

Editorial

The first of three Articles provides an in-depth study of multibeam survey methodology used across several spatial areas to determine an optimum cost model based on beam angles, acceptable uncertainty and other factors. The paper looks at how operator skill levels, training, multibeam parameters and the physical characteristics of the seabed and the water column affect survey results.

The second paper provides an in-depth précis of a sounding method to improve the determination of nautical depth where the seabed is composed of mud – fluid mud and consolidating mud. The authors describe a technique that has been trialled with success in the field and in a testing tank. It is their opinion that the use of the Rheocable method can provide significant savings and improved safety to dredging operations whilst determining a more reasonable estimation of the nautical depth. I hope that those involved with dredging operations may consider this method and perform your own trials to validate the method.

Our third paper discusses data encoding consistency issues in Electronic Navigation Chart (ENC) data. In the paper, the author also discusses how an ENC cell is not like a paper chart to a user and this can cause presentation problems in adjoining data to the user. In an ECDIS, the display can present several cells of ENC data, sometimes at different usage bands (or scales) to the user. This display issue requires careful consideration by the producing nation to provide data coverage that is unambiguous in terms of interpretation and use. The author also describes a preference for managing ENC data in a tiled structure rather than individual cells that mirror existing paper chart extents. I suspect that ENC cell scheming will not be consistent amongst the HO's as they adopt a cell scheming that optimises their own geographic coverage and customer's requirements.

Included in this edition are two papers in the Notes section. The first paper provides a detailed account of the crucial work undertaken by the Japanese Hydrographic and Oceanographic Department (JHOD) as they survey and provide new charts of the ports and harbours that were ravaged by the great earthquake and ensuing tsunami of 11 March 2011. Our profession is involved in exploration, discovery, construction, economic development, research, safety of navigation and military activities but there is no more important role than providing humanitarian and disaster relief. The work undertaken by the JHOD at such a difficult time for their nation and people is a true testament to the hydrographic professionalism of their teams. The recovery of their torn communities will take many, many years and our thoughts and blessings are with them.

The second paper is an account of some personal observations from attending some recent international hydrographic conferences. It has been several years since I have attended these events and their importance cannot be understated at bringing the profession together to forge new directions and relationships between government, industry and academia. These are also important forums for students and members of developing countries to attend.

On behalf of the Editorial Board, I hope that this edition is of interest to you. Thank you to the authors for your contributions and to my colleagues who provided peer reviews for the Articles in this edition.

Ian W. Halls
Editor

Page intentionally left blank