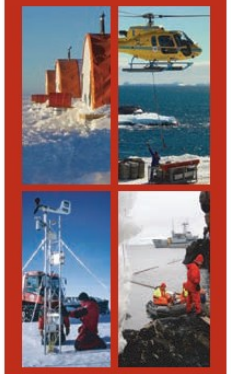
COMNAP



The Council of Managers of National Antarctic Programs

www.comnap.aq

info@comnap.aq

HCA9-06.2A

COMNAP REPORT TO HCA-9 12-14 OCT 09

About COMNAP

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

COMNAP

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*

COMNAP

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

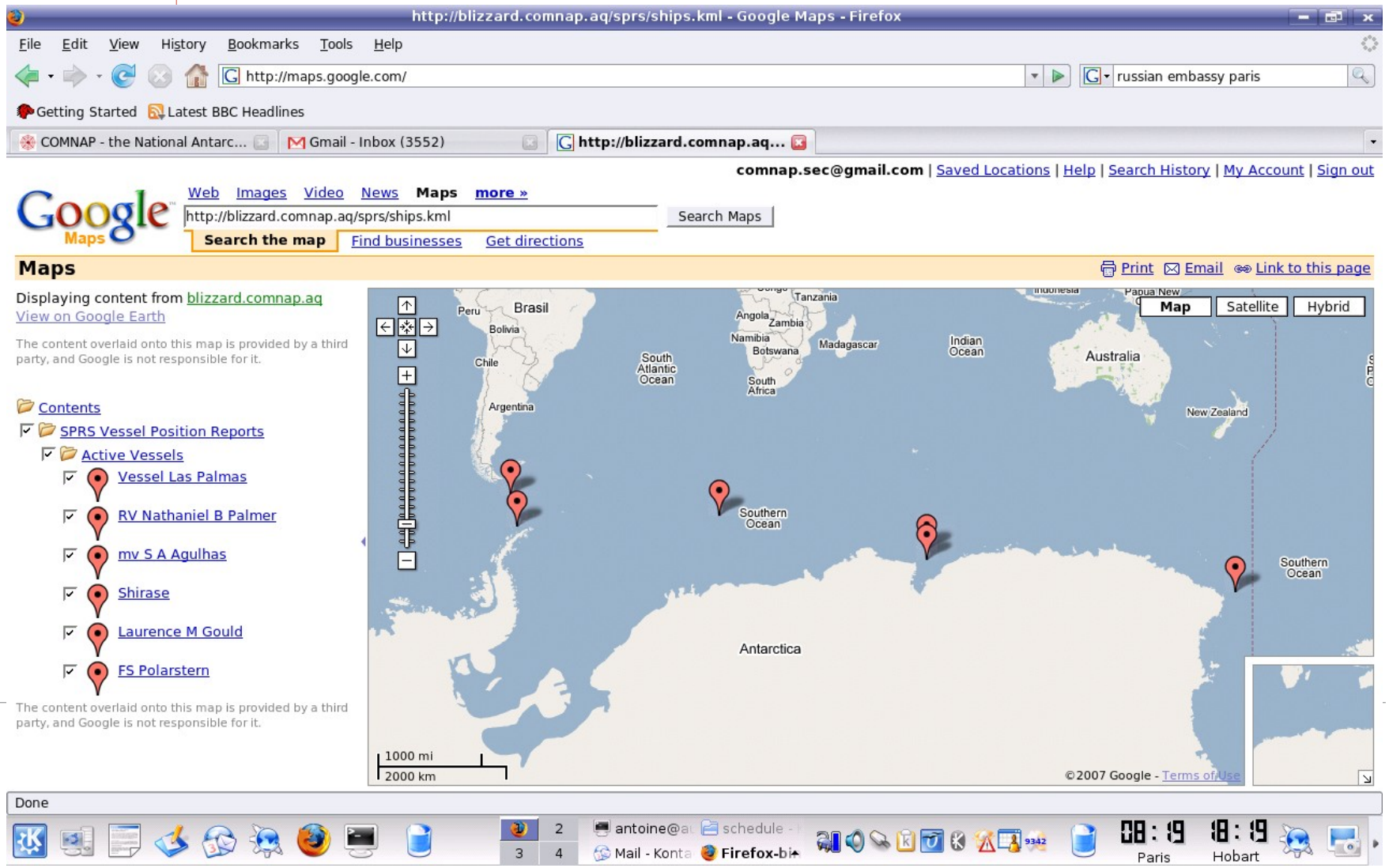
- For collaboration, and also safety
- Voluntary
- Email-based with Some interactivity
- Range of optional parameters
- Can update parameters separately
- Sends back list of positions/contacts
- Broadcasts daily list
- Connected to ship info database

COMNAP

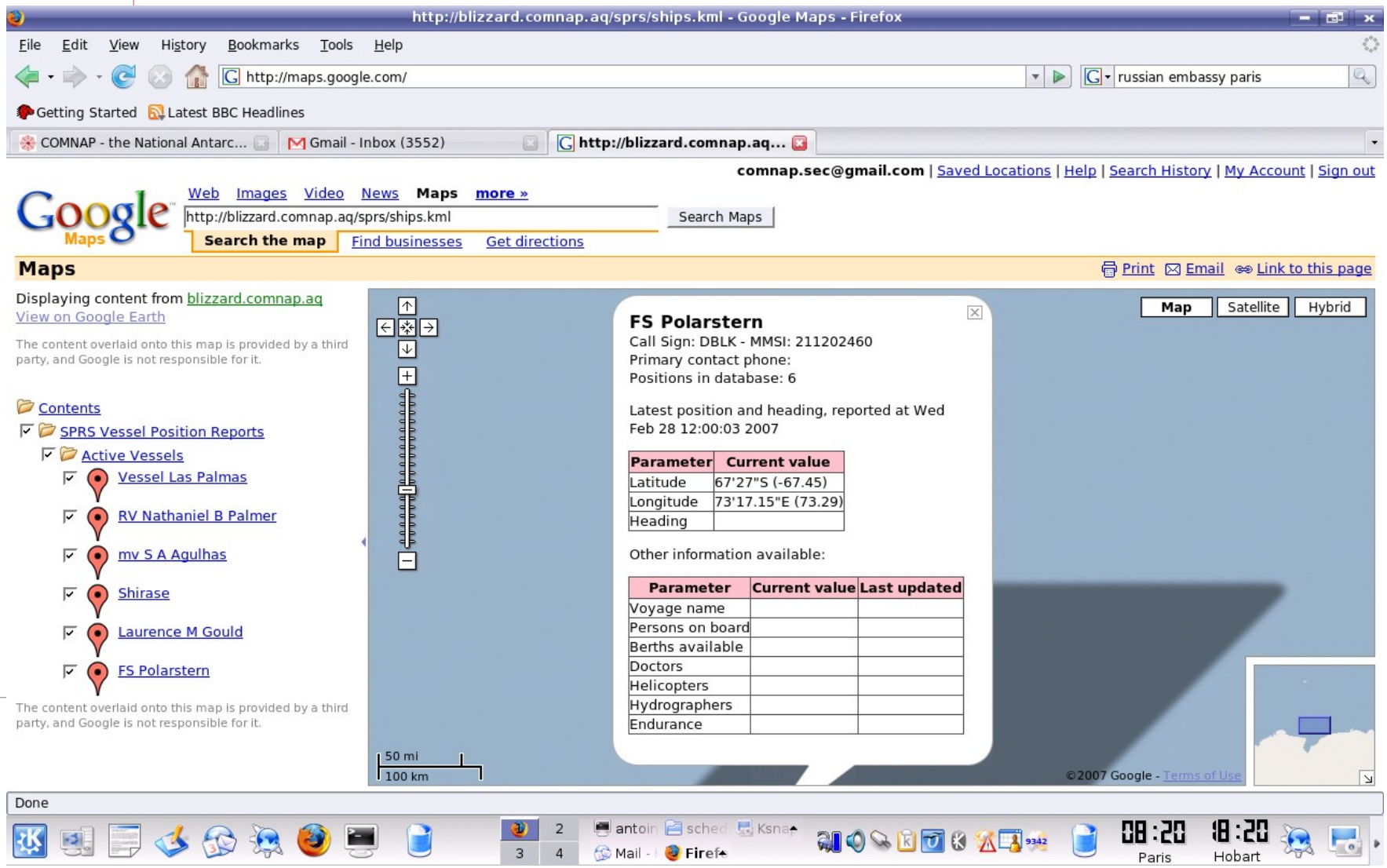
Parameters

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

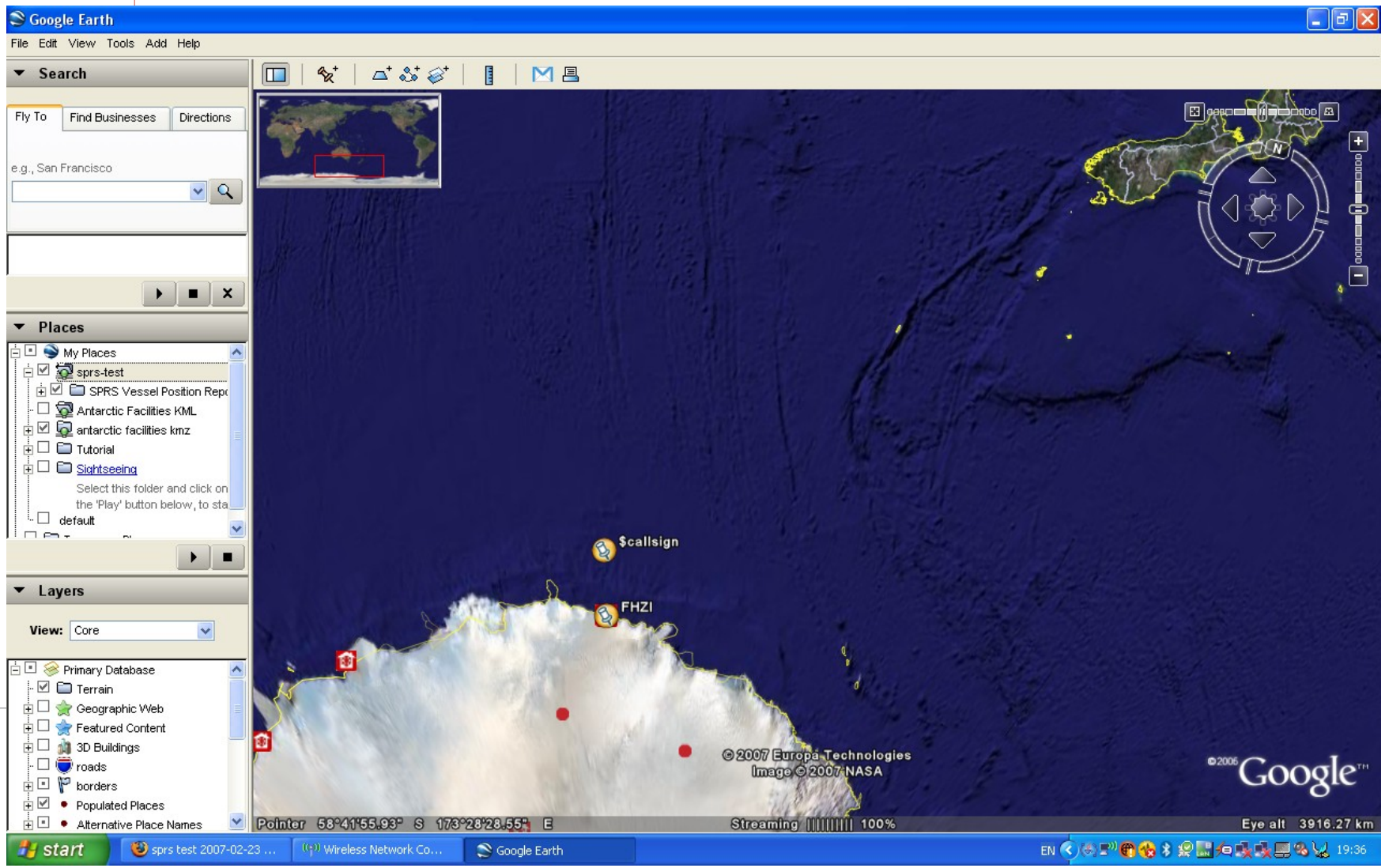
Map Views (email & web)



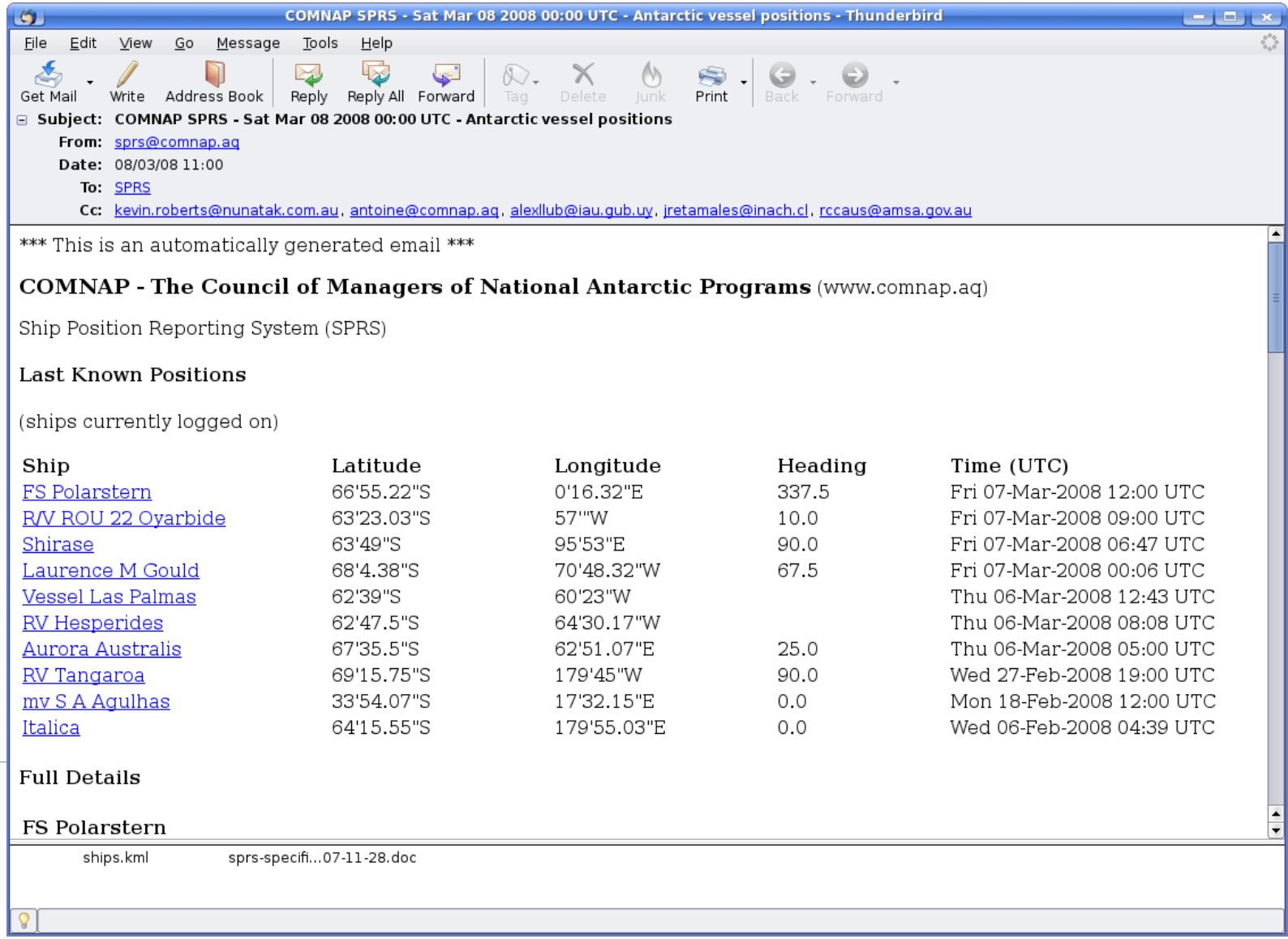
Map Views (email & web)



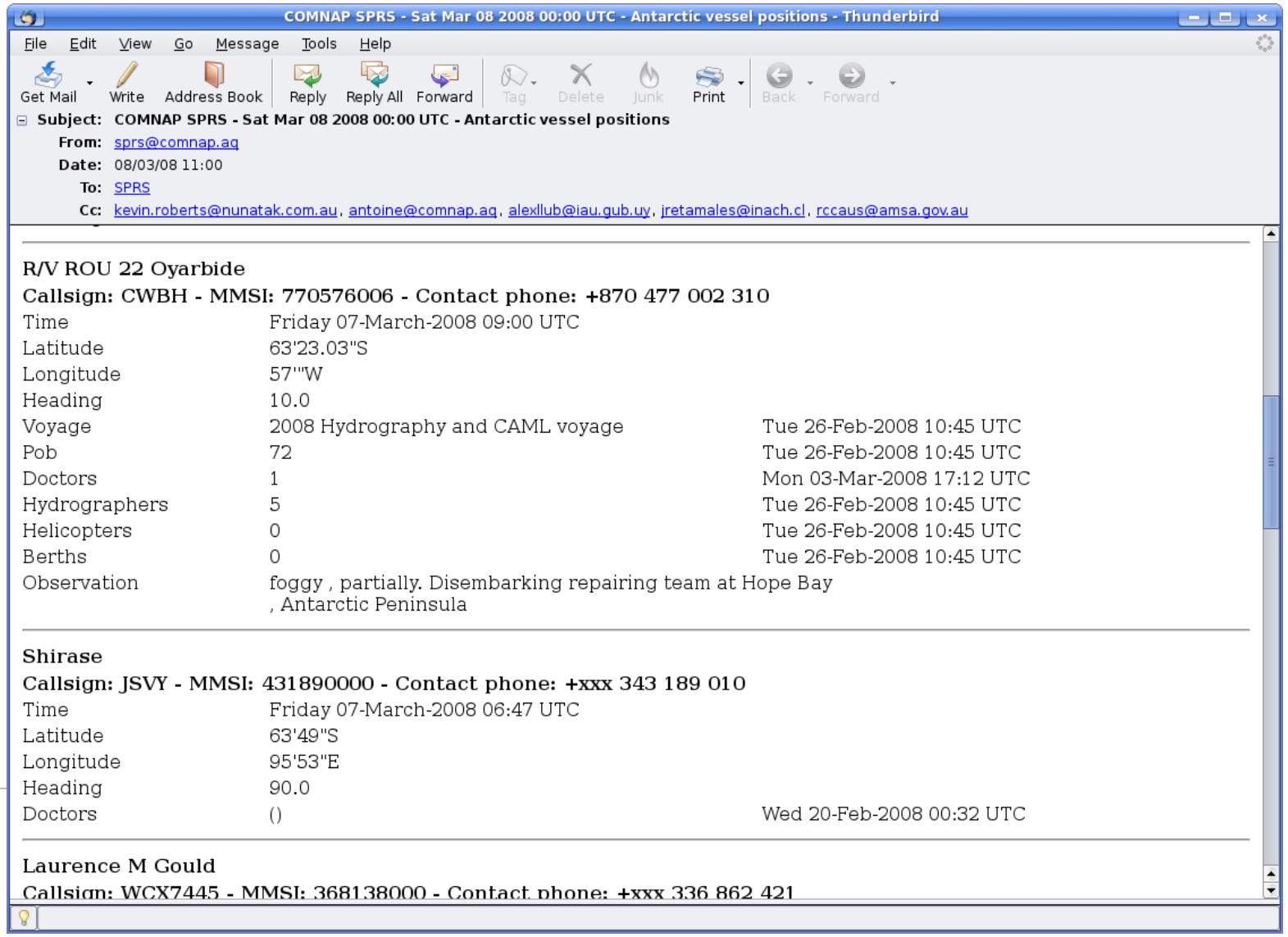
Map Views (email & web)



Position Lists (email & web)



Position Lists (email & web)



COMNAP

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 with 'help' in the subject line

COMNAP

2008-2009 COMNAP activities of interest to the HCA

-

2008-2009 COMNAP activities of interest to the HCA

New COMNAP Antarctic facilities map published, including Search and Rescue information,

March and July2009 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

Agenda item 6.2 -Action : 8/7

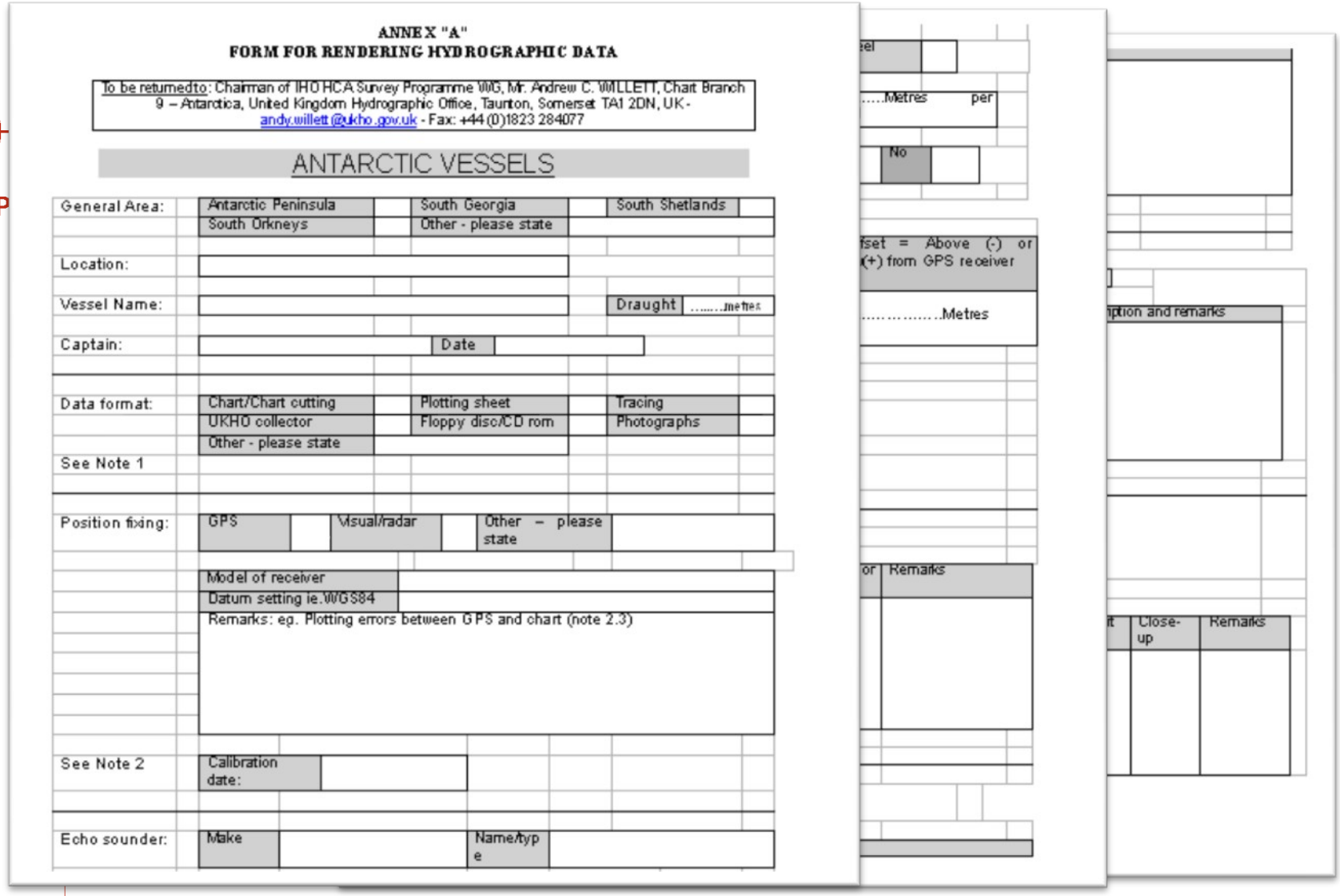
Task: Review and update the existing guidelines to conduct hydrographic surveys using ships of opportunity, i.e. HCA document "*Collection and Rendering of Hydrographic Data*", taking Doc. HCA8-INF8 into consideration. Submit new text to the HCA Chair for distribution to COMNAP at the 2009 HCA Seminar.

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

Status:

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

COMNAP



ANNEX "A"
FORM FOR RENDERING HYDROGRAPHIC DATA

To be returnedto: Chairman of IHO HCA Survey Programme WG, Mr. Andrew C. WILLETT, Chart Branch 9 – Antarctica, United Kingdom Hydrographic Office, Taunton, Somerset TA1 2DN, UK - 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			

COMNAP

7966 CAPE TOWN
SOUTH AFRICA
Ph: +27 21 787 2408
Fax: +27 21 787 2228
e-mail: hydrosan@iafrica.c
Website: http://www.sanho
NAVAREA X – AUSTRA
Senior Search & Rescue Of
RCC AUSTRALIA
Emergency Response Divis
Australian Maritime Safety
GPO Box 2181
CANBERRA ACT 2601
AUSTRALIA
Ph: +61 2 6230 6811 FAX:
e-mail: rccaus@amsa.gov.a
Website:
http://www.amsa.gov.au/Se
itime_Safety_Information.a
NAVAREA XIV – NEW
LINZ Hydrographic Servic
Land Information New Zeal
National Office, Lambton H
160 Lambton Quay,
Private Box 5501
WELLINGTON
NEW ZEALAND
Ph: +64 4 460 0110 FAX: +
e-mail: info@linz.govt.nz
Website: http://www.linz.g
NAVAREA XV – CHILE
Director del Servicio Hidro
y Oceanografico de la Arma
the Chilean Navy)
Errazuriz 254
Playa Ancha
VALPARAISO
CHILE
Ph: +56 322 266666 FAX: +
e-mail: shoa@shoa.cl
Website: http://www.shoa.c

4. Name, Model and frequency in KHz of De
5. Port of Departure/date of departure
6. Port of Arrival/date of arrival
Water depth data should include data as follo
Year, month, day, hour, minute, latitude, lon
meters).
The preferred exchange format for data subm
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 a
operator to supply cruise/system data.

Submission of Data: Data should be sub
Administration (NOAA), NESDIS, National
address:
National Geophysical Data Center
NOAA, E/GC3
325 Broadway
Boulder, Colorado 80305
USA
Attn: Dan Metzger
NGDC is the data center for publicly avail
center but is also the designated International
Bathymetry. By submitting bathymetric data
will have access to the data for use in compil

Submission of Navigation Warnings: Whe
obstructions, shoals, wrecks, etc., which
ships/navigators, this information should be
NAVAREA Coordinators listed below.

NAVAREA VI – ARGENTINA
Head of Maritime Safety Department
Servicio de Hidrografia Naval
Avenida Montes de Oca 2124
C1271ABV BUENOS AIRES
ARGENTINA
Ph: +54 11 4301-2249 Fax: +54 11 4303-229
e-mail: navarea_VI@hidro.gov.ar
snautica@hidro.gov.ar
Website: http://hidro.gov.ar/Nautica/radioav.
NAVAREA VII – SOUTH AFRICA
The Hydrographer, S.A. Navy
Hydrographic Office
Private Bag X1, 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

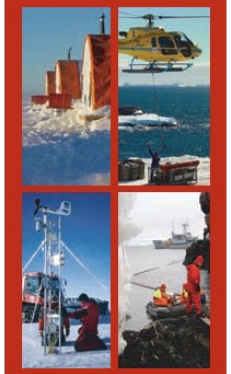
Agenda item 9.1 Action :8/17

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

COMNAP



The Council of Managers of National Antarctic Programs

www.comnap.aq

info@comnap.aq

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.

COMNAP

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.

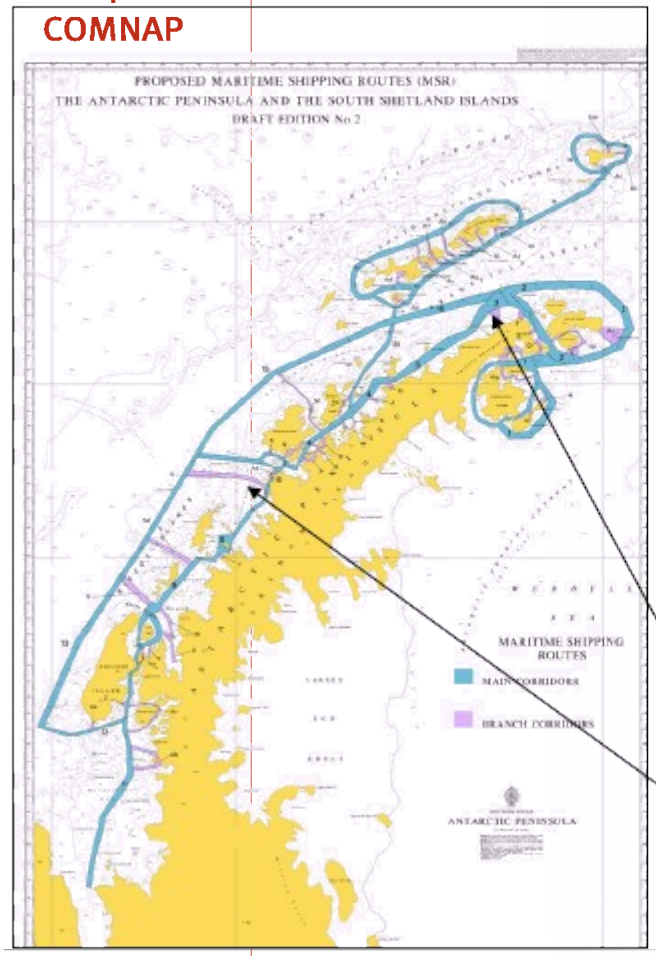
- Speaker: **Ian Moncrieff,** Rear Admiral, United Kingdom National Hydrographer, former Commanding Officer of HMS Endurance (the RN Antarctic Patrol Ships) and former Commander of British Forces in the South Atlantic. HCA Vice Chairman.
- Content: Antarctic Navigation and its risks. Extant of present 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 recomendations 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.

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 ....*

COMNAP

Thank you

- Any questions?