NSHC 27th Conference Rostock September 2006 Explanatory Note Item B8 Denmark

Improvement of the accuracy of the Greenlandic Charts

The current 93 Greenlandic Charts are mainly produced during the 1960ies and 1970ies. The reason for initiating the then "enhanced" chart production project was that a ship - which according to her constructors could not sink - on her maiden voyage to Greenland in 1959 sank and all on board died. In fact the only thing ever found 9 months after the loss was a lifebuoy.

The base material on which the compilation of the new charts was based were *available* topographical maps, hydrographic data - some of unknown origin - from what ever *available* source etc. etc. Most of the time the compilers did not even know the horizontal or the vertical datum of the information used. And for many years this fact was not that important.

The horizontal datum used for the compilation of these new charts was defined to be Qornoq 1927 which is still the datum in use in today's charts.

The importance on knowing and stating the horizontal datum became really evident when GPS was introduced and used for hydrographic surveying. The chart compiler was unable to combine new, accurate hydrographic surveys with the existing chart information. In coastal areas the soundings sometimes appeared on the landside of the coastline.

Later on it also became evident to the mariner that the accuracy of the chart information was poor. Positions obtained from GPS could not be plotted on the charts in coastal areas without severe problems.

Therefore KMS has now initiated a project in order to try to find a fairly easy and cost-effective method in order to improve the accuracy of the charts

The Conference is invited to take note of the information