



INTERNATIONAL HYDROGRAPHIC ORGANIZATION
HYDROGRAPHIC COMMITTEE ON ANTARCTICA – HCA
11th MEETING – HOBART, TASMANIA
OCTOBER 05 – 07, 2011

REPORT PREPARED BY THE HYDROGRAPHIC AND OCEANOGRAPHIC SERVICE
OF THE CHILEAN NAVY (SHOA)



SHOA SURVEYORS



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**PREPARED BY THE HYDROGRAPHIC AND OCEANOGRAPHIC SERVICE
OF THE CHILEAN NAVY (SHOA)**

1.- HYDROGRAPHIC OFFICE/SERVICE.

The Hydrographic and Oceanographic Service of the Chilean Navy (SHOA) is responsible for the hydrographic, cartographic, oceanographic and navigational activities at the Chilean Antarctic waters, being those actions part of its mission.

Every year, SHOA surveyors on board the Antarctic vessels of the Chilean Navy, accomplish the hydrographic activities planned by the National Committee for Nautical Charts.

Usually three campaigns are annually developed in order to acquire the source data to produce, at least, one Antarctic paper nautical chart per year and consequently, if proper, the correspondent Electronic Nautical Chart.

The Maritime Directorate of the Navy carries out broadcasting tasks related to its appointed area NAVAREA XV (IMO), where the Antarctic sector of the Chilean responsibility is included. Additionally, the Meteorological Service of the Navy disseminates through the Safety Net INMARSAT the navigational warnings about ice edges and plotting of drifting icebergs.

SHOA is part of the IHO Permanent Working Group for Cooperation in Antarctica (PWGCA) and follows the recommendations of the XV Meeting of the Antarctic Treaty for cooperating to the international coordination efforts related to hydrographic and cartographic activities in Antarctica.



2.- SURVEYS.

This year Antarctic hydrographic activities were developed by SHOA from January 5th to February 22nd, 2011, on board ATF “Lautaro” (see picture) for surveying the area from Useful Islet to Wednesday Island, Gerlache Strait, surveying phase 2 of 3, affecting national charts 15350 (Int. 9104), 15351 and 15352 which surveying activities are depicted below.

Additionally, maintaining tasks to sea level and environmental stations at “Prat” and “O’Higgins” bases were carried out, considering also measurements of geodetic vertexes, stereoscopic points for photogrammetric support and updates for the Antarctic Sailing Directions.

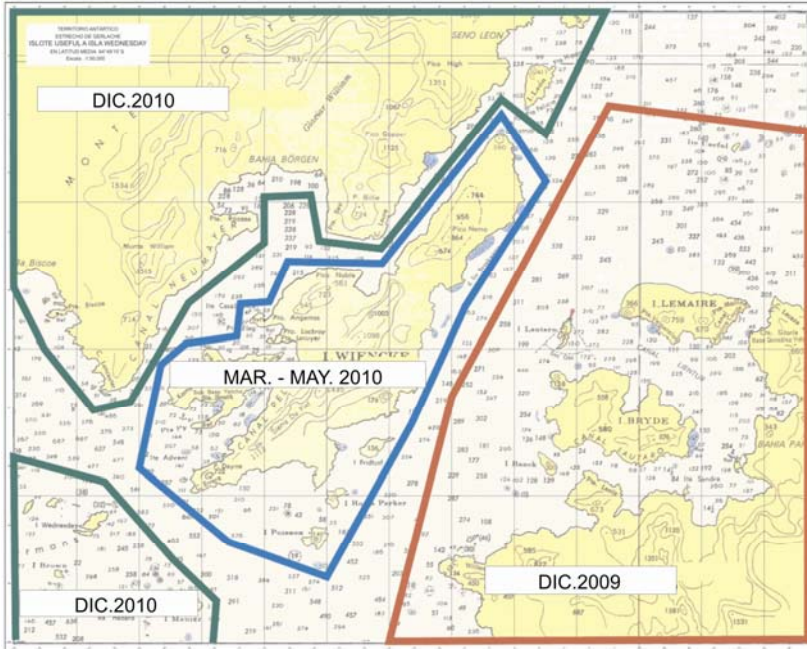


ATF “LAUTARO”

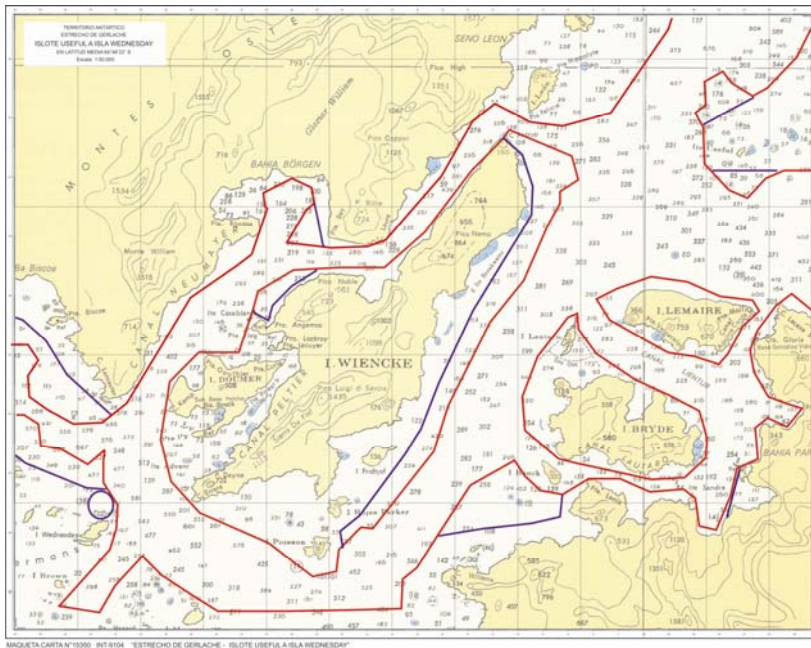
Surveying activities schedule

Int. N°	Scale 1:	Years of surveys
9104	50.000	2010 – 2011 – 2012
9103 (UKHO data)	50.000	2013 – 2014
9151	200.000	2015 – 2016
9157	150.000	2017 – 2018 – 2019

Dates of source photogrammetric data for producing National 15350 (Int. 9104)



Areas of collected bathymetric data for National 15350 (Int. 9104)





3.- CHARTS AND PUBLICATIONS.

a.- Paper charts:

Green: Published. INT 9102 SHOA 14511 INT 9122 SHOA 14231 INT 9123 SHOA 14211 INT 9124 SHOA 14212 INT 9155 SHOA 14400	
Orange: In process (phase 2/3). INT 9104 SHOA 15350	
Blue: Planned. INT 9103 (UKHO data)	

Int. 9103

List of action items from the 10th HCA meeting (HCA11-05A)

Action 10/7.

UKHO to provide bathymetric data collected in Gerlache Strait to Chile, for production of chart Int. 9103 (Proj. 2013) – Done.

Data provided by UKHO in XYZ files.

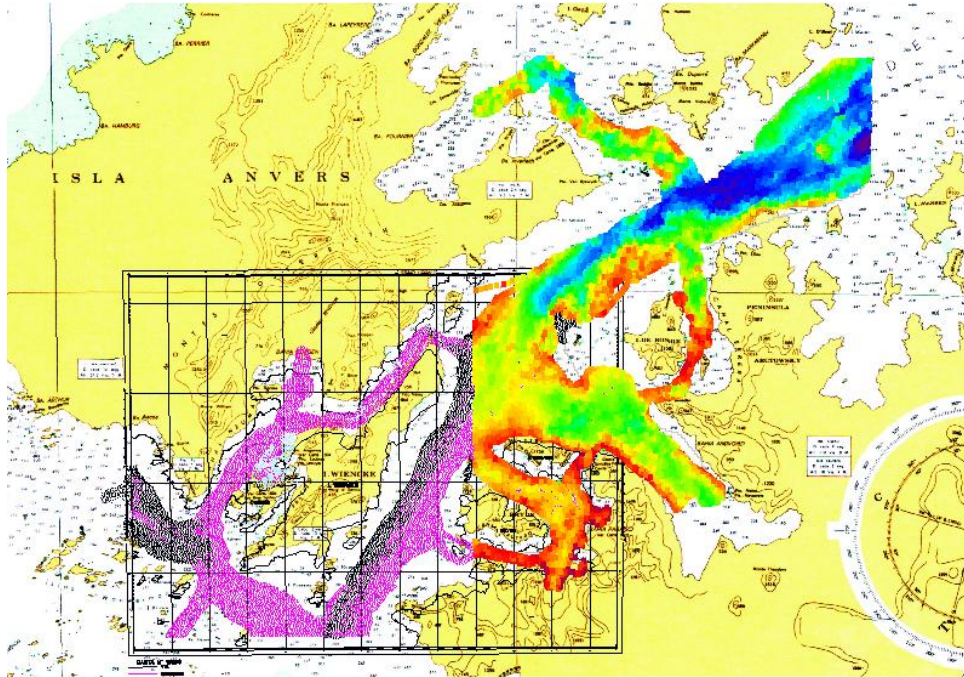
Multibeam, singlebeam and passage soundings.

Shoal biased data.

Depth selection at 1:50,000 to fit Int. 9103 coordinates.

Data under analysis by SHOA.

Next figure shows Int. 9104 (gridded) and Int. 9103 coverage (colored).



b.- Electronic Nautical Charts:

- No new ENC's were produced during the period.

c.- Publications:

- Updating of SHOA Pub. 3006, "Antarctic Sailing Directions".



4.- MARITIME SAFETY INFORMATION (MSI).

Chile operates an information infrastructure in accordance with the assigned area of responsibility IMO NAVAREA XV.

This area considers the Antarctic sector of the Chilean responsibility. Transmissions are made through NAVTEX and SafetyNet according to a pre-established schedule. Additionally, the Meteorological Service of the Navy broadcasts through NAVTEX and SafetyNet the navigational warnings about ice edges and plotting of drifting icebergs.

5.- STATUS OF HYDROGRAPHIC SURVEYING AND NAUTICAL CHARTING WORLDWIDE (S-55).

No new S-55 information has been reported.

6.- CAPACITY BUILDING.

Between February 17th and March 01st, 2011, Hydrographers and Oceanographers Officers from Guatemala, Mexico and Chile (three in total) who graduated from the FIG Class "A" course, were instructed on board Icebreaker Viel (see picture), being this a practical method to introduce the surveyors on field and vessel activities made in Antarctica.

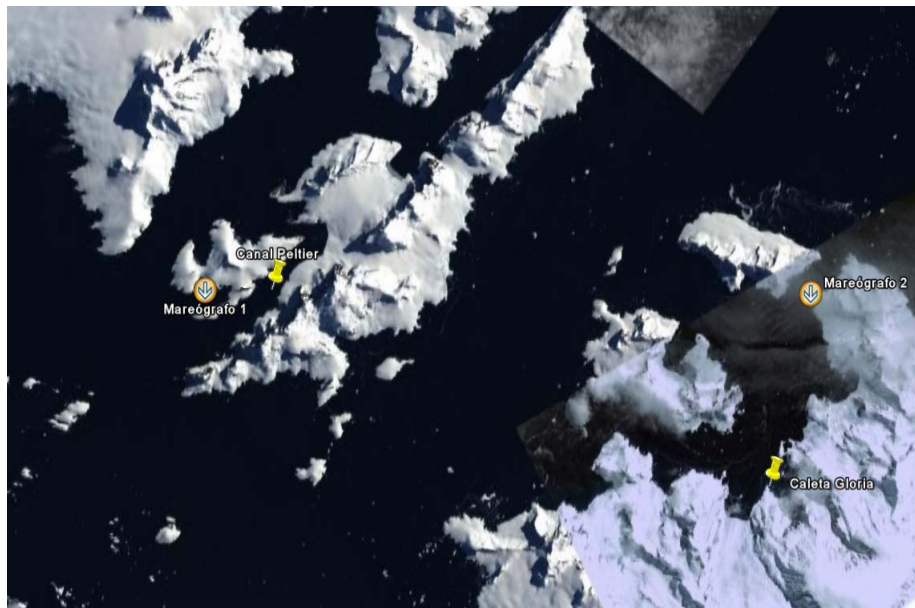


AP "VIEL"



7.- OCEANOGRAPHIC ACTIVITIES.

- a.- Tide gauge maintenance.
 - “Base Prat”.
 - “Base O’Higgins”.
- b.- Tide gauge installation.
 - “Bahía Paraíso”.
 - “Bahía South”.



General scheme

8.- OTHER ACTIVITIES.

- a.- Antarctic Geographic Names
 - The National Committee of Antarctic Geographic Names continuous its work in the Geographic Names Dictionary by checking the charts of the area.