

SHALLOW SURVEY 2005

We Visited for You

The 4th international conference on high-resolution surveys in shallow waters took place in Plymouth (UK) from 12 to 15 September. The conference focused on the "Common Data Set"™ (comparison data obtained by different survey systems over an area of seabed close to the conference venue). The conference included 40 high-quality presentations. Twenty-three exhibitors also took the opportunity to display their products to the 250 international delegates.

The Shallow Survey Conference (SSC), a bi-annual conference focusing on the latest developments and research in shallow water surveying, was held in Europe for the first time. Previous conferences have been based in Sydney, Australia, or Portsmouth (New Hampshire), USA.

The conference organisers, the UK Maritime and Coastguard Agency (MCA) and the United Kingdom Hydrographic Office (UKHO), produced a well-managed conference, with ample staff present and professional presentation (the programme book, the audio-visual facilities and an animated video welcome, not to be missed, to introduce delegates to the conference).

The welcome and introduction speeches by Dr D. Wynford Williams, chief executive and national hydrographer, UKHO, and captain Stephen Bligh, chief executive, MCA, and the opening address of vice admiral Alexandros Maratos, president of the International Hydrographic Bureau (IHB), highlighted the role of their organisations, as well as the importance of the SSC. The speeches focussed on the need for up-to-date and accurate data for safety of navigation (although the survey data serves many other uses, for example, for coastal zone management), and the acceptance of new Multi-beam Echosounder (MBES) and digital processing technologies. The introductory speeches also stressed the fact that a main drive for obtaining up-to-date survey information is to populate electronic navigational charts (many of which are still based on surveys undertaken with old data-gathering techniques). The "Zone of Confidence"™ concept was also stressed as a method of ensuring that mariners were informed of the reliability of underlying survey data.

New data-collecting equipment results in an exponentially expanding data collection rate, forcing charting authorities such as the UKHO to invest heavily to keep pace with this data explosion. Dr Williams presented the UKHO's Production Systems Programme and explained how this will aid the UKHO in dealing with increased data volumes. Modern equipment, however, is expensive and needs special training for operating and processing. Vice admiral Maratos detailed how the IHO has made "capacity building"™ one of its strategic issues in order to address this ever-increasing problem.

The presentations were grouped into sessions covering a number of main topic areas, such as survey systems, processing systems, national programmes, data handling and vertical datums, and they were interesting and of good quality. They showed the latest developments in both equipment and processing methods. Examples of these included those for object detection "MBES, side-scan sonar, Synthetic Aperture Sonar (SAS), Light Detection and Ranging (Lidar), etc." and for processing "the applications of CUBE and the Open Navigation Surface Project. The conference programme, formulated by the UKHO and MCA organising committee, was well received by the delegates. The presentations, the time allocated for questions, the exhibition stands, the breaks, the ice-breaker reception at the National Marine Aquarium and the conference dinner at the Guildhall all offered ample opportunity for discussion and exchange of views on the problems, progress and development in shallow water surveying, although a forum discussion at the end of each group of presentations could have generated even greater exchange of these views.

A CD containing the conference proceedings can be ordered from the MCA at navigationsafety@mcga.gov.uk for the price of GBP 15 plus postage.

The Common Data Set

Two seabed areas in Plymouth Sound were selected for a series of surveys of the same common areas using a variety of systems (different manufacturers and different types of equipment: MBES, Lidar). The majority of the surveys were already done in August 2004; however, a Lidar survey was carried out while the conference was being held and gave the opportunity for delegates to visit the aircraft with the equipment installed. The complete common data set is available on portable disc drive (contact: navigationsafety@mcga.gov.uk). This common data set is of course interesting for comparison purposes and Hydro international will feature this comparison in a future issue.

The Exhibition

Alongside the conference, an exhibition was held around the conference facilities. The majority of the participants of the SSCs are experienced users, researchers and potential buyers. This gave the manufacturers an excellent opportunity to discuss equipment and programs and to answer user questions and have feedback from the users. In total, 23 manufacturers had a stand at this conference-driven event.

Conclusion

In short: a well-organised conference that brought together experienced users, researchers and manufacturers to give an overview of the present status and to exchange ideas, particularly on future developments.

The next Shallow Survey Conference is planned to take place in Portsmouth, New Hampshire, USA, in late 2008.

