

The **UNIVAC SYSTEM**





The Remington UNIVAC



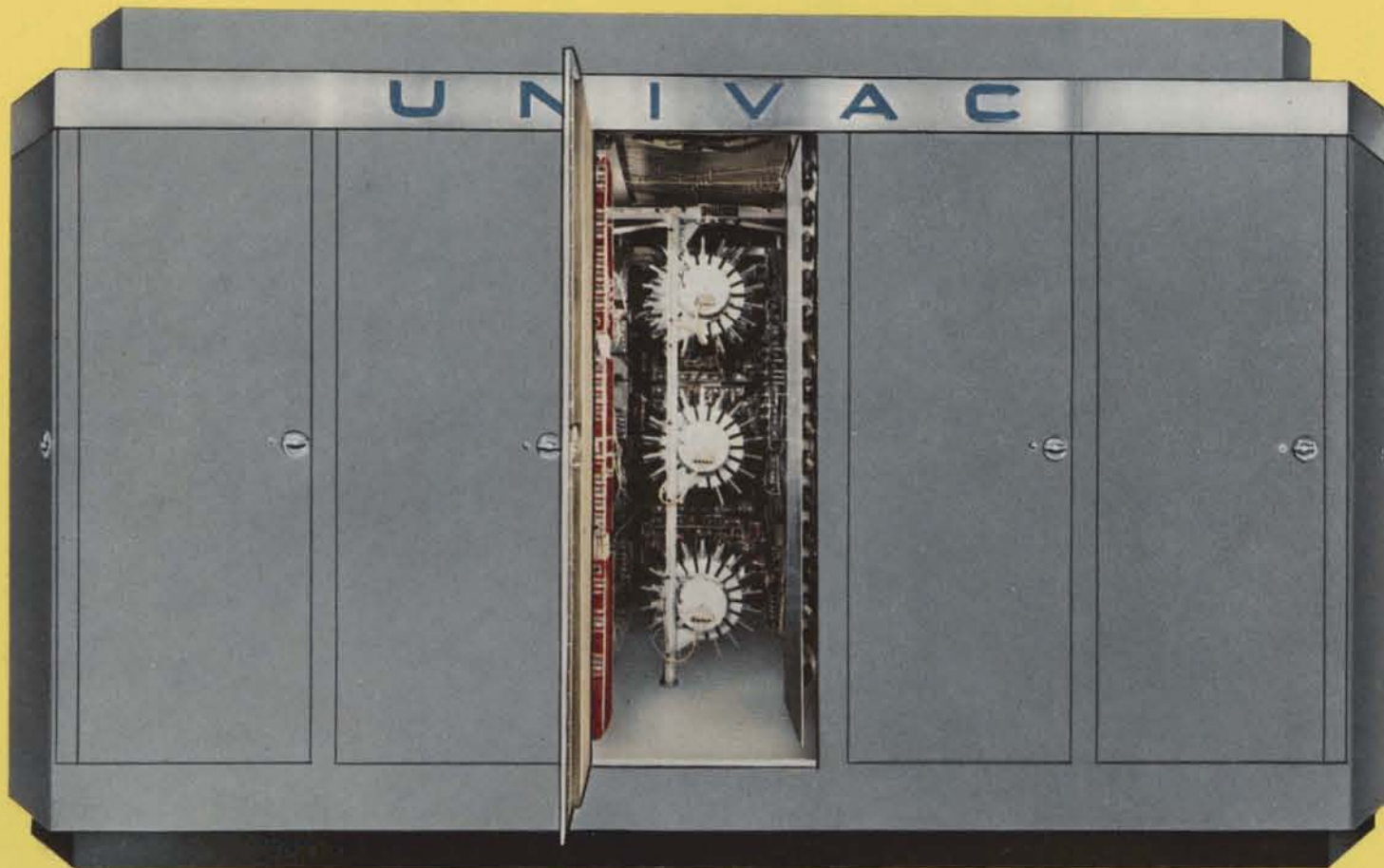
FIRST CHOICE OF MODERN MANAGEMENT

First so-called "giant brain" on the market—first in large-scale production — first electronic computing system to satisfy the diverse needs of business management — Univac is the acknowledged leader in the electronic computing field.

Everyone has heard about the scientific computing marvels that this type of equipment is capable of performing. But less well known are the many equally important commercial routines which the Remington Rand Univac — and Univac alone — handles automatically and economically, with matchless accuracy, to achieve results such as these:

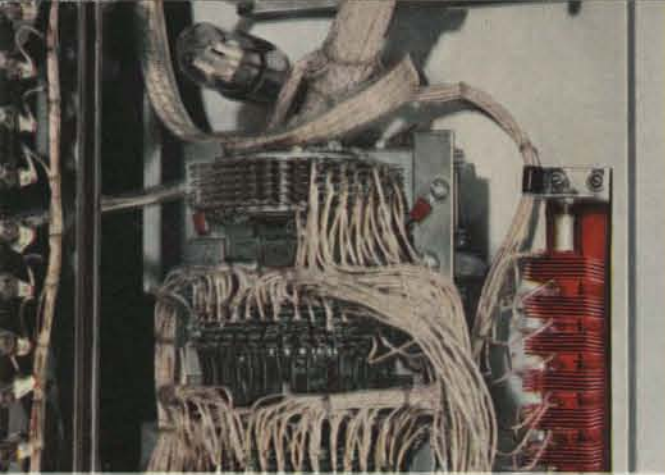
- Classifying survey results with time savings of 30 to 1 and dollar savings of 5 to 1.
- Performing, in 2 days, public utility rate studies which formerly required 21 man-weeks.
- Compiling, in 16 hours, actuarial statistics which would require 2 *machine-months* with punched-card equipment.



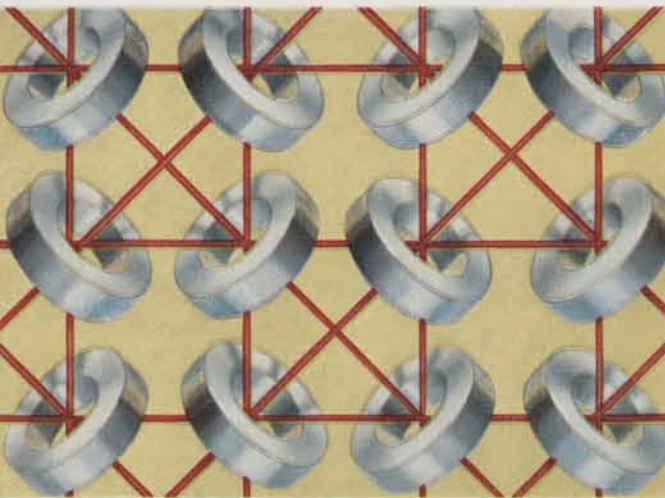


the central computer...

This is the "heart" of the Univac System. All other equipment is designed either to feed information into the Central Computer as input, or get final results from it as output. Data-processing in this unit, and checking of results, are completely automatic. Nothing that takes place within the Central Computer in the solution of a problem requires human intervention.

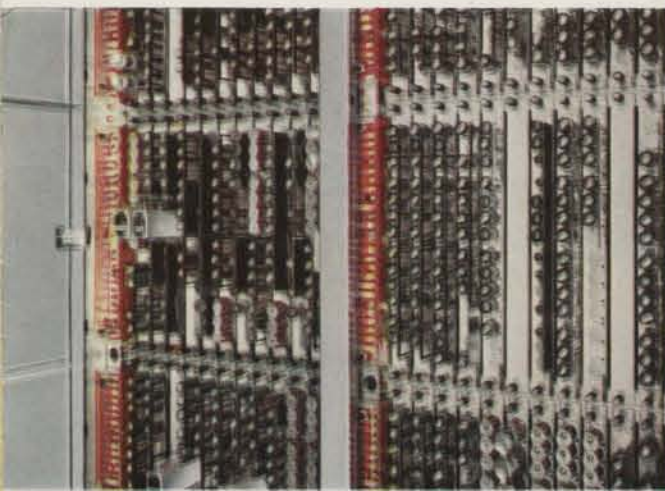


The Univac checks important operating conditions by such means as fuse, temperature, and voltage monitors. This automatic voltage monitor checks all voltages once every two minutes while the computer is running.

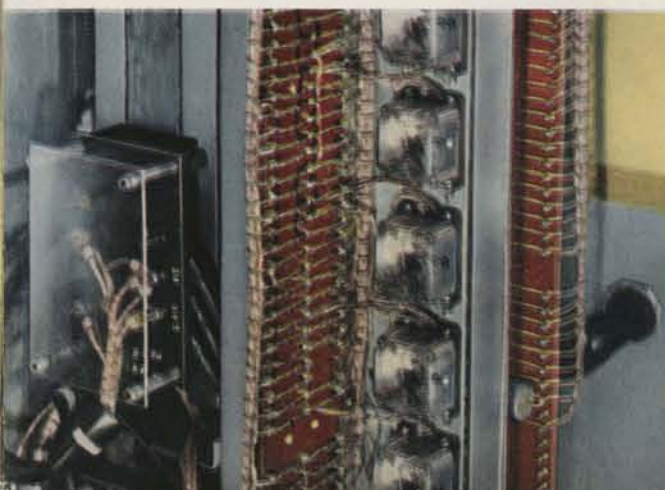


168,000 of these tiny magnetic cores go into each of the new Univac 24,000-character memories, with 5 times this capacity available if needed. A single core is approximately the size of the head of a pin.

Over 5,400 vacuum tubes are used in the Central Computer, as well as more than 18,000 crystal diodes. There are approximately 200 miles of electrical wiring used in the construction of a Univac System.



The internal operations of the Central Computer are continually and completely checked to ensure reliable results. These monitors detect overheating, signalling the location of potential trouble before it develops.



the supervisory control

The Supervisory Control is the "nerve center" of the system, giving the operator a continual picture of Univac's internal operation. The keyboard on the panel provides means whereby the operator can "talk" to the computer; a control printer permits the computer to "talk back" automatically.



uniservos

As many as 10 Uniservos handle the magnetic tape which provides high-speed input and output for the Central Computer. The Uniservos convert data recorded on tape into electrical impulses, feeding them into the computer at the rate of 20,000 numbers or letters a second. Uniservos also produce a magnetic recording of output at this same peak speed.

UNIVAC input auxiliaries.

The input and output medium of the Central Computer Group is magnetic tape. These metallic tapes are prepared, and results taken from them, by auxiliary equipment.

All input and output auxiliaries can be operated without interrupting the work of the Central Computer Group. Each unit of the System serves a special purpose in the series of operations that begins with raw data and ends with a processed result.



↑
The Magnetic Core Memory of the Card-to-Tape Converter — just $\frac{1}{3}$ actual size. Univac incorporates, throughout the System, the latest, most economical, and most efficient electronic developments.

card-to-tape converter

When the Univac System is integrated into an existing punched-card system, the Card-to-Tape Converter rapidly and automatically prepares an accurate duplication on tape of the information contained in the punched cards. Processing 240 cards a minute, the Converter reads each card twice and compares the second reading with the initial recording on the magnetic tape. If the two are not identical in every respect, the card is automatically ejected for special attention.



