



HCA12-07.4Ad

**INTERNATIONAL HYDROGRAPHIC ORGANIZATION  
HYDROGRAPHIC COMMITTEE ON ANTARCTICA – HCA  
12<sup>th</sup> MEETING – MONTEVIDEO, URUGUAY  
OCTOBER 09 – 13, 2012**

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



SHOA SURVEYORS



**TABLE OF CONTENTS**

- 1.- HYDROGRAPHIC OFFICE/SERVICE.
- 2.- SURVEYS.
- 3.- CHARTS AND PUBLICATIONS.
- 4.- MARITIME SAFETY INFORMATION (MSI).
- 5.- STATUS OF HYDROGRAPHIC SURVEYING AND NAUTICAL CHARTING WORLDWIDE (S-55).
- 6.- CAPACITY BUILDING.
- 7.- OCEANOGRAPHIC ACTIVITIES.
- 8.- OTHER ACTIVITIES.



**INTERNATIONAL HYDROGRAPHIC ORGANIZATION  
HYDROGRAPHIC COMMITTEE ON ANTARCTICA – HCA**

**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) has the responsibility of carrying out hydrographic, cartographic and oceanographic activities on Antarctica, being those actions part of its permanent mission.

Every year, SHOA conducts field works on board appointed vessels of the Chilean Navy to achieve the activities planned by the Steering Committee for Nautical Charts.

Usually two or three campaigns are developed for acquiring source data to produce paper and electronic nautical charts of Antarctica and consequently the correspondent Nautical Publications.

As mentioned in the last year report, the Maritime Directorate of the Navy performs broadcasting tasks at NAVAREA XV. Additionally, the Meteorological Service of the Navy broadcasts via INMARSAT the navigational warnings.

SHOA is part of the IHO Permanent Working Group for Cooperation in Antarctica (PWGCA) following the recommendations of the XV Meeting of the Antarctic Treaty.



## 2.- SURVEYS.

This year Antarctic hydrographic activities were carried out from February 11<sup>th</sup> to March 14<sup>th</sup>, 2012, on board Auxiliary Tug Fleet (ATF) “Lautaro” (see picture below). This vessel worked in the area from Useful Islet to Wednesday Island, of Gerlache Strait. This survey corresponds to the phase 3 of 4, which relates 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.

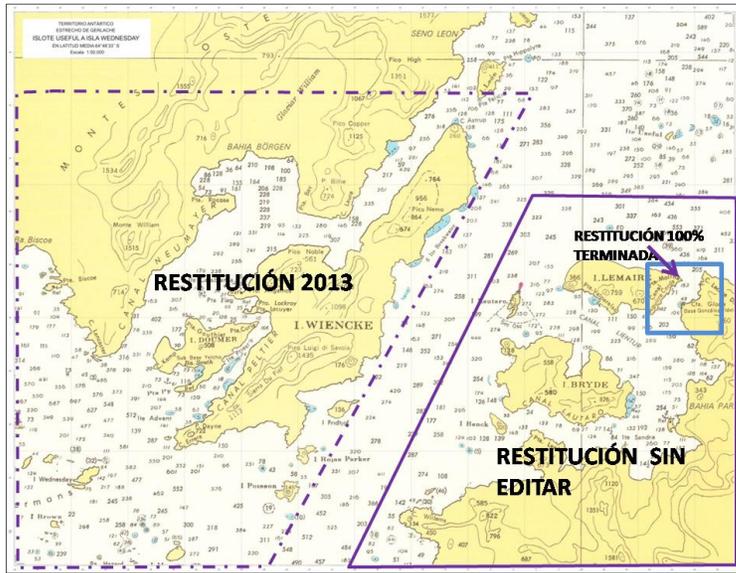


Auxiliary Tug Fleet “LAUTARO”

### Surveying activities schedule

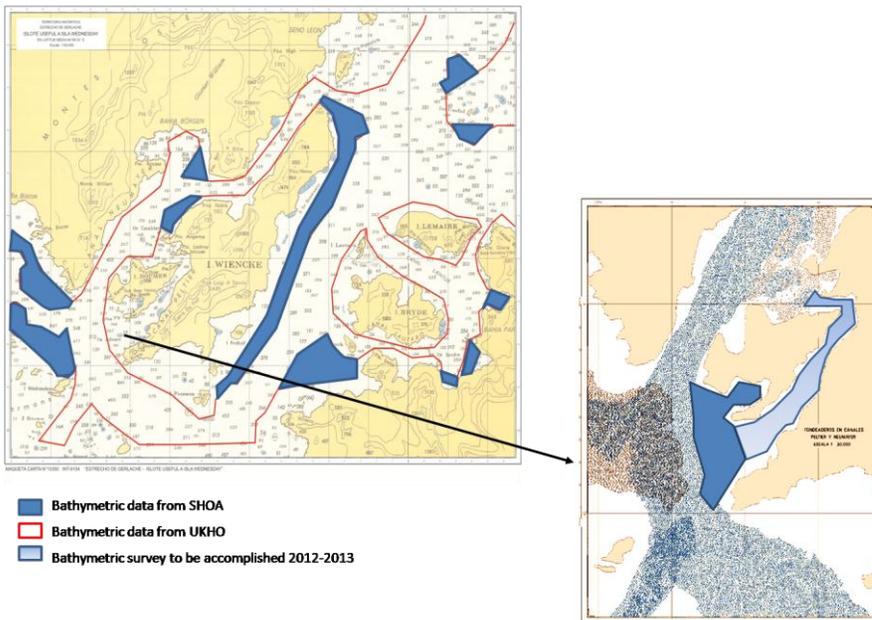
Int. N°	Scale 1:	Years of surveys
9104	50.000	2010 – 2011 – 2012 - 2013
9103 (UKHO data)	50.000	2014 – 2015
9151	200.000	2016 – 2017
9157	150.000	2018 – 2019 – 2020

Status of photogrammetric data for National 15350 (Int. 9104)



- Photogrammetric work accomplished **100%**
- Photogrammetric work accomplished 2012 **50%**
- Photogrammetric work to be accomplished 2013

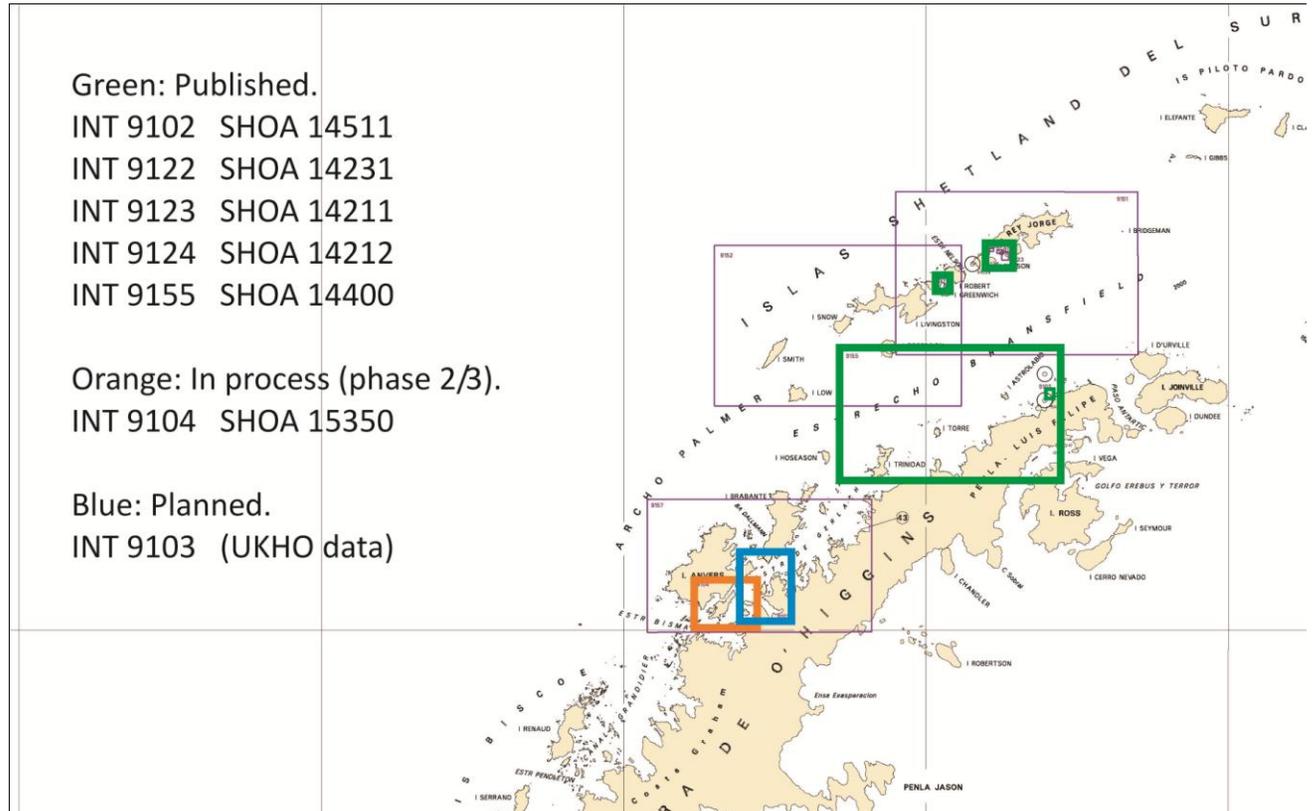
Areas of collected bathymetric data for National 15350 (Int. 9104)





### 3.- CHARTS AND PUBLICATIONS.

a.- Paper charts:



Int. 9103

List of action items from the 10<sup>th</sup> 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.

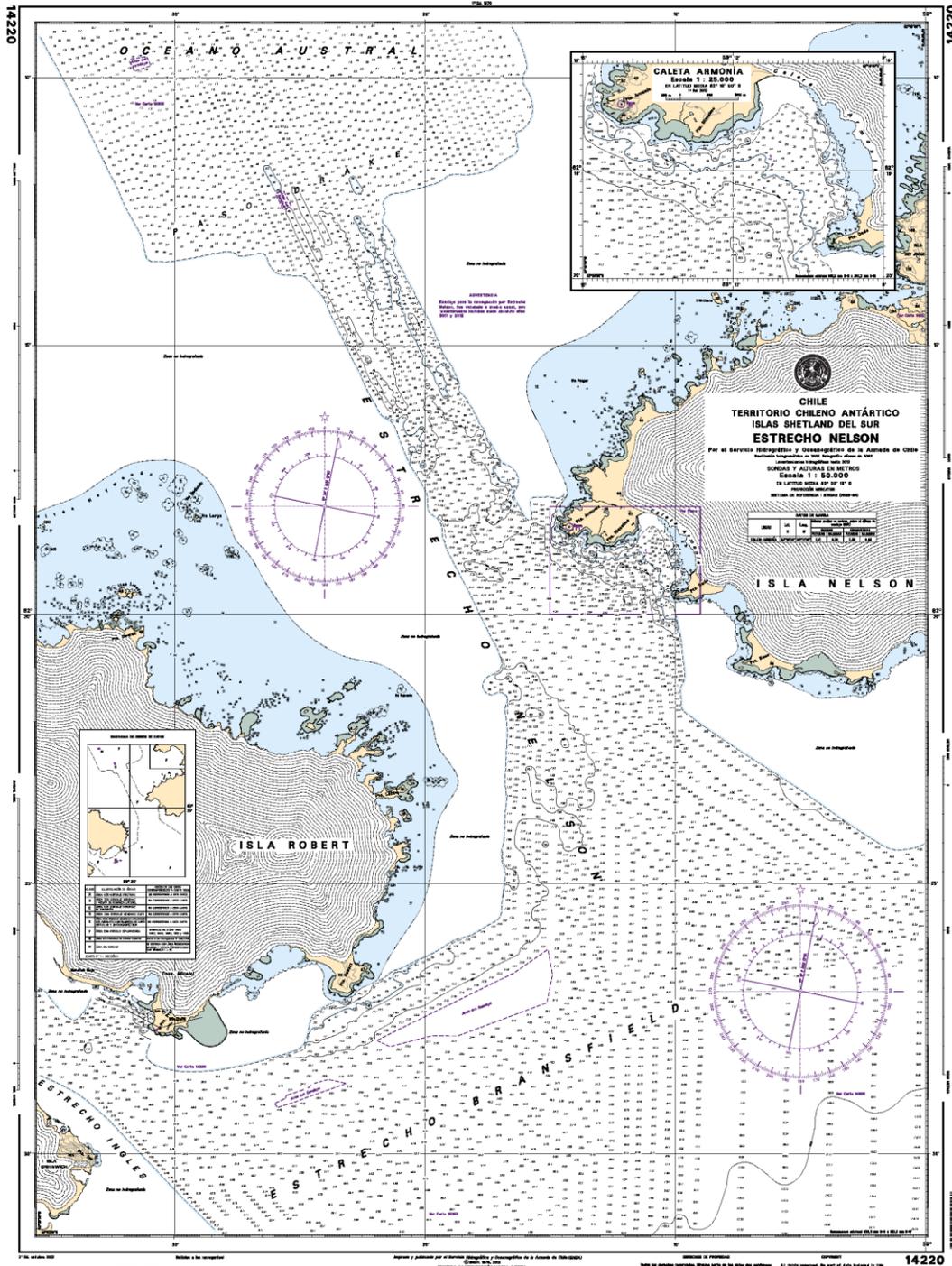
Depth selection at 1:50,000 to fit Int. 9103 coordinate.

Data under analysis by SHOA.



a.1.- New chart:

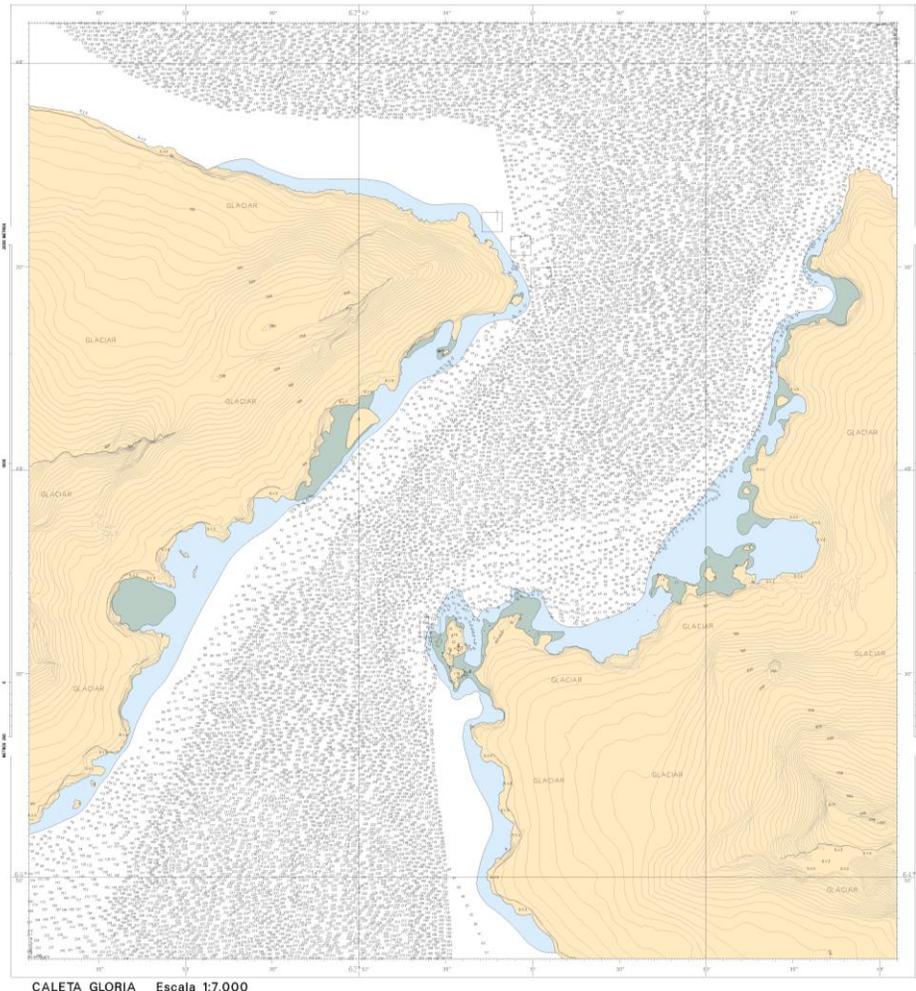
**NELSON STRAIT, 1:50.000 (National Chart) projected Dec. 2012.**





a.2.- New chart:

**GLORIA CREEK, 1:7.000 (National Chart) projected Dec. 2012.**





b.- Electronic Nautical Charts:

- New ENC's, projected 2013

	"CALETAS EN BAHÍA FILDES"	
14211	Caleta Potter	1:12.000
INT9123	Caleta Ardley	1: 12.000
	Caleta Marian	1: 12.000
14212		
INT9124	"BAHÍA FILDES"	1: 22.000

c.- Publications:

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

**4.- MARITIME SAFETY INFORMATION (MSI).**

Chile operates assigned area of responsibility IMO NAVAREA XV.

This area includes the Antarctic sector of Chilean responsibility. Transmissions are 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.

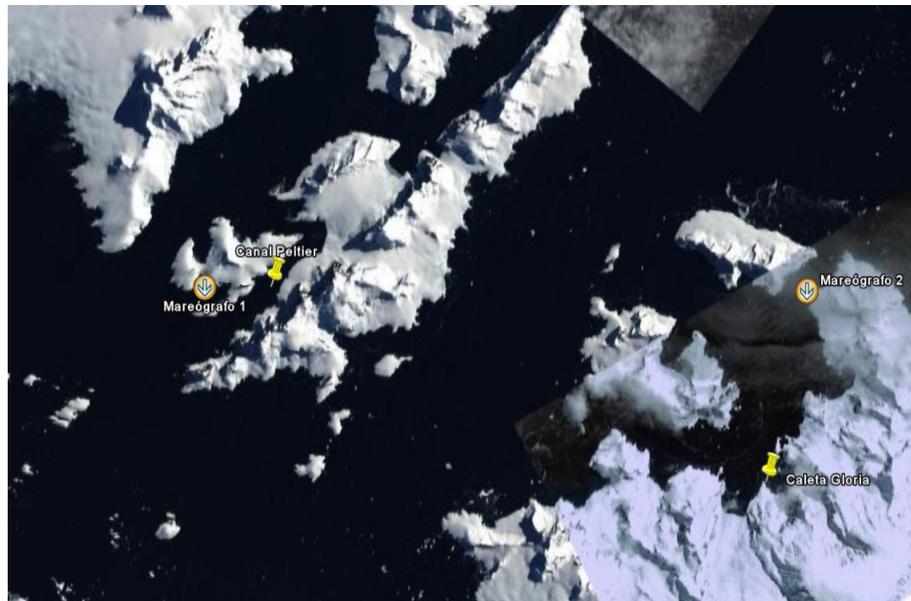
**6.- CAPACITY BUILDING.**

No new activities related Antarctica issues.



## 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 continues its work in the Geographic Names Dictionary by checking the charts of the area.