# NOTIFICATION OF PROPOSED RESEARCH CRUISE

# PART A: GENERAL

1.	NAME OF RESEARCH SH	<u>ip:</u> "G.	.O.SARS"	<u>CRUISE NO.</u> 2006117		
2.	DATES OF CRUISE	From:	Nov. 20 - 2006	To: Dec. 04. 2006		
3.	OPERATING AUTHORITY:		Institute of Marine Research P.O.Box 1870 Nordnes N-5817 BERGEN NORWAY			
	<u>TELEPHONE:</u> <u>TELEFAX :</u> <u>TELEX:</u>		47-55238500 47-55238531 42297 OCEAN I	Ν		
4.	OWNER (if different from no. 3)					
5. <u>PARTICULARS OF SHIP:</u> Name: "G.O. SARS"						
			Nationality: Norwegian			
			Overall length: 77.5 metres			
			Maximum draught: 7.30 metres			
			GRT: 4067 tonnes			
			Propulsion: DC-Electric			
			Call sign: LME	L		
			Registration port and number (if registered fishing vessel): Bergen			
			Telephone:	+47 55906440 +47 55906441		
			E-mail:	GOSars@IMR.no		
6.	CREW		Name of master: John Hugo Johnsen/Preben Vindenes			
			Number of crew: 15			

7.	SCIENTIFIC PERSONNEL	Name and adress of scientist in charge:	Haflidi Haflidason University of Bergen Allegt. 41 N-5007 BERGEN NORWAY	
		Tel/telex/fax no.:	(47)55583501/3600/(47)55583660	
		No. of scientists:	10	

8. <u>GEOGRAPHICAL AREA IN WHICH SHIP WILL OPERATE</u> (with reference to latitude and longitude)
Central and Northern North Sea Outline:
56<sup>0</sup>00N, 2<sup>0</sup> 0 W
56<sup>0</sup>00N, 5<sup>0</sup> E (Norwegian coast)
62<sup>0</sup>00N, 0<sup>0</sup> E
62<sup>0</sup>30N, 5<sup>0</sup> E (Norwegian coast)

### 9. BRIEF DESCRIPTION OF PURPOSE OF CRUISE

Marine geological survey including, TOPAS (3-6 kHz) high-resolution hull-mounted instrument for profiling, EM1002 for multibeam, piston coring (Calypso) and single mini air gun. The survey will be concentrated around the Fladen area in the central North Sea and the northgoing area along the sector boundary for studying the last glaciation and the deglaciation history of the North Sea area.

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

In case of bad weather conditions - Peterhead, otherwise no port call is planned

### 11. <u>ANY SPECIAL REQUIREMENTS AT PORTS OF CALL</u>

### NOTIFICATION OF PROPOSED RESEARCH CRUISE

PART B: DETAIL

# 1. <u>NAME OF RESEARCH SHIP:</u> "G.O. SARS"

#### <u>CRUISE NO.</u> 2006117

2. DATES OF CRUISE From: Nov. 20 - 2006

To: Dec. 04. 2006

### 3. a) <u>PURPOSE OF RESEARCH</u>

Marine geological survey for studying the last glaciation and the deglaciation history of the North Sea

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

Calypso piston corer (22 m long) EM1002 Multibeam (hull mounted) TOPAS parametric array (hull mounted) Single mini-air gun (20-40 cinch) and mini streamer (150 m)

- 4. <u>ATTACH CHART</u> showing (on an <u>appropriate</u> scale) the geographical area of intended work, The attached chart shows location of older sparker array lines. Thick outline shows area of interest for the cruise.
- 5. a)<u>TYPES OF SAMPLES REQUIRED</u> (e.g., geological/water/plankton/fish/radionuclide.

geological

b) <u>METHODS OF OBTAINING SAMPLES</u> (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)

*Shallow seismic*: single mini air-gun (20-40 cinch) and mini hydrophone cable to be towed 50-150 m behind the ship.

Coring: Calypso piston coring (15-20 m) at stations in the central North Sea

### 6. <u>DETAILS OF MOORED EQUIPMENT</u>

Dates Laying Recovery

Description Depth

Latitude

Longitude

ANY HAZARDOUS MATERIALS (chemicals/explosives/gases/radioactives, etc. (Use separate sheet if necessary)
 a) Type and trade name
 NIL

b) <u>Chemical content (and formula)</u> NIL

- c) IMO IMDG code (reference and UN no.) NIL
- d) Quantity and method of storage on board NIL
- e) <u>If explosives</u> 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. <u>DETAIL AND REFERENCE OF</u> a) Any relevant previous/future cruises

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

- Sejrup, H.P.; Haflidason, H.; Aarseth, I.; King, E.; Forsberg, C.F., Long, D. and Rokoengen, K. 1994. Late Weichselian glaciation history of the northern North Sea. <u>Boreas 23</u>, 1-13.
- Sejrup, H.P., Aarseth, I., Haflidason, H., Løvlie, R., Bratten, Å., Tjøstheim, G. and Forsberg, C.F. 1995: Quaternary of the Norwegian Channel: Glaciation history and paleoceanography. <u>Norsk Geologisk</u> <u>Tidsskrift 75</u>, 65-87.
- Haflidason, H., King, E.L. and Sejrup, H.P. 1998. Late Weichselian and Holocene sediment fluxes of the northern North Sea Margin. <u>Marine Geology 152</u>, (1-3), 189-215.
- Carr, S., Haflidason, H. and Sejrup, H.P. 2000. Micromorphological evidence supporting Late Weichselian glaciation of the Northern North Sea. <u>Boreas 29</u>, 315-328
- Klitgaard-Kristensen, D., Sejrup, H.P. and Haflidason, H., 2002. Distribution pattern of recent calcareous benthic foraminifera in the northern North Sea and relation to the environment. Polar Research 21, 275-282.
- 9. <u>NAMED AND ADDRESSES OF SCIENTISTS OF THE COASTAL STATE(S) IN WHOSE WATERS</u> <u>THE PROPOSED CRUISE TAKES PLACE WITH WHOM PREVIOUS CONTACT HAS BEEN</u> <u>MADE</u>

Dr. Martyn Stoker, British geoloical Survey, Murchinson House, West Main Road, Edinburgh, EH9 3LA, UK Professor Grant R. Bigg, Department of Geography, University of Sheffield, Winter Street, Sheffield S10 2TN

#### 10. <u>STATE</u>

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

Yes

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

Students and scientists have been invited to join us on the cruise.

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

Report in Norwegian after survey and report to ICES Working group on the assessment of mackerel, horse mackerel, sardine and anchovy in 2005. Report to the ICES Planning Group on Aerial and Acoustic Surveys for Mackerel in 2005.

PART C. SCIENTIFIC EQUIPMENT

Complete the following table	Coastal state:	U.K.
using a separate page for		
each coastal state	Port call:	No

Indicate "YES or "NO"

				Distance from coast		
List scientific work by function 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 characteris- tics	Within 4 n.mi.	Between 4-12 n.mi.	Between 12 and 200 n.mi.
Mini Air gun	No	No	No	No	No	yes
Echo sounding/TOPAS	No	No	No	No	No	Yes
Sediment sampling	No	No	No	No	No	Yes

Beate E. Gardal (On behalf of the Principal Scientist)

HAVFORSKNINGSINSTITUTTET INSTITUTE OF MARINE RESEARCH Rederiseksjonen / Research Vessel Division P.O.Box 1870 Nordnes - N-5817 Bergen - Netway 

Dated 19<sup>th</sup> June 2006

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.

