



SERVICIO HIDROGRÁFICO Y OCEANOGRÁFICO DE LA ARMADA DE CHILE

---

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



**REPORT PREPARED BY THE HYDROGRAPHIC AND OCEANOGRAPHIC SERVICE  
OF THE CHILEAN NAVY (SHOA)  
Period 2015-2016**



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## INTERNATIONAL HYDROGRAPHIC ORGANIZATION HYDROGRAPHIC COMMISSION ON ANTARCTICA – HCA

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

#### 1. - HYDROGRAPHIC OFFICE/SERVICE.

- a. The Hydrographic and Oceanographic Service of Chilean Navy (SHOA), has the responsibility of carrying out hydrographic, cartographic and oceanographic activities in Antarctica, being these actions permanent part of its mission.
- b. SHOA has been part of the IHO/HCA since the early establishment of the IHO Permanent Working Group for Cooperation in Antarctica (PWGCA), following recommendations agreed at the XVth Antarctic Treaty Consultative Meeting.
- c. Updates for the Yearbook:
  - ✓ In “Other Point of contact” should say: Head of Hydrographic Department, Lt. Cdr. Héctor Fierro S.
  - ✓ In “Number of ENC cells published” should say: 223 (produced and delivery).

#### 2. - SURVEYS.

In 2015 and 2016, the following hydrographic surveys have been conducted:

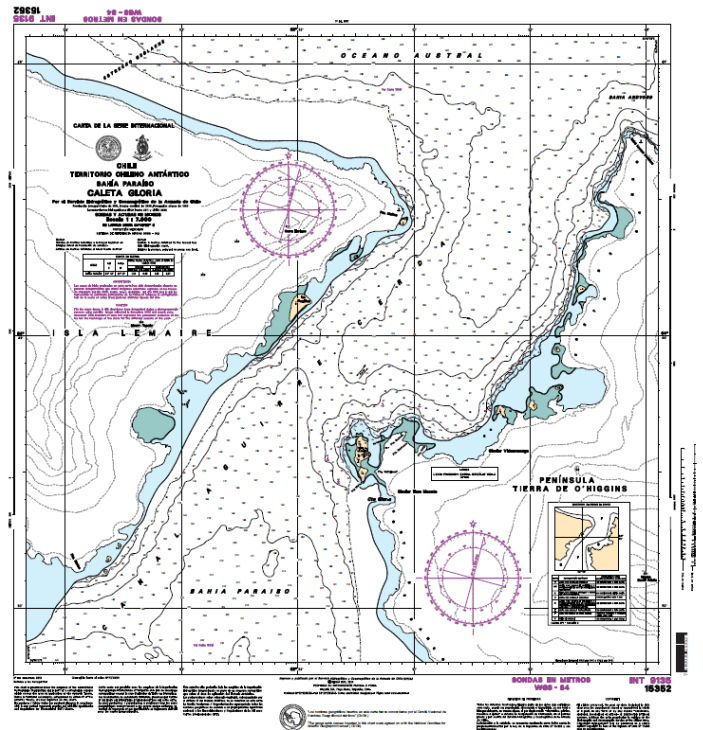
- ✓ Between January 11<sup>th</sup> and February 17<sup>th</sup> , 2015, a hydrographic survey in Gerlache Strait, between Markmann bay a Andvord bay was realized to acquired data which will be used to publish Nautical Chart N° 15340 “Territorio Chileno Antártico - Estrecho Gerlache – Bahía Markmann a Bahía Andvord”, scale 1:50.000. Also the verification of the Electronic Nautical Chart N° 15352 “Gloria Cove” with the support of ATF Galvarino was conducted.
- ✓ Between January 14<sup>th</sup> and February 10, 2015, a hydrographic survey in Gerlache Strait with support of AP Aquiles was conducted to get information for the production of Nautical Chart N° 15350 “Territorio Chileno Antártico - Estrecho Gerlache - Islote Useful a isla Wednesday”, scale 1:50.000.
- ✓ Between February 23 and March 31, this year, a hydrographic survey was conducted in Admiralty Bay, King George Island, in South Shetland Islands with the support of ATF Lautaro to acquire data which will be used to publish Nautical Chart N° 14200 "South Shetland Islands - Island King George to Island Livingstone ", scale 1: 200.000.



### 3. - NEW CHARTS AND UPDATES.

a.- Paper charts: Production 2015 and 2016.

- ✓ Nautical Chart SHOA N° 15352 “Caleta Gloria”, scale 1:7000 printed in December 2013, was homologated to an International format (INT 9135).



**Figure N° 1:** Homologated Nautical Chart N° 15352 “Caleta Gloria.

- ✓ Nautical Chart N° 15350 “Territorio Chileno Antártico - Estrecho Gerlache - Islote Useful a isla Wednesday”, scale 1:50.000 (INT 9104) will be published on November 2016.
- ✓ The publication of Nautical Chart N° 15340 “Bahía Markmann a Bahía Andvord”, scale 1:50.000 (INT 9103) it scheduled for 2017.

b.- Electronic Nautical Charts:

No Electronic Nautical Chart was published on this period.



#### **4. - NEW PUBLICATIONS AND UPDATES.**

- a. SHOA Pub. 3035, “General Instruction for Pilotage in the Waterway of the Chilean Antarctic Territory”. (2<sup>nd</sup> edition) was published in October 2015.
- b. SHOA Pub. 3006, “Antarctic Sailing Directions” was kept updated accordingly.
- c. Through the temporary notice (Nº 11T/2016), this Service supported Antarctic Operations and Maritime Security giving relevant information about: meteorological information from Fildes Bay Weather Station; Bays and oceanic’s access Glaciological information; height and direction waves; and ice border analysis chart.

#### **5. - MARITIME SAFETY INFORMATION (MSI).**

Chile is the coordinator for NAVAREA XV. This area includes the Chilean Antarctic Territory. 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.

The Chilean Maritime Authority, through “Puerto Fildes” Port Authority, issues Antarctic weather forecast for Zone IX and Presidente Eduardo Frei Montalva Antarctic Meteorological Center, issues weather forecast for the Drake Passage and Bellingshausen Maritime Region.

#### **6. - STATUS OF HYDROGRAPHIC SURVEYING AND NAUTICAL CHARTING WORLDWIDE (S-55).**

No new S-55 information has been reported.

#### **7. - CAPACITY BUILDING.**

- a. Technical advice to the first Colombian Antarctic Expedition was provided to the Colombian Navy and particularly to the Centro de Investigación Oceanográfica e Hidrográfica (CIOH), for the collection of bathymetric information which could be included into Chart Nº 15340 (Int. 9103). The survey took place and the data is being compiled for the production of the mentioned chart.
- b. Chile continues to provide an International Course on Operation on Antarctic Waters. This training is offered mainly to pilots sailing to Antarctica. The course is offered by the Maritime Instruction Centre (CIMAR). Last course



was imparted September 29 to October 10, 2015 and was attended by students from Germany, Brazil, Canada, Colombia, Spain, France, Ecuador, New Zealand and Chilean Navy officers. , This course will be delivered again from October 17<sup>th</sup> to 28th on this year.

## **8. - OCEANOGRAPHIC ACTIVITIES**

- a. Tide gauge maintenance  
The tide gauges that are installed in the following locations have been kept in operation and maintained throughout the period:
  - Base Arturo Prat.
  - Base O'Higgins.
  - Rada Soberanía.
- b. The sea level station of Prat Base is part of the National Tsunami Warning System. Last sentence is considering the observation at Rada Covadonga is used mainly for forecasting and preparation of the tidal table purposes.

## **9. - OTHER ACTIVITIES.**

- a. Antarctic Geographic Names.  
  
The National Committee of Antarctic Geographic Names continues its work through meetings with other national organizations, determining Geographic names in this area, updating Dictionary, checking the charts of the area and providing advice on the proper use of names.
- b. XXXIX Antarctic Treaty Consultative Meeting 2016.  
  
On the occasion of XXXIX ATCM, Information Paper 97 "Cooperation by the Hydrographic and Oceanographic Service of Chilean Navy (SHOA) in the Production of Nautical Charts in the Antarctic Area" (Program 2010-2020), was presented.

## **10. - CONCLUSIONS.**

Chile has continued to participate and cooperate with other countries in the provision of hydrographic, cartographic, oceanographic and maritime safety information aiming at achieving the objectives of HCA.