



HCA10-07.4Ad

**INTERNATIONAL HYDROGRAPHIC ORGANIZATION  
HYDROGRAPHIC COMMITTEE ON ANTARCTICA  
10<sup>TH</sup> MEETING – CAMBRIDGE, UNITED KINGDOM  
SEPTEMBER 20 – 22, 2010**

**REPORT PREPARED BY THE CHILEAN NAVY HYDROGRAPHIC AND  
OCEANOGRAPHIC SERVICE**



Chilean Icebreaker "Oscar Viel Toro"

Certificación ISO 9001 para los procesos de producción de Cartas y Publicaciones Náuticas.



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## CONTENTS

- 1.- Name of the Hydrographic Office
- 2.- Surveys
- 3.- New Charts and updates
- 4.- New Publications and updates
- 5.- Antarctic MSI
- 6.- S-55 Data Input
- 7.- Capacity Building
- 8.- Oceanographic Activities
- 9.- Other Activities





**NATIONAL REPORT TO THE  
HYDROGRAPHIC COMMITTEE ON ANTARCTICA (HCA)  
PREPARED BY THE CHILEAN NAVY HYDROGRAPHIC  
AND OCEANOGRAPHIC SERVICE**

**1.- Hydrographic Office/Service:** Servicio Hidrográfico y Oceanográfico de la Armada de Chile (SHOA). Hydrographic and Oceanographic Service of the Chilean Navy.

**2.- Surveys:**

**Hydrographic Activities 2010**

In February 2010, the Hydrographic and Oceanographic Service of the Chilean Navy (SHOA) carried out hydrographic surveys on Gerlache Strait. The survey achieved during February corresponds to the first campaign planned to complete the data acquisition for the National Paper Charts 15350 (INT-9104), 15351 and 15352.

The survey for publishing SHOA Chart N° 15352 was accomplished by the Chilean Auxiliary Fleet Tug (AFT) "Lautaro", however the survey for publishing SHOA chart N° 15350 and 15351 was accomplished by the Chilean Ice breaker "Oscar Viel" and the "Lautaro". Some areas were surveyed using multibeam and others were surveyed using single beam echosounder.

Charts 15350, 15351 and 15352 will use bathymetric data collected in Gerlache Strait by United Kingdom, according to Actions resulting from the 9<sup>th</sup> HCA Meeting.

Furthermore SHOA obtained Geoeye Satellital images, which have been used to make charts N° 15350, 15351 and 15352.



The figure below describes, the coverage (Km<sup>2</sup>) and the date of acquisition of every image that conforms a polygon:

- SATELLITAL UNCOVERED AREA UNTIL HAVING CLEAR SKY
- RECENTLY ACQUIRED IMAGES FROM GEOEYE SATELLITE
- AREA WITH PHOTOGRAMMETRIC RESTITUTION FROM GEOEYE SATELLITE

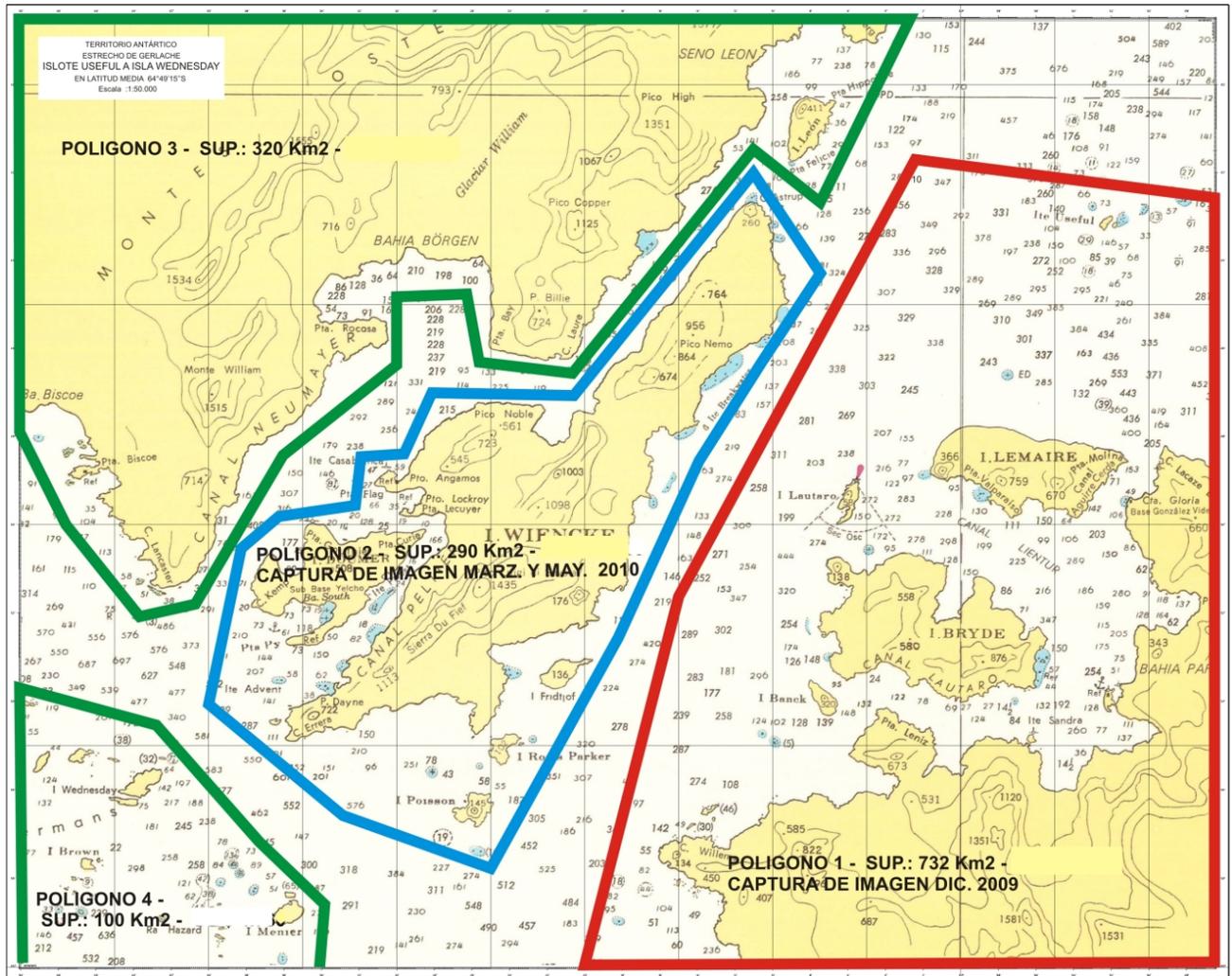


FIGURE N°1 POLYGON SCHEMATICS

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### Hydrographic Activities 2011 - 2012

In January 2011, the SHOA will carry out hydrographic surveys in those areas to be accomplished shown in figures N° 2 and 3.

The figures below show the bathymetric data from United Kingdom (green), the bathymetric data from Chile during the campaign 2010 (orange) and the bathymetric data to be accomplished by Chile in 2011 and 2012 (cyan).

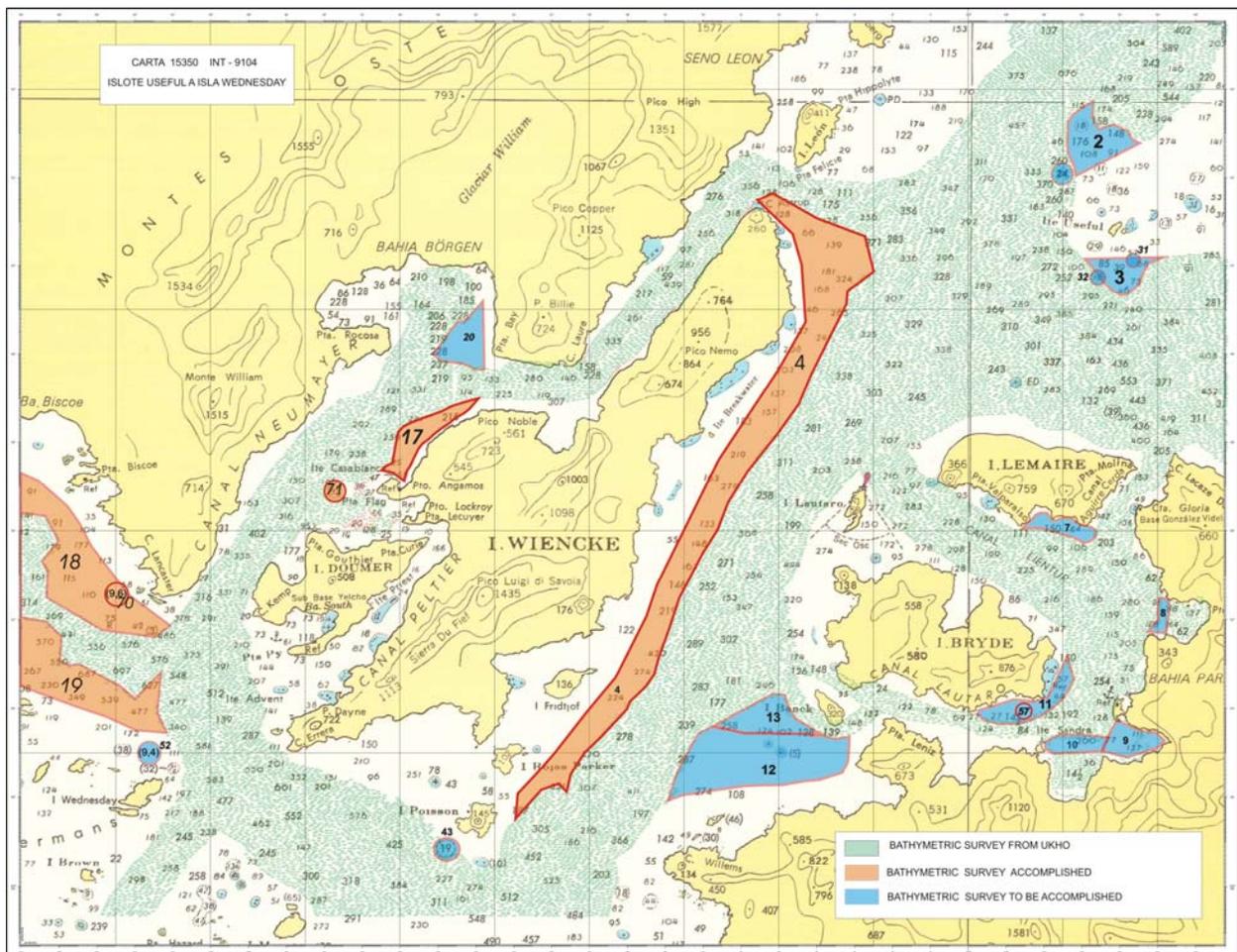


FIGURE N° 2 CHART INT 9104 (NATIONAL 15350)

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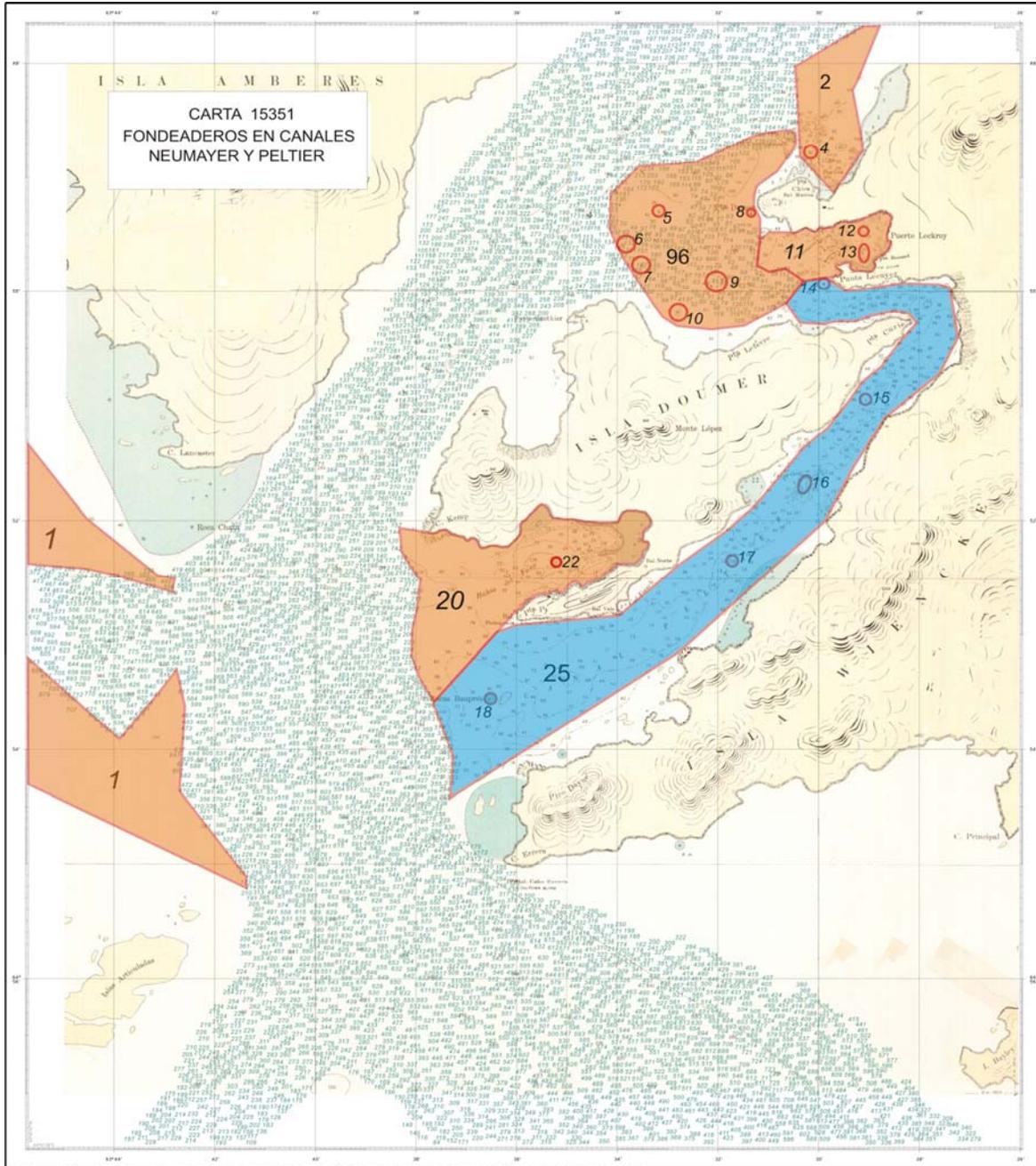
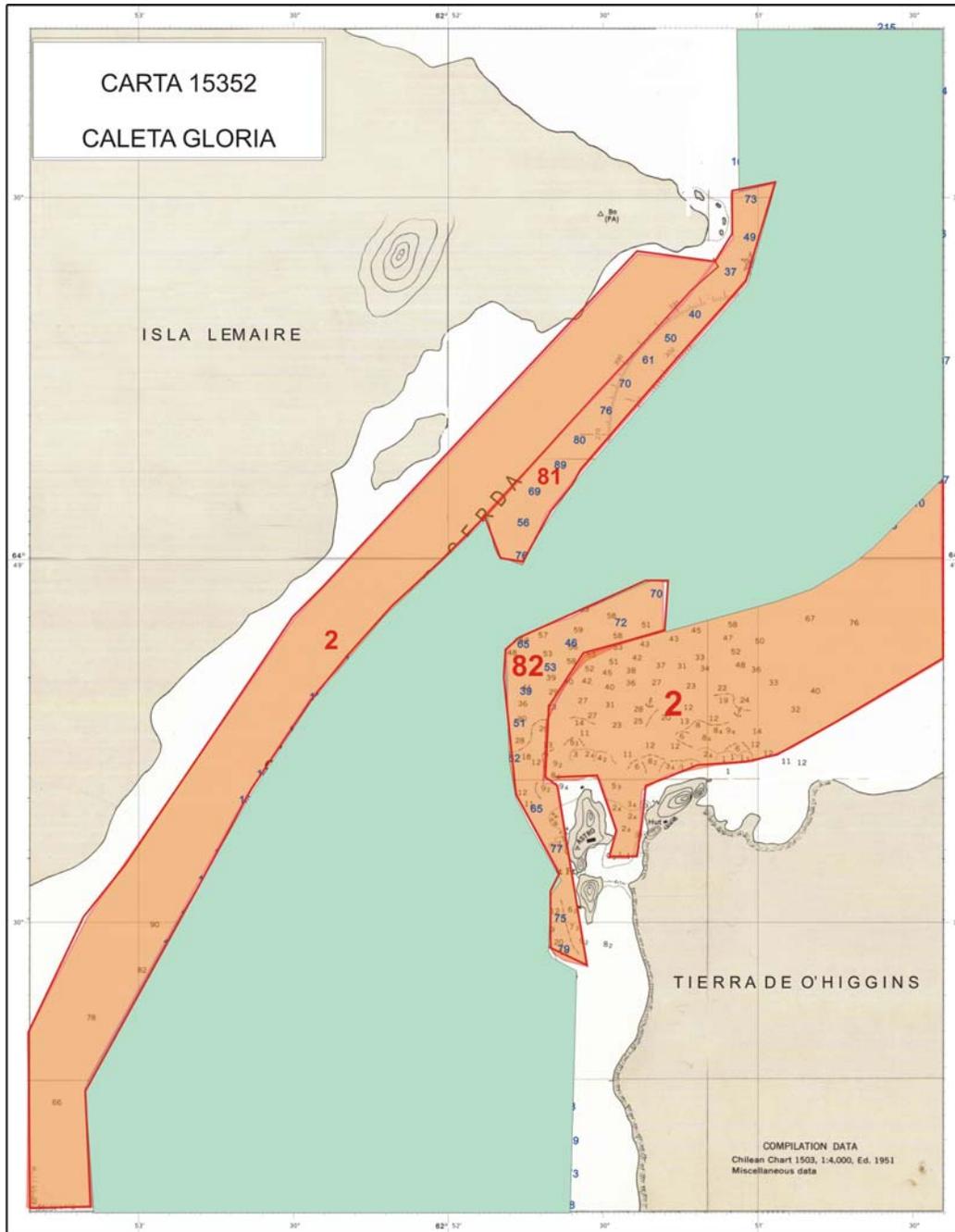


FIGURE N° 3 NATIONAL CHART N° 15351

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MAQUETA CARTA N° 15352 "ESTRECHO DE GERLACHE - CANAL AGUIRRE CERDA"

■ BATHYMETRIC SURVEY FROM UKHO  
■ BATHYMETRIC SURVEY ACCOMPLISHED

FIGURE N° 4 NATIONAL CHART N° 15352

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### 3.- Charts and Publications

a) Paper charts & updates:

No paper charts have been produced since the last meeting. New Edition of National Paper Chart 15352 “Caleta Gloria” (scale 1:7.000) will be published next year.

Figure N° 5 show the location of charts N°s 15350, 15351 and 15352.

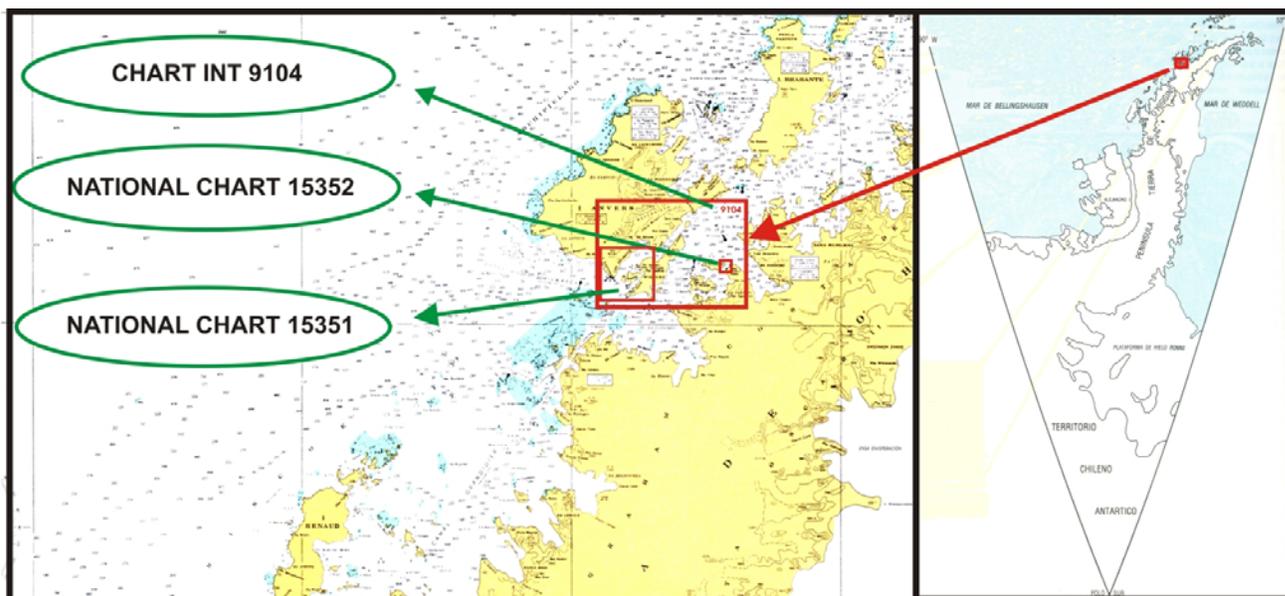


FIGURE N° 5 CHILEAN ANTARCTIC TERRITORY.



b) ENC:

No Electronic Nautical Chart have been produced since the last meeting.

c) Publications:

1.- SHOA is currently updating “Sailing directions for the Antarctic Territory”.  
Derrotero Antártico, Vol. VI.

2.- SHOA is working to update “Hydrographic Instructions” N° 3.  
Determinación de Nombres Geográficos.

#### **4.- MSI**

Chile has an 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 Safety NET INMARSAT “C” according to pre-established schedule. Additionally, the “Servicio Meteorológico de la Armada” (Meteorological Service of the navy) broadcasts through Safety NET INMARSAT the navigational warnings about ice edges and plotting of drifting icebergs.

#### **5.- S-55 Status of Hydrographic Surveying and Nautical Charting Worldwide**

No new S-55 information has been informed.

#### **6.- Capacity Building**

Next summer (2011) the students belong to the Hydrography Class “A” Course offered by the Instruction Training Center of SHOA, will sail to Antarctica on board the Chilean Ice breaker “Oscar Viel”. This hydrographic training considers, in its last semester, a module of Antarctic Information. The main objective of this information course is to give the students an Antarctic knowledge in several topics considering updated information about the Antarctic Hydro-cartographic and Oceanographic activities accomplished by the Chilean and others navies.



## 7.- Oceanographic Activities:

### Permanent Activities:

- Tide gauge maintenance in **Base Prat.**
- Tide gauge maintenance in **Rada Covadonga.**

### Activities during last Antarctic Campaign:

- Tide gauge installation in **Bahía Paraíso.**
- Tide gauge installation in **Bahía South.**

## 8.- Others Activities:

### The National Committee of Antarctic Geographic Names:

The National Committee of Antarctic Geographic Names is the organization in charge of studying the historical and collected information required to assign any name used in the Chilean Antarctic Cartography.

This Committee gathers several Chilean governmental institutions.

During last year the Committee has been updating the Geographic Names Dictionary and Checking different charts, such as:

- Estrecho Nelson
- Isla Rugged
- Península Byers
- Isla Livingston
- Carta Continental Antártica.