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ICES søknadsskjema

NOTIFICATION OF PROPOSED RESEARCH CRUISE

PART A: GENERAL

1. NAME OF RESEARCH SHIP "HÅKON MOSBY" CRUISE NO. 2014615
2. DATES OF CRUISE From: 6 July 2014 To: 18 July 2013
3. OPERATING AUTHORITY: Institute of Marine Research
P.O.Box 1870 Nordnes
N-5817 BERGEN NORWAY
TELEPHONE: 47-55238500
TELEFAX : 47-55238531
TELEX: 42297 OCEAN N
E-MAIL: post@imr.no
4. OWNER
(if different from no. 3)
5. PARTICULARS OF SHIP: Name: "HÅKON MOSBY"

Nationality: Norwegian
Overall length: 48 metres
Maximum draught: 4.5 metres
Net tonnage: 209
Propulsion: Diesel
Call sign: LJIT
Registration port and number
(if registered fishing vessel)
6. CREW Name of master: Johnny Karlsen/Tom Ole Drange

Number of crew: 9
7. SCIENTIFIC PERSONNEL Name and address of scientist in charge:
Henrik Søiland
Institute of Marine Research
P.O.Box 1870 Nordnes
N-5817 BERGEN NORWAY
Tel/telex/fax no.: +47 92695447

No. of scientists: 6
8. GEOGRAPHICAL AREA IN WHICH SHIP WILL OPERATE (with reference to latitude and longitude)

Norwegian Sea and Iceland Sea (60-71° N, 26 W-20E). (See also the chart at the end of the document)
9. BRIEF DESCRIPTION OF PURPOSE OF CRUISE

The cruise is part of a research project where the aim is to investigate the water masses and circulation in the Iceland and Norwegian Sea. In the project Norwegian and Icelandic scientists collaborate. The studies include hydrographic measurements, deployment of both surface and subsurface drifters and moorings.



10. DATES AND NAMES OF INTENDED PORTS OF CALL

9 or 10 July 2014, Vopnafjörður, Iceland

The purpose of the port call is to pick up mooring equipment that was adrift off Iceland, that was picked up and brought to shore by an Icelandic vessel.

The port call will be of short duration.

11. ANY SPECIAL REQUIREMENTS AT PORTS OF CALL

NOTIFICATION OF PROPOSED RESEARCH CRUISE

PART B: DETAIL

1. NAME OF RESEARCH SHIP "Hákon Mosby" CRUISE NO. 2014615
2. DATES OF CRUISE From: 6 July 2014 To: 18 July 2014
3. a) PURPOSE OF RESEARCH

The cruise is part of a research project where the aim is to investigate the water masses and circulation in the Iceland and Norwegian Sea. In the project Norwegian and Icelandic scientists collaborate. The studies include hydrographic measurements, deployment of both surface and subsurface drifters and moorings.

b) GENERAL OPERATIONAL METHODS (including full description of any fish gear, trawl type, mesh size, etc.)
CTD probe with multi water-sampler
ADCP current measurements
Recover and deployment of subsurface moorings
Deployment of subsurface RAFOS drifters.

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

A chart showing the planned cruise track is at the end of the document

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

Seawater sampling for salinity (CTD) calibration

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).

CTD multi water sampler

6. DETAILS OF MOORED EQUIPMENT

Two current meter moorings will be recovered and one will be deployed for another year, recovery July 2015.

The other moorings were deployed on a cruise in July 2013 and will be serviced if necessary at this cruise and remain in the water till July 2015. The moorings are subsurface and the top of the moorings are located 600 meter below the sea surface. The moorings are equipped with an acoustic release that will be activated at recovery. At the map the mooring positions are shown. The acoustic signals from each sound source will be



an 80 second long CW (continuous wave) pulse at 260 Hz transmitted twice a day. The signal strength is estimated to be 179 dB re 1 microPascal at 1 m distance.

Dates

<u>Laying</u>	<u>Recovery</u>	<u>Description</u>	<u>Depth</u>	<u>Latitude</u>	<u>Longitude</u>
18-31 July 2013	July 2014	Measure current	400 m	67 N	14 W
18-31 July 2013	July 2014	Measure current	1150 m	67.5 N	14W
6-18 July 2014	June 2015	Measure current	1150 m	67.5 N	14W

If needed the following moorings will be serviced on the cruise:

18-31 July 2013	July 2015	See above	1200m	68.5°N	18°W
18-31 July 2013	July 2015	See above	1500m	68°N	8.25°W
18-31 July 2013	July 2015	See above	1500m	67°N	10°W
18-31 July 2013	July 2015	See above	2000m	69°N	14°W

The positions are approximately.

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

- Type and trade name
- Chemical content (and formula)
- IMO IMDG code (reference and UN no.)
- Quantity and method of storage on board
- If explosives give date(s) of detonation
 - Method 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

A research cruise was performed in 2012 when the current meter moorings were deployed. In 2013 the sound source moorings, subsurface floats and surface drifter were deployed and the current meter moorings deployed in 2012 were serviced. All moorings will be recovered on a research cruise in the summer of 2015.

- Any previously published research data relating to the proposed cruise

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

Hedinn Valdimarsson, Skulagata 4, 121 Reykjavik, Iceland, tel: 354-5752000, 354-5752063 (direct)
Steingrímur Jonsson, University of Akureyri, Borgir v/Norðurslóð, 600 Akureyri, Iceland

10. STATE

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

YES

- 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

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

The data will go into international databases ICES and will therefore be available to all scientists.

**PART C. SCIENTIFIC EQUIPMENT**

Complete the following table

Coastal state: IcelandPort call: Vopnafjörður, IcelandDates: 9 or 10 July 2014

Indicate "YES" or "NO"

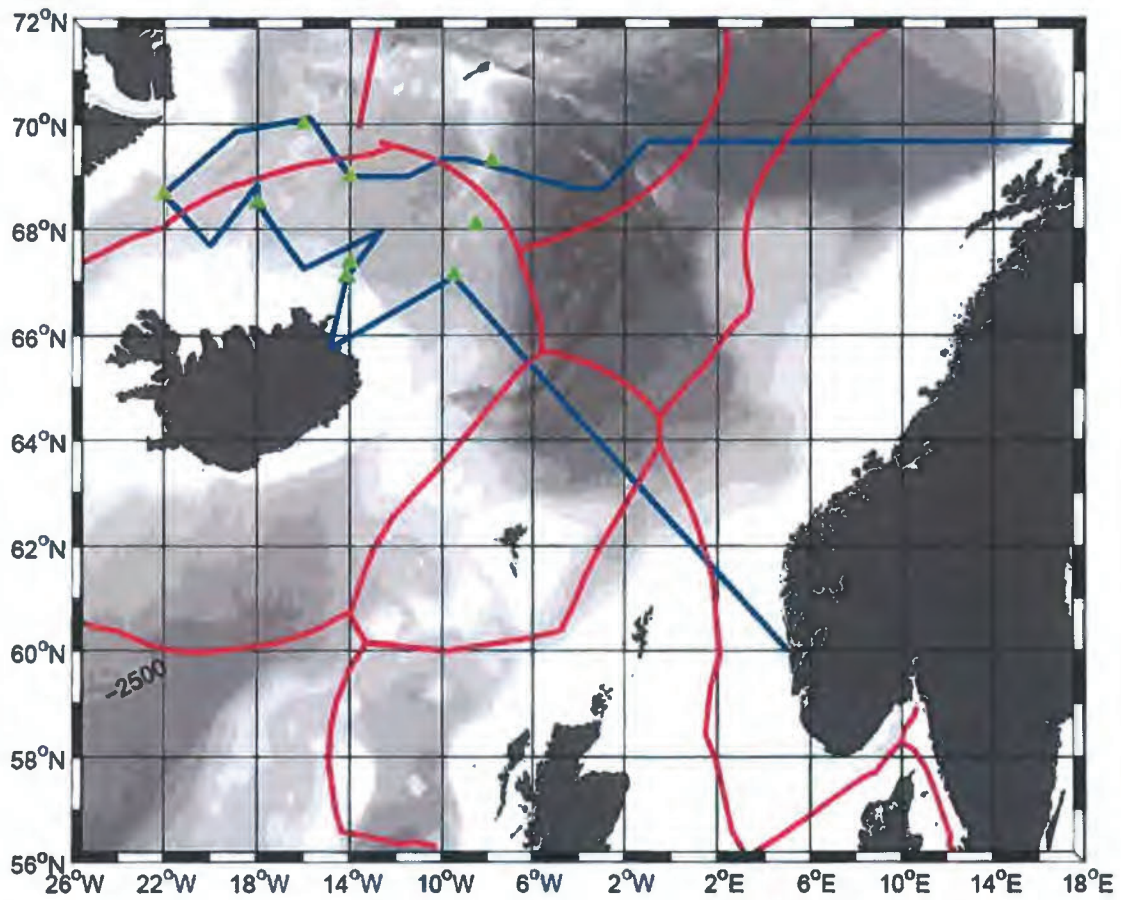
<u>List scientific work by function</u> e.g. Magnetometry Gravity Diving Seismics Seabed sampling Bathymetry Trawling Echo sounding Water sampling U/W TV Moored instr. Towed instr.	Water column including sediment sampling of the seabed	Fisheries research within fishing limits	Research concerning the natural resources of the continental shelf or its physical characteristics	Distance from coast		
				Within 4 nm	Between 4-12 nm	Between 12 and 200 nm
CTD	Yes	No	Yes	No	No	Yes
Rosette	Yes	No	Yes	No	No	Yes
Underway systems	Yes	No	Yes	No	No	Yes
Ecco sounding	Yes	No	Yes	No	No	Yes
Water sampling	Yes	No	Yes	No	No	Yes
Towed Instrument	No	No	No	No	No	No
Trawling	No	No	No	No	No	No
Moored Instruments	Yes	No	Yes	No	No	Yes
Surface drifters	No	No	No	No	No	No

Henrik Söiland

Henrik Söiland (Principal Scientist)

Date: 21 March 2014

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.



Schematic view of the planned cruise track (blue line) and mooring service/deployments (green triangles).