

**10th Hydrographic Commission on Antarctica (HCA) Meeting
British Antarctic Survey (BAS), Cambridge,
United Kingdom, 20-22 September 2010**

**ANTARCTIC HYDROGRAPHY
HCA Presentations at the IAATO 21st Annual Meeting
Turin, Italy, 21-24 June 2010**

**Importance of Hydrographic Activities in Antarctica
(Capt. Hugo Gorziglia, IHB Director and HCA Chair)**

I.- General Information.

The International Association of Antarctic Tour Operators (IAATO) is a global network of tour operators that banded together in 1991 to advocate, promote and practice safe and environmentally responsible private-sector travel to the Antarctic. IAATO meets annually to consider and develop practices to improve effectiveness of their activities.

In this opportunity, IAATO invited the IHO/HCA to deliver a set of presentations that will refer to the "Importance of Hydrographic Activities in Antarctica".

II.- Participants.

Close to 100 IAATO Members and Observers were present. The IHO participated with its HCA Chairman and IHB Director, Captain Hugo Gorziglia, together with Mr. Andy Willett, member of the UK delegation to the HCA and Chair of the HCA Hydrographic Survey Prioritization Working Group, respectively.

III.- The Presentations.

The objective of the presentation was to raise awareness at the operational level on the importance of hydrographic activity in the Antarctica; to achieve a better understanding of IAATO on the existing risks associated to the present status of charting in the region and what IHO/HCA is doing to fill the gaps and finally, to jointly explore on WHAT and HOW IAATO can contribute to IHO/HCA efforts to improve the situation.

First Presentation

Title: Hydrography in the Antarctica.

Speaker: **Hugo Gorziglia**, Captain Chilean Navy, former Chilean Hydrographer, Director IHB and Chairman HCA

Content: IHO and IHO/HCA involvement in Antarctic. Role and achievements of HCA. SOLAS V Regulation 9 and the Antarctica. HCA priorities. IHO/IAATO relationship.

Second Presentation

Title: HCA approach to improve Hydrography and Nautical Cartography in Antarctica.

Speaker: **Andrew Willett**, UKHO Southern Ocean and Antarctica Team; Member of the UK Delegation to the HCA and Chair of the HCA Hydrographic Survey Prioritization Working Group.

Content: Maritime Shipping Routes (MSRs). Present approach to charting priorities based on observed routes used for different purposes. Work done to date and future work plans. Case studies. How hydrography knowledge reduces the risk. What is needed and how the Antarctic community can help.

Third Presentation

Title: Practical initiatives to improve hydrography and nautical cartography in Antarctica with the support of IAATO, followed by discussion.

Speaker: **Hugo Gorziglia**, Captain Chilean Navy, former Chilean Hydrographer, Director IHB and Chairman HCA

Content: Presentation of proposals that could be put in practice by IAATO that will contribute IHO/HCA to improve availability of reliable nautical charts of Antarctic waters. What and How it can be done.

Introduction of Guidelines for the Collection and Rendering of Hydrographic Data obtained by
“Ships of Opportunity” in Antarctic Water.

The presentations were very well received and generated a series of questions and comments from the participants.

The main subject/questions raised and its brief comments follow:

- a) Which is the minimum standard expected from the equipment used to gather data.
The minimum should ensure the accomplishment of S-44.
- b) Will it be possible to have a data base in the IHO website reporting on all the existing paper charts available?
This is possible. For the time being the web includes a report on all INT charts available, but that list does not cover other national chart. The matter will be worked out between IHB and UKHO. In any case it was offered as a temporary solution, to go to each individual IHO MS website to find the information. The IHO website offers the liaison with the IHO MSs.
- c) Some ECDIS has the capability to register information but it cannot be edited and therefore cannot be reviewed before it is provided to HOs.
It was requested that a sample be sent to the UKHO and IHB, with the characteristics of the equipment so that the matter be investigated. It was also indicated that it would be preferable that any edition be made at an HO and not on board.
- d) Would it be possible to have a sort of data logger to collect automatically the required bathymetric data?
This initiative has a cost and that alternative has not been considered so far. But certainly the possibility exists.
- e) How data is analyzed before entering into the cartographic process?
It was explained the standard procedure followed before the data could enter the cartographic process.
- f) If a PC with appropriate charts and software is provided, this will facilitate the collection of data.
This statement is true but several other actions are required to ensure the usefulness of the data.
- g) How SOLAS obligation is expected to be met by cruise ships in Antarctica?
It was explained that this issue has been a matter of special interest raised by the IHO to the ATS. Until now the provision of charts of the Antarctica is on a voluntary basis. In the short term it is not envisaged that main ports or routes are considered for Antarctica, but in the future this shall change. Is a pending issue that needs some definitions.
- h) Would it be feasible to use NAV to consider also Antarctic issues?
NAV can consider the matters if submitted. Therefore, if there is a need to have NAV involved on any subject, the appropriate bodies/countries shall propose documents for NAV consideration.
- i) Is it the intention/hope of the IHO/HCA that cruise ships collect hydrographic information of areas lacking from that information?
It was made absolutely clear that IHO/HCA has never had in mind that cruise ship shall perform the work of a hydrographic vessel, but to provide charting authorities with the data collected during their normal navigations, data that is being collected anyway nowadays.

IV.- Other information.

1.- IAATO stands ready to continue cooperating with and participating at IHO/HCA meetings. The IAATO Meeting tasked its Marine Committee to consider ways of enhancing the contribution to the IHO in the hydrographic data collecting process.

2.- Particular interest was expressed by Mr. Stephen Wilkins (Xplore Expeditions) and Captain Leif Skog (Lindblad Expeditions) with regard to the OLEX System (www.olex.no) and Multibeam systems, respectively. It was made clear that the intention is to have cruise ship fitted with a multibeam to improve its safety. Data collected was felt to be a concrete potential contribution to IHO/HCA, if such data is collected following standards. Mr. Wilkins will manage to submit a set of data collected by OLEX so be assessed. It was anticipated that two MB might be soon be installed on Lindblad Expeditions vessels in the near future.

3.- In conclusion, the participation of the IHO/HCA representatives at the IAATO Annual Meeting is considered a very successful activity that shall open new opportunities for mutual cooperation and collaboration aiming at improving safety to navigation and protection of the marine environment in Antarctic waters.

4.- The UKHO has to be thanked for having made available Mr. Andy Willett to participate actively in this meeting.