

NOTIFICATION TO ICELAND OF PROPOSED RESEARCH CRUISE

PART A: GENERAL

1. NAME OF RESEARCH SHIP CCGS Louis S. St-Laurent CRUISE NO. 2015/LSSL

2. DATES OF CRUISE From 30 July 2015 To 1 August 2015

Note: These dates reflect entry and exit from the Icelandic 200 nautical mile zone.

3. OPERATING AUTHORITY: Canadian Coast Guard, Government of Canada

TELEPHONE: 011-8816-514-22642 (Iridium)

TELEFAX: 011-8816-937-22621 (Iridium)

TELEX: nil

4. OWNER (if different from no. 3)

5. PARTICULARS OF SHIP:

Name: CCGS Louis S. St-Laurent
Nationality: Canadian
Overall length: (in metres) 119.6 m
Maximum draught: (in metres) 9.9 m
Net tonnage: 3,403 tonnes
Propulsion e.g. diesel/steam: diesel-electric
Call sign: CGBN
Registration port and number (if registered fishing vessel): not a fishing vessel

6. CREW

Name of master:
Captain Anthony Potts

Number of crew: 49

7. SCIENTIFIC PERSONNEL

Name and address of scientist in charge:

Mr. John Shimeld
Geological Survey of Canada – Atlantic
Bedford Institute of Oceanography
1 Challenger Drive (P.O. Box 1006)
Dartmouth, Nova Scotia B2Y 4A2

Tel/telex/fax no.:
telephone: +902 426-6759
fax: +902 426-4465
email: john.shimeld@nrcan-rncan.gc.ca

Chief Hydrographer – Atlantic crossing
Ms. Paola Travaglini
Canadian Hydrographic Service
Bedford Institute of Oceanography
1 Challenger Drive (P.O. Box 1006)
Dartmouth, Nova Scotia B2Y 4A2

Tel/telex/fax no.:
telephone: +902 407-7446
fax: +902 407-7470
email: paola.travaglino@dfo-mpo.gc.ca

No. of scientists:
3 during transit to Tromsø

8. GEOGRAPHICAL AREA IN WHICH SHIP WILL OPERATE (with reference to latitude and longitude)

Data will be collected along a line of travel from Halifax, Canada into Tromsø, Norway. Approximate entry to the Icelandic 200 nautical mile limit at 60.375 N, 026.875 W and exit at 64.472 N, 005.748 W.

1 50.2334 N, 048.6949 W
2 53.8853 N, 042.7276 W
3 56.6640 N, 037.2099 W
4 58.8964 N, 031.7774 W
5 60.6132 N, 026.1072 W
6 61.8781 N, 020.2454 W
7 63.3064 N, 012.8704 W
8 64.2482 N, 006.2218 W
9 66.4333 N, 000.8917 W
10 68.2923 N, 005.0405 E
11 69.5980 N, 010.6624 E
12 70.5555 N, 016.4303 E
13 70.5219 N, 020.0781 E
14 70.3601 N, 020.0761 E
15 70.1602 N, 020.1431 E
16 70.0997 N, 020.2413 E
17 69.8469 N, 019.8724 E
18 69.7932 N, 019.3179 E
19 69.7831 N, 019.2287 E
20 69.7288 N, 019.0501 E
21 69.6809 N, 019.0298 E
22 69.6707 N, 018.9901 E

See attached graphic Annex 1.

9. BRIEF DESCRIPTION OF PURPOSE OF CRUISE

Canada is conducting a survey in areas on the Eurasian side of the Lomonosov Ridge to collect data for its continental shelf submission. The survey is being conducted using the CCGS Louis S. St-Laurent and the CCGS Terry Fox. All scientific equipment and personnel are carried on the CCGS Louis S. St-Laurent. The vessels will be calling at the port of Tromsø, Norway en route to the continental shelf survey area for the purpose of refuelling, re-provisioning, changing crew and boarding the science team. The opportunity has arisen to take advantage of the CCGS Louis S. St-Laurent's transit from Canada to Tromsø to collect bathymetric data using the multibeam system installed on the ship. This marine scientific research would be conducted in order to increase knowledge of the Atlantic Ocean further to the Galway Statement on Atlantic Ocean Cooperation signed by the EU, Canada and the US on 24 May 2013.

10. DATES AND NAMES OF INTENDED PORTS OF CALL

Not applicable.

11. ANY SPECIAL REQUIREMENTS AT PORTS OF CALL

Not applicable.

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1. PART B: DETAILS

1. NAME OF RESEARCH SHIP CCGS Louis S. St-Laurent CRUISE NO. 2015/LSSL

2. DATES OF CRUISE From 30 July 2015 To 1 August 2015

Note: These dates reflect entry and exit from the Icelandic 200 nautical mile zone.

3. a) PURPOSE OF RESEARCH

To take advantage of the CCGS Louis S. St-Laurent's transit from Canada to Tromsø to collect bathymetric data using the multibeam system installed on the ship. This marine scientific research would be conducted in order to increase knowledge of the Atlantic Ocean further to the Galway Statement on Atlantic Ocean Cooperation signed by the EU, Canada and the US on 24 May 2013.

b) GENERAL OPERATIONAL METHODS (including full description of any fish gear, trawl type, mesh size, etc.)

The multibeam system on the CCGS Louis S. St-Laurent is a Kongsberg EM 122, operating at 12 kHz with up to 288 beams with a beam pattern swath width of four to seven times water depth. The system also includes a 2.5 to 7 kHz swept frequency sub-bottom profiler (Knudsen). Both systems are hull mounted.

4. ATTACH CHART showing (on an appropriate scale) the geographical area of intended work, positions of intended stations, tracks of survey lines, positions of moored/seabed equipment, areas to be fished

See attached.

5. a) TYPES OF SAMPLES REQUIRED (e.g., geological/water/plankton/fish/radionuclide)

Not applicable.

b) METHODS OF OBTAINING SAMPLES (e.g., dredging/coring/drilling/fishing, etc. When using fishing gear, indicate fish stocks being worked, quantity of each species required, and quantity of fish to be retained on board).

Not applicable.

6. DETAILS OF MOORED EQUIPMENT

<u>Dates Laying</u>	<u>Recovery</u>	<u>Description</u>	<u>Depth</u>	<u>Latitude</u>	<u>Longitude</u>
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Not applicable.

7. ANY HAZARDOUS MATERIALS (chemicals/explosives/gases/radioactives, etc.)
(Use separate sheet if necessary)

Not applicable.

a) Type and trade name

b) Chemical content (and formula)

c) IMO IMDG code (reference and UN no.)

d) Quantity and method of storage on board

- e) If explosives give dates of detonation
- Method of detonation
 - Position of detonation
 - Position of detonation
 - Frequency of detonation
 - Depth of detonation
 - Size of explosive charge in kg.

8. DETAIL AND REFERENCE OF

a) Any relevant previous/future cruises

Not applicable.

b) Any previously published research data relating to the proposed cruise

Not applicable.

9. NAMES AND ADDRESSES OF SCIENTISTS OF THE COASTAL STATE(S) IN WHOSE WATERS THE PROPOSED CRUISE TAKES PLACE WITH WHOM PREVIOUS CONTACT HAS BEEN MADE

A scientist from the Geological Survey of Denmark and Greenland will be participating in the continental shelf survey on board the CCGS Louis S. St-Laurent. He is part of the science team that will be boarding in Tromsø.

Name: Dr. Thomas Funck, Senior Advisor, Geophysics
Address: Geological Survey of Denmark and Greenland
Ø. Voldgade 10
DK-1350 Cph. K
Telephone: +45 9133 3930
Email: tf@geus.dk

10. STATE

a) Whether visits to the ship in port by scientists of the coastal state concerned will be acceptable (Yes/No)

Not applicable.

b) Participation of an observer from the coastal state for any part of the cruise together with the dates and the ports for embarkation and disembarkation

Participation onboard of observers from coastal states was not foreseen during collection of bathymetric data along lines of travel.

A scientist from the Geological Survey of Denmark and Greenland will be participating in the continental shelf survey on board the CCGS Louis S. St-Laurent. He is part of the science team that will be boarding in Tromsø.

c) When research data from the intended cruise are likely to be made available to the coastal state and by what means

Bathymetric data collected during transit in areas within 200 nautical miles of Iceland will be provided to the coastal state within approximately 120 days following the conclusion of the survey.

Canada also intends to submit bathymetric data collected along all lines of travel (Canada to Norway, Norway to the continental shelf survey area, continental shelf survey area to Canada) for inclusion in the General Bathymetric Chart of the Oceans (GEBCO) and/or the International Bathymetric Chart of the Arctic Ocean (IBCAO). Iceland's confirmation that the inclusion of data collected in areas within 200 nautical miles of Iceland in data submitted to GEBCO and/or IBCAO is acceptable would be appreciated as part of the response to this application.

PART C. SCIENTIFIC EQUIPMENT

Complete the following table using a separate page for each coastal state

Coastal state: Iceland

Port of call: not applicable

Dates: entry into Icelandic 200 M zone on 30 July 2015, departure on 1 August 2015

Indicate "YES" or "NO"

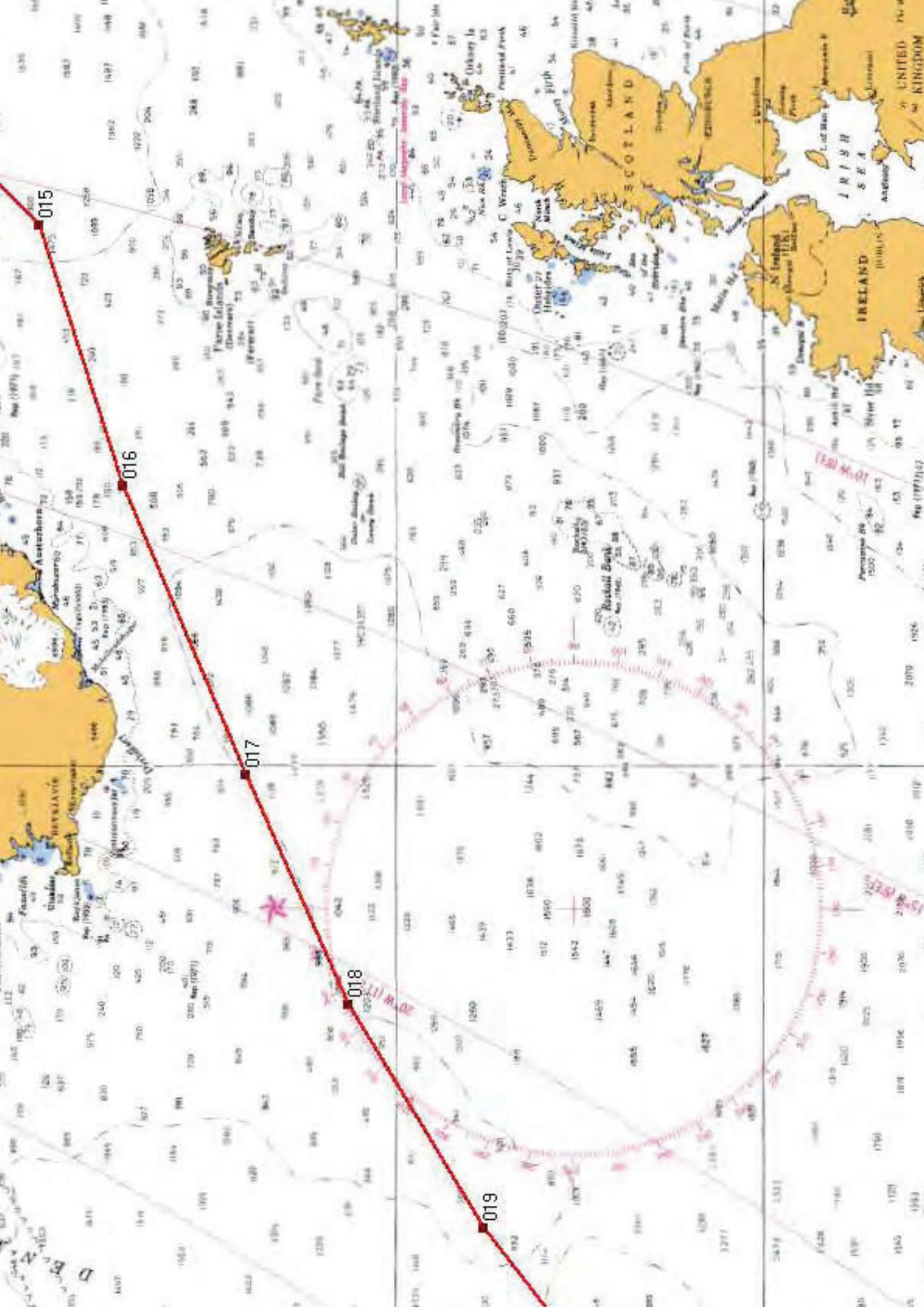
				DISTANCE FROM COAST		
<u>List scientific work by function</u> e.g.	Water column including sediment sampling of the seabed	Fisheries research within fishing limits	Research concerning the natural resources of the continental shelf or its physical characteristics	Within 4 nm	Between 4-12 nm	Between 12-200 nm
Bathymetry	Yes, but no seabed sampling	No	Yes, physical characteristics: depth and morphology	No	No	Yes

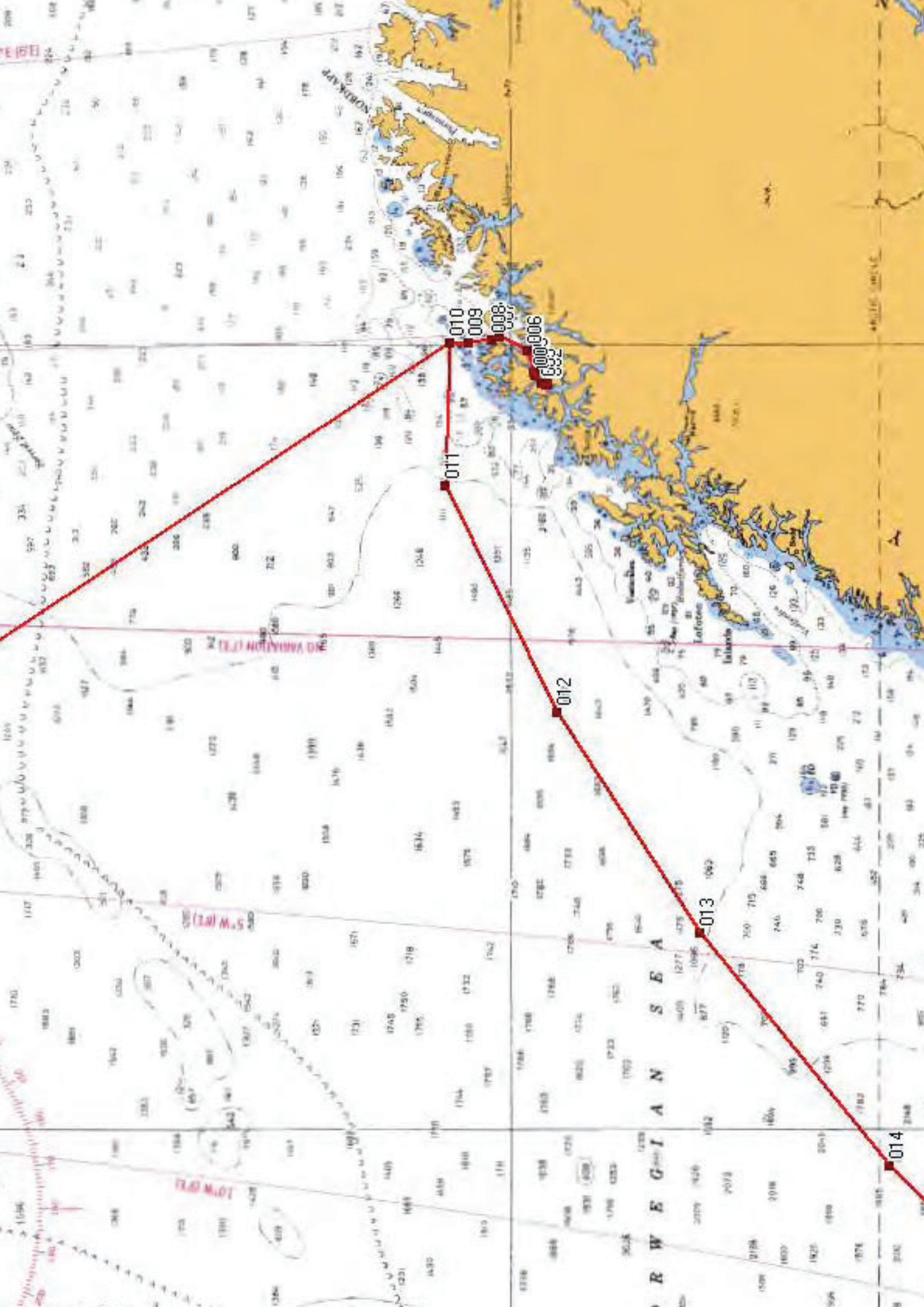


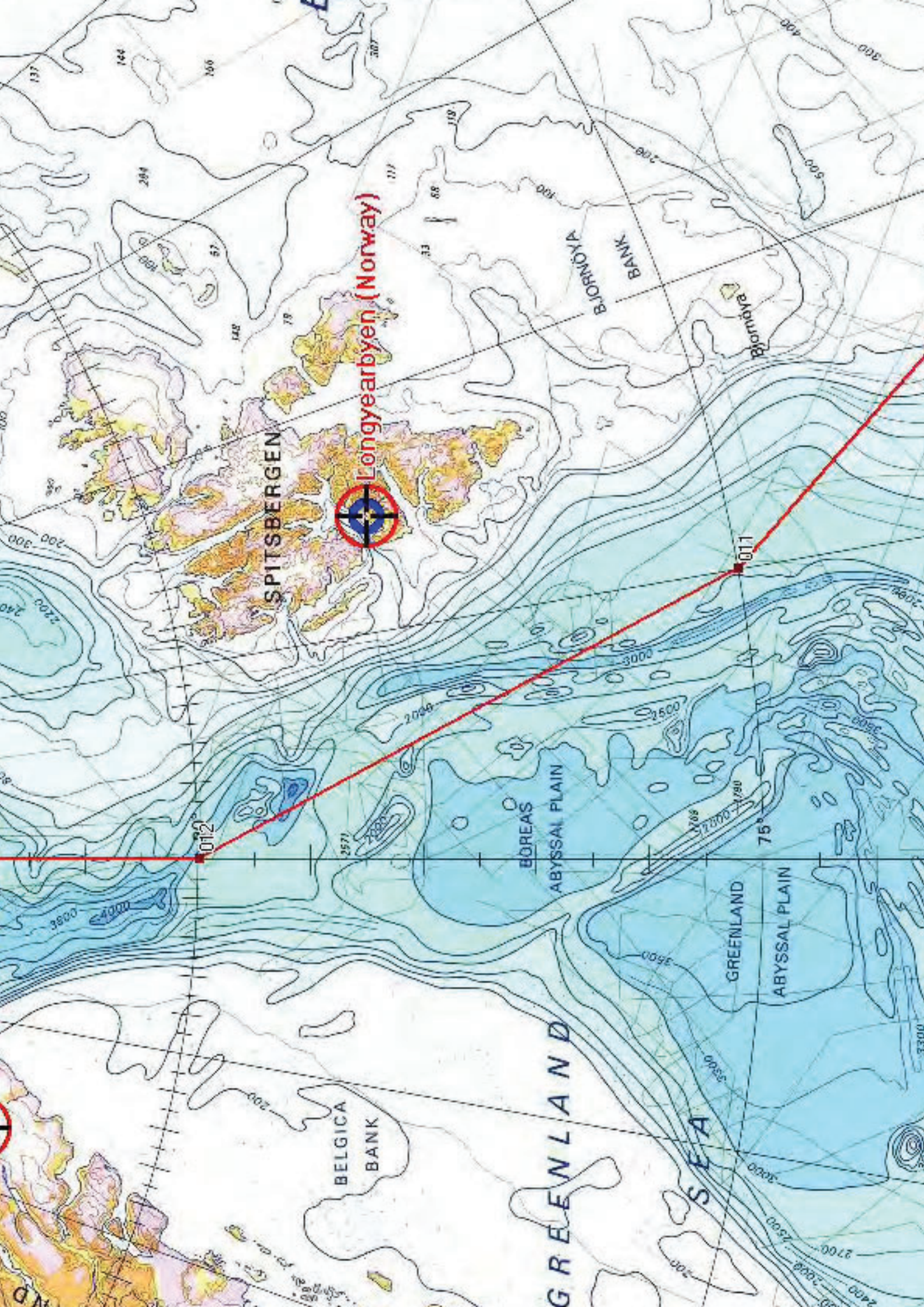
 (Dr. David Mosher, On behalf of the Principal Scientist)
 Program Manager, UNCLOS Program
 Geological Survey of Canada - Atlantic

Dated _____ 22 May 2015 _____

NB IF ANY DETAILS ARE MATERIALLY CHANGED REGARDING DATES/AREA OF OPERATION AFTER THIS FORM HAS BEEN SUBMITTED, THE COASTAL STATE AUTHORITIES MUST BE NOTIFIED IMMEDIATELY







Longyearbyen (Norway)

SPITSBERGEN

BJORNØYA BANK

GREENLAND

BOREAS ABYSSAL PLAIN

ABYSSAL PLAIN

BELGICA BANK

GREENLAND

SEA

012

011

John William Shimeld, M.Sc., P.Eng.

Canadian, born February 2, 1968

Current Position

Geophysicist, Geological Survey of Canada (Atlantic), Natural Resources Canada, Bedford Institute of Oceanography, P.O. Box 1006, Dartmouth, Nova Scotia, Canada, B2Y 4A2, (902) 426-6759, John.Shimeld@nrcan.gc.ca

Education

1994: Department of Earth Sciences, Dalhousie University, Canada, M.Sc.
1991: Department of Geological Engineering, University of Waterloo, Canada, B.A.Sc.

Employment Record

1998–present: Geological Survey of Canada (Atlantic), Dartmouth, Nova Scotia, Geophysicist
1993–1998: Blue Vajra Consulting, Dartmouth, Nova Scotia, Seismic data interpreter
1991: Geological Survey of Canada, Ottawa, Nova Scotia, Contract field assistant
1990: Geological Survey of Canada, Ottawa, Ontario, Student field assistant
1989: Geological Survey of Canada, Ottawa, Ontario, Student field assistant
1988: Petro-Canada, Calgary, Alberta, Student geophysicist
1987: Connestoga-Rovers & Associates, Waterloo, Student engineer
1986: Department of Indian and Northern Affairs, Ottawa, Student field assistant

Geophysical field projects

2015: CCGS *Louis S. St-Laurent*, Amundsen Basin, Chief Scientist
2014: CCGS *Louis S. St-Laurent*, Amundsen Basin, Second Scientist
2010: CCGS *Louis S. St-Laurent*, Canada Basin & Alpha Ridge, Second Scientist
2009: CCGS *Louis S. St-Laurent*, Canada Basin & Alpha Ridge, Second Scientist
2009: Multichannel seismic acquisition contract, Labrador Abyssal Plain, Scientific Authority
2008: CCGS *Louis S. St-Laurent*, Canada Basin & Alpha Ridge, Second Scientist
2008: Alpha Ridge Test of Appurtenance (ARTA)
2007: CCGS *Louis S. St-Laurent*, Canada Basin, Second Scientist
2007: Multichannel seismic acquisition contract, Sohm Abyssal Plain, Scientific Authority
2006: Lomonosov Ridge Test of Appurtenance (LORITA)
2004: CCGS *Hudson* Cruise 04-030, St. Pierre Slope, Scotian Slope & Western Bank
2002: CCGS *Hudson* Cruise 02-046, Scotian Slope
1999: CCGS *Hudson* Cruise 97-007, Scotian Shelf & Northumberland Strait
1996: Ocean Drilling Program, Leg 171a, Barbados Accretionary Wedge
1992: CSS *Hudson* Cruise 92-022 (Mission Erable), Newfoundland Basin & Flemish Cap

Awards and Recognition

2014: Natural Resources Canada, Achievement Award
2009: Natural Resources Canada, Sector Merit Award
2008: Natural Resources Canada, Letter of appreciation from Minister Gary Lunn
2007: Department of Earth Sciences, Dalhousie University, Adjunct Research Associate
2006: Director General, Natural Resources Canada, Certificate of Appreciation
2006: Geological Association of Canada, Voluntary Service Award
2003: Geological Survey of Canada, Merit Award
2001: Natural Resources Canada, Sector Merit Award
2001: Geological Survey of Canada, Merit Award

Paola Giovanna Travaglini

Canadian, born May 28, 1964

Current Position

Technical Advisor, Geomatics,
Canadian Hydrographic Service, Department of Fisheries and Oceans, Ottawa,
Ontario
c/o Bedford Institute of Oceanography, P.O. Box 1006, Dartmouth, Nova Scotia,
Canada, B2Y 4A2,
(902) 407-7446, Paola.Travaglini@dfo-mpo.gc.ca

Education

1990: B.Sc. (Hons) Specializing in Survey Science; Department of Survey Science,
University of Toronto, Ontario, Canada,

Employment Record

2009- present: Technical Advisor, Geomatics, Canadian Hydrographic Service,
Ottawa, Ontario
1999-2006: Acting Hydrographer in Charge, Canadian Hydrographic Service,
Burlington, Ontario
1991: Hydrographer, Canadian Hydrographic Service, Burlington, Ontario
1984 -1990: Field Survey Instrument Person to Party Chief, C.A Sexton Ltd.

Hydrographic field projects

2015: Hydrographer In Charge: CCGS *Louis S. St-Laurent*, Atlantic Crossing
2014: Hydrographer In Charge: CCGS *Louis S. St-Laurent*, Amundsen Basin,
2002-2006: A/Hydrographer In Charge: CCGS *Nahidik*, Beaufort Sea Multibeam
(MB) Survey, Beaufort Sea
2000-2005: A/Hydrographer In Charge: Fathom Five National Marine Park MB
Survey, Tobermory, Ontario
1999-2004: A/Hydrographer In Charge: Sarnia, Cornwall, Welland Canal MB
Surveys, Ontario
1998-2001: MB Processor, CCGS *Griffon*, Georgian Bay,
1998: MB Processor, Thunder Bay & Georgian Bay MB Surveys, Ontario
1998: MB Processor, CCGS *Griffon*, Hudson Bay
1997: MB Processor: CCGS *Hudson*, Hudson Bay
1995-1996: Field Hydrographer: CSS *Hudson*, Hudson Bay

Awards and Recognition

2011: Department of Fisheries and Oceans, Immediate Award
2009: Department of Fisheries and Oceans, Immediate Award
2006: Department of Fisheries and Oceans, Immediate Award
2005: Department of Fisheries and Oceans, Award of Excellence
2003: Department of Fisheries and Oceans, Immediate Award
2001: Department of Fisheries and Oceans, Immediate Award
1993: Department of Fisheries and Oceans, Award of Excellence