



SEMINAR

**THE INTERNATIONAL HYDROGRAPHIC ORGANIZATION
HYDROGRAPHIC COMMISSION ON ANTARCTICA**

**“ IMPORTANCE OF HYDROGRAPHIC
ACTIVITIES IN ANTARCTICA ”**

CONTENT



1st Presentation by Captain Hugo GORZIGLIA, IHB Director and HCA Chairman.

« Hydrography in Antarctica »

2nd Presentation by Radm Ian MONCRIEFF, UK National Hydrographer and HCA Vice Chairman.

« Risks in Antarctic Operations related to Hydrography and Nautical Cartography »

3rd Presentation by Cdr. Enrique SILVA, Head Dept. Operations SHOA and Chilean representative to HCA.

« Practical initiatives to improve Hydrography and Nautical Charting in Antarctica »



HYDROGRAPHY IN ANTARCTICA



WHAT IS HYDROGRAPHY?



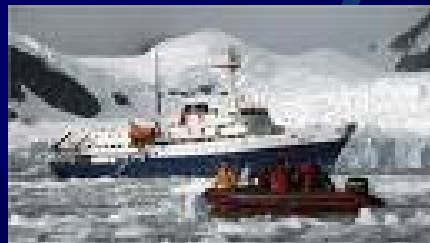
*“Hydrography is the branch of applied sciences which deals with the **measurement and description** of the physical features of oceans, seas, coastal areas, lakes and rivers, as well as with the **prediction of their change** over time, for the primary purpose of **safety of navigation** and in support of all other marine activities, including economic development, security and defence, **scientific research, and environmental protection**”.*

WHY WE NEED HYDROGRAPHY IN ANTARCTICA?



FOR AT LEAST :

1. ENABLING SAFE TO NAVIGATION
2. CONTRIBUTING TO SAFETY OF LIFE AT SEA
3. CONTRIBUTING TO PROTECT MARINE ENVIRONMENT
4. SUPPORTING SCIENTIFIC RESEARCH
5. CONTRIBUTING TO SAR OPERATIONS
6. SUPPORTING DECISION MAKING PROCESS





IHO MISSION

- “to facilitate the provision of *adequate and timely hydrographic information* for world-wide marine navigation and other purposes, through the co-ordination of the endeavours of national hydrographic offices”

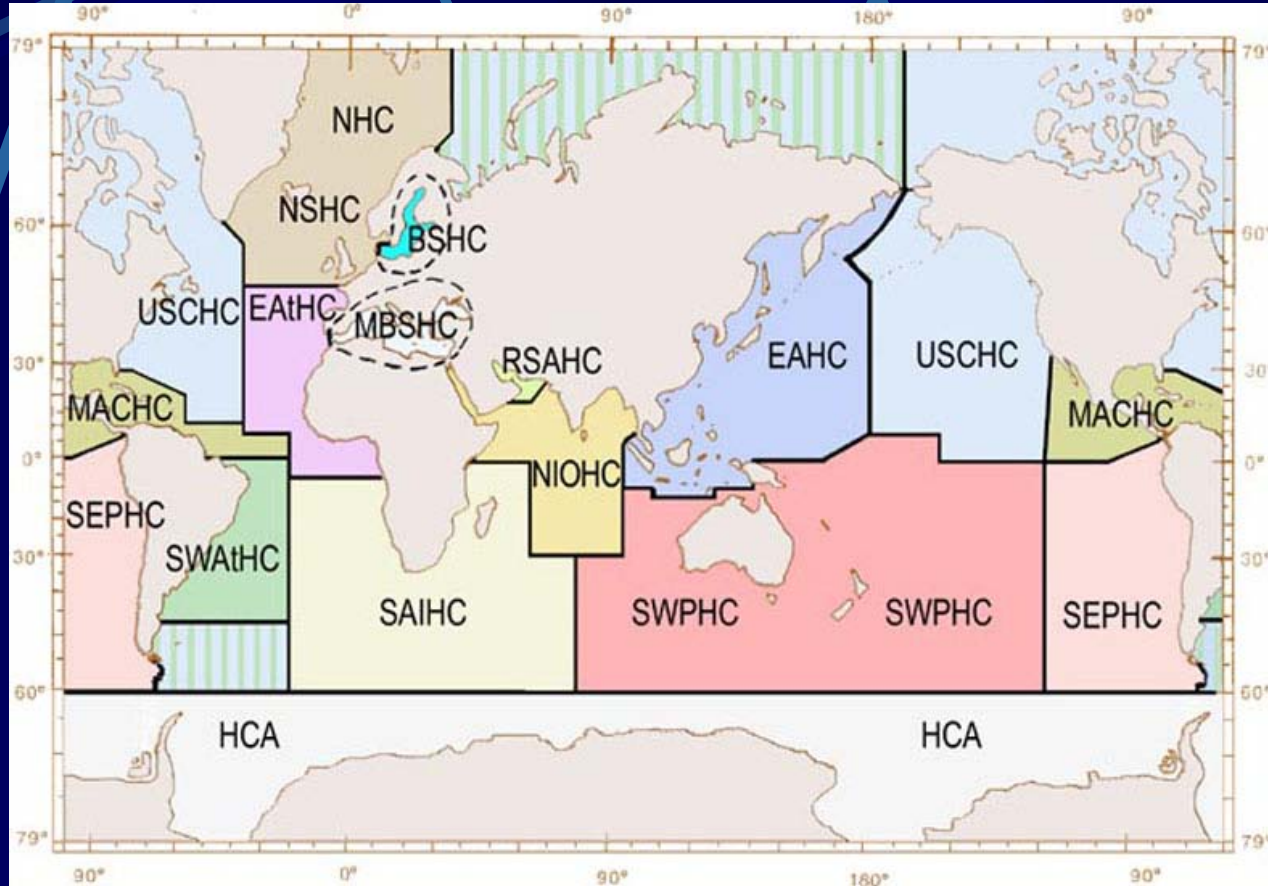
IHO OBJECTIVES



- The **co-ordination** of the activities of national hydrographic offices ;
- The greatest possible **uniformity** in nautical charts and documents;
- The **adoption** of reliable and efficient methods of carrying out and exploiting hydrographic surveys;
- The **development** of the sciences in the field of hydrography and the techniques employed in descriptive oceanography.



REGIONAL HYDROGRAPHIC COMMISSIONS AND THE HCA



HCA MEMBERSHIP (23)



USA VENEZUELA UK NORWAY

RUSSIA

JAPAN

CHINA

R.de KOREA

AUSTRALIA

NEW ZEALAND



GERMANY

ITALY

GREECE

SPAIN

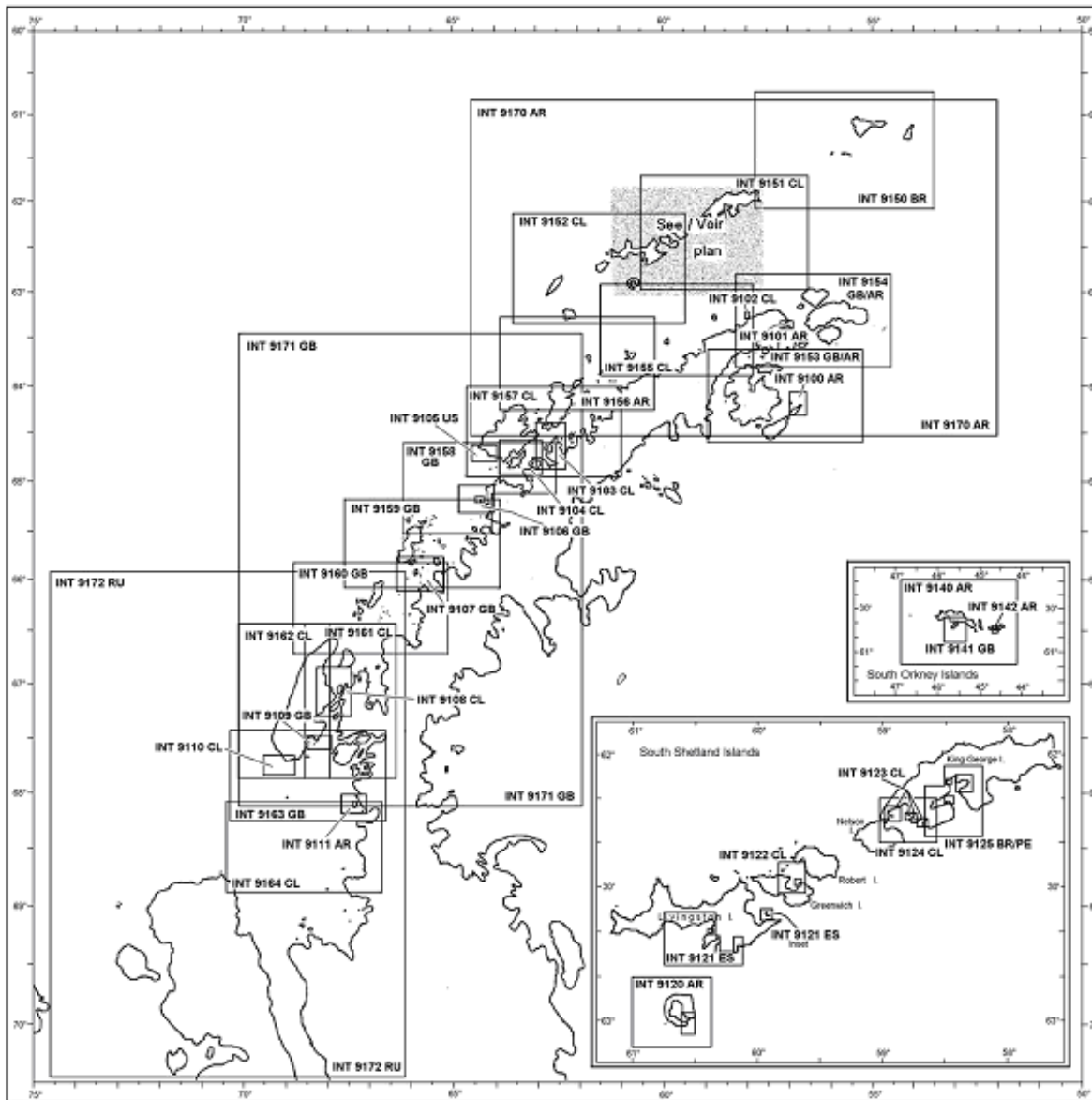
FRANCE

INDIA

SOUTH AFRICA

BRAZIL

ECUADOR PERU CHILE ARGENTINA URUGUAY



INT CHART SCHEME

Antarctic
Peninsula

EXPECTED PRODUCTION OF ANTARCTIC INT CHARTS



Till December 2009, 67 INT Charts will have been published, leaving 33 in the pending list.

PRESENT EXPECTATION IS :

- 3 charts are planned to be produced in 2010
- 1 chart is planned for 2011
- 4 charts are planned for 2012
- 1 chart is planned for 2013
- 0 chart is planned for 2014
- 5 charts are planned for “no earlier than 2015”
- 19 charts have not yet been considered in the planning.

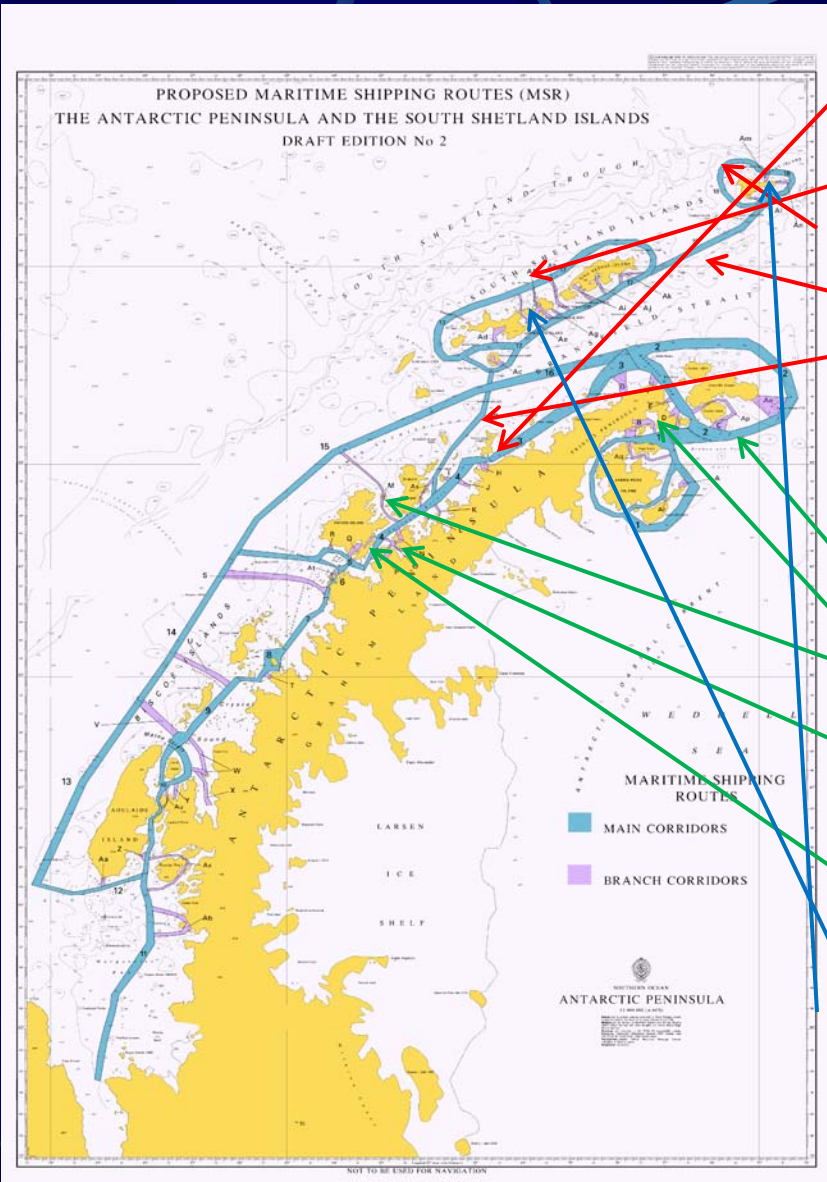
SOLAS V, REGULATION 9 (2002)

« Hydrographic Services »



Contracting Governments undertake to arrange for the collection and compilation of hydrographic data and the publication, dissemination and keeping up to date of all nautical information necessary for safe navigation.

Main and Branch Corridors and Approaches



MSR	Name
4	Gerlache strait
17	MSR
18	MSR
19	to KGI
20	Deception Is to Brabant Island

MSR	Name
C	Paulet Island
D	Brown Bluff and Fridtjof Sound
M	Melchior Islands and approaches
N	Errera Channel
O	Andvord Bay
P	Paradise Harbour
Q	Neumayer Channel and Port Lockroy
Ae	McFarlane Strait
Am	Point Wild /Mawson Commonwealth Bay Davis to Larsemann Hills

SHIPS OF OPPORTUNITY

(by own means or supported externally?)



PERSONNEL involved in hydro data gathering

- + Existing personnel on board?
- + With actual knowledge or to be trained?
- + If to be trained, where? when? by whom?
- + Embarking personnel from HOs? Where? For how long?
- + Which HOs?

EQUIPMENT (positioning and depth determination)

- + Existing equipment on board?
- + External equipment? How installation is achieved?
- + Is it possible to interconnect it with other sensors?
- + Is training needed? When and by whom?

Let us concentrate on gathering data employing existing resources, human and equipment.

TO CONCLUDE



COMNAP as well as many other stake holders requires a reliable hydrographic service.

IHO looks forward to higher priority and commitment from the Antarctic Treaty countries.

Lack of new hydrographic surveys prevent IHO to achieve INT Chart coverage of Antarctic waters.



Let us join our efforts to improve the situation as it constitutes a risk in the Antarctic Operations. This will be explained in the next presentation.

**THANKS
FOR YOUR ATTENTION**