

# REVIEW

## GENERAL BATHYMETRIC CHART OF THE OCEANS: THE ARCTIC SHEET

[Review by Brian Harland\* of the *General bathymetric chart of the oceans, sheet 5.17, 5th ed.* Published under the joint authority of the International Hydrographic Organization and Intergovernmental Oceanographic Commission (UNESCO), Paris, 1979. Scale 1:6 000 000 at 75°N.]

The series of bathymetric charts established by Prince Albert I of Monaco in 1903 has served an invaluable purpose and covered the walls of many institutions. Apart from the two polar sheets, most of the world of this fifth edition is charted on 16 sheets using Mercator projections, four each between 0°, 46°40' and 72°N and S. The polar sheets are on a nearly equidistant projection (that is not specified) reaching to 64°. The sources are given in 26 listed publications and the 1:1 000 000 *World Series*, divided more or less according to national responsibility; however, according to the key map the USSR appears not to have contributed.

Orography of the Arctic sheet shows a network of rivers and layered brown contours at 200, 500, 1 000, 2 000 and 5 000 m intervals. The heights above 5 000 m, according to the key, are left white, but so is ice for which there is no explanation. In the case of Greenland there seem to be subglacial as well as supraglacial contours.

Bathymetry would appear to be the main point of the map and we must take it on trust that the complex pattern of contours does justice to the very many sources listed. Contours at 200, 500, 1 000, 2 000, 3 000, 4 000 and 5 000 m are distinguished. Any small-scale bathymetric contours involve some interpretation and rounding; but a fine background of traverse lines is discernible, so presumably where these intersect the contours we can depend on them as soundings. There are large sections without such a background network—the sources used probably gave no such information. Compared, for example, with the competing 1:5 000 000 map of the American Geographical Society by Heezen and Tharp (1975), there are fewer contours and much less detail—but that was highly personalized and tectonically interpreted bathymetry, whereas this series is more of a committee job.

Choice and spelling of place-names seems to have been capricious. The selection of marine place-names available is tabulated in the legend, so for example, Arctic Mid-Ocean Ridge is shown on the map and the table gives the alternatives: Nansen-Gakkel Ridge, Nansen Ridge, Gakkel Ridge, Nansen Cordillera and so on. It would be good if some international body were to agree on a single recognized name for each feature. Possibly such a map could gently achieve what no committee could do, if it could carry the authority of a high standard of production; but this sheet falls short of such a standard.

The land names are not so much the subject of the map, and the editors' attention has clearly wandered. There is an implicit attempt to give the names according to the official form of the countries concerned. Political responsibility may have been deemed to be waived by not showing national boundaries on land; but in the USSR for example there is little consistency nor any standard system of accepted transliteration. There are too many hybrid names, such as Taymyrskiy Peninsula rather than Taymyr Peninsula or Taymyrskiy Poluostrov, Vrangelya I rather than Ostrov Vrangel'ya or Wrangel Island; Bay of Duna is given instead of Dvinskaya Guba or Dvina Bay, vozonin (trough) for voronin and so on. There are not many names altogether and a high proportion are questionable. But it does not stop there. Only two islands of Svalbard are named: Spitsbergen and Bjørnøya (misspelt as Bjornøya). The names Svalbard and Nordaustlandet might also have been included. Indeed the more one looks at or for names the more slapdash does that part of the work appear. Having drawn attention to this we may look for a good international sixth edition in a series that will undoubtedly survive.

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