



iv. CONFIGURABLE MARINE SYSTEM

The Configurable Marine System (CMS III) is at the centre of data collection operations. Although the most visible function of the CMS III is survey control and navigation data recording, the system also collects and records data from a variety of sources.

The CMS III comprises a central Texas Instruments 980B mini computer networked to three TI 990 based sub-systems. Various peripheral systems are interfaced directly to the 980B computer, or to one of its 990 sub-systems.

The major functions of the 980B central computer are to record all non-seismic data on its peripheral tape transports, provide seismic line control, provide data to the ADL for real time quality control, provide selectable data over an eXternal Quality Control link (XQC) and drive a graphical plotter for vessel steering guidance.

The 980B computer has an operator interface provided by the 990 QC sub-system. The operator interface is used to enter line control and prospect level parameters. A subset of the data recorded to tape is routinely passed to the 990 QC and displayed on a VDU. The same data is passed to the automatic data logger (ADL) for quality control. Additionally, the 990 QC allows the operator to interrogate the 980B at any time for additional data.

A second 990 based sub-system is the 990 NAV system. Dedicated to navigation, the 990 NAV sub-system provides the 980B with filtered navigation data for use by the line control program, as well as raw data for recording on magnetic tape. The 990 NAV system is described more fully in a following section of this report.

The OBB/STS/TIGER system, another 990 based sub-system, comprises the final sub-system of the CMS III. This 990 mini computer runs under the DX10 multi-tasking operating system, which allows the computer to perform its three major tasks as though they were running on separate machines. The three functions are streamer tracking (STS), real-time binning (OBB), and Tiger II quality control. These three functions are also described more fully in a later section.