

NOTIFICATION OF PROPOSED RESEARCH CRUISE

PART A: GENERAL

1. NAME OF RESEARCH SHIP: "JOHAN HJORT" CRUISE NO. 2008206

2. DATES OF CRUISE From: May 22 - 2008 To: June 8 - 2008

3. OPERATING AUTHORITY: Institute of Marine Research  
P.O.Box 1870 Nordnes  
N-5817 BERGEN NORWAY

TELEPHONE: 47-55238500  
TELEFAX : 47-55238531  
TELEX:

4. OWNER  
(if different from  
no. 3)

5. PARTICULARS OF SHIP: Name: "JOHAN HJORT"

Nationality: Norwegian

Overall length: 64,5 metres

Maximum draught: 6,4 metres

Net tonnage. 548 Gross 1828

Propulsion: Diesel

Call sign: L D G J

Vessels communication

Phone (Satcom) +47 55 90 64 00

Fax (Satcom) +47 55 90 64 01

E-mail: johan..hjort@IMR.no

6. CREW Name of master: Tom Ole Drange/John Ola Stensønes  
Number of crew: 14

7. SCIENTIFIC PERSONNEL Name and address of  
scientist in charge: Kjell Arne Mork / Ken Drinkwater  
Institute of Marine Research  
P.O.Box 1870 Nordnes  
N-5817 BERGEN NORWAY
- Tel/telex/fax no.: (47)55238500 / (47)55238531
- No. of scientists: 20
8. GEOGRAPHICAL AREA IN WHICH SHIP WILL OPERATE (with reference to latitude and longitude)  
Norwegian and Iceland Seas  
Outline:  
71°00N, 10°00W  
61°00N, 6°E
9. BRIEF DESCRIPTION OF PURPOSE OF CRUISE
- Physical, chemical and biological oceanographic cruise using CTD and rosette for water sampling, acoustic, trawls, towed vehicle (include optical and acoustic sensors), and autonomous vehicle (sea gliders). In addition will two moorings that include acoustic current profiler and current meter be recovered and redeployed. The purpose is to quantify the impact of climate variability on Arctic marine ecosystems at fronts in the Norwegian Sea. This cruise is a part of the Norwegian funded International Polar Year (IPY) project NESSAR that again is a part of the international IPY project NESSAS. Iceland partners are included in this project.
10. DATES AND NAMES OF INTENDED PORTS OF CALL
- No port call is planned
11. ANY SPECIAL REQUIREMENTS AT PORTS OF CALL

NOTIFICATION OF PROPOSED RESEARCH CRUISEPART B: DETAIL

1. NAME OF RESEARCH SHIP: "J. HJORT" CRUISE NO. 2008206

2. DATES OF CRUISE From: May 22, 2008 To: June 8, 2008

3. a) PURPOSE OF RESEARCH

Physical, chemical and biological oceanographic survey in the Norwegian Sea to study relations between the ocean circulation, plankton and fish near the Arctic front. Moorings will also be deployed (that include current meters and Acoustic Doppler Current Profiler) south of Jan Mayen to measure variability in the ocean circulation. The focus is to identify the biological production in frontal region and how it varies with the ocean circulation.

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

CTD corer (1 m long)

Rosette/water sampler (2 m long)

Underway measuring systems, continuous flow of seawater into ship born instrumentation

Pelagic trawl

Towed vehicle that includes CTD, Optical Plankton Recorder and acoustic (2-4 frequency).

Autonomous vehicle (sea gliders) that measure CTD, oxygen, and fluorescence will be deployed (out for several months).

4. ATTACH CHART showing (on an appropriate scale) the geographical area of intended work, For the site of operation see the attached map.

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

Seawater, air, plankton and fish sampling

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)

*24 Niskin bottles 10 liter automatic rosette, CTD and ADCP*

*Pelagic trawls for herring catches*

6. DETAILS OF MOORED EQUIPMENT

<u>Dates</u>		<u>Description</u>	<u>Depth</u>	<u>Latitude</u>	<u>Longitude</u>
<u>Laying</u>	<u>Recovery</u>				
June 1	June 30, 2008	Measure current	100-800 m (bottom)	69.7 N	8.3 W
June 1	June 30, 2008	Measure current	100-2000 m (bottom)	68.7 N	8.4 W

D

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

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

Previous Cruises

Future Cruises

There is planned a cruise in 2009 in same region to recover the moorings.

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

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

Ólafur K. Pálsson, Skulagata 4, 121 Reykjavik, Iceland  
Olafur Astthorsson, Skulagata 4, 121 Reykjavik, Iceland  
Bogi Hansen, Faroese Fisheries Laboratory, Nóatún 1, FO-110 Tórshavn,  
Faroe Islands

10. STATE

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

Yes

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

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 also be available to all scientists that are involved in the IPY.

## E

## PART C. SCIENTIFIC EQUIPMENT

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

Coastal state: Iceland

Port call: No

Dates: 22 May - 8 June 2008

Indicate "YES or "NO"

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

Kjell Arne Mork / Ken Drinkwater

(Principal Scientist)

Dated 4<sup>th</sup> December 2007

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.

F

PART C. SCIENTIFIC EQUIPMENT

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

Coastal state: Faorese Islands

Port call: No

Dates: 22 May - 8 June 2008

Indicate "YES or "NO"

				Distance from coast		
<u>List scientific work by function</u>						
e.g. Magnetometry Gravity Diving Seismics Seabed sampling Bathymetry Trawling <b>Echo sounding</b> <b>Water sampling</b> U/W TV Moored instr. Towed instr.	<b>Water column</b> 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 n.mi.	Between 4-12 n.mi.	Between 12 and 200 n.mi.
CTD	No	No	No	No	No	Yes
Rosette	No	No	No	No	No	Yes
Underway systems	No	No	No	No	No	Yes
Ecco sounding	No	Yes	No	No	No	Yes
Water sampling	No	No	No	No	No	Yes
Towed Instrument	No	Yes	No	No	No	Yes
Trawling	No	Yes	No	No	No	Yes
Autonomous vehicle	No	No	No	No	No	Yes

Kjell Arne Mork / Ken Drinkwater

(Principal Scientist)

Dated 4<sup>th</sup> December 2007

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PART C. SCIENTIFIC EQUIPMENT

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

Coastal state: Great Britain

Port call: No

G

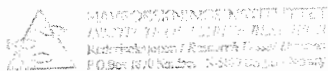
Dates: 22 May - 8 June 2008

Indicate "YES or "NO"

<u>List scientific work by function</u>  e.g. Magnetometry Gravity Diving Seismics Seabed sampling Bathymetry Trawling <b>Echo sounding</b> <b>Water sampling</b> U/W TV Moored instr. Towed instr.	<b>Water column</b> 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 n.mi.	Between 4-12 n.mi.	Between 12 and 200 n.mi.
CTD	No	No	No	No	No	Yes
Rosette	No	No	No	No	No	Yes
Underway systems	No	No	No	No	No	Yes
Ecco sounding	No	Yes	No	No	No	Yes
Water sampling	No	No	No	No	No	Yes
Towed Instrument	No	Yes	No	No	No	Yes
Trawling	No	Yes	No	No	No	Yes
Autonomous vehicle	No	No	No	No	No	No

*Bente Karin Tveit*

(On behalf of the Principal Scientist)



Kjell Arne Mork / Ken Drinkwater

(Principal Scientist)

Dated 4<sup>th</sup> December 2007

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