Detailed Project Description

The Canadian Army is proposing to conduct its Arctic Operations Advisor Course Session 7 (AOA), formerly known as the Winter Warfare Advance Course Session 6, over the two-month period of February 2010 to March 2010. The course is conducted in two phases, a sub-arctic phase in areas surrounding the City of Yellowknife, NWT and a high-arctic phase in the vicinity of Resolute Bay, Nunavut. The course will consist of a maximum of 45 Canadian Forces (CF) Personnel (36 candidates and 9 course instructors) as well as 9 local Canadian Rangers who will serve to assist in the implementation of the course and guide movements while in the field. The objective of the course is to train 36 CF specialists capable of advising their commanders on training and deployments in arctic and cold weather conditions.

1. Camp locations for the high-arctic phase of the course are outlined below. Although locations remain the same as in previous years, four new sites are being proposed for 2010 (Lat/Long: degrees, minutes, seconds):

    a. Griffith Island:
    95° 17' 00"W, 74° 29' 00"N

    b. Cornwallis Island:
    96° 28' 00"W, 75° 05' 00"N

    c. Polaris Mines Airstrip:
    96° 58' 00"W, 75° 23' 00"N

    d. Freeman's Cove Airstrip:
    97° 59' 00"W, 75° 07' 00"N

    e. Airfield:
    94º 45' 20.8"W, 74º 42' 02.1"N

    f. Polar Continental Shelf Project (PCSP):
    94º 59' 23.9"W, 74º 43' 07.1"N

    g. Survival Training Area:
    94º 58' 46.4"W, 74º 45' 13.2"N

    h. Austere Range Area:
    94º 53' 20.8"W, 74º 42' 02.1"N

    i. Little Cornwallis Island Airstrip (Polaris Mines)(planned patrol site):
    96º 55' 41.9"W, 75º 23' 14.3"N

    j. Sophia Cove (alternative patrol site)(only used should 1e prove unusable):
    90º 47' 30.1"W, 75º 7' 25.5"N

    k. Eleanor Lake (Proposed new location):
    93° 55'W, 75° 20'N

    l. Stuart Bay (Proposed new location):

94° 35’W, 75° 38’N

m. Cape Gell (Proposed new location):
94° 55’W, 75° 38’N

n. Lady Hamilton Bay (Proposed new location):
95° 00’W, 75° 38’N

2. Course Schedule:

a. Phase 1: Acclimatization (1-4 March 2010):
The initial stage of the high-arctic phase of the AOA will see students acclimatize themselves to the high arctic environment. This will involve students deploying from the Polar Continental Shelf Project (PCSP) in Resolute Bay, Nunavut, to conduct various skill tasks in the vicinity. No camps will be established during this phase of the course and only lunch rations will be eaten in the field. All personnel will return to the PCSP nightly following the completion of the day’s activities.

b. Phase 2: Range Construction/Survival Training (5-6 March 2010):
Subsequent to the acclimatization period, personnel will begin staying in the field on a 24/7 basis for a period of four days. During this phase of the course an austere range will be constructed and overnight survival training will be conducted within the survival training area.

c. Phase 3: Arctic Exercise (7-16 March 2010):
Following the initial training period, the course will stage out of Resolute Bay to conduct a nine-day platoon-sized mock sovereignty patrol. The final destination for the patrol will be the Polaris Mines site on Little Cornwallis island; however, Sophia Cove will serve as the final destination should the primary site prove to be unusable. The Arctic Exercise will see course candidates travel by light over-snow vehicles (LOSV) with instructors using medium over-snow vehicles (MOSV) or LOSVs with attached komatik to conduct re-supply. Field camps will be established every 1 – 2 days in various locations en-route to the final destination (i.e. the Polaris Mine site or Sophia Cove).

d. Phase 4: Small-arms Training/Goodwill Exchange (17 March 2010):
Following the completion of the Arctic Exercise, candidates will train in the use of small-arms (C7, C8, C9) under arctic conditions. Small-arms training will occur during one day only with a maximum total of 1000 rounds being fired. Small-arms training will be a component of a goodwill exchange with the community of Resolute Bay. The goodwill exchange will continue following small-arms training. The course will subsequently return to the PCSP from where it will operate for the remainder of the course.

e. Phase 5: Post-course drills (18-20 March 2010):
The final stage of the course will see CF personnel ensure that all sites have been returned to their previous condition and to prepare equipment for redeployment to Trenton, ON.

3. Summary of planned activities:

Course participants will be planning, mounting and executing a mock Sovereignty Patrol, employing Canadian Rangers and navigating while using GPS and astrocompass. Other activities will include:

- Nordic Skiing;
- Ski-joring;
- Light oversnow vehicle use (LOSV: skidoo) ;
- Medium oversnow vehicle use (MOSV: BV206);
- Towing loads
- Communicating in arctic conditions;
- Assessing the effects of cold on training;
- Conducting re-supply operations;
- Applying First Aid in arctic conditions;
- Conducting casualty evacuation;
- Demonstrating arctic survival techniques;
- Ice-fishing (all personnel will possess appropriate Territorial fishing licenses);
- Establishing bivouacs;
- Constructing field defenses and snow obstacles;
- Conducting tactical training; and
- Conducting community relations' activities

4. Equipment:

The equipment used during the course will include up to 58 skidoos and komatiks, up to 4 BV-206s, a BV-206 trailer, 4 10-man army tents, up to 6 prospectors tents, camp stove, ice auger, radio and chainsaw.

5. Resupply/Waste Disposal:

While the course is operating in the field, resupply of water (in the form of 20L ice blocks) and fuel will occur on a daily basis or as required using MOSV and/or LOSV with attached komatik. All water and fuel will be drawn from the community of Resolute Bay. Garbage and all contaminated water (including sanitary sewage) generated in the field will be collected in bags, redeployed daily to the community of Resolute Bay and ultimately redeployed with the course to Trenton, ON following its completion. Water warmed for personal hygiene or to heat food will be cooled down to as close to atmospheric temperature as possible prior to being released on land. All site locations will be returned to their previous condition upon departure.

6. Fuels supply and management:

All fuel required for the course will be drawn from the community of Resolute Bay and will be transported to field locations by MOSV or LOSV with attached komatik. Fuel will be stored in 20L jerry cans and secured during transportation. Fuel transfer in the field will be conducted by jerry can, over drip-trays and/or appropriate spill absorbent material. Standard CF fuel spill kits will be carried within each MOSV and at the Section-level (i.e. 1 spill kit per 1 instructor, 9 candidates and 2 Canadian Rangers). The Joint Task Force North (JTF(N)) spill Standard Operating Procedure will be employed as necessary (see below).

Table 2: Fuel information

Type	Use	Volume in field at one time	# of containers (container capacity)
Diesel	MOSV	240 – 560 L	2 to 4 vehicle tanks (120 L) 2 to 4 emergency jerry cans (20 L)
Gasoline	LOSV	2160 L	58 vehicle tanks (20 L) 58 emergency jerry cans (20 L)
Naphtha	Stoves	40 L	40 (1 L)