PART A: GENERAL

1. NAME OF RESEARCH SHIP CRUISE NO. **RV POLARSTERN** ARK XXIII/3

2. **DATES OF CRUISE**

From

To

12.08.2008

19.10.2008

3. **OPERATING AUTHORITY:**

Stiftung Alfred-Wegener-Institut für Polar-und Meeresforschung Postfach 12 01 61

D-27515 Bremerhaven

TELEPHONE:

0049 471 4831-0

TELEFAX:

0049 471 4831 1355

TELEX:

238 695 polar d

4. OWNER (if different from no. 3)

5. PARTICULARS OF SHIP:

Name:

POLARSTERN

Nationality: Overall length: (in metres) Maximum draught: (in metres)

GERMAN 117,91 11,21

Net tonnage:

3.532,30 diesel **DBLK**

Propulsion e.g. diesel/steam: Call sign:

Registration port and number

(if registered fishing vessel)

6. **CREW**

Name of master:

Stefan Schwarze

Number of crew:

43

7. **SCIENTIFIC PERSONNEL**

Name and address of scientist in charge:

Dr. Wilfried Jokat

Alfred-Wegener-Institut für Polar- und Meeresforschung

D-27515 Bremerhaven

Tel/telex/fax no.:

+49-471-4831-1211/ ... /+49-471-4831-1149

No. of scientists:

55

8. GEOGRAPHICAL AREA IN WHICH SHIP WILL OPERATE (with reference to latitude and longitude)

Transit through the Icelandic Exclusive Economic Zone

9. BRIEF DESCRIPTION OF PURPOSE OF CRUISE

> The cruise will start in Reykjavik. Here, all ship sensors like gravity, magnetics will be switched on. Then the ship will transit either towards South East or North East Greenland, without conducting any station work in the Icelandic EEZ. The shipborne sensors (Gravity, magnetics, bathymetry, Parasound, ADCP) will run during this transit to gather continuously data.

DATES AND NAMES OF INTENDED PORTS OF CALL 10.

The ship will leave Reykjavik at 12. August 2008

ANY SPECIAL REQUIREMENTS AT PORTS OF CALL Change of personnel, logistics.

D:\Logistik\Diplo\ARKXXIII\Fahrtabschnitt3\Island\Antrag-AA-ARK-XXIII-3-Iceland-080211.doc

1. PART B: DETAILS

1. NAME OF RESEARCH SHIP RV POLARSTERN

CRUISE NO.
ARK XXIII/3

2. DATES OF CRUISE

From

To

12.08.2008

19.10.2008

3. a) PURPOSE OF RESEARCH

<u>Bathymetry:</u> Gather new data during the transit through the Icelandic EEZ. <u>Marine Geophysics</u>: Acquire magnetic and gravity data during transit

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

To record data by acoustic devices (e.g. Hydrosweep, Parasound) To record gravity and magnetic data

4. <u>ATTACH CHART</u> showing (on an <u>appropriate</u> scale) the geographical area of intended work, positions of intended stations, tracks of survey lines, positions of moored/seabed equipment, areas to be fished

No chart attached, since the exact transit route is not known. The ship will transit either towards South East or North East Greenland, without conducting any station work in the Icelandic EEZ.

5. a) TYPES OF SAMPLES REQUIRED (e.g., geological/water/plankton/fish/radionuclide)

None,

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).

Hydrosweep, Echosounder 3.5 KHz Gravity and magnetic data

6. <u>DETAILS OF MOORINGS</u> no moorings

Dates Laying Recovery

Description

Depth

<u>Latitude</u>

Longitude

7. <u>ANY HAZARDOUS MATERIALS</u> (chemicals/explosives/gases/radioactives, etc.) (Use separate sheet if necessary)

None-

- a) Type and trade name
- b) Chemical content (and formula)
- c) IMO IMDG code (reference and UN no.)d) Quantity and method of storage on board
- e) If explosives give dates of detonation

no explosives

- 8. <u>DETAIL AND REFERENCE OF</u>
 - a) Any relevant previous/future cruises

Previous:

Future cruises are planned.

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

All cruise reports with detailed station lists are published in the series "Reports on Polar Research" by Alfred-Wegener-Institute for Polar-und Marine Research, Bremerhaven.

9. NAMES AND ADDRESSES OF SCIENTISTS OF THE COASTAL STATE(S) IN WHOSE WATERS THE PROPOSED CRUISE TAKES PLACE WITH WHOM PREVIOUS CONTACT HAS BEEN MADE

None

- 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) Participation of an observer from the coastal state for any part of the cruise together with the dates and the ports for embarkation and disembarkation

Yes, see dates above.

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

Data are available digitally within one year after the cruise. In addition, the data are published in the Reports of Polar Research by AWI and in other reports, papers and in international scientific journals.

Complete the following table using a separate page for

Coastal state

Iceland

each coastal state

Port of call

Reykjavik

Dates

10. to 12.08.2008

Indicate "YES" or "NO"

				DISTANCE FROM COAST		
List scientific work by function e.g.	Water column including sediment sampling of the seabed	Fisheries research within fishing limits	Research concerning the natural resources of the conti- nental shelf or its physical characteris- tics	Within 4 nm	Between 4-12 nm	Between 12-200 nm
Magnetometry	no	no	yes	yes	yes	yes
Gravity	no	no	yes	yes	yes	yes
Diving	no	no	.no	no	no	no
Seismics	no	no	no	no	no	no
Seabed sampling	no	no	no	no	no	no
Bathymetry	yes	no	yes	yes	yes	yes
Echo sounding	yes	no	yes	yes	yes	yes
Water sampling	no	no	no	no	no	no
Trawling	no	no	no	no	no	no
Moored instr.	no	no	no	no	no	no
Air sampling	no	no	no	no	no	no
Water sampling	no	no	no	no	no	no
Sea-ice sampling	no	no	no	no	no	no
Snow sampling	no	no	no	no	no	no

Alfred-Wegener-Institut für Polar- und Meeresforschung Bereich Logistik

Postfach 120161 D-27515 Bremerhaven

(On behalf of the Principal Scientist)

Dated_

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

 $D. \label{logistik} D. \label{logistik} D. \label{logistik} Logistik \label{logistik} ID-ARKXXIII \label{logistik} The abschmitt \label{logistik} All \label{logistik} All \label{logistik} Logistik \label{logistik} \label{logistik} D. \label{logistik} Logistik \labellih \labella \labella \labella \labella \labella \labella \lab$

PART A: GENERAL

1. NAME OF RESEARCH SHIP CRUISE NO. RV POLARSTERN ARK XXIII/2

2. DATES OF CRUISE

From 04.07.2008 To 10.08.2008

3. **OPERATING AUTHORITY:**

Stiftung Alfred-Wegener-Institut für Polar-und Meeresforschung Postfach 12 01 61 D-27515 Bremerhaven

TELEPHONE: TELEFAX: TELEX:

0049 471 4831-0 0049 471 4831 1355 238 695 polar d

4. OWNER (if different from no. 3)

5. PARTICULARS OF SHIP:

Name:

POLARSTERN

Nationality: Overall length: (in metres) **GERMAN** 117.91

Maximum draught: (in metres) Net tonnage:

11.21 3532.30

Propulsion e.g. diesel/steam:

diesel DBLK

Call sign: Registration port and number (if

registered fishing vessel)

6. **CREW**

Name of master:

Uwe Pahl

Number of crew:

44

7. SCIENTIFIC PERSONNEL

Name and address of scientist in charge: Prof. Dr. Gerhard Kattner

Alfred-Wegener-Institut für Polar- und Meeresforschung

D-27515 Bremerhaven 0049 471 4831 -1490/2115

Tel/telex/fax no.:

No. of scientists:

GEOGRAPHICAL AREA IN WHICH SHIP WILL OPERATE (with reference to latitude and 8. longitude)

71° N, 24° W

82° N, 15°E, see also map attached (attachement 1)

9. BRIEF DESCRIPTION OF PURPOSE OF CRUISE

> The main aim of the research is to study the in- and outflow of water masses in Fram Strait, in the East Greenland Current and on the shelf as well as to perform geodetic work on Greenland. Benthic research will be done off Svalbard in the area of the Molloy Deep, the so-called "Hausgarten". The work carried out during the cruise includes mooring recoveries and deployments. All research is part of ongoing studies within an international framework. The studies are part of the activities during the International Polar Year.

There will be no research activities in Icelandic waters (EEZ).

10. DATES AND NAMES OF INTENDED PORTS OF CALL

> The ship will call Longyearbyen/Svalbard, 02. to 04.07.2008 and Reykjavik, Iceland, 10. to 12.08.2008

11. ANY SPECIAL REQUIREMENTS AT PORTS OF CALL

none

PART B: DETAILS

1. NAME OF RESEARCH SHIP RV POLARSTERN

CRUISE NO. ARK XXIII/2

2. <u>DATES OF CRUISE</u>

From **04.07.2008**

To **10.08.2008**

3. a) PURPOSE OF RESEARCH

Physical Oceanography: To study the circulation in the ocean and the fresh water and heat exchange between the Nordic Sea and the Arctic Ocean by measuring ocean velocity, temperature, pressure and salinity by moored instruments which will be deployed and recovered

To measure water temperature, velocity and salinity profiles and to collect water samples in the water column using a CTD/Rosette sampler.

Marine biochemistry: To study the nutrient, phytoplankton and tracer distrubution.

Biology: To extend time-series sampling and observations at the deep-sea long-term observatory HAUSGARTEN in the eastern Fram Strait.

To carry out multi-disciplinary ecological investigations at a deep-sea site in relation to Global Change.

Sediment sampling with multiple corer and box corer, respectively.

Determination of fluxes of particulate matter to the seafloor using sediment traps.

Measurements of carbon remineralisation rates by the benthic community using a free-falling device. Photo/Video surveys with a towed camera system to assess large-scale distribution patterns of the benthic epi/megafauna.

Geophysics: To study the micro seismic.

Geodetics: To study the vertical movement of the Greenland continent.

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

Measure water properties like temperature, salinity, oxygen, velocity, optical properties, chemical constituents, plankton content. Use optical devices.

Collect water, snow, ice, benthic material.

Record data by acoustic devices (e.g. Hydrosweep, ADCP)

Recover and deploy moorings.

Deploy AUV for the measurment of physical water properties (recovery during succeeding cruise leg). Collect water, zooplankton, settling particulate matter, sediments, benthic organisms

Set up and recover GPS-receivers on Greenland by helicopter.

4. <u>ATTACH CHART</u> showing (on an <u>appropriate</u> scale) the geographical area of intended work, positions of intended stations, tracks of survey lines, positions of moored/seabed equipment, areas to be fished

Areas of planned operations see attachment 1. The GPS stations need to be located on rocky ground, and their exact position has therefore to be determined according to the actual conditions during the expedition.

- a) TYPES OF SAMPLES REQUIRED (e.g., geological/water/plankton/fish/radionuclide)
- 5. Water, snow and ice, current measurements, plankton, benthic organisms.
 - 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).

CTD with rosette sampler, thermistor chain, ontrack water sampling, ADCP, XBT, AUV, plankton net and moorings.

Methods by which samples will be obtained include dredging / coring / drilling.

Use of Niskin bottles, sediment traps, multiple corer, box corer, towed camera systems, incubation chambers in a free-falling device, Multinet, Bongo net.

Set up and recovery of GPS-receivers by helicopter.

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

Dates Laving Recovery

Description

Depth

<u>Latitude</u>

Longitude

see attachment 2

7. ANY HAZARDOUS MATERIALS (chemicals/explosives/gases/radioactives, etc.) (see attachment 3)

a) Type and trade name

b) Chemical content (and formula)

c) IMO IMDG code (reference and UN no.)

d) Quantity and method of storage on board

e) If explosives give dates of detonation

no explosives

Method of detonation

Position of detonation

Position of detonation

Frequency of detonation

Depth of detonation

Size of explosive charge in kg.

8. **DETAIL AND REFERENCE OF**

a) Any relevant previous/future cruises

Previous:

Yearly POLARSTERN cruise beginning in 1991

LANCE-6-97

23.08.-17.09.1997

POLARSTERN ARK XVII/1

19.06.-24.07.2001

POLARSTERN ARK XIX/1

28.02.-24.04.2003

POLARSTERN ARK XIX/4

10.08.-13.10.2003

POLARSTERN ARK XXI/1-a 13.08 - 19.09.2005

MARIA S. MERIAN MSMO2/4 20.08,-15.09.2006

Future cruises are planned.

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

All cruise reports with detailed station lists are published in the series "Reports on Polar and Marine Research" by Alfred Wegener Institute for Polar and Marine Research, Bremerhaven.

NAMES AND ADDRESSES OF SCIENTISTS OF THE COASTAL STATE(S) IN WHOSE WATERS 9. THE PROPOSED CRUISE TAKES PLACE WITH WHOM PREVIOUS CONTACT HAS BEEN MADE

10. **STATE**

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

Yes

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

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

Data are available digitally within one year after the cruise. In addition, the data are published in the Reports of Polar Research by AWI and in other reports, papers and in international scientific journals.

Complete the following table using a separate page for

Coastal state

Iceland

each coastal state

Port of call

Reykjavik

Dates

10. to 12.08.2008

Indicate "YES" or "NO"

1		·	,	DIST	OAST	
e.g.	Water column including sediment sampling of the seabed	research within fishing limits	natural resources of the conti-nental shelf or its physical characteristics	MANAGEMENT TO THE PROPERTY OF	Between 3-12 nm	Between 12-200 nm
Magnetometry	no	no	no			
Gravity	no	no	no	William Programme	DOMESTIC PROPERTY.	
Diving	no	no	no			
Seismics	no	no	no	er e volume reaction de de		
Bathymetry	no	no	no	no	no	no
Echo sounding	no	no	no	no	no	no
Water sampling	no	no	no	no	no	no
U/W TV	no	no	no	no	no	no
Net sampling	no	no	no	no	no	no
Multi and box corer	no	no	no	no	no	no
Bottom trawl	no	no	no	no	no	no
Moored instr.	no	no	no	no	no	no
Towed instr.	no	no	no	no	no	no
peach sampling	no	no	no	no	no	no

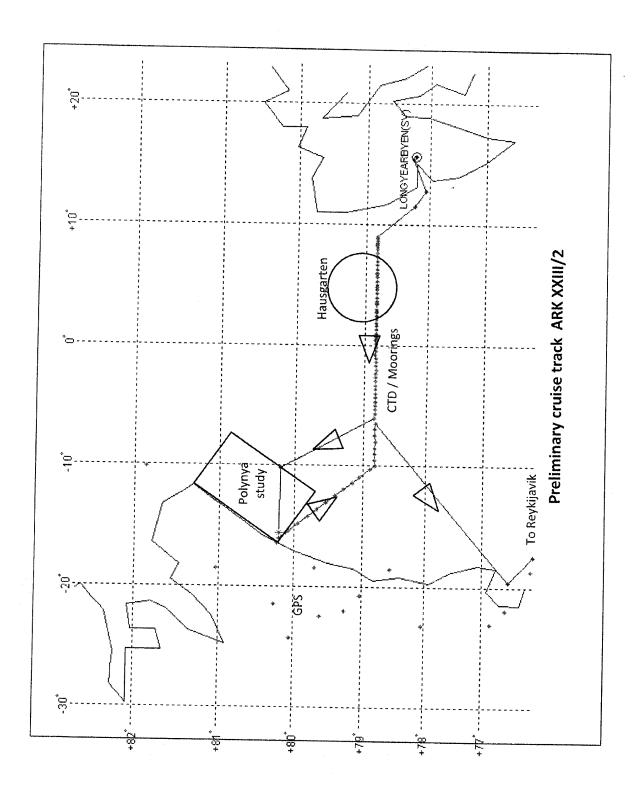
Alfred-Wegener-Institut für Polar- und Meeresforschung Bereich Logistik Postfach 120161

D-27515 Bremerhaven

(On behalf of the Principal Scientist)

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



Attachment 2: Planned exchange of moorings during ARKXXIII/2 in 2008

Mooring	Latitude Longitude	Water depth (m)	Description	Activity
F1-10	78°50.03'N	245	standard mooring	recovery/
	008°40.46'E		(CMs, TS sensors)	deployment
F2-11	78°50.09'N	782	standard mooring	recovery/
	008°19.76'E		(CMs, TS sensors)	deployment
	78°50.50' N	775	Pressure Inverted	recovery/
PIES-F2-11	008°19.52' E	775	Echo Sounder	deployment
F3-10	78°50.02'N	1012	standard mooring	recovery/
,	008°00.03'N		(CMs, TS sensors)	deployment
F4-10	78°50.06'N	1432	standard mooring	recovery/
	006°59.84'E		with modem	deployment
DIEG 71.40	78°50.184'N	1407	Pressure Inverted	recovery/
PIES-F4-10	006°59.706'E	1427	Echo Sounder	deployment
F5-9	78°50.05'N	2412	standard mooring	recovery/
	006°00.02'E		with modem	deployment
	78°49.9' N	0446	Pressure Inverted	recovery/
PIES-F5-10	005°56.3' E	2446	Echo Sounder	deployment
F6-11	78°50.02'N	2644	standard mooring	recovery/
1011	005°00.14'E		with modem	deployment
F20-1	*max. 1 Nm		CTD profiler,	
(yo-yo	from F6-11	2650	underwater winch,	deployment
communicatio	(78°50'N	ca. 2650	modem	
n mooring)	05°00'E)			
	78°50.1'N	2526	Pressure Inverted	recovery/
PIES-F6-11	004°54.1'E	2586	Echo Sounder	deployment
F7-9	78°50.02'N	2298	standard mooring	recovery/
1,,	004°00.02'E		(CMs, TS sensors)	deployment
	78°49.9'N	2225	Pressure Inverted	recovery/
PIES-F7-9	003°56,8'E	2287	Echo Sounder	deployment
F8-10	78°49.98'N	2445	standard mooring	recovery/
1010	002°48.04'E		(CMs, TS sensors)	deployment
_	78°50.0'N	0.400	Pressure Inverted	recovery/
PIES-F8-10	002°50.8'E	2433	Echo Sounder	deployment
F15-6	78°49.96'N	2496	standard mooring	recovery/
1100	001°36.27'E		(CMs, TS sensors)	deployment
F16-6	78°49.94'N	2533	standard mooring	recovery/
	000°32.40'E		(CMs, TS sensors)	deployment
F9-9	78°50.34'N	2614	standard mooring	recovery/
	000°48.64'W		(CMs, TS sensors)	deployment
F10-10	78°49.26'N	2669	standard mooring	recovery/
110-10	002°02.99'W		(CMs, TS sensors)	deployment
Seaglider SN127	at the West Spitsbergen slope	ca. 1000	AUV	recovery
	(ca 78°40'N)			

Description	Latitute	Longitude	Depth	Deployment	Recovery
FEVI-15	78°34.81' N	05°02.81′ E	2286 m	July 2007	July 2008
FEVI-16	79°00.82' N	04°20.62' E	2589 m	July 2007	July 2008
FEVI-17	79°43.79' N	04°28.10′ E	2695 m	July 2007	July 2008
FEVI-18	78°34.81' N	05°02.81' E	2286 m	July 2008	July 2009
FEVI-19	79°00.82' N	04°20.62' E	2589 m	July 2008	July 2009
FEVI-20	79°43.79' N	04°28.10' E	2695 m	July 2008	•
Lander I	79°05.09' N	04°09.08' E	2456 m	July 2007	July 2009
Lander II	79°05.09' N	04°09.08' E	2457 m	•	July 2008
FLUME-5	78°36.44' N	05°04.62' E		July 2008	July 2009
FLUME-6	78°36.44' N	05°04.62' E	2350 m	July 2007	July 2008
[2350 m	July 2008	July 2009
	79°04.60' N	04°07.90' E	2456 m	July 2008	July 2009

^{*} the accurate position will be decided on the spot

Attachment 3

Dangerous goods

No.	Name	IMO Class	UN Code	Amount*
1	Sulphuric acid, conz	8	1830	4 L
2	Sulphuric acid, 60%	8	1830	2.5 L
3	Sodium hydroxide	8	1823	0.15 kg
4	Potassium hydroxide	8	1813	0.15 kg
5	Sodium hydroxide-solution	8	1813	2 L
6	Iron(III)chloride	8	1773	0.003 kg
				0.05 kg
7	Sodium sulphide	8	1849	0.25 kg
8	Hydrochloric acid, 30%	8	1789	6 L
9	Formaldehyde, 37%	8	2209	50 L
10	Ethanol, 99%	3	1170	10 L
11	Ethanol p.A.	3.2	1170	40 L
12	Glutaraldehyde	6	2810	4 L
13	Cacodylic acid sodium cryst.	6	1688	500 g
14	Potassium Hydroxide	8	1813	150 g
15	Ortho phosphoric acid, 85% p.A.	8	1805	6 L
16	Hydrochloric acid, 8%	8	1789	1 L
17	Acetone, 90%	3	1090	30 L
18	Acetone, 100%	3	1090	5 L
19	Mercury chloride, 7%	6.1	1624	78 L
20	Ethylene glycol mono-methyl ether	3.3	1188	0,5 L
21	Methanol	6.1	1230	2,5 L
22	Chloroform	6.1	1593	2,5 L
23	Cadmium	6.1	1593	2,5 L
24	Nitrogen	2.1A	1066	50 kg



Botschaft der Bundesrepublik Deutschland Sendiráð Sambandslýðveldisins Þýskalands

Gz.: Wi 462.24 Polarstern Note No.: 6 / 2008

Verbal Note

The Embassy of the Federal Republic of Germany presents its compliments to the Ministry for Foreign Affairs of the Republic of Iceland and has the honour to communicate the following:

The German Research Vessel "RV Polarstern", call sign: DBLK operated by the "Stiftung Alfred-Wegener-Institut für Polar- und Meeresforschung", intends to call on Reykjavik port in August 2008. The cruise will start in Reykjavík. The ship will transit either towards South East or North West Greenland, without conducting any station work in the Icelandic EEZ.

Cruise-No. ARK XXIII/3 from August 12th to October 19th 2008

Purpose of the cruise:

Transit either towards South East or North East Greenland. The shipborne sensors (Gravity, magnetics, bathymetry, Parasound, ADCP) will run during this transit to gather continuously data.

Compare enclosure.

Intended ports of call:

From 10th to 12th August 2008 at Reykjavik.

The Embassy would be grateful to the Ministry if it could kindly inform the relevant authorities of the Republic of Iceland accordingly, in order to achieve a permission for the port of call in Reykjavik. Details of the vessel's previous cruise No. ARK XXIII/2 from July 4th to August 10th 2008 are enclosed.

The Embassy of the Federal Republic of Germany avails itself of this opportunity to renew to the Ministry for Foreign Affairs of the Republic of Iceland the assurances of its highest consideration.

Reykjavík, February 15th 2008

The Ministry
for Foreign Affairs
of the Republic of Iceland
Reykjavík

L.S.

PART A: GENERAL

NAME OF RESEARCH SHIP CRUISE NO. RV POLARSTERN ARK XXIII/3

2. **DATES OF CRUISE**

From

To

12.08.2008

19.10.2008

3. **OPERATING AUTHORITY:**

Stiftung Alfred-Wegener-Institut für Polar-und Meeresforschung Postfach 12 01 61

D-27515 Bremerhaven

TELEPHONE:

0049 471 4831-0

TELEFAX:

0049 471 4831 1355

TELEX:

238 695 polar d

4. OWNER (if different from no. 3)

5. PARTICULARS OF SHIP:

Name:

POLARSTERN

Nationality:

GERMAN 117,91

Overall length: (in metres) Maximum draught: (in metres)

11,21 3.532,30

Net tonnage: Propulsion e.g. diesel/steam:

diesel

Call sign:

DBLK

Registration port and number (if registered fishing vessel)

6. **CREW**

Name of master:

Stefan Schwarze

Number of crew:

43

7. SCIENTIFIC PERSONNEL

Name and address of scientist in charge:

Dr. Wilfried Jokat

Alfred-Wegener-Institut für Polar- und Meeresforschung

D-27515 Bremerhaven

Tel/telex/fax no.:

+49-471-4831-1211/ ... /+49-471-4831-1149

No. of scientists:

55

8. GEOGRAPHICAL AREA IN WHICH SHIP WILL OPERATE (with reference to latitude and longitude)

Transit through the Icelandic Exclusive Economic Zone

BRIEF DESCRIPTION OF PURPOSE OF CRUISE 9.

> The cruise will start in Reykjavik. Here, all ship sensors like gravity, magnetics will be switched on. Then the ship will transit either towards South East or North East Greenland, without conducting any station work in the Icelandic EEZ. The shipborne sensors (Gravity, magnetics, bathymetry, Parasound, ADCP) will run during this transit to gather continuously data.

10. DATES AND NAMES OF INTENDED PORTS OF CALL

The ship will leave Reykjavik at 12. August 2008

ANY SPECIAL REQUIREMENTS AT PORTS OF CALL Change of personnel, logistics.

1. PART B: DETAILS

1. NAME OF RESEARCH SHIP RV POLARSTERN

CRUISE NO.
ARK XXIII/3

2. DATES OF CRUISE

From

To

12.08.2008

19.10.2008

3. a) PURPOSE OF RESEARCH

<u>Bathymetry:</u> Gather new data during the transit through the Icelandic EEZ. <u>Marine Geophysics</u>: Acquire magnetic and gravity data during transit

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

To record data by acoustic devices (e.g. Hydrosweep, Parasound) To record gravity and magnetic data

4. <u>ATTACH CHART</u> showing (on an <u>appropriate</u> scale) the geographical area of intended work, positions of intended stations, tracks of survey lines, positions of moored/seabed equipment, areas to be fished

No chart attached, since the exact transit route is not known. The ship will transit either towards South East or North East Greenland, without conducting any station work in the Icelandic EEZ.

5. a) TYPES OF SAMPLES REQUIRED (e.g., geological/water/plankton/fish/radionuclide)

None,

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).

Hydrosweep, Echosounder 3.5 KHz Gravity and magnetic data

6. <u>DETAILS OF MOORINGS</u> no moorings

Dates Laying Recovery

Description

Depth

Latitude

Longitude |

- 7. <u>ANY HAZARDOUS MATERIALS</u> (chemicals/explosives/gases/radioactives, etc.) (Use separate sheet if necessary)
 - Nonea) Type and trade name
 - b) Chemical content (and formula)
 - c) IMO IMDG code (reference and UN no.)
 - d) Quantity and method of storage on board
 - e) If explosives give dates of detonation

no explosives

8. <u>DETAIL AND REFERENCE OF</u>

a) Any relevant previous/future cruises

Previous:

Future cruises are planned.

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

All cruise reports with detailed station lists are published in the series "Reports on Polar Research" by Alfred-Wegener-Institute for Polar-und Marine Research, Bremerhaven.

9. NAMES AND ADDRESSES OF SCIENTISTS OF THE COASTAL STATE(S) IN WHOSE WATERS THE PROPOSED CRUISE TAKES PLACE WITH WHOM PREVIOUS CONTACT HAS BEEN MADE

None

- 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) Participation of an observer from the coastal state for any part of the cruise together with the dates and the ports for embarkation and disembarkation

Yes, see dates above.

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

Data are available digitally within one year after the cruise. In addition, the data are published in the Reports of Polar Research by AWI and in other reports, papers and in international scientific journals.

Complete the following table using a separate page for each coastal state

Coastal state

Iceland

Port of call

Reykjavik

Dates

10. to 12.08.2008

Indicate "YES" or "NO"

				DISTANCE FROM COAST		
List scientific work by function e.g.	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 characteristics	Within 4 nm	Between 4-12 nm	Between 12-200 nm
Magnetometry	no	no	yes	yes	yes	yes
Gravity	no	no	yes	yes	yes	yes
Diving	no	no	no	no	no	no
Seismics	no	110	no	no	no	no
Seabed sampling	no	no	no	no	no	no
Bathymetry	yes	no	yes	yes	yes	yes
Echo sounding	yes	no	yes	yes	yes	yes
Water sampling	no	no	no	no	no	no
Trawling	no	no	no	no	no	no
Moored instr.	no	no	no	no	no	no
Air sampling	no	no	no	no	no	no
Water sampling	no	no	no	no	no	no
Sea-ice sampling	no	no	no	no	no	no
Snow sampling	no	no	no	no	no	no

Alfred-Wegener-Institut für Polar- und Meeresforschung Bereich Logistik

Postfach 12 01 61 D-27515 Bremerhaven

Dated 1. 22,6008

(On behalf of the Principal Scientist)

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

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Botschaft der Bundesrepublik Deutschland Sendiráð Sambandslýðveldisins Þýskalands

Gz.: Wi 462.24 Polarstern Note No.: / 2008

Verbal Note

The Embassy of the Federal Republic of Germany presents its compliments to the Ministry for Foreign Affairs of the Republic of Iceland and has the honour to communicate the following:

The German Research Vessel "RV Polarstern", call sign: DBLK operated by the "Stiftung Alfred-Wegener-Institut für Polar- und Meeresforschung", intends to call on Reykjavik port in August 2008. The cruise will start in Reykjavík. The ship will transit either towards South East or North West Greenland, without conducting any station work in the Icelandic EEZ.

Cruise-No. ARK XXIII/3 from August 12th to October 19th 2008

Purpose of the cruise:

Transit either towards South East or North East Greenland. The shipborne sensors (Gravity, magnetics, bathymetry, Parasound, ADCP) will run during this transit to gather continuously data.

Compare enclosure.

Intended ports of call:

From 10th to 12th August 2008 at Reykjavik.

The Embassy would be grateful to the Ministry if it could kindly inform the relevant authorities of the Republic of Iceland accordingly, in order to achieve a permission for the port of call in Reykjavik. Details of the vessel's previous cruise No. ARK XXIII/2 from July 4th to August 10th 2008 are enclosed.

The Embassy of the Federal Republic of Germany avails itself of this opportunity to renew to the Ministry for Foreign Affairs of the Republic of Iceland the assurances of its highest consideration.

Reykjavík, February 15th 2008

The Ministry for Foreign Affairs of the Republic of Iceland Reykjavík

L.S.

PART A: GENERAL

1. NAME OF RESEARCH SHIP
RV POLARSTERN
CRUISE NO.
ARK XXIII/3

2. <u>DATES OF CRUISE</u>

From

То

3. <u>OPERATING AUTHORITY:</u>

12.08.2008 19.10.2008

Stiftung Alfred-Wegener-Institut für Polar-und Meeresforschung

Postfach 12 01 61 D-27515 Bremerhaven

TELEPHONE:

0049 471 4831-0

TELEFAX:

0049 471 4831 1355

TELEX:

238 695 polar d

4. OWNER (if different from no. 3)

5. PARTICULARS OF SHIP:

Name:

POLARSTERN

Nationality:

GERMAN 117,91

Overall length: (in metres)
Maximum draught: (in metres)
Net tonnage:

11,21 3.532,30

Propulsion e.g. diesel/steam:

diesel

Call sign:

DBLK

Registration port and number (if registered fishing vessel)

6. <u>CREW</u>

Name of master:

Stefan Schwarze

Number of crew:

43

7. <u>SCIENTIFIC PERSONNEL</u>

Name and address of scientist in charge:

Dr. Wilfried Jokat

Alfred-Wegener-Institut für Polar- und Meeresforschung

D-27515 Bremerhaven

Tel/telex/fax no.:

+49-471-4831-1211/ ... /+49-471-4831-1149

No. of scientists:

55

8. <u>GEOGRAPHICAL AREA IN WHICH SHIP WILL OPERATE</u> (with reference to latitude and longitude)

Transit through the Icelandic Exclusive Economic Zone

9. BRIEF DESCRIPTION OF PURPOSE OF CRUISE

The cruise will start in Reykjavik. Here, all ship sensors like gravity, magnetics will be switched on. Then the ship will transit either towards South East or North East Greenland, without conducting any station work in the Icelandic EEZ. The shipborne sensors (Gravity, magnetics, bathymetry, Parasound, ADCP) will run during this transit to gather continuously data.

10. DATES AND NAMES OF INTENDED PORTS OF CALL

The ship will leave Reykjavik at 12. August 2008

ANY SPECIAL REQUIREMENTS AT PORTS OF CALL Change of personnel, logistics.

1. PART B: DETAILS

1. NAME OF RESEARCH SHIP RV POLARSTERN

CRUISE NO.
ARK XXIII/3

2. DATES OF CRUISE

From

То

12.08.2008

19.10.2008

3. a) PURPOSE OF RESEARCH

<u>Bathymetry:</u> Gather new data during the transit through the Icelandic EEZ. <u>Marine Geophysics</u>: Acquire magnetic and gravity data during transit

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

To record data by acoustic devices (e.g. Hydrosweep, Parasound) To record gravity and magnetic data

4. <u>ATTACH CHART</u> showing (on an <u>appropriate</u> scale) the geographical area of intended work, positions of intended stations, tracks of survey lines, positions of moored/seabed equipment, areas to be fished

No chart attached, since the exact transit route is not known. The ship will transit either towards South East or North East Greenland, without conducting any station work in the Icelandic EEZ.

5. a) TYPES OF SAMPLES REQUIRED (e.g., geological/water/plankton/fish/radionuclide)

None,

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).

Hydrosweep, Echosounder 3.5 KHz Gravity and magnetic data

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Dates Laying Recovery

Description

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<u>Latitude</u>

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each coastal state

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Trawling	no	no	no	no	no	no
Moored instr.	no	no	no	no	no	no
Air sampling	no	no	no	no	no	no
Water sampling	no	no	no	no	no	no
Sea-ice sampling	no	no	no	no	no	no
Snow sampling	no	по	no	no	no	no

Alfred-Wegener-Institut für Polar- und Meeresforschung Bereich Logistik

Postfach 120161 D-27515 Bremerhaven

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 $D: Logistik \label{logistik} Logistik \label{logistik} Diplo \label{logistik} ARKXXIII \label{logistik} ARXIII \label{$