

## IHO HYDROGRAPHIC COMMITTEE ON ANTARCTICA (HCA) 15th Conference, Niteroi, Brazil, 26 – 28 June 2018

# NATIONAL REPORT - BRAZIL

Hydrographic Office / Directorate of Hydrography and Navigation (DHN) Service:

- 1. Surveys: During the 36th Antarctic Commission (OPERANTAR XXXVI), performed by the Brazilian Navy Ships ALMIRANTE MAXIMIANO (Polar Ship) and ALMIRANTE ARY RONGEL (Oceanographic Support Ship), bathymetric surveys using single beam echosounder were conducted, specifically in the area of the INT 9125 and national chart 25122.
- 2. New charts & Brazil has concluded its Antarctic Cartographic Planning, gathering updates: the following six (06) nautical charts:

### Nautical Charts (paper):

- 25110 (INT 9150) – Antártica: Ilha Elefante e Proximidades, 1:200.000, Ed. 2009;

- 25115 – Antártica: Ilhas Shetland do Sul – Ilha Elefante, 1:100.000, Ed. 2005;

- 25119 (INT 9127) – Antártica: Ilhas Shetland do Sul - Baía Serratt, 1:40.000, Ed. 2013;

- 25120 (INT 9126) – Antártica: Ilhas Shetland do Sul - Baía Rei George, 1:40.000, Ed. 2013;

- 25121 (INT 9125) – Baía do Almirantado, 1:40.000, Ed. 2016; Inset A: Enseada Martel , 1:20 000; and Inset B: Estação Comandante Ferraz, 1:5.000; and

- 25122 – Antártica: Ilhas Shetland do Sul - Baía Maxwell, 1:40.000, Ed. 1994; and Inset: Enseada Ardley e Baía Edgell, 1:20.000.

### ENC:

- BR3 25110 Ilha Elefante e Proximidades, 1:180.000;
- BR4 25119 Ilhas Shetland do Sul Baía Serratt, 1:40.000;
- BR4 25120 Ilhas Shetland do Sul Baía Rei George, 1:40.000;
- BR4 25121 Baía do Almirantado (Ilha Rei George) 1:45.000;
- BR5 25121 Enseada Martel, 1:12000;
- 3. New publications X X X

#### & updates:

4. MSI X X X

- 5. C-55 As stated for the entire region Antarctic Peninsula (M): available at https://www.iho.int/iho\_pubs/CB/C-55/c55.pdf.
- 6. Capacity Building
- a) Training needed: X X X
- b) Training and courses offered:

| COURSE                | DESCRIPTION  | DURATION |
|-----------------------|--|----------|
| C-Esp-HN              | Aims to qualify the student to be a technician in<br>Hydrography and Navigation issues.  | 42 weeks |
| C-Ap-HN               | Aims to increase the capability of the student to be a technician in Hydrography and Navigation.   | 35 weeks |
| CAHO<br>(IHO Cat."A") | Aims to provide the student with the capability to<br>plan, to conduct and to execute the activities<br>related with the Hydrographic Service. | 50 weeks |

- c) Projects under development: XXX
- 7. Oceanographic activities During OPERANTAR XXXVI, the Brazilian Navy Polar Ship ALMI-RANTE MAXIMIANO acquired oceanographic data from CTD/rosette, Thermosalinograph and water samples for chemical analysis. Drifting buoys were deployed as well as XBT. Current measurements were also taken, along with CTD/rosette deployments supporting Brazilian Scientific Community.

GEBCO/IBC's activities: routine GEBCO soundings were performed the Brazilian Navy Ships ALMIRANTE MAXIMIANO (Polar Ship) and ALMIRANTE ARY RONGEL (Oceanographic Support Ship) during all the OPERANTAR XXXVI operations. Problems detected: due to the isolation and harsh conditions of the Antarctic region, it is always necessary to keep a large number of spare equipments and parts to adequately perform the oceanographic measurements.

- 8. Other activities Participation in IHO Committees / Working Groups: ABLOS, CBSC, CSPCWG, DPSWG, DQWG, ENCWG, EUWG, GEBCO-SCUNF, GEBCO-TSCOM, HCA, HDWG, HSSC, IBSC, IC-ENC, IEHG, IHO Council, IMO-NCSR, IRCC, MACHC, MSDIWG, NCWG, NIPWG, SNPWG, SWAtHC, S-100WG, TWCWG, WENDWG e WWNWS.
- 9. Conclusions DHN continues its commitment in carrying forward hydrographic activities through the work of the Hydrographic Commission on Antarctica.