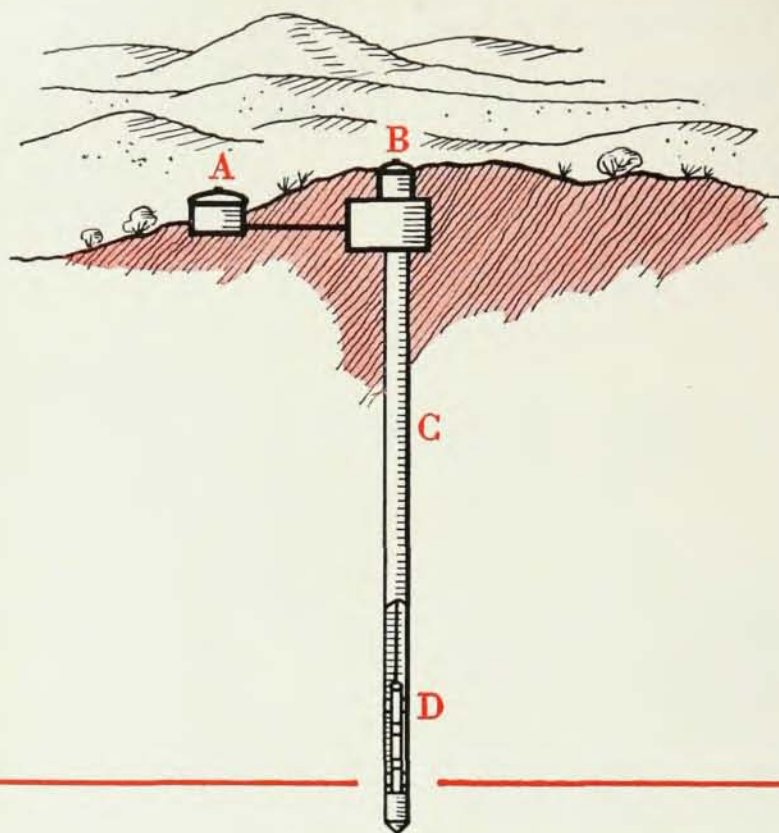




USO

At the request of the Advanced Research Projects Agency of the Department of Defense, Sandia Corporation is developing an unmanned seismic observatory (USO) capable of continuous unattended operation for 120 days. System design criteria include potential use as an observatory for obtaining data to enhance the state-of-the-art in detecting, locating, and identifying seismic sources.

The USO is a compact, flexible installation consisting of a thermoelectric power supply (A), a shelter for a tape recorder and electronics (B), and a seismometer shaft (C). When buried, the sealed shelter protects against weather, animals, and tampering, and stabilizes temperature for the electronics.

The seismometers (D) operate in a shaft 12 inches in diameter and up to 200 feet deep. A short-period seismometer records signals as low as 2.7 millimicrons at frequencies of 0.1 to 10 cycles per second. A complementary subsystem responds to earth motions from 8 to 30 seconds in duration, at amplitudes to 100 millimicrons. Recorded events are correlated to within 0.1 second of real time.

Sandia Corporation is a prime contractor to the U.S. Atomic Energy Commission for nuclear weapons research and development. If you are graduating with outstanding scholastic achievement in engineering or the physical sciences, Sandia would like to arrange an interview. For dates when the Sandia recruiters will be on your campus, check with your Placement Director. Sandia is a Plan for Progress Company and an equal opportunity employer. U.S. citizenship is required.



A BELL SYSTEM SUBSIDIARY / ALBUQUERQUE, NEW MEXICO; LIVERMORE, CALIFORNIA; TONOPAH, NEVADA

... Our decisions are not simply based on response to demand. A conscious effort is made to emphasize those fields where the scientific challenge is greatest and where the time appears to be ripe for major advances. Reports from the National Academy of Sciences are particularly helpful in identifying needs for major increases in support."

Is there any significant followup of research results? Each year agency directors order their program heads to survey the short-term research results (published papers and discoveries) of projects the agencies have supported. Subsequently many of the more important projects are included in the annual reports of the agencies.

Long-term evaluation is another matter entirely. It appears that nobody in the government agencies has ever been able to work out a system that is both reasonable and workable. To trace the origin and impact of even a single scientific discovery requires an elaborate and impractical machinery. Federal administrators, however, continue to be concerned by this problem and studies are now in progress and will continue in an effort to find some solution.

Selective Service exam

Physics professors should remind their students to take the upcoming selective-service qualification test. Scores on this test will be used in conjunction with class standings to determine possible student deferments. Beginning 1 April students can obtain application blanks from their local draft boards and should send them, before 23 April, to Science Research Associates, the test administrator. SRA will then direct each student to one of 1200 centers across the country where the exam will be given on 14 and 21 May and 3 June. According to Mrs. Betty Vetter of the Scientific Manpower Commission, physics students should have absolutely no difficulty with the 150 'puppy is to dog, kitten is to what'-level problems. Questions on the draft can be sent to the Scientific Manpower Commission, 2101 Constitution Ave., Washington, D.C. 20418.