

IBM... Poughkeepsie - Kingston

A TEKTRONIX CUSTOMER
STORY by John West

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Located on the banks of the Hudson River, 75 miles north of New York City, lies the City of Poughkeepsie and one of IBM's several sites throughout the United States.

At the present time there are 85,000 people working for IBM. Of this number, 61,000 are in domestic IBM and 24,000 work for IBM's World Trade Corp. There are approximately 20,000 IBM'ers in the Poughkeepsie-Kingston area.

In the Poughkeepsie section, research development and manufacturing are done on data processing equipment, large scale computers, punched card machines, proof machines and punched paper tape machines.

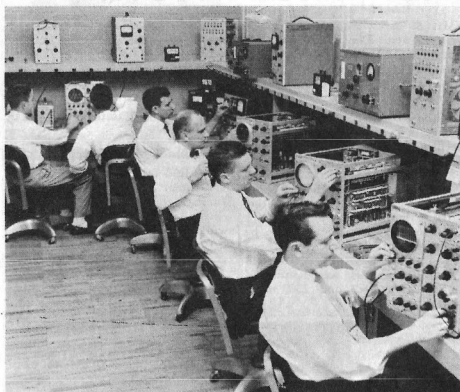
At Kingston, twenty miles north of Poughkeepsie, we find the Military Products Division of IBM. This division builds the SAGE computer and electronic equipment for the B52. There are approximately 10,000 IBM people here. The total number of Tek scopes at Poughkeepsie and Kingston is close to 3,000, with just under 500 smaller instruments. There are eight different test departments located in the Poughkeepsie-Kingston area, and at least five of them spend 80% of their time scheduling Tek equipment for periodic checks.

In Poughkeepsie the electronic accounting machines have become the IBM electronic giants that provide automation in offices and research centers. Many major corporations in America today use the IBM 704 and 705 machines. In almost every important piece of recent scientific research, the IBM 705 has played a vital role. With each 705 installation that leaves Poughkeepsie, they include two 535's, one 531, one 53/54C and one 53/54B as standard equipment. Each 704 installation includes a 535 and a 531. The 705 has put modern record keeping on the production line. Through its magnetic tape carries the processing of records from raw data to complete and final reports in one continuous operation. In industry, for example, stock inventory, which has always been an unwieldy chore, has been made permanently easy by the 705. This machine does away with the recurrent trials of periodic inventory—it keeps a continual inventory. It not only records stock exchanges and levels, but writes the orders for new or needed stock.

For insurance companies the 705 is an invaluable boon. The magnetic tape of the machine can store all the information on every policy the company issues. The machine examines all the policies for possible errors and corrects the errors. When premiums are due, it prints the notices for the policyholder, and later records his payment. For the statistical tables, so necessary for insurance operations, the machine can compile information in a matter of minutes. Many are the wonders of the 705.

And many are the wonders, also, of the 704. It has become the strong-arm of scientific research. From a minimum of data it can produce a maximum of information. After evaluating information, it can arrive at complex decisions, predict radical changes and effects.

The Vanguard Computing center in Washington, D.C. was established for the purpose of calculating and predicting the orbits of U.S. scientific satellites. It is operated by IBM under contract with the Navy. At the center, IBM calculates orbits based on reports received from Minitrack Radio Tracking Stations which pick up the radio signals from the satellites. IBM computers were able to calcu-



Six technicians from IBM's Department 780 (Test Equipment Engineering) repairing Tek scopes. This department spends approximately 80% of its time recalibrating Tek equipment.



Mr. John Kasakowitz, a Technician, on the left, with Mr. Helmut Faasch, Associate Engineer, on the right. Mr. Faasch is in charge of Department 780. When IBM supplied these pictures they pointed out that these scopes had been brought in especially for the purpose of taking pictures. They wanted us to be sure to include this in the caption, as they did not want to give the impression that all these scopes sit on the shelf gathering dust!

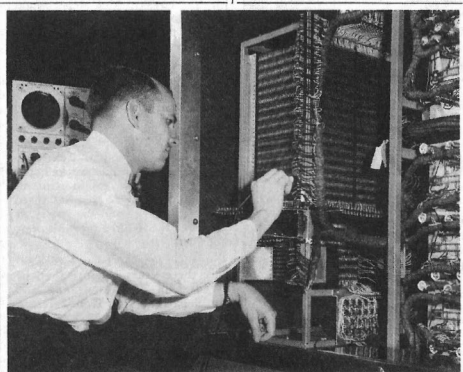
late and accurately predict the orbits of the Russian satellites very soon after they were launched. Similarly, these computers have traced the U.S. Explorer Satellites.

Another 704, located at Cape Canaveral, Florida, is used to monitor rockets in flight. This machine actually tells the scientist involved whether or not the rocket is on the right track and, if it isn't, warns them so that it may be destroyed with the destruction switch.

The first of the 700 series large scale computers were rented for from \$17,000 to \$65,000 a month when they were installed in 1953. There are now over 200 on rental throughout the United States. The first IBM 650, a drum calculator—an intermediate data processing machine—went on rental in 1955. They charge from \$3,750 to \$16,000 a month for it, and there are now more than 1,000 of these systems installed.

With the first RAMAC during 1957, IBM believes they have another new major product line under way. This is also an intermediate data processing system, but it fulfills a different need from either the 650 or the 700 series. Its average rental is \$3,300 a month, and it is called RAMAC. RAMAC means Random Access Method of Accounting and Control. It is unique because it can handle the processing of business transactions as they arise rather than requiring that these transactions be accumulated in batches before processing. Research and developing is conducted in San (Si Corn land) Jose, California. Most of the service on the RAMAC in the field is done with 310's. In fact there are approximately 1500 Type 310's scattered throughout IBM's field offices.

At the large, attractive, three-story, 1/3-of-a-mile long building located in Poughkeepsie, the Manufacturing Department produces the



At the Boeing Airplane Company, a Tektronix oscilloscope is used to check the "memory" bank of a big IBM-705 computer.

— Boeing Airplane Company Photo

machines that have been the shortcuts to 20th century progress. They both manufacture and assemble here. To be absolutely sure that the equipment is of high quality throughout its operation, it is tested and retested. At Plant #2, which includes manufacturing, test equipment engineering, etc., there are approximately 575 Tek scopes.

Working with the test equipment department is an Instrument Repair group headed by Mr. Helmut Faasch. His group initially repaired and recalibrated 200 scopes plus 105s and 180s. However, Mr. Faasch has recently taken over all of the maintenance of Tektronix equipment at Plant #2. This efficient Instrument Repair group includes ten men. However, now that they have to maintain more Tek

equipment, the number of technicians will be increased. Each scope will be given a thirty-day periodic check and will have a history report where tube and component failures are recorded for future reference.

There are many sections throughout IBM Poughkeepsie and Kingston, that remind one of Tektronix. Scopes to the right of us, scopes to the left of us, and on rides the delaying sweep.

Briefly summarizing, IBM has grown tremendously in the electronic calculator field. In this age of tremendous industrial and scientific activity, they have lightened the burdens of everyday life and paved the way for a more exciting and adventuresome future.