

Application for Consent to conduct  
Marine Scientific Research

Date: 27.05.2020

1. General Information

1.1 Cruise name and/or number: <b>PS123</b>
---

1.2 Sponsoring Institution(s):	
Name:	<b>Alfred-Wegener-Institute for Polar- and Marine Research</b>
Address:	<b>Am Handelshafen 12 27570 Bremerhaven Germany</b>
Name of Director:	<b>Prof. Dr. Antje Boetius</b>

1.3 Scientist in charge of the Project:	
Name:	<b>Dr. Sören Krägefsky</b>
Country:	<b>Germany</b>
Affiliation:	<b>Alfred Wegener Institute</b>
Address:	<b>Am Handelshafen 12, 27570 Bremerhaven</b>
Telephone:	<b>+49(471)-4831-1638</b>
Fax:	<b>+49(471)-4831-1355</b>
Email:	<b>Soeren.Kraegefsky@awi.de</b>
Website (for CV and photo):	<b>http://www.awi.de</b>

1.4 Entity(ies)/Participant(s) from coastal State involved in the planning of the project:	
Name:	<b>Not applicable</b>
Affiliation:	
Address:	
Telephone:	
Fax:	
Email:	
Website (for CV and photo):	

2. Description of Project

2.1 Nature and objectives of the project:
<b>Transfer of vessel from Bremerhaven, Germany, to Capetown, South Africa, before performing expeditions in the Antarctic. The Transit will be used for en route measurements of meteorological, oceanographic and bathymetric data, and tests and calibrations of on board sensors and scientific measuring equipment See map attached</b>

2.2 If designated as part of a larger scale project, then provide the name of the project and the Organisation responsible for coordinating the project:
<b>Not applicable</b>

2.3 Relevant previous or future research projects:
<b>Not applicable</b>

2.4 Previous publications relating to the project:

**Not applicable**

3. Geographical Areas

3.1 Indicate geographical areas in which the project is to be conducted (with reference in Latitude and longitude in decimal degrees, including coordinates of cruise/track/way points/sampling stations). Please provide coordinates in a separate excel spreadsheet.

**Leaving Bremerhaven the track leads straight to Las Palmas, Canary Islands (Interim Port).**

**The track through the English Channel will follow the regular traffic ways and traffic separation schemes. All measurements will be done while underway to Capetown. Therefore, a separate excel-list is not attached, as waypoints may vary due to the traffic situation. Vessels speed will be between 7 to 11knots. See also attached maps.**

3.2 Attach chart(s) at an appropriate scale (1 page, high-resolution) showing the geographical Areas of the intended work and, as far as practicable, the location and depth of sampling Stations, the tracks of survey lines, and the locations of installations and equipment.

**See Attachment I, Maps Only en route measurements in the English channel.**

4. Methods and means to be used

4.1 Particulars of vessel:

Name:	<b>POLARSTERN</b>
Type/Class:	<b>RV / Icebreaker</b>
Nationality (Flag State):	<b>GERMAN</b>
Identification Number (IMO/Lloyds No.):	<b>8013132</b>
Owner:	<b>Federal Ministry of Education and Research, German Government</b>
Operator:	<b>Alfred-Wegener-Institut. Helmholtz-Zentrum für Polar- und Meeresforschung</b>
Overall length (meters):	<b>117.91</b>
Maximum draught:	<b>11.21</b>
Displacement/Gross Tonnage:	<b>17,300 t</b>
Propulsion:	<b>2 Propeller, 4 Engines, MDO</b>
Cruising & maximum speed:	<b>12,0kn and 15.5 kn</b>
Call sign:	<b>DBLK</b>
INMARSAT number and method and capability of communication (including emergency frequencies):	<b>Inmarsat Telephone: 00871 32184 2611 or 2711 Fax: 00871 32184 2612 or 2712</b>
Name of Master:	<b>Stefan Schwarze</b>
Number of Crew:	<b>43</b>
Number of Scientists on board:	<b>50</b>

4.2 Particulars of Aircraft:

Name:	<b>Not applicable</b>
Make/Model:	
Nationality (flag State):	
Website for diagram & Specifications:	
Owner:	
Operator:	
Overall Length (meters):	
Propulsion:	
Cruising & Maximum speed:	

Registration No.:	
Call Sign:	
Method and capability of communication (including emergency frequencies):	
Name of Pilot:	
Number of crew:	
Number of scientists on board:	
Details of sensor packages:	
Other relevant information:	

4.3 Particulars of Autonomous Underwater Vehicle (AUV):	
Name:	<b>Not applicable</b>
Manufacturer and make/model:	
Nationality (Flag State):	
Website for diagram & Specifications:	
Owner:	
Operator:	
Overall length (meters):	
Displacement/Gross tonnage:	
Cruising & Maximum speed:	
Range/Endurance:	
Method and capability of communication (including emergency frequencies):	
Details of sensor packages:	
Other relevant information:	

4.4 other craft in the project, including its use:
<b>Not applicable</b>

4.5 Particulars of methods, full description of scientific instruments to be used(for fishing gear specify type and dimension) and location			
Types of samples and Measurements:	Methods to be used:	Instruments to be used:	To be carried out within 12nm (yes or no):
<b>Meteorological measurements</b>		<b>Miscl. e.g cloud camera</b>	<b>yes</b>
<b>Air sampling</b>	<b>Continuous pumping</b>	<b>pCO<sub>2</sub>, thermosalinograph, distrometer, watervapour analyzer</b>	<b>yes</b>
<b>Water sampling</b>	<b>pCO<sub>2</sub>, temperature, salinity Continous pumping</b>	<b>Ferrybox, Temp. / salinity sensors, particlefilter, SVP/T</b>	<b>yes</b>
<b>Endotherme Observation</b>	<b>Visual, IR-camera</b>	<b>IR-Camera</b>	<b>yes</b>
<b>Gravity</b>		<b>Gravimeter</b>	<b>yes</b>
<b>Magnetometry</b>		<b>Fluxgate Magnetometer</b>	<b>yes</b>
<b>Sea currents</b>	<b>hydro-acoustics</b>	<b>ADCP</b>	<b>yes</b>
<b>Sea bottom topography</b>	<b>hydro-acoustics</b>	<b>Hydrosweep DSIII</b>	<b>yes</b>
<b>Wave measurement</b>	<b>Radar</b>	<b>WAMOS wave radar</b>	<b>yes</b>
<b>Cosmic ray</b>	<b>Particle detector</b>	<b>Myon detector and neutron detector</b>	<b>yes</b>
<b>Remote sensing</b>	<b>Optical sounding, radiometry</b>	<b>Radiometers, Raman lidar</b>	<b>yes</b>

4.6 Indicate nature and quantity of substances to be released into the marine environment:

**None**

4.7 Indicate whether drilling will be carried out. If yes, please specify:

**None**

4.8 Indicate whether explosives will be used. If yes, please specify type and trade name, Chemical content, depth of trade class and stowage, size, depth of detonation, frequency of Detonation, and position in latitude and longitude:

**No**

## 5. Installations and Equipment

Details of installations and equipment (including dates of laying, servicing, method and Anticipated timeframe for recover, as far as possible exact locations and depth, and Measurements):

**Not applicable**

## 6. Dates

6.1 Expected dates of first entry into and final departure from the research area by the research vessel and/or other platforms:

**Expected transit through the English channel: 13.12.2020 to 15.12.2020**

6.2 Indicate if multiple entries are expected:

**Not applicable**

## 7. Port Calls

7.1 Dates and Names of intended ports of call:

**Departure: 12. Dec. 2020 Bremerhaven (Germany)**

**Portcall: 21. Dec. 2020 Las Palmas, Canary Islands (Spain) plus minus 1 day,**

**Arrival: 10. Jan. 2021 Capetown (South Africa)**

7.2 Any special logistical requirements at ports of call:

**Not applicable**

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

**Not applicable**

## 8. Participation of the representative of the coastal State

8.1 Modalities of the participation of the representative of the coastal State in the research Project:

**Participation possible but not planned.**

8.2 Proposed dates and ports for embarkation/disembarkation:

**See 7.1**

--

9. Access to Data, Samples and Research Results

9.1 Expected dates of submission to coastal State of preliminary report, which should include The expected dates of submission of the data and research results:

**6 months after the end of the cruise**

9.2 Anticipated dates of submission to the coastal State of the final report:

**12 months after the end of the cruise**

9.3 Proposed means for access by coastal State to data (including format) and samples:

**Via Internet, through the Pangaea database accessible at <http://www.pangaea.de>/  
<https://www.pangaea.de/expeditions/cr.php/Polarstern>**

9.4 Proposed means to provide coastal State with assessment of data, samples and Research results:

**Results are published in the Reports of Polar Research by AWI and in other reports, papers and in international scientific journals.**

**Via Internet: <http://www.pangaea.de>/  
<https://www.pangaea.de/expeditions/cr.php/Polarstern>**

9.5 Proposed means to provide assistance in assessment or interpretation of data, samples And research results:

**Data including documentation and contact details of the responsible scientists are available through the Pangaea database accessible at <http://www.pangaea.de>  
<https://www.pangaea.de/expeditions/cr.php/Polarstern>**

9.6 Proposed means of making results internationally available:

**Results are published in the Reports of Polar Research by AWI and in other reports, papers and in international scientific journals.**

10. Other permits Submitted

10.1 Indicate other types of coastal state permits anticipated for this research (received or Pending):

Similar notification to all coastal states en route from Bremerhaven to Cape Town

11. List of Supporting Documentation

11.1 List of attachments, such as additional forms required by the coastal State, etc.:

- Attachment I/II: Maps

On behalf of the chief scientist:

Signature:



Alfred-Wegener-Institut  
Helmholtz-Zentrum für  
Polar- und Meeresforschung  
Logistik und Forschungsplattformen  
Am Alten Hafen 26  
27568 Bremerhaven

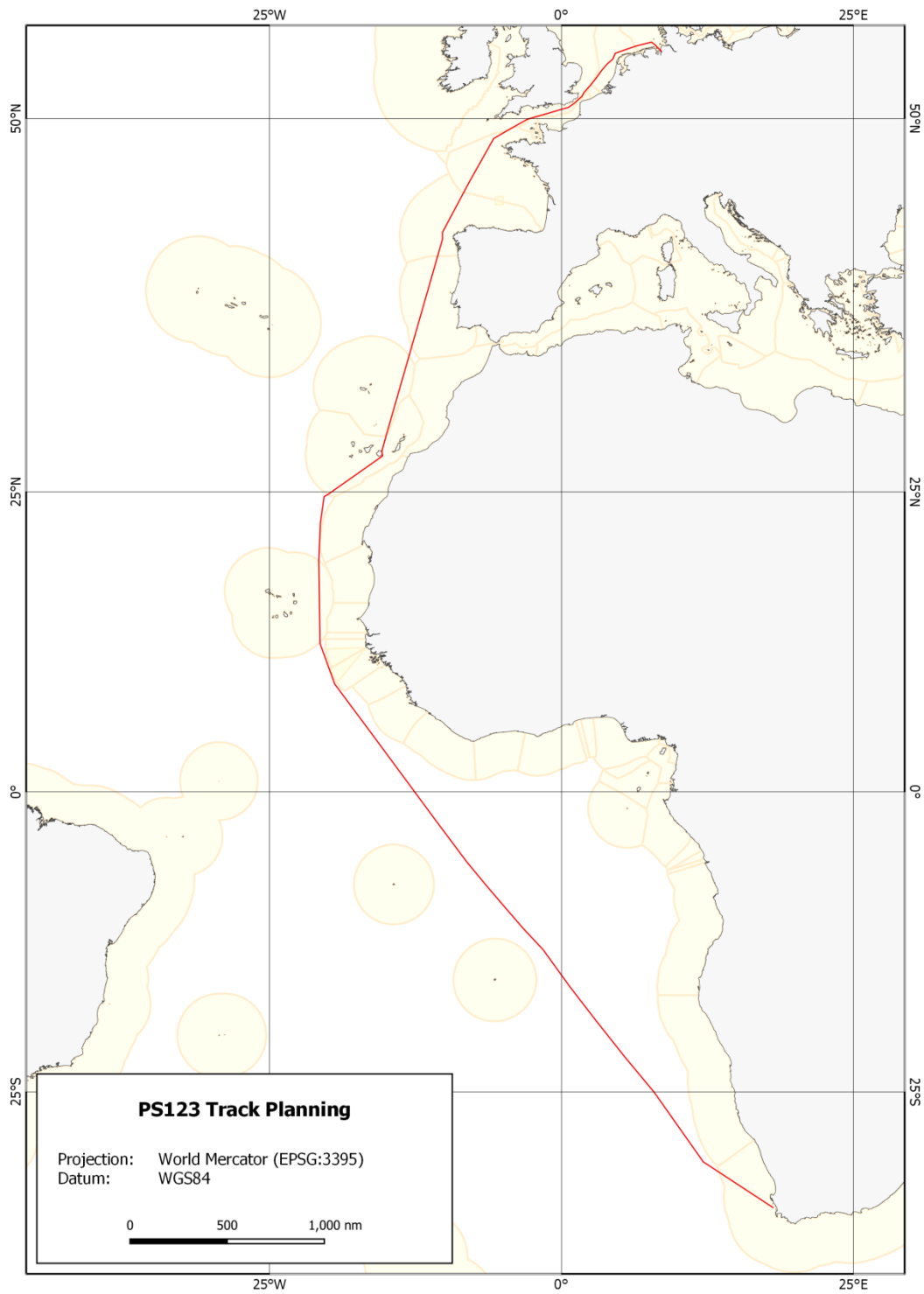
27.05.2020

Contact information of the focal point:

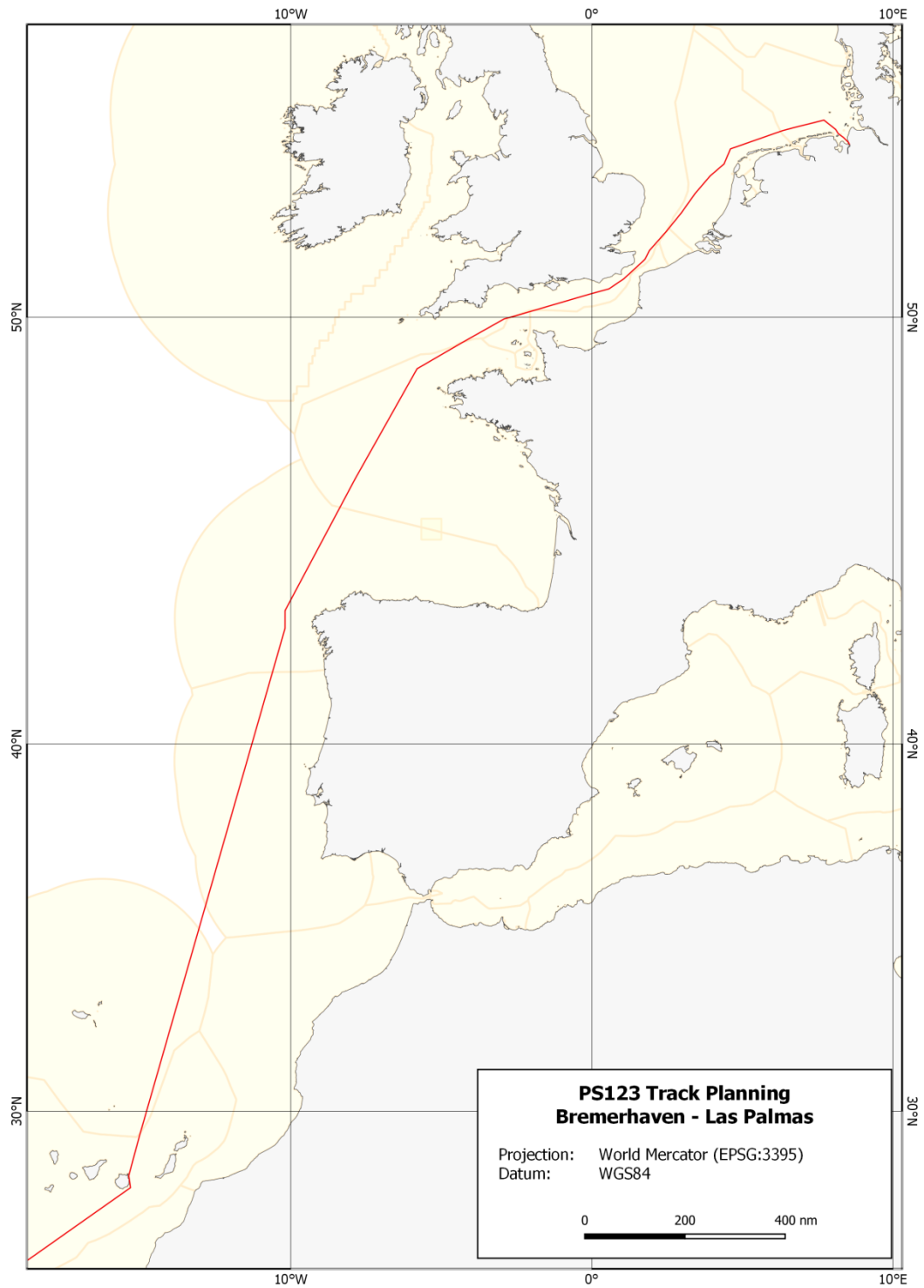
Name: Marius Hirsekorn  
Country: Germany  
Affiliation: Alfred Wegner Institute

Telephone: +49-(0)471-4831-2241  
Email: [Schiffskoord@awi.de](mailto:Schiffskoord@awi.de)  
Address: Am Alten Hafen 26

# Attachment I. (map of total cruise)



## Attachment II. (map of cruise section Bremerhaven-Las Palmas)



No specific research area in the English Channel. Measurements to be done “en route” and underway following regular traffic ways and separation schemes, therefore no separate sheet with research area coordinates.