

EXPEDITION PLAN AND ITINERARY

DEPARTMENT: DFO, Ocean Sciences Division

MISSION NO: 2017-01

CCG PATROL NO: 16-12

MISSION AREA: Line P, Station Papa, Strait of Georgia

MISSION OBJECTIVE: Repeat hydrography section, repeat zooplankton section, repeat Cesium sampling, deploy 4 Argo floats for IOS, Deploy ED drifters, Recover 3 Gliders for IOS.

SHIP: John P. Tully

DATE, FROM: 05 February 2017

TO: 23 February 2017

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

SCIENTIFIC PERSONNEL: 13 berths required

Female	Male
Ashley Arnold (UBC)	Mike Arychuk (IOS)
Rianna Burnham (UVic)	Mark Belton (IOS)
Marie Robert (IOS)	Will Burt (UBC)
Jade Shiller (UBC)	Glenn Cooper (IOS)
Theresa Venello (UVic)	Luke Halpin (EC)
	Connor Morgan-Lang (UBC)
	Rick Nelson (BIO)
	Doug Yelland (IOS)

SHIP EQUIPMENT REQUIRED: EK60 functioning, EA600 functioning, EA600 remote display available from the bridge and the new CTD lab, GPS in lab/CTD lab functioning, both DD20s functioning in the main lab, sea water supply to lab, heave compensator, tugger winch, work boat to recover Gliders (733/753).

DECK MACHINERY REQUIRED:

Note: The details are on the deck plan, last page.

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

ANTICIPATED LOADING TIME: Half-day. Loading of scientific gear/winchs will start on Sunday February 5 at 1200. Departure Monday after all winches/grocery loaded.

DANGEROUS CHEMICALS:

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

STATION LIST:

Station	Latitude N deg min	Longitude W deg min	Bottom depth m	Sampling
Haro Strait				
Haro 59	48°36.85	123°14.86	~230	Rosette to B-10, Bongo
Juan de Fuca Strait				
JF1	48 16.0	123 30.0	150	under way
JF2*	48 18.0	124 00.0	180	Rosette to B-10, Bongo
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	Rosette B-10, Bongo
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	Rosette 2000, Bongo
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	Rosette B-10, Bongo
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	Rosette B-10, Bongo
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	Rosette B-10, Bongo
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	Rosette B-10, Bongo
Mooring	50°08.0	144°50.0	~4250	Rosette to 500 m
42	49°01.8	123°26.2	326	Rosette B-10
GE01	49°15.0	123°45.0	400	Rosette B-10, 2 bongos
27	49°19.1	123°48.0	347	Rosette B-10
2	49°24.1	124°09.3	289	Rosette B-10

Note: Order of stations will be depending on weather. Some work will be done on the way back.

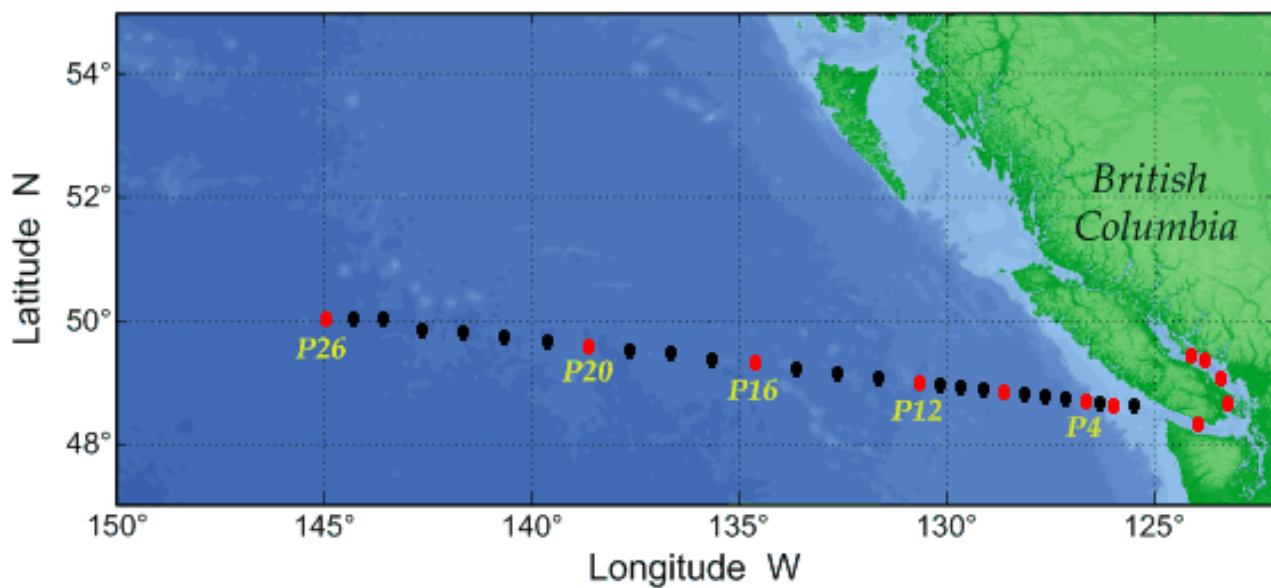
*** Station at JF2: as close as possible to station but can be moved if problem with ship traffic.**

More stations might be added in the Strait of Georgia at the end of the cruise depending on timing.

ITINERARY

Feb 5	Start loading around noon. Scientific equipment and some winches/containers.
Feb 6	Load boat deck winches with LBL crane/grocery/more science gear.
~Feb 14	Arrive at Station Papa.
~Feb 15	Leave Station Papa.
Feb 23	Arrive at IOS and offload. Ship to be clear by noon.

CRUISE TRACK

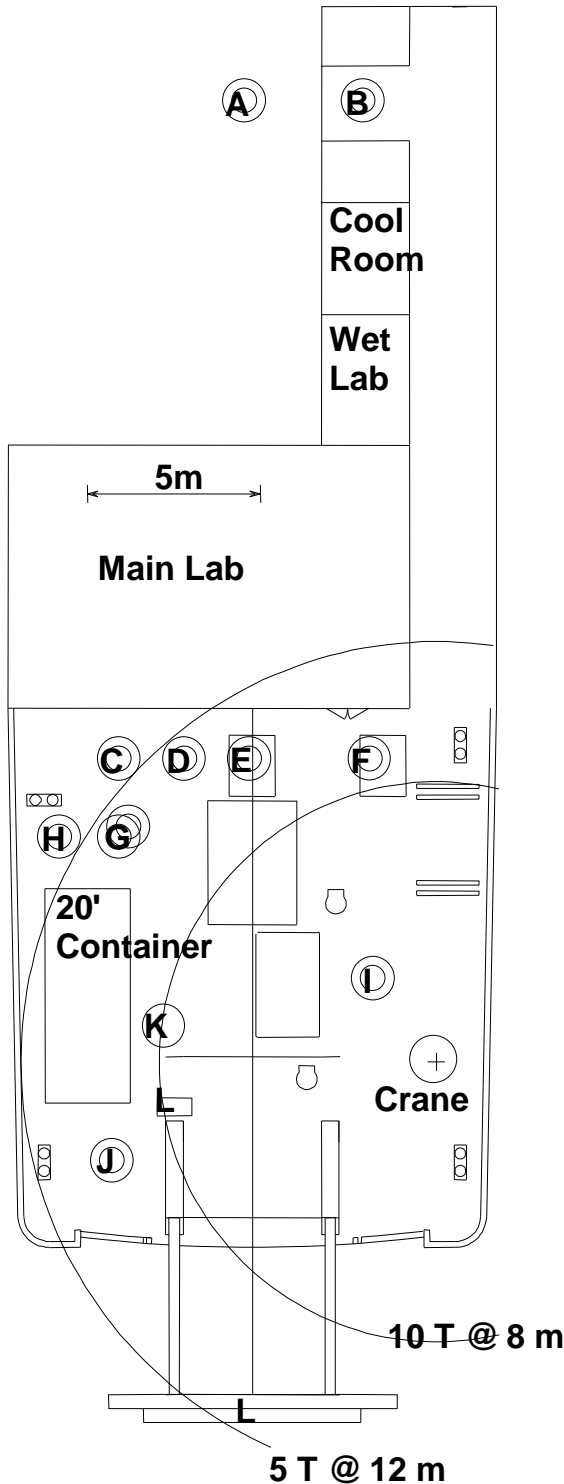


CCGS John P. Tully

Deck Lay Out: **Station PAPA Cruise, M. Robert**

Cruise ID: **2017 - 01**

Date : **5th to 23rd February, 2017**



A:	Empty
B:	Rosette Landing
C/D:	Empty
E:	CTD Winch #17026 c/w 6000m x .322"Ø x 3 cdr cable
F:	Empty
G:	Empty
H:	Empty
I:	Work winch 329 #1482 c/w 4100 m x 5/16"Ø X 3x19 wire rope
J:	Empty
K:	Required
L:	Heave Compensator Required
Crane	Required
Aft A-Frame	Required
Hawboldt CTD (Boat Deck)	#17027 c/w 6000m x .322"Ø x 3 cdr
Stbd. A-Frame	Not Required
20' DMS Container	Required
Rad Van	Not Required

Additional Comments:

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