# Panel Discussion: Hydrographic Certification Schemes and Continuous Professional Development

Co-chairs: Derrick R. Peyton and Jean-Claude Tétreault IIC Technologies and Association of Canada Lands Surveyors

#### Abstract

In summary, the session was well attended. There was an issue of time constraint as nine speakers were requested to cover a number of topics within an allotted 1.5 hours. For the most part, all speakers kept their presentations short but focused.



The format of the session was that three groups presented (see below) and after each group the audience was asked for questions. No questions were presented until the end. The number of questions presented were good but had to be limited due to time constraints.

To the best of the chairperson's knowledge, there were healthy discussions on the session that took place after the presentations and during the break. This was observed as good feedback that the session topic was relevant and important.

The general thread of the discussion indicated that all participants supported the IHO's IBSC initiatives in establishing global standards for recognizing academic programs that support hydrographic competency. In addition, it was observed that although it is important to recognize Hydrographic Certification schemes, each nation has its own distinctions (e.g. rules, regulations, laws, etc.) as to what is required for regional hydrographic certification. It would appear that a customization of each regional hydrographic scheme under the IBSC framework is worthy of recognition and could also facilitate labor mobility within a region and globally. Finally, the approach to take is a collaborative effort amongst the private and public sectors and academia.



# Panel Format:

5-10 minute presentation in PowerPoint and/or free format.



The panel from left to right: Andrew Leyzack, Paul Brett, David Dodd, Shelly Leighton, Jeff Ferguson, Denis Hains, Mustafa Iptes and at the podium, Paul Cooper (J.C. Tetreault taking the photos)

## Public & Private Sector

#### **Mustafa Iptes**

**IHO Director** 

Role and Function of the IBSC (International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers)

#### **Denis Hains**

Hydrographer General of Canada CHS Professional Development, Training and Continuous Learning

#### **Jeff Ferguson**

Chief, Hydrographic Surveys Division, NOAA Office of Coast Survey NOAA professional development and eLearning

#### **Shelly Leighton**

Project Manager, UTEC Canada Ltd., St. John's, Newfoundland Challenges of Today's Offshore Surveyor; Technology, Standards and Professionalism

## **Group Summary**

The group gave an excellent cross sectional overview of the roles and responsibilities of their respective organizations and how each organization viewed the importance of competency in hydrography and how they were involved continuous professional development for their employees.

Director Iptes introduced the IBSC (International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers) and their role in establishing standards of competence in hydrography from an IHO perspective. He then went on to describe how the IBSC recognizes academic institutions that submit for Category A and Category B recognition of their S5 (Hydrography) and S8 (Nautical Cartography) programs. He also described how the IBSC can recognize schemes for Hydrographic Certification

Denis Hains gave a CHS perspective on development, training and continuous learning. His take home message was while there is importance in setting international standards of competency in hydrography there are also regional distinctions. Denis explained how these regional distinctions can best be addressed through a collaborative effort amongst public sector, industry and academia.

Jeffery Ferguson, Chief of NOAA Hydrographic Surveys Division, gave an overview of the challenges faced by NOAA's internal operations and the large contracting out operations that it undertakes each year.

Shelly Leighton of UTEC Survey Canada Ltd. gave an interesting presentation not only from the private industry perspective but also from the requirements in hydrographic competency that is faced by the offshore oil and gas sector. Shelly enlightened the audience on many aspects hydrography in oil and gas services life cycle. She elaborated on the various forces that act on offshore operations such as the Canada Oil and Gas Regulations and the Offshore Petroleum Boards.

#### Academia

#### Dr. David Dodd

Past Coordinator of IHO Cat A S5 program at the University of Southern Mississippi; Special Examiner for the Canadian Board of Examiners for Professional Surveyors (CBEPS) C12 Exam on Hydrographic Surveying

How Academia can support the CPD of a Hydrographic Certification program

#### **Paul Brett**

Acting Chair, Memorial University, Marine Institute Ocean Mapping Program

Marine Institute's Ocean Mapping Program in pursuit of an IHO Cat A S5 Recognition

## **Group Summary**

The Academic group provided examples of various institutional programs that have been developed and are available to support hydrographic excellence.

Dr. Dave Dodd focused on the support from Academia towards Continuous Professional Development (CPD). He listed various North American universities and colleges that already have programs and how they can be evolved to provide a mentorship framework as well as facilitate global seminars and short courses.

Paul Brett presented the joint degree/diploma Ocean Mapping Program at the Marine Institute of Memorial University. He described their strategy behind the program and how it was designed to facilitate an IHO Cat A (S5) submission and the Canadian Technology Accreditation Board. He also explained how their program supported the proposed Hydrographic Certification scheme proposed by the Association of Canada Lands Surveyors.

It was noted that CIDCO of Quebec had recently submitted to present with the Panel but due to time constraints this was not possible. However, CIDCO was acknowledged during the session and the audience was invited to engage with the CIDCO representative who was pointed out in the audience.

# Hydrographic Certification Initiatives

#### **Paul Cooper**

President THSOA, USA

Hydrographic Certification program in the USA

#### **Commodore Brett Brace (Presented by Derrick R. Peyton)**

Hydrographer of Australia, SSSI Hydrography Commission Committee Member *The Australasian Hydrographic Surveyors Certification (AHSCP) Scheme* 

#### Jean-Claude Tétreault

**ACLS Executive Director** 

The ACLS submission to the IBSC for recognition of the Hydrographic Certification Scheme

# Group Summary

The final group provided information on hydrographic certification schemes that presently exist or are being proposed.

Paul Cooper described The Hydrographic Society of America (THSOA) and the history of their Hydrographic Certification program in the USA. He explained the application process, the formula they have of education and experience, and their examination procedure. He also

described how the Certification program recognizes the IHO Category A and B programs and how candidates graduating from such programs can have exemptions in the application process. Paul also brought forth some results on an opinion poll he conducted on Hydrographic Certification. For the most part both industry and public sector respondents were in favor of supporting an IHO recognized Hydrographic Certification scheme in the USA.

Derrick Peyton of IIC Technologies presented the existing and IBSC-recognized Australasian Hydrographic Certification scheme, maintained by the Surveying and Spatial Science Institute (SSSI). The scheme, which has Level 1 and Level 2 certification levels, is highly supportive of graduates from an IHO Category A and/or Category B program. However, it does recognize and facilitate Hydrographic Certification for hydrographers who have had many years of experience and who have graduated from programs that are not IBSC-recognized but are related to geospatial sciences. In addition, the SSSI Hydrographic Certifications scheme showed a strong reliance on a CPD/practice review program.

Finally, Jean-Claude Tétreault and Andrew Leyzack tagged teamed to present the Association of Canada Lands Surveyors' Hydrographic Certification scheme that was recently submitted to the IBSC for recognition. The presentation gave an overview of the ACLS and its jurisdiction within Canada. They described the reason behind their submission and why they believed the ACLS has the capacity to facilitate a certification scheme for Canada. The presentation explained the differences between certification and licensing and how the aim behind the Hydrographic Certification was provided as a guide to the public and private sectors for professional development and competency as well as a means for labor mobility for Canadian hydrographic surveyors. Andrew concluded that the ACLS are open to collaborating on the delivery of Hydrographic Certification.