ECDIS - a comprehensive guide

→ The speaker at the Hong Kong branch in May was Clive Loh of the UK Hydrographic Office, the senior member of its technical support team at Admiralty Asia Pacific. Clive is a walking encyclopaedia on anything related to ECDIS, and more than 50 members and guests gathered to hear his presentation.

He began with some observations about the recent proliferation of counterfeit Admiralty charts and publications, which are putting ships and crews at risk, and gave us a number of pointers on how to recognise the fakes. Interested readers should consult the branch website, where we hope to post some graphics from the presentation. [Editor's note: see also Nautelex, Seaways May 2016]

Turning to ECDIS, Clive pointed out the number of port state control deficiencies that involve improper carriage or use of electronic charts. He stressed the need for proper training, and the importance of selecting products that combine quality, accuracy, flexibility and automatic updates, with the ability to make voyage planning more efficient. He emphasised the importance of proper maintenance, as there are no annual inspection requirements for ECDIS.

Clive urged his listeners to avoid over-reliance on any electronic device and not to forget to look out the wheelhouse windows. ECDIS should be thought of in the same way as the GPS in a car – as an aid.

Clive then turned to the International Hydrographic Office standards, which govern items such as encryption and presentation. The new standards will require ECDIS software to be updated by August next year. The update is intended to resolve all identified ambiguities and inconsistencies, reduce the number of alarms, offer clearer symbols, standardise tidal stream information and provide a new 'hoverover' function using the mouse. Listeners were advised to update as soon as possible to avoid the last-minute rush.

The UKHO have been running familiarisation seminars about the new standards, and there is more information on its website and on the various social media including 'Admiralty TV'. He commended two new or revised publications – NP 5012, the guide to ENC symbols used by ECDIS, and NP 231, the guide to the practical use of ENCs – and stated that these should be carried by all vessels. He also praised the NI's electronic navigation checklists.

A lively question and answer session followed. Some listeners were concerned that



equipment manufacturers will not be ready with software updates next year. One ship manager opined that anyone like him who had persuaded his owners to fit ECDIS 10 years ago was a moron, because he now had to explain to those owners why they had to buy new systems.

There was considerable discussion about the likelihood of suffering a complete system failure on a dual-ECDIS vessel. Clive could not provide exact figures, but admitted he was aware of a number of such failures. He believes all ships should carry 20 to 30% paper charts to cover areas where there are still no ENCs, and to provide a 'get you home' function in case of a catastrophic failure.

One ship manager revealed that his fleet of 400 vessels had only suffered one complete failure in the past five years, and he thought one failure per 2,000 ECDIS years was reasonable. Others in the audience pointed out that not all companies are so well-run, so his figures might not be typical.

This was a fitting topic for our first meeting at the Hong Kong Maritime Museum after our previous venue was flattened to make way for development. It was a very interesting evening in a superb location on the harbourfront, well-attended, and followed by an excellent buffet at the museum café. We are grateful to Clive Loh and his colleagues for a fine talk and some sponsorship to defray the cost of hiring the venue.

Captain Alan Loynd FNI

