

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 June 16, 2008 to July 07, 2008
3. Operation Authority Academy of Sciences of Russia,  
P.P. Shirshov Institute of Oceanology  
Nakhimovsky pr., 36  
Telephone (095) 1246196 Telex 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 m
Maximum draught	5.9 meters
Net tonnage	6600
Engine	PIELSTIK 6 ChMN 40/46, 2 x 2576 kW
6. Crew

Name of Master	G. Poskonny
Number of crew members	42
7. Scientific Personnel

Name and address of the scientist in charge	Dr. A.V. Sokov, Academy of Sciences of Russia, P.P. Shirshov Institute of Oceanology, Nakhimovsky pr., 36, 117997, Moscow, Russia
Tel/telex	(095) 124 6142/ 411968 OKEAN RU
Fax	(095) 124 5983
No. of scientists	25
8. Geographical area in which ship will operate (with reference in latitude and longitude).  
Hydrographic section from 59°30' N 04°36' W to 59°55' N 42°30' W.
9. Brief description of purpose of cruise  
The cruise is a 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.
10. Dates and names of planned ports of call.

Departure: June 16, 2008	Szczecin (Poland).
Arrival: July 07, 2008	St. John (Canada).
11. Any special logistic requirements at port of call .....NONE

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**GENERAL**

**Part B**

1. Name of the ship                    **“Akademik Ioffe”**
2. Dates of cruise                   **From June 16, 2008 to July 07, 2008**
3. Time of work within the exclusive economical zone of Great Britain: **from June 17, 2008 to June 27, 2008**

The ship enters the economical zone of Great Britain on June 17, 2008 at 00:00 GMT in co-ordinates 60° N, 2° E. The ship makes 21 hydrographic stations according to the list of stations. The final station is located at 59°30' N, 18°00'W. After the final station the ship goes to continue the section in the open ocean.

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 Economical Development of Russia. The cruise is a 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 24-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 stations is 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:

Longitude	Latitude
04°36 W	59°30 N
05°15 W	59°30 N
06°00 W	59°30 N
06°40 W	59°30 N
07°20 W	59°30 N
08°00 W	59°30 N
08°40 W	59°30 N
09°20 W	59°30 N
10°00 W	59°30 N
10°40 W	59°30 N
11°20 W	59°30 N
12°00 W	59°30 N
12°40 W	59°30 N
13°20 W	59°30 N
14°00 W	59°30 N
14°40 W	59°30 N
15°20 W	59°30 N
16°00 W	59°30 N
16°40 W	59°30 N
17°20 W	59°30 N
18°00 W	59°30 N

The measurements at these stations will be carried out from June 17, 2008 to June 27, 2008.

3. Type of samples required, and methods by which samples will be obtained.

Only seawater samples are required for salinity, oxygen, and nutrient 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 is likely to be made available to the coastal state and if so by what means.

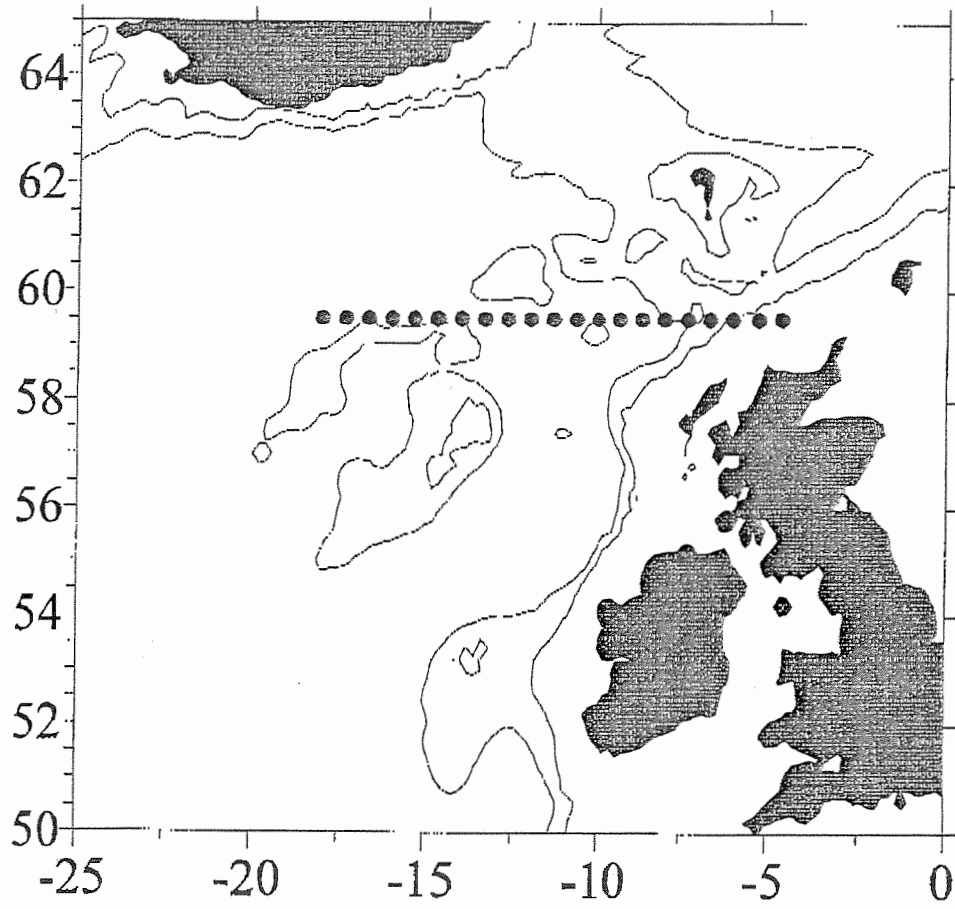
The raw data can be made available after the end of the cruise from the chief scientist by means of the INTERNET.

SCIENTIFIC EQUIPMENT.

11. Complete the following table - SEPARATELY COPY FOR EACH COASTAL STATE.

(INDICATE "YES" OR "NO")

List of all Major Marine equipment planned to use and indicate waters in which it will be deployed	Within Fishing Limits	On Continental Shelf	DISTANCE FROM COAST			
			Within 3 NM	Between 3-12 NM	Between 12-50 NM	Between 50-200 NM
Sea-Bird 911 with Niskin bottles for water sampling	YES	YES	NO	NO	YES	YES
SBE 32 rosette system 24 bottles - 5l	YES	YES	NO	NO	YES	YES
300 kHz Workhorse Sentinel ADCPs	YES	YES	NO	NO	YES	YES



The chart of the station location in the Great Britain economic zone