Bathymetric Survey of Cebu Harbor

EGS (Asia) Ltd. has completed a detailed bathymetric survey in Cebu, the Philippines, on behalf of Cebu Port Authority (CPA). Work was completed over a 30 day period, starting on 25 January 2004.
To cope with the steadily increasing marine traffic within the Cebu Harbour, CPA has commenced a study on the Cebu Integrated Port Development Plan. As part of master plan of the study, it is essential to carry out a detailed bathymetric survey to map the seabed in great details in order to:

- To update and upgrade existing charts
- To map areas where siltation appears to be taking place
- To create a multi-purpose marine data base

To comply with modern day international maritime requirement for navigation safety, the International Hydrographic Organization (IHO) Standards were used as the basis of the survey specifications. To fulfill this requirement, the majority of the bathymetric survey used multi-beam echo sounding (MBES) technique while shoals, wrecks and shallow water areas were filled in using the conventional single beam echo sounding technique
The survey area covers the narrow and busy Cebu Harbour in the center and the coverage extends to both the northeast and southwest entrances down to water depth greater than 100m. During the survey EGS acquired a total of 1,400 km multi-beam echo sounding (MBES) and 50 km of single beam echo sounding (SBES) data over a study area of 3,700 hectares. Key equipment and software used:

- CNav differential GPS, giving accuracies of +/- 0.3 metres
- C-ViewNav navigation suite
- Seabeam 1180 MBES system
- Knudsen 320M SBES system
- C-View Seabed Data Management Processing software (SDMP)