

**HYDROGRAPHIC DATA PROCESSING USING PERSONAL COMPUTER IN
BCGS, PHILIPPINES**

The Bureau of Coast and Geodetic Survey of the Philippines has developed a new hydrographic data processing system using personal computer since the end of 1985 when BCGS acquired a 16-bit personal computer as a donation from JICA, with the assistance of Mr. Mitsugu Okada, a JICA expert from the Hydrographic Department of Japan.

This system functions to cover the process from digitizing soundings out of echograms to plotting smooth sheets. The process is performed in the form of dialogue on a display between the computer and operators. The total cost of a set of hardware is less than US\$14,000 and it took about 6 months to develop the software in BCGS.

In July 1986, a pilot project of the system using actual field data was successfully completed, and the first computer-aided nautical chart was published in the end of March 1987. Acquiring another set of personal computer from JICA later to facilitate data processing of hydrographic survey, BCGS is now utilizing this system as a routine work. In May 1987, five more projects were executed by this system with four operators.

The characteristic of this BCGS-JICA system is to use analogue form of hydrographic survey data such as echo traces, marigrams (records of automatic tide gauges), etc. and a less expensive personal computer, which is unique in our professional fields. The software is written in BASIC so that one can modify or improve it easily. BCGS hopes to obtain some complete sets of hydrographic data acquisition and processing system in the near future, but the present system in the meantime will fully be used as its routine work in publishing more accurate nautical charts more quickly.

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