

APPLICATION FOR OCEANOGRAPHIC MEASUREMENTS IN THE ECONOMIC ZONE OF GREAT BRITAIN

GENERAL PART A

1. *NAME OF THE SHIP*

"Akademik Ioffe"

2. *DATES OF CRUISE*

From 24 June to 12 July 2003

3. *OPERATION AUTHORITY*

Academy of Sciences of Russia,
P.P. Shirshov Institute of Oceanology,
Nakhimovsky pr., 36.

Tel: (095) 1246196
Tlx: 411968 OKEAN RU
Fax: (095) 124 5983

4. *OWNER (IF DIFFERENT FROM PARA 3)*

5. *PARTICULARS OF SHIP:*

| | |
|------------------|------------------------------------|
| Name: | "Akademik Ioffe" |
| Nationality: | RUSSIA |
| Overall length: | 117.1 m |
| Height: | 41.0 m |
| Maximum draught: | 5.9 metres |
| Net tonnage: | 6600 |
| Propulsion: | PIELSTIK 6 ChMN 40/46, 2 x 2570 kW |
| Call sign: | UAUN |

1. *CREW*

Name of Master: Gennady Poskonny
No. of crew members: 40

2. *SCIENTIFIC PERSONNEL*

Name and address of scientist in charge: Dr. A.V. Sokov, Academy of Sciences of Russia,
P.P. Shirshov Institute of Oceanology,
Nakhimovsky pr., 36,
117851, Moscow, Russia.

Tel: (095) 1246142
Tlx: 411968 OKEAN RU
Fax: (095) 1245983

No. of scientists: 25

3. *GEOGRAPHICAL AREA IN WHICH SHIP WILL OPERATE*
(with reference in latitude and longitude).

Hydrographic section from 59 deg 30'N 5deg 00'W to 59deg 30'N 42deg 50'W

4. *BRIEF DESCRIPTION OF THE PURPOSE OF CRUISE*

The cruise is part of the CLIVAR International program, which is the continuation of the International World Ocean Circulation Program. Specific goals of the cruise are to provide the description of thermohaline ocean structure; to monitor the spatiotemporal changes of transatlantic meridional water and heat transport, to investigate and evaluate the exchange in the northern part of the Atlantic Ocean.

5. *DATES AND NAMES OF PLANNED PORTS OF CALL*

| | | |
|------------|---------------|---------------------------|
| Departure: | 24 June, 2003 | Kaliningrad (Russia) |
| Arrival: | 12 July, 2003 | Kangerluarsuk (Greenland) |

6. *ANY SPECIAL LOGISTIC REQUIREMENTS AT PORT OF CALL*

None

GENERAL PART B

1. NAME OF THE SHIP

"Akademik Ioffe"

2. DATES OF CRUISE

From 24 June to 12 July 2003

3. TIME OF WORK WITHIN THE EXCLUSIVE ECONOMICAL ZONE OF GREAT BRITAIN

From 28 June to 03 July 2003-05-12

The ship enters the economical zone of Great Britain on 28 June 2003 at 00:00 GMT in co-ordinates 59deg 30'N, 5deg 00'W.

The ship makes 16 hydrographic stations according to the list of stations.

The final station is located at 59deg 30'N, 19deg 00'W.

After the final station, the ship goes on to continue the transatlantic section.

1. PURPOSE OF RESEARCH AND GENERAL OPERATIONAL METHODS

The research work will be carried out by the P.P. Shirshov Institute of Oceanology, Russian Academy of Sciences. The cruise is financed by the Ministry of Science and Technology of Russia. The cruise is part of the International Climate Variability Program (CLIVAR). Specific goals of the cruise are to provide the description of thermohaline ocean structure; to monitor the spatiotemporal changes of transatlantic and meridional water and heat transport.

The operational methods to be used for the research include measurements of ocean water physical (temperature, salinity) and chemical (oxygen, nutrients) properties at hydrographic stations. The full depth vertical profiles of temperature and salinity will be obtained by profiling with oceanographic CTD (conductivity/temperature/depth) instrument. The chemical properties will result from on board analyses of water samples collected at specified levels by deployment of a 12 bottle rosette. The measurements are made without touching the bottom.

2. A CHART SHOWING (ON AN APPROPRIATE SCALE) THE GEOGRAPHICAL AREA OF THE WORK AND POSITIONS OF PLANNED STATION

Attached. The navigation is performed by means of the GPS satellite navigation system.

The position of hydrographic stations within the exclusive economical zone of Great Britain:

59deg 30'N 05deg 00'W; 59deg 30'N 05deg 30'W; 59deg 30'N 06deg 00'W;
59deg 30'N 07deg 00'W; 59deg 30'N 08deg 00'W; 59deg 30'N 09deg 00'W;
59deg 30'N 10deg 00'W; 59deg 30'N 11deg 00'W; 59deg 30'N 12deg 00'W;
59deg 30'N 13deg 00'W; 59deg 30'N 14deg 00'W; 59deg 30'N 15deg 00'W;
59deg 30'N 16deg 00'W; 59deg 30'N 17deg 00'W; 59deg 30'N 18deg 00'W;
59deg 30'N 19deg 00'W.

The measurements at these stations will be carried out from 28 June to 03 July 2003.

3. TYPE OF SAMPLES REQUIRED AND METHODS BY WHICH SAMPLES WILL BE OBTAINED

Only seawater samples are required for salinity, oxygen and nutrients analyses. The water samples will be taken from selected pressure levels using bottles mounted on a rosette. The measurements are made without touching the sea bottom.

4. *DETAILS OF MOORED EQUIPMENT*

No equipment will be moored during the cruise.

5. *EXPLOSIVES*

None

6. *RADIOACTIVE COMPOUNDS*

None

7. *STATE:*

- (a) *Whether visits to the ship in port by scientists of the coastal state concerned will be acceptable*

Yes

- (b) *Whether it will be acceptable to carry on board an observer from the coastal state for any part of the cruise and dates and ports of embarkation/disembarkation*

Yes. Any ports and dates mentioned in para 10 of Part A are acceptable

- (c) *When research data from intended cruise are likely to be made available to the coastal state and, if so, by what means*

The raw data can be made available after the end of the cruise from the chief scientist by means of the internet

SCIENTIFIC EQUIPMENT

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

| | | | DISTANCE FROM COAST | | | |
|--|-----------------------|----------------------|---------------------|-----------------|------------------|-------------------|
| LIST OF ALL MAJOR MARINE EQUIPMENT PLANNED TO USE AND INDICATE WATERS IN WHICH IT WILL BE DEPLOYED | WITHIN FISHING LIMITS | ON CONTINENTAL SHELF | WITHIN 3 NM | BETWEEN 3-12 NM | BETWEEN 12-50 NM | BETWEEN 50-200 NM |
| Neil Brown Mark III CTD | Yes | Yes | No | No | No | Yes |
| General Oceanics rosette system 12 bottles-1.5J | Yes | Yes | No | No | No | Yes |

(On behalf of the Principal Scientist)

Dated

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.