IHO guidelines

for the collection and rendering of hydrographic data by Ships of Opportunity operating in the Antarctic Region

Preamble

The remote and hostile Antarctic environment often prevents Hydrographic Offices (HOs) from conducting regular, controlled systematic hydrographic surveys in poorly surveyed and charted areas. With regular visits to Antarctica by commercial, private and National Antarctic Programme vessels, an opportunity exists to take advantage of such Ships of Opportunity (SOOs) to collect hydrographic data.

The International Hydrographic Organization (IHO) through its Hydrographic Commission on Antarctica (HCA) has identified the potential benefit of HOs conducting visits to SOOs before they embark on voyages in Antarctic waters to brief vessel operators, expedition leaders and mariners on the status of surveys and charting in the region.

The purpose of such visits is to help mariners and others working in Antarctic waters to understand the vital contribution that they can make to improving the charts and nautical publications for the region.

Aims

To raise the awareness of vessel operators, expedition leaders and mariners, to the benefits of acquiring data, location information and photographic records that can improve the charts and nautical publications for the region and thereby improve safety of navigation.

To develop relationships with organisations, companies and individuals willing to collect and supply hydrographic data to the relevant primary charting authorities (HOs).

To encourage, support and provide advice on aspects of hydrographic data collection to any project that may be able to acquire data when in the Antarctic region.

To determine if sensors already fitted in ships operating in Antarctic waters can be used to obtain much needed hydrographic data and if so, provide guidance and assistance with sensor calibration and their use for hydrography, where appropriate.

To provide mariners with appropriate information and additional technology (where available and appropriate), and to advise on requirements for collecting and rendering hydrographic information and data to HOs.

To provide mariners with appropriate feedback on any data that is submitted, in a timely manner after its receipt, assessment and validation by an HO, including the provision of updated navigation products and any revised supporting information.

Purpose

To support improvements in survey coverage on a priority basis through consultation with all mariners who navigate in the Antarctic region.

Outputs

The supply of hydrographic information such as bathymetry, photographic views and Hydrographic Notes (all with appropriate metadata) to primary charting authorities (HOs) to assist with surveying and charting prioritisation and chart maintenance.

Methodology

HOs are encouraged to arrange for suitably qualified and experienced personnel to brief the crews of vessels calling at ports on their way to Antarctica, or on arrival in Antarctic waters.

Briefings should cover:

- discussion on the shortcomings in existing survey and chart coverage in areas of ships’ operations;
- provision of copies of appropriate paper charts for the mariner and/or expedition leader to annotate with information including: discrepancies with the official chart, position of soundings and/or photographic views, position of conspicuous objects of significance to navigation; and request annotated charts be returned to the HO;
- provision of copies of and provide instruction for completing a Hydrographic Note;
- encouraging the use of and provide instruction for completing the form IHO Collection and Rendering of Hydrographic Data available from http://www.iho.int/mtg_docs/rhc/HCA/HCA_Misc/HCA_SPWG/HCA_Survey_Prioritisation_WG.htm
- installation of an electronic data logger, where available and appropriate, and provide operating instructions to the mariner;
- provision of contact details of relevant NAVAREA Co-ordinators, Maritime Rescue Co-ordination Centres and the relevant primary charting authority (HOs);
- documenting the visit, collating vessel information and notification of the visit to the IHB (HCA) to ensure the coordination of subsequent visits to the same vessel.