



COMNAP



The Council of  
Managers of National  
Antarctic Programs

[www.comnap.aq](http://www.comnap.aq)  
[info@comnap.aq](mailto:info@comnap.aq)

HCA9-06.2A

# COMNAP REPORT TO HCA-9 12-14 OCT 09





# ***About COMNAP***

- ***Purpose : To develop and promote best practice in managing the support of scientific research in Antarctica***





# How

- *Serving as a forum to develop practices that improve effectiveness of activities in an environmentally responsible manner;*
- *Facilitating and promoting international partnerships;*
- *Providing opportunities and systems for information exchange*





# *and*

- *Providing the Antarctic Treaty System with objective and practical, technical and non-political advice drawn from the National Antarctic Programs' pool of expertise.*
- *COMNAP is now a strategic, project-oriented organisation.*





# ***2008-2009 COMNAP activities of interest to the HCA***

- **II Workshop “Towards improved SAR coordination and response in the Antarctic”, Monday 2 to Wednesday 4 November; Buenos Aires, Argentina.**

**<https://www.comnap.aq/content/events/sar2009>**

**Among other Objectives, Conduct preliminary discussions on Prevention through training and Prevention through improved hydrography**





# ***2008-2009 COMNAP activities of interest to the HCA***

## **COMNAP Ship Position Reporting System (SPRS)**





# COMNAP SPRS

- For collaboration, and also safety
- Voluntary
- Email-based with Some interactivity
- Range of optional parameters
- Can update parameters separately
- Sends back list of positions/contacts
- Broadcasts daily list
- Connected to ship info database





# Parameters

- Position / Heading / Time
- Voyage
- Pob
- Doctors
- Helicopters
- Endurance
- Berths available







# Map Views (email & web)

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    - [Shirase](#)
    - [Laurence M Gould](#)
    - [FS Polarstern](#)

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1000 mi  
2000 km

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    - [Shirase](#)
    - [Laurence M Gould](#)
    - [FS Polarstern](#)

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**FS Polarstern**

Call Sign: DBLK - MMSI: 211202460  
Primary contact phone:  
Positions in database: 6

Latest position and heading, reported at Wed Feb 28 12:00:03 2007

Parameter	Current value
Latitude	67°27'S (-67.45)
Longitude	73°17.15'E (73.29)
Heading	

Other information available:

Parameter	Current value	Last updated
Voyage name		
Persons on board		
Berths available		
Doctors		
Helicopters		
Hydrographers		
Endurance		

50 mi  
100 km

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Done

2 antoin sched Ksna  
3 4 Mail - Firefox

08:20 18:20  
Paris Hobart



# Map Views (email & web)





# Position Lists (email & web)

COMNAP SPRS - Sat Mar 08 2008 00:00 UTC - Antarctic vessel positions - Thunderbird

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**Subject:** COMNAP SPRS - Sat Mar 08 2008 00:00 UTC - Antarctic vessel positions  
**From:** [sprs@comnap.aq](mailto:sprs@comnap.aq)  
**Date:** 08/03/08 11:00  
**To:** [SPRS](mailto:SPRS)  
**Cc:** [kevin.roberts@nunatak.com.au](mailto:kevin.roberts@nunatak.com.au), [antoine@comnap.aq](mailto:antoine@comnap.aq), [alexllub@iau.gub.uy](mailto:alexllub@iau.gub.uy), [jretamales@inach.cl](mailto:jretamales@inach.cl), [rccaus@amsa.gov.au](mailto:rccaus@amsa.gov.au)

\*\*\* This is an automatically generated email \*\*\*

**COMNAP - The Council of Managers of National Antarctic Programs** ([www.comnap.aq](http://www.comnap.aq))

Ship Position Reporting System (SPRS)

**Last Known Positions**

(ships currently logged on)

Ship	Latitude	Longitude	Heading	Time (UTC)
<a href="#">FS Polarstern</a>	66°55.22"S	0°16.32"E	337.5	Fri 07-Mar-2008 12:00 UTC
<a href="#">R/V ROU 22 Oyarbide</a>	63°23.03"S	57°W	10.0	Fri 07-Mar-2008 09:00 UTC
<a href="#">Shirase</a>	63°49"S	95°53"E	90.0	Fri 07-Mar-2008 06:47 UTC
<a href="#">Laurence M Gould</a>	68°4.38"S	70°48.32"W	67.5	Fri 07-Mar-2008 00:06 UTC
<a href="#">Vessel Las Palmas</a>	62°39"S	60°23"W		Thu 06-Mar-2008 12:43 UTC
<a href="#">RV Hesperides</a>	62°47.5"S	64°30.17"W		Thu 06-Mar-2008 08:08 UTC
<a href="#">Aurora Australis</a>	67°35.5"S	62°51.07"E	25.0	Thu 06-Mar-2008 05:00 UTC
<a href="#">RV Tangaroa</a>	69°15.75"S	179°45"W	90.0	Wed 27-Feb-2008 19:00 UTC
<a href="#">mv S A Aguilhas</a>	33°54.07"S	17°32.15"E	0.0	Mon 18-Feb-2008 12:00 UTC
<a href="#">Italica</a>	64°15.55"S	179°55.03"E	0.0	Wed 06-Feb-2008 04:39 UTC

**Full Details**

**FS Polarstern**

ships.kml sprs-specifi...07-11-28.doc



# Position Lists (email & web)

COMNAP SPRS - Sat Mar 08 2008 00:00 UTC - Antarctic vessel positions - Thunderbird

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**From:** [sprs@comnap.aq](mailto:sprs@comnap.aq)  
**Date:** 08/03/08 11:00  
**To:** [SPRS](#)  
**Cc:** [kevin.roberts@nunatak.com.au](mailto:kevin.roberts@nunatak.com.au), [antoine@comnap.aq](mailto:antoine@comnap.aq), [alexclub@iau.gub.uv](mailto:alexclub@iau.gub.uv), [jretamales@inach.cl](mailto:jretamales@inach.cl), [rccaus@amsa.gov.au](mailto:rccaus@amsa.gov.au)

---

**R/V ROU 22 Oyarbide**  
**Callsign:** CWBH - **MMSI:** 770576006 - **Contact phone:** +870 477 002 310  
Time Friday 07-March-2008 09:00 UTC  
Latitude 63'23.03"S  
Longitude 57"W  
Heading 10.0  
Voyage 2008 Hydrography and CAML voyage Tue 26-Feb-2008 10:45 UTC  
Pob 72 Tue 26-Feb-2008 10:45 UTC  
Doctors 1 Mon 03-Mar-2008 17:12 UTC  
Hydrographers 5 Tue 26-Feb-2008 10:45 UTC  
Helicopters 0 Tue 26-Feb-2008 10:45 UTC  
Berths 0 Tue 26-Feb-2008 10:45 UTC  
Observation foggy , partially. Disembarking repairing team at Hope Bay  
, Antarctic Peninsula

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**Shirase**  
**Callsign:** JSVY - **MMSI:** 431890000 - **Contact phone:** +xxx 343 189 010  
Time Friday 07-March-2008 06:47 UTC  
Latitude 63'49"S  
Longitude 95'53"E  
Heading 90.0  
Doctors () Wed 20-Feb-2008 00:32 UTC

---

**Laurence M Gould**  
**Callsign:** WCX7445 - **MMSI:** 368138000 - **Contact phone:** +xxx 336 862 421



# To do next

- “next” way points (lat-long or locode)
- Increase participation
- Pre-season advance schedule
- Expand ship info database
- Detailed reports on request
- Exchange positions with IAATO





# For more info

- <http://www.comnap.aq/sprs/help>

or

- Email [sprs@comnap.aq](mailto:sprs@comnap.aq) with 'help' in the subject line





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# ***2008-2009 COMNAP activities of interest to the HCA***

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# ***2008-2009 COMNAP activities of interest to the HCA***

**New COMNAP Antarctic facilities map published,  
including Search and Rescue information,  
March and July 2009 editions, A0 and A2 sizes**

**Available for download and high quality printing  
<https://www.comnap.aq/publications/maps>**





# COMNAP -HCA

## JOINT ACTIONS RESULTING FROM THE 8th HCA MEETING

Agenda item 6.2 -Action : 8/7

Task: Review and update the existing guidelines to conduct hydrographic surveys using ships of opportunity, i.e. HCA document “*Collection and Rendering of Hydrographic Data*”, taking Doc. HCA8-INF8 into consideration. Submit new text to the HCA Chair for distribution to COMNAP at the 2009 HCA Seminar.

By: USA (lead) and UK, in liaison with COMNAP

Status: Done. Revised form available on IHO web. See HCA9-INF4.





# COMNAP -HCA

## JOINT ACTIONS RESULTING FROM THE 8th HCA MEETING

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**By:** USA (lead) and UK, in liaison with COMNAP

### Status:

- Done. Revised form available on IHO web. See HCA9-INF4.
- Presented at COMNAP AGM AUG 09 as follows , document posted at COMNAP web site
- Available for users





**ANNEX "A"**  
**FORM FOR RENDERING HYDROGRAPHIC DATA**

To be returned to: Chairman of IHO HCA Survey Programme WGS, Mr. Andrew C. WILLETT, Chart Branch  
9 – Antarctica, United Kingdom Hydrographic Office, Taunton, Somerset TA1 2DN, UK -  
[andy.willett@ukho.gov.uk](mailto:andy.willett@ukho.gov.uk) - Fax: +44 (0)1823 284077

**ANTARCTIC VESSELS**

General Area:	Antarctic Peninsula	South Georgia	South Shetlands
	South Orkneys	Other - please state	
Location:			
Vessel Name:			Draught .....metres
Captain:	Date		
Data format:	Chart/Chart cutting	Plotting sheet	Tracing
	UKHO collector	Floppy disc/CD rom	Photographs
	Other - please state		
See Note 1			
Position fixing:	GPS	Visual/radar	Other - please state
	Model of receiver		
	Datum setting ie.WGS84		
	Remarks: eg. Plotting errors between GPS and chart (note 2.3)		
See Note 2	Calibration date:		
Echo sounder:	Make	Name/type	

.....Metres	per	
No		
Offset = Above (-) or (+) from GPS receiver		
.....Metres		
Description and remarks		
or Remarks		
at	Close-up	Remarks





7966 CAPE TOWN  
SOUTH AFRICA  
Ph: +27 21 787 2408  
Fax: +27 21 787 2228  
e-mail: [hydrosan@safrica.co.za](mailto:hydrosan@safrica.co.za)  
Website: <http://www.sanho.gov.za>  
**NAVAREA X – AUSTRALIA**  
Senior Search & Rescue Officer  
RCC AUSTRALIA  
Emergency Response Division  
Australian Maritime Safety Authority  
GPO Box 2181  
CANBERRA ACT 2601  
AUSTRALIA  
Ph: +61 2 6230 6811 FAX: +61 2 6230 6811  
e-mail: [rccaus@amsa.gov.au](mailto:rccaus@amsa.gov.au)  
Website: [http://www.amsa.gov.au/Safety/Time\\_Safety\\_Information.aspx](http://www.amsa.gov.au/Safety/Time_Safety_Information.aspx)  
**NAVAREA XIV – NEW ZEALAND**  
LINZ Hydrographic Service  
Land Information New Zealand  
National Office, Lambton Quay,  
160 Lambton Quay,  
Private Box 5501  
WELLINGTON  
NEW ZEALAND  
Ph: +64 4 460 0110 FAX: +64 4 460 0110  
e-mail: [info@linz.govt.nz](mailto:info@linz.govt.nz)  
Website: <http://www.linz.govt.nz>  
**NAVAREA XV – CHILE**  
Director del Servicio Hidrográfico y Oceanográfico de la Armada (Chilean Navy)  
Eraucaria 254  
Playa Ancha  
VALPARAISO  
CHILE  
Ph: +56 322 266666 FAX: +56 322 266666  
e-mail: [shoa@shoa.cl](mailto:shoa@shoa.cl)  
Website: <http://www.shoa.cl>

4. Name, Model and frequency in KHz of Depth Recorder  
5. Port of Departure/date of departure  
6. Port of Arrival/date of arrival  
Water depth data should include data as follows: Year, month, day, hour, minute, latitude, longitude (meters).  
The preferred exchange format for data submitted should be found at: <http://www.ngdc.noaa.gov/mgg/>  
Note: The MGD77 format was developed to also magnetic and gravity data. For a cruise values most of which could be filled in by the operator to supply cruise/system data.

**Submission of Data:** Data should be submitted to the National Oceanic and Atmospheric Administration (NOAA), NESDIS, National Geophysical Data Center  
National Geophysical Data Center  
NOAA, E/GC3  
325 Broadway  
Boulder, Colorado 80305  
USA  
Attn: Dan Metzger  
NGDC is the data center for publicly available bathymetry data but is also the designated International Bathymetry. By submitting bathymetric data you will have access to the data for use in compiling charts.

**Submission of Navigation Warnings:** When reporting obstructions, shoals, wrecks, etc., which ships/navigators, this information should be submitted to the NAVAREA Coordinators listed below.

**NAVAREA VI – ARGENTINA**  
Head of Maritime Safety Department  
Servicio de Hidrografía Naval  
Avenida Montes de Oca 2124  
C1271ABV BUENOS AIRES  
ARGENTINA  
Ph: +54 11 4301-2249 Fax: +54 11 4303-229  
e-mail: [navearea\\_vi@hidro.gov.ar](mailto:navearea_vi@hidro.gov.ar)  
[smautica@hidro.gov.ar](mailto:smautica@hidro.gov.ar)  
Website: <http://hidro.gov.ar/Nautica/radioav/>  
**NAVAREA VII – SOUTH AFRICA**  
The Hydrographer, S.A. Navy  
Hydrographic Office  
Private Bag XI, Tokai

## ANNEX "B"

### GUIDANCE DOCUMENT FOR COLLECTION OF HYDROGRAPHIC DATA BY SHIPS OF OPPORTUNITY OPERATING IN THE SOUTHERN OCEAN/ANTARCTIC REGION

**Purpose:** This document is to describe how Ships of Opportunity, e.g., cruise ships, scientific vessels and commercial vessels on transit, might best provide water depth information for use by scientists and nautical charting authorities.

**Background:** Official government Hydrographic Offices that conduct systematic hydrographic surveys to International Hydrographic Organization standards for use in compiling nautical charts for support of safe ship navigation, exercise great care in collection of data. They conduct sonar investigations of the entire chart area and for waters less than 200-meters water depth install tide gauges around the survey area to record actual water levels for the time of survey and often conduct side scan surveys to identify wrecks and obstructions that might lie within critical navigation areas.

Hydrographic Offices do not want to imply that areas are safe for navigation by building charts with less than IHO quality data, however, data collection by ships operating in waters deeper than 200 meters, where real-time tide correction is not an issue, or for the reporting of significant hazards in areas where no significant data exist, is an important factor in maritime safety. These data from Ships of Opportunity are of interest to nautical chart compilers. Little data exists for the Southern Ocean/Antarctic region and acquisition of water depth data by Ships of Opportunity is needed in that the resources to conduct IHO quality systematic surveys are extremely limited.

**Observations Needed by Ships of Opportunity:** Legacy track-line data typically was collected by recording dead reckoning or LORAN positions for water depth observations on perhaps a 15-minute interval; this was a manual task for the ship navigator. With the advent of digital chart navigation systems, integrated with digital depth recorders and GPS positioning, observations by Ships of Opportunity can be automated through integration of a large hard drive and a DVD recorder to collect/disseminate important Ship of Opportunity information at a very marginal added cost. With an internet connection, the data can be submitted electronically.

#### What Should be Collected and in What Format?

Each data set needs to include "header information" to identify the vessel and systems used for data acquisition as follows:

1. Name of Vessel
2. Name and Model of GPS Navigation System (Datum must be WGS-84)
3. Draft of ship (Draft at beginning of cruise and end of cruise, nearest to depth transducer location, if possible)





# COMNAP -HCA

JOINT ACTIONS RESULTING FROM THE 8th HCA MEETING

Agenda item 9.1 Action :8/17

Task: Organize an HCA Seminar to raise awareness on the importance of hydrographic activities in Antarctica, as part of COMNAP Council in Punta Arenas, Chile, 03 August 2009, taking into consideration discussions held at HCA-8 on common interest to IHO-COMNAP.

By: HCA Chair (lead), UK and Chile, in liaison with COMNAP

Status: Done as follows





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# **COMNAP XXI AGM**

***Punta Arenas AUG09***

***Project: Hydrographic surveying:***

## ***HCA PRESENTATION***







## Objectives:

- To raise awareness at the operational level on the importance of hydrographic activity in the Antarctica, to achieve a better understanding of COMNAP on the existing risks associated to the present status of charting in the region and to explore ways to jointly improve the situation.
- Introduction of Guidelines for the Collection and Rendering of Hydrographic Data obtained by “Ships of Opportunity” in Antarctic Waters.





## Hydrography in the Antarctica.

- Speaker: Hugo Gorziglia, Captain Chilean Navy, former Chilean Hydrographer, Director IHB and Chairman HCA
- Content: What is hydrography? Why we need hydrography? What are and why the IHO and HCA exist and what they have been doing. INT Chart Scheme. Hydrographic priorities. SOLAS and the Antarctica. IHO/COMNAP relationship.





COMNAP

**Title: *Risks in Antarctic Operations related to Hydrography and Nautical Cartography.***

- Speaker: **Ian Moncrieff**, Rear Admiral, United Kingdom National Hydrographer, former Commanding Officer of HMS Endurance (the RN Antarctic Patrol Ships) and former Commander of British Forces in the South Atlantic. HCA Vice Chairman.
- Content: Antarctic Navigation and its risks. Extant of present coverage in and around the peninsula. Present approach to charting priorities based on observed routes used for different purposes. Work done to date and future work plans. Case studies. Liabilities, Paucity of SAR. How hydrography knowledge reduces the risk. Marine accidents and its impact on the marine environment. Role of hydrography in Antarctic operations. What is needed to operate with greater safety ness? Safe access to

remote research areas.





## Practical initiatives to improve hydrography and nautical cartography in Antarctica.

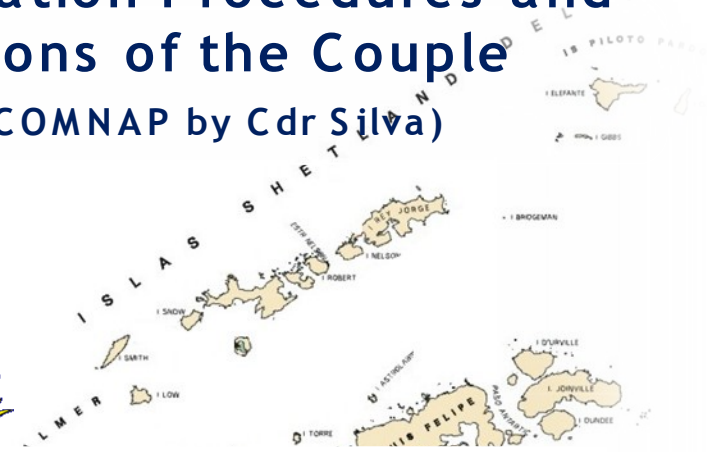
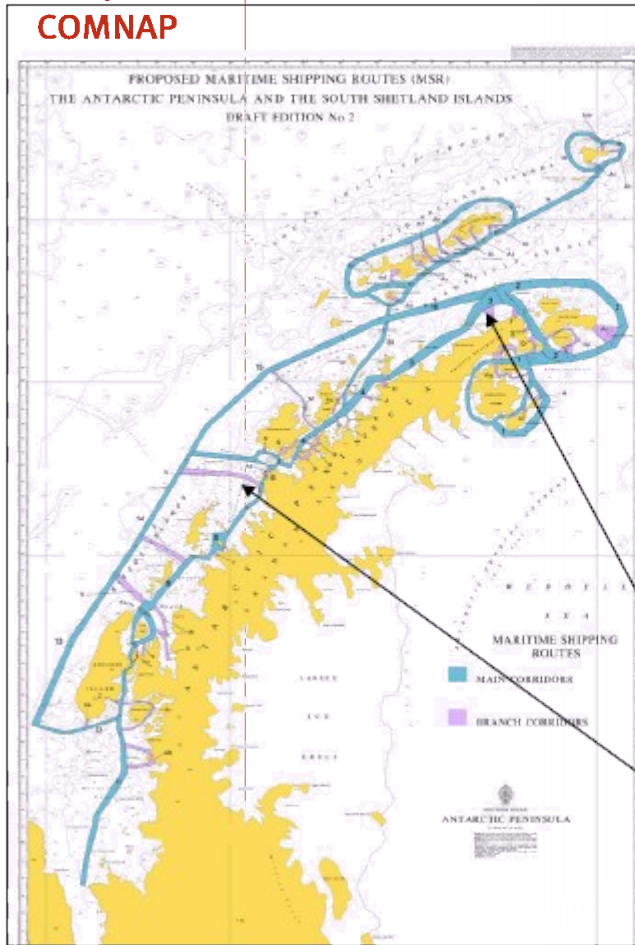
- Speaker: Enrique Silva, Commander, Head Department of Operations, Chilean Navy Hydrographic and Oceanographic Service, and Chilean representative to the HCA.
- Content: A resume of the problems based on previous presentations and the offer of conclusive measures that could be put jointly in place by COMNAP and IHO to improve safety for National Program vessels. IHO contribution to COMNAP to achieve its objectives.
- Introduction of Guidelines for the Collection and Rendering of Hydrographic Data obtained by “Ships of Opportunity” in Antarctic Water.



# HCA recommendations on Coordination Procedures and Measures to Support the Actions of the Couple COMNAP- IHO. (Presentation at COMNAP by Cdr Silva)



COMNAP



Considering that government vessel are working in areas of their current national interest. The Maritime Shipping Routes (MSR) could be an useful graphic tool for planning.

## MAIN SHIPPING ROUTES

-  Main Corridors
-  Branch Corridors





# ***Future intersessional work and desired outcomes of HCA-9***

*Coordination Procedures and Measures to Support the Actions of the Couple COMNAP- IHO:*

*As with all surveying activities in Antarctica, it is imperative to have a coordinated approach, to ensure there is no duplication of effort and that the most urgent priorities are considered first. Advanced Planning Schedules of COMNAP and SPRS database can be useful.*





# ***Future intersessional work and desired outcomes of HCA-9***

- *Project Manager will be .....*
- *Overseen and supported by COMNAP Vice-Chair ....*





# *Thank you*

- Any questions?

