

NATURAL ENVIRONMENT RESEARCH COUNCIL

APPLICATION FOR CONSENT TO CONDUCT MARINE SCIENTIFIC
RESEARCH IN AREAS UNDER NATIONAL JURISDICTION OF **Iceland**

Date: 06 November – 14 December 2006

1. General information

1.1 Cruise name and/or number: RRS DISCOVERY D313

1.2 Sponsoring institution:

Name: Natural Environment Research Council
Address: Polaris House, North Star Avenue, Swindon SN2 1EU,
UK.
Name of director: Professor Alan Thorpe

1.3 Scientists in charge of the project:

Name: Prof. R.C. Upstill-Goddard
Address: School of Marine Science and Technology,
University of Newcastle upon Tyne, NE1 7RU,
United Kingdom

Telephone: +44 191 222 5065
Telefax: +44 191 222 7891
e-mail: rob.goddard@ncl.ac.uk

1.4 Scientist(s) from Coastal states informed of project planning

Name(s): None
Address:

1.5 Submitting officer:

Name: AR Louch, NERC Research Ship Unit, National
Oceanography Centre, European Way, Empress Dock,
Southampton, SO14 3ZH
Telephone: 02380 596472
Telex: 47121 Telefax: 02380 635130

2. Description of project

2.1 Nature of objectives of the project:

The SOLAS Deep Ocean Gas Exchange Experiment (DOGEE-SOLAS)

The cruise objectives aim to reduce uncertainties in air-sea gas exchange processes by identifying and evaluating the major factors (i.e. wind speed, sea state, white-capping, bubbles, surface slicks and other sea surface turbulence-related phenomena) controlling sea-air gas transfer and related processes.

2.2 Relevant previous or future research cruises:

A second cruise is scheduled for May-June 2007 in the same general oceanic area.

2.3 Previously published research data relating to the project:

3. Methods and means to be used

3.1 Particulars of vessel

Name: RRS Discovery
Nationality: British
Owner: NERC
Operator: RSU
Overall Length: 90.25 metres
Maximum draught: 5.3 metres
Net tonnage: 902 Gross tonnage: 3008
Propulsion: Diesel Electric
Cruising Speed: 11 knots Maximum speed: N/A
Call sign: GLNE
Method of capability of communication (including telex, frequencies):
Inmarsat Voice: 323388210 Fax: 23388212 Telex: 323388314
Name of Master: TBA
Number of Crew: 22
Number of Scientists on board: 28

3.2 Aircraft or other craft to be used in the project:

None

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3.3 Particulars of methods and scientific instruments

Types of samples and data	Methods to be used	Instruments to be used
Biological	Water Bottles, Water Filtration	CTD, Optical sensors
Chemical	Water bottles, continuous underway sampling	CTD, gas chromatographs, mass spectrometer, electrodes, gas sensors
Physical	Surface water pumps, Satellite drifter buoys, wave buoys, atmospheric sampling and meteorology	CTD, wave buoys, meteorological packages, aerosol collectors

3.4 Indicate whether harmful substances will be used: No

3.5 Indicate whether drilling will be carried out: No

3.6 Indicate whether explosives will be used: No

4. Installations and equipment

Details of installations and equipment (dates of laying, servicing, recovery; exact locations and depth):

None

5. Geographical areas

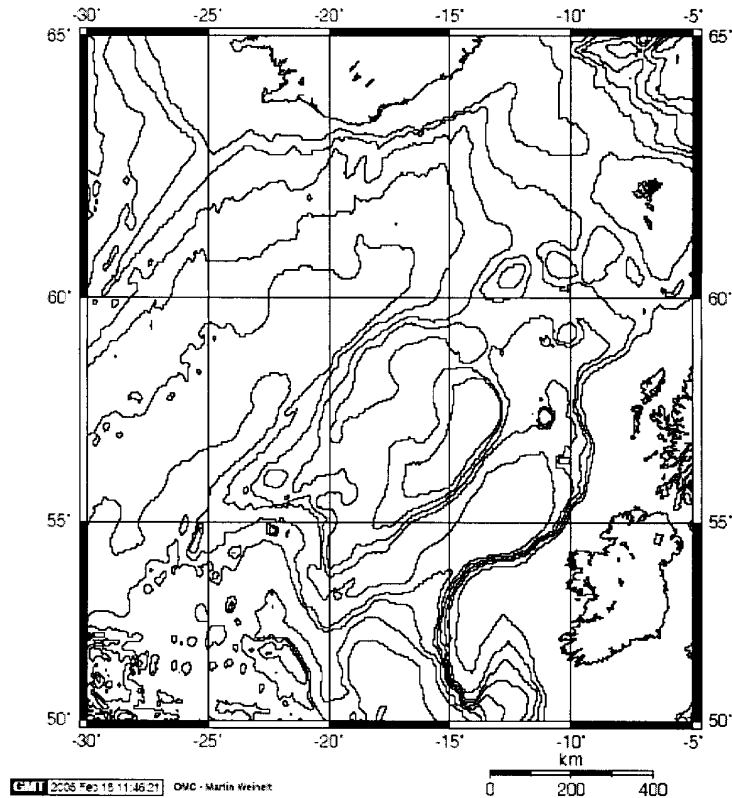
5.1 Indicate geographical areas in which the project is to be conducted (with reference in latitude and longitude):

Latitude 50 °N to 65 °N

Longitude -5 °W to -30 °W

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- 5.2 Attach chart (s) at an appropriate scale showing the geographical areas of the intended work and, as far as practicable, the positions of intended stations, the tracks of survey lines, and the locations of installations and equipment**



6. Dates

- 6.1 Expected dates of first entry into and final departure from research area of the research vessel:**

Expected first entry: 01 November 2006
Expected final departure: 14 December 2006

- 6.2 Indicate if multiple entry is expected:**

Yes

7. Port calls

- 7.1 Dates and names of intended ports of call in Iceland**

None

- 7.2 Any special logistical requirements at ports of call:**

N/A

- 7.3 Name/Address/Telephone of shipping agent (if available)**

8. Participation

8.1 Extent to which Iceland will be enabled to participate or to be represented in the research project:

One berth for an observer from each coastal state is offered in accordance with UNCLOS Art 249 (1a).

8.2 Proposed dates and ports for embarkation/disembarkation:

9. Access to data, samples and research results

9.1 Expected dates of submission to Iceland of preliminary reports which should include the expected dates of submission of the final results:

Preliminary data available at the completion of the cruise
Cruise report completed six months after the completion of the cruise – available from website.

9.2 Proposed means for access by Iceland to data and samples:

By request to Prof. R.C. Upstill-Goddard, School of Marine Science and Technology, University of Newcastle upon Tyne, for oceanographic results (rob.goddard@ncl.ac.uk)

9.3 Proposed means to provide Iceland with assessment of data, samples and research results or provide assistance in their assessment or interpretation:

Cruise reports within 6 months of the completion of the voyage.
For additional information on oceanographic results, contact the Principal Investigator (Prof. R.C. Upstill-Goddard).

9.4 Proposed means of making research results internationally available:

Cruise Report
Results will be published in refereed scientific journals

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10. COMPLETE THE FOLLOWING TABLE - SEPARATE PAGE FOR EACH COASTAL STATE:

COASTAL STATE: Iceland

PORT CALL: None planned

DATES: 06 November - December 2006

SCIENTIFIC EQUIPMENT	INDICATE "YES" OR "NO"				
	Water Column Incl. Sediment Sampling on the Seabed	Fisheries Research within Fishing Limits	Research Concerning the Natural Resources of the Continental Shelf or its Physical Characteristics	Distance from Coast Within 12 NM	12 - 200 NM
List Scientific Work by Function e.g.: Magnetometry Gravity, Diving, Seismic, Bathymetry, Seabed Sampling, Trawling, Echo Sounding, Water Sampling U/W T.V.: Moored and Towed instrument					
Water Sampling	Yes (water column only)	No	No	No	Yes
Atmospheric Sampling	N/A	No	No	No	Yes
Optical Measurements	Yes (water column only)	No	No	No	Yes
Physical sea-state measurements	Yes (water column only)	No	No	No	Yes

.....(On behalf of the Principal Scientist)