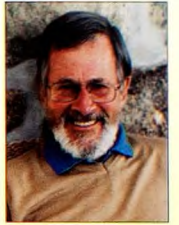


Editorial



Are we seeing the national power base of hydrographic knowledge and development changing from Europe to America and Asia? The pages of this issue would seem to indicate that it is, with papers from North America and China discussing a wide range of technical issues. Key tools of hydrography today are the ubiquitous GPS, multibeam echo sounding systems (mbes) and Lidar. The availability of these systems has given rise to the need for great improvements in data management. Where are these developments taking place? Satellite position was developed for military purposes by the two World powers of the time, the USA and the USSR. Now we stand by and watch the Europeans justify the economic and other reasons why it also should not develop its very own satellite system, namely Galileo. While we may well ask if we really want another system, we will recall the long fight to get rid of Selective Availability and so perhaps some competitive alternative is always a good thing. Multibeam echo sounding and Lidar are different matters. These are designed for hydrography, although other professions may also make use of them. Mbes originated in the United States but today people will more likely to look to Europe for sources of equipment. Germany, Norway and Denmark have companies producing a great range of the systems. Now, in a paper in this review, we find that China also is entering the fray. Lidar may have had its origins in Australia, Canada and Sweden but prime sources of these systems today seem to be Australia and the USA, although it is recognised that Canada remains an important source of components and Sweden is still a producer. Once again, we find that China is reporting developments in this area and we must watch its progress.

While the development of hardware has been restricted to a very few countries, this is not the case with software and data management. Developments of a minor nature go ahead in most hydrographic offices but major system developments can be found in several countries, which notably include Australia, Canada, Germany, Russia and the USA. This list is far from inclusive and interesting developments are afoot in many countries, which include, once again, China. Data management, connected with the production of electronic charts, is a particular activity that can be seen going on in several countries and providing a service to hydrographic offices. Here we may look to Germany, Italy, India, Japan and Russia.

The above exercise of attempting to identify where modern hydrographic developments are taking place is full of pitfalls, as numerous countries will raise their hand to say that they have been omitted from the lists. However, what is interesting is that some of the biggest practitioners of the hydrographic business are not necessarily those who are taking a lead in the development of the technology. Why, we may ask, are the United Kingdom and Japan not developing mbes or Lidar? On the other hand, the USA, is now covering all areas of development and is particularly noticeable for its recent developments in data management, as evidenced in papers in this and other issues of this journal.

Adam J. Kerr, Editor