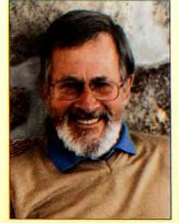


## Editorial



Having just read the October issue of *Hydro INTERNATIONAL* one is struck by the complementary nature of that publication and this Review. Both publications carry information of value to the hydrographic community. The former, written in an easily read style, deals primarily with the happenings of today, while the latter, written in a more academic style, deals primarily with developments of the future.

In wondering where hydrography is going, we may observe some overall trends. One is the move to greater attention to data management as opposed to data capture, a matter already noted by various authors. Another is the development of the use of GPS far beyond its straightforward capability of saying precisely where we are. Another is the long sought goal of making the sea as transparent as the air when it comes to charting.

In this issue the handling of data is the subject of attention of papers dealing with attributing data quality and of distributing hydrographic data to a wide public audience. The need to ensure that the user of digital navigation data is fully aware of its quality and limitations has long been advocated by the Australian Hydrographic Office, first with the paper chart and now with the digital chart. Unfortunately many HOs have been very slow to attribute the quality of the data being shown on their electronic charts. However much they may be concerned about their potential for legal liability they surely owe it to their users, to provide information on the quality of their data? An approach to making hydrographic data available to a wider audience than just the traditional navigational users is the subject of a Canadian paper. Perhaps it is unfortunate that a new audience necessitates a new lexicon and a discussion that is full of 'new' words, such as geobrowser, interoperability, portals.

The pendulum may be swinging back from data management to data capture but it is interesting to note how much GPS is being used, not to just horizontally position but to measure heights or height differences. This can be seen in the German paper dealing with ship squat and in a Canadian paper concerning tidal measurement. Further refinements of the now ubiquitous acoustic multi-beam systems continue, particularly dealing with acoustic influences, and are discussed in a further Canadian paper. Wonderful as modern acoustic array systems may be, they remain dependent on the ship as a platform and work continues to look for airborne systems. While LIDAR has been discussed in this Review previously and is now commonly used operationally, it also has drawbacks, mainly due to its inability to be used in turbid waters. To overcome this difficulty we are seeing increasing attention being given to geophysical methods. In Canada the technology has been used for some years in ice covered waters and in the Netherlands it has been used for measurement in areas of mobile seafloor. In this issue we have a lengthy paper discussing research in Australia in this promising technology.

Adam J. Kerr, Editor