

**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 25, 2007 to July 18, 2007**
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 **3.9 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 **Dr. A.V. Sokov, Academy of Sciences
the scientist in charge 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°53' N 42°16' 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 25, 2007 Kaliningrad (Russia).
 Arrival: July 18, 2007 Iqualit (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 25, 2007 to July 18, 2007
3. Time of work within the exclusive economical zone of Great Britain: from June 30, 2007 to July 10, 2007

The ship enters the economical zone of Great Britain on June 30, 2007 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 30, 2007 to July 10, 2007.

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.

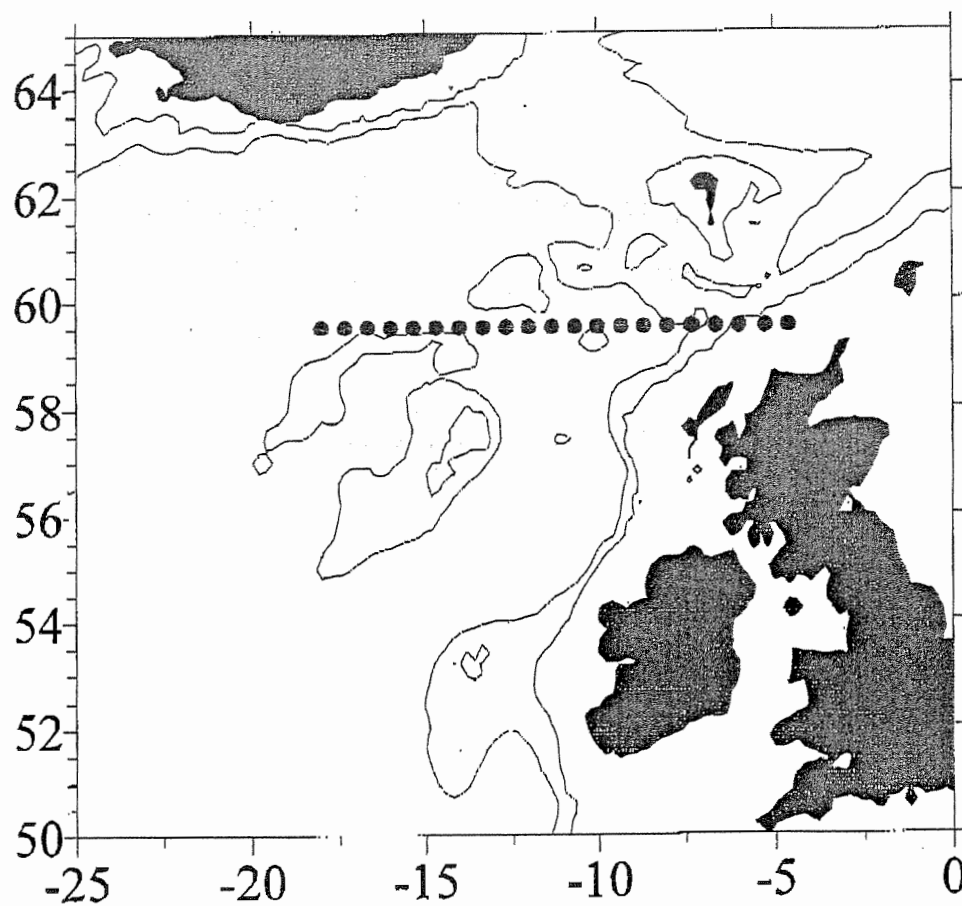
The raw data can be made available after the end of the cruise from the chief scientist by means of the INTERNET.

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	YES	YES	NO	NO	YES	YES
24 bottles - 5l						
300 kHz Workhorse Sentinel ADCP	YES	YES	NO	NO	YES	YES



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