

18th Conference of the IHO Hydrographic Commission on Antarctica

National Report by Brazil

Agenda item 07.2A



IHO Surveys and charting progress in Antarctica since HCA-17

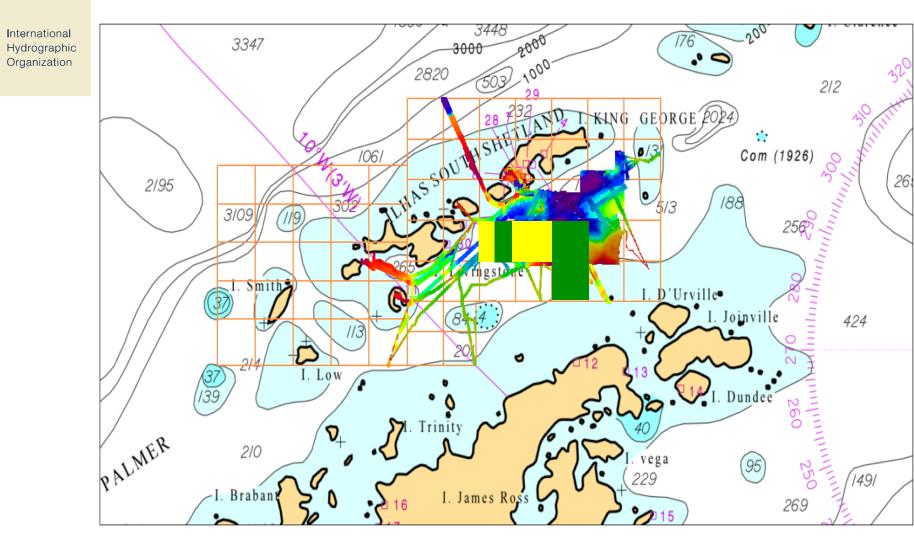
International Hydrographic Organization

- ✓ Brazilian Antarctic campaign: OPERANTAR XL (2021-2022)
- ✓ Bathymetric surveys south of King George Island in the Bransfield Strait, in the region for the planned INT Charts 9151 and 9152 (scale 1:200,000).





IHO Surveys and charting progress in Antarctica since HCA-17



Areas in yellow: Surveyed in the 2020-2021 campaign.

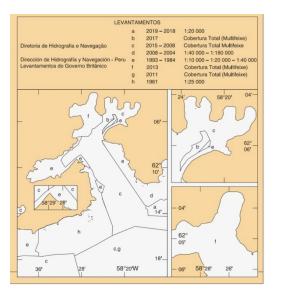
Areas in **green**: Surveyed in the last campaign from Oct 2021 to Mar 2022.

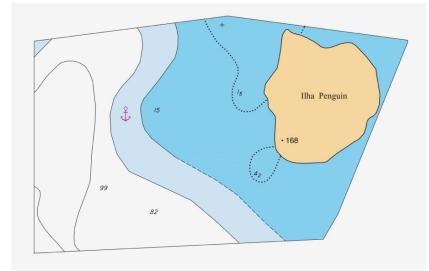


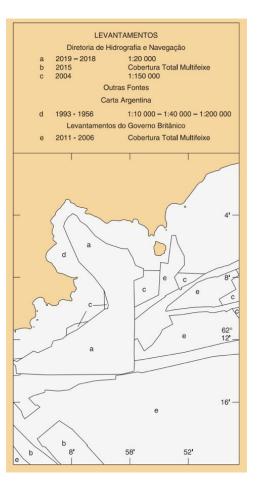
IHO Surveys and charting progress in Antarctica since HCA-17

International Hydrographic Organization The following nautical charts were updated:

- ✓ INT Chart 9126 (25120) Feb 2022
- ✓ INT Chart 9125 (25121) Feb 2022
- ✓ ENC cell BR425119 Nov 2021
- ✓ ENC cell BR425120 Feb 2022
- ✓ ENC cell BR425121 Apr 2022
- ✓ ENC cell BR525121 Apr 2022









IHO Relations with Other Organizations

International Hydrographic Organization

- ✓ Scientific and polar institutes: Inter-ministerial Commission for the Marine Resources (CIRM) that coordinates the Brazilian Antarctic Program (PROANTAR).
- ✓ Hydrographic data <u>received</u> from other organizations: DHN/PE and UKHO.
- ✓ Hydrographic data <u>provided</u> to other primary charting authorities and/or GEBCO: SHOA/CL and GEBCO.
- ✓ Cruise vessels: currently, the Brazilian Navy has two polar vessels, operated by the Directorate of Hydrography and Navigation. Brazil will build a new polar vessel that is expected to make its first Antarctic campaign in 2025.



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Current Brazilian Navy Polar Vessels



"Almirante Maximiano" and "Ary Rongel"

New Brazilian Navy Polar Vessel (2024)



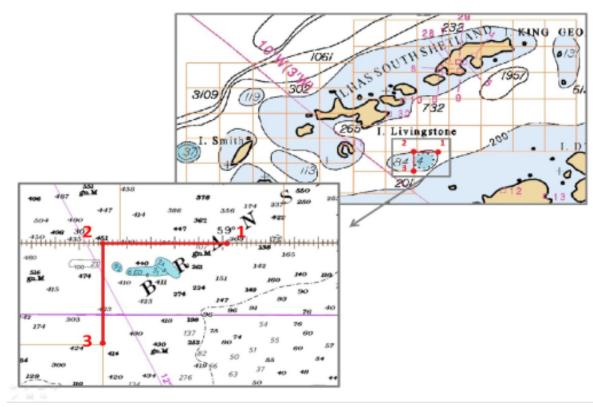
<u>Hydrographic Equipment</u>: Deep water MBES (range 3,600m) Deep water SBES (range 10,000m) DGNSS receptor Motion Reference Unit (MRU) Moving Vessel Profiler (MVP)



IHO Planned Activities for 2022-2023

International Hydrographic Organization

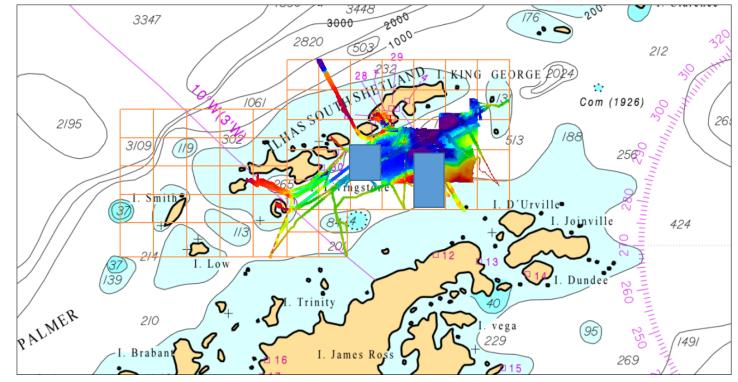
Planned for the Brazilian Antarctic campaign OPERANTAR XLI (2022-2023) to conduct a feature search in the vicinity of a shoal southeast of Livingstone Island in the Bransfield Strait.





IHO Planned Activities for 2022-2023

International Hydrographic Organization In the coming campaigns, the Brazilian Navy polar vessels "Almirante Maximiano" and "Ary Rongel" will continue to carry out bathymetric surveys in the Bransfield Strait to support the production of the planned INT Charts 9151 and 9152.





Other matters of relevance to HCA, particular issues that may require HCA consideration and/or may need to be reported to A-3 (3-year IHO Work Programme, IHO Strategic Plan,...)

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Brazilian Paper Nautical Chart

https://cartasnauticasbrasil.com.br/cartas-nauticas-geral/cartas-nauticas-2.html

Brazilian RNCs are freely available in BSB and GeoTIFF formats:

https://www.marinha.mil.br/chm/dados-do-segnav/cartas-raster

Brazilian ENCs are available through:

- RENC IC-ENC (<u>www.ic-enc.org</u>); or
- VAR EMGEPRON

(www.cartasnauticasbrasil.com.br/geoportal/web/niceindex.html).



Other matters of relevance to HCA, particular issues that may require HCA consideration and/or may need to be reported to A-3 (3-year IHO Work Programme, IHO Strategic Plan,...)

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Course on Operations in Polar Waters



Topics covered:

- ✓ navigation;
- ✓ watchkeeping;
- ✓ weather monitoring and forecasting;
- ✓ risk management;
- \checkmark mission planning.

Offered: annually.



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Thank you!