

35 Firing Practice and Exercise Areas

Explanatory Notes

- 1 Firing and bombing practices, and defence exercises, take place in a number of areas off the coasts of Canada.
- 2 The principal types of practices carried out are:
 - (a) Bombing practice from aircraft.
 - (b) Air to air, and air to sea or ground firing. The former is carried out by aircraft at a large white or red sleeve, a winged target, or flag towed by another aircraft moving on a steady course. The latter are carried out from aircraft at towed or stationary targets on sea or land, the firing taking place to seaward in the case of those on land. All marine craft operating as range safety craft, target towers or control launches for radio controlled targets will display, for identification purposes, while in or in the vicinity of the danger area, the following markings:
 - (i) A large red flag at the masthead;
 - (ii) A painted canvas strip, 1.8 m (6 ft.) by .9 m (3 ft.) with red and white chequers in .3 m (1 ft.) squares, on the fore deck or cabin roof.
 - (c) Anti-aircraft firing.

This may be from guns, missiles or machine guns at a target towed by aircraft as in (b) above, a pilotless target aircraft, or at balloons or kites. Practice may take place from shore batteries or ships. Warning signals as a rule are shown from shore batteries; ships fly a red flag.
 - (d) Firing from shore batteries or ships at sea at fixed or floating targets. Warning signals usually shown as in (c).
 - (e) Firing at remote-controlled craft.

These craft are approximately 20.7 m (68 ft.) in length and carry not under command shapes and lights, as well as normal navigation lights. Exercises consisting of surface firing by ships, practice bombing, air to sea firing and rocket firing will be carried out against these craft or targets towed by them. A control craft will keep visual and radar watch up to approximately 8 nautical miles and there will be cover from the air over a much greater range to ensure that other shipping will not be endangered.
- 3 Warning signals, when given, usually consist of red flags by day and red fixed or red flashing lights at night. The absence of any such signal cannot, however, be accepted as evidence that a practice area does not exist. Warning signals are shown from shortly before practice commences until it ceases. Ships and aircraft carrying out night exercises may illuminate with bright red or orange flares.
- 4 CAUTION. A vessel may be aware of the existence of a practice area from Local Notices to Mariners or similar method of promulgation and by observing the warning signals of the practice. The Range Authorities are responsible for ensuring that there should be no risk of damage from falling shell-splinters, bullets, etc., to any vessel which may be in a practice area.

Except where stated under Employment, areas are only in use intermittently or over limited periods, and when it is intended that a firing practice and exercise area be used, this information *will* be promulgated by local Canadian Coast Guard *Marine Radio Broadcasts* and may also be advertised in local newspapers. Maritime Command vessels are informed by Navigational Warning Messages *CANHYDROLANT* or *CANHYDROPAC*.

- 5 (a) The DND Sea area alphabetical identification designators in this Notice are used for marine purposes and are quoted in marine warning messages advertising the reservation of sea space for armed forces exercises. They are also shown in areas displayed on marine charts, however, not all areas are so displayed. Designators for marine areas on the West Coast are prefixed W; those for areas in the Great Lakes are prefixed L; those for the East Coast are not prefixed.

(b) **Area descriptions**

All bearings are true and those relating to arcs are from seaward. Miles are in nautical miles. Unless otherwise specified coordinates are based on North American Datum 1983 (NAD 83) which is equivalent to WGS 84.

(c) **Employment abbreviations**

The following abbreviations are used to indicate the employment of DND Exercise Areas:

A/A	Anti-Aircraft Firing
Missile	Surface to Air Missile Firing
S	Surface Firing
S.ht	Surface Firing High Trajectory
T	Torpedo Firing
NF	Non-Firing area for general purpose type exercise
A to A	Air to Air Firing
A to S	Air to Sea Firing
B	Bombing
R	Rocket Firing
A	Non-Firing area for general purpose type air exercises
A/S.he	Anti-Submarine Exercise including high explosive projectiles
A/S	Anti-Submarine Exercise excluding high explosive projectiles
SS	Subsurface Exercises

- 6 The airspace identification numbers used in this Notice conform to the International Civil Aviation Organization (ICAO) Standards for airspace designations.

The identification system consists of a three-part code as follows:

- (a) The assigned national identification letters - Canada is *CY*; and
 (b) The letter *R* for a restricted area or the letter *D* for a danger area; and
 (c) A three-digit number which will identify the airspace. This number will also indicate the region of Canada within which the area is located according to the following criteria:

101 to 199	British Columbia
201 to 299	Alberta
301 to 399	Saskatchewan
401 to 499	Manitoba
501 to 599	Ontario
601 to 699	Québec
701 to 799	New Brunswick; Nova Scotia; Prince Edward Island; Newfoundland
801 to 899	Yukon Territory
901 to 999	Northwest Territories; Arctic Islands

EXAMPLE: CYD401

CY	CY indicates Canada,
D	Indicates Danger Area,
401	Indicates the assigned number of the area in Manitoba

7 WARNING

The portion of WG (Diagram 14) enclosed by pecked lines is an active surface, sub-surface, air and torpedo firing/operations area which may also include use of active sonar. Operations are generally (though not exclusively) conducted from 0700-1730 Monday to Saturday during which times area WG is considered extremely hazardous to marine traffic. Additionally, any number of lit and unlit Mooring Buoys may be within Area WG at various locations throughout the year to be used for military purposes. These buoys may be placed, moved and/or removed without notice. Mariners are to exercise caution whenever transiting this area, and vessels are required to remain clear whenever WG is active. Area WG constitutes a defence establishment as defined in the *National Defence Act* to which the *Defence Controlled Access Area Regulations* apply.

EAST COAST

Nova Scotia Area					
Sea Areas	Air Space	Location	Coordinates	Employment	Diagram
*ALPHA		Charts 4001, 4003, 4012, 4320 and 8007	44°42'N 63°00'W 44°19'N 63°00'W 44°19'N 63°40'W 44°28'N 63°40'W	Sub surface operations area. * Does not include Halifax Hbr. Extends to harbour limits only.	1
		Chart 4013	44°42'N 63°00'W 44°19'N 63°00'W 44°19'N 63°40'W		
BRAVO		Charts 4001, 4003, 4012 and 4320	44°28'N 63°40'W 44°19'N 63°40'W 44°19'N 64°00'W 44°28'N 64°05'W	Sub surface operations area.	1
CHARLIE ONE		Charts 4001, 4003, and 4012	44°28'N 64°05'W 44°19'N 64°00'W 44°00'N 64°00'W 44°00'N 64°40'W	Sub surface operations area.	
CHARLIE TWO		Charts 4001, 4003, and 4012	44°00'N 64°40'W 44°00'N 64°00'W 43°30'N 64°00'W 43°30'N 65°24'W	Sub surface operations area.	1
		Chart 4320	44°00'N 64°00'W 44°00'N 64°25'W 43°55'N 64°00'W 43°55'N 64°25'W		
		Chart 8006	43°30.0'N 65°24.5'W 43°30.0'N 64°00.0'W 43°33.0'N 64°00.0'W		

Nova Scotia Area					
Sea Areas	Air Space	Location	Coordinates	Employment	Diagram
CHARLIE THREE		Charts 4001, 4003, 4012 and 8006	43°30'N 65°00'W 43°30'N 64°00'W 43°00'N 64°00'W 43°00'N 65°00'W	Sub surface operations area.	1
DELTA ONE	To 20,000 feet	Charts 4001, 4003, 4012 and 4320	44°19'N 64°00'W 44°19'N 63°45'W 44°10'N 63°45'W 44°10'N 64°00'W	Sub surface operations area. Firing Exercise (FIREX)	1
DELTA TWO	To 20,000 feet	Charts 4001, 4003, 4012 and 4320	44°19'N 63°45'W 44°19'N 63°30'W 44°10'N 63°30'W 44°10'N 63°45'W	Sub surface operations area. Firing Exercise (FIREX)	1
		Charts 4013 and 8007	44°19'N 63°40'W 44°19'N 63°30'W 44°10'N 63°30'W 44°10'N 63°40'W		
DELTA THREE	To 20,000 feet	Charts 4001, 4003, 4012 and 4320	44°10'N 63°45'W 44°10'N 63°30'W 44°00'N 63°30'W 44°00'N 63°45'W	Sub surface operations area. Firing Exercise (FIREX)	1
		Charts 4013 and 8007	44°10'N 63°40'W 44°10'N 63°30'W 44°00'N 63°30'W 44°00'N 63°40'W		
DELTA FOUR	To 20,000 feet	Charts 4001, 4003, 4012 and 4320	44°10'N 64°00'W 44°10'N 63°45'W 44°00'N 63°45'W 44°00'N 64°00'W	Sub surface operations area. Firing Exercise (FIREX)	1
ECHO ONE		Charts 4001, 4003 and 4013	44°59'N 62°00'W 44°00'N 62°00'W 44°00'N 63°00'W 44°42'N 63°00'W	Sub surface operations area.	1
		Chart 4012	44°42'N 63°00'W 44°00'N 63°00'W 44°00'N 62°40'W		
		Chart 4320	44°42'N 63°00'W 44°00'N 63°00'W 44°00'N 62°45'W		
		Chart 8007	44°42'N 63°00'W 44°00'N 63°00'W 44°00'N 62°00'W 44°52'N 62°00'W		
HOTBOX ONE	To 5,000 feet	Charts 4013	44°00'N 063°00'W 44°19'N 063°00'W 44°19'N 062°30'W 44°00'N 062°30'W	Sub surface operations area. Firing Exercise (FIREX)	1

Nova Scotia Area					
Sea Areas	Air Space	Location	Coordinates	Employment	Diagram
ECHO TWO	To 20,000 feet	Charts 4001, 4003 4012, 4013, 4320 and 8007	44°19'N 063°30'W 44°19'N 063°00'W 44°10'N 063°00'W 44°10'N 063°30'W	Sub surface operations area. Firing Exercise (FIREX)	1
ECHO THREE	To 20,000 feet	Charts 4001, 4003 4012, 4013, 4320 and 8007	44°10'N 063°30'W 44°10'N 063°00'W 44°00'N 063°00'W 44°00'N 063°30'W	Sub surface operations area. Firing Exercise (FIREX)	1
FOXTROT ONE		Charts 4001, 4003 and 4011	45°03'N 66°46'W 44°48'N 66°46'W and 44°36'N 66°54'W 44°00'N 66°54'W 44°00'N 66°09'W	Sub surface operations area.	1
		Chart 4012	Southern limit at 44°00'N 66°40'W 44°00'N 66°09'W		
FOXTROT TWO		Charts 4001, 4003 and 4011	43°43'N 66°00'W 43°00'N 66°00'W 43°00'N 66°54'W 44°00'N 66°54'W 44°00'N 66°09'W	Sub surface operations area.	1
		Chart 4012	44°00'N 66°40'W 44°00'N 66°09'W 43°43'N 66°00'W 43°00'N 66°00'W 43°00'N 66°40'W		
		Chart 8006	43°33'N 66°00'W 43°00'N 66°00'W 43°00'N 66°36'W		
FOXTROT THREE		Charts 4001, 4003 and 4012	43°30'N 65°24'W 43°30'N 65°00'W 43°00'N 65°00'W 43°00'N 66°00'W 43°43'N 66°00'W	Sub surface operations area.	1
		Chart 4011	43°00'N 65°30'W 43°00'N 66°00'W 43°43'N 66°00'W		
		Chart 8006	43°33.0'N 66°00.0'W 43°00.0'N 66°00.0'W 43°00.0'N 65°00.0'W 43°30.0'N 65°00.0' W 43°30.0'N 65°24.5'W		
FOXTROT FOUR		Charts 4001, 4003 and 8006	43°00'N 66°00'W 43°00'N 65°00'W 42°00'N 65°00'W 42°00'N 66°00'W	Sub surface operations area.	1

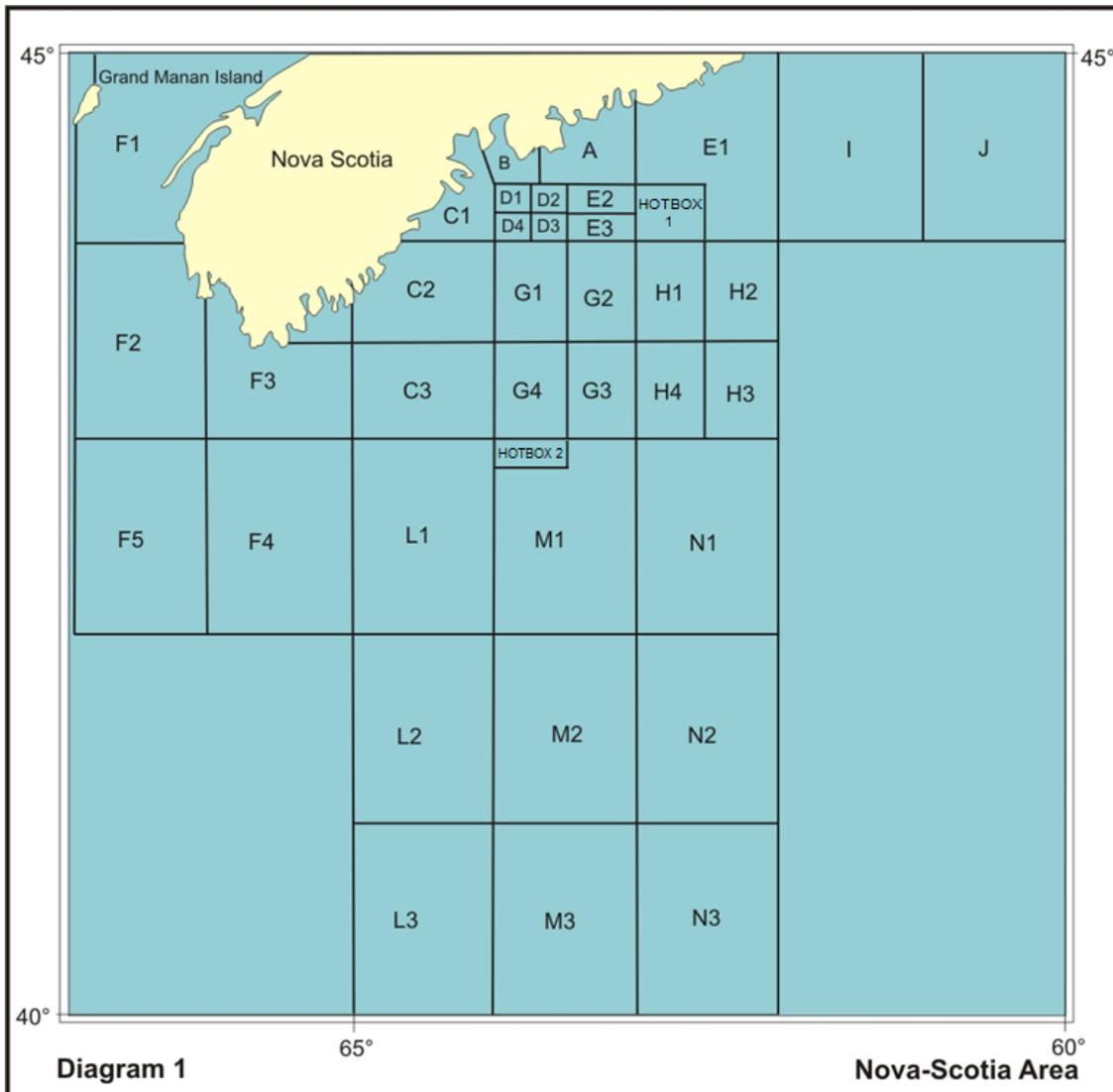
Nova Scotia Area					
Sea Areas	Air Space	Location	Coordinates	Employment	Diagram
		Chart 4011	43°00'N 66°00'W 43°00'N 65°30'W 42°27'N 66°00'W		
		Chart 4012	43°00'N 66°00'W 43°00'N 65°00'W 42°40'N 65°00'W 42°40'N 66°00'W		
FOXTROT FIVE		Charts 4001 and 4003	43°00'N 66°54'W 43°00'N 66°00'W 42°00'N 66°00'W 42°00'N 66°54'W	Sub surface operations area.	1
		Chart 4011	43°00'N 66°54'W 43°00'N 66°00'W 42°27'N 66°00'W 42°27'N 66°54'W		
		Chart 4012	43°00'N 66°40'W 43°00'N 66°00'W 42°40'N 66°00'W 42°40'N 66°40'W		
		Chart 8006	43°00'N 66°36'W 43°00'N 66°00'W 42°00'N 66°00'W 42°00'N 66°36'W		
GOLF ONE	To 30,000 feet	Charts 4001, 4003 and 4012	44°00'N 64°00'W 44°00'N 63°30'W 43°30'N 63°30'W 43°30'N 64°00'W	Sub surface operations area. Firing Exercise (FIREX)	1
		Charts 4013 and 8007	44°00'N 63°40'W 44°00'N 63°30'W 43°30'N 63°30'W 43°30'N 63°40'W		
		Chart 4320	44°00'N 64°00'W 44°00'N 63°30'W 43°55'N 63°30'W 43°55'N 64°00'W		
		Chart 8006	43°33'N 64°00'W 43°30'N 64°00'W 43°30'N 63°30'W 43°33'N 63°30'W		
GOLF TWO	To 30,000 feet	Charts 4001, 4003, 4012 and 8007	44°00'N 63°30'W 44°00'N 63°00'W 43°30'N 63°00'W 43°30'N 63°30'W	Sub surface operations area. Firing Exercise (FIREX)	1
		Chart 4013	44°00'N 63°30'W 44°00'N 63°00'W 43°52'N 63°00'W 43°52'N 63°30'W		

Nova Scotia Area					
Sea Areas	Air Space	Location	Coordinates	Employment	Diagram
		Chart 4320	44°00'N 63°30'W 44°00'N 63°00'W 43°55'N 63°00'W 43°55'N 63°30'W		
		Chart 8006	43°33'N 63°30'W 43°30'N 63°30'W 43°30'N 63°00'W 43°33'N 63°00'W		
GOLF THREE	To 30,000 feet	Charts 4001, 4003, 4012, 8006 and 8007	43°30'N 63°30'W 43°30'N 63°00'W 43°00'N 63°00'W 43°00'N 63°30'W	Sub surface operations area. Firing Exercise (FIREX)	1
GOLF FOUR	To 30,000 feet	Charts 4001, 4003, 4012 and 8006	43°30'N 64°00'W 43°30'N 63°30'W 43°00'N 63°30'W 43°00'N 64°00'W	Sub surface operations area. Firing Exercise (FIREX)	1
		Chart 8007	43°30'N 63°40'W 43°30'N 63°30'W 43°00'N 63°30'W 43°00'N 63°40'W		
HOTEL ONE	To 30,000 feet	Charts 4001, 4003 and 8007	44°00'N 63°00'W 44°00'N 62°30'W 43°30'N 62°30'W 43°30'N 63°00'W	Sub surface operations area. Firing Exercise (FIREX)	1
		Chart 4012	44°00'N 63°00'W 44°00'N 62°40'W 43°30'N 62°40'W 43°30'N 63°00'W		
		Chart 4013	44°00'N 63°00'W 44°00'N 62°30'W 43°52'N 62°30'W 43°52'N 63°00'W		
		Chart 4320	44°00'N 63°00'W 44°00'N 62°45'W 43°55'N 62°45'W 43°55'N 63°00'W		
		Chart 8006	43°33'N 63°00'W 43°30'N 63°00'W 43°30'N 62°34'W		
HOTEL TWO	To 30,000 feet	Charts 4001, 4003 and 8007	44°00'N 62°30'W 44°00'N 62°00'W 43°30'N 62°00'W 43°30'N 62°30'W	Sub surface operations area. Firing Exercise (FIREX)	1
		Chart 4013	44°00'N 62°30'W 44°00'N 62°00'W 43°52'N 62°00'W 43°52'N 62°30'W		

Nova Scotia Area					
Sea Areas	Air Space	Location	Coordinates	Employment	Diagram
HOTEL THREE	To 30,000 feet	Charts 4001, 4003 and 8007	43°30'N 62°30'W 43°30'N 62°00'W 43°00'N 62°00'W 43°00'N 62°30'W	Sub surface operations area. Firing Exercise (FIREX)	1
HOTEL FOUR	To 30,000 feet	Charts 4001, 4003 and 8007	43°30'N 63°00'W 43°30'N 62°30'W 43°00'N 62°30'W 43°00'N 63°00'W	Sub surface operations area. Firing Exercise (FIREX)	1
		Chart 4012	43°30'N 63°00'W 43°30'N 62°40'W 43°00'N 62°40'W 43°00'N 63°00'W		
		Chart 8006	43°00'N 62°34'W 43°00'N 63°00'W 43°30'N 63°00'W 43°30'N 62°34'W		
INDIA		Charts 4001, 4003 and 4013	45°16'N 61°00'W 44°00'N 61°00'W 44°00'N 62°00'W 44°59'N 62°00'W	Sub surface operations area.	1
		Chart 8007	44°52'N 62°00'W 44°00'N 62°00'W 44°00'N 61°00'W 44°52'N 61°00'W		
JULIET		Charts 4001, 4003 and 4013	45°53'N 60°00'W 44°00'N 60°00'W 44°00'N 61°00'W 45°16'N 61°00'W	Sub surface operations area.	1
		Chart 8007	44°52'N 61°00'W 44°00'N 61°00'W 44°00'N 60°00'W 44°52'N 60°00'W		
LIMA ONE		Charts 4001, 4003 and 8006	43°00'N 65°00'W 43°00'N 64°00'W 42°00'N 64°00'W 42°00'N 65°00'W	Sub surface operations area.	1
		Chart 4012	43°00'N 65°00'W 43°00'N 64°00'W 42°40'N 64°00'W 42°40'N 65°00'W		
LIMA TWO		Charts 4001 and 4003	42°00'N 65°00'W 42°00'N 64°00'W 41°00'N 64°00'W 41°00'N 65°00'W	Sub surface operations area.	1
		Chart 8006	41°24'N 65°00'W 42°00'N 65°00'W 42°00'N 64°00'W 41°24'N 64°00'W		

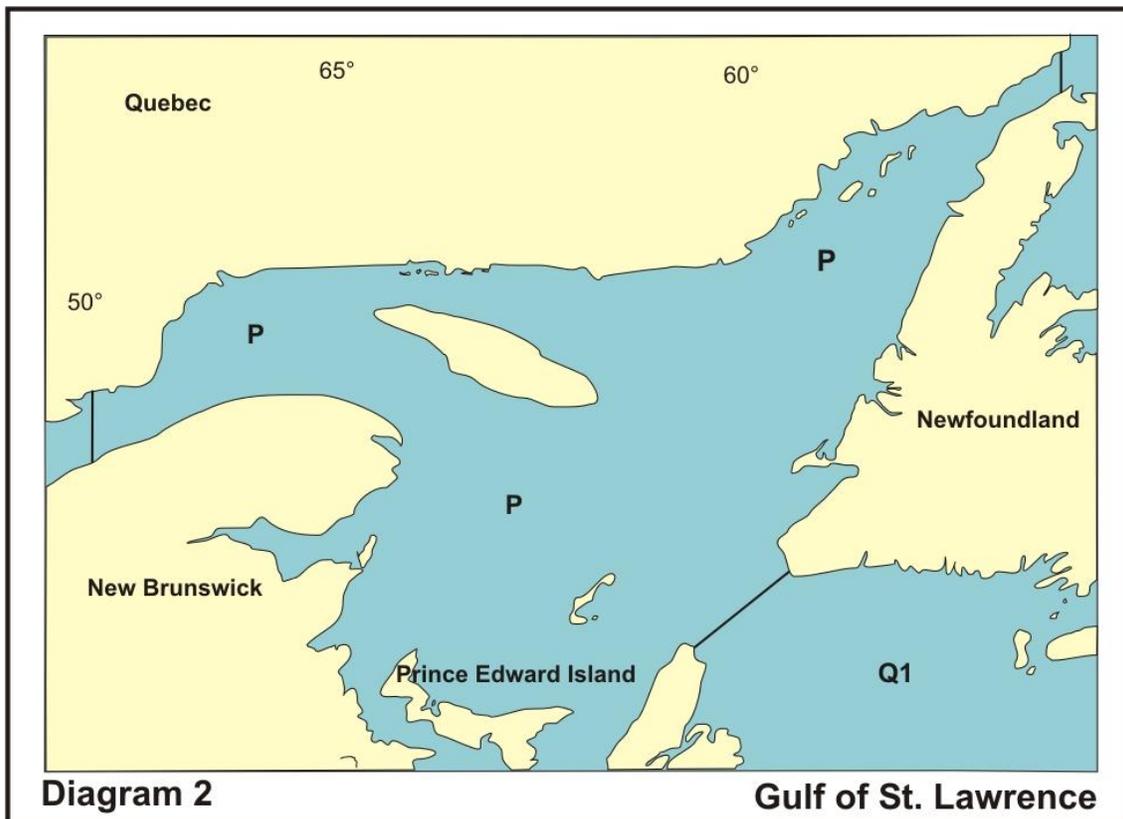
Nova Scotia Area					
Sea Areas	Air Space	Location	Coordinates	Employment	Diagram
LIMA THREE		Charts 4001 and 4003	41°00'N 65°00'W 41°00'N 64°00'W 40°00'N 64°00'W 40°00'N 65°00'W	Sub surface operations area.	1
MIKE ONE		Charts 4001, 4003 and 8006	43°00'N 64°00'W 43°00'N 63°00'W 42°00'N 63°00'W 42°00'N 64°00'W	Sub surface operations area.	1
		Chart 4012	43°00'N 64°00'W 43°00'N 63°00'W 42°40'N 63°00'W 42°40'N 64°00'W		
		Chart 8007	43°00'N 63°40'W 43°00'N 63°00'W 42°44'N 63°00'W		
HOTBOX TWO	To 5,000 feet	Chart 4001, 4003 and 8006	42°50'N 064°00'W 43°00'N 064°00'W 43°00'N 063°30'W 42°50'N 063°30'W	Sub surface operations area. Firing Exercise (FIREX)	1
MIKE TWO		Charts 4001 and 4003	42°00'N 64°00'W 42°00'N 63°00'W 41°00'N 63°00'W 41°00'N 64°00'W	Sub surface operations area.	1
		Chart 8006	41°24'N 64°00'W 42°00'N 64°00'W 42°00'N 63°00'W 41°24'N 63°00'W		
MIKE THREE		Charts 4001 and 4003	41°00'N 64°00'W 41°00'N 63°00'W 40°00'N 63°00'W 40°00'N 64°00'W	Sub surface operations area.	1
NOVEMBER ONE		Charts 4001 and 4003	43°00'N 63°00'W 43°00'N 62°00'W 42°00'N 62°00'W 42°00'N 63°00'W	Sub surface operations area.	1
		Chart 4012	43°00'N 63°00'W 43°00'N 62°40'W 42°40'N 62°40'W 42°40'N 63°00'W		
		Chart 8006	42°00'N 62°34'W 42°00'N 63°00'W 43°00'N 63°00'W 43°00'N 62°34'W		
		Chart 8007	42°44'N 63°00'W 43°00'N 63°00'W 43°00'N 62°00'W 42°44'N 62°00'W		

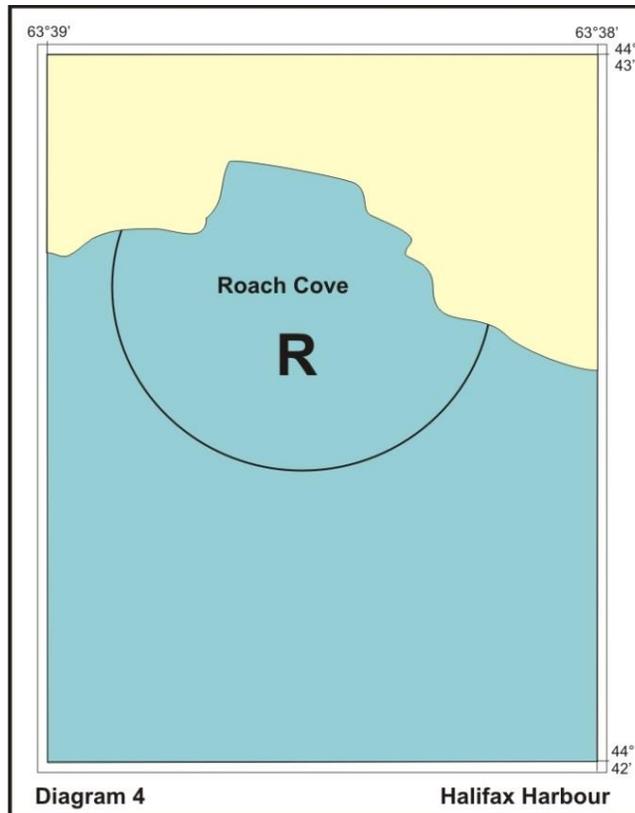
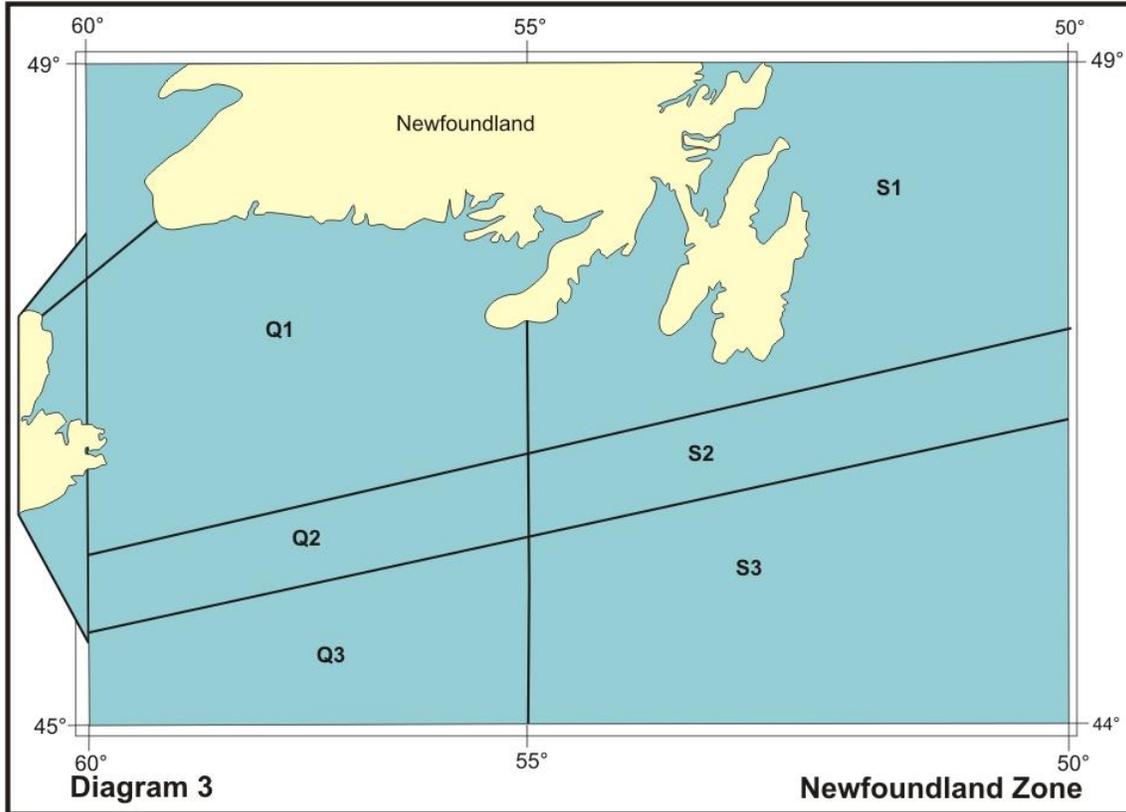
Nova Scotia Area					
Sea Areas	Air Space	Location	Coordinates	Employment	Diagram
NOVEMBER TWO		Charts 4001 and 4003	42°00'N 63°00'W 42°00'N 62°00'W 41°00'N 62°00'W 41°00'N 63°00'W	Sub surface operations area.	1
		Chart 8006	41°24'N 63°00'W 42°00'N 63°00'W 42°00'N 62°34'W		
NOVEMBER THREE		Charts 4001 and 4003	41°00'N 63°00'W 41°00'N 62°00'W 40°00'N 62°00'W 40°00'N 63°00'W	Sub surface operations area.	1



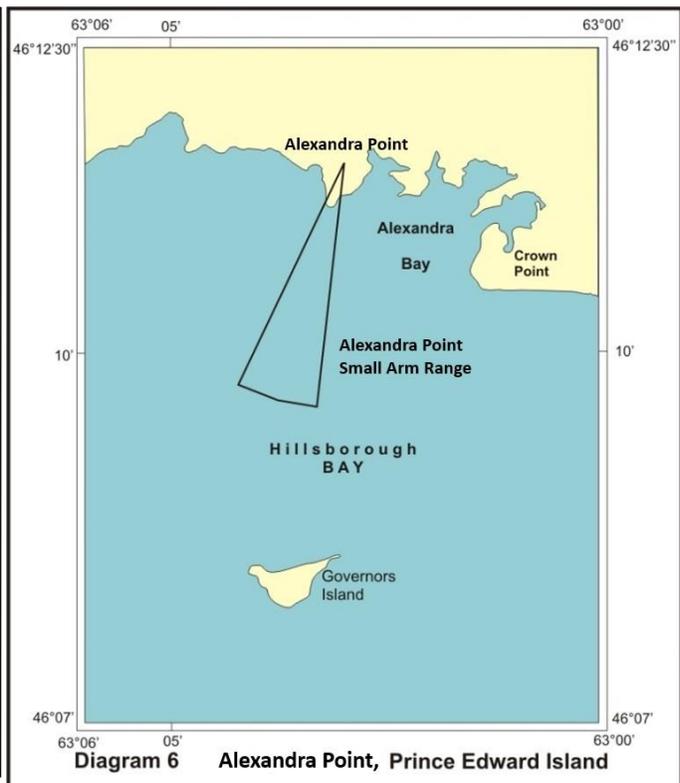
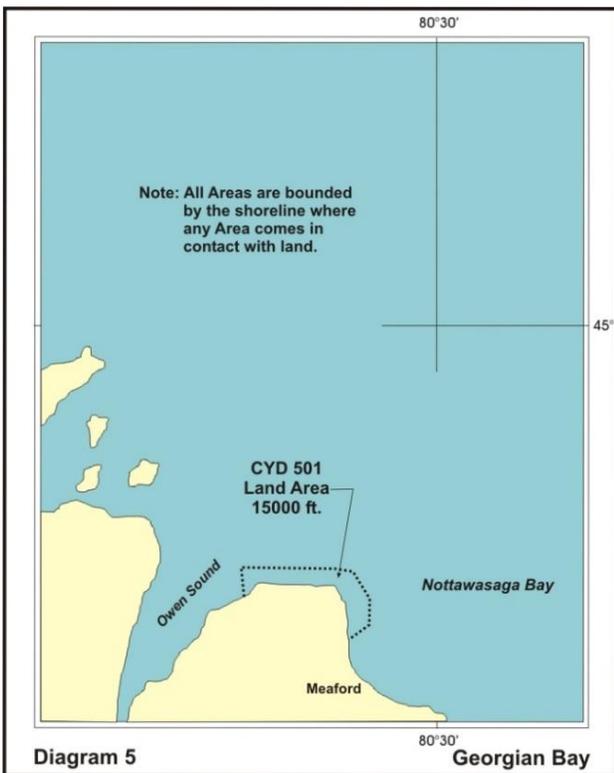
Gulf of St. Lawrence Area					
Sea Area	Airspace	Location	Coordinates	Employment	Diagram
PAPA		Chart 4001	Gulf of St Lawrence bounded by lines joining: 47°00'N 60°25'W 47°37'17.1"N 59°18'16.8"W 51°35'N 56°00'W 51°54'N 56°00'W 49°18'N 68°00'W 48°41'N 68°00'W	Sub surface operations area.	2
QUÉBEC ONE		Chart 4001	46°56'N 55°30'W 46°00'N 55°30'W 45°17'N 60°00'W 45°53'N 60°00'W and 47°00'N 60°25'W to 47°37'17.1"N 59°18'16.8"W	Sub surface operations area. *Does not include the French territorial waters of Saint-Pierre et Miquelon.	2 & 3
		Chart 4003	45°53'N 60°00'W 45°17'N 60°00'W 45°35'N 58°15'W		
		Chart 4013	45°53'N 60°00'W 45°17'N 60°00'W 45°27'N 59°00'W		
QUÉBEC TWO		Chart 4001	45°17'N 60°00'W 46°00'N 55°30'W 45°20'N 55°30'W 44°45'N 60°00'W	Sub surface operations area. *Does not include the French Territorial waters of Saint-Pierre et Miquelon.	3
		Chart 4003	45°17'N 60°00'W 45°35'N 58°15'W 45°02'N 58°15'W 44°45'N 60°00'W		
		Chart 4013	45°17'N 60°00'W 45°27'N 59°00'W 44°55'N 59°00'W 44°45'N 60°00'W		
		Chart 8007	44°52.0'N 60°00.0'W 44°45.0'N 60°00.0'W 44°47.5'N 59°45.0'W		
QUÉBEC THREE		Chart 4001	44°45'N 60°00'W 45°20'N 55°30'W 44°00'N 55°30'W 44°00'N 60°00'W	Sub surface operations area. *Does not include the French territorial waters of Saint-Pierre et Miquelon.	3
		Chart 4003	44°45'N 60°00'W 45°02'N 58°15'W 44°00'N 58°15'W 44°00'N 60°00'W		
		Chart 4013	44°45'N 60°00'W 44°55'N 59°00'W 44°00'N 59°00'W 44°00'N 60°00'W		

Gulf of St. Lawrence Area					
Sea Area	Airspace	Location	Coordinates	Employment	Diagram
		Chart 8007	44°00.0'N 59°45.0'W 44°00.0'N 60°00.0'W 44°45.0'N 60°00.0'W 44°47.5'N 59°45.0'W		
ROMEO		Chart 4201 (Halifax Harbour)	An arc from shoreline to shoreline centred on 44°42'43"N 63°38'40"W with radius of 365 metres	Underwater demolition training (Maximum explosive weight 10 Kilograms)	4
SIERRA ONE		Chart 4001	48°40'N 53°05'W 48°40'N 50°00'W 46°47'N 50°00'W 46°00'N 55°30'W 46°56'N 55°30'W	Sub surface operations area.	3
SIERRA TWO		Chart 4001	46°00'N 55°30'W 46°47'N 50°00'W 46°10'N 50°00'W 45°20'N 55°30'W	Sub surface operations area.	3
SIERRA THREE		Chart 4001	45°20'N 55°30'W 46°10'N 50°00'W 44°00'N 50°00'W 44°00'N 55°30'W	Sub surface operations area.	3

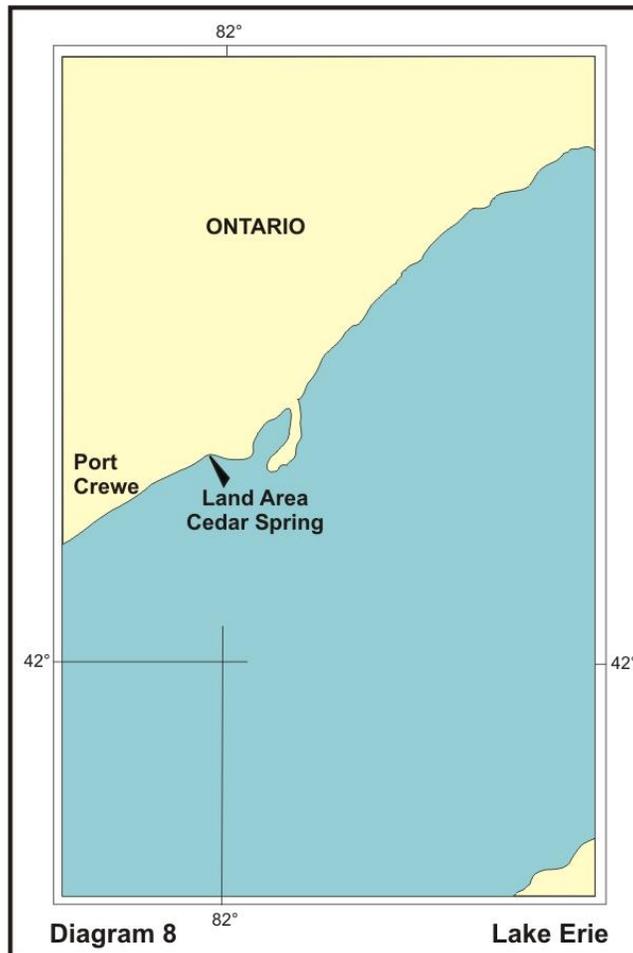




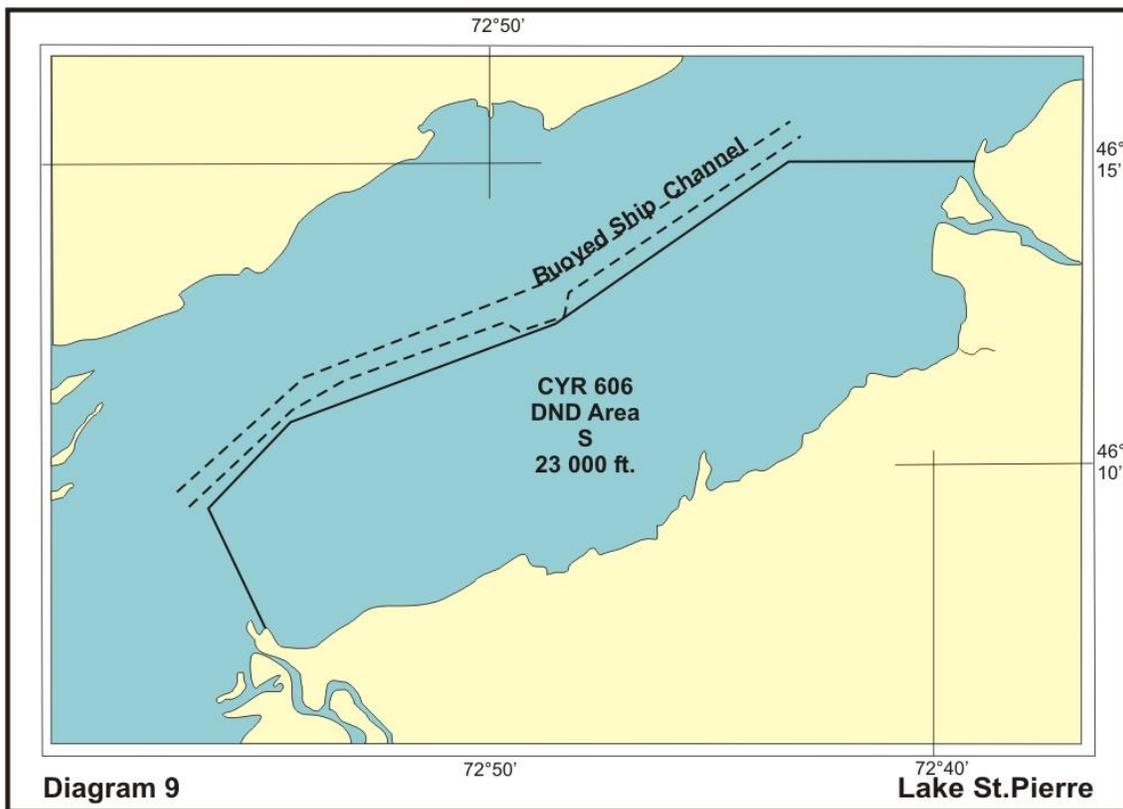
Alexandra Point (PEI) & Georgian Bay Firing Area					
Designators		Location	Coordinates	Employment	Diagram
DND	DOT				
		Alexandra Point, Prince Edward Island, Firing Area (Chart 4466)	From Alexandra Point (46°11'25"N 63°02'58"W) extending 1.9 nautical mile limited by an arc of 029°, from 184° to 213°.		6
	CYD501	CYD501 Ontario (Firing Area of Meaford) (Chart 2201)	44°42'48"N 80°46'11"W 44°44'40"N 80°46'22"W 44°44'40"N 80°39'32"W 44°44'25"N 80°37'17"W 44°42'50"N 80°35'45"W 44°41'11"N 80°35'35"W 44°39'45"N 80°37'41"W	1 S	5



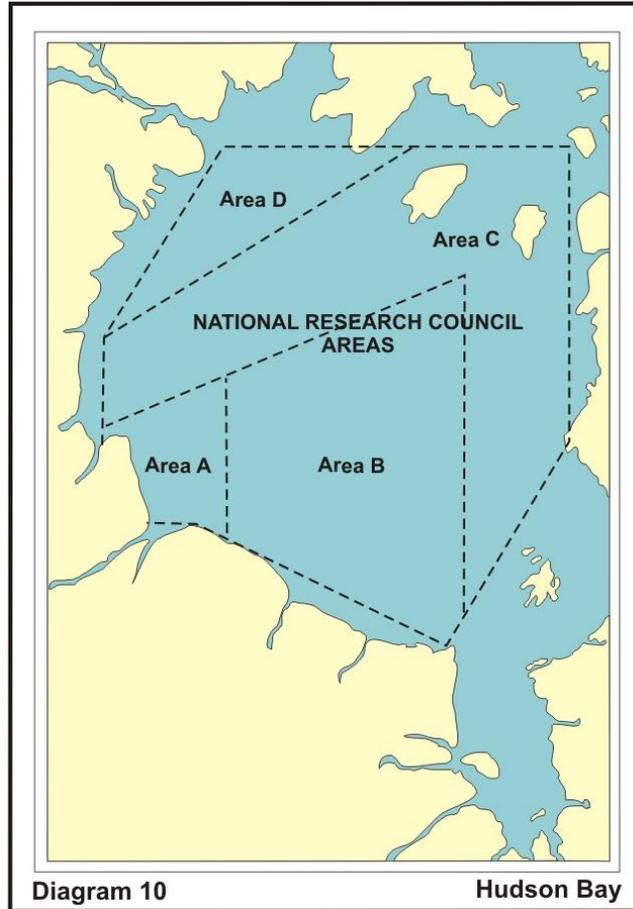
Lake Ontario & Erie Area Firing Area					
Designators		Location	Coordinates	Employment	Diagram
DND	DOT				
		Erie Lake (Cedar Springs, Ontario) (Chart 2100)	Offshore, from 42°16'00"N 82°01'00"W, limited by an arc of 020°; from 308 1/2° to 328 1/2° of 4,000 yards.		8
		Ontario Lake, Grimsby, Firing Area (Chart 2077)	43°13'21"N 79°36'59"W 43°13'28"N 79°36'59"W 43°14'45"N 79°36'13"W 43°14'29"N 79°35'33"W 43°13'18"N 79°36'33"W 43°13'12"N 79°36'47"W		7
		Ontario Lake, Niagara-on-the-Lake Firing Area (Chart 2043)	43°15'31"N 79°06'13"W 43°16'22"N 79°07'43"W 43°16'46"N 79°07'13"W 43°15'45"N 79°05'55"W 43°15'35"N 79°05'53"W		8



DND Inspection Services - Lake St. Pierre (Québec) Area					
Designators		Location	Coordinates	Employment	Diagram
DND	DOT				
	CYR606	Lac St. Pierre, Quebec (South of Shipping Channel) (Chart 1312)	Marine portion bounded by south shore of Lake St. Pierre and lines joining: 46°15'00"N 72°39'14"W 46°15'00"N 72°43'20"W 46°12'18"N 72°48'41"W 46°10'54"N 72°54'18"W 46°09'20"N 72°56'20"W 46°07'21"N 72°55'00"W	1 In continuous use 2 S	9



National Research Council Areas - Hudson Bay					
Rocket Area		Location	Coordinates	Employment	Diagram
DND	DOT				
		Hudson Bay and Strait Churchill, Manitoba (Chart 5000)	<p>AREA A 58°56'00"N 94°00'00"W 57°18'00"N 94°00'00"W 57°20'00"N 91°08'00"W 57°04'00"N 90°00'00"W 59°46'30"N 90°00'00"W</p> <p>AREA B 59°46'30"N 90°00'00"W 57°04'00"N 90°00'00"W 55°13'00"N 82°30'00"W 55°28'00"N 82°00'00"W 61°27'00"N 82°00'00"W</p> <p>AREA C 55°28'00"N 82°00'00"W 58°55'00"N 78°28'00"W 63°15'00"N 78°28'00"W 63°15'00"N 83°00'00"W 60°21'00"N 94°00'00"W 58°56'00"N 94°00'00"W 59°46'30"N 90°00'00"W 61°27'00"N 82°00'00"W</p> <p>AREA D 63°15'00"N 83°00'00"W 63°15'00"N 90°00'00"W 60°21'00"N 94°00'00"W</p>	<p>1 R</p> <p>2 Dependent on the characteristics of each rocket, the trajectory will cross all altitudes up to approximately 600,000 feet during a period not exceeding 30 minutes the time of launch. It is that majority of rockets launched will impact at a point within Area A (see diagram 10). Radar and other surveillance procedures will be used over the area during the range operations. No rocket will be launched if it is known that an aircraft or ship is likely to be endangered. Information about a launch will be published through a Navigational Warning issued by Iqaluit MCTS.</p> <p>Further details can be obtained by Telephone: 867-979-5269 Email: NAVWARN.MCTS@i-nav.gc.ca</p>	10



Authority: Department of National Defence (NDHQ)

West Coast Area					
Sea Area	Airspace	Location	Coordinates	Employment	Diagram
CHARLIE ALPHA 1		Chart 3000	51°30'00"N 129°20'00"W 51°30'00"N 129°00'00"W 51°15'00"N 129°00'00"W 51°15'00"N 129°20'00"W	Sub surface operations area.	11
CHARLIE ALPHA 2		Chart 3000	51°30'00"N 129°00'00"W 51°30'00"N 128°40'00"W 51°15'00"N 128°40'00"W 51°15'00"N 129°00'00"W	Sub surface operations area.	11
CHARLIE ALPHA 3		Chart 3000	51°30'00"N 128°40'00"W 51°30'00"N 128°20'00"W 51°15'00"N 128°20'00"W 51°15'00"N 128°40'00"W	Sub surface operations area.	11
CHARLIE ALPHA 4		Chart 3000	51°30'00"N 128°20'00"W 51°30'00"N 128°00'00"W 51°15'00"N 128°00'00"W 51°15'00"N 128°20'00"W	Sub surface operations area.	11
CHARLIE ALPHA 5		Chart 3000	51°30'00"N 128°00'00"W 51°30'00"N 127°40'00"W 51°15'00"N 127°40'00"W 51°15'00"N 128°00'00"W	Sub surface operations area.	11
Areas CHARLIE ALPHA 6 to CHARLIE ALPHA 14 inclusive not allocated					
CHARLIE BRAVO 1		Chart 3000	51°15'00"N 129°20'00"W 51°15'00"N 129°00'00"W 51°00'00"N 129°00'00"W 51°00'00"N 129°20'00"W	Sub surface operations area.	11
CHARLIE BRAVO 2		Chart 3000	51°15'00"N 129°00'00"W 51°15'00"N 128°40'00"W 51°00'00"N 128°40'00"W 51°00'00"N 129°00'00"W	Sub surface operations area.	11
CHARLIE BRAVO 3		Chart 3000	51°15'00"N 128°40'00"W 51°15'00"N 128°20'00"W 51°00'00"N 128°20'00"W 51°00'00"N 128°40'00"W	Sub surface operations area.	11
CHARLIE BRAVO 4		Chart 3000	51°15'00"N 128°20'00"W 51°15'00"N 128°00'00"W 51°00'00"N 128°00'00"W 51°00'00"N 128°20'00"W	Sub surface operations area.	11
CHARLIE BRAVO 5		Chart 3000	51°15'00"N 128°00'00"W 51°15'00"N 127°40'00"W 51°00'00"N 127°40'00"W 51°00'00"N 128°00'00"W	Sub surface operations area.	11
Areas CHARLIE BRAVO 6 to CHARLIE BRAVO 14 inclusive not allocated					
CHARLIE CHARLIE 1		Chart 3000	51°00'00"N 129°20'00"W 51°00'00"N 129°00'00"W 50°45'00"N 129°00'00"W 50°45'00"N 129°20'00"W	Sub surface operations area.	11

West Coast Area					
Sea Area	Airspace	Location	Coordinates	Employment	Diagram
CHARLIE CHARLIE 2		Chart 3000	51°00'00"N 129°00'00"W 51°00'00"N 128°40'00"W 50°45'00"N 128°40'00"W 50°45'00"N 129°00'00"W	Sub surface operations area.	11
CHARLIE CHARLIE 3		Chart 3000	51°00'00"N 128°40'00"W 51°00'00"N 128°20'00"W 50°45'00"N 128°20'00"W 50°45'00"N 128°40'00"W	Sub surface operations area.	11
CHARLIE CHARLIE 4		Chart 3000	51°00'00"N 128°20'00"W 51°00'00"N 128°00'00"W 50°45'00"N 128°00'00"W 50°45'00"N 128°20'00"W	Sub surface operations area.	11
CHARLIE CHARLIE 5		Chart 3000	51°00'00"N 128°00'00"W 51°00'00"N 127°40'00"W 50°45'00"N 127°40'00"W 50°45'00"N 128°00'00"W	Sub surface operations area.	11
Areas CHARLIE CHARLIE 6 to CHARLIE CHARLIE 14 inclusive not allocated					
CHARLIE DELTA 1	CYR 106 to 23,000 feet	Chart 3000	50°45'00"N 129°20'00"W 50°45'00"N 129°00'00"W 50°30'00"N 129°00'00"W 50°30'00"N 129°20'00"W	Sub surface operations area.	11 & 12
CHARLIE DELTA 2		Chart 3000	50°45'00"N 129°00'00"W 50°45'00"N 128°40'00"W 50°30'00"N 128°40'00"W 50°30'00"N 129°00'00"W	Sub surface operations area.	11
CHARLIE DELTA 3		Chart 3000	50°45'00"N 128°40'00"W 50°45'00"N 128°20'00"W 50°30'00"N 128°20'00"W 50°30'00"N 128°40'00"W	Sub surface operations area.	11
CHARLIE DELTA 4		Chart 3000	50°45'00"N 128°20'00"W 50°45'00"N 128°00'00"W 50°30'00"N 128°00'00"W 50°30'00"N 128°20'00"W	Sub surface operations area.	11
CHARLIE DELTA 5		Chart 3000	50°45'00"N 128°00'00"W 50°45'00"N 127°40'00"W 50°30'00"N 127°40'00"W 50°30'00"N 128°00'00"W	Sub surface operations area.	11
CHARLIE DELTA 6		Chart 3000	50°45'00"N 127°40'00"W 50°45'00"N 127°20'00"W 50°30'00"N 127°20'00"W 50°30'00"N 127°40'00"W	Sub surface operations area.	11
Areas CHARLIE DELTA 7 to CHARLIE DELTA 14 inclusive not allocated					
CHARLIE ECHO 1	CYR 106 to 23,000 feet	Chart 3000	50°30'00"N 129°20'00"W 50°30'00"N 129°00'00"W 50°15'00"N 129°00'00"W 50°15'00"N 129°20'00"W	Sub surface operations area.	11 & 12

West Coast Area					
Sea Area	Airspace	Location	Coordinates	Employment	Diagram
CHARLIE ECHO 2	CYR 106 to 23,000 feet	Chart 3000	50°30'00"N 129°00'00"W 50°30'00"N 128°40'00"W 50°15'00"N 128°40'00"W 50°15'00"N 129°00'00"W	Sub surface operations area.	11 & 12
CHARLIE ECHO 3		Chart 3000	50°30'00"N 128°40'00"W 50°30'00"N 128°20'00"W 50°15'00"N 128°20'00"W 50°15'00"N 128°40'00"W	Sub surface operations area.	11
CHARLIE ECHO 4		Chart 3000	50°30'00"N 128°20'00"W 50°30'00"N 128°00'00"W 50°15'00"N 128°00'00"W 50°15'00"N 128°20'00"W	Sub surface operations area.	11
CHARLIE ECHO 5		Chart 3000	50°30'00"N 128°00'00"W 50°30'00"N 127°40'00"W 50°15'00"N 127°40'00"W 50°15'00"N 128°00'00"W	Sub surface operations area.	11
CHARLIE ECHO 6		Chart 3000	50°30'00"N 127°40'00"W 50°30'00"N 127°20'00"W 50°15'00"N 127°20'00"W 50°15'00"N 127°40'00"W	Sub surface operations area.	11
Areas CHARLIE ECHO 7 to CHARLIE ECHO 14 inclusive not allocated					
CHARLIE FOXTROT 1	CYR 106 to 23,000 feet	Chart 3000	50°15'00"N 129°20'00"W 50°15'00"N 129°00'00"W 50°00'00"N 129°00'00"W 50°00'00"N 129°20'00"W	Sub surface operations area.	11
CHARLIE FOXTROT 2	CYR 106 to 23,000 feet	Chart 3000	50°15'00"N 129°00'00"W 50°15'00"N 128°40'00"W 50°00'00"N 128°40'00"W 50°00'00"N 129°00'00"W	Sub surface operations area.	11
CHARLIE FOXTROT 3	CYR 106 to 23,000 feet	Chart 3000	50°15'00"N 128°40'00"W 50°15'00"N 128°20'00"W 50°00'00"N 128°20'00"W 50°00'00"N 128°40'00"W	Sub surface operations area.	11 & 12
CHARLIE FOXTROT 4	CYR 106 to 23,000 feet	Chart 3000	50°15'00"N 128°20'00"W 50°15'00"N 128°00'00"W 50°00'00"N 128°00'00"W 50°00'00"N 128°20'00"W	Sub surface operations area.	11
CHARLIE FOXTROT 5		Chart 3000	50°15'00"N 128°00'00"W 50°15'00"N 127°40'00"W 50°00'00"N 127°40'00"W 50°00'00"N 128°00'00"W	Sub surface operations area.	11
CHARLIE FOXTROT 6		Chart 3000	50°15'00"N 127°40'00"W 50°15'00"N 127°20'00"W 50°00'00"N 127°20'00"W 50°00'00"N 127°40'00"W	Sub surface operations area.	11

West Coast Area					
Sea Area	Airspace	Location	Coordinates	Employment	Diagram
CHARLIE FOXTROT 7		Chart 3000	50°15'00"N 127°20'00"W 50°15'00"N 127°00'00"W 50°00'00"N 127°00'00"W 50°00'00"N 127°20'00"W	Sub surface operations area.	11
Areas CHARLIE FOXTROT 8 to CHARLIE FOXTROT 14 inclusive not allocated					
CHARLIE GOLF 1	CYR 106 to 23,000 feet	Chart 3000	50°00'00"N 129°20'00"W 50°00'00"N 129°00'00"W 49°45'00"N 129°00'00"W 49°45'00"N 129°20'00"W	Sub surface operations area.	11 & 12
CHARLIE GOLF 2	CYR 106 to 23,000 feet	Chart 3000	50°00'00"N 129°00'00"W 50°00'00"N 128°40'00"W 49°45'00"N 128°40'00"W 49°45'00"N 129°00'00"W	Sub surface operations area. Firing Exercise Area.	11 & 12
CHARLIE GOLF 3	CYR 106 to 23,000 feet CYR 101 23,000 to 60,000 feet	Chart 3000	50°00'00"N 128°40'00"W 50°00'00"N 128°20'00"W 49°45'00"N 128°20'00"W 49°45'00"N 128°40'00"W	Sub surface operations area. Firing Exercise Area.	11 & 12
CHARLIE GOLF 4	CYR 106 to 23,000 feet CYR 101 23,000 to 60,000 feet	Chart 3000	50°00'00"N 128°20'00"W 50°00'00"N 128°00'00"W 49°45'00"N 128°00'00"W 49°45'00"N 128°20'00"W	Sub surface operations area. ♣ Firing Exercise Area.	11 & 12
CHARLIE GOLF 5	CYR 106 to 23,000 feet CYR 101 23,000 to 60,000 feet	Chart 3000	50°00'00"N 128°00'00"W 50°00'00"N 127°40'00"W 49°45'00"N 127°40'00"W 49°45'00"N 128°00'00"W	Sub surface operations area. ♣ Firing Exercise Area.	11 & 12
CHARLIE GOLF 6	CYR 106 to 23,000 feet CYR 101 23,000 to 60,000 feet	Chart 3000	50°00'00"N 127°40'00"W 50°00'00"N 127°20'00"W 49°45'00"N 127°20'00"W 49°45'00"N 127°40'00"W	Sub surface operations area.	11
CHARLIE GOLF 7		Chart 3000	50°00'00"N 127°20'00"W 50°00'00"N 127°00'00"W 49°45'00"N 127°00'00"W 49°45'00"N 127°20'00"W	Sub surface operations area.	11
CHARLIE GOLF 8		Chart 3000	50°00'00"N 127°00'00"W 50°00'00"N 126°40'00"W 49°45'00"N 126°40'00"W 49°45'00"N 127°00'00"W	Sub surface operations area.	11
♣ = Only that portion of the area that is within Area WP (Defined at Diagram 11)					

West Coast Area					
Sea Area	Airspace	Location	Coordinates	Employment	Diagram
CHARLIE GOLF 9		Chart 3000	50°00'00"N 126°40'00"W 50°00'00"N 126°20'00"W 49°45'00"N 126°20'00"W 49°45'00"N 126°40'00"W	Sub surface operations area.	11
Areas CHARLIE GOLF 10 to CHARLIE GOLF 14 inclusive not allocated					
CHARLIE HOTEL 1	CYR 106 to 23,000 feet	Chart 3000	49°45'00"N 129°20'00"W 49°45'00"N 129°00'00"W 49°30'00"N 129°00'00"W 49°30'00"N 129°20'00"W	Sub surface operations area.	11
CHARLIE HOTEL 2	CYR 106 to 23,000 feet	Chart 3000	49°45'00"N 129°00'00"W 49°45'00"N 128°40'00"W 49°30'00"N 128°40'00"W 49°30'00"N 129°00'00"W	Sub surface operations area. Firing Exercise Area.	11 & 12
CHARLIE HOTEL 3	CYR 106 to 23,000 feet CYR 101 23,000 to 60,000 feet	Chart 3000	49°45'00"N 128°40'00"W 49°45'00"N 128°20'00"W 49°30'00"N 128°20'00"W 49°30'00"N 128°40'00"W	Sub surface operations area. Firing Exercise Area.	11 & 12
CHARLIE HOTEL 4	CYR 106 to 23,000 feet CYR 101 23,000 to 60,000 feet	Chart 3000	49°45'00"N 128°20'00"W 49°45'00"N 128°00'00"W 49°30'00"N 128°00'00"W 49°30'00"N 128°20'00"W	Sub surface operations area. Firing Exercise Area.	11 & 12
CHARLIE HOTEL 5	CYR 106 to 23,000 feet CYR 101 23,000 to 60,000 feet	Chart 3000	49°45'00"N 128°00'00"W 49°45'00"N 127°40'00"W 49°30'00"N 127°40'00"W 49°30'00"N 128°00'00"W	Sub surface operations area. Firing Exercise Area.	11 & 12
CHARLIE HOTEL 6	CYR 106 to 23,000 feet CYR 101 23,000 to 60,000 feet	Chart 3000	49°45'00"N 127°40'00"W 49°45'00"N 127°20'00"W 49°30'00"N 127°20'00"W 49°30'00"N 127°40'00"W	Sub surface operations area. ♣ Firing Exercise Area.	11 & 12
CHARLIE HOTEL 7	CYR 106 to 23,000 feet CYR 101 23,000 to 60,000 feet	Chart 3000	49°45'00"N 127°20'00"W 49°45'00"N 127°00'00"W 49°30'00"N 127°00'00"W 49°30'00"N 127°20'00"W	Sub surface operations area. ♣ Firing Exercise Area	11 & 12
CHARLIE HOTEL 8	CYR 106 to 23,000 feet	Chart 3000	49°45'00"N 127°00'00"W 49°45'00"N 126°40'00"W 49°30'00"N 126°40'00"W 49°30'00"N 127°00'00"W	Sub surface operations area.	11
♣ = Only that portion of the area that is within Area WP (Defined at Diagram 11)					

West Coast Area					
Sea Area	Airspace	Location	Coordinates	Employment	Diagram
CHARLIE HOTEL 9		Chart 3000	49°45'00"N 126°40'00"W 49°45'00"N 126°20'00"W 49°30'00"N 126°20'00"W 49°30'00"N 126°40'00"W	Sub surface operations area.	11
CHARLIE HOTEL 10		Chart 3000	49°45'00"N 126°20'00"W 49°45'00"N 126°00'00"W 49°30'00"N 126°00'00"W 49°30'00"N 126°20'00"W	Sub surface operations area.	11
Areas CHARLIE HOTEL 11 to CHARLIE HOTEL 14 inclusive not allocated					
CHARLIE INDIA 1	CYR 106 to 23,000 feet	Chart 3000	49°30'00"N 129°20'00"W 49°30'00"N 129°00'00"W 49°15'00"N 129°00'00"W 49°15'00"N 129°20'00"W	Sub surface operations area.	11
CHARLIE INDIA 2	CYR 106 to 23,000 feet	Chart 3000	49°30'00"N 129°00'00"W 49°30'00"N 128°40'00"W 49°15'00"N 128°40'00"W 49°15'00"N 129°00'00"W	Sub surface operations area. Firing Exercise Area.	11 & 12
CHARLIE INDIA 3	CYR 106 to 23,000 feet CYR 101 23,000 to 60,000 feet	Chart 3000	49°30'00"N 128°40'00"W 49°30'00"N 128°20'00"W 49°15'00"N 128°20'00"W 49°15'00"N 128°40'00"W	Sub surface operations area. ♦ Firing Exercise Area.	11 & 12
CHARLIE INDIA 4	CYR 106 to 23,000 feet CYR 101 23,000 to 60,000 feet	Chart 3000	49°30'00"N 128°20'00"W 49°30'00"N 128°00'00"W 49°15'00"N 128°00'00"W 49°15'00"N 128°20'00"W	Sub surface operations area. Firing Exercise Area.	11 & 12
CHARLIE INDIA 5	CYR 106 to 23,000 feet CYR 101 23,000 to 60,000 feet	Chart 3000	49°30'00"N 128°00'00"W 49°30'00"N 127°40'00"W 49°15'00"N 127°40'00"W 49°15'00"N 128°00'00"W	Sub surface operations area. Firing Exercise Area.	11 & 12
CHARLIE INDIA 6	CYR 106 to 23,000 feet CYR 101 23,000 to 60,000 feet	Chart 3000	49°30'00"N 127°40'00"W 49°30'00"N 127°20'00"W 49°15'00"N 127°20'00"W 49°15'00"N 127°40'00"W	Sub surface operations area. Primary Firing Exercise Area.	11 & 12
CHARLIE INDIA 7	CYR 106 to 23,000 feet CYR 101 23,000 to 60,000 feet	Chart 3000	49°30'00"N 127°20'00"W 49°30'00"N 127°00'00"W 49°15'00"N 127°00'00"W 49°15'00"N 127°20'00"W	Sub surface operations area. ♣ Primary Firing Exercise Area.	11 & 12
♣ = Only that portion of the area that is within Area WP (Defined at Diagram 11)					

West Coast Area					
Sea Area	Airspace	Location	Coordinates	Employment	Diagram
CHARLIE INDIA 8	CYR 106 to 23,000 feet	Chart 3000	49°30'00"N 127°00'00"W 49°30'00"N 126°40'00"W 49°15'00"N 126°40'00"W 49°15'00"N 127°00'00"W	Sub surface operations area.	11
CHARLIE INDIA 9	CYR 106 to 23,000 feet	Chart 3000	49°30'00"N 126°40'00"W 49°30'00"N 126°20'00"W 49°15'00"N 126°20'00"W 49°15'00"N 126°40'00"W	Sub surface operations area.	11
CHARLIE INDIA 10		Chart 3000	49°30'00"N 126°20'00"W 49°30'00"N 126°00'00"W 49°15'00"N 126°00'00"W 49°15'00"N 126°20'00"W	Sub surface operations area.	11
CHARLIE INDIA 11		Chart 3000	49°30'00"N 126°00'00"W 49°30'00"N 125°40'00"W 49°15'00"N 125°40'00"W 49°15'00"N 126°00'00"W	Sub surface operations area.	11
Areas CHARLIE INDIA 12 to CHARLIE INDIA 14 inclusive not allocated					
CHARLIE JULIET 1	CYR 106 to 23,000 feet	Chart 3000	49°15'00"N 129°20'00"W 49°15'00"N 129°00'00"W 49°00'00"N 129°00'00"W 49°00'00"N 129°20'00"W	Sub surface operations area.	11
CHARLIE JULIET 2	CYR 106 to 23,000 feet	Chart 3000	49°15'00"N 129°00'00"W 49°15'00"N 128°40'00"W 49°00'00"N 128°40'00"W 49°00'00"N 129°00'00"W	Sub surface operations area. ♣ Firing Exercise Area.	11 & 12
CHARLIE JULIET 3	CYR 106 to 23,000 feet	Chart 3000	49°15'00"N 128°40'00"W 49°15'00"N 128°20'00"W 49°00'00"N 128°20'00"W 49°00'00"N 128°40'00"W	Sub surface operations area. Firing Exercise Area.	11 & 12
CHARLIE JULIET 4	CYR 106 to 23,000 feet	Chart 3000	49°15'00"N 128°20'00"W 49°15'00"N 128°00'00"W 49°00'00"N 128°00'00"W 49°00'00"N 128°20'00"W	Sub surface operations area. Firing Exercise Area.	11 & 12
CHARLIE JULIET 5	CYR 106 to 23,000 feet CYR 101 23,000 to 60,000 feet	Chart 3000	49°15'00"N 128°00'00"W 49°15'00"N 127°40'00"W 49°00'00"N 127°40'00"W 49°00'00"N 128°00'00"W	Sub surface operations area. Firing Exercise Area.	11 & 12
CHARLIE JULIET 6	CYR 106 to 23,000 feet CYR 101 23,000 to 60,000 feet	Chart 3000	49°15'00"N 127°40'00"W 49°15'00"N 127°20'00"W 49°00'00"N 127°20'00"W 49°00'00"N 127°40'00"W	Sub surface operations area. Primary Firing Exercise Area Surface.	11 & 12
♣ = Only that portion of the area that is within Area WP (Defined at Diagram 11)					

West Coast Area					
Sea Area	Airspace	Location	Coordinates	Employment	Diagram
CHARLIE JULIET 7	CYR 106 to 23,000 feet CYR 101 23,000 to 60,000 feet	Chart 3000	49°15'00"N 127°20'00"W 49°15'00"N 127°00'00"W 49°00'00"N 127°00'00"W 49°00'00"N 127°20'00"W	Sub surface operations area. ♣ Primary Firing Exercise Area Surface.	11 & 12
CHARLIE JULIET 8	CYR 106 to 23,000 feet CYR 101 23,000 to 60,000 feet	Chart 3000	49°15'00"N 127°00'00"W 49°15'00"N 126°40'00"W 49°00'00"N 126°40'00"W 49°00'00"N 127°00'00"W	Sub surface operations area. ♣ Firing Exercise Area.	11 & 12
CHARLIE JULIET 9	CYR 106 to 23,000 feet CYR 101 23,000 to 60,000 feet	Chart 3000	49°15'00"N 126°40'00"W 49°15'00"N 126°20'00"W 49°00'00"N 126°20'00"W 49°00'00"N 126°40'00"W	Sub surface operations area.	11
CHARLIE JULIET 10		Chart 3000	49°15'00"N 126°20'00"W 49°15'00"N 126°00'00"W 49°00'00"N 126°00'00"W 49°00'00"N 126°20'00"W	Sub surface operations area.	11
CHARLIE JULIET 11		Chart 3000	49°15'00"N 126°00'00"W 49°15'00"N 125°40'00"W 49°00'00"N 125°40'00"W 49°00'00"N 126°00'00"W	Sub surface operations area.	11
CHARLIE JULIET 12		Chart 3000	49°15'00"N 125°40'00"W 49°15'00"N 125°20'00"W 49°00'00"N 125°20'00"W 49°00'00"N 125°40'00"W	Sub surface operations area.	11
CHARLIE JULIET 13		Chart 3000	49°15'00"N 125°20'00"W 49°15'00"N 125°00'00"W 49°00'00"N 125°00'00"W 49°00'00"N 125°20'00"W	Sub surface operations area.	11
Area CHARLIE JULIET 14 not allocated					
CHARLIE KILO 1	CYR 106 to 23,000 feet	Chart 3000	49°00'00"N 129°20'00"W 49°00'00"N 129°00'00"W 48°45'00"N 129°00'00"W 48°45'00"N 129°20'00"W	Sub surface operations area.	11
CHARLIE KILO 2	CYR 106 to 23,000 feet	Chart 3000	49°00'00"N 129°00'00"W 49°00'00"N 128°40'00"W 48°45'00"N 128°40'00"W 48°45'00"N 129°00'00"W	Sub surface operations area.	11
♣ = Only that portion of the area that is within Area WP (Defined at Diagram 11)					

West Coast Area					
Sea Area	Airspace	Location	Coordinates	Employment	Diagram
CHARLIE KILO 3	CYR 106 to 23,000 feet	Chart 3000	49°00'00"N 128°40'00"W 49°00'00"N 128°20'00"W 48°45'00"N 128°20'00"W 48°45'00"N 128°40'00"W	Sub surface operations area. ♣ Firing Exercise Area.	11 & 12
CHARLIE KILO 4	CYR 106 to 23,000 feet	Chart 3000	49°00'00"N 128°20'00"W 49°00'00"N 128°00'00"W 48°45'00"N 128°00'00"W 48°45'00"N 128°20'00"W	Sub surface operations area. ♣ Firing Exercise Area	11 & 12
CHARLIE KILO 5	CYR 106 to 23,000 feet	Chart 3000	49°00'00"N 128°00'00"W 49°00'00"N 127°40'00"W 48°45'00"N 127°40'00"W 48°45'00"N 128°00'00"W	Sub surface operations area. Firing Exercise Area	11 & 12
CHARLIE KILO 6	CYR 106 to 23,000 feet	Chart 3000	49°00'00"N 127°40'00"W 49°00'00"N 127°20'00"W 48°45'00"N 127°20'00"W 48°45'00"N 127°40'00"W	Sub surface operations area. Firing Exercise Area	11 & 12
CHARLIE KILO 7	CYR 106 to 23,000 feet	Chart 3000	49°00'00"N 127°20'00"W 49°00'00"N 127°00'00"W 48°45'00"N 127°00'00"W 48°45'00"N 127°20'00"W	Sub surface operations area. Firing Exercise Area.	11 & 12
CHARLIE KILO 8	CYR 106 to 23,000 feet	Chart 3000	49°00'00"N 127°00'00"W 49°00'00"N 126°40'00"W 48°45'00"N 126°40'00"W 48°45'00"N 127°00'00"W	Sub surface operations area. ♣ Firing Exercise Area.	11 & 12
CHARLIE KILO 9	CYR 106 to 23,000 feet	Chart 3000	49°00'00"N 126°40'00"W 49°00'00"N 126°20'00"W 48°45'00"N 126°20'00"W 48°45'00"N 126°40'00"W	Sub surface operations area.	11
CHARLIE KILO 10		Chart 3000	49°00'00"N 126°20'00"W 49°00'00"N 126°00'00"W 48°45'00"N 126°00'00"W 48°45'00"N 126°20'00"W	Sub surface operations area.	11
CHARLIE KILO 11		Chart 3000	49°00'00"N 126°00'00"W 49°00'00"N 125°40'00"W 48°45'00"N 125°40'00"W 48°45'00"N 126°00'00"W	Sub surface operations area.	11
CHARLIE KILO 12		Chart 3000	49°00'00"N 125°40'00"W 49°00'00"N 125°20'00"W 48°45'00"N 125°20'00"W 48°45'00"N 125°40'00"W	Sub surface operations area.	11
CHARLIE KILO 13		Chart 3000	49°00'00"N 125°20'00"W 49°00'00"N 125°00'00"W 48°45'00"N 125°00'00"W 48°45'00"N 125°20'00"W	Sub surface operations area.	11

Area CHARLIE KILO 14 not allocated

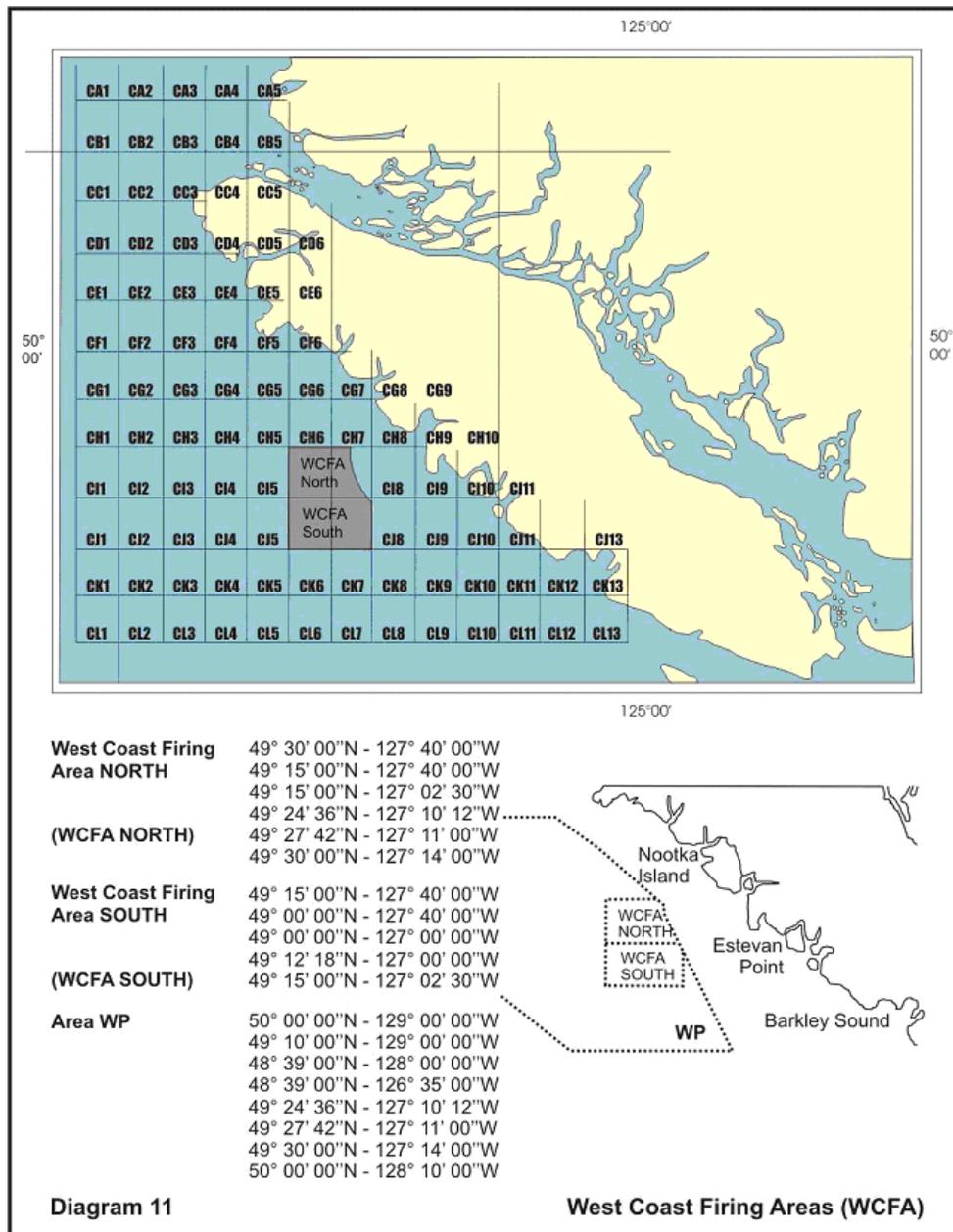
♣ = Only that portion of the area that is within Area WP (Defined at Diagram 11)

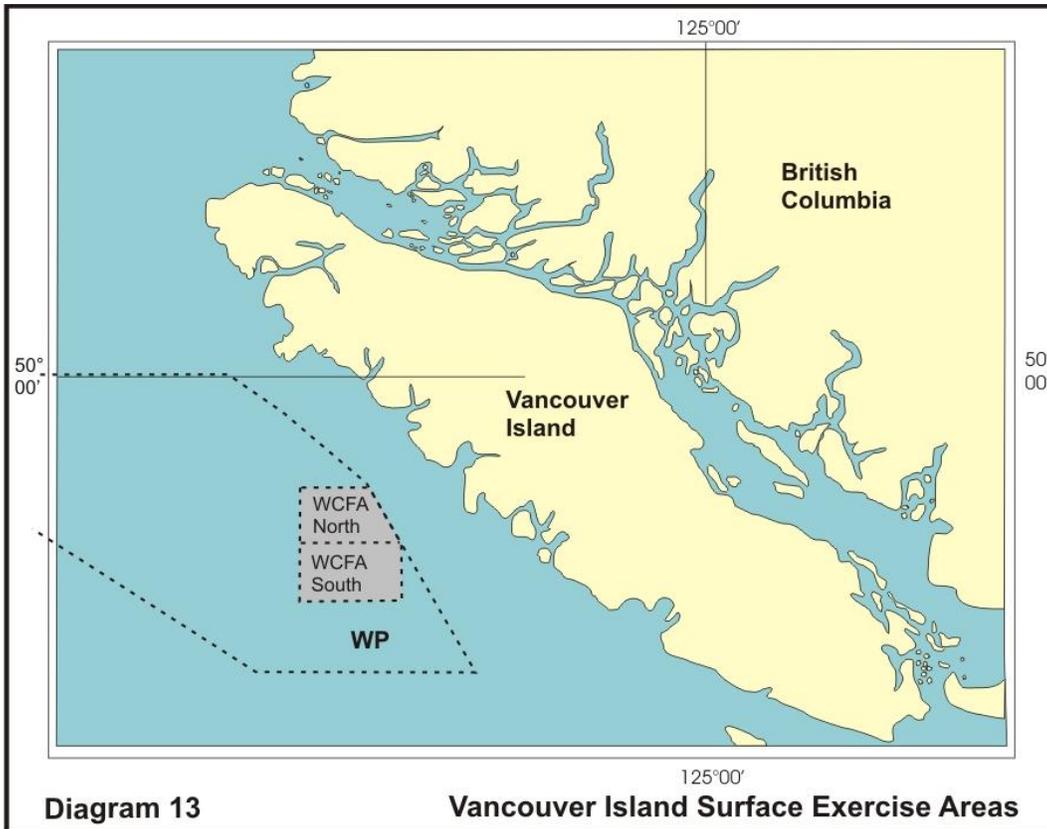
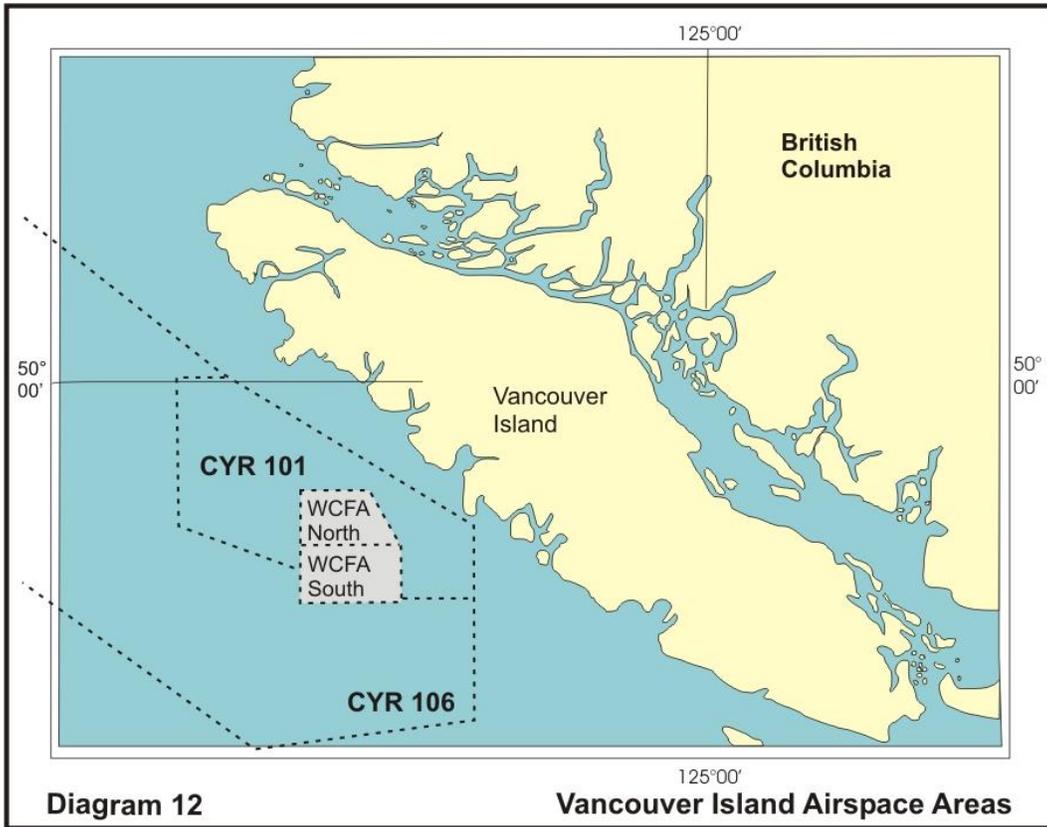
West Coast Area					
Sea Area	Airspace	Location	Coordinates	Employment	Diagram
CHARLIE LIMA 1		Chart 3000	48°45'00"N 129°20'00"W 48°45'00"N 129°00'00"W 48°30'00"N 129°00'00"W 48°30'00"N 129°20'00"W	Sub surface operations area.	11
CHARLIE LIMA 2	CYR 106 to 23,000 feet	Chart 3000	48°45'00"N 129°00'00"W 48°45'00"N 128°40'00"W 48°30'00"N 128°40'00"W 48°30'00"N 129°00'00"W	Sub surface operations area.	11
CHARLIE LIMA 3	CYR 106 to 23,000 feet	Chart 3000	48°45'00"N 128°40'00"W 48°45'00"N 128°20'00"W 48°30'00"N 128°20'00"W 48°30'00"N 128°40'00"W	Sub surface operations area.	11
CHARLIE LIMA 4	CYR 106 to 23,000 feet	Chart 3000	48°45'00"N 128°20'00"W 48°45'00"N 128°00'00"W 48°30'00"N 128°00'00"W 48°30'00"N 128°20'00"W	Sub surface operations area. ♣ Firing Exercise Area.	11 & 12
CHARLIE LIMA 5	CYR 106 to 23,000 feet	Chart 3000	48°45'00"N 128°00'00"W 48°45'00"N 127°40'00"W 48°30'00"N 127°40'00"W 48°30'00"N 128°00'00"W	Sub surface operations area. ♣ Firing Exercise Area.	11 & 12
CHARLIE LIMA 6	CYR 106 to 23,000 feet	Chart 3000	48°45'00"N 127°40'00"W 48°45'00"N 127°20'00"W 48°30'00"N 127°20'00"W 48°30'00"N 127°40'00"W	Sub surface operations area. ♣ Firing Exercise Area.	11 & 12
CHARLIE LIMA 7	CYR 106 to 23,000 feet	Chart 3000	48°45'00"N 127°20'00"W 48°45'00"N 127°00'00"W 48°30'00"N 127°00'00"W 48°30'00"N 127°20'00"W	Sub surface operations area. ♣ Firing Exercise Area.	11 & 12
CHARLIE LIMA 8	CYR 106 to 23,000 feet	Chart 3000	48°45'00"N 127°00'00"W 48°45'00"N 126°40'00"W 48°30'00"N 126°40'00"W 48°30'00"N 127°00'00"W	Sub surface operations area. ♣ Firing Exercise Area.	11 & 12
CHARLIE LIMA 9	CYR 106 to 23,000 feet	Chart 3000	48°45'00"N 126°40'00"W 48°45'00"N 126°20'00"W 48°30'00"N 126°20'00"W 48°30'00"N 126°40'00"W	Sub surface operations area. ♣ Firing Exercise Area.	11 & 12
CHARLIE LIMA 10		Chart 3000	48°45'00"N 126°20'00"W 48°45'00"N 126°00'00"W 48°30'00"N 126°00'00"W 48°30'00"N 126°20'00"W	Sub surface operations area.	11
CHARLIE LIMA 11		Chart 3000	48°45'00"N 126°00'00"W 48°45'00"N 125°40'00"W 48°30'00"N 125°40'00"W 48°30'00"N 126°00'00"W	Sub surface operations area.	11

♣ = Only that portion of the area that is within Area WP (Defined at Diagram 11)

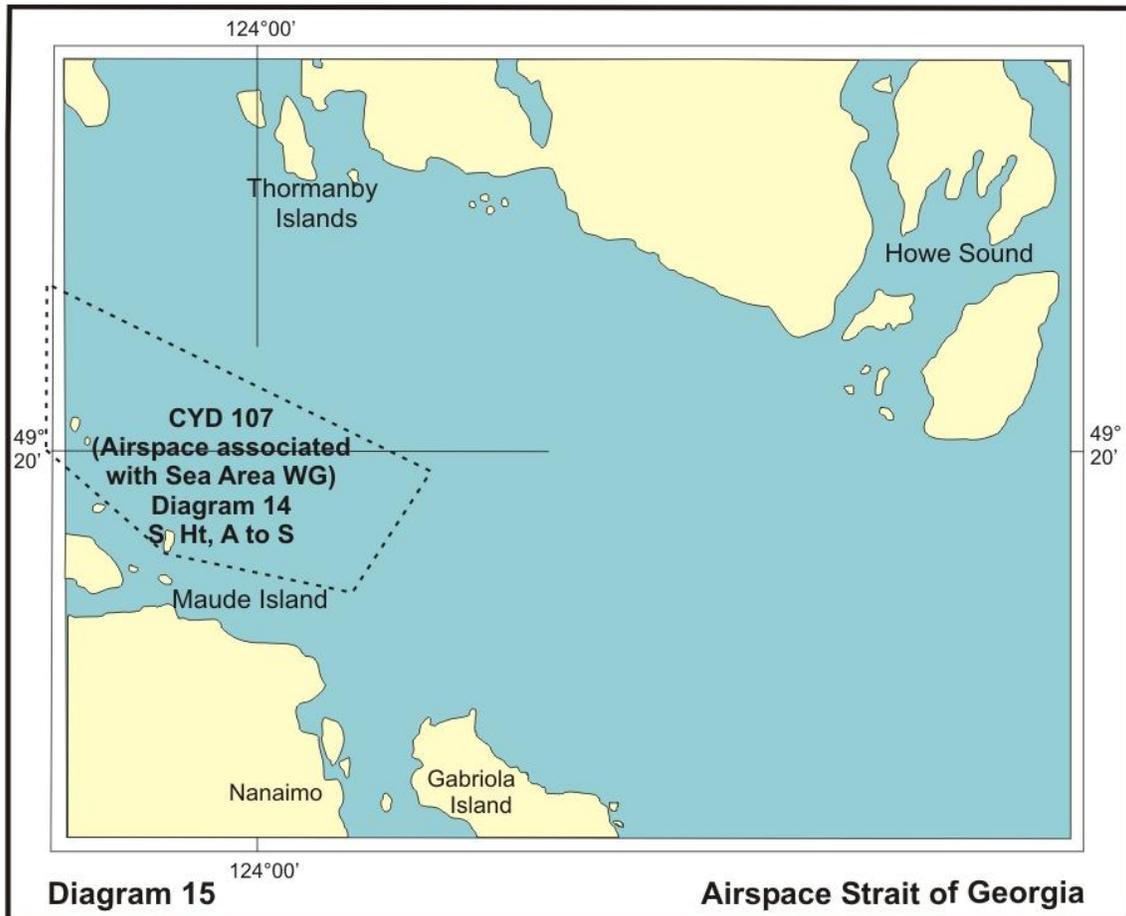
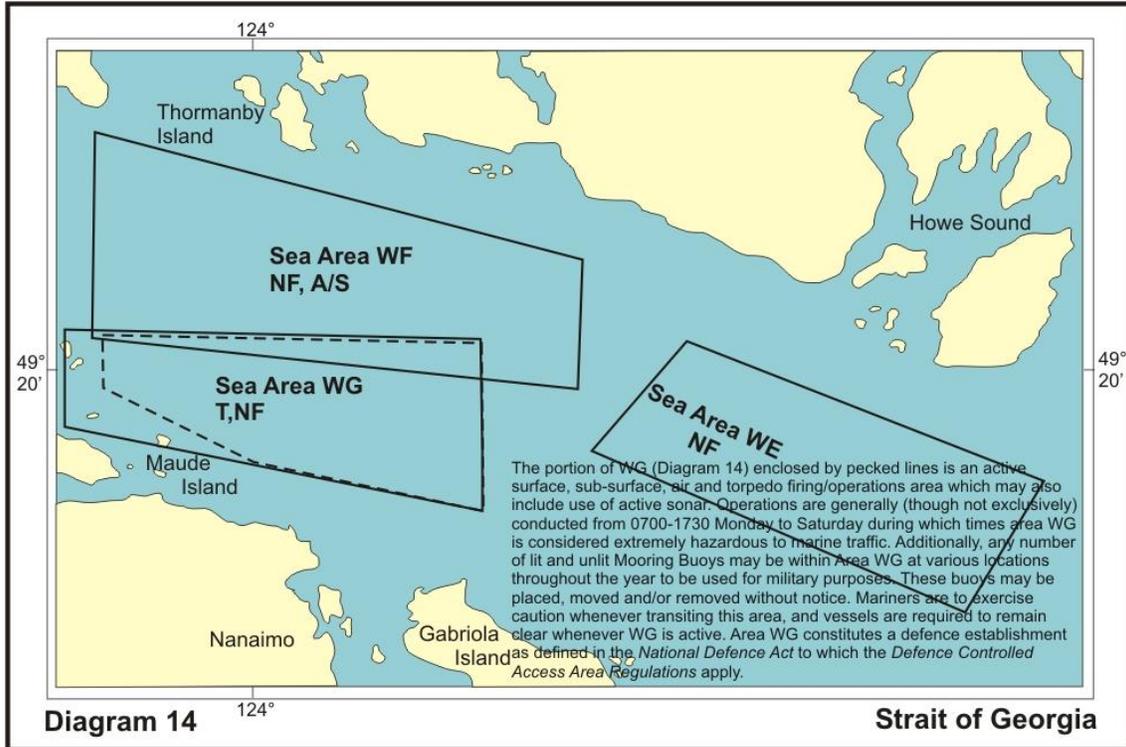
West Coast Area					
Sea Area	Airspace	Location	Coordinates	Employment	Diagram
CHARLIE LIMA 12		Chart 3000	48°45'00"N 125°40'00"W 48°45'00"N 125°20'00"W 48°30'00"N 125°20'00"W 48°30'00"N 125°40'00"W	Sub surface operations area.	11
CHARLIE LIMA 13		Chart 3000	48°45'00"N 125°20'00"W 48°45'00"N 125°00'00"W 48°30'00"N 125°00'00"W 48°30'00"N 125°20'00"W	Sub surface operations area.	11

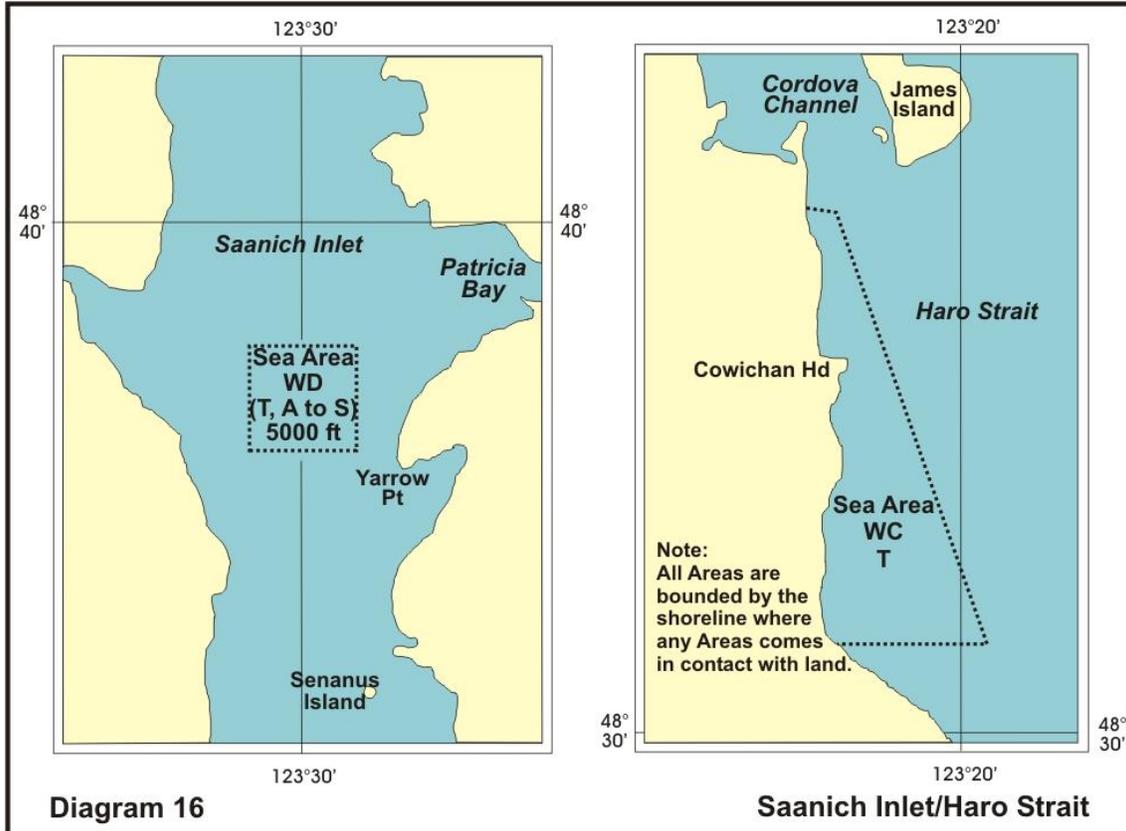
Note: All Vancouver Island (VI) Areas are bounded by the shoreline where any area comes in contact with land.





Strait of Georgia (Area SOG)					
Sea Area	Airspace	Location	Coordinates	Employment	Diagram
Strait of Georgia (AREA SOG)		Charts 3513, 3512, and 3463	Area bounded to the West by Vancouver Island East by British Columbia mainland North by lat. 50°10'00"N; and South by lat. 49°00'00"N.	Sub surface operations area.	18
WC		Chart 3462	48°35'25"N 123°22'18"W 48°35'25"N 123°21'48"W 48°31'57"N 123°19'42"W 48°31'57"N 123°21'59"W	Firing Exercise (Torpedo) (TORPEX) Sub surface operations area.	16
WD	To 5,000 feet	Chart 3441	48°38'48"N 123°30'45"W 48°38'48"N 123°29'15"W 48°37'48"N 123°29'15"W 48°37'48"N 123°30'45"W	Surface and Sub surface general operations area.	16
WE		Chart 3463	49°11'00"N 123°24'00"W 49°17'00"N 123°43'00"W 49°21'00"N 123°38'00"W 49°16'00"N 123°20'00"W	Non-firing exercises. Sub surface operations area.	14
WF		Chart 3512	49°19'18"N 123°43'30"W 49°21'18"N 124°08'00"W 49°28'42"N 124°08'00"W 49°24'18"N 123°43'30"W	Air, Sub surface and surface operations area.	14
WG	To 13,500 feet CYR 107	Chart 3512	49°21'28"N 124°09'30"W 49°21'00"N 123°48'24"W 49°14'50"N 123°48'24"W 49°18'02"N 124°09'30"W	Air, Sub surface and surface operations area. Firing Exercise (Torpedo) (TORPEX)	14 & 15
WI	To 1,000 feet CYA 124	Chart 3513	49°46'30"N 124°50'00"W 49°46'30"N 124°40'00"W 49°43'30"N 124°40'00"W 49°31'30"N 124°16'00"W 49°33'00"N 124°28'00"W	Air and Sub surface exercise area. Firing Exercise (Air Dropped Explosives) (EEREX)	17
WN	To 1,000 feet	Chart 3514	49°50'06"N 124°02'12"W 49°48'21"N 124°05'06"W 49°47'51"N 124°05'26"W 49°46'40"N 124°03'16"W 49°46'41"N 123°59'50"W 49°46'54"N 123°59'32"W 49°47'22"N 123°58'54"W 49°48'30"N 123°57'30"W 49°49'23"N 124°00'03"W	Surface and Sub surface general operations area. Surface to Bottom	19
Note: All of SOG Area is bounded by the shoreline where the area comes in contact with land					





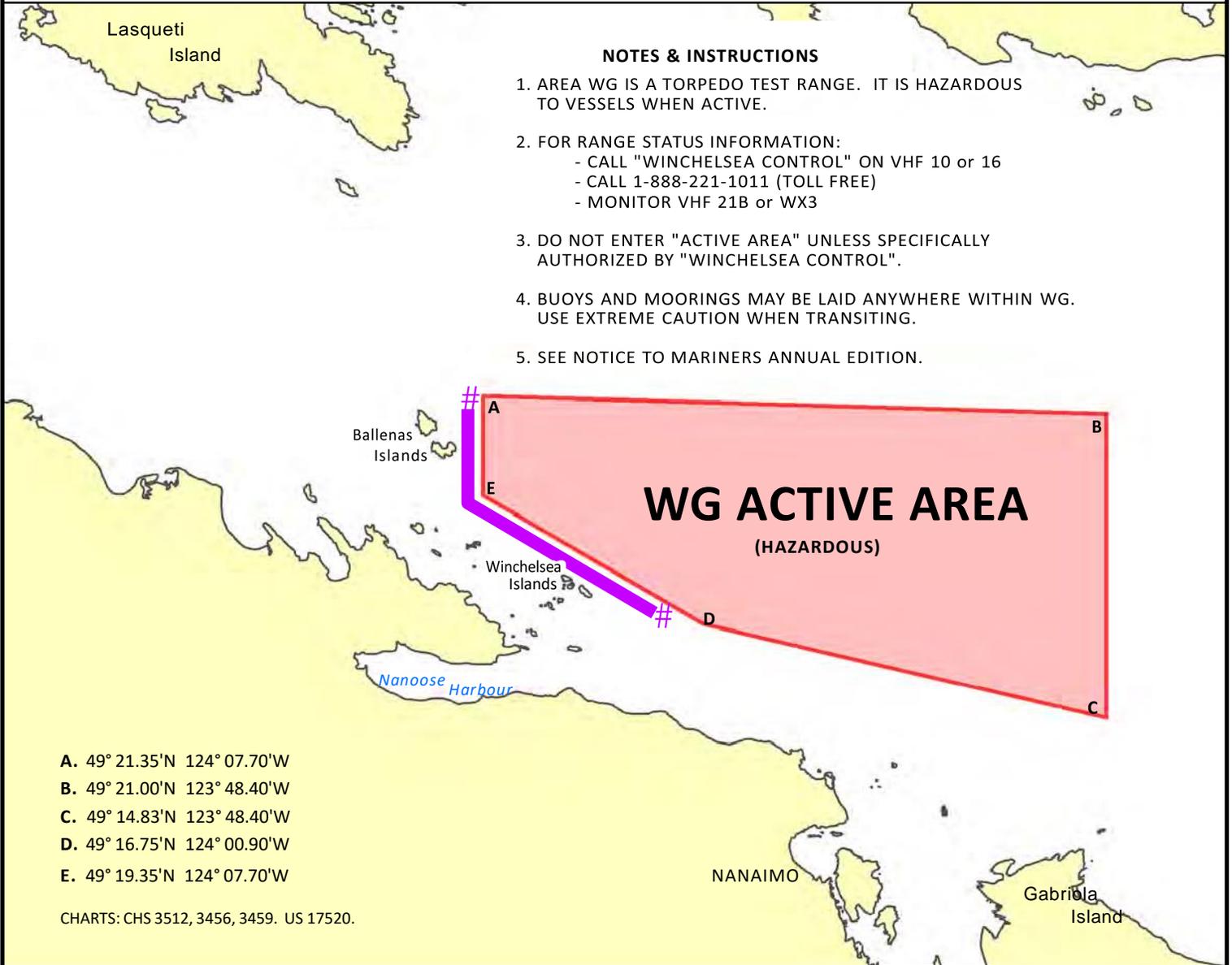


NOTICE OF HAZARDOUS AREA DEPARTMENT OF NATIONAL DEFENCE TORPEDO TEST RANGE



NOTES & INSTRUCTIONS

1. AREA WG IS A TORPEDO TEST RANGE. IT IS HAZARDOUS TO VESSELS WHEN ACTIVE.
2. FOR RANGE STATUS INFORMATION:
 - CALL "WINCHELSEA CONTROL" ON VHF 10 or 16
 - CALL 1-888-221-1011 (TOLL FREE)
 - MONITOR VHF 21B or WX3
3. DO NOT ENTER "ACTIVE AREA" UNLESS SPECIFICALLY AUTHORIZED BY "WINCHELSEA CONTROL".
4. BUOYS AND MOORINGS MAY BE LAID ANYWHERE WITHIN WG. USE EXTREME CAUTION WHEN TRANSITING.
5. SEE NOTICE TO MARINERS ANNUAL EDITION.



Canadian Forces Maritime Experimental and Test Ranges (CFMETR) - Nanoose Bay, BC

The Canadian Forces Maritime Experimental and Test Ranges tests ship and aircraft systems and torpedoes launched by surface vessels, submarines, or aircraft. No explosives are used; however, a hazard exists due to the possibility of the torpedo homing on vessels and then the vessel being struck by the torpedo on its way to the surface.

Testing is usually carried out during daylight hours Monday to Saturday. During testing, area "WG" is "Active". Any vessel within the area will be required to clear or stop on demand from the "Winchelsea Island Control" or any of the range vessels or range helicopter. The positions of these coordinates are clearly marked on the diagram above.

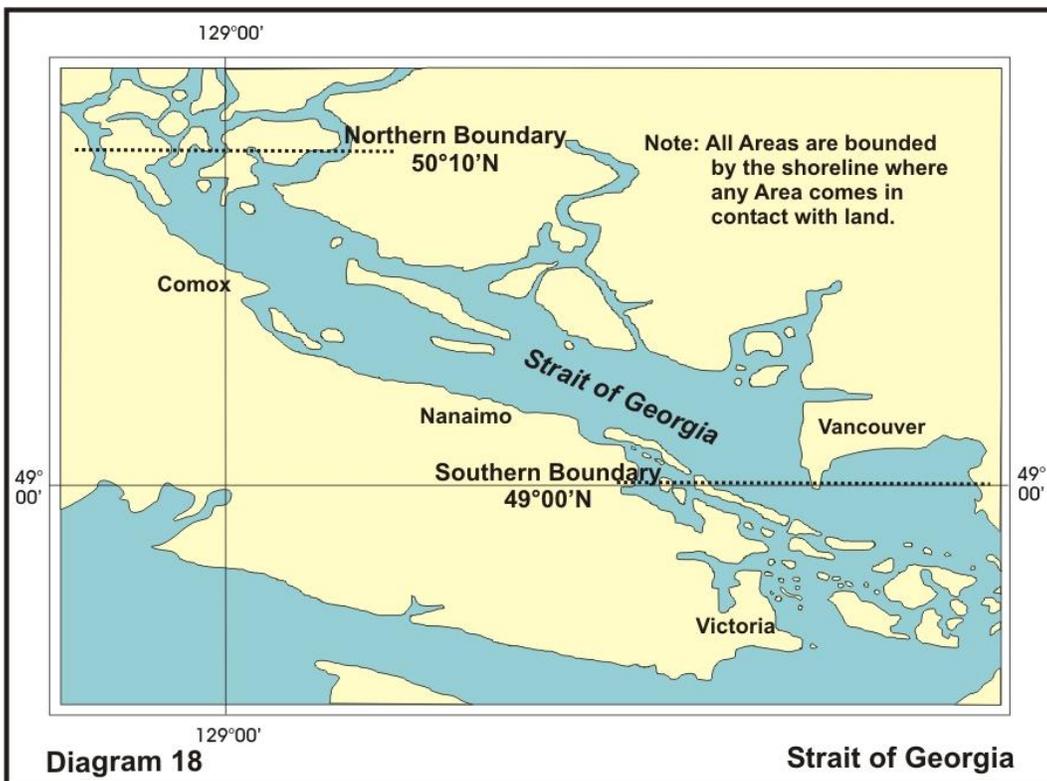
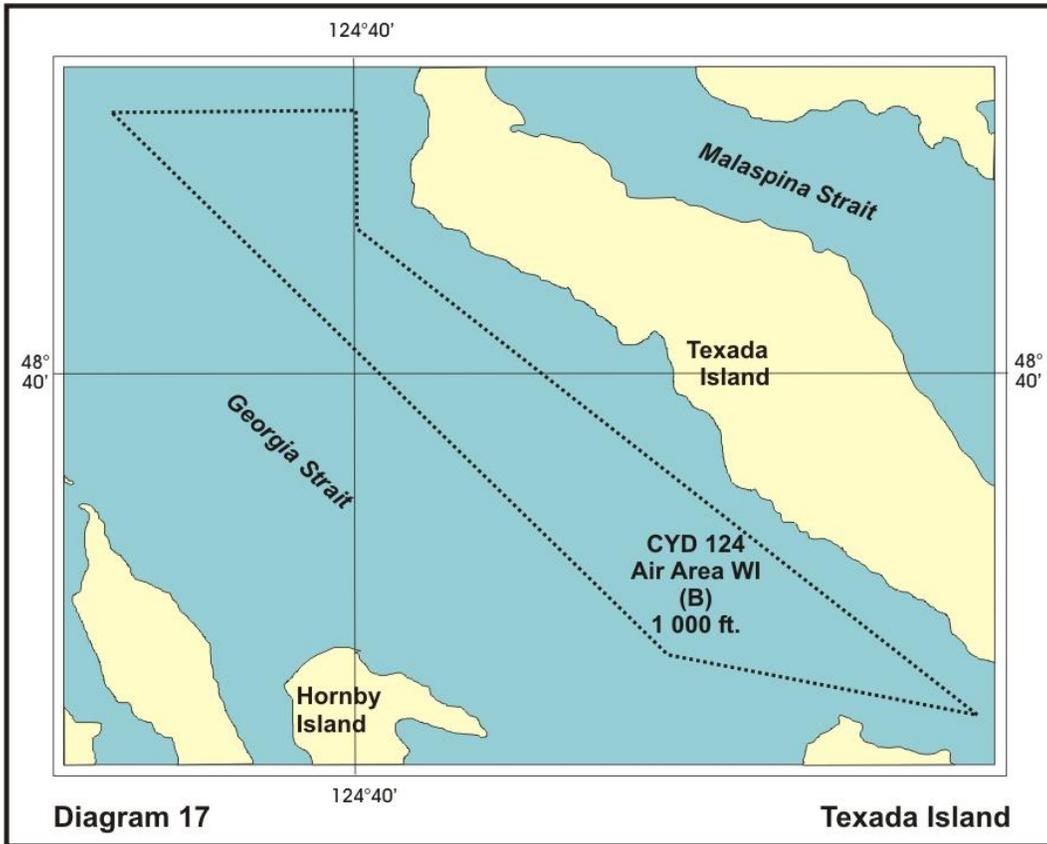
A transit area 1,000 yards north of Winchelsea Island and 1,000 yards east of South Ballenas Island is recommended to enable mariners to transit safely around the active area. It also facilitates unimpeded access to marina facilities in Schooner Cove and Nanoose Bay. The active range area is clearly depicted on CHS charts 3512, 3456 and 3459 by means of pecked lines.

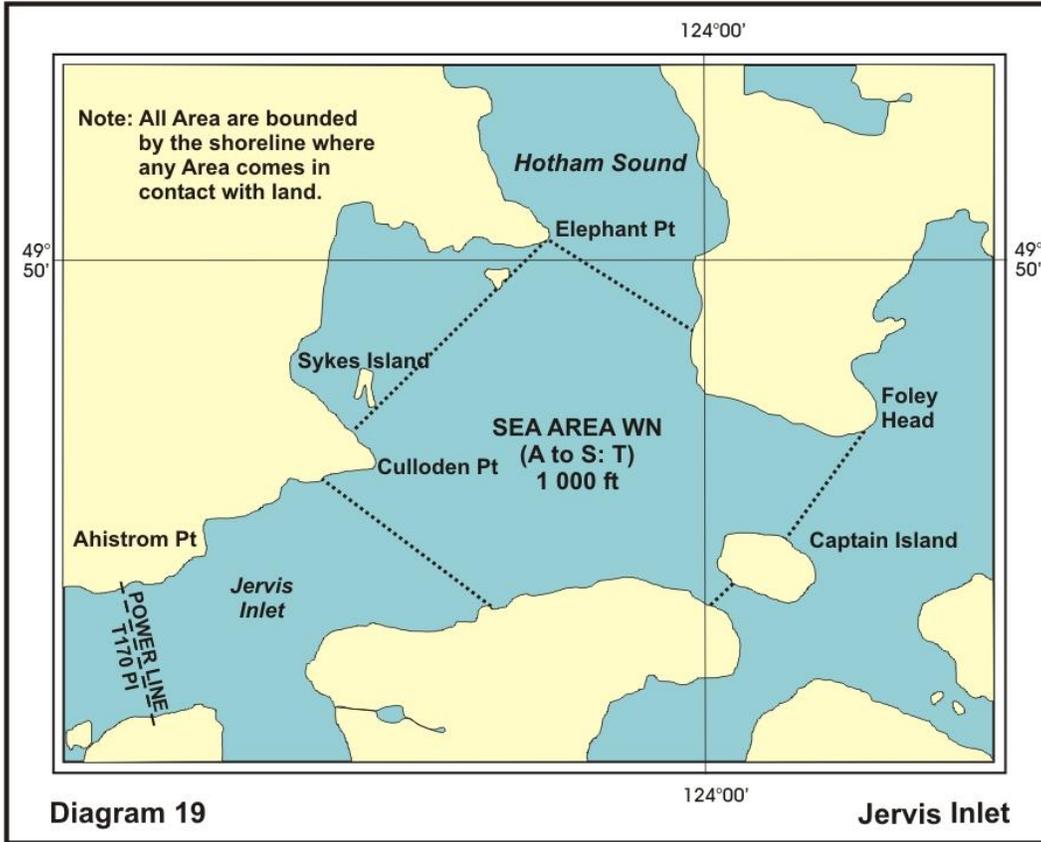
Additional information on active range hours or for safe transit through the area may be obtained from:

- a. Winchelsea Island Control at 1-888-221-1011 (next day's activity only);
- b. CFMETR Range Officer at 250-468-5002 (long range planning);
- c. Winchelsea Island Control VHF CH 10 or 16 (for safe transit area information when approaching Area "WG"). or
- d. CMB VHF 21B or Weather 3 (listen only, for active times).
- e. Navigational Warning. Prince Rupert MCTS Centre at 250-627-3070.
NAVWARN.MCTSPrinceRupert@innav.gc.ca
- f. Victoria MCTS Centre at 250-363-6333.

Area "WG" constitutes a "Defence Establishment" as defined in the National Defence Act to which the Defence Controlled Access Area Regulations apply. Vessels which do not comply with direction from either Winchelsea control or Range Patrol Vessels may be charged for trespassing.

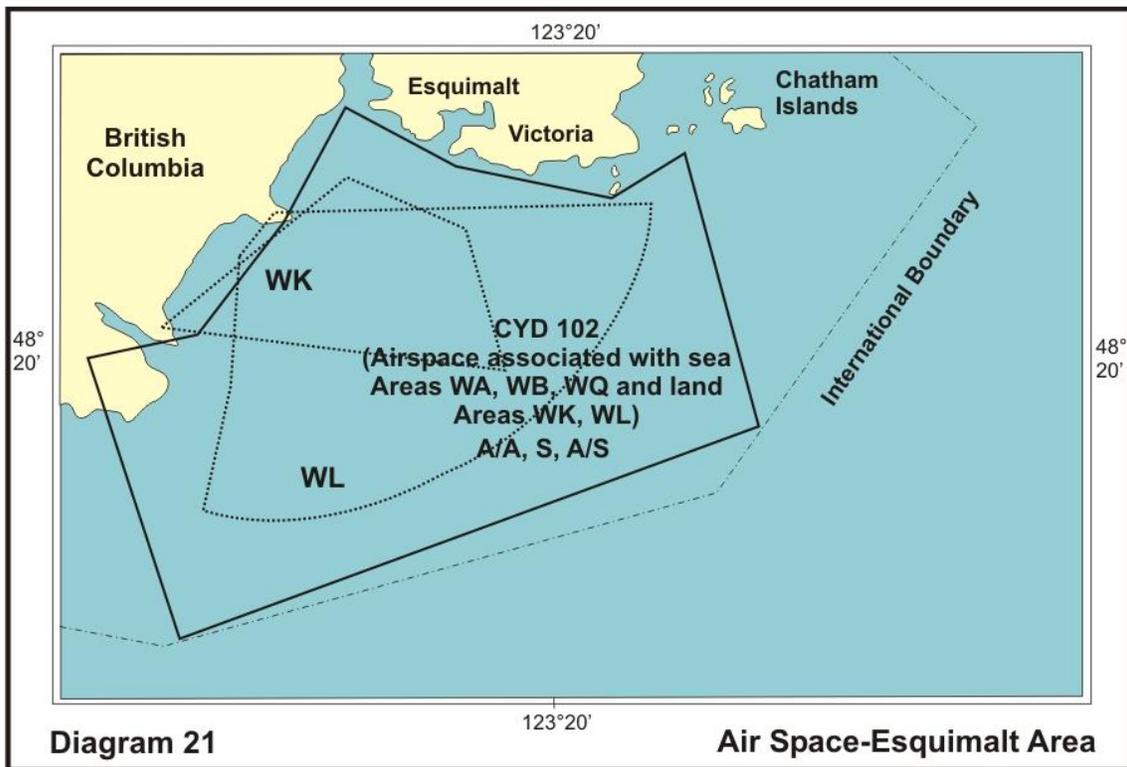
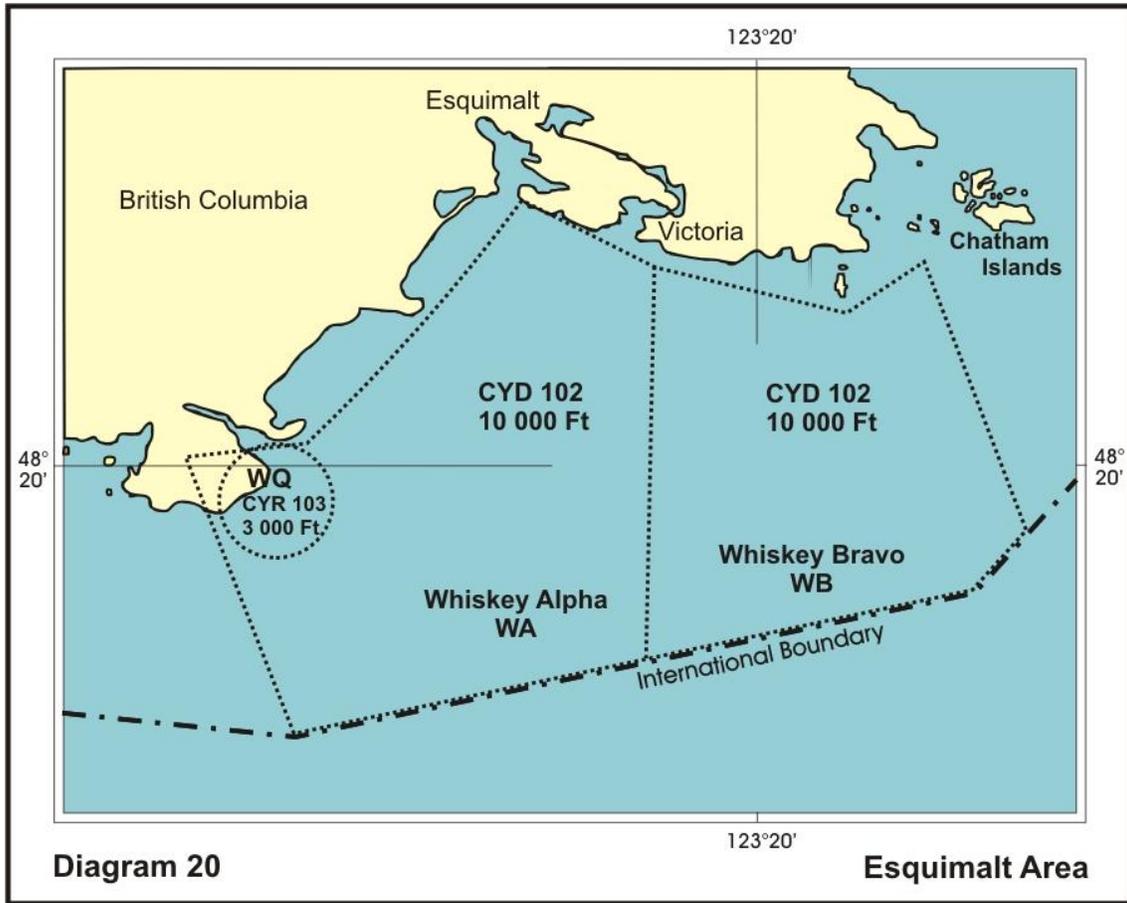
Range vessels exhibit a flashing red light in addition to the prescribed lights and shapes. These vessels may operate outside of scheduled hours and should not be approached within 3,000 yards because they may be in a three-point moor with mooring lines extending to buoys 1,500 yards away. Additionally, lighted and unlighted mooring buoys are randomly located within the area. Mariners are advised to use caution when transiting this area during non-active range periods to avoid mooring buoys and lines.





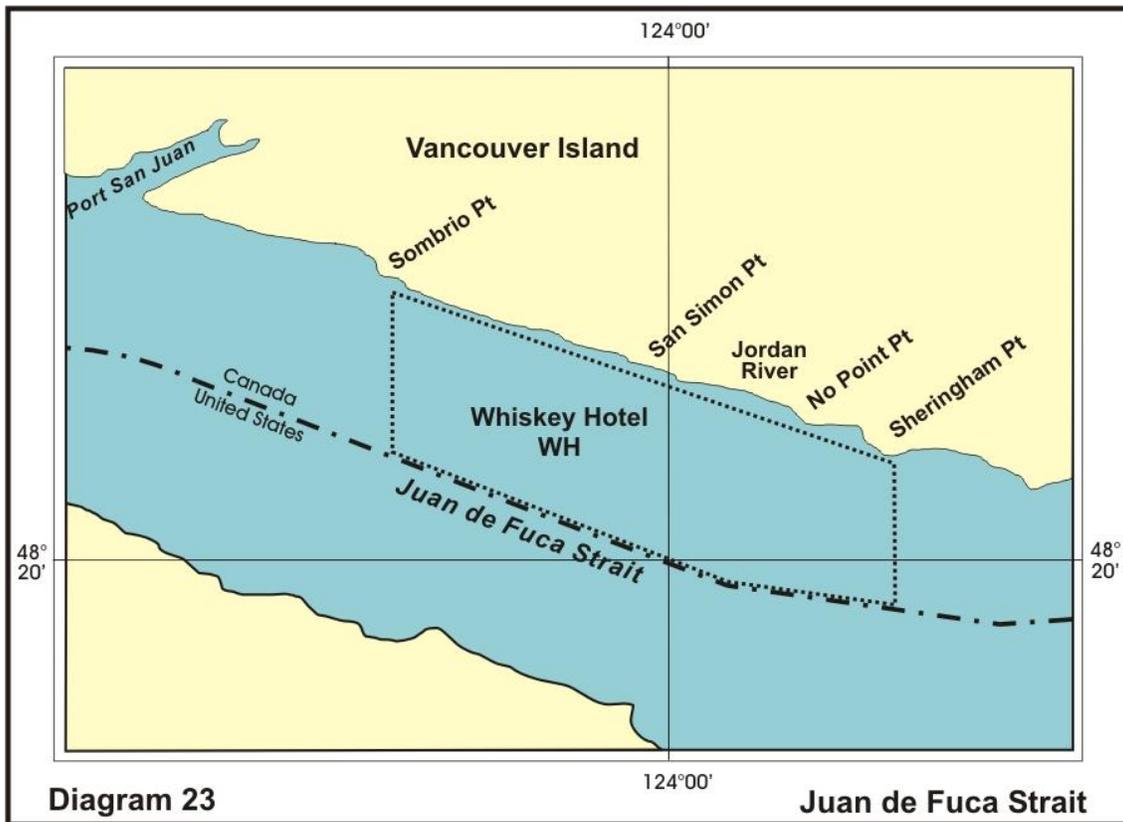
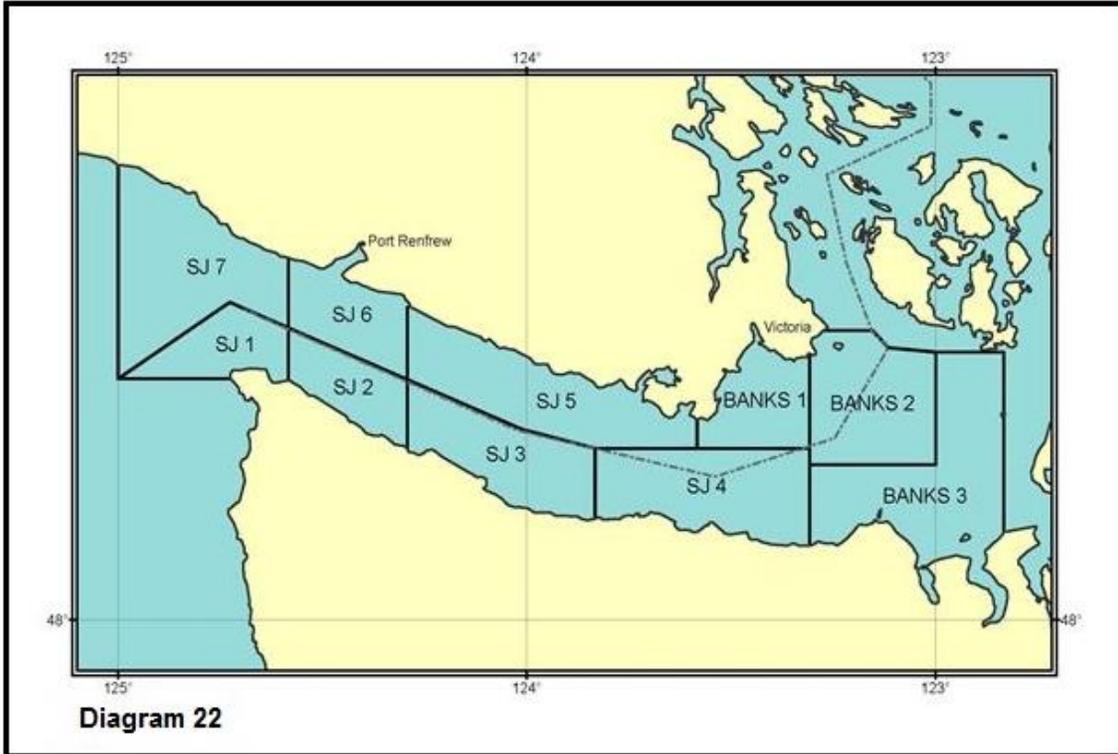
Esquimalt Harbour Approaches Areas				
Sea Area	Airspace	Location	Coordinates	Employment
BANKS 1		Charts 3461 3440	48°24'28" N 123° 18'30" W (INTERSECTION OF LAND) 48°16'00" N 123°18'30" W 48°16'00" N 123°35'00" W 48°18'38" N 123°35'00" W (INTERSECTION OF LAND) THE COASTLINE BACK TO ORIGIN	Sub surface operations area. Surface to Bottom.
BANKS 2		Charts 3461 3440	48°27'00" N 123°17'22" W (INTERSECTION OF LAND) 48°27'00" N 123°09'18" W (INTERNATIONAL BORDER) 48°25'22" N 123°06'54.5" W (INTERNATIONAL BORDER) 48°25'00" N 123°00'00" W 48°14'30" N 123°00'00" W 48°14'30" N 123°18'30" W 48°24'28" N 123°18'30" W (INTERSECTION OF LAND)	Sub surface operations area. Surface to Bottom.

Esquimalt Harbour Approaches Areas				
Sea Area	Airspace	Location	Coordinates	Employment
BANKS 3		Charts 3461 3440	48°14'30" N 123°18'30" W 48°14'30" N 123°00'00" W 48°25'00" N 123°00'00" W 48°25'00" N 122°50'00" W 48°08'04" N 122°50'00" W (INTERSECTION OF LAND)	Sub surface operations area. Surface to Bottom.
WA	To 10,000 feet CYD 102	Chart 3461	48°20'36" N 123°31'34" W 48°23'15" N 123°28'36" W 48°25'50" N 123°26'45" W 48°24'25" N 123°23'15" W 48°15'21" N 123°23'15" W 48°13'36" N 123°31'48" W 48°20'00" N 123°34'30" W	General surface and air operations area. Firing Exercise (Pyrotechnics) (PYROEX)
WB	To 10,000 feet CYD 102	Chart 3461	48°24'25" N 123°23'15" W 48°23'47" N 123°18'12" W 48°24'45" N 123°16'00" W 48°18'30" N 123°13'28" W 48°17'03" N 123°14'48" W 48°15'21" N 123°23'15" W	General surface and air operations area. Firing Exercise (Pyrotechnics) (PYROEX)
WK	To 10,000 feet CYD 102	Chart 3461		General surface and air operations area. Inactive
WL	To 10,000 feet CYD 102	Chart 3461		General surface and air operations area. Inactive
WQ	To 3,000 feet CYD 103	Chart 3641	Bentinck Island demolition Range A circle with 1 mile radius centered on 48°18'42" N 123°32'36" W	Demolition exercise (DEMOEX)
Note: All of JDF Strait Area is bounded by the shoreline where the area comes in contact with land				



Strait of Juan de Fuca (Area SJDF)					
Sea Area	Airspace	Location	Coordinates	Employment	Diagram
Juan De Fuca Strait (SJ 1)		Chart 3606	48°27'14" N 124°35'00" W 48°29'36" N 124°43'38" W 48°22'30" N 125°00'00" W 48°22'30" N 124°35'00" W	Sub surface operations area. Surface to Bottom.	
Juan De Fuca Strait (SJ 2)		Chart 3606	NORTHERN BOUNDARY ALONG A LINE FOLLOWING THE US/CANADIAN INTERNATIONAL BOUNDARY WESTERN BOUNDARY OF 124°35'00" W EASTERN BOUNDARY OF 124°17'35" W COAST OF THE STATE OF WASHINGTON TO THE SOUTH	Sub surface operations area. Surface to Bottom.	
Juan De Fuca Strait (SJ 3)		Chart 3606	NORTHERN BOUNDARY ALONG A LINE FOLLOWING THE US/CANADIAN INTERNATIONAL BOUNDARY WESTERN BOUNDARY OF 124°17'35" W EASTERN BOUNDARY OF 123°50'00" W COAST OF THE STATE OF WASHINGTON TO THE SOUTH	Sub surface operations area. Surface to Bottom.	
Juan De Fuca Strait (SJ 4)		Chart 3606	48°06'48" N 123°18'30" W (INTERSECTION OF LAND) 48°16'00" N 123°18'30" W 48°16'00" N 123°50'00" W 48°09'20" N 123°50'00" W (INTERSECTION OF LAND) THE COASTLINE BACK TO ORIGIN	Sub surface operations area. Surface to Bottom.	

Strait of Juan de Fuca (Area SJDF)					
Sea Area	Airspace	Location	Coordinates	Employment	Diagram
Juan De Fuca Strait (SJ 5)		Chart 3606	COAST OF VANCOUVER ISLAND TO THE NORTH WESTERN BOUNDARY OF 124°35'00" W EASTERN BOUNDARY OF 124°17'35" W SOUTHERN BOUNDARY ALONG A LINE FOLLOWING THE US/CANADIAN INTERNATIONAL BOUNDARY	Sub surface operations area. Surface to Bottom.	
Juan De Fuca Strait (SJ 6)		Chart 3606	COAST OF VANCOUVER ISLAND TO THE NORTH WESTERN BOUNDARY OF 124°17'35" W EASTERN BOUNDARY OF 123°35'00" W SOUTHERN BOUNDARY ALONG A LINE FOLLOWING THE US/CANADIAN INTERNATIONAL BOUNDARY	Sub surface operations area. Surface to Bottom.	
Juan De Fuca Strait (SJ 7)		Chart 3606	COAST OF VANCOUVER ISLAND TO THE NORTH WESTERN BOUNDARY OF 125°00' 00" W EASTERN BOUNDARY OF 124°35' 00" W SOUTHERN BOUNDARY ALONG A LINE CONNECTING THE FOLLOWING POINTS: 48°27'14" N 124°35'00" W, 48°29'36" N 124°43'38" W, 48°22'30" N 125°00'00" W	Sub surface operations area. Surface to Bottom.	
WH	To Unlimited CYD 109	Chart 3606	48°22'00" N 123°55'05" W 48°16'51" N 123°55'05" W 48°17'54" N 124°00'43" W 48°22'29" N 124°17'35" W 48°28'18" N 124°17'35" W	Firing Exercise (Surface) (FIREX)	
Note: All of JDF Area is bounded by the shoreline where the area comes in contact with land.					



Queen Charlotte Island (QCI) Areas					
Sea Area	Airspace	Location	Coordinates	Employment	Diagram
DIXON		Chart 3002	54°25'00"N 134°00'00"W 54°25'00"N 130°00'00"W 54°00'00"N 130°00'00"W 54°00'00"N 132°30'00"W 53°30'00"N 132°30'00"W 53°30'00"N 134°00'00"W	Sub surface operations area.	24
HECATE		Chart 3002	54°00'00"N 130°00'00"W 54°00'00"N 132°30'00"W 53°30'00"N 132°30'00"W 52°00'00"N 131°00'00"W 51°30'00"N 130°00'00"W 51°30'00"N 127°20'00"W	Sub surface operations area.	24
MORESBY		Chart 3002	52°00'00"N 132°30'00"W 52°00'00"N 131°00'00"W 51°30'00"N 130°00'00"W 51°30'00"N 129°20'00"W 50°15'00"N 129°20'00"W 51°00'00"N 130°00'00"W	Sub surface operations area.	24
GRAHAM		Chart 3002	53°30'00"N 134°00'00"W 53°30'00"N 132°30'00"W 52°00'00"N 131°00'00"W 52°00'00"N 132°30'00"W	Sub surface operations area.	24
Note: All Queen Charlotte Island (QCI) Areas are bounded by the shoreline where any area comes in contact with land					

