COMMDORE ROD NAIRN
HYDROGRAPHER OF AUSTRALIA

WORLD HYDROGRAPHY DAY 2009
AUSTRALIAN HYDROGRAPHIC OFFICE
19 June 2009

SPEECH

Ms Sharon Bird, MP, Member for Cunningham and Local Member for the Australian Hydrographic Office;

Distinguished Guests, Colleagues, Industry Partners,

Ladies and Gentlemen;

Thank you for taking your valuable time to be with us here this morning to help celebrate the United Nations World Hydrography Day, which falls on 21 June, the anniversary of the foundation of the International Hydrographic Organization – the IHO.

Hydrography is about measuring the depth of the seas, oceans and the characteristics of the water column and seafloor in order to make nautical charts and ocean maps. Historically its primary purpose was to enable safe navigation for Maritime Trade and Military Operations. Today the utility of hydrographic information has broadened and it is recognised as an essential enabler for exploitation of offshore resources, protection of the marine environment, ocean modelling and environmental monitoring.

The maritime Domain is essentially global as international shipping needs harmonised information to common standards that transcends national boundaries.

This requirement was identified long ago and consequently the IHO was founded on 21 June 1921. The objectives of the IHO are to achieve a close and permanent association between national hydrographic offices across a range of international cooperation measures.

The impact the IHO has made in advancing worldwide safety of navigation, protection of the marine environment and to the development and cooperation between nations, cannot be underestimated. The Australian Hydrographic Service (AHS) was established in 1920 and Australia became a founding member of the IHO. Our contribution to global hydrography has been significant over the years and remains so today. One of the 3 Directors of the IHO is a recently serving officer of the AHS.

Today's presentations will highlight how Australia's robust hydrographic capability provided by Navy contributes to protection of the marine environment. The AHS has maintained pace with technology and in some instances led the way in the use of new technology in provision of services to the community. Today, the AHS will officially launch its interactive graphical Australian Chart Index. We will hear more about this project shortly.

In keeping with the IHO theme of "*Hydrography- protecting the marine environment*" I'd like to take a few moments to highlight two current AHS projects, the Underkeel Management System surveying project and

the Fisheries Protection Surveying and Charting Project, and their contribution to marine environmental protection.

Currently we are conducting harbour accuracy hydrographic surveys of critical areas of the Torres Strait shipping route to support improved vessel safety and a possible increase in permissible draughts. This has been achieved by the valuable efforts of our Hydrographic Survey Force.

We need to keep in mind that ship sizes have grown from a draught of less than 9m prior to 1970, through to draughts today of more than 14 m[1], which can be critical in shallow waters.

The Torres Strait, including the Great North East Channel, is a busy place for big ships. It is used primarily by large vessels trading between ports in southern Asia, Australia and New Zealand, South America, Papua New Guinea and Pacific Island nations. The majority of tanker traffic bound for the Australian east-coast refineries also uses it to link with the outer route of the Great Barrier Reef. Vessels entering or leaving the inner route of the GBR also use the Prince of Wales (POW) Channel at the western end of the Torres Strait.

The surveying project requires accuracies at the limit of current technology, in an area recognised as one of the most complex tidal regimes in the world. These International Hydrographic Organization Special Order accuracy surveys are in support of the proposed implementation by Australian Martime Safety Authority (AMSA) of a real-time Underkeel Clearance Management System to improve the

[1] Thompson and Clarke shipping report, quoted in iXSurvey Australia 2008 submission to the House Standing Committee on Infrastructure, Transport, Regional Development and Local Government

understanding of the margins for navigation safety, rather than the current static regime. The effectiveness of such a system is heavily dependent on the quality of bathymetric data and environmental inputs.

Another major AHS project with benefits to marine environment protection is the *Fisheries Protection Surveying and Charting Project.*

One of the big threats to the marine environment in the northern region of Australia's Fishing Zone is illegal, unreported and unregulated (IUU) fishing activities. Fishermen involved in IUU fishing in this area target specific marine species such as shark, reef fish, sea cucumber and trochus. Many of these marine species' stocks are now at critical levels.[2]

As part of the Government's $388.9 million plan to combat illegal foreign fishing in the northern Australian waters, $18.5 million was allocated to the Navy in 2007 over three years to facilitate the charting of the Torres Strait and northern Great Barrier Reef. This project was initiated by the Government to provide accurate charting of the northern waters of Australia.

The Fisheries Protection Survey and Charting Project is accelerating the charting of the Torres Strait to enable Defence and other enforcement agency vessels to navigate safely in currently uncharted waters to carry out enforcement operations. The more that illegal fishermen can be found and stopped, the more chance these threatened stocks have to replenish themselves.

---

[2] **J. Vince,** School of Government, University of Tasmania, 2007

You – the staff and contractors associated with this project - are in the thick of this project right now, and I'd like to applaud your efforts in surveying more than 12,000 square kilometres that have been surveyed by Tenix LADS and Fugro during the project. Although two provisional charts have been produced and distributed to surveillance units from early surveys, the major charting effort is about to begin.

To conclude, I wish to take the opportunity today, as we celebrate UN World Hydrography Day, to thank each and every one of you in attendance today - our colleagues from other government agencies, from industry and business, and the AHS staff and associated contractors, whose work is contributing to protection and wise management and use of, our marine environment.

We invite you to enjoy the displays showcasing a range of hydrographic, oceanographic and cartographic projects in the adjacent room during morning tea.

I would now like to introduce our keynote speaker to share with us further how hydrography contributes to protection of the marine environment and to launch the new Australian Chart Index. Please welcome our Representative for the Minister for Defence Senator the Hon John Faulkner ….Ms Sharon Bird MP, Member for Cunningham and the local member for the Australian Hydrographic Service.