processor about the size of an office desk, the machine has a million-byte main memory with a cycle time of 1.5 microseconds, and a read-only-memory access time of 300 nanoseconds. **It is the first machine, despite its numerical designation, in RCA's new line of series 200 militarized computers.**

The other machine, the R-100, was developed by the Communications Systems division, Camden, N.J., for large military communications networks. The R-100 can be used both for message and circuit switching,—**functions generally performed by separate processors.** Up to 2,500 voice and data circuits can be controlled simultaneously with messages routed directly to their destinations or stored and forwarded later. In addition, the R-100 can interconnect and control multiple voice circuits and provide services for voice communications, including automatic call forwarding.

Computerized test for keyboards due

The latest technique to make calculator production faster, more efficient, and less expensive is a computer-directed final inspection system for keyboards being built by the Micro Switch division of Honeywell in Freeport, Ill. **The goal is a 100% check of all function switches and circuitry.**

Among parameters to be checked for each key are proper code, rise and fall times, and output levels of voltage and current when the key is depressed or not depressed. Inspection commands and related acceptable parameter values will be stored in a high-speed disk pack storing several million words. **At the test station the inspector keys in the keyboard model number, and the system automatically exercises each key 10 times.** Information for several hundred keyboard models, with an average of 55 keys, is retained in the system, called CAKE for computer Assisted Keyboard Evaluator.

Edward C. Leibig, product/market manager for keyboards, says CAKE will service several inspection stations simultaneously. **A complete test should take only "a few minutes."** CAKE is based on a Honeywell DDP 516 computer with 16,384 words of core. Initial operation is slated for late February.

Garrett expanding Canadian facility

The Garrett Corp. of Los Angeles, which essentially got out of the MOS/LSI business when it sold its Rancho Bernardo, Calif., production facility to Burroughs Corp., isn't abandoning microelectronics completely. **The firm has decided to add 20,000 square feet to Garrett Manufacturing Ltd., in Rexdale, Ont., Canada,** to make thin- and thick-film hybrid microelectronic devices. Production is expected to start at the new facility by April.

Some $1.5 million in new equipment is earmarked for hybrid microcircuit production over the next three years. **The Canadian government has helped underwrite a portion of the R&D and production equipment costs.**

Although sales this year are expected to be less than $1 million, **Garrett Manufacturing officials are projecting volume topping $7 million by 1975.**

Addenda

MOS/LSI is beginning to edge into automobiles—in that widely publicized Phystester ignition interlock system developed by the Delco Electronics division of General Motors Corp. **The experimental device includes a keyboard and display, with MOS/LSI logic and memory array supplied by North American Rockwell Microelectronics Co. . . . To encourage use of its calculator on a chip for scales, meters, cash registers, and other applications,** Texas Instruments is reported to have cut the price in half—**to the $12-to-$14 range. The 230-by-230-mil chip is MOS/LSI, and it is programable [*Electronics*, Sept. 27, 1971, p. 24].**