

SDB is Flying High

Hydrography has seen a decrease in capacity, with fewer survey ships available for surveys around the globe. Although there are certain regional differences, which means a decrease in some regions and an increase in others, it requires good thinking on where to put resources. This, together with less government funding available due to the economic crisis and an increase in shipping as one of the safest and cleanest ways of transporting goods, means that shipping companies suffer from pressure on prices and therefore on margins and efficiency will therefore be the mantra for the coming years. Efficient planning of hydrographic surveys, rather than routinely carrying out resurveys – every two or three years – will save money when possible (and will cost money in seas or parts of seas that need to be resurveyed more often than the government planning foresees). One tool that will see a 'high fly' in deciding whether a survey is needed is satellite-derived bathymetry.

In this issue of Hydro International you can find the article Satellite-derived Bathymetry as a Reconnaissance Tool for Hydrography by Pe'eri, Azuiké and Parrish (see page 16). The authors see Satellite-derived Bathymetry (SDB) as a reconnaissance tool for national hydrographic offices where analysis to date was mainly based on a visual inspection of existing nautical charts. Disadvantages of visual inspection include the age of many of the nautical charts and the lack of availability of the original source data. The study conducted by the authors and researchers from the Center for Coastal and Ocean Mapping and the Joint Hydrographic Center (CCHOM/JHC), both located in Durham at the University of New Hampshire, USA and the NGS Remote Sensing Division of NOAA and the National Geodetic Survey in Silver Spring, Maryland, USA, shows an evaluation of the use of SDB to map shallow-water bathymetry in a GIS to identify areas that require surveying. Using publically available satellite imagery and published algorithms to derive estimates of bathymetry is showing promising results.

Also, in this issue of Hydro International, you will find an interview with Dr. Johannes Riegl, CEO and founder of the Austrian company with the same name (see page 12), written by our technical editor Mark Pronk. RIEGL introduced the first Unmanned Aerial Vehicle (UAV) with hydrographic Lidar and has already seen the efficiency and flexibility increase. Dr. Riegl explains that the focus will be more on reaching even greater depths and on the same depths but with less optimal water conditions.

It is true that the buzz around SDB has been in the air for years, maybe even decades, but it now looks like we have finally reached the stage where these techniques will really help an efficient, accurate and flexible hydrography of the future to mature.