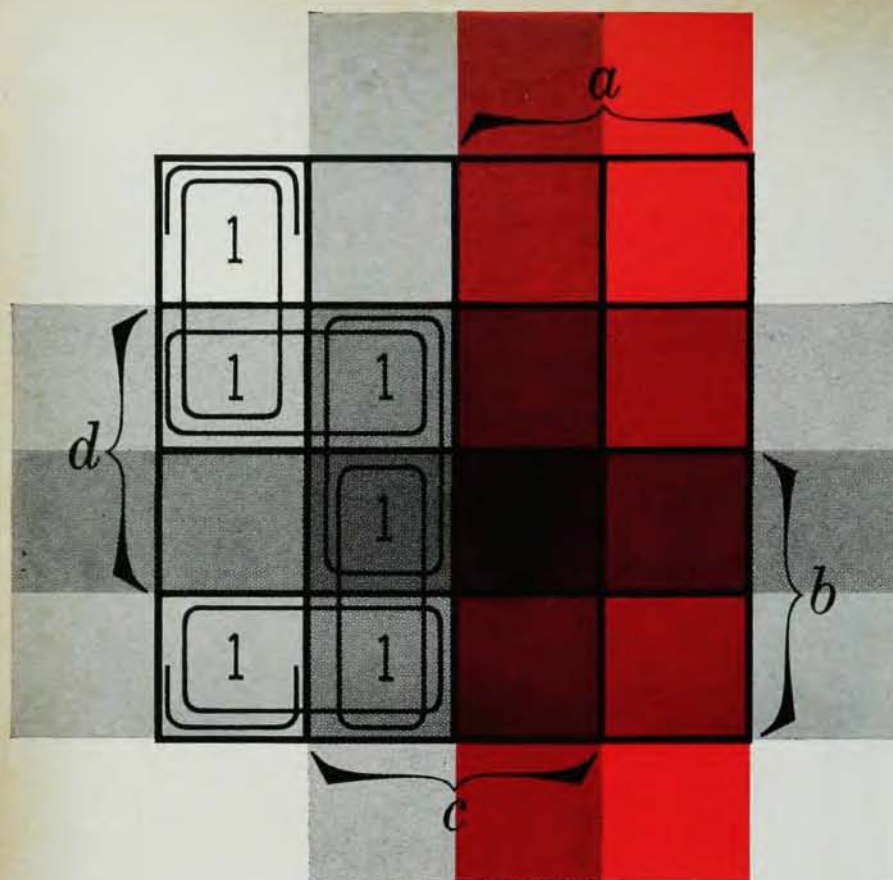




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Detection satellites now in orbit and under development depend on Sandia-designed logic systems to interpret and communicate what they sense. Each satellite carries a network of some 25,000 logic components which enable it to discriminate and compress data from its sensors, separating the telltale from the normal, essential from unessential, before transmission to ground stations. The logic examines data on radiation and electromagnetics and by a function of correlating and comparing decides whether these result from natural phenomena or a man-made nuclear event. Four such satellites are now in operation 50,000 miles out, transmitting reliable intelligence on the yes or no of clandestine nuclear explosions.

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Sandia recruits on many major campuses and is primarily interested in recent and current outstanding graduates in many of the engineering and scientific disciplines at all degree levels. Consideration of applicants is based solely on qualifications and without regard to race, creed, color or national origin. U. S. citizenship is, however, required. For current opportunities, contact the Sandia recruiter at your college or write Professional Employment Organization 3151, Ref. 559-6, Sandia Corporation, Box 5800, Albuquerque, New Mexico, 87115.

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traditional physics curriculum, including modern physics. In the third and fourth years, the students will be prepared for advanced subjects in the physical sciences and may elect to study theoretical or experimental physics, applied physics and engineering, or geophysics, oceanography, and astronomy. Fluid dynamics, including turbulence, and the newer subjects of magnetohydrodynamics and plasma physics will form one of the most important areas of the curriculum. The accompanying mathematics courses will be of a similarly advanced nature and will cover such topics as statistical decision theory, probability, metric spaces and elementary topology, and modern algebra, including group theory. Total enrollment in the honors program will be limited to some twenty students.

A graduate program in sensory communication has been organized at Syracuse University for students who are interested in the study of sensory systems and who have some background in physics and mathematics. The main purpose of the program is an integration of those parts of mathematics, physics, chemistry, physiology, and psychology that are most pertinent to the study of sensory processes and their role in human and animal communication.

Administration of the program is by a committee composed of faculty members from the Departments of Electrical Engineering, Physics, Psychology, and Zoology; the executive part of the administration is provided by the director of the Laboratory of Sensory Communication, J. J. Zwillocki, and the assistant director, E. J. Kleitsky. Additional information on the program can be obtained by writing to either the director or the assistant director of the laboratory, 821 University Ave., Syracuse, N. Y., 13210.

Esso grants

The Esso Education Foundation is continuing a program, begun last year, of underwriting projects to help colleges and universities extend their undergraduate educational resources. Grants up to \$75,000 each will be awarded in support of projects in-

volving alterations in curricula, faculty time and effort, administrative procedures, and design of academic structures and equipment, including the utilization of land. Proposals submitted under the program must be genuine innovations, and they must be duplicable on other campuses. The beneficiary institution should be able to continue a successful project after the termination of the grant.

Applications are now being accepted for those projects which will begin in February of 1966. Further information can be obtained from Frederick Bolman, Director, Esso Education Foundation Special Programs, 49 West 49th Street, New York, N.Y. 10020.

Summer Programs

Arlington State College in northern Texas will hold a conference on relativity, sponsored by the National Science Foundation, from June 14 to July 2. Subject matter will include special relativity and some cosmology and nonmathematical general relativity. The material will generally be restricted to an undergraduate level. Lectures, discussions, study projects, and some experimental work will make up the program.

Letters of application and inquiry should be submitted as soon as possible to the conference director, Dr. Jason Ellis, Department of Physics, Arlington State College, Arlington, Tex.

The School of Environmental and Planetary Sciences of the University of Miami at Coral Gables, Fla., is inviting applications for fellowships to a six-week course lasting from June 21 to July 30. Sponsored by the North Atlantic Treaty Organization and the National Aeronautics and Space Administration, the course will emphasize geophysical fluid dynamics and advanced concepts in electromagnetic sensing, including utilization of satellites and rockets. Field trips will include visits to the Kennedy Space Center and to the volcano Irazu in Costa Rica.

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