13th CHRIS MEETING
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PRINT ON DEMAND
(by Dabe Enabnit, August 2001)

United States (NOAA)

The Unites States (NOAA) reported at the 12th CHRIS meeting on its efforts to use Print on Demand technology for nautical charts. This report describes progress made over the last year.

1. Approximately 266 of NOAA's 1,016 nautical charts are now available via Print on Demand. The remaining 716 charts are prepared, but are waiting for the completion of automated chart assembly software before they are released. The software will be completed, and the entire chart suite released by the end of this year (2001).

2. NOAA's primary purpose in using Print on Demand is to distribute charts that are up-to-date at the time they are manufactured. That purpose is being met as all chart files are updated weekly with all Notice to Mariners items to support both Print on Demand and the raster navigational chart update service. The second purpose of using Print on Demand is to customize charts with information specific to market segments. The charts are presently being customized for commercial or recreational users. The ability to customize a chart for an individual user is now being tested. The third purpose is to use Print on Demand as a means of eliminating inventory and warehousing, and to achieve savings from eliminating those processes. That purpose is not being met since the lithographic chart is, at present, still being produced.

3. The Print on Demand charts have been well received by mariners. The combination of up-to-date information plus the new water-resistant materials, colors, and customization is being readily accepted, although the custom information for recreational boaters that is included outside the chart neatline has not been as popular as hoped. A different collection of information for that market will be developed. The charts are sold for 20 USD whereas the traditional lithographic charts are sold for 17 USD.

4. Acceptance by charts sales agents has been mixed. While the product itself is generally praised by the agents, it complicates their business and requires them to educate their customers. More work will be needed to successfully convert agents from selling the traditional lithographic chart to selling Print on Demand.

5. The technology to produce Print on Demand charts has been found to be within the reach of any hydrographic office. If a hydrographic office intends to use the technology only for inventory control, e.g. for charts that sell in low volumes, or to avoid reprints, then there are many suitable choices of equipment, and the decision should be made on economic grounds.

6. The greatest benefit for mariners of Print on Demand is the ability to get up-to-date charts. Achieving this benefit requires additional technology for rapidly updating the charts, and for managing the files that are to be printed. Customization requires substantial additional software beyond that needed to create and manage up-to-date charts.

7. The flexibility of Print on Demand could allow any hydrographic office to print up-to-date charts of any other hydrographic office for local customers anywhere in the world. Such mutual support among hydrographic offices could benefit mariners by helping them receive the most current information. The need for a common data format to facilitate such a capability would be convenient but is not essential. The CHRIS should explicitly discuss this matter, and consider taking appropriate action.

8. A discussion group has been formed at the Open ECDIS Forum, http://www.openecdis.org/, to exchange information about Print on Demand.