New Applications

Anticollision System

Lockheed Electronics' Data Products Division has shipped the first production order of fifty MAC 16 minicomputers under a contract with Iotron Corporation of Bedford, Massachusetts. The MAC 16's are components of Iotron's automatic anticollision navigation system for shipboard use. Called DigiPlot™, the minicomputer-controlled system, using conventional ship radar, analyzes all radar returns within 17 miles. The system automatically discriminates between small targets and the edge of land, evaluates over 200 of the closest targets, and plots the 40 "most threatening." The watch officer may preset a warning approach distance and approach time. When any target crosses these thresholds an alarm sounds and that target brightens on the display tube.

The MAC 16 does much more, however, than calculate courses and speeds for the most threatening targets. For example, the MAC 16 will compute the predicted results of trial maneuvers and display them in quick time. In this way the watch officer can view a clear-cut graphic display of what will occur if he changes course and/or speed to pass a closing target safely. The trial maneuver projects the positions of all displayed targets and own ship, considering the maneuvering characteristics of own ship, the speed and course selected, and the speed and course of the other targets. The maneuver is displayed dynamically, 30 times faster than normal time. Thus, DigiPlot can be a powerful aid in navigating through crowded waters with precision.

Contact Lockheed Electronics Company, Data Products Division, 6201 East Randolph Street, Los Angeles, California 90040 for further information about LEC designed navigation and control systems.

Supermarket Computer

Giant Markets, northeastern Pennsylvania's leading independent supermarket chain, has installed a new computer as part of its continuing commitment to customer satisfaction. The computer, an IBM System/3 Model 10, is used for unit pricing of groceries and for tracking Giant's stock of merchandise. In the future, the computer is expected to play a major role in stock forecasting for Giant, reducing out-of-stock items to a minimum.

In the average Giant store, for example, over 12,000 different items are sold. In addition, the entire stock supplied out of Giant's distribution center typically turns over 14 times a year. The purchasing cycle at Giant begins with a stock status report produced by the computer and used by the company's buyers. The report lists stock on hand, average movement and its reorder level. Buyers use the information to order carload purchases, taking into consideration seasonal factors and vendor incentives. Stock received at the warehouse is entered into the computer, as are shipments to particular stores. Requests for replacement stock from stores are handled manually, but the computer is expected to play a larger role in this function in the future.

Among these management applications are billing, accounts payable, sales analysis, weekly payroll for the company's 850 full and part-time employees, and general ledger accounting. These new applications will provide management with weekly profit and loss statements — by store and by department.
Monitoring System

Completely tested as a special application at Peter Bent Brigham Hospital, Boston, the HP Computerized Monitoring System is combined with existing HP Bedside Monitors and Central Station Equipment to perform calculations and intensive monitoring that is tedious and time consuming by manual methods. It provides accurate, consistent monitoring of important physiological variables, instant access to stored data, formats categories of cardiac arrhythmias to reveal new trends, analyzes cardiac functions, automates messages, and prints reports periodically or upon demand.

The central processor is HP's newest computer, the 2100. Typical peripherals for the dedicated system include and A to D converter, Digital Clock, Display Scope and a newly designed keyboard for efficient communications between the central processor and the intensive care personnel. General-purpose peripherals for the optional system include a High-Speed Punch, an I/O Extender, and additional I/O devices such as teletypes and line printers.

For detailed information, contact Hewlett-Packard, Medical Electronics Division, 175 Wyman Street, Waltham, Massachusetts 02154, (617) 890-6300.

Instant Invoices

Customers who buy lawn equipment parts from Marr Brothers, Inc., don't have to wait long for their invoices. Owner James Marr says the firm's IBM computer, located behind the sales counter, has eliminated the need for time-consuming, hand-written paperwork on each sale.

When a customer first visits the store, his name, address and pricing information about his account are keyed onto a punched card. On that and subsequent visits, the customer's card, along with cards describing the parts he purchases, are entered into the IBM System/3 Model 10. The computer automatically prepares a complete invoice. Marr Brothers stocks more than 15,000 parts for various types of power lawn tools and air-cooled engines.

Glacier Analysis

A Ruggednova minicomputer is at the heart of an electronic system which will provide the first three-dimensional look at glaciers, it was announced today by the computer's manufacturer, Rolm Corporation.

Operating in an environment where commercial-type computers would fail, the Ruggednova controls a mobile information gathering system designed by Canadian scientists of the Department of Energy, Mines and Resources. The program, called Radio-Echo Sounding Project, is now exploring the Columbia Icefields located on the boundary of Alberta and British Columbia.

For further information contact Rolm Corp. at 10300 N. Tantau Avenue, Cupertino, California 95014, (408) 257-6440.