



SPAIN

NATIONAL REPORT

**TO THE 10th HYDROGRAPHIC
COMMISSION ON ANTARCTICA
MEETING**

**CAMBRIDGE, UNITED KINGDOM
20 TO 22 SEPTIEMBRE 2010**

1. Hydrographic Service

Instituto Hidrográfico de la Marina (España).

2. Surveys

To develop the Spanish Nautical Chart Scheme in the South Shetland Islands Region, the following surveys have been carried out, according to the International Hydrographic Organization agreements.

On February 2010 two bathymetric works were carried out:

I. At Byers Peninsula (Livingston Island)

The works were planned to complete the survey performed in 2009. A Rigid Hulled Inflatable Boat (RHIB) from the Oceanographic Research Vessel “Las Palmas” was employed. The RHIB was fitted with a single-beam echo sounder SIMRAD EA-400. A pressure tide gauge established in the Juan Carlos I Base was used for tidal correction. The projected scale was 1:5000. A total of 18 nautical miles were surveyed. Figure 1 shows the area covered in 2009. Figure 2 shows the area covered in 2010 (squared in yellow) along with the 2009 works. An 80% of the projected new chart 7002 (Spanish Nautical Chart Scheme) is now surveyed.

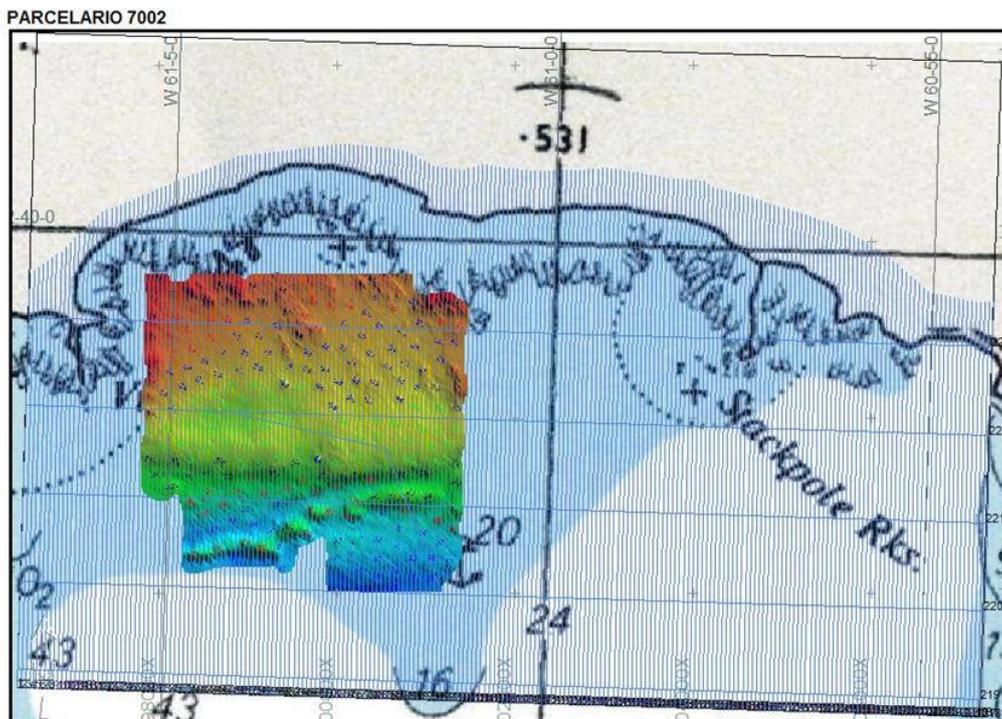


Figure 1: Area surveyed in 2009 in Livingston Island (Spanish Chart 7002)

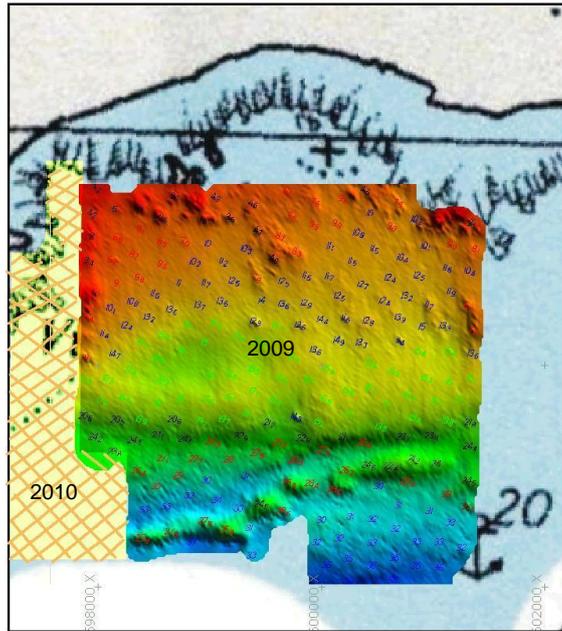


Figure 2: Area surveyed in 2010 (yellow) in Livingston Island along with the area covered in 2009



Figure 3: Livingston Island and charts 9121 INT, Spanish 7001 (new 9128 INT) and Spanish 7002

II. At Fumarole Bay (Deception Island)

A RHIB from the Oceanographic Research Vessel “Las Palmas”, fitted with a single-beam echo sounder SIMRAD EA-400, was employed. A pressure

tide gauge established in the Gabriel de Castilla Base was used for tidal correction. The projected scale was 1:10000. A total of 15 nautical miles were surveyed. Figure 4 shows the surveyed area, which covers 40% of the Spanish chart 7003A (scale 1:10000) included in INT 9120 (scale 1:50000).

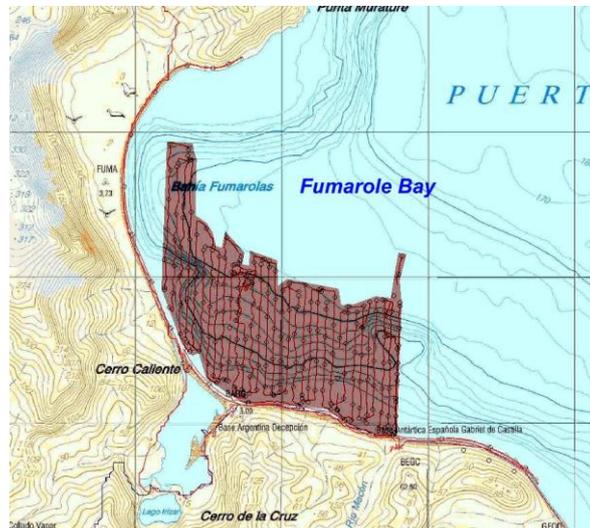


Figure 4: Area surveyed in 2010 in Deception Island

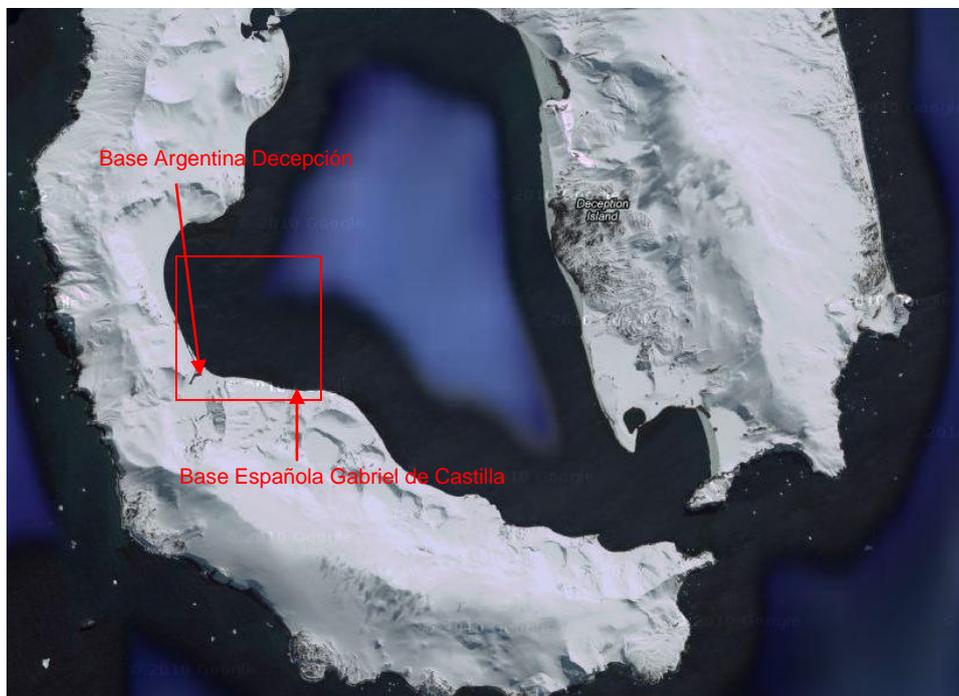


Figure 5: Argentina Base "Decepción" and Spanish Base "Gabriel de Castilla" in Deception Island

3. New Charts and updates

INT Charts

As Spain has updated its national paper chart scheme for Antarctic (Annex I and Annex II) some modifications have arose for the INT charts. This new scheme was presented by Spain at the 9th meeting of the Hydrographic Commission on Antarctica (HCA9, Cape Town, South Africa). As part of this plan, some changes affecting chart INT 9121 (De Punta Barnard a Campamento Byers. Isla Livingston costa Sur; scale 1: 40000), for which Spain is producer, were proposed for consideration by other MS by HCA Letter n° 01/2010. Details of the proposed changes were:

- Remove the plan at 1:5,000 on Base Juan Carlos I.
- Shift the chart limits westward by approximately one third.
- Reduce the scale from 1:35,000 to 1:40,000, thus allowing to slightly extending the chart coverage, mainly southward.

As a result of this HCA letter, INT 9121 has been amended in IHO Publication S-11 Region 'M' by HCA Letter n° 04/2010. In their response to this last HCA Letter, South Africa suggested the inclusion of Spanish national chart 7001 (Base Juan Carlos I) into the INT scheme. Spain, by letter (13 July 2010), proposed to the HCA the adoption of the aforementioned chart into the INT chart scheme. The HCA suggested to be given to the new chart the INT number 9128, by HCA letter n° 05/2010.

National paper charts

In Annex I and Annex II list shown the Spanish national paper chart scheme for Antarctic including the INT number for relevant INT charts involved.

ENC

As the new surveys allow producing new editions of INT 9121, the related ENC production will also take place. These new ENCs will be distributed via the IC-ENC European RENC.

4. New publications and updates

NTR

5. MSI

NTR

6. S-55

NTR

7. Capacity Building

NTR

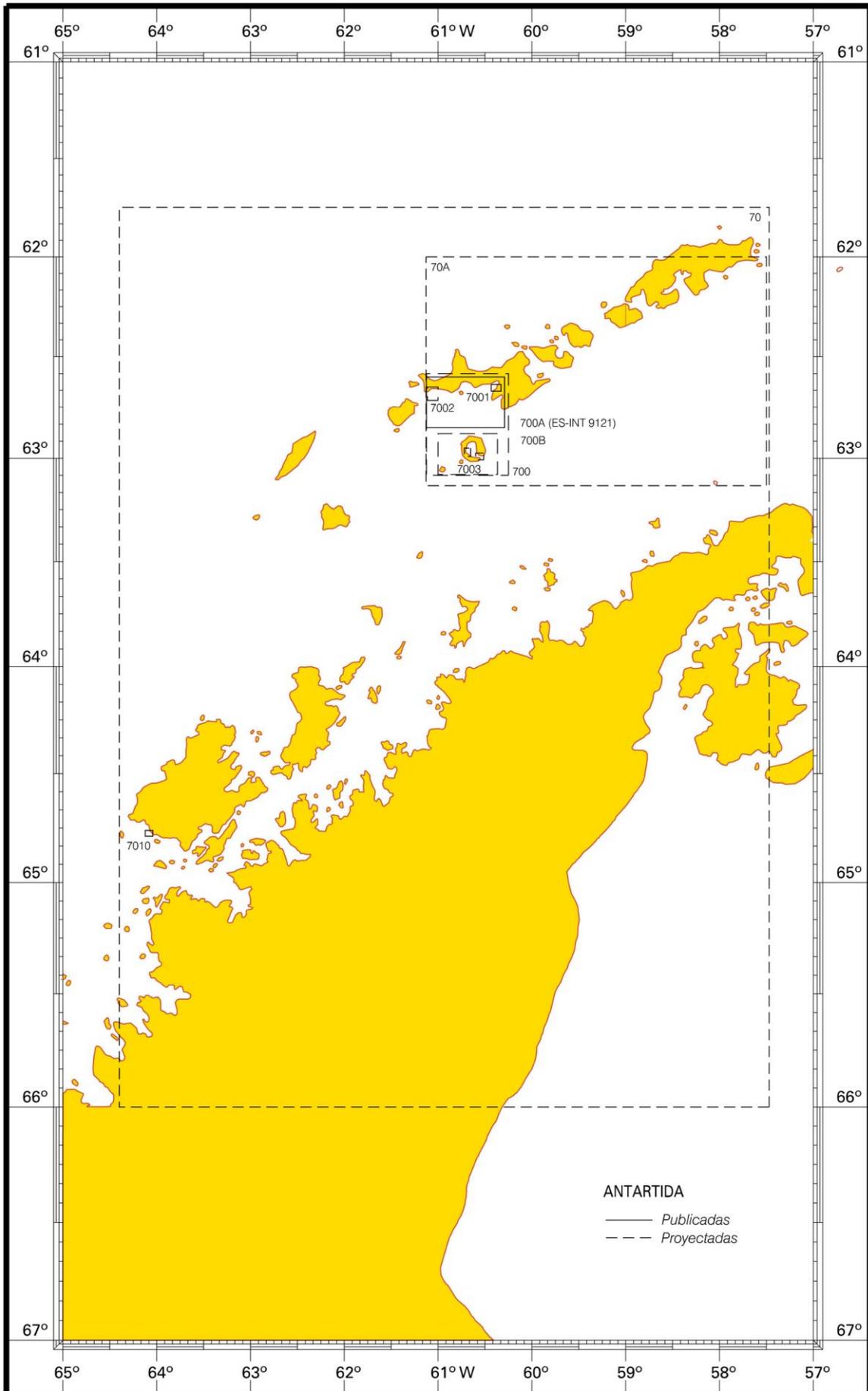
8. Oceanographic activities

NTR

9. Other activities

NTR

ANNEX I



ANNEX II

NÚM.	TÍTULO	ESCALA 1: (φr)	MARCOS				DIMENSIONES (mm)		CARTAS A CADUCAR
			NORTE	SUR	ESTE	OESTE			
70	Isla Rey Jorge y costa norte de la península Antártica a isla Anvers y estrecho Bransfield.	450 000 (63°30')	61° 45,00' S	66° 00,00' S	57° 30,00' W	64° 24,00' W	750 x 1051		
70A 1776 (GB)	Isla Livingston, a isla Rey Jorge.	200 000 (62°20')	62° 00,00' S	63° 07,90' S	57° 30,00' W	61° 13,50' W	964 x 634		
700	Costa Sur de la isla de Livingston a isla Decepción. Islas Shetland del Sur, estrecho Bransfield.	60 000 (62°50')	62° 35,00' S	63° 05,00' S	60° 15,00' W	61° 07,50' W	743 x 929		
700A INT 9121 (ES)	De punta Barnard a Campamento Byers . Isla Livingston, costa Sur. Plano adjunto: Isla Media Luna	40 000 (62°42,50') 25 000 (62°35,50')	62° 34,85' S	62° 51,00' S	60° 17,00' W	61° 07,50' W	1077 x 750 199 x 190		004ANT 003ANT
700B	Isla Decepción. Islas Shetland del Sur, estrecho Bransfield.	30 000 (62°59')	62° 52,75' S	63° 04,75' S	60°22,00' W	61° 00,00' W	1071 x 743		
7001	Base Juan Carlos I. Isla Livingston, costa de Bahía Sur.	5 000 (62°39,25')	62° 38,25' S	62° 40,25' S	60° 26,00' W	60° 19,75' W	1068 x 743	P	001-002- 004ANT
7002	Campamento Byers. Isla Livingston, península Byers.	5 000 (62°40,75')	62° 39,00' S	62° 41,75' S	61° 01,50' W	61° 05,85' W	742 x 1021		
7003	Bahía Fumarolas y Fuelles de Neptuno. Isla Decepción, islas Shetland del Sur. A. Base Gabriel de Castilla. B. Fuelles de Neptuno.	10000 (62°58,75') 12500 (63°00')	62° 57,00' S	62° 59,50' S	60° 39,25' W	60° 43,25' W	338 x 464 676 x 520		
7010	Arthur Harbor. Archipiélago Palmer, isla Anvers.	5 000 (64°46,50')	64° 45,70' S	64° 47,30' S	64° 02,40' W	64° 07,35' W	785 x 595	P	011ANT