

NOTIFICATION OF PROPOSED RESEARCH CRUISE

PART A: GENERAL

1. *NAME OF RESEARCH SHIP* "Hakon Mosby" *CRUISE NO.* 2003612
2. *DATES OF CRUISE* From: 01/07/2003 To: 15/07/2003
3. *OPERATING AUTHORITY* Institute of Marine Research,
P.O. Box 1870 Nordnes,
N-5024 Bergen, Norway.
- Telephone: +47 55238500
Facsimile: +47 55238531
Telex: 42297 OCEAN N
4. *OWNER*
(if different from No. 3)
5. *PARTICULARS OF SHIP*
- | | |
|---------------------------------------|--------------------|
| <i>NAME:</i> | "Hakon Mosby" |
| <i>NATIONALITY:</i> | Norwegian |
| <i>OVERALL LENGTH:</i> | 48 metres |
| <i>MAXIMUM DRAUGHT:</i> | 4,5 metres |
| <i>NET TONNAGE:</i> | 449 |
| <i>GROSS:</i> | |
| <i>PROPULSION:</i> | Diesel |
| <i>CALL SIGN:</i> | L J I T |
| <i>VESSELS COMMUNICATION:</i> | |
| <i>PHONE:</i> | +47 55906420 (Sat) |
| <i>FAX:</i> | +47 55906421 (Sat) |
| <i>REGISTERED PORT & NUMBER:</i> | |
| <i>(if registered fishing vessel)</i> | |
6. *CREW*
- | | |
|------------------------|-----------------------------|
| <i>NAME OF MASTER:</i> | John G. Aasen/Henrik Faeroy |
| <i>NO. OF CREW:</i> | 12 |
7. *SCIENTIFIC PERSONNEL*
- | | |
|---|--|
| <i>NAME AND ADDRESS OF SCIENTIST IN CHARGE:</i> | Carin Andersson Dahl,
Bjerknes Centre for
Climate Research,
University of Bergen,
N-5007 Bergen. |
| <i>TELEPHONE:</i> | +47 55583216 |
| <i>FAX:</i> | +47 55584330 |
| <i>TELEX:</i> | |
| <i>NUMBER OF SCIENTISTS:</i> | Approx. 8 |
8. *GEOGRAPHICAL AREA IN WHICH SHIP WILL OPERATE*
(with reference to latitude and longitude)
- Sector 1: 59deg N, 3deg 30W, 61deg N, 1deg W, 61deg N, 8deg W, 62deg 30N, 6deg 30W
Sector 2: 65deg N, 7deg W, 65deg N, 5deg W, 62deg 20N, 7deg W, 62deg 20N, 5deg W

9. *BRIEF DESCRIPTION OF PURPOSE OF CRUISE*

Geological sediment sampling for paleoclimate studies. We will also try to recover live and fossil specimens of the mollusc, *Arctica islandica*, from shallow water areas with the purpose of studying the internal growth banding and its relationship with climate.

10. *DATES AND NAMES OF INTENDED PORTS OF CALL*

None planned

11. *ANY SPECIAL REQUIREMENTS AT PORTS OF CALL*

No

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PART B: DETAIL

1. *NAME OF RESEARCH SHIP* "Hakon Mosby" *CRUISE NO.* 2003612

2. *DATES OF CRUISE* From: 01/07/2003 To: 15/07/2003

3. a) *PURPOSE OF RESEARCH*

Geological sediment sampling (upper 5 m of sediment column) for paleoclimate studies. We will also try to recover live and fossil specimens of the mollusc, *Arctica islandica*, from shallow water areas with the purpose of studying the internal growth banding and its relationship with climate.

Our cruise is planned as part of the nationally funded NOClim project in Norway, where one task is to study the changes in meridional exchange of water masses in and out of the Nordic Seas during periods of rapid changes in climate. One excellent place to monitor these changes is through the Faroe-Shetland channel and through the Iceland-Faroes ridge and in the Faeroe Channel. We want to study changes in water mass transport through some of these major gateways during 3 time slices in the Holocene (little ice age, mid-Holocene neoglacial transition, 8200 year cold episode) and during the transition from Younger Dryas and into Holocene about 11,000 years ago.

b) *GENERAL OPERATIONAL METHODS*

(including full description of any fishing gear trawl type, mesh size, etc.)

Geological and biological sampling equipment (gravity corer, multi-corer, box corer, dredge) site-surveying by 3.5 kHz echo-sounding. Conductivity-temperature-depth (CTD) measurements in the water column.

4. *ATTACH CHART*

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

See chart attached

5. a) *TYPES OF SAMPLES REQUIRED*

(e.g. Geological/Water/Plankton/Fish/Radionuclide)

Geological (sediment), biological (molluscs), water samples

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, quantify of fish to be retained on board)

Geological sampling within the upper 6 m of the sediment column. Collecting molluscs from the sea-bottom by dredging. Collecting of water samples from the water column.

6. *DETAILS OF MOORED EQUIPMENT*

DATES: None

<u>Laying</u>	<u>Recovery</u>	<u>Description</u>	<u>Depth</u>	<u>Latitude</u>	<u>Longitude</u>
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7. *ANY HAZARDOUS MATERIALS*

*(Chemicals, Explosives, Gases, Radioactive etc)
(use separate sheet, if necessary)*

None

- a) *TYPE AND TRADE NAME*
- b) *CHEMICAL CONTENT (& FORMULA)*
- c) *IMO IMDG CODE REFERENCE & UN. NO.*
- d) *QUANTITY & METHOD OF STOWAGE ON BOARD*

e) *IF EXPLOSIVES GIVE DATE(S) OF DETONATION* None

- *Method of detonation*
- *Position of detonation*
- *Frequency of detonation*
- *Depth of detonation*
- *Size of explosive charge in Kgs*

8. *DETAIL & REFERENCE OF PREVIOUS CRUISES AND/OR PUBLISHED RESULTS*

A cruise for geological sampling in Faeroe waters was undertaken in 2001. Report to the Faeroe authorities about the cruise in 2001.

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*

10. STATE

a) *WHETHER VISITS TO THE SHIP IN PORT BY SCIENTISTS OF THE COASTAL STATE CONCERNED WILL BE ACCEPTABLE*

Yes

b) *PARTICIPATION OF AN OBSERVER FROM THE COASTAL STATE FOR ANY PART OF THE CRUISE TOGETHER WITH THE DATES AND PORTS FOR EMBARKATION/DISEMBARKATION*

Yes

c) *WHEN RESEARCH DATA FROM THE INTENDED CRUISE IS LIKELY TO BE MADE AVAILABLE TO THE COASTAL STATE AND BY WHAT MEANS*

3 months - cruise report

PART C: SCIENTIFIC EQUIPMENT

COASTAL STATE: United Kingdom
 PORT CALL: none planned
 DATES:

11. COMPLETE THE FOLLOWING TABLE - SEPARATE PAGE FOR EACH COASTAL STATE
 (indicate "Yes" or "No")

LIST SCIENTIFIC WORK BY FUNCTION e.g. MAGNETOMETRY GRAVITY DIVING SEISMICS BATHYMETRY SEABED SAMPLING TRAWLING ECHO SOUNDING WATER SAMPLING U/W TV MOORED INSTRUMENTS TOWED INSTRUMENTS	FISHERIES RESEARCH WITHIN FISHING LIMITS	RESEARCH CONCERNING CONTINENTAL SHELF TO COASTAL STATE'S MARGIN	DISTANCE FROM COAST		
			0 - 3 NM	3 - 12 NM	12 - 200 NM
Seabed sampling	No	No	Yes	Yes	Yes
3.5 kHz echo sampling	No	No	Yes	Yes	Yes
Water sampling	No	No	Yes	Yes	Yes
CTD	No	No	Yes	Yes	Yes

(On behalf of the Principal Scientist)

Dated 25th March 2003

N.B. 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.