

Each student in the participating group received about 18 hours of instruction on the device, following preliminary training in interpreting tape-recorded sounds of the machine.

Recognition of the tape-recorded sound patterns corresponding to 145 different sentences was learned fairly readily, but the complex operation of manually rolling the probe along the line of print while interpreting the tone patterns will require considerable further practice before routine use. Only five prototype models of the reader have been made, and further development of both the device and training methods will be required before quantity production is advisable.

Middle East Population

The Population Reference Bureau, Washington, D.C., reports that the population of the Middle East is growing by 4 million people a year (equivalent to the population of Chicago). Any plan to raise the standard of living in the Middle East, such as that suggested by President Eisenhower, will have little effect unless the population growth can be brought under control. The President recently laid before the United Nations a proposal for a regional Arab development institute that would provide for improved health, education, irrigation, and so forth. The Population Reference Bureau points out that the area's 95.7 million people have increased by 15 percent in 5 years. The rate of growth, in an area already heavily crowded in terms of habitable land, is exceeded only by that of Tropical South America.

The bureau lists these problems in the Middle Eastern population situation: large stretches of barren land; a falling death rate and a high birth rate; a predominantly illiterate agricultural population with little knowledge of modern techniques; and a Moslem tradition of taking great pride in large families. It is emphasized that there appears to be no religious mandate regarding fertility control in the Moslem world. This attitude can change when it is understood that high fertility blocks the hope for a better life.

Antarctic Research

The Arctic Institute of North America will participate in the U.S. Antarctic Research Program under the sponsorship of the National Science Foundation and the National Academy of Sciences. Seven new programs have been planned in order to continue international scientific collaboration in the Antarctic after the close of the International Geophysical Year in December.

The programs to be undertaken by the Arctic Institute include 2-year studies in glaciology and in seismology that will involve eight scientists in investigations of the ice-cap and its base rock in hitherto untraversed areas of the continent. A program of auroral observations at the Byrd and Pole stations will also be conducted through 1959 and 1960, in cooperation with scientists from New Zealand and Australia at the Hallett, Wilkes, and Ellsworth stations.

A further responsibility of the Arctic Institute is the coordination of a program in the biological and medical sciences. This will include the establishment of a biological laboratory at the Naval Air facility at McMurdo Sound for the use of zoologists, microbiologists, and physiologists. Other programs deal with ice studies and microflora collections. Scientists for all the newly announced programs are now being selected.

Grants, Fellowships and Awards

General. The British Government is calling for applications for its 1959 Marshall Scholarship Awards. Students are being urged to get their applications in *before 31 October*, when the lists close. Requirements for these 2-year study grants, 12 of which are awarded each year, are liberal. Any American student (including inhabitants of Hawaii and Puerto Rico) of either sex, married or single, may apply—provided he or she has earned a first degree at a recognized university and is under the age of 26 on 1 October 1959.

Each award is worth around \$1400 a year, for 2 years (and occasionally 3), plus tuition at a United Kingdom university, if possible of the applicant's choice. This is estimated to be sufficient for student life in Britain. Passage to and from the United Kingdom is paid. Married men get an extra allowance.

Applications should be made to the British consul-general in one of the following cities: Chicago, New York, New Orleans, or San Francisco. The Marshall Scholarship Scheme was begun in 1953. It is intended to express Britain's gratitude for Marshall Aid.

Pediatrics. Grants providing for post-graduate pediatric studies will be awarded again in 1959 by Wyeth Laboratories, Philadelphia. The firm will award 20 2-year grants, each carrying an annual stipend of \$2400. The first 3 years of the program will cost \$195,000.

Candidates for the pediatric fellowships may include interns, physicians who have recently completed their internship, military service, or a U.S. Public Health Service tour, and research fellows. All recipients must be citizens of the United States and Canada.

Applications must be submitted *by 28 November*. Information and application forms may be obtained from Dr. Philip S. Barbar, University of Pennsylvania School of Medicine, Philadelphia, Pa.

NSF Summer Conferences for College Teachers

The National Science Foundation has announced that it will support in 1959 an experimental program of some 20 Summer Conferences primarily for college teachers of science and mathematics. The Summer Conferences will be of shorter duration but generally similar to the Summer Institutes that the foundation has supported in recent years. Colleges and universities interested in sponsoring such conferences are invited to request further information from the Program Director for Summer Institutes, National Science Foundation, Washington 25, D.C. The deadline date for submission of proposals is *15 December 1958*.

Although planned and sponsored by the nation's institutions of higher learning, Summer Conferences will be supported by foundation funds to defray direct operational costs plus expenses of participants. Summer Institutes, 125 of which were supported by the foundation in 1958, are usually from 6 to 10 weeks in length and have been predominantly for high school teachers. In contrast, Summer Conferences will extend over a 1-to-3-week period and will be primarily for college teachers. In a few cases secondary-school teachers may be included for particular purposes. As with Institutes, Summer Conferences will emphasize subject matter rather than methods of teaching.

Radioactivity in Milk

The Public Health Service has announced that its latest tests for the presence of radioactivity in milk from nine locations in the United States have shown amounts well within the permissible levels recommended by the National Committee on Radiation Protection and Measurement. The new report, which covers the months of May, June, and July, brings up to date the findings of the study initiated by the Public Health Service in the spring of 1957. A report on the first-year findings was issued on 25 May 1958.

During June and July, the network of sampling stations was expanded from five to nine. The four new stations reporting for the first time are on the milksheds of Atlanta, Ga.; Austin, Tex.; Fargo, N.D.; and Chicago, Ill. An additional sampling point is being established in Spokane, Wash. New labora-