Research and Development for the Seeking Mind

Instrumentation Laboratory
Massachusetts Institute of Technology

History o

With a history of pioneering and breaking through the horizons of scientific knowledge, the M. I. T. Instrumentation Laboratory is constantly striding forward into challenging research and development.

At the moment we are engaged in the research and development of inertial guidance systems and components for use in missiles and space vehicles of varied sorts. Under the direction of Dr. C. Stark Draper, the Laboratory has achieved fame for its outstanding contributions and leadership in the development of high performance control systems making use of an ultimate combination of gyroscopic devices—servomechanisms and electronic components.

Among the more publicized achievements of the Instrumentation Laboratory (remembering that a great deal of our work is classified) are the Navy Mark **14** Gunsight, the Air Force **AI** Gunsight, Hermetic Integrating Gyros (HIG), the Ship Inertial Navigation System (SINS) and, as early as **1953** and again in **1957,** the flights from Boston to Los Angeles without a single reference by human eye, mechanical, or electronic device to the ground or stars. Present effort includes participation in Polaris and Atlas programs and other advanced systems for cis-lunar and interplanetary projects.

Work •

The Laboratory is primarily engaged in the conception and perfection of completely automatic control systems necessary **for** the flight and guidance **of** aircraft, missiles and other vehicles.

R and D opportunities exist in:

- **System Design & Theoretical Analysis**
- **Astronautics**
- **High Performance Servomechanisms**
- **Power Supplies**
- **Magnetic Amplifiers**
- **Analog and Digital Computers**
- **Electro-mechanical Components**
- **Transistor Circuitry**
- **Printed Circuitry**
- **Environmental Instrumentation & Evaluation**
- **Research, Design & Evaluation of Gyroscopic Instruments**
- **Computer Programming**
- **Simulator Studies**
- **Classical Mechanics**
- **Optical Instrumentation**
- **Pulse Circuitry**

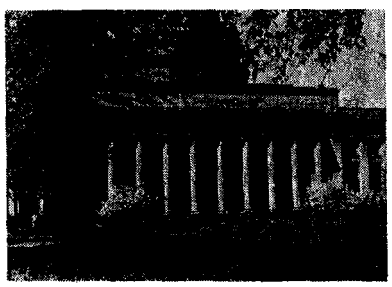
and in many other areas.

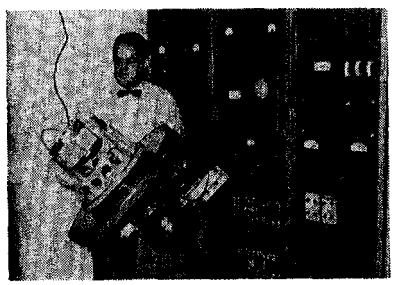
Associates and Working Conditions •

The strength of the Instrumentation Laboratory lies in the caliber of its staff of **800** employees, dedicated to furthering the quest for advancement of the frontiers of scientific knowledge. The high standards of the professional staff and the magnitude and importance of its programs enable the Laboratory to assign to individual scientist and technical men a measure of responsibility much greater than the ordinary.

Educational Opportunities •

The atmosphere that prevails in Instrumentation Laboratory is both stimulating and congenial; academic and yet industrial. The opportunity for professional growth is implemented by an expanded graduate study program which encourages staff members to work toward advanced degrees as special students while earning full pay.





Interested
Applied Physicists
and
Engineers . . .
Electrical,
Mechanical,
and
Aeronautical.

Write : Ivan **R.** Samuels, Dir. **of** Personnel
M.I.T. Instrumentation Laboratory
45 Osborne **St.,** Cambridge 39,
Massachusetts

U. S. Citizenship required.