CONNAUGHT RANGE AND PRIMARY TRAINING CENTRE

Range Standing Orders



April 2018

CRPTC STANDING ORDERS / RECORD OF AMENDMENTS				
AMENDMENT NUMBER	DATE	SIGNATURE		

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CONNAUGHT RANGES AND

PRIMARY TRAINING CENTRE

RANGE STANDING ORDERS

FORWARD

- 1. These orders form part of CFSU Ottawa Standing Orders and are published to fulfill requirements established in B-GL-381-001/TS-000 Training Safety, and to provide administrative guidelines for both military and non-DND agencies using CRPTC facilities.
- 2. All personnel employed or training at CRPTC shall comply with and enforce these orders.
- 3. All users must be in possession of a copy of these orders while using the Ranges or Training Areas.

I.G. Pedley

Lieutenant-Colonel Commandant

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EMERGENCY TELEPHONE NUMBERS 911 OR 8-911

RANGE CONTROL 613-991-5890 Cell 613-266-4474

Area Code 613

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CRPTC RANGE STANDING ORDERS

CHAPTER 1

GENERAL INSTRUCTIONS

1.01 LOCATION

CRPTC is located 22 km WEST of Ottawa at Shirley's Bay on the Ottawa River. It is reached from Highway 17B (Carling Ave) by exiting at Rifle Road and proceeding north to the entry barrier. See locator map at Annex A.

1.02 ORGANIZATION AND ROLE

- 1. CRPTC functions as an integral sub-unit of Canadian Forces Support Unit Ottawa (CFSU (O)). The responsibilities of Commandant, CFSU (O), vis-à-vis the CAF ranges and training facilities at Connaught, are detailed at Canadian Forces Organization Order (CFOO) 1.12 and at B-GL-381-001/TS-000 (Training Safety), Chapter 2, para 19-21. These responsibilities have been delegated to Commandant CRPTC (Cmdt).
- 2. The role of CRPTC is to provide a facility where CFSU (O), supported Regular Force, Reserve, and Cadet Units can efficiently and effectively conduct operational training under realistic conditions.
- 3. The responsibilities of user-unit CO are detailed in CFP 381(1), Chapter 1.

1.03 HOURS OF OPERATION

1. Normal range operating hours are 0800 - 2300 during the week and 0900 - 2300 on weekends and holidays for non-military users. Military users may shoot from 0730 -2300 daily for small calibers and 0900-2300 for large calibers.

1.04 PRIORITIES FOR USE

1. The priority for allocation of CRPTC facilities is:

a. <u>Priority One</u>. CANSOFCOM/RCMP Tactical School;

b. <u>Priority Two</u>. Regular Force;

c. Priority Three. Reserve Force;

d. <u>Priority Four</u>. CIC and Cadets;

e. Priority Five. Other Government Departments (OGD); and

f. Priority Six. Non-OGD: Civilian Police or other Civilian organizations

recognized by DND.

- 2. Within the first four priorities, those organizations which are supported by CFSU (O) will take precedence over others.
- 3. Reserve Force organizations will receive priority over Regular Force on weekends.

1.05 CHANNELS OF COMMUNICATION

- 1. <u>Booking/Allocation of Facilities</u>. All matters relating to allocation of CRPTC facilities will be directed to the CRPTC Range Control Officer (RCO).
- 2. <u>Logistic Requirements</u>. All matters dealing with logistical or administrative support will be directed to CRPTC Logistics Officer (Log O) or Administrative Officer (Admin O) respectively.

1.06 CADETS

- 1. The following restrictions apply to cadet activities at CRPTC:
 - a. activities must be in accordance with regulations promulgated by the applicable regional cadet authority;
 - b. the berm to Chartrand and Haycock Islands is out of bounds to cadets.
 - c. cadets will not be accommodated in the same building, trailer or tent as adults. Cadet Supervisors excepted;
 - d. there will be no joint cadet and Reserve/Regular Force activities unless authorized by the applicable Region and Nat'l CJCR Sp Gp;
 - e. cadet messing and recreational facilities will be segregated from the Regular and Reserve Force when possible; and
 - f. cadet training during cold weather will only be authorized when sufficient heated quarters to house all cadets are available at CRPTC.

1.07 ALLOCATION OF FACILITIES

1. The Range Control Officer (RCO) is responsible for the allocation and control of all ranges, training facilities, training areas and accommodations. Only those units that have submitted a TSR and have been approved will be permitted to use CRPTC facilities.

NOTE: REQUESTS MUST BE SUBMITTED 30 DAYS PRIOR TO THE EVENT

a. Reg F and Res F units are to create a TSR in CFRIS, for submission and approval. Units are responsible to confirm in CFRIS if the TSR has been approved. Non-DND organizations should contact the Booking NCO by telephone for information to tentatively book the required facilities. Following receipt of this request, CRPTC will confirm the allocation.

- b. All applicable information must be entered in the TSR Attributes section, including a copy of the Exercise / General Instruction, and a copy of the CRPTC TSR. A brief description of the activity is to be added to the Remarks of the Event Details. Failure to include these will result in the request being rejected by RCO.
- 2. Final confirmation of allocations and sole authority to use the facility is contained in Daily Range Safety Orders (DRSO). The RCO will promulgate DRSOs as required.

1.08 VISITORS

- 1. CFAO 20-5 applies to visitors to CRPTC who are not part of authorized user units/agencies.
- 2. All visitors will be escorted and will not proceed to a range unless cleared by the Range Safety Officer responsible for that particular range.

1.09 RECREATIONAL USE OF CRPTC FACILITIES

- 1. Recreational camping is prohibited within CRPTC boundaries.
- 2. The entire CRPTC property is a Provincial Game Preserve. Hunting, fishing, and trapping are prohibited.
- 3. Swimming is prohibited within CRPTC boundaries.

1.10 PETS

1. Pets are not permitted on CRPTC. Service animals are an exception, but must be registered at Range Control.

1.11 AMNESTY BOX

1. Amnesty boxes, for disposal of ammunition or casings which may have been removed accidently from a range, are sited throughout the Camp. If a large number of rounds or casings are found concentrated in one area, it should be reported immediately to Range Control.

1.12 ALCOHOL

- 1. It is forbidden to bring alcohol onto CRPTC Property.
- 2 All alcoholic beverages will be purchased from the CRPTC All Ranks Mess and consumed <u>ONLY</u> in the Mess and porch area, and when authorized in the Dining Hall for special functions.
- 3. There will be no alcoholic beverages brought into the quarters, tented areas or the training areas.

1. 13 SPEED LIMITS

- 1. The speed limits in the main camp and training areas are well posted and will be strictly enforced.
 - a. The speed limit on Malabar Road is 50 KM/H.
 - b. The speed limit on all surface roads north of Malabar Road is 30 KM/H.
 - c. The speed limit on all roads in the Training Areas is 30 KM/H.
 - d. The speed limit on all Range Roads is 10 KM/H.
 - e. The speed limit within the confines of the Tent lines is 10KM/H.

1.14 DAMAGES

- 1. All CRPTC facilities represent a significant public investment and serve many groups operational and training needs. The on-going efforts to maintain these facilities to the required safety standards are intensive in terms of both manpower and funds.
- 2. As a result, the Commandant will hold all users liable for the cost of any repairs or damages to any facility which he determines are beyond reasonable use, either as the result of negligence, or wilful damage. Moreover, the Commandant may take disciplinary and administrative action necessary in cases of negligence or wilful damage to public property.

1.15 GRAFFITI

1. Graffiti of any kind will not be tolerated on any of the CRPTC facilities including the ranges and training areas. Graffiti will be treated the same as damages in para. 1.14.

1.16 <u>FITNESS CENTRE</u>

- 1. The Fitness Centre may be used by the following personnel only;
 - a. Connaught staff including the Cadet permanent staff;
 - b. all military personnel staying or training at CRPTC;
 - c. CIC Officers and Staff Cadets who are 18 years and over; and
 - d. only permanent civilian employees of CRPTC will be permitted in the Fitness Centre.
- 2. All equipment is to be returned on the racks and machines wiped down.
- 3. Clean footwear only to be worn.
- 4. Lockers are provided on a daily use only. No personal padlocks will remain on a locker.

- 5. Any problems with any of the equipment are to be reported to Range Control.
- 6. During silent hours, there must be a minimum of 2 personnel in the Gym. The key may be signed out from Range Control.

1.17 <u>DIGGING/STAKES</u>

- 1. Digging is not permitted in the main camp.
- 2. For rental tents, a CF141 must be submitted to PSPC for approval and the coordination of the utilities locate.

1.18 PARKING AT CRPTC

- 1. Parking is authorized only in Designated Areas. Range users will primarily use area located between Shirley Boulevard and the fence (north side of the road).
- 2. DND MSE (including Rentals) are expected to follow established practices for parking. All SMP veh will have a drip pan under the engine bay.
- 3. Personnel that are living in, are to park in the parking area nearest to their assigned quarters.
- 4. The following areas are NOT AUTHORIZED for parking:
 - a. The south side of Shirley Boulevard (this extends from 1 Shirley to the Ammunition Compound).
 - b. The west side of 23 Shirley Boulevard (Training Building). This area is reserved for the Training Section staff.
 - c. The area directly to the south of 35 Shirley (HQ / Combined Mess). This is reserved for CRPTC staff only.
 - d. On any grassed area. All parking areas at CRPTC are gravel or tar/chip surfaces.
 - e. Inside the fence of the Tent lines.

1.19 WEEKLY COORDINATION MEETING

There will be a coordination meeting in the Conference Room at Range Control, every Friday at 1500 hrs, for ALL weekend users. This is to ensure that all users are aware of the all training activities and that any issues can be dealt with during normal working hours.

1.20 <u>DISCIPLINE</u>

1. <u>Responsibility</u>. Any breach of discipline will be reported to the Range Control Officer. If warranted, the RCO will order the initiation of an Incident Report. See Annex C.

1.21 CONTRACTORS

- 1. All contractors will report as follows:
 - a. at all times, contractors will report to the Range Control office at 1 Lee Enfield, and then to PWGSC at 31 Shirley; and
 - b. during Silent Hours Range Control at 1 Lee Enfield
- 1.22 1.99 Not Allocated.

CRPTC RANGE STANDING ORDERS

CHAPTER 2

ACCOMODATION and RATIONS

2.01 TENT LINES

- 1. The Connaught Cadet Training Centre (CCTC) will maintain operational control, including March In/Out, of all buildings/tents/facilities within the CCTC area, located to the West side of Vickers Gun Road, with the following exceptions:
 - a. Sprung Shelter Air 1 will remain under the direct control of CRPTC HQ.
 Anyone wishing to utilize Air 1 will book their requests with the CRPTC Booking NCO. No users shall utilize Air 1 without the express consent and confirmed booking from CRPTC HQ;
 - b. 89 Shirley Alpha Range Hut. Although located on the CCTC side, this range hut is for Alpha Range and will therefore remain under control of CRPTC HQ;
 - c. During peak season, CRPTC may be required to place constraints, limitations, or requirements etc. on the utilization of the tent lines in order to ensure maximum efficiency of use during times of overlap between major users and events. These booking conflicts will be coordinated between CRPTC HQ and CCTC; and
 - d. In the event of an emergency, at any time and with little notice, utilization of any CCTC space and facilities may be required as a result of necessity in support of Domestic Operations.
- 2. The three S-Shelters located on Brouillette Blvd, directly behind and to the North of 7 Vickers Gun (Personal Protection Unit), will remain under the direct control of CRPTC HQ.
- 3. Throughout the year, all bookings for CCTC assets as outlined above, will be managed by CCTC HQ as follows:
 - a. Requests for use by Cadet Units will be processed directly to the CCTC HQ there is no requirement for CRPTC HQ to be involved unless facilities outside of the CCTC are required. For non CCTC facilities, the CCTC HQ will facilitate bookings with CRPTC HQ on behalf of the requesting Unit; and
 - Requests for use of CCTC facilities by non-Cadet Units will be processed through CRPTC HQ as part of an overall facilities request (TSR/FSR). CRPTC HQ will coordinate the CCTC facilities portion with the CCTC HQ on behalf of the requesting Unit

4. This process will maintain CCTC oversight of all Cadet bookings at CRPTC and facilities management of the CCTC, while also allowing CRPTC HQ to maintain control over outside agencies, organizations and units wishing to utilize CRPTC, ensuring prioritized use, and that the required agreements are in place.

2.02 QUARTERS MALE AND FEMALE

- 1. 9 Webley is designated as female quarters. If a male requires entry into female quarters, they must be accompanied by a female escort. The same applies for females entering male quarters; they must be accompanied by a male escort. If no member of the opposite sex is available to, then at minimum, they must be accompanied by a second individual.
- 2. The procedure for entry into the quarters of the opposite sex is as follows:
 - a. knock and verbally announce at the main door before entry loud enough to be heard throughout;
 - b. give appropriate time for occupants of the building to acknowledge and/or prepare themselves accordingly ie: half a minute;
 - c. announce again upon physical entrance into the quarters;
 - d. same protocol for individual rooms and common areas ie: bathrooms, showers and laundry rooms; and
 - e. if necessary, Reg F and PRes units may co-locate females and males with permission from the CRPTC CofC, with user unit CofC accepting full control and responsibility.

2.03 FOOD SERVICES

- 1. CRPTC Food Services Standing Orders are part of CRPTC Standing Orders but are promulgated separately.
- 2. CRPTC provides feeding for a wide range of customers requiring meals on-site in the dining facilities or off-site dispersed (i.e. box lunches/hay boxes). Normal training/events shall be requested through the CRPTC Kitchen a minimum of 10 working days in advance; minor adjustments (numbers) will be accepted within 5 working days (Mon-Fri). The Kitchen works on a Just in Time delivery (JIT) system for staffing & food preparation. Emergency food requests are handled immediately within the capabilities of the kitchen facility.
- 3. <u>Requests for Special Functions</u>. Christmas dinners, luncheons, BBQ's etc. require a minimum of 45 working days and are financially recovered as per the local market economy.
- 4. <u>35 Shirley Front Lawn</u>. Booking requests must be submitted to the Booking NCO and with permission by CRPTC HQ. Restrictions may be put in place on a case by case basis.

2.04 - 2.99 Not allocated

CRPTC RANGE STANDING ORDERS

CHAPTER 3

EMERGENCIES AND ACCIDENTS

3.01 CRPTC EMERGENCY RESPONSE

- 1. Range Control is the CRPTC Emergency Response Centre.
- 2. When an incident or accident occurs which requires an emergency response by CRPTC, the person receiving the initial notification will immediately inform Range Control.
- 3. The Commandant and the DCO will proceed to the Range Control office when advised of the emergency. All other personnel will report to their normal place of duty.
- 4. The Commandant or senior staff member will:
 - a. open a log;
 - b. notify CFSU (O) of the situation; and
 - c. take action as required.

3.02 FIRE ORDERS

- Actions to be taken in the event of a fire are detailed in CRPTC Fire Orders.
- 2. Commanding Officers/OICs Exercise shall ensure that all personnel occupying quarters, tented areas and bivouac sites at CRPTC are thoroughly briefed on arrival regarding the contents of CRPTC Fire Orders.

3.03 ACCIDENTS

- 1. In case of injury, the senior member at the location will:
 - a. cease training/firing and provide first aid;
 - b. if immediate medical/ambulance service is required, dial 911 or 8-911, describe the problem and state location (CONNAUGHT RANGE);
 - c. notify Range Control immediately;
 - d. Range Control will meet the ambulance at the entrance gate and guide it to the accident site; and
 - e. unit OPI to initiate CRPTC Incident Report.

- 2. The ambulance supervisor will, based on the nature of the injury, decide to which hospital the injured person will be transferred. The nearest civilian hospital is the QUEENSWAY CARLETON (corner Baseline and Richmond Roads).
- 3. If a person is being moved by vehicle and the 911 Emergency Number was not used, the Emergency Department of the destination hospital should be notified by Range Control.
- 5. CRPTC Range Control / Commissionaire will notify CFSU (O) of following details:
 - a. date, time and location of incident;
 - b. brief description of incident;
 - c. name, rank, unit of injured personnel; and
 - d. destination hospital.

3.04 EXPLOSIVE DEVICES

- 1. If an explosive device is discovered on CRPTC property the senior member present will:
 - a. order an evacuation of the immediate area:
 - b. post sentries to deny access; and
 - c. notify Range Control and provide the following details:
 - (1) date, time and location of discovery; and
 - (2) description of device (i.e. artillery shell, grenade, mortar shell, dynamite, etc).
- 2. Once CRPTC Range Control has been notified, the EOD procedures outlined in Chapter 13 will be followed.

3.05 OTHER EMERGENCIES

1. For other emergencies dial 8-911.

3.06 <u>WEATHER WARNINGS</u>

1. Range Control will issue warnings to all units training at CRPTC when a weather warning is received during duty hours. The decision on whether or not to suspend training will be made by Range Control. If lightning is present, firing will cease immediately and recommence only by authority of Range Control

3.07 <u>HEAT STRESS</u>

1. See Preventive Medicine Guidelines on Heat Stress within the NCR, Annex D.

3.08 – 3.99 Not Allocated.

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CRPTC RANGE STANDING ORDERS

CHAPTER 4

RANGE CONTROL AND SAFETY

4.01 GENERAL

- 1. CRPTC Range Standing Orders apply to all personnel using CRPTC ranges and training areas. These Safety Orders must be read in conjunction with B-GL-381-001/TS-000 (CFP 381, Volume 1, Part 1, Training Safety).
- 2. All units conducting live weapon firing at CRPTC must identify, in writing, to the Range Control Officer the following appointments, by name, with regard to any live firing exercise:
 - a. OIC Exercise;
 - b. Range Safety Officer (RSO), and any assistant safety officers;
 - c. These names MUST also be included on the CFRIS TSR.
- 3. <u>Daily Range Safety Orders (DRSO)</u>. DRSOs provide a detailed allocation of ranges and training areas to users. Users are not authorized to conduct range practices or field training exercises (FTX) at Connaught except on the range(s) or in training area(s) which specifically have been assigned to the user in the DRSO. Copies of the DRSOs may be obtained from Range Control at 1 Lee Enfield.
- 4. Out of Bounds. Ranges, training facilities, and areas, are out of bounds to all personnel unless specifically authorized by Range Control on behalf of the RCO. To obtain authority, contact Range Control at 1 Lee Enfield, or by phone at 613-991-5890 or 613-266-4474.

4.02 REPORTING

- 1. <u>General</u>. The OIC Exercise or the Range Safety Officer must report to Range Control (1 Lee Enfield) before proceeding to the allocated range. Range Control will issue the OIC Exercise/RSO a Range Allocation and Clearance Certificate (Annex E).
- 2. <u>Range Stores</u>. Range Control will issue unique range equipment (armbands, control flags, grouping rings, patches, safety goggles, night warning lamps, range radios, etc.) to user-units. Field units must provide their own field force equipment (megaphones, telephones, stretchers, blankets, first-aid kit, helmets, ear-defenders, tables, etc.). A limited quantity of the latter stores is available for issue to non-entitled units.
- 3. <u>Aide-Mémoire</u>. Range Control will issue on request the "Aide-Mémoire" at Annex F to users.

4. <u>Safety Briefing</u>. The OIC Exercise or the Range Safety Officer must report Range Control (1 Lee Enfield) to receive a safety briefing before proceeding to the allocated range or permitting troops to proceed beyond range access road barriers. The OIC/RSO must, in all instances, obtain permission from Range Control by radio/phone to proceed beyond barriers and to commence firing).

4.03 <u>AUTHORITY TO FIRE</u>

1. The OIC Exercise/RSO will not permit live firing to commence until specific authority to do so have been granted by Range Control. A "check-fire" order by Range Control must be implemented immediately by the applicable RSO(s).

4.04 CLEARANCE CERTIFICATE

1. The Range Clearance Certificate at Annex E must be completed by all users and provided to Range Control at the conclusion of each day's training.

4.05 <u>VEHICLE ACCESS CONTROL</u>

- 1. <u>General</u>. Only vehicles operating in direct support of an exercise, a competition or a PSPC task may be authorized access to a range or training area.
- 2. Ranges. The operation of vehicles on ranges is governed by the following:
 - a. privately owned motor vehicles will not be driven onto ranges or into training areas unless specifically authorized by the RCO;
 - b. access must be authorized by the Range Safety Officer of the range in use;
 - c. all range road barriers are to be kept closed and have sentries posted during firing;
 - d. during firing, vehicles are not permitted on the range, with the exception of:
 - (1) ambulance or safety vehicle;
 - (2) armorer vehicle (MRT); and
 - (3) ammunition vehicle.
 - e. vehicles loading and unloading stores will do so from the range road and will immediately exit the range when finished. Equipment, unless bulk/weight preclude, will be manhandled to firing points; and
 - f. only the vehicles mentioned above, excluding Range Control vehicles, are permitted on a range during an exercise.

- g. there is to be NO PARKING on the grassed areas between the firing points. Exceptions, such as for mobility impaired personnel, must be authorized in advance by the RCO.
- 3. <u>Training Areas</u>. User-unit regulations regarding off-road use of vehicles will apply. In addition:
 - a. vehicles will only travel on established roads, unless otherwise authorized by Range Control;
 - b. designated areas and non-DND buildings and equipment are out of bounds;
 - c. the OIC Exercise or his representative will be briefed by CRPTC Range Control on any local restrictions prior to entering the unit's assigned area; and
 - d. black-out (BO) driving, if authorized in DRSOs, may be practiced within specified timings and training areas.

4.06 **ENVIRONMENTAL SAFETY**

- 1. The OIC Exercise will ensure that assigned ranges and training areas are left in a clean and orderly condition.
- 2. Poison Ivy is prevalent at CRPTC. The OIC Exercise must ensure that personnel are briefed to recognize the plant. Some people are extremely sensitive to poison ivy and severe cases may require medical treatment.
- 3. The OIC Exercise will ensure that only authorized latrines and urinals are used. Portable toilets can be ordered, through PSPC, by the Unit at the Units' expense. **Portable latrines will not be moved by users** under any circumstances; contact Range Control if latrines are not appropriately located.

THE USE OF FIELD LATRINES AND OTHER EXPEDIENTS IS PROHIBITED

- 4. Cutting of trees and/or brush for any reason is prohibited.
- 5. POL spills, or spills of any other product which may be harmful to the environment, will be reported immediately to Range Control.
- 6. The use of garbage and swill pits is prohibited. Garbage and swill disposal will be arranged through Range Control.

DO NOT THROW GARBAGE IN THE TOILETS

7. When authorized by Range Control, fires in the bivouac sites will only be burned in the established fire pits.

- 8. Ranges and training areas will be inspected by CRPTC Range Control staff immediately after use to ensure the areas have been cleaned and that buildings and facilities have not been damaged.
- 9. Comprehensive instructions with respect to minimizing the environmental effects of units using the CRPTC site are contained in Annex G.

4.07 HEARING CONSERVATION

- 1. Authorized ear plugs or ear defenders shall be worn by all CAF personnel and cadets within 30m of the source of small arms firing.
- 2. For other personnel, the hearing conservation measures are as specified by the organization authorized to use the range.

4.08 EYE PROTECTION

1. Unless otherwise specified, the wearing of authorized ballistic eye wear is not mandatory but is highly recommended when firing weapons.

4.09 SMOKING

1. Smoking is not permitted on firing points or in the vicinity of ammunition points. The Range Safety Officer may designate a smoking area a minimum of 30 m behind the firing point.

4.10 ALCOHOL

1. Alcoholic beverages shall not be consumed on small arms ranges or training areas.

4.11 MEDICAL

- 1. <u>General</u>. When live ammunition is used, the user unit must ensure that an individual trained to the level of Standard First Aid in accordance with CFAO 9-5 is readily available.
- 2. <u>Emergency Vehicle</u>. A dedicated evacuation vehicle will be located on the ranges and designated solely for medical evacuation. This vehicle must contain a medical first aid kit, blankets and a stretcher.
- 3. <u>Drugs/Medication</u>. Personnel must ensure that prescription, and non-prescription drugs, will not impair their physical reactions. If there is any doubt, professional medical opinion will be obtained.

- 4. <u>Health Care</u>. Any injury will be treated as serious, however, the nature of the injury will dictate to which medical facility the casualty is taken.
 - a. anyone requiring immediate medical attention will be taken to Queensway-Carleton Hospital (QCH) located on Richmond Road just south of the Queensway. (Take Carling Avenue east to Holly Acres Road; follow Holly Acres to Richmond; turn west (right) on Richmond and watch for "H" sign on left.);
 - b. when less urgent medical attention is needed, the casualty should be transported to the CF H Svc Centre (Montfort Hospital) 713 Montreal Rd; and
 - c. Range Control must be notified of any injuries and the disposition of casualties.

4.12 USE OF FLAGS, LIGHTS AND BARRIERS

- 1. <u>General</u>. Flags and lights are used as visual signals to warn that a range is in use and to control firing.
- 2. Range Danger Flags. Users will raise a RED danger flag whenever a range is in use. Flagpoles are located at the entrance to the range and the center of the range back stop. Users will lower the flag when firing has been completed.
- 3. Range Control Flags. RED and GREEN, except on the Pistol Ranges, where there is only one control red flag, the following is the sequence of range control flag use:
 - a. <u>Butt Flag</u>. When a GREEN flag is raised, NO firing will take place. When notified by the Range Safety Officer that firing is about to commence, the Butts Officer will raise a RED flag after he/she has ensured that all Butt personnel are under protective cover;
 - b. <u>Firing Point Flag</u>. A GREEN flag is raised at the firing point when NO firing is taking place. The butts and firing point RED flags will be displayed when firing is in progress;
 - c. whenever the GREEN flag is raised at the firing point and/or in the butts, weapons will be "made safe"; and
 - d. The main red flag at the rear of the Range will remain raised until all participants have departed, and the range has been cleared.
 - e. Sentries must be posted at the entrance to the Range when the range is LIVE, equipped with a means to contact the RSO / Firing Point.

4.13 NIGHT FIRING

- 1. When night firing takes place, a sentry shall be posted at the entrance barrier(s) of the range in use, as long as the range is OCCUPIED.
- 2. The red lights on the pole for the range in use will be turned on and RED and GREEN lanterns will be used as replacement control flags.
- 3. Barriers are located at the beginning of the access road to each range.
- 4. The ratio of shooters to ARSO's shall be reduced during night time firing. Normal daytime ratio is one ARSO for up to five shooters. This shall be reduced to one ARSO for every two shooters at night. The ratio is further reduced to a one on one ratio if the shooter is untrained.

BARRIERS ARE TO BE MANNED AND CLOSED AT ALL TIMES.

4.14 WEAPON HANDLING AND INCIDENTS

- 1. The RSO is responsible to ensure that all weapon handling is in accordance with the CFP applicable to the weapon being fired.
- 2. Weapon incidents are those arising from the use, attempted use, misuse, or negligent discharge of a weapon, which could result in death or injury to any person, or damage to property. In the event of an incident, the RSO will:
 - a. cease all firing;
 - b. isolate the weapon involved in the incident. In case of a negligent discharge, unload and clear the weapon. Ensure weapon is secured separately and not tampered with in any way. The weapon will remain secure until a weapons tech is able to complete an inspection of the weapon;
 - c ensure all weapons are unloaded, cleared, and the range is made safe; and
 - d. notify Range Control.
- 3. Units are responsible to initiate ammunition reports as per DOAD 3002-4.

4.15 SUSPECT OR DEFECTIVE AMMUNITION AND PYROTECHNICS

- 1. Ammunition or pyrotechnics suspected of being defective will not be used.
- 2. When it becomes apparent that a weapon, ammunition or pyrotechnics are defective, firing will cease and the defective stocks will be withdrawn and reported. Evidence of malfunction must be preserved for subsequent technical investigation. User Unit must notify Range Control of the fault.

- 3. Each OIC Exercise must complete and sign a CF "Report of Ammunition Expended" (Annex E) on completion of each exercise.
- 4. AMMUNITION ACCIDENTS, DEFECTS AND MALFUNCTIONS SHALL be reported IAW CFAO 71-4 and A-GG-040-006/AG-002. (DND Ammunition Accident, Incident, Defect and Malfunction Reports). A copy of the report (CF 410) to be completed is held by Range Control.
- 5. In the event of an ammunition accident OIC Practice will ensure that:
 - a. all firing will be stopped until the cause of the accident has been determined;
 - b. first aid will be given and evacuation of casualties arranged;
 - c. the area will be cordoned off;
 - d. Range Control will be contacted immediately and they will contact the Ammo Tech and Military Police;
 - e. a search will be made for ammunition fragments and parts of weapons, and any items found will be:
 - (1) left untouched, but preserved in place for investigation purposes, and
 - (2) if it is necessary to move them, they will be identified and their former location in relation to the explosive source shall be marked and recorded on a sketch or in a photograph.
 - f. the weapon will NOT be moved or dismantled until completion of the investigation or unless advised to do so by an ATO;
 - g. further firing of the lot of ammunition will be halted pending the outcome of the investigation;
 - h. statements from eyewitnesses will be taken immediately; and
 - i. a prompt report of the accident will be made to higher headquarters as per para4.

4.16 USE OF PYROTECHNICS

1. Specific authorization in DRSOs is required for the use of any pyrotechnic at Connaught.

- 2. CRPTC Range Control must be notified 48 hours in advance of planned day or night use of flare(s), including:
 - a. type of flare;
 - b. time of illumination; and
 - c. flares maximum elevation.
- 3. Artillery simulators and thunderflashes are not authorized from 2300 to 0700hrs daily. Range Control will notify NDOC, NDHQ SAMP desk, local police and yachting agencies of the intended use of flares.

4.17 TRACER AMMUNITION

- 1. If the fire index permits, tracer ammunition may be used on the long ranges only.
- 2. Tracer ammunition is not authorized on any of the pistol ranges, including the pistol ranges situated on the rifle ranges.

4.18 DANGER AREA TEMPLATES

1. Large-scale weapon danger area templates and range plans are maintained by Range Control. They must be checked by the RCO and RSOs to verify that there is no overlap of danger areas when adjacent ranges are scheduled simultaneously.

4.19 FIRES

- 1. When a fire occurs on a range or in a training area, the Range Safety Officer, OIC Exercise or senior member present will:
 - a. immediately cease all training activity;
 - d. notify Range Control by the quickest means available; and
 - e. proceed to fight the fire using available manpower and equipment.
- 2. Fire-fighting equipment is stored in sheds adjacent to the target sheds on all ranges.
- 3. MNR and/or local civilian fire services may assist in the firefighting effort. The first "professional" firefighting organization to arrive on site will take over the direction of the firefighting operation. Military pers will work under their own supervisors who will receive firefighting direction from the professional fire services.

4.20 NON-SERVICABLE EQUIPMENT

1. The OIC Exercise will ensure that all N/S range equipment and stores are reported to Range Control immediately.

4.21 <u>CLEANLINESS</u>

1. The OIC Exercise will ensure that all ranges and training areas used are left in a clean, tidy condition. Target sheds must be tidy, with targets patched and stored appropriately and neatly. Brass and salvage must be returned by the user unit. All garbage is to be removed from the Butts by the user.

4.22 FIRE INDEX

1. All units will adhere to the Fire Index Board situated outside Range Control.

4.23 SAFETY BERMS

1. The safety berms located along the ranges are in place for additional safety and indicate the range boundary.

IT IS FORBIDDEN TO WALK OR CLIMB ON THE BERMS AT ANY TIME

4.24 - 4.99 Not Allocated.

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CHAPTER 5

DUTIES - RANGE SAFETY STAFF

5.01 GENERAL

1. Safety is everyone's responsibility. Units and organizations using CRPTC ranges and training areas must be familiar, and exercise in compliance with these Range Safety Orders.

5.02 INFRACTIONS

1. Infractions, incidents and non-safe practices will be reported to the Range Safety Officer and the CRPTC Range Control Officer through the chain of command. If serious infractions are not corrected immediately, CRPTC Range Control will order cease firing/training and close the applicable range or training area until the condition has been corrected.

5.03 RANGE SAFETY OFFICER (RSO)

- 1. A Range Safety Officer (RSO) will be appointed by the user-unit Commanding Officer for every live firing exercise.
- 2. The RSO must be qualified in accordance with CFAO 9-20 and be thoroughly familiar with CRPTC Range Safety Orders. When a civilian or military rifle association is authorized to shoot at Connaught, the president of that association is deemed to be the "Commanding Officer" per CFAO 9-20 and is responsible to appoint suitably qualified member(s) of the association to be RSO(s).
- 3. Prior to assuming RSO responsibilities, the Range Safety Officer shall be briefed by Range Control on the range layout and local procedures as required.
- 4. RSOs must be prepared to produce proof of qualification on request.
- 5. Range Safety Officer's Responsibilities. The RSO is responsible for:
 - a. ensuring the safety of all personnel on his/her range;
 - b. verifying, on Daily Range Safety Orders (DRSOs), that use of the range has been authorized, and the location of other units undergoing training at CRPTC;
 - c. implementing CAF safety policy and ensuring compliance with safety regulations contained in appropriate CAF orders;
 - d. ensuring that a dedicated emergency vehicle with a stretcher, first aid kit, and qualified first-aider are immediately available;
 - e. safely conducting all activities that take place on a range during an exercise;

- f. ensuring that radio/telephone communications is maintained with Range Control and the Butts:
- g. acknowledging in writing at Range Control, that he/she is thoroughly familiar with Range Safety Orders and authorized by his/her Commanding Officer or Club President to act as Range Safety Officer for the scheduled exercise planned;
- h. ensuring that the danger area between the firing points and targets is clear of personnel and vehicles;
- i. organizing the range party so that ammunition is issued to firers immediately prior to use and withdrawn as soon as possible on completion of the practice;
- j. ensuring that all range warning flags are raised and barriers closed at all times in accordance with these orders. When .338 LAPUA ammunition is authorized for use, both barriers in the training areas must be closed;
- k. displaying a RED (danger) control flag at the entrance to the range, firing point and butts when firing is in progress and displaying a GREEN (safe) control flag at the firing point and butts when firing is not taking place:
- I. stopping firing when conditions arise which, in his/her opinion, constitute a hazard. The RSO will ensure the hazard has been eliminated before recommencing firing. If the hazard involves unauthorized trespass of vehicles or person(s), the trespassers will be located, identified, and escorted from the range prior to commencing firing;
- m. ensuring that all weapons are inspected and declared "clear" before the firers leave the firing point;
- n. organizing groups to pick up brass casings, and other salvage and refuse, from each firing point used;
- o. receiving a declaration from each person before they leave the range, that they have no rounds or casings in their possession;
- p. ensuring that sentries are withdrawn and range flags lowered when firing has been completed;
- q. returning all equipment issued to Range Control; and
- r. completing the Range Allocation and Clearance Certificate.

THE RSO WILL NOT FIRE WHILE PERFORMING THE DUTIES OF AN RSO UNLESS RELIEVED BY ANOTHER QUALIFIED RSO.

- 6. <u>Delegation of RSO Responsibilities</u>. The size and nature of the firing exercise may require the RSO to delegate authority and responsibility to all or some of the following appointments:
 - Assistant Range Safety Officers (ARSO);
 - b. Butts Officer or Butts NCO;
 - c. Sentries, only one required during daylight and 2 for night firing.
 - d. coaches and assistants; and
 - e. ammunition party.
- 7. The Range Safety Officer is to ensure that personnel delegated range safety responsibilities are briefed on and understand their duties.

5.04 <u>BUTTS OFFICER/ BUTTS NCO</u>

- 1. <u>General</u>. The Butts Officer / NCO is under command of the RSO and responsible for the safe and efficient operation of the target gallery.
- 2. Responsibility. The Butts Officer / NCO is responsible for:
 - a. establishing and maintaining communications with the Range Safety Officer;
 - b. displaying the appropriate range control flags;
 - c. ensuring either Kevlar helmets, NATO Standard Helmets or Canadian Standard Association (CSA) Industrial helmets are worn at all times, safety glasses are worn when using hand held targets, and that personnel remain in the butts while live firing is in progress;
 - d. managing target requirements;
 - e. ensuring after firing, that:
 - (1) the target gallery is clean (including toilet facilities);
 - (2) all targets are patched and stowed as required;
 - (3) target frames are left at half-mast and are serviceable;
 - (4) all garbage cans and recycle bins have been emptied; and
 - (5) unserviceable equipment is brought to the attention of the RSO for inclusion in the Range/Allocation and Clearance Certificate.

5.05 ASSISTANT RANGE SAFETY OFFICERS

1. Assistant Range Safety Officers should be appointed by the RSO when he considers that he/she cannot effectively control the exercise by himself/herself. The Assistant Range Safety Officer may repeat RSO orders if required, but he/she will not normally announce his/her own orders or otherwise act independently of the RSO.

5.06 OIC AMMUNITION PARTY

- 1. The OIC Ammunition Party is responsible to the RSO for:
 - a. control and issue of ammunition:
 - b. retention, in a separate container, of any noticeably defective rounds (e.g. crushed or cracked casings, loose bullets, struck but non-serviceable primers, etc). A Defective Ammunition Report (available from Range Control) will be completed when appropriate. CRPTC Range Control will safeguard the defective round and make it available for examination by an Ammunition Technician;
 - c. ensuring, on completion of firing, that all live ammunition and spent casings are placed in separate containers; and
 - d. ensuring that empty ammunition containers are returned to CFSU(O) Ammo Section.

5.07 SENTRIES

1. Sentries will be briefed and posted as required by the RSO and these orders, and establish and maintain communications with the RSO.

5.08 - 5.99 Not allocated

CHAPTER 6

SMALL ARMS RANGES

6.01 GENERAL

- 1. <u>Weapons</u>. Connaught Ranges are licensed for most standard military and police small arms in the handgun, sub-machine gun, carbine, rifle, LMG and GPMG categories. Details of the weapons authorized are listed on the range license held by Range Control. Specific authority must be obtained, through the RCO, to fire "non-standard" or un-listed weapons.
- 2. <u>Ammunition</u>. Only ammunition provided through the CAF Supply System is authorized to be fired at CRPTC. Specific authority to fire non-issue ammunition, unless authorized by the range license, must be obtained from NDHQ through the RCO.
- 3. A partial listing of the weapons and ammunition licensed for Connaught is at article 6.05 below.

HAND LOADED CARTRIDGES ARE PROHIBITED.

6.02 RANGE DESCRIPTIONS AND RESTRICTIONS

1. "A" Range. "A" Range is a medium distance range located at the WEST edge of the ranges. This range provides 40 metal target frames suitable for 4' x 4' targets. These frames are to be used for all targets except hand-held Figures 11, 12/59/12/59c. There are built-up firing points at 100 yard intervals from 100 to 600 yards inclusive. It also provides a 25m pistol range forward of the target gallery. This range will also allow.338 ammunition to be fired from lanes 21 to 40. No firing of hard targets or falling plates permitted on this range at any time.



Alpha Range

- 2. "A Range 2. "A2" is the area behind the back stop of "A" Range. It is situated east of the road leading to the backstop flag. There are 10 lanes with 10 firing trenches located behind the backstop placed at 4m intervals. The target may be placed at any distance between the trenches and the farthest backstop which has 10 bullet catchers. ALL TARGETS MUST BE PLACED IN LINE BETWEEN THE TRENCHES AND THE BULLET CATCHERS TO CORRESPOND WITH THE LANE NUMBER. All flags pertaining to "A" Range will be flown in addition to a firing point flag by trench number 10. Falling plates are permitted but will only be set up in front of the backstop. The use of .338 ammunition is permitted on this range. This range is normally booked by CANSOFCOM units only; permission for other units may be granted by CANSOFCOM.
- 3. "B" Range. "B" Range comprises of 10 lanes between "A" Range and "C" Range Left. This range can be used as far back as 900m. **ALL TARGETS MUST BE PLACED IN LINE BETWEEN THE FIRING POINTS AND THE BULLET CATCHERS TO CORRESPOND WITH THE LANE NUMBER**. The use of .338 ammunition may be authorized on this range. Falling plates are authorized but will **only** be set up in front of the backstop. When booking this range, "C" Range Left will be closed for safety unless the same distances are used on both ranges. The same goes when "C" Range Left is used.
- 4. "C" Range. "C" Range is a long distance range located centrally within the range complex. It provides 76 metal target frames suitable for targets up to 6' x 10', and elevated firing points at 100 metre intervals up to 900. Falling plates, when authorized, can be fired on this range. Range Control may also authorize the use of .338 ammunition on lanes 1 to 30 with a minimum range of no less than 300m.



Charlie Range

5. "<u>D" Range</u>. This is a short distance range located to the east of the range complex. It provides 30 metal target frames suitable for 4' x 4' targets, and elevated firing points at 100, 200 and 300 metres It also contains a 50m pistol range forward of the target gallery. This range has an enclosed target area allowing full use during the winter. **No firing of hard targets or falling plates permitted on this range.** Range Control may also authorize the use of .338 inch ammunition.



Delta Range



Delta Range



Delta Range

6. <u>Pistol Ranges</u>. The pistol ranges are located in the extreme east edge of the range complex. No weapon may be fired at a range greater than the established 25 and 50 metre points. No tracer ammunition is permitted on any of these ranges.



Pistol Ranges

6.03 WINTER FIRING

1. Ranges may be used in winter. 'A' and 'C' Range target frames are to be placed at half-mast after firing. 'D' Range is enclosed and should be considered first.

6.04 WEAPON DANGER AREA

1. When ranges are being used concurrently, Range Control will ensure that danger areas do not overlap adjacent firing points. RSOs must co-ordinate with Range Control and other users in relation to firing at multiple ranges.

6.05 AUTHORIZED AMMUNITION AND WEAPONS

- 1. Subject to the provision of article 6.01 above, and the Range license for the specific range in use, the following may be fired on CRPTC gallery ranges:
 - a. 5.56 mm Ball and Tracer from CAF and NATO-equivalent small arms including C7 rifle, C8 carbine and C9 LMG;
 - 7.62 mm Ball and Tracer from CAF and NATO-equivalent small arms including C1A1 rifle, C2A1 automatic rifle, C11A1, C12A1, C3 sniper rifle, C5A1 GPMG, C6 GPMG and re-bored .303 inch rifles;
 - c. .303 inch Ball and Tracer from CAF and NATO-equivalent small arms including No. 4 rifle;
 - d. sub-calibre Training Devices (SCTD) 6.5mm Carl Gustav Practice with Trace L1OA1 insert and 21mm M72-S; and
 - d. black powder rifles up to .45 inch; and
 - e. .338 ammunition on a certain range as specified by Range Control.
- 2. Firing of tracer ammunition may be prohibited due to the fire index.
- 3. The following may be fired on all CRPTC gallery ranges and the two 50m ranges:
 - a. any standard military, police or NATO-equivalent automatic pistol or revolver up to 10mm or .45 inch calibre firing standard, ACP, magnum or special ammunition;
 - b. .22 inch rifles;
 - c. 12 Gauge SSG and Slug from shotguns; and
 - d. 38mm Gas and inert grenades from grenade launcher.
- 4. For the four 25m pistol ranges, refer to chapter 18.

TRACER AMMUNITION IS FORBIDDEN ON ANY OF THE PISTOL RANGES

- 5. The following weapon trainers may also be fired at CRPTC however specific permission must be sought from Range Control for each exercise:
 - a. cartridge 25mm Practice, Training for Mortar, 81mm; and
 - b. 14.5mm Gun, Artillery Trainer.

6.06 NIGHT FIRING

1. Night firing may be conducted at Connaught. The Unit must notify Range Control 48 hours in advance when paraflares are to be used. When authorized, Range Control will notify the following agencies of the type of training, and the approx. start and end times:

NDCC	613-945-5551
NDHQ SAMP	613-995-0123
Ottawa Police Service	613-236-1222
Gatineau Police Service	819-246-0222
DRDC	613-998-2264
Nepean Sailing Club	613-829-7015
Ottawa Fire Dept	
·	

6.07 FALLING PLATES

1. When authorized by Range Control in DRSO, falling plates may be used on A2, B Range and C Ranges only. They will **only** be set up in front of the backstop and on the wooden platforms provided. Refer to CFP 381(1) for other details.

6.08 - 6.99 Not allocated

CHAPTER 7

EXPLOSIVE ORDNANCE DISPOSAL RANGE

7.01 GENERAL

1. 4th Canadian Division is responsible for EOD operations within the Province of Ontario. The 4 Div Duty Officer will direct EOD teams (military or civilian) to proceed to Connaught Range to dispose of demolitions.

7.02 LOCATION

1. EOD operations will be conducted on the Ordnance /Grenade Range at GR 279244.

7.03 <u>ACCESS</u>

1. Access to the EOD Range is by way of the perimeter road. The route is signed from Rifle Road to the EOD Range.

7.04 CONTROL

- 1. Units and organizations requiring the EOD Range must contact Range Control at one of the following phone numbers:
 - a. CRPTC Range Control at 613-991-5890; and
 - b. CRPTC Range Control cell phone at 613-266-4474.

7.05 EOD TEAM LEADER RESPONSIBILITIES

- 1. The EOD team leader is responsible for ensuring that procedures outlined in this order are followed, and that EOD detonations are carried out in accordance with applicable directives.
- 2. <u>Notification of EOD Operations</u>. Once an EOD team establishes a need for the CRPTC EOD Range, the EOD Team will provide CRPTC Range Control the following information:
 - a. estimated time of arrival at CRPTC;
 - b. whether the item will be destroyed upon arrival at the EOD range or held and observed. If the item is to be held, the estimated number of hours; and
 - c. name and contact number of EOD team leader.

- 3. <u>Transportation of Explosive Devices</u>. Explosive or suspected explosive devices will be transported to the EOD site in accordance with the explosive transportation directives of the organization assigned responsibility for the particular operation.
- 4. <u>Arrival at CRPTC</u>. Normally a member of the CRPTC Range Control staff will be available and will assist the team to proceed to the EOD site on its arrival at CRPTC. The EOD team leader is responsible to:
 - a. ensure public warning flags are hoisted at the Grenade Range (barrier and tower);
 - b. contact Range Control;
 - c. brief CRPTC Range Control staff on the situation and advise of the danger zone;
 - d. establish voice communications with Range Control;
 - e. give a 10 minute warning prior to detonation and obtain final clearance from Range Control to detonate at that time;
 - f. detonate; and
 - g. signal "All Clear".
- 5. If the device must be detonated immediately and CRPTC staff are not available, the EOD team will:
 - a. verify that there are no personnel within the 300 meter danger area; and
 - b. post sentries at the barriers on the perimeter road to prohibit entry into the danger area.

7.06 CRPTC RESPONSIBILITIES

- 1. <u>Working Hours</u>. CRPTC Range Control will control CRPTC action. Upon being notified of an EOD operation, Range Control will:
 - a. open a log;
 - b. notify CRPTC Commandant of the situation;
 - c. if necessary, suspend training in areas affected by the EOD:
 - (1) training on, or in the vicinity of the grenade range will be suspended; and
 - (2) firing on "A" Range will be suspended.

- d. post guards as required to deny entry or exit of vehicles to CRPTC property beginning 15 minutes prior to scheduled arrival of EOD Team;
- e. establish communications with the EOD Team;
- f. obtain a SITREP from the EOD Team Leader and determine;
 - (1) danger area for the device being detonated; and
 - (2) any special requirements.
- g. hold the EOD convoy if necessary until affected personnel have been evacuated. The team then may be cleared to proceed to the EOD site;
- h. ensure all personnel have been evacuated from the danger area prior to giving the EOD Team clearance to detonate at the 10 minute warning; and
- j. coordinate start-up of training activities. Personnel shall not move back into the EOD danger area until the EOD Team Leader has reported to Range Control and confirmed his team has cleared the ranges.

7.07 EOD AFTER ACTION REPORT

1. Range Control will complete a CRPTC Incident Report after each EOD incident.

7.08 - 7.99 Not allocated

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CHAPTER 8

TRAINING AREAS

8.01 GENERAL

1. Dry training maneuver areas are allocated and controlled in the same manner as ranges and other facilities at CRPTC.

8.02 TRAINING AREA LOCATIONS

- 1. The grid references of the center point of each training area are included in the description of each area.
- 2. <u>Area 1</u>. North of Malibar Road, east of Watts Creek to the CRPTC boundary (GR 304237).
- 3. <u>Area 2</u>. The area by Malibar Road, March Valley Road (west boundary), Shirley Blvd, and the Cadet Camp west boundary (GR 287230).
- 4. <u>Area 3</u>. The area bounded by Connaught's west boundary fence, Shirley's Brook, the west boundary of the common danger area, and Riddell Storm Ditch (GR 274248).
- 5. <u>Area 4</u>. The area bounded by Connaught's west and north boundary fences, Shirley's Brook, and the road from Cameron Harvey Drive at Gate 7B (GR 267259).
- 6. <u>Area 5</u>. The area bounded on the north by Cameron Harvey Drive, on the west by the road from Gate 7B, in the south by the north boundary of the common danger area, and in the east by the hydro line (GR 275269).
- 7. <u>Area 6</u>. The area bounded on the north by Cameron Harvey Drive, on the west by the hydro line and danger area, on the east by the Ottawa River, and in the south (very roughly) by the the 220 contour line (GR 283273)
- 8. <u>Area 7</u>. Bounded in the north by area 6, on the east and south by the Ottawa River, and on the west by the common danger area (GR 294249).
- 9. Area 8. Chartrand Island (GR 229254) and Haycock Island (GR 300248).
- 10. <u>Area 9</u>. The northern portion of the common danger area (north of Shirley's Brook) (GR 281260).
- 11. <u>Area 10</u>. The southern portion of the common danger area (south of Shirley's Brook and north of the range back stops (GR 284249).

<u>NOTE</u>. Parts of training areas 4, 5 and 6 will be closed and out of bounds to all personnel when .338 LAPUA MAGNUM ammunition is fired on Alpha and or Charlie range. Range Control will notify all Users in the training areas.

8.03 PROHIBITED AND PROTECTED AREAS

- 1. <u>Prohibited Areas</u>. The following communications facilities are out of bounds:
 - a. the north side of Area 6 at GR 281278; and
 - b. the east side of Area 7 at GR 296268.
- 2. <u>Protected Areas</u>. The following wildlife areas are "protected" and should be avoided during training:
 - a. the Ottawa Duck Club area north of the main back stop; and
 - b. the Innis Point Bird Sanctuary's two sites:
 - (1) <u>site A</u>. A strip approximately 200 meters deep running north-south for approx. 800 meters astride the easternmost tip of land in Area 7 at GR 301263; and
 - (2) <u>site B.</u> A small 100 x 300 metre strip in the south of area 6 between the road and the river.
- 3. The Innis Point sites are especially sensitive during the spring and fall bird migration periods.

8.04 LIVE FIRING

- 1. Live firing is prohibited in dry training areas unless specifically authorized by Range Control.
- 2. The use of flares and pyrotechnics is also prohibited unless specifically authorized by Range Control. No artillery simulators or thunder flashes are permitted between 2300 to 0700hrs daily.

8.05 CLEANLINESS

- 1. Units will not leave litter and garbage in the training area. All such residue will be taken to the main site and deposited in a dumpster designated by Range Control.
- 2. Units are responsible to provide unit held garbage cans and receptacles.
- 3. Range Control will inspect training areas at the conclusion of training to ensure compliance with these orders.

8.06 CAMPFIRES

1. Campfires are authorized by Range Control and will only take place in the established fire pits in Bivouac sites 1, 2, and 3 only. No campfires permitted in Bivouac 4. Only dead fall is to be used. Cutting of branches or trees is forbidden. All fires must be extinguished at a minimum of 3 hours prior to march-out.

8.07 BIVOUAC SITES

- 1. There are 4 Bivouac sites located in the training areas. Each site has a fire shed equipped with fire-fighting equipment and 2 x 1000 liter water refill tank for man packs. When the site is occupied, the fire shed is to be opened. Tampering with any of this equipment is strictly forbidden.
- 2. Swimming is not authorized in bivouac sites 2 and 4. These sites however may be used for watermanship training.
- 3. Bivouac site 4 is an austere site and only shelter-halves are authorized. No modular tentage or fires permitted on this site.
- 4. The use of field latrines and other expedients is prohibited.
- 5. It is forbidden to throw garbage in the toilets.



Bivouac 1



Bivouac 2



Bivouac 3



Bivouac 4

8.08 - 8.99 Not Allocated

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CHAPTER 9

GAS HUT

9.01 LOCATION

- 1. The gas hut is located at the corner of Malibar Road and Lee Enfield Road at GR 298232.
- 2. The OIC Exercise of a unit scheduled for gas hut training will report to Range Control to obtain the keys for the building and to be briefed on operating the equipment.



9.02 SAFETY PRECAUTIONS

- 1. Gas equipment tests must be conducted in accordance with CFP 316(1), Annex D. Copies are available from Range Control.
- 2. The following safety precautions are mandatory:
 - a. personnel shall be medically fit for deliberate or accidental exposure to CS in accordance with CFAO 34-49:
 - b. personnel should wear protective clothing in a closed state and must have a protective mask. If protective clothing is not available, combat clothing or equivalent fastened at wrists, neck and ankles, is permissible;

- c. female personnel shall wear a sanitary napkin and slacks or overalls combination;
- d. the tests shall be conducted only by current NBCW qualified personnel;
- e. only CS vials or capsules shall be used to charge the gas hut;
- f. no individual shall be allowed to remain alone in the gas hut; and
- g. a burning grenade will not be used to charge the gas hut.

9.03 – 9.99 Not Allocated.

CHAPTER 10

RAPPEL TOWER

10.01 GENERAL

- 1. The Rappel Tower is located beside the Assault Course at grid reference 299233. It includes:
 - a. 15 foot vertical wall;
 - b. 40 foot vertical wall;
 - c. 40 foot angled wall; and
 - d. two 40 foot skids for Helicopter Rappel Training.

<u>Note</u>. The 40 foot Skids shall not be used simultaneously with any of the vertical or angled walls. Aussie Rappelling is only authorized on the 40 foot angled wall.

- 2. <u>Helicopters</u>. Rappelling from helicopters may be conducted in the field immediately to the NORTH EAST of the tower or other areas as designated by Range Control.
- 3. Out of Bounds. The tower and the adjacent fields are OUT OF BOUNDS except for authorized users. Unless booked, all obstacles in the Assault Course are out of bounds.

10.02 ACCESS

- 1. <u>Allocation</u>. Units will request allocation of the rappel tower by submitting a TSR through CFRIS.
- 2. <u>Access</u>. The user unit's OIC Exercise will report to CRPTC Range Control to obtain the key to the rappel tower and to be briefed on any special hazards or considerations.

10.03 SAFETY

- 1. <u>General</u>. B-GL-392-003/FP-001 Helicopter Insertion / Extraction Techniques and Procedures regulations pertaining to safety for rappelling from helicopters. These regulations are also applicable to rappelling from the CRPTC Rappel Tower.
- 2. <u>Active Walls</u>. The 40 foot Skids will not be used simultaneously with any other wall. The inactive portion of the platform will be secured and gates closed to prevent personnel from accidentally falling or walking off the platform. The 15 foot and 40 foot walls may be used simultaneously as long as the required level of supervision is met.
- 3. <u>40 foot Skids</u>. Both skids may be used simultaneously with up to three (3) rappellers per skid.

- 4. Angled Wall. This wall can be used for both normal and Aussie Style rappelling.
- 5. <u>Qualifications Required</u>. As per B-GL-381-001/TS-001 or equivalent police qualification, for conducting tower or helicopter insertion and/or extraction, the following qualifications are required:
 - a. Helicopter Insertion Master (HIM) Course Mod 1 qualifies the soldier to be a Static Rappel Master (SRM). The soldier shall be employed within the scope detailed by the course QS. The qualification authorizes the qualified soldier to dispatch rappellers from a rappel tower and helicopter
 - b. Helicopter Insertion Master (HIM) Course Mod 2 qualifies the soldier to be a Fast Rope Insertion and Extraction (FRIE) Master. The soldier shall be employed within the scope as detailed by the course QS. The FRIE Master qualification authorizes the qualified soldier to dispatch fast ropers, helicopters, and hoverers from a rappel tower, helicopter mock-up, and helicopter only.
 - c. CTI and AMO. Personnel holding these current qualifications are qualified nonstandard rigging, which allows them to rig natural and artificial structures (including towers) for rappelling. CTIs and AMOs are NOT authorized to dispatch soldiers from helicopters or teach helicopter drills.
 - d. Currency. Currency for HIM Mod 1 and 2, tower and helicopter operations, is every 180 days. If a qualified soldier's currency lapses, that soldier must be refreshed by a current and qualified member.
- 6. <u>Safety Personnel</u>. The following personnel are the minimum required for safety when using the CRPTC Rappel Tower.
 - a. <u>Helicopter Insertion Master In Charge (HIM)</u>. Who is also the Range Safety Officer, is responsible for all aspects of safety in, on and around the tower;
 - b. <u>Wall Supervisor</u>. One qualified Static Rappel Master (SRM) for each wall in use (except that the HIM may perform this function when only one wall is in use);
 - c. <u>Anchor</u>. One anchor person, who must be a qualified rappeller, for each rope in use to hold the ground-end of the rope and brake any rappeller who loses control;
 - d. <u>Medical</u>. CFP 381(1) specifies that a First Aider will be present when rappelling. Units will not be authorized to use the rappel tower unless a First Aider is present with applicable first aid equipment; and
 - e. <u>Safety Vehicle</u>. A safety vehicle capable of transporting a stretcher load will be located just to the north of the tower.

- 7. <u>Helicopter Insertion Master Responsibilities</u>. The HIM is responsible for the training and safety of all rappellers on and around the tower:
 - a. prior to conducting any rappelling they shall:
 - (1) visually inspect the structural members of the tower for obvious defects;
 - (2) check all ladders, steps, platforms and walls to ensure they are clean, dry and free of hazards:
 - (3) carefully inspect tie-downs to ensure they are safe to use and free of rust and excessive slack; and
 - (4) inspect all ropes, snap links and equipment to ensure each item is functional and safe.
 - b. The HIM will also ensure that:
 - (1) each rappel instructor is a qualified Mod 1 Static Rappel Master (SRM);
 - (2) each rappel instructor on the tower wears a properly secured safety harness; and
 - (3) only a qualified SRM dispatches personnel from the tower on rappel.
 - c. On completion of training the HIM will ensure that the tower is locked.

10.04 EQUIPMENT

- 1. <u>Rappel Equipment</u>. Only the following rappel equipment is authorized for use when rappelling from the CRPTC Rappel Tower:
 - a. Kevlar combat helmet or armoured vehicle crew helmet;
 - b. Petzl, Cordex Plus gloves NSN 8415-14-560-0251, 48 small, 51 medium, 52 large, 53 extra-large;
 - c. sharp knife or issued emergency seatbelt cutter;
 - d. elastic retainer bands;
 - e. Petzl Steel Vulcan TM Tri-act carabineer NSN 8465-14-575-2163;
 - f. Petzl Omni TM Tri-act Carabineer NSN 5340-14-563-0394 (black);
 - g. Black Diamond TM ATC rappel device NSN 8465-01-614-1590;
 - h. Petzl Pandion TM Tactical seat harness NSN 4240-01-611-6986;

- i. Petzl Voltige chest harness NSN 4240-14-564-1894;
- j. CMC TM eight link connector loop NSN 8465-01-616-7209;
- Airborne Systems TM leg bag NSN 01-626-0484 or Carcajou 54 Tactical & Defence rope bag;
- 10.5 mm dynamic kernmantle rope (110 ft) NSN 4020-01-624-8536. This is the rope used for rappelling as well as for the construction of the improvised seat harness (Swiss Seat);
- m. one-inch tubular nylon (Sterling Rope Coy) NSN 8465-01-585-3322, used to construct the improvised chest harness and improvised connector loop; and
- n. seven millimeter static kernmantle rope (cordallette) NSN 4020-20-000-9094, used to construct the safety leash for tower training.
- 2. CRPTC holds limited supplies of equipment. All users are responsible for their own ropes, harnesses, carabiners and must ensure all equipment used is inspected.
- 3. <u>Personal Equipment</u>. All trainees shall wear the following when inside the tower fence and on the tower:
 - a. kevlar helmet or approved climbing helmet (secured firmly to the trainee's head). Hockey helmets are not authorized;
 - b. leather gloves; and
 - c. boots.

10.05 RESTRICTIONS

- 1. <u>Anchor Points</u>. Carabineer snaplinks shall be used to anchor each rappel rope to the anchor cable assembly or anchor point.
- 2. <u>Harness</u>. A trainee shall not be permitted on the tower until he/she has been properly rigged and inspected on the ground by a qualified instructor.
- 3. <u>Tower Limits</u>. To prevent crowding, the number of personnel on the tower at any one time shall be kept to an absolute minimum. Not more than four (4) trainees shall be permitted on a platform except when conducting training from the skids.

10.06 CEASE TRAINING

- 1. Rappel training will be suspended immediately when conditions become unsafe. The following conditions are considered unsafe for rappelling from the CRPTC Tower:
 - a. wind speeds in excess of 40 km/h or heavy gusting; and
 - b. tower surfaces are too wet or slippery.
- 2. The decision to cease training will be made by the HIM or Range Control.



Rappel Tower

10.07 ABSEILING BY CADETS

- 1. The Rappel Tower is authorized for Abseiling by members of the Canadian Cadet Movement (CCM).
- 2. All Abseiling events must conform to A-CR-CCP-951/PT-002, Army Cadet Adventure Training Safety Standards.

10.08 - 10.99 Not Allocated

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CHAPTER 11

ASSAULT COURSE

11.01 GENERAL

1. The Assault Course begins at the junction of Malibar and Shirley Boulevard and runs from GR 303236 to GR 298233 (The first obstacle is on the east side of Watts creek and the final one is just behind Range Control). The course is designed to be used in that east-to-west direction. Three sub-groups can use the course simultaneously along parallel trails which contain a variety of hurdles intended to represent typical obstacles which a soldier may encounter in combat. Traversing the obstacles requires skill, strength and coordination however it is the skill aspect which should be stressed in the early stages of training. Initially, personnel should only wear combat clothing on the course, however, dress and equipment should be increased in stages to fighting order with weapons.

11.02 ACCESS

- 1. <u>Allocation</u>. Units can request the Assault Course by submitting a TSR through CFRIS.
- 2. <u>Reporting</u>. Before using the Assault Course, the user unit's OIC exercise will report to CRPTC Range Control (1 Lee Enfield) to confirm authority for use and to be briefed on any special hazards or considerations.

11.03 **SAFETY**

1. <u>General</u>. CFP 381, Volume 1, Part 1 page 1-92 provides regulations pertaining to safety on obstacle courses. These regulations are applicable to the CRPTC Assault Course.

2. Supervision:

- a. personnel shall only use the Assault Course under the supervision of a qualified platoon/troop commander who has been authorized by the user unit CO to supervise obstacle course training;
- b. the assigned supervisor must be familiar with the CRPTC Assault Course. Firsttime supervisors will be walked through the course by a Range Control Patroller to ensure that crossing and safety requirements are understood;
- c. this supervisor must be present, along with sufficient assistants to supervise at each obstacle in use; and
- d. prior to commencing the exercise, the supervisor will walk the course and inspect each obstacle. Any obstacle of questionable safety will be declared out of bounds. Defects, hazards (badly frayed ropes, protruding nails, rotting wood etc. or other safety concerns will be reported to CRPTC Range Control.

- 3. <u>Equipment</u>. The following will be immediately available when the course is in use:
 - a. safety vehicle, complete with First Aid kit, Blanket and stretcher; and
 - b. radio on CRPTC Range Control voice net.

11.04 OBSTACLES

- 1. <u>General</u>. Obstacles will be traversed in the manner described below for each obstacle as well as any additional restrictions which may be imposed by CRPTC Range Control. Safety on the Assault Course shall not to be sacrificed to achieve speed in surmounting obstacles. Supervisors shall ensure that effective "spotting" techniques are employed when crossing each obstacle. Obstacles should not be used if they are dangerously wet or icy.
- 2. <u>Individual Obstacles</u>. The following sub-paragraphs describe each obstacle, including its method of crossing, in the order in which the obstacles occur:
 - a. <u>Single Rope Bridge</u>. An expedient bridge consisting of two poles 30' apart (representing trees on opposite sides of a water or other obstacle) connected by 1" rope. There are two bridges on each of the three lanes. The soldier ascends the vertical rope, traverses the horizontal, then descends under control on the distant vertical rope. <u>Restrictions</u>. Only one individual is permitted on the horizontal rope. No more than two individuals are permitted on the bridge at any time;



b. <u>Burma Bridge</u>. An expedient bridge across Watts Creek, again representing a bridge between trees on opposite sides of the water obstacle. There is one bridge on each lane. The soldier walks on the cable while holding the upper ropes for balance. <u>Restrictions</u>. Not more than three soldiers on bridge simultaneously. When the water is running fast and/or deep (particularly during springtime) safety lines will be employed by all users. Safety line will consist of 7/16-inch nylon sash cord passed through a snap-link fastened to the top rope and secured to the soldier in such a way (e.g. single or double-bowline around chest) that he/she cannot be swept away in the current if he/she falls from the bridge. Range Control will notify users when safety lines are mandatory. A rescue-man must be appointed when Watts Creek is in flood stage;



b. Rubble Climb. A series of large steps representing rubble from bomb damage. Soldier is free to choose crossing technique. **Restrictions.** Nil;



c. <u>Culvert Crawl</u>. A 20' long culvert representing typical bomb-damage obstacle. Soldier must crawl from end to end. <u>Restrictions</u>. Nil;



d. <u>Balance Beam</u>. Expedient crossing consisting of a 10-inch beam set on three posts across a gulley representing a typical dry-gap obstacle. Soldier should run from end to end. <u>Restrictions</u>. Caution to be used if wet or slippery;



e. <u>6' Wall</u>. Typical urban obstacle consisting of a 6' wall. Soldier must traverse without assistance. **Restrictions**. Nil;



f. <u>Log Crawl</u>. Soldier traverses by sitting with one leg on each side of the log. <u>Restrictions</u>. No standing on the log;



g. <u>Gulley Exit</u>. Similar to Rubble Climb. Free style. <u>Restrictions</u>. Nil;



h. <u>Swinging Bridge</u>. Soldier traverses by balancing in the center and keeping forward momentum. **Restrictions.** Nil;



- i. <u>High Wall</u>. Typical urban obstacle consisting of a 13' high wall with a 1" rope to assist ascent and decent. **Restrictions**:
 - (1) soldier must climb both up and down (i.e., no free-falling from top of wall);
 - (2) no more than two individuals on wall simultaneously; and
 - (3) no assistants to sit on top of wall.



j. <u>Scramble Net</u>. Used in seaborne and other specialized operations to descend/ascend vertical walls. Obstacle is a 20' high scramble/-cargo net draped over a log. Soldier climbs up one side and down the other. <u>Restrictions</u>. No assistants to sit on top of wall and no free-falling;



k. <u>Over and Under</u>. Soldier goes over the high beams and under the low beams. **Restrictions**. Nil;



I. <u>Arm Ladder</u>. Soldier traverses the obstacle by swinging the body from tube to tube. **Restrictions**. Caution if slippery;



m. <u>Single Rope Swing</u>. Single rope swing over a gulley representing an expedient crossing method. Soldier swings from one side to the other then throws the rope back to the next individual. A bridge is available for instructors (may also be used by first soldier on scene to retrieve the rope). <u>Restrictions</u>. No climbing the rope and only one person permitted on rope;



n. <u>ZigZag.</u> Typical obstacle. Run through. <u>Restrictions</u>. Nil;



o. <u>Window Crawl</u>. Typical urban obstacle. Soldier climbs through window without assistance. <u>Restrictions</u>. No diving through the window;



p. <u>Low Wire</u>. Standard defensive obstacle used to impede assaults. Soldier crawls under the wire. <u>Restrictions</u>. Nil; and



q. <u>Trench Crawl</u>. Typical obstacle. Soldier jumps in, moves under log and climbs out. <u>Restrictions</u>. The log will not be used to step on.



11.05 CEASE TRAINING

- 1. Assault course training will cease immediately under the following conditions:
 - a. darkness; or
 - b. rain/sleet/hail.

11.06 INSPECTIONS

- 1. The Assault Course shall be inspected annually by the responsible engineer authority from PWGSC to verify that it is structurally sound. A check-list is at B-GL-381-001/TS-000, page 1-87 para 219.
- 11.07 11.99 Not allocated.

CHAPTER 12

AIR RIFLE RANGE

12.01 GENERAL

1. <u>Location</u>. Air Rifle Ranges exist in the Cadet Camp or can be established in a location determined by Range Control.

12.02 RESTRICTIONS

- 1. <u>Weapons</u>. Only 0.177 calibre air rifles are authorized to be fired on this range.
- 2. <u>Ammunition</u>. Target (flat head) pellets only may be fired. Pointed or "hunting" pellets and BB's will not be fired.
- 3. <u>Firers</u>. The number of firers will depend on available space. The minimum distance between rifles or pistols is 1.5 meters. The minimum distance from the first and last targets to a wall is also 1.5 meters.

12.03 RANGE SAFETY OFFICER

1. <u>Qualification</u>. The user-unit Commanding Officer must appoint a RSO who is qualified in accordance with CFAO 9-20 to be present during all live firing.

12.04 PRE-EXERCISE ACTIVITIES

- 1. Reporting. Before proceeding to the allocated range, the RSO will:
 - a. Report to Range Control (1 Lee Enfield) to be briefed on conditions affecting the use of the allocated range and:
 - (1) to obtain a radio; and
 - (2) sign the *Range Clearance Certificate* to certify familiarity with CRPTC Range Safety Orders and Commanding Officer's or Club President's authorization to be Range Safety Officer;
 - b. establish radio communications.

- 2. <u>Troop Briefing</u>. The RSO must brief all troops involved in the exercise and provide a detailed explanation on each of the following items:
 - a. medical emergency procedure (see below), and where medical assistance (individual must be First Aid Qualified) and the ambulance or designated range safety vehicle will be located; and
 - b. requirement to point weapons down range at all times, and weapon control on the firing point.

12.05 RANGE SAFETY

- 1. Personnel must be instructed in the safe use and operation of the air rifle prior to firing.
- 2. The RSO must inspect the backstop to ensure it is serviceable prior to firing.
- 3. The RSO must establish strict, positive range access control. Personnel shall not be permitted to enter/exit the cadet stores or arsenal while firing is in progress.
- 4. A First Aid Kit must be immediately available during all firing exercises.
- 5. Eye protection shall be worn by all personnel during firing. The wearing of aural protectors is recommended.
- 6. Air rifles will be pointed down range at all times. All other safety precautions, as detailed in the appropriate user manuals, will be strictly enforced by the RSO.

12.06 CONDUCT OF EXERCISE

- 1. Only firers, the RSO and his assistants are allowed on the firing point. Waiting details must be to the rear of the firing point or in the adjoining area.
- 2. The air rifles/pistols required for a training exercise shall be placed on the firing point, pointing toward the target area, before the commencement of the exercise. At no time during the exercise will any air rifle/pistol be pointed in any direction other than at the targets.
- 3. Air rifles/pistols shall be loaded and fired only on orders of the RSO. Firing will take place only from the assigned firing positions.
- 4. When a stoppage/malfunction occurs, the firer shall immediately lay down his/her air rifle/pistol with it pointing towards the targets and raise his/her hand. After the stoppage/malfunction is cleared, the RSO shall inspect for serviceability before firing resumes.

- 5. On completion of the practice:
 - a. the RSO shall issue the order to "**UNLOAD**";
 - b. spring tension or gas pressure will be released, and the air rifles/ pistols placed on the firing point with the breech open. All weapons will then be inspected by the RSO to ensure they are unloaded;
 - the RSO may then permit firers to proceed beyond of the firing point. Air rifles/pistols will not be touched by personnel returning from the target area without permission from the RSO;
 - all pellets will be recovered and turned over to cadet or CRPTC stores for recycling. PELLETS WILL NOT BE PLACED IN GARBAGE CONTAINERS; and
 - e. before authorizing the firing party to leave the range, a final inspection will be carried out by the RSO to ensure that all air rifles/pistols are unloaded.

12.07 <u>TARGETS</u>

1. Only International Shooting Union (ISU) targets or those targets authorized for Cadet use will be used.

12.08 HOUSEKEEPING

- 1. Users shall be responsible for cleaning the range on conclusion of exercises. The RSO shall ensure that the range is inspected for cleanliness prior to notifying Range Control who will secure the range.
- 2. Upon completion of any air rifle activity, all pellets are to be collected and deposited into the marked Lead Waste containers located at each range. When collecting pellets for disposal, personnel should wear nitrile gloves.
- 3. On the completion of range activity, the range must be thoroughly vacuumed at the firing line and the point of impact. The vacuum must be equipped with high efficiency particulate air (HEPA) filter systems and be designated for lead clean-up only.
- 4. All members who have handled lead pellets must thoroughly clean their hands following the range activity.
- 5. Floors will be damp swept using a Dust Bane material on completion of the days firing.

12.09 SECURITY

- 1. The RSO, on completion of firing, will secure the range area and the air rifle/pistol storage room.
- 12.10 12.99 Not Allocated.

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CHAPTER 13

ORDNANCE / GRENADE RANGE

13.01 LOCATION

1. The Grenade Range is located at GR 279244. Access is from the west via Perimeter Road.





13.02 GENERAL

1. Safety procedures specified in applicable grenade training manuals, CFP 381(1), and current ammunition restrictions will be implemented during all exercises on the grenade range.

13.03 TYPES OF TRAINING

- 1. The only authorized training on the Ordnance/Grenade Range are:
 - a. live grenade practice (including any necessary dud disposal);
 - b. grenade range staff training;
 - c. grenade dud disposal training; and
 - d. RCMP training using North side of the range.

13.04 TYPES OF ORDNANCE

- 1. All hand-thrown grenades currently in use in the Canadian Forces, except Energa grenades, may be employed on the grenade range.
- 2. The use of improvised grenades and the conduct of unauthorized experiments are forbidden.
- 3. Conventional munitions for emergency ordinance disposal (EOD) may be employed provided the 300-metre danger template for the range is not exceeded.
- 4. Demolitions on the Ordnance/Grenade range will only be used for grenade dud disposal training and actual dud disposal. Explosives are limited to a single charge no larger than 1 kg with only the essential det cord and detonator.

13.05 COMMAND & CONTROL

- 1. The user-unit's commanding officer shall appoint a range safety officer (RSO) who will command all personnel on the grenade range and supervise all live grenade practices from the control tower. When an officer is not available, an experienced warrant officer or senior non-commissioned member may be appointed by the unit commanding officer to supervise live grenade practices.
- The RSO shall supervise all throwing of live grenades, and will ensure that these orders, particularly with regard to safety, are enforced.
- 3. An experienced NCO must be present in each throwing and preparation bay during live exercises to act as safety supervisor and assistant to the RSO.

13.06 NIGHT TRAINING

1. No training is authorized during night time.

13.07 EXERCISES DURING WINTER

- 1. Live grenades will NOT be thrown into soft snow.
- 2. Provided it is known with certainty that NO blinds have been left in the target area, live grenades may be thrown after all snow has been removed so that hard ground is exposed in the target area (must be cleared to at least 30 meters forward of the throwing bays).
- 2. Throwing and priming bays must be ice free or sanded to prevent personnel from slipping or falling.

13.08 GENERAL RULES

- 1. <u>Timings</u>. Grenades will not be thrown prior to 0730hrs weekdays and 0900hrs weekends and holidays. **All demolitions operations, including the sweep of the range, must be completed during daylight hours.**
- 2. <u>Sentries</u>. One sentry will be posted at each of the two range barriers on the perimeter road to ensure that no one enters the range danger area while firing is in progress. Each sentry must have instant communications with the RSO and RCO.
- 3. <u>Range Danger Flags</u>. Range flags for this range must be hoisted before firing commences and remain flying throughout the live exercise. The danger flags are located at:
 - a. both barrier gates on the perimeter road which control access to the range; and
 - b. at the control tower. This control tower flag will not be raised until the RSO is satisfied that the range danger area is clear of personnel and wildlife.
- 4. <u>Range Control Flags</u>. One RED and one GREEN control flag will be kept at the control tower. The RSO will order the raising of the GREEN flag when the throwing party arrives at the range. The RED flag will not be raised before the danger area is clear of personnel and wildlife, sentries are in position, and the larger RED warning flag has been raised. The RED control flag will be lowered, and the GREEN flag raised when throwing is suspended or terminated. When the control flag is raised, the door must be closed.
- 5. <u>Duds</u>. Any grenade which fails to detonate will be destroyed before continuing with the exercise or departing the range. A demolition set must be taken to the range for the destruction of duds or damaged grenades. Qualified personnel only are authorized to control and use the demolition set.
- 6. <u>Shelter</u>. Before commencing live training, everyone within the danger area, including the RSO, Safety Assistants, waiting relays and spectators, must be behind blast proof cover or in trenches.

- 7. Orders. Grenades will not be thrown or fired unless a direct order is given by the RSO.
- 8. <u>Smoke Grenades</u>. Smoke emission grenades may be placed in position before activation but must not be held or touched while burning or for at least 10 minutes after completion of the chemical action because the grenade body becomes extremely hot and can cause severe burns.

13.09 THROWING AREA

- 1. Live fragmentation grenades will be thrown only from throwing bays.
- 2. Grenades will be thrown directly to the front of the throwing bay at a range calculated to strike a target situated NOT less than 20 meters forward of the throwing bay.
- 3. The impact area must be free of trees, undergrowth, bushes and any other objects which could obscure the RSO's view of thrown grenades. Any holes which contain water must be filled with earth so that thrown grenades do not come to rest where they could be difficult to locate for demolition.
- 4. On conclusion of each exercise, the RSO will ensure that holes in the target area are filled with dirt and that the surface is levelled.

13.10 EXERCISE SEQUENCE

- 1. The sequence to be followed on the CRPTC grenade range by the RSO, ARSO and thrower will be exactly as described in the current weapons publication. It should be noted, however, that the assembly area on this range is to the rear of the throwing bays.
- 2. The general procedure is that, under the orders of the OIC/RSO, throwers will move from the troop shelter to the designated assembly area. From the assembly area, the first two throwers (#1 and #2) will be ordered into preparation bays. When the first two have prepared their grenades, they will be ordered into throwing bays and the next two throwers (#3 and #4) will be ordered into preparation bays. When the first two have finished throwing, they will return through the assembly area to the troop shelter.

13.11 FRAGMENTATION GRENADES - GENERAL

- 1. <u>General</u>. The following safety regulations apply to the throwing of all fragmentation grenades (specific regulations for individual types are given in succeeding articles):
 - a. fragmentation grenades will NOT be thrown at night or in conditions of poor visibility;
 - b. steel/Kevlar helmets must be worn by all personnel while on this range;
 - c. smoking is prohibited on the range whenever grenades or their components are being handled or carried;

- d. an officer or NCO will be detailed as a Safety Assistant in each preparation and throwing bay in use;
- e. when throwing is in progress, everyone within the 300 metre danger area must be behind or under protective cover;
- f. the RSO will position himself at the control tower with the demolition set in his possession. When he is satisfied that all safety requirements have been satisfied, he will raise the RED control flag at the control tower and order the first relay forward into the assembly bays;
- g. no more than one person, in addition to the Safety Assistant, will be in a throwing bay (or preparation bay) at any time except in those situations where a student Safety Assistant is used. In this situation, three persons are allowed in the preparation and throwing bays; the thrower, the student, and the Safety Assistant;
- h. when Assistant RSOs are in position in the preparation and throwing bays, the first thrower from each assembly bay will be ordered into the adjoining preparation bay where the Assistant RSO will issue the grenade(s) for throwing. The Assistant RSO will closely supervise while the thrower inspects the grenade(s);
- i. a grenade found upside down in its packing container will not be removed but will be marked and returned to the issuing agency;
- j. prior to removing grenades from their containers, the supervising officer or NCO will ensure that the safety pin and, where applicable, the safety clip are in position on the grenade, and that there are no cracks in the shoulder of the grenade. If any of these faults are detected, the container will be marked, and the container with its grenade returned to the issuing agency without removing the grenade;
- k. the grenade will be thrown immediately after the safety pin is removed. Under no circumstances whatsoever will the grenade be held after the safety pin has been removed;
- I. should a live grenade be accidentally dropped in the throwing bay, the Safety Assistant must immediately force the thrower behind cover around the traverse before taking cover himself;
- m. the RSO will observe the actions of the thrower and the flight of the grenade. Both he and the Safety Assistant in the throwing bay will order "DOWN" as soon as they see the grenade strike the ground;

- n. should a dud occur, everyone will remain under cover until further orders. After a 30-minute waiting period the OIC Exercise will proceed, alone, to where the grenade lies and destroy it as described in CFTO C-09-008-002/FP-000. The OIC Exercise's Kevlar helmet must be securely worn and other equipment must be secure so that they will not become dislodged and disturb the dud; and
- if a dud occurs in a hole filled with water or soft snow, it may not be possible to safely locate and destroy it. Assistance from an Ammunition Technical Officer may be necessary.
- 2. <u>C13, M61, M67 and V40 Grenades</u>. The following additional safety precautions will be observed when using C13, M61, M67, and V40 grenades:
 - a. these grenades are delivered in a primed and ready-for-use condition therefore additional care will be taken to ensure that all grenades are secure in their containers before moving them to the practice area;
 - b. personnel will not open a grenade container or remove the grenade until instructed to do so. Immediately the grenade is removed from its container, it will be examined to ensure that there is no damage to the retaining lugs. The body will be checked for cracks. Damaged grenades will be set aside in a safe place for destruction before the conclusion of the exercise; and
 - c. neither the safety clip nor the safety pin will be removed unless the grenade is to be thrown.

13.12 <u>SMOKE AND RIOT GRENADE SAFETY REGULATIONS</u>

1. <u>No. 80 (WP) Grenade</u>:

- when the grenade is removed from its container, the mechanism holder will be unscrewed, and the detonator tube examined to ensure that the grenade is not primed;
- b. grenades will only be primed and unprimed on order of the RSO;
- a white phosphorous first aid kit will be kept at hand when the No. 80 grenade is being thrown. Some first aid measures are outlined in CFP 317(5) and CFTO C-09-153-001/TS-00 Part 9 Sect 2 and will be consulted by all officers and NCOs responsible for No. 80 grenade range practices;
- d. the No. 80 grenade should not be used in training when serious fire hazards may result from its use; and
- e. the No. 80 grenade will not be thrown at night or in conditions of poor visibility.
- 2. <u>No. 83 Grenade and the C3 Series</u>. This grenade is issued with a No. C19 fuse assembly fitted. The grenades can be pre-positioned and activated or thrown by hand. The grenade can ignite surrounding grass and care must be exercised in its use.

- 3. <u>HCC1A1 Smoke Grenade</u>. This grenade is issued with the No. C19 fuse assembly fitted. It can be thrown by hand or projected from a rifle. The grenade can ignite surrounding dry grass and care must be exercised in its use.
- 4. <u>M7A2/M7A3 Series Grenades</u>. These grenades are issued with and M201A1 fuse assembly already fitted. They can be thrown by hand or projected from a rifle. Care must be exercised when employing the grenade that friendly forces are not in the immediate downwind vicinity. The grenade can ignite surrounding grass and care must be exercised in its use. Because exposure to high concentrations of CS could cause lung damage, it will not be used against personnel in confined areas from which there is no ready exit.
- 5. <u>Pains Wessex Grenade</u>. The grenade is manufactured with the igniter set as an integral element. The smoke from the grenade can be toxic in high concentrations. The grenade must therefore not be used in confined spaces when persons are present. The grenade can ignite surrounding grass and care must be exercised in its use.
- 6. <u>Duds.</u> When duds occur during the use of the No. 80, No. 83, C3 Series, HCC1A1, Pains-Wessex and M7A2/M7A3 Series grenades, they will be destroyed IAW CFTO C-09-008-002/FP-000 after a waiting period of 30 minutes has elapsed.

13.13 DESTRUCTION OF UNEXPLODED GRENADES

- 1. The throwing and firing of live projectiles in the form of grenades, mortars, rockets, bombs or shells is an essential part of training. It is extremely important that all possible measures be taken to avoid accidents when dealing with any ordnance which fail to explode during training.
- 2. This order concerns the destruction of grenade blinds/duds which occur during live firing practices at CRPTC.
- 3. The following procedures will apply when dealing with unexploded grenades:
 - a. grenade blinds which occur during live practices will be destroyed by the OIC in accordance with the procedure detailed in C-09-008-002/FB-000 Ammunition and Explosives Manual, Destruction of Dud and Misfire Ammunition;
 - b. in instances where a blind has been located, but cannot be destroyed at once, a guard will be posted until such time as the blind is destroyed;
 - c. if, after a careful search, a blind cannot be located, the unit conducting the firing practice will notify Range Control of the incident and request guidance;
 - d. a Hazardous Ammunition Report will be submitted concerning all unexploded munitions, pyrotechnics or similar devices found or reported on ranges or training areas of CRPTC. Blinds which are detected during firing and immediately disposed of, and items reported under CFAO 36-31 concerning Explosive Ordnance Disposal (EOD), will not be included in this report; and

e. in all cases involving unexploded ammunition found or destroyed at Connaught, a Range Clearance Certificate or Hazardous Ammunition Report will be submitted to Range Control.

13.14 RANGE CLEARANCE - Prior to clearing the Range, the following must occur:

- a. The stove (if used) will NOT be stoked or fueled for 90 minutes prior to the planned march out. This will allow time for the coals to burn down sufficiently enough that the stove can be emptied;
- b. The priming bays and throwing bays will be cleared of all garbage and debris; and
- c. The Range hut will be emptied and free of all pers eqpt and waste prior to the Patroller inspection.

13.15 - 13.99 Not Allocated

CHAPTER 14

VEHICLE OPERATION AND SAFETY

14.01 GENERAL

- 1. All vehicles at CRPTC shall respect all traffic laws.
- 2. DND MSE will be operated in accordance with all policies issued by DND.
- 3. All Privately Owned Motor Vehicles (POMV) shall be operated in accordance with common safe driving practices.

14.02 COLLISIONS

- 1. Any collisions that occur within the confines of CRPTC are to be immediately reported to Range Control.
- 2. If DND MSE is involved, the CFSU (O) Veh Safety Section must be informed.
- 3. A DND 423 (Accident Report) shall be completed and submitted to the Safety Section.

14.03 BACKING

1. Ground guides are to be used (were possible), in order to prevent collisions. In circumstances where a ground guide is not available, the driver must exit the veh and complete a walk-around before backing up.

14.04 TROOP CARRYING VEHICLES

- 1. Any Troop Carrying Vehicles (TCV) shall meet all safety and vehicle equipment standards:
 - a. Be equipped with a Tarp and Superstructure;
 - Be equipped with a passenger safety strap;
 - c. All passengers shall wear helmets CSA Approved or Helmet, Ground Troop, Kevlar;
 - d. Drivers are to ensure that troops maintain 3 points of contact when climbing up and down the ladder:
 - e. Veh is not to be reversed with passengers. Unload troops first.
 - f. Driver is to ensure that the maximum seating capacity is not exceeded:

- (1) LSVW 8 passengers in the cargo compartment;
- (2) MLVW 24 passengers in the cargo compartment; and
- (3) MSVS 24 passengers in the cargo compartment.
- g. Stores and troops are not to be carried in the same veh;
- h. Veh carrying troops shall not tow any trailers (Water Buffalo);

14.05 CARRYING TROOPS ON PUBLIC ROADWAYS

- 1. When .338 LAPUA is being used on any range, Perimeter Road is barricaded, preventing access through to Area 6, 7, and 8. If a troop-lift is required, Old March Valley Road can be used, to access the Trg Area at the northwest corner gate. If this is required:
 - a. Contact Range Control to advise of the need for a troop-lift to the Trg Area.
 - b. A Patroller will meet the TCV and allow entrance or exit through the gate.
 - c. The veh shall not exceed 60km/h while in public roadways.

14.06 USE OF DRIP PANS

- 1. All SMP Veh will employ drip pans while at CRPTC.
- 2. Any fuel or POL spills are to be reported to Range Control immediately.

14.07 WAGONS and TRAILERS

1. Haywagons, and trailers will only be used to transport stores and equipment. Trailers of any type shall not be used to carry troops.

14.08 GOLF CARTS

- 1. Golf carts are authorized for use on the Ranges and throughout the built-up areas of CRPTC. They are not authorized in the Training Area.
- 2. Personnel operating golf carts must be qualified on the veh.
- 3. Golf carts are not to be overloaded 4 passengers maximum.
- 4. All kit and equipment must be secure while the veh is operating.

14.09 - 14.99 Not allocated

CHAPTER 15

14.5 MM ARTILLERY TRAINER

15.01 GENERAL

1. The 14.5 mm Artillery Trainer Range is a designated section of the CRPTC training area restricted to within the CRPTC boundary, grid squares, 2724 and 2824, on the CRPTC map (214804 MCE). The designated area within these grid squares is the only area within CRPTC where the M31 14.5 mm Artillery Trainer may be fired. At no time will firing extend beyond these boundaries.

15.02 <u>ACCESS</u>

- 1. <u>Allocation</u>. Units will request the 14.5 mm Artillery Trainer Range by submitting a booking request to CRPTC Range Control. Details (i.e. gun positions, target area and timings) for each proposed exercise will be forwarded to CRPTC Range Control at least one week in advance of the exercise.
- 2. <u>Reporting</u>. The RSO for each exercise will report to CRPTC Range Control, 1 Lee Enfield, prior to any personnel entering the training area. The RSO will confirm authority for use of the range and review the exercise plan with Range Control. The RSO will then be briefed on all procedures pertaining to the Range and on any special considerations (i.e. other troops in the vicinity) which may exist at the time. Once the RSO is briefed and has all of the equipment required to use the Range (flags, gate keys, radio etc.), access will be granted.

15.03 **SAFETY**

- 1. Range Safety Officers must be thoroughly familiar with and enforce CRPTC Range Safety Orders and B-GL-381-001/TS000 (CFP 381(1) "Training Safety") with particular attention to Chapter 4 of the latter. There are no physical barriers separating the 14.5 mm impact area from other sections of the CRPTC training area, therefore, careful attention must be paid to ensuring that the impact area is clear before firing, and that no personnel enter the danger area during firing.
- 2. The 14.5 mm Artillery Trainer is a dud-producing munition, therefore, each round fired must be "spotted". When a dud is identified, a cease fire must be called immediately. Duds will be marked for disposal prior to firing continuing and will be disposed of at the end of the exercise. Disposal of duds will be in accordance with B-GL-304-003/TS-0A1 (Training Safety) and TC G-1 User Manual for the 14.5 mm Artillery Trainer). Duds will be disposed of in locations specifically designated by CRPTC Range Control.

15.04 ENVIRONMENTAL PROTECTION

1. CRPTC Range Safety Orders contain regulations pertaining to Environmental Protection. These regulations apply to the 14.5 mm Artillery Trainer Range as well as to all other areas of CRPTC.

2. The relatively small charge, and the ability to collect all rounds from the 14.5 mm Artillery Trainer after they have been fired, ensures minimal impact on the environment. All expended rounds will be collected at the end of each exercise with careful attention to ensuring that all duds are destroyed in the designated location. These procedures will be strictly followed, and no unit will be cleared from the range until CRPTC Range Control is satisfied that the training area has been left in a satisfactory condition.

15.05 <u>AUTHORIZED AMMUNITION</u>

1. Only PD M183 (Point Detonating) ammunition is authorized for use on the 14.5 mm Artillery Trainer Range.

15.06 - 15.99 Not allocated

CHAPTER 16

CONNAUGHT RANGES AND PRIMARY TRAINING CENTRE

NAVIGATION EXERCISE

Prepared by: CRPTC Range Control

Effective Date: Jan 2008

Area: CRPTC areas 4, 5, 6, and 7

Map: CRPTC 1:25,000 Edition 1 Dated 2009

16.01 <u>AIM</u>

1. The aim of this Nav Ex is to provide the user with a prepared course for the instruction and testing of navigation skills. This Ex has been permanently established to save on the time required for setup and can be used for both day and night training regardless of the season. The distance between points conforms to the specified requirements for recruit and MLOC trg, however there is no set sequence of points to follow. The routes/legs are up to the user to determine and establish.

16.02 TERRAIN

1. The terrain consists of mixed woods with scattered clearings. The ground gently slopes to the South East with a mix of exposed rock and wet land. The area is divided by a road and a power line running North to South in Area 7 and a main road running west to East connecting the training area. There is a large intermittent lake located near the center of the Nav Ex in Grid Square 2726. This intermittent lake no longer resembles the map and it has extended as far north as Riddell drive. It may be safely traversed only during the winter months, as deep open marshes are located to the south and north of the road.

16.03 NAV POINTS

1. There are 28 points placed out in the areas as indicated on the map (Annex J). Each point is marked with a metal sign painted florescent red and white with the corresponding number in black. There is also a marker punch located with each point. All points are outside of the Danger Area Trace; however personnel must not cross into the Danger Area Template if firing is occurring. **NOTE:** These points are **not** to be moved or adjusted in any fashion. If a point or punch is missing, inform Range Control so the point can be replaced.

16.04 GPS USERS

1. All the Nav points have been placed using the PLGR +96 GPS in Y Code. The Map Datum used was World Geodetic System 1984 (WGS 84). The co-ordinates were done in 10 Figures and have been rounded down to 8 figure grid references.

16.05 CONDUCT

- 1. <u>Day</u>. The Ex is laid out with no specific start point. It is recommended that the troops be sent off in pairs from varied start points along the main roads to prevent groups from following each other. Each group should have a minimum of three legs to cover. The routes to be covered are the responsibility of the User and must conform to the training requirements as directed. The use of the roads is to be strongly discouraged. Each group should have a Nav Data Sheet to mark the grids, bearings and distances for each leg. To confirm that the members have reached the correct points, punches have been placed and each point. The member is to punch their card to prove that they have correctly navigated to the proper point. At the end of training the Nav cards should be turned in and the punch marks checked against the master card to verify the member's ability to navigate.
- 2. <u>Night</u>. The Ex should run the same as per the day with the only differences being the use of Chem–lites to mark the points and members should not navigate to the same points as done during the day Nav. The Chem-lites are the responsibility of the User and it is recommended that only a maximum of ½ an inch of the Chem-lite be visible. After the training is complete the User is to remove all Chem-lites.

16.06 - 16.99 Not Allocated

Annexes:

Annex H – Admin Instruction

Annex I – Safety Briefing

Annex J - CRPTC Map

Annex K – Nav. Points

Annex L – Example Nav Data Sheet and Punch Verification Card

Annex M – CRPTC Orienteering Map

CHAPTER 17

OBUA SITE

17.01 GENERAL

- 1. <u>Location</u>. The OBUA Site (Operations in Built Up Areas) is located at GR 2844 2708.
- 2. <u>Allocation</u>. Units will request allocation of the OBUA site by submitting a TSR through CFRIS.
- 3. <u>Access</u>. The user unit's OIC Exercise will report to Range Control, 1 Lee Enfield to obtain access and to be briefed on any special hazards or considerations.
- 4. <u>Principle Uses</u>. The OBUA site has been designed and constructed for OBUA training. Any request for this purpose will take priority over any other utilization. Unless its use is authorized by Range Control for exercise purposes, the OBUA site is **OUT OF BOUNDS.** It will not be authorized for use as a troop shelter or bivouac site or any other purpose which prevents its employment for its primary purpose.

17.02 RANGE REGULATIONS

- 5. <u>Live Firing</u>. There is **no live firing** permitted in or towards the OBUA site. It is a dry training facility in a dry training area.
- 6. The weapons and pyrotechnics authorized for use are as follows:
 - a. all CAF and Police standard issue weapons (Blank ammunition only);
 - b. Smoke (No white Phosphorous); and
 - c. Thunder Flashes.

Note: Simunition, CS grenades, artillery simulators, flares or any other types must be approved by Range Control.

- 7. Equipment. The following equipment will be on location when the OBUA site is in use:
 - a. safety vehicle;
 - b. stretcher, first aid kit, blankets;
 - c. communications with Range Control; and
 - d. fire-fighting equipment to immediately combat any fire that may occur.

- 8. <u>Inspection</u>. When a unit is proceeding to the OBUA site for training, a member of Range Control will accompany them and together they will inspect the facility. On completion of the training, Range Control will be notified and again an inspection will be carried out by a unit representative and a Range Control member. The march out must be booked in advance.
- 9. <u>Defensive Works</u>. Units are permitted to construct defensive works in and around the house. No structural damage is to be done. Units may be liable to fund necessary repairs. All works are to be fully removed on completion of the exercise and all materials are to be stacked neatly in its designated space.
- 10. <u>Rappel Points</u>. The two storey house features rappel points on the roof, in the attic and upper storey. Only the floor mounted eyebolts and the inside window bars of the upper storey will be used to support rappellers or climbers using rope or grappling hooks. Under no conditions will internal or external stairway guardrails or the front balcony guardrail be used to support rappellers or climbers. Use of rappel points is subject to all applicable regulations for rappelling. Units must request permission from Range Control to conduct rappelling as part of the exercise. The rappel master must be signed in at Range Control.

17.03 – 17.99 Not Allocated.

CHAPTER 18

25 METRE OUTDOOR PISTOL RANGE

18.01 GENERAL

1. The 25m ranges (Pistol 1, 2, 5 and 6) may be used for the practice firing of pistols, rifles, light automatic rifles/light machine-guns (LARs/LMGs), GPMGs and 84mm infantry antitank guns (only when 6.5mm, 7.62mm gallery and FFV 553 ammunition is being used).

18.02 SAFETY

- 1. B-GL-381-001/TS-000 or CFP381 (1) Training Safety provides all regulations pertaining to the 25m ranges.
- 2. Only firers, the OIC Practice and, RSO, when required, are allowed on the firing point. Waiting relays must be at least 5m to the rear of the firing point.
- 3. The sand in the bullet catcher must be kept loose. The bullet catcher is to be free from stones or other hard material. The bullet catcher is to be maintained by the user unit.

18.03 LIMITATIONS

- 1. Range Practice. The following limitations apply to the 25m ranges:
 - a. during practices involving an advance with loaded weapons, not more than two firers are to advance or fire at the same time; and
 - b. the firing of any weapon, other than the pistol, by sense of direction, e.g. instinctive shooting, is forbidden.
- 2. <u>Ammunition</u>. Only service small arms ball and sub-caliber ammunition is to be used. Tracer ammunition is **NOT** to be fired.
- 3. Targets. The following limitations apply:
 - a. targets are to be put in the target slot provided. Centers of flank targets or edges of landscape targets must be at least 1.25m away from either end of the bullet catcher; and
 - b. metal plates or other hard targets are **NOT** to be used as targets

- 4. <u>Weapons</u>. The following limitations apply:
 - a. the number of weapons, by types, which may be fired at the same time during daylight on a 25m range is determined by the following minimum safe distances required between weapons:
 - (1) 1.5m between pistol and rifles;
 - (2) 2.0m between LARs/LMGs;
 - (3) 3.5m between SMGs;
 - (4) 4.0m between GPMGs; and
 - (5) 4.0m between 84mm infantry anti-tank gun using ammunition described in section 18.01.
 - b. only the following weapons may be used to fire bursts, and these are to be restricted as shown:
 - (1) <u>GPMG</u>. 6 rounds when mounted on sustained fire (SF) kit; and
 - (2) <u>LMG and Rifles</u>. 2 to 3 rounds.
 - c. shotguns are not authorized on 25m ranges unless firing North on P1 and P6.

NOTE: When firing North on P1 and P6, only the weapons and ammunition authorized on P3 and P4 will be used due to the template.

- 5. <u>First Aid</u>. A person qualified first aid as per CFAO 9-5 with stretcher, first aid kit and a dedicated safety vehicle will be on site.
- 6. <u>Communications</u>. User units will be at all times in contact with Range Control by radio when using any of the ranges.
- 7. <u>Aural Protection</u>. All personnel will wear aural protectors when participating in range practices.
- 8. <u>Range Clearance</u>. The OIC or RSO will report to Range Control prior to occupying the range and fill out Part 1 of the Range Clearance Certificate and Part 2 once firing has been completed. After use, the range will be left with all garbage disposed of, all brass picked up, and the sand raked. The OIC or RSO will advise Range Control when the range is ready for inspection. All maintenance problems will be reported to Range Control.

18.04 NIGHT FIRING

- 1. Night firing will be conducted using the following:
 - a. all range flags will be replaced by red and green lights;
 - b. a supervisor or instructor is required for each firer. The level of light around the target must be sufficient to enable the firer to distinguish the target from its background; if this is not so, it is unsafe to use the range; and
 - c. when night firing is completed, the supervisors or instructors are to ensure that weapons are cleared, made safe, and inspected while the firers are still in the firing position.
- 2. The following additional safety rules apply to individual weapons in night firing:
 - a. Rifle:
 - (1) only 2 firers at one time;
 - (2) firing not permitted from closer than 25m;
 - magazines are only to be filled with the precise number of rounds required for the practice; and
 - (4) burst fire is prohibited.
 - b. <u>GPMG</u>. The GPMG is not to be fired at night unless targets have been registered by fire during the day;
 - c. LAR/LMG. The LAR/LMG is **NOT** to be fired on the 25m ranges at night;
 - d. <u>Pistol</u>. Only one firer to fire at a time; and
 - e. <u>84mm</u>. The 84mm using 6.5mm gallery and 7.62mm FFV 553 ammunition may fire at night on the 25m range, one weapon at a time.
- 3. Preliminary grouping and zeroing of any small arm fitted with IR, light intensification, or other night-aiming sights, may be carried out on a 25m range at night.

18.05 USE OF PISTOL RANGES FOR NON STANDARD RANGE PRACTICES

- 1. Units that desire to conduct a non-standard range practice such as greater firing arcs, fire and movement, use of non standard targetry, etc., will indicate so on the booking request and attach a diagram outlining the position of the targets and firing points. Once the practice has been authorized, Range Control reserves the right to inspect the set-up and make necessary changes if required. **All shots must land in the backstop**. No target shall be positioned within 1.25 m of either end of the walls or stop butt. RSOs are to watch for any shots that will not impact in the backstop and stop the shooter before he / she fires.
- 2. Training Safety, Range Standing Orders and the Canadian Forces Operational Shooting Program as well as the latest Safety Policy changes will still be adhered to.

18.06 - 18.99 Not Allocated

CHAPTER 19

50 METRE OUTDOOR PISTOL RANGE

19.01 GENERAL

1. The 50m ranges (Pistol 3 and 4) may be used for the practice firing of pistols, MP5 and shotguns only.

19.02 SAFETY

- 1. B-GL-381-001/TS-000 or CFP381 (1) Training Safety provides all regulations pertaining to the 50m ranges.
- 2. Only firers, the OIC Practice and, RSO, when required, are allowed on the firing point. Waiting relays must be at least 5m to the rear of the firing point.
- 3. The sand in the bullet catcher must be kept loose. The bullet catcher is to be free from stones or other hard material. The bullet catcher is to be maintained in good order by the user unit.

19.03 LIMITATIONS

- 1. Range Practice. The following limitations apply to the 50m ranges:
 - a. during practices involving an advance with loaded weapons, not more than two firers' are to advance or fire at the same time.
- 2. Ammunition. Only service small arms ball ammunition is to be used.
- 3. <u>Targets</u>. The following limitations apply:
 - targets are to be put in the target slot provided. Centers of flank targets or edges of landscape targets must be at least 1.25m away from either end of the bullet catcher;
 - b. metal plates or other hard targets are **NOT** to be used as targets; and
 - c. only stick figure targets will be used when firing shotguns.

<u>NOTE:</u> When firing from the 50m point on P3, no target will be set up closer than the 25m point to prevent hitting the ground behind the target. On P4, all targets will be set up at the target line just before the backstop.

- 4. Weapons. The following limitations apply:
 - a. the number of weapons, by types, which may be fired at the same time during daylight on a 50m range is determined by the following minimum safe distances required between weapons:
 - (1) 1.5m between pistol; and
 - (2) 4.0m between MP5's and shotguns.
- 5. <u>First Aid</u>. A person qualified first aid as per CFAO 9-5 with stretcher, first aid kit and a dedicated safety vehicle will be on site.
- 6. <u>Communications</u>. User units will be at all times in contact with Range Control by radio when using any of the ranges.
- 7. <u>Aural Protection</u>. All personnel will wear aural protectors when participating in range practices.
- 8. Range Clearance. The OIC or RSO will report to Range Control prior to occupying the range and fill out Part 1 of the Range Clearance Certificate and Part 2 once firing has been completed. After use, the range will be left cleaned, all brass picked up and the sand raked. The OIC or RSO will advise Range Control when the range is ready for inspection. All maintenance problems will be reported to Range Control.

19.04 NIGHT FIRING

- 1. Night firing will be conducted using the following:
 - a. all range flags will be replaced by red and green lights;
 - b. a supervisor or instructor is required for each firer;
 - c. the level of light around the target must be sufficient to enable the firer to distinguish the target from its background; and
 - d. when night firing is completed, the supervisors or instructors are to ensure that weapons are cleared, made safe, and inspected while the firers are still in the firing position.
- 2. The following additional safety rules apply to individual weapons in night firing:
 - a. Pistol. Only one firer to fire at a time; and
 - b. MP 5 and Shotgun. One weapon at a time.
- 3. Preliminary grouping and zeroing of any small arm fitted with IR, light intensification, or other night-aiming sights, may be carried out on a 50m range at night.

19.05 USE OF PISTOL RANGES FOR NON STANDARD RANGE PRACTICES

- 1. Units that desire to conduct a non-standard range practice such as greater firing arcs, fire and movement, use of non standard targetry, etc., will indicate so on the booking request, and attach a diagram outlining the position of the targets, and firing points. Once the practice has been authorized, Range Control reserves the right to inspect the set-up and make necessary changes if required. **All shots must land in the backstop**. No target shall be positioned within 1.25 m of either end of the walls or stop butt. Range Safety Officers to watch for any shots that will not impact in the backstop and stop the shooter before he/she fires.
- 2. Training Safety, Range Standing Orders and the Canadian Forces Operational Shooting Program as well as the latest Safety Policy changes will still be adhered to.



19.06 - 19.99 Not Allocated

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CHAPTER 20

RCMP EXPLOSIVES TRAINING RANGE

20.01 GENERAL

1. Safety procedures specified in applicable training manuals, CFP 381(1), and current explosive / disruptor weapon restrictions will be implemented during all exercises on the RCMP Explosives Training Range.

20.02 LOCATION

1. The RCMP Explosives Training Range is located on the north side of the Grenade Range at GR279244. Access is from the west via Perimeter Road.

20.03 TYPES OF TRAINING

- 1. The only authorized training on the RCMP Explosives Training Range is:
 - a. Police Explosives Technicians' training; and
 - b. Live Explosives Demonstrations.

20.04 TYPES OF EXPLOSIVES / WEAPONS

- 1. Explosives are limited to a single charge no larger than **1.0 kg.**
- 2. Only the use of conventional explosives disposal, render safe methods will be used, including but not limited to the 12.5 mm, 20 mm, and 29 mm Neutrex, Mineral Water Bottles and shaped charges.

20.05 COMMAND & CONTROL

- 1. The Officer In Charge (OIC) is ultimately responsible for the conduct of the range.
- 2. The NCO i/c Explosives Training Unit shall appoint a Range Safety Officer (RSO) who will command all personnel on the RCMP Explosives Training Range and supervise all live explosive training. The RSO shall be an NCO from the Explosive Training Unit.
- 3. The RSO shall appoint Assistant Range Safety Officers (ARSO) who will observe all personnel while down range to ensure the safe operation of the range.
- 4. The RSO will have constant communications with Range Control.
- 5. The RSO shall supervise all live explosive training and will ensure that these orders, particularly with regard to safety, are enforced.

6. An experienced explosives training instructor must be present in each syndicate during the preparation and during live exercises to act as safety supervisor and assistant to the RSO.

20.06 NIGHT TRAINING

- 1. No training is authorized between last light and 0800 hrs.
- 2. All demolitions operations, including the sweep of the range, must be completed during daylight hours.

20.07 EXERCISES DURING WINTER

- 1. The RCMP Explosives Training Range may be used after all snow has been removed so that hard ground is exposed in the target area (the entire range must be cleared).
- 2. Bunker and preparation area must be ice free or sanded to prevent personnel from slipping or falling. If required, Range Control can provide emergency snow removal.

20.08 GENERAL RULES

- 1. One sentry will be posted at entrance to the RCMP Explosives Training Range / Ordnance grenade range on the perimeter road to ensure that no one enters the range danger area while firing is in progress. The sentry must have instant communications with the RSO.
- 2. Range danger flags for this range must be hoisted before firing commences and remain hoisted throughout the live exercise. The danger flags are located at:
 - a. at the entrance to the RCMP Explosives Training Range / Ordnance grenade range; and
 - b. at the control tower. This control tower flag will not be raised until the RSO is satisfied that the range danger area is clear of personnel and wildlife.
- 3. Range Control Flags. One RED and one GREEN control flag will be kept at the control tower. The Red flag will be raised at any time that explosives are in use. The Green Flag will be raised only when all explosives and detonators are expended or safely stored in magazines. The RSO will order the raising of the GREEN flag when the training staff arrives at the range.
- 4. The RSO will advise Range Control by radio or telephone when live firing is about to commence and when live firing has terminated.
- 5. Partial detonations will be destroyed before continuing with the exercise or departing the range.
- 6. During live training, everyone within the danger area, including the OIC, RSO, ARSO, instructors, waiting relays and spectators, shall be in a safe area, as designated by the OIC.

7. Live explosives/disruptor weapons will not be fired unless a direct order is given by the RSO

20.09 TARGET AREA

- 1. Live explosives/disruptor weapons will be placed a minimum of 30 meters to the front of the bunker.
- 2. The impact area must be free of trees, undergrowth, bushes and any other objects which could obscure the RSO's view of explosives/disruptor weapons. Any holes which contain water must be filled with earth so that explosives/disruptor weapons do not come to rest where they could be difficult to locate for demolition.
- 3. At the conclusion of each exercise, or training day, the RSO will ensure that holes in the target area are filled with dirt and that the surface is leveled.

20.10 EXERCISE SEQUENCE

- 1. The sequence to be followed on the RCMP Explosives Training Range by the OIC, RSO, ARSO, instructors and candidates will be exactly as described in the applicable technical publications. It should be noted, however, that the assembly area on this range is to the rear of the bunker.
- 2. All charges will be made in the preparation area and placed in the explosives magazines, prior to the commencement of live explosive training, as designated by the OIC

3. <u>General Procedure</u>:

- a. initiation systems are placed under the control of the RSO at the bunker;
- b. the explosives are picked up from the explosives magazines & transferred to the disposal point by the NO. 2. NO. 2 identifies the location of the explosives to all in attendance with a loud "LIVE EXPLOSIVES HERE":
- c. Detonator(s) (Dets) are picked up from the detonator magazines, placed in the detonator box & transferred to the disposal point by the NO. 1. Dets to be placed 3 to 5 meters up range from the disposal point until instructions are received from the RSO. NO. 1 identifies the location of the detonator(s) to all in attendance with a loud "LIVE DET HERE";
- d. after all explosives have been placed, the RSO will give the instruction for nonessential personnel to return to the bunker;
- e. once non-essentials are clear & candidates are ready, the RSO will instruct the candidate to connect detonators to the firing line, by saying "**HOOK UP**". When the necessary connections are made, the No 1 will advise the ARSO;

- f. once the ARSO has been advised, he will in turn advise the RSO. After all ARSO has reported, the RSO will instruct the candidates to "**DET UP**". The candidate(s) will then install the det into the main charge/disruptor;
- g. when "**DET UP**" process is complete, the ARSO & the candidate will return to the bunker area. The RSO returns to the bunker area with the last team;
- h. The RSO will confirm the sentry is posted at the entrance to the RCMP Explosives Training range/Ordnance grenade range; and
- i. the RSO will direct the NO. 1(s) to pick up the initiation system, connect to the firing line & fire.

4. <u>Safe waiting times</u>:

- a. 10 minutes **AFTER MISFIRE** via shock tube initiation;
- b. 10 minutes **AFTER MISFIRE** via electric initiation;
- c. 30 minutes AFTER MISFIRE via time fuse initiation;
- d. 2 minutes **AFTER DETONATION**; and
- e. 2 minutes **AFTER PARTIAL DETONATION**.

5. <u>Misfire Drill</u>:

- a. candidate advises RSO that a misfire has occurred;
- b. RSO directs candidate to attempt the shot a 2nd time (check connections at blasting machine);
- c. RSO directs candidate to disconnect from blasting machine and RSO takes control of blasting machine;
- d. RSO instructs all other candidates to continue;
- e. RSO observes proper safe waiting time;
- f. ARSO or another instructor will go downrange and determine the cause and remedy the situation;
- g. ARSO notifies RSO of the outcome, and whether or not to proceed; and
- h. RSO to indicate what is to be done with the shot and based on that choice he will advise when range is clear.

20.11 March Off and Clearance

- 1. Upon completion of the training activity, the OIC / RSO will contact Range Control to book a Range Clearance.
- 2. All holes, indentations and craters are to be filled in, and raked over.
- 3. All debris, equipment and stores are to be packed away.
- 4. If the woodstove has been used, it must be cleaned out, and the ashes disposed of in the ash bin.

20.12 - 20.99 Not Allocated.

Annex A **CRPTC Range Standing Orders** Ottawa & Environs Perkins Scale 1:250 000 Échelle 10 Kilometres Cantley Ch. CRPTC Standing Beder Heyworth Breckenridge Beau-Mont Acres Estates • Dunrobin Hamlet Malwood leights 35/121 E Inn Stratheam Bay Beatly Point Britan Marchhurst 31/Blossom Park TEN VE Kempark Leitrim Nepean Barrhaven Hearts Desire South Gloucester Greely • Stittsville Manion Metc Stanley Corners Manotick Twin Elm Watterson (13) (19) 11/90 Mansfield

North Gower Osgoode

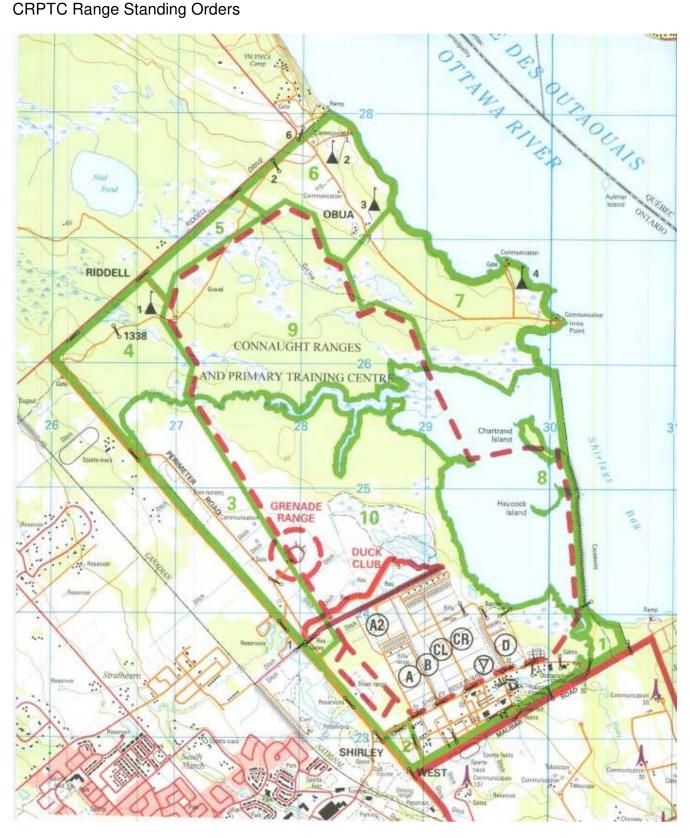
Richmond"

Munster ...

Dwyer Hill

Mills

Annex B CRPTC Range Standing Orders



Annex C CRPTC Range Standing Orders CRPTC INCIDENT REPORT								
(Note: This form may form the basis for an Unusual Incident Report per CFAO 4-13)								
Date of Incident : Time of Incident:								
Particulars (personnel, vehicles, and/or weapons involved)								
Svc Number/ Veh / POMV / Wpn	Rank	N	ame & Initials		Unit			
Description of Incident:								
Reported by: >>>>>>>>>>>>	>>							
Date: (dd/mmm/yyyy)	(Si	(Signature) (print) II			Name	Rank		
CRPTC RCO Comments:	011	ıı						
Date:	Si	Signature:						
CRPTC Cmdt Comments:								
Date:		Signat	ure:					

Annex D CRPTC Range Standing Orders

PREVENTIVE MEDICINE GUIDELINES ON HEAT STRESS WITHIN NCR

Refs: A. Treasury Use and occupancy of Building Directive B. General Safety Program Volume 2 General Safety Standards, C-02-040-009/AG-001

- 1. This document is intended to clarify humidex, heat index and to help authorities make informed decisions regarding the planning of the outdoor activities and the use and occupancy of the building to ensure the health and safety of all occupants.
- 2. The following definitions will aid in the understanding of this document:
 - a. <u>temperature or dry temperature</u>. The temperature indicated by a normal thermometer without any additional factor;
 - b. <u>relative humidity</u>. The relative humidity is the quantity of water vapor the air contains compared to the maximum amount it can hold at particular temperature, before water droplets start to form clouds or dew;
 - c. <u>humidex</u>. The humidex is an index devise to describe how hot or humid weather feels to the average person. It combines the temperature and humidity into one number to reflect the perceived temperature; and
 - d. <u>WBGT index</u>. The WBGT index is calculated using a formula that takes into account air temperature, speed of air movement, radiant heat from hot objects, sunshine and body cooling due to sweat evaporation.
- 3. There are two ways to evaluate heat stress. First the humidex: it is the value provided by environment Canada, it is easy to use and aimed at the general public. Humidex is the relationship between air temperature and humidity. The result of this equation is a comfort sensation and could be very subjective. However in an office building it is reliable. Second is WBGT index: it is used in industries to calculate the heat stress in occupational health and safety. Because it takes many factors into account such as: air temperature, humidity, wind, and sun radiation. It's more reliable for outside conditions. The WBGT is used by the CAF to calculate the heat stress outdoors.

WBGT

4. The following table illustrates how to help counter heat stress.

	WBGT index	Water intake	Work Rest cycle
Level	C° (this is the index T° not the thermometer T°)	Liter/Hr	Period of Work / Period of Rest
1	26-27.5	0.5	50/10
2	27.5-29	0.5-1.0	50/10
3	29-31	1.0-1.5	45/15
4	31-32	1.5-2.0	30/30
5	32 - above	2.0+	20/40

- 5. The WBGT index is measured twice a day throughout the NCR when the outside temperature exceed 20 C at:
 - a. CF H SVCS (O) Montfort Site, 713 Montreal Road, Ottawa;
 - b. CRPTC Range Control; and
 - c. Carleton University.

All reading will be available at: http://national.mil.ca/collaboration/tt.asp?forumid=268

- 6. Air temperature during working hours should be maintained between the 20° C 26° C range, which is the ideal temperature operating range. Temperatures between 17° C and 20 °C and above 26° C can be uncomfortable, and occupancy should not exceed 3 hours daily or 120 hours annually in each of these extremes. Temperatures above 26° C are deemed to be uncomfortable when the humidex reading at a given temperature equals 40 or less. Temperatures shall be measured at desktop level in those spaces within workstations that would be occupied by employees while they are carrying out the major part of their normal duties.
 - a. with regard to the uncomfortable range of temperatures described in paragraph 4, it is the responsibility of the deputy head, or the designated representative, to take appropriate action to ensure that environmental conditions do not subject employees to undue stress or discomfort. Corrective measures which shall be considered include, among others, increased frequency of rest periods and temporary relocation of employees to work stations outside the affected area; and

- b. an unsatisfactory condition is deemed to exist when the humidex reading exceeds 40 (see table), or when the air temperature (dry temperature) falls below 17°C. In these cases, operations shall be stopped and employees released from the workplace if relocation is not practicable. If instrumentation capable of accurately measuring humidex is not practically available within one hour of a complaint being made, a temperature of 29°C or above shall be considered unsatisfactory. Conditions shall not be intentionally maintained within the marginal zones of 17°C to 20°C and 26° to 29°C. Such conditions should result only from occurrences over which departments have no direct control, such as weather extremes or equipment failures.
- 7. Range Control reserves the right to suspend or cancel training.

Relative Humidity (%)																
Temp °C	100	95	90	85	80	75	70	65	60	55	50	45	35	30	25	20
35		58	57	56	54	52	51	49	48	47	45	43	42	41	38	37
34	58	57	55	53	52	51	49	48	47	45	43	42	41	39	37	36
33	55	54	52	51	50	48	47	46	44	43	42	40	38	37	36	34
32	52	51	50	49	47	46	45	43	42	41	39	38	37	36	34	33
31	50	49	48	48	45	44	43	41	40	39	38	36	35	34	33	31
30	48	47	46	44	43	42	41	40	38	37	36	35	34	34	31	31
29	46	45	44	43	42	41	39	38	37	36	34	33	32	31	30	
28	43	42	41	41	39	38	37	36	35	34	33	32	31	29	28	
27	41	40	39	38	37	36	35	34	33	32	31	30	29	28	28	
26	39	38	37	36	35	34	33	32	31	31	29	28	28	27		
25	37	36	35	34	33	33	32	31	30	29	28	27	27	26		
24	35	34	33	33	32	31	30	29	28	28	27	26	26	25		
23	33	32	32	31	30	29	28	27	27	26	25	24	23			
22	31	29	29	28	28	27	26	26	24	24	23	23				
21	29	29	28	27	27	26	26	24	24	23	23	22				
20	27	27	26	25	25	24	24	23	22	22	21			Hu	mide	x
19	25	25	24	24	23	23	22	22	21	21	20					
18	23	23	22	22	21	21	20	20					R	elocate	or Rele	ase S
17 21 21 20 20 19 19																
°C: If Instrum	C: If Instrumentation capable of accurately measuring humidex is not										ncomfo orrectiv					
ctically available within one hour of a complaint being made, a temperature								re		lo	deal Op	erationa	al Ran			
29°C or above	°C or above shall be considered unsatisfactory.															

Corrective measures, which shall be considered, include, among others, increased frequency of rest periods and temporary relocation of employees to work station outside this affected area.

Allocation & Clearance Certificate

Part I – Clearance Certificate (to be completed before training begins)

					Booking Number	:					
User'	s Unit / Organizatio	on									
	OIC - Exercise	Print – Rank, N	Print – Rank, Name, Initials								
Α	Activity / Training										
The foll	owing facilities hav	ve been allocate	d and the	training s	shown is authorized on	the following date(s)					
Serial	Range/Area/Bldg	Lane(s) / Rm(s)		nings To	Weapon(s) / Personnel	Training Restriction(s)					
1											
2											
3											
4											
5											
Certification by OIC or Range Safety Officer I certify that: a. A qualified Range Safety Officer has been appointed for live fire exercises. b. The following have been read and are understood by the RSO: (1) CFP 381(1) Training Safety, and (2) CFSU Ottawa/ Connaught Range Safety Orders.											
	Name (Pleas	se Print)		Date - DD/MMM/YYYY							

Allocation & Clearance Certificate

Part II – Clearance Certificate (to be completed at conclusion of training) Training Statistics

	1		running Otationic				
Serial	Date	Туре	Ammunition Qty	Expended Lot Number	No. of Pers		
1							
2							
3							
4							
5							
Please provide a brief description of training conducted and any problems with the facilities							
		Certification by	y OIC Exercise I	AW CFP 381(1)			
I certify that I supervised troops while the above duties were being performed and that the statements made in this report are correct. Before leaving the range, I left my area free of live ammunition that I used during my practice. I certify that my troops and weapons have been inspected and that all ammunition has been withdrawn from them. I further certify that to the best of my knowledge my impact area is free of duds except as noted above. I also certify that a sweep of the range/area has been conducted under my direction to ensure cleanliness.							
	Name (Please P	Print)	Sign	ature D	Date - DD/MMM/YYYY		
Range Contro	ol Initials						

Annex F CRPTC Range Standing Orders

Range & Safety Aide Memoire

<u>GENERAL</u>

- 1. <u>Requirement</u>. The Commanding Officer of a unit must appoint, by name, an OIC Exercise and a Range Safety Officer (RSO) for each live firing exercise. The Commanding Officer may also appoint a Range Conducting Officer (RCO) to assist the OIC Exercise. For simple, gallery-range exercises involving a small number of troops, all three functions may be performed by the same individual provided that person possesses the requisite qualifications.
- 2. <u>Qualification</u>. The RSO must be qualified by his Commanding Officer in accordance with CFAO 9-20.
- 3. <u>General</u>. The RSO must be thoroughly familiar with CFP 381(1) Training Safety, CRPTC Range Safety Orders, and the weapon(s) being fired. He is responsible for:
 - a. the safety of all personnel on the assigned range;
 - b. implementing and enforcing range safety, policy, procedures, regulations and orders; and
 - c. ensuring that all activities which occur during an exercise are performed safely.

RESPONSIBILITIES

- 4. The RSO is responsible for:
 - a. ensuring the safety of all personnel;
 - b. implementing the safety policy, and ensuring the observance of the safety regulations contained in appropriate orders;
 - c. safely conducting all activities that take place on a range during an exercise;
 - d. stopping the firing when conditions arise that in his/her opinion would constitute a hazard;
 - e. drawing and identifying necessary Range equipment from Range Control at 1 Lee Enfield;
 - f. signing the Range Clearance certificate that he/she is thoroughly familiar with the Range Safety Orders and authorized by his Commanding Officer or Club President to act as Range Safety Officer for the practice;

- g. verifying, on Daily Range Safety Orders (DRSO's), that the use of the range has been authorized, and the location of other units undergoing training at CRPTC;
- h. ensuring that the area between the firing points and targets and the danger area for the weapons being fired is clear of persons, animals and vehicles;
- i. organizing the range party so that ammunition is issued to the firer immediately prior to use and withdrawn as soon as possible on completion of the practice;
- j. displaying red flags at the entrances to the range, firing point, butts and back stop when firing is in progress and displaying a green flag at the firing point and butts when firing is not being conducted;
- k. ensuring that all weapons are inspected and declared clear before the firers leave the firing point;
- I. taking a declaration from each person before they leave the range that they have no live rounds or empty casings in their possession;
- m. completing the Range Clearance Certificate, at Range Control;
- n. ensuring range gates remain closed at all times;
- o. organizing parties to pick up brass casings and other salvage from each firing point;
- p. ensuring that sentries, when utilized, are withdrawn and range flags lowered when firing is complete; and
- q. returning the range stores/equipment issued to him/her by Range Control.

PARKING OF VEHICLES

5. During the conduct of range practices, a maximum of three vehicles will be allowed on the assigned range (Ammunition, Safety, MRT). The three vehicles will be parked on the road to the rear of the firing point being used. All other vehicles will be parked in the designated range parking area.

AIDE MEMOIRE

- 6. The RSO will brief all his/her personnel, ensuring that the major headings on this aide memoire are explained:
 - a. location on the range of the Medical Assistant (First Aid Qualified), the first aid kit, the ambulance or designated Range Safety Vehicle and location of firefighting eqpt;
 - b. use of red and green flags;

- c. pointing of weapons down range;
- d. assign arcs of fire (own targets only);
- e. issue and control of ammunition (only live ammunition on the range);
- f. helmets, hearing protection, and protective eyewear (butt party);
- g. weapon control on the firing point;
- h. closure of range gates during firing;
- i. users will open radio net with Range Control before firing;
- j. alcoholic beverages;
- k. designated smoking area; and
- I. range clean-up.

EMERGENCY PROCEDURES

- 7. In case of an accident or serious injury, the following procedure is to be followed:
 - a. administer immediate first aid;
 - b. move person to hospital. If ambulance required Ambulance dispatch 613-739-1918 or 911 (use 8 for outside line when using our phones);
 - c. closest hospital Queensway Carleton (corner of Baseline Road and Richmond Road) 613-721-2000;
 - d. if the person is being moved by vehicle other than the Ambulance Dispatch service, notify the Emergency Department of the hospital; and
 - e. inform Range Control by radio or phone 613-991-5890, or 613-266-4474.

OTHER EMERGENCIES

- 8. In case of FIRE, VEHICLE ACCIDENT, THEFT, inform Range Control or Duty Commissionaire.
- 9. Other Emergency telephone numbers are:

OTTAWA FIRE DEPARTMENT 613-825-1750 or 613-232-1551

OTTAWA POLICE 613-236-1222 MILITARY POLICE 613-995-0123

ENVIRONMENTAL PROTECTION

GENERAL

- 1. Commanders of units using CRPTC must include an assessment of the potential environmental impact of the training along with instructions for environmental protection in their exercise instructions. These instructions will specify unit procedures concerning area clean-up, garbage and waste disposal, protection of wildlife, protection of flora and fauna, incident reporting and other subjects as applicable.
- 2. An Environmental Assessment (EA) must be prepared by the unit OPI if the training activity could adversely affect the environment. The OPI determines the level of screening and forwards the completed screening form to the CRPTC RCO for review and verification.

UNIT ENVIRONMENTAL OPI

- 3. Units participating in training that could cause an environmental incident must identify a unit "Environmental OPI" who shall report to the CRPTC RCO before commencing training and immediately prior to leaving Connaught.
- 4. The Environmental OPI must be familiar with unit and CRPTC policy regarding environmental protection. A copy of the CRPTC environmental protective instruction will be provided as guidance for "due diligence".

CRPTC ENVIRONMENTAL RESPONSIBILITIES

- 5. Each and every person at Connaught must be diligent in protecting the environment.
- 6. <u>Unit Environmental Officer (U Env O)</u>. The CRPTC Range Control Officer is the U Env O. The U Env O, in conjunction with the CFSU (O) ENV O, is responsible to provide technical advice on the care and disposal of hazardous materials. The U Env O is responsible for ensuring that all environmental spills are properly reported IAW CFSU(O) SOP, that a completed report is forwarded to the CFSU Tech Svcs Environmental Officer within 48 hours of the incident, and for liaison with the CFSU (O) ENV O to ensure that spills are properly cleaned and investigated. He also is responsible for coordinating the training of the CRPTC Environmental Emergency Response Team.
- 7. <u>Hazardous Materials Coordinator (HAZMAT Co-ord)</u>. The Connaught supply Warrant Officer is the Hazardous Material Coordinator. He is responsible for coordinating the management, storage, and inventory on the CRPTC site. He assists the Environmental Officer in Hazardous Waste Disposal.

SPILL KITS

- 8. SMP vehicles must be equipped with vehicle spill kits and drip pans. Spill kits must include, as a minimum:
 - a. shovel;
 - b. absorbal (1 bag);
 - c. clear garbage bag; and
 - d. other suitable container for contaminated substances.
- 9. Designated CRPTC Spill Response Teams will carry a minimum of two specialized spill kits. These kits may also be obtained by Unit Environmental OPIs for CRPTC.

HAZARDOUS MATERIALS SPILLS EMERGENCY PROCEDURES

- 10. Hazardous material spills must be cleaned up as soon as possible after detection. If a hazardous spill occurs, the user unit must report the spill to Range Control (613-991-5890 or 613-266-4474) immediately.
- 11. In the event of a spill or emergency involving hazardous material, Range Control must immediately notify the CRPTC Emergency Response Team who will proceed to the scene and combat the spill.
- 12. The following information will be included when reporting a spill:
 - a. location of incident (8-figure grid reference);
 - b. nature of incident, and description of spilled material, if known;
 - c. time of incident;
 - d. number of injuries, if applicable;
 - e. potential threat;
 - f. action taken to resolve the incident or contain the spill;
 - g. contact point or RV; and
 - h. name, unit, location and local of person reporting

SPILL REPORTING - CFSU(O)

13. The ESO, CFSU Ottawa will be notified by CRPTC as soon as possible after the incident.

SPREAD CONTROL

- 14. The immediate action in any spill is to limit the spread of contamination.
- 15. <u>Liquid Spills</u>. The following steps will be employed when dealing with liquid spills:
 - a. stop source of the spill if possible (turn off vehicle, close off connecting valves, plug holes, reposition the fuel pod so that the leak flow is slowed or stopped, and position a container under the leak);
 - b. erect booms or dykes with absorbent material (or wood/sandbags) to limit the spread of the material;
 - c. prevent the spill from entering waterways, or drainage or sewage systems;
 - d. remove articles not yet contaminated;
 - e. take precautions to avoid personal contamination;
 - f. if necessary, remove surface material;
 - g. use absorbent pads to remove oil contaminants from water;
 - h. dispose of all waste liquid, clean up material and contaminated surface material as directed by CRPTC Emergency Response Team; and
 - i. if the spill is glycol, it is not necessary to remove the contaminated soil if it soaks into the ground, (glycol is a hazard to animals but not a serious environmental hazard). Any pooled liquid must be cleaned up using absorbal (kitty litter) and the waste double-bagged and disposed of through the CRPTC HAZMAT Coord. The incident must be reported through the procedure described above.
- 16. Spill of solid hazardous materials. Spills of solid waste should be removed by shoveling materials into drums or double-bagged garbage bags. Drums or bags should then be disposed of as directed by CRPTC Emergency Response Team. Upon containment of hazardous spill, CRPTC will forward a completed incident report (using the form at Appendix 1, Annex H) to the ESO CFSU(O).

VEHICLE USE

- 17. Vehicle activities, if not properly monitored, can produce contaminants that may be harmful. Areas where caution must be exercised in the use of vehicles include:
 - a. all SMP vehicles shall be parked in designated parking areas coordinated by the CRPTC RCO Staff;
 - b. drip pans are to be placed under all parked SMP vehicles and vehicles known to leak:
 - c. vehicle maintenance will be performed only in designated areas;
 - d. waste fluids from vehicles will be collected and disposed of in waste fluid containers (including bilge waste). Report to CRPTC QM Stores for disposal in Hazmat Bldg;
 - e. vehicles will only be washed at authorized vehicle wash sites (There are no authorized sites at CRPTC). Visiting units will wash their vehicles at their home unit locations;
 - f. avoid sharp turns that tear up the ground or pavement;
 - g. when APCs/AFVs are parked for more than 24 hours they will be covered by a tarp to reduce accumulation of water in the hull; and
 - h. hull plates and drain plugs are to be installed in APCs/AFVs at all times except during maintenance.

POL SITES AND REFUELLING

- 18. The following procedures will be followed at POL points and during all refuelling operations:
 - a. all POL will be centrally stored and controlled. If a spill occurs, it immediately will be cleaned up using a Hazmat pad or absorbal;
 - b. small refueling sites (i.e. generators) will be dug in the ground and the pit will be lined with a poly-tarp. Spills will be dealt with per the above;
 - c. POL sites should be covered by a canvas tarp to reduce both the accumulation of water and the requirement to dispose of waste oil/water mixture. A poly tarp is required on the ground, and a sand bagged containment boom positioned around the site; and
 - d. any spills of one liter or more must be reported to CRPTC Env O (RCO) who will forward report to WS POL and ESO CFSU Ottawa.

DIGGING

- 19. Digging is permitted only in areas approved in advance by Range Control. When digging, the following restrictions apply:
 - a. topsoil and turf will be preserved and replaced on conclusion of the exercise;
 - b. garbage and plant matter (branches and logs) will not be used to fill in excavations;
 - c. when refilling excavations, soil will be mounded to permit subsequent settling to ground level; and
 - d. no major excavations, with the exception of fire trenches, will take place within 30m of any watercourse.

WATER COURSES

20. <u>General</u>. The streams and wetlands within CRPTC boundaries constitute important fish migration routes and spawning areas; therefore extra caution must be exercised in their vicinities.

21. Restrictions:

- a. streams will not be forded by vehicles;
- b. vehicles shall not be washed in watercourses;
- c. damage to ditches and stream bed will be reported and repaired;
- d. watercourses will not be rerouted or blocked under any circumstances whatsoever; and
- e. beaver dams will not be disturbed.

Annex H **CRPTC Range Standing Orders**

ADMIN INSTRUCTION

Booking. Through Range Control at CRPTC

References. A copy of RSO's and DRSO's are required to confirm if the ranges are being used.

Dress. For military users, dress should be Fighting Order. For non-military users, good quality boots and warm clothing should be worn. Consideration must also be taken for the type of Environmental Clothing to be worn as based on the weather.

- Equipment. Map per soldier
 - Compass per soldier/group
 - Nav Data sheet per soldier
 - Pencil and note book per soldier
 - Flashlight or Chem-lite per soldier for night nav
 - Whistle per group (to be used only if lost)
 - Pace counter per soldier

Transport. As required and a Safety vehicle with First Aid kit and stretcher.

As required through CRPTC. Soldiers should carry a full water bottle or Rations. thermos.

Medical. A safety vehicle with a first aid kit and stretcher must be located at the Ex area. If an emergency occurs, the nearest hospital is the Queensway Carleton, located south of the Queensway on Richmond Rd.

Motorola radios are available at Range Control and the Ex CP must maintain Comms. comms with Range Control at all times.

Annex I CRPTC Range Standing Orders

SAFETY BRIEFING

<u>General</u>. Safety is the responsibility of all levels of command. All soldiers must be fully briefed on the requirements of the training.

<u>Danger Area</u>: The Danger Area Template forms part of the area used for the Nav Ex. The DRSO's must be checked prior to using the Nav Ex to determine if any ranges are being used. If the ranges are being used, then personnel **must not** traverse the Danger Area Template and they must be fully briefed prior to commencing training.

BRIEFING TO BE ISSUED TO ALL PARTICIPANTS

Welcome to the Nav Ex at CRPTC. This Ex is designed to test you on your navigation skills. You will be placed into groups/teams and will remain in these groups until the training is completed.						
The terrain is wooded with some swampy ground. It is now hrs and you are to be back at the finish point GR NLT hrs. You will avoid the restricted areas and do not use the roads except in an emergency.						
Restricted Area						
All buildings located in Area 7 are out of bounds and no effort will be made to enter them. Also the area around Grid 296 268 (Communications) is also out of bounds. This area is fenced and there is no requirement to enter or traverse this area to get from one point to the next.						
Action if Lost						
If you become lost, DO NOT PANIC . Move back to your last point and recalculate there. If your compass is N/S or lost locate the North Star at night or use the methods taught such as a sundial to locate North. Do not move south, as you will enter the Danger Area Template.						
Action if Injured						
If an injury occurs to you or your partner, immediately administer First Aid. Next assess the						

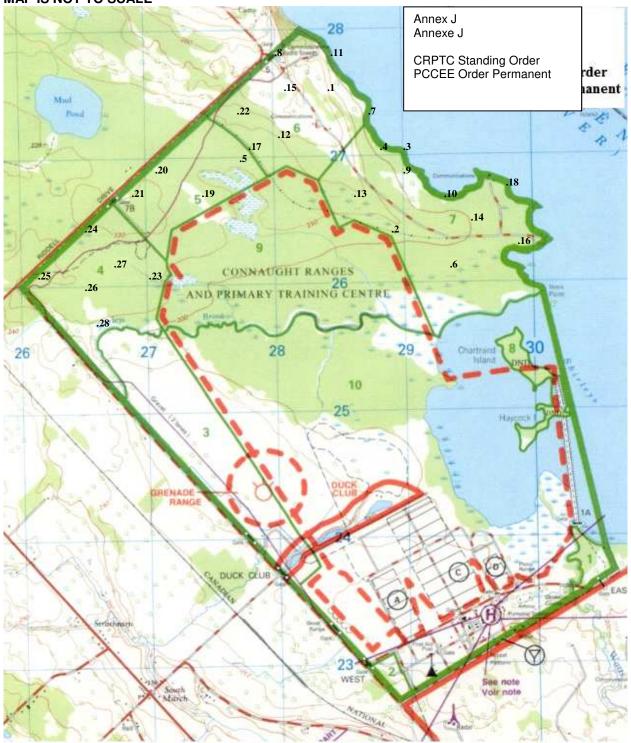
degree of injury and if the casualty can move, then evac to the pick-up point. If the casualty is

attention. Keep the casualty warm and calm and wait for assistance. The Ex CP will have a

unable to move or unconscious **DO NOT LEAVE.** Use your whistle or shout to attract

Motorola and can contact Range Control to arrange for Cas Evac if required.

Annex J
CRPTC Range Standing Orders
MAP IS NOT TO SCALE



CONNAUGHT RANGES AND PRIMARY TRAINING CENTRE POLYGONE DE CONNAUGHT ET CENTRE D'ENTRAINEMENT ÉLÉMENTAIRE

Annex K CRPTC Range Standing Orders NAV POINT LOCATIONS

1	GR	2840 2756	LARGE TREE EDGE OF WOODLINE
2	GR	2880 2648	TWO SMALL PINES WEST SIDE OF SWAMP
3	GR	2900 2701	TWO 40 GALLON DRUMS
4	GR	2884 2704	SOUTH END OF CLEARING
5	GR	2772 2692	EDGE OF INTERMITTENT LAKE
6	GR	2930 2617	LARGE DEAD TREE EAST SIDE CLEARING
7	GR	2877 2732	EDGE OF SHORE LINE AND WOODS
8	GR	2806 2789	SMALL CLEARING
9	GR	2901 2683	LARGE OAK EDGE OF TREELINE
10	GR	2938 2667	LARGE BOULDER
11	GR	2844 2778	SOUTH END OF PITS
12	GR	2802 2715	SOUTH EAST CORNER OF SWAMP
13	GR	2853 2679	CORNER OF SLOPE NEAR SWAMP
14	GR	2958 2660	LARGE OAK IN CLEARING
15	GR	2810 2752	CENTER EDGE OF WOODLINE
16	GR	2985 2623	SHORE LINE
17	GR	2776 2714	EAST OF BEND IN POWER LINE
18	GR	2980 2673	LARGE ROCK NEAR SHORELINE
19	GR	2748 2667	NORTH WEST SIDE INTERMITTENT SWAMP
20	GR	2712 2690	EDGE OF CLEARING
21	GR	2682 2668	POINT OF WOODS
22	GR	2786 2742	VERY LARGE PINE TREE
23	GR	2707 2612	ABANDONED LOG SHELTER
24	GR	2660 2647	EDGE OF SWAMP (CONTOUR LINE)
25	GR	2617 2606	ROCK WALL (CONTOUR LINE)
26	GR	2633 2564	CREEK AND WOOD LINE
27	GR	2672 2618	LARGE LONE BOULDER IN SWAMP
28	GR	2652 2591	NORTH TIP OF CLEARING

EXAMPLE NAV DATA SHEET AND PUNCH VERIFICATION CARD

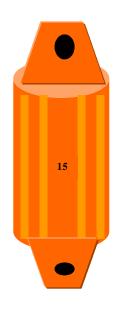
NAV DATA SHEET

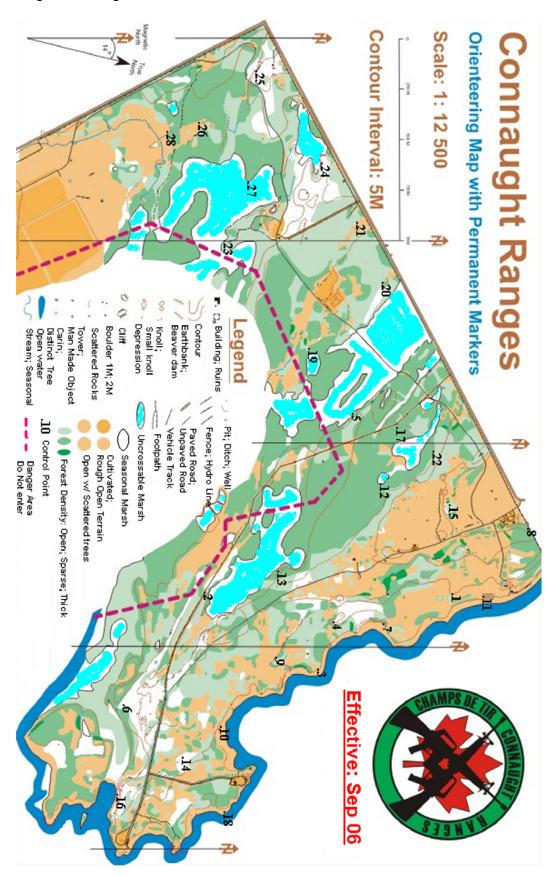
LEG	FROM	ТО	BRG	DISTANCE	PACES	REMARKS
1	261 734	283 751	2300	800M		
2	283 751	241 811	4700	700M		
3	241 811	221 902	5600	600M		

PUNCH VERIFICATION CARD

1	2	3	4	5	6	7	8	9	10
					-				
	-								
11	12	13	14	15	16	17	18	19	20
		•		•		•		•	
-								-	
•			•						
21	22	23	24	25	26	27	28		
	-		-						
-		-							

NAVIGATION POINT





Appendix 1 Annex G CRPTC Range Standing Orders

HAZARDOUS MATERIAL SPILL REPORT

Unit reporting:	
Date / Time of spill:	
Location of spill:	
Weather conditions:	
Name / NSN of spilled material:	
Source of spilled material:	
Volume of unrecovered material:	
Route and destination of unrecovered material:	
Cause of spill:	
Description of the incident:	
Corrective action taken:	
Evacuations / Casualties	
Spill reported by:	
Reported to:	
Date / Time reported:	