

RESEARCH FACILITIES AND PROGRAMS

Buildings

Ceremonies held on April 25 marked the opening of IBM's Thomas J. Watson Research Center in Yorktown, N. Y. The new laboratory, which will house a staff of 1500, is the largest in the world devoted to computer research. The Center's facilities include laboratory, office, and service areas, an acoustically designed auditorium, a well-stocked and centrally located technical library complete with sound-proof alcoves for microfilm and tape-recording equipment, and a computing center with an IBM 7090 and two other electronic data-processing machines.

Designed by architect Eero Saarinen, the crescent-shaped, three-level structure of native Westchester County field stone, black slate, teak, and glass is situated on a 240-acre tract forty miles from New York City. The building is more than a fifth of a mile in length, is traversed by more than half a mile of glass-walled corridors, and has floor space "equal to eight football fields". Constructed in such a way that its corridors offer a panoramic view of the outside, the build-

ing has windowless offices and laboratories which open on one or another of the 56 radial aisles that intersect the 146-foot-wide structure from front to back on the three levels. In contrast to the sweeping rural view from the front corridors, the rear of the Center is graced by a "sunken Japanese-style garden with grass-covered islands in a lagoon of chipped limestone".

According to IBM, Saarinen spent weeks observing researchers at work before undertaking his design of the Center: "He wanted to see how they moved around a room; how they used their equipment. He even asked what kind of laboratory furniture they preferred. Saarinen noticed that most researchers sat with their backs to windows; kept venetian blinds drawn. This observation led him to the design of windowless offices only a step from the radial aisles and a few feet from the wide vistas of the glass-walled main corridors. Mock offices were constructed in the IBM laboratory at nearby Mohansic and tested through actual use in advance of construction. The modular units are complete



A front view of IBM's new computer laboratory, the Thomas J. Watson Research Center, located in Yorktown, N. Y.

with built-in metal cabinets, closets, and shelves. Even the color schemes of the enamel surfaces were tested for reactions of scientists using those offices. . . . The Center also has a parking lot for 1000 automobiles, a cafeteria with laminated teak and white maple tables, and in the lobby the receptionist's desk is "a massive ten-foot block" finished in black slate.

Work in the Watson Research Center will include a variety of investigations in physics, chemistry, mathematics, and engineering ranging from basic studies of magnetic, low-temperature, and solid-state phenomena to the design and development of experimental computing machines and of new data-handling systems.

Armour Research Foundation of Illinois Institute of Technology was established in 1936 in a few basement rooms on the Illinois Tech campus in Chicago. It now occupies a group of seven buildings which are part of the school's Technology Center and has a staff of more than 1200 working in nine research divisions. Among the events scheduled as part of a year-long 25th anniversary celebration which is currently being observed will be dedication ceremonies for a new \$3.5 million chemistry research building and a \$1.2 million extension to ARF's existing mechanics research building.

A \$2.5 million research building will be added to the Franklin Institute in Philadelphia on a site adjacent to the Institute's main building. The new six-story structure is to house greatly increased laboratory facilities and will enable the Institute, which now employs 350 scientists and technicians, to expand its personnel and research activities. Completion is expected in late 1962.

Southern Methodist University has received a National Science Foundation grant of \$26 400 to study the feasibility of transforming the new Science Information Center at SMU into a regional scientific and technical information office serving industry and higher education in the Southwest. The building to house the new center, a million-dollar, 80 000-square-foot structure with space for a half-million volumes, is scheduled for completion next August and will serve the SMU faculty and student body as well as the Graduate Research Center.

Communication Satellites

Ground stations for two National Aeronautics and Space Administration satellite projects designed to test basic concepts and technological approaches employed in satellite communications systems will be provided by the British General Post Office and the French Center for Telecommunications Studies, according to a joint announcement made in April by the three cooperating agencies. The stations will be used to transmit multi-channel telephone, telegraph, and television signals across the Atlantic with the help of active and passive satellites which are scheduled to be launched by NASA

PHYSICISTS

Senior Staff Appointments

**AT REPUBLIC'S
NEW \$14 MILLION
PAUL MOORE RESEARCH
& DEVELOPMENT CENTER**



Space Environment & Life Sciences Laboratory:

BIOPHYSICS. PhD or MS with research exp. in medical electronics. Apply mathematics & computer methods to physiological instrumentation. Use new Space Chamber (14' x 30') simulating conditions more than 150 miles above the earth.

ATMOSPHERE PHYSICS. PhD, direct space & upper atmosphere studies related to manned flight. Use simulation techniques. Practical engineering (vacuum) experience necessary.

Guidance & Control Systems Laboratory:

OPTICAL & IR SYSTEMS & DEVICES.
PhD Physical Optics with 5 years experience.

OPTICAL & IR TRACKING DEVICES.
MS Solid State with 10 years experience.

THIN FILM TECHNIQUES.
PhD Solid State with 5 years experience.

Electronics Laboratory:

ELECTROMAGNETICS.
PhD or MS, 15 yrs. exp. in electrophysics research.

ANTENNA RESEARCH, MICROWAVE.
BS with 10 years experience. Use uniquely shaped Anechoic Chamber in studies.

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