EXPEDITION PLAN AND ITINERARY

DEPARTMENT: DFO, Ocean Sciences Division

MISSION NO: 2013-01

CCG PATROL NO: 11-12

MISSION AREA: Line P, Station Papa.

MISSION OBJECTIVE: Repeat hydrography/zooplankton section, deploy MetOcean floats for DFO/IOS, deploy two Iridium floats for University of Washington, deploy drifters for University of Berkeley.

SHIP: John P. Tully

DATE, FROM: 5 February 2013 **TO**: 19 February 2013

SENIOR SCIENTIST: Marie Robert 363.6612 marie.robert@dfo-mpo.gc.ca

SCIENTIFIC PERSONNEL: 11 berths required

Female	Male
Emily Braithwaite (volunteer)	Michael Arychuk (IOS)
Tamara Fraser (IOS)	Mark Belton (Volunteer)
Marie Robert (IOS)	Glenn Cooper (IOS)
Jill Sutton (U. Berkeley)	Sam Kheirandish (UBC)
	Hugh Maclean (IOS)
	Kyle Simpson (IOS)
	Todd Wood (U. Berkeley)

SHIP EQUIPMENT REQUIRED: EK60 functioning, EA600 functioning, EA600 remote display available from the closet and the bridge, GPS in lab/closet functioning, both DD20s functioning in the main lab, sea water supply to lab, heave compensator, tugger winch.

DECK MACHINERY REQUIRED:

See last page of this plan.

OTHER EQUIPMENT TO BE LOADED: Scientific gear (lab instruments, sampling equipment, etc.), aft-deck container.

ANTICIPATED LOADING TIME: Half-day. Loading will start as soon as the Tully is available, at the latest on February 5 at 1200. Departure in the evening.

DANGEROUS CHEMICALS:

Separate list to follow, to be handed to the Chief Officer before departure. Radioisotopes will NOT be used during this cruise.

Station	Latitude	Longitude	Bottom	Sampling		
	deg min N	deg min W	Depth m			
6102				e location in the inlet.		
SI03	48°35.6	123°30.0	225	Rosette to B-10 for IOS		
101	40.16.0	Underway sa		· ·		
JF1	48 16.0	123 30.0	150	under way		
JF2	48 18.0	124 00.0	180	under way		
JF3	48 27.0	124 30.0	230	under way		
JF4	48 32.3	125 00.0	60	under way		
	Line P CTD and water sampling survey					
P1	48 34.5	125 30.0	120	CTD B-10		
P2	48 36.0	126 00.0	114	Rosette B-10, Bongo		
P3	48 37.5	126 20.0	730	CTD B-10		
P4	48 39.0	126 40.0	1300	Major station.		
P5	48 41.5	127 10.0	2100	CTD 2000 m		
P6	48 44.6	127 40.0	2500	CTD 2000 m		
P7	48 46.6	128 10.0	2450	CTD 2000 m		
P8	48 49.0	128 40.0	2440	Major station.		
P9	48 51.4	129 10.0	2340	CTD 2000 m		
P10	48 53.6	129 40.0	2660	CTD 2000 m		
P11	48 56.0	130 10.0	2700	CTD 2000 m		
P12	48 58.2	130 40.0	3300	Major station.		
P13	49 02.6	131 40.0	2875	CTD 2000 m		
P14	49 07.4	132 40.0	3275	CTD 2000 m		
P15	49 12.0	133 40.0	3200	CTD 2000 m		
P16	49 17.0	134 40.0	3550	Major station.		
P17	49 21.0	135 40.0	3200	CTD 2000 m		
P18	49 26.0	136 40.0	3775	CTD 2000 m		
P19	49 30.0	137 40.0	3850	CTD 2000 m		
P20	49 34.0	138 40.0	3890	Major station.		
P21	49 38.0	139 40.0	3840	CTD 2000 m		
P22	49 42.0	140 40.0	3880	CTD 2000 m		
P23	49 46.0	141 40.0	3970	CTD 2000 m		
P24	49 50.2	142 40.0	3910	CTD 2000 m		
P25	50 00.0	143 36.3	3890	CTD 2000 m		
P35	50 00.0	144 18.2	4170	CTD 2000 m		
P26	50 00.0	145 00.0	4250	Major station.		
Mooring	50°08.00	144°50.00	~4250	Rosette		

Station List:

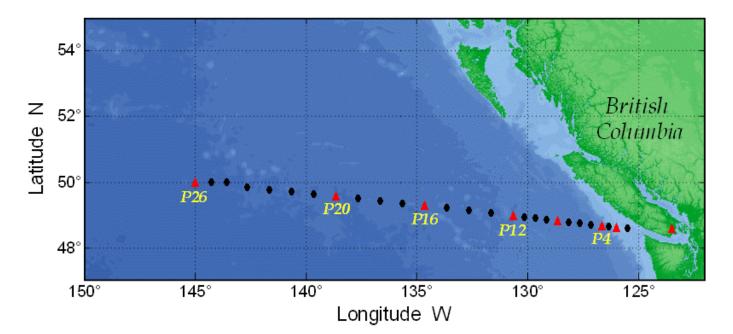
Note: we only have 2 weeks total for this cruise. Depending on weather we might go straight to Station P and work on the way back.

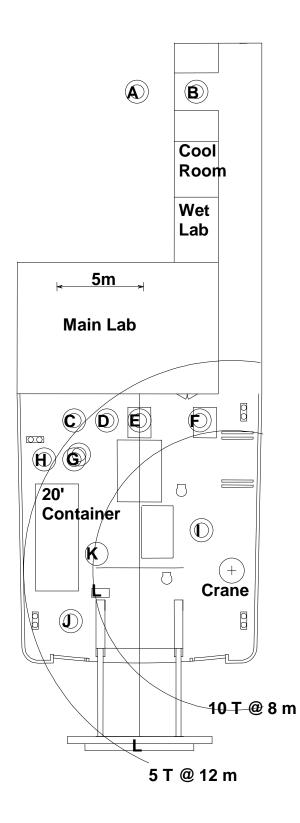
Major station: Many rosette casts, bongo to 250 m, Go-flos and pumping in the chains.

Itinerary

- Feb 5Start loading at 1200 (or earlier if possible). Leave after dinner. Do a rosette cast in
Saanich Inlet. Depart to P1 when sampling completed.
- ~Feb 14 Arrive at Station Papa.
- ~Feb 15 Leave Station Papa.
- Feb 19 Arrive at IOS and offload. Ship to be clear by noon.

Cruise track





CCGS John P. Tully

Deck Lay Out: Station P Cruise, M. Robert

Cruise ID: **2013-01** Date : **Feb 5**th **to Feb 19**th. **2013**

		ed 13,2013		
A:	Empty			
B:	Rosette Landing			
C/D:	Trace Metal Lab Container			
E:	CTD Winch #17027 c/w 4500m			
	x .322"Ø x 3 cdr cable			
F:	Bongo winch 420 #1432 c/w 2650 m x			
	5/32" X 3x19			
G:	Empty			
H:	Empty			
l:	Empty			
J:	Empty			
K:	Not Required			
L:	Heave Compensator Required			
Cr	ane	Required		
Aft A	Frame	Required		
Hawboldt Hydro (BD)		0.25"ø x 4550m		
		Kevlar line		
Hawboldt CTD (BD)		#17026 c/w 5350m x		
		.322ӯ x 3 cdr		
Stbd. A	A-Frame	Not Required		
20' Co	ontainer	Required		
Rad V	an (BD)	Not Required		
A 1 11/1 1				

Additional Comments:

- Hawboldt spares box to be loaded.
- Please also load, 2 Osco 20" CTD blocks, and an Omron counter for each winch. The Heave Compensator and Tully Tugger operational c/w spares are required.