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 postgraduate 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-

tory techniques have been introduced and instruments have been recalibrated to simplify sampling procedures and make them more accurate. Data previously reported have been adjusted to conform to new values resulting from these changes.

Levels of strontium-90 in the May samples were found to range, in the various milksheds, from 3.3 to 10.0 micromicrocuries per liter, as compared to the permissible limit of 80.0 μμc/liter. The yearly average for the period ending May 1958 for strontium-90 ranged from 4.1 to 9.4 μμ/liter.

Levels of strontium-90 in the June samples were found to range from 2.2 to 15.5 μμc/liter. The yearly average for the period ending June 1958 ranged from 4.2 to 9.6 μμc/liter.

In the July samples, the levels of strontium-90 were found to range from 3.3 to 18.7 μμc/liter. The yearly average for the period ending July 1958 ranged from 4.2 to 10.2 μμc/liter.

The maximum permissible levels recommended by the National Committee on Radiation Protection and Measurement represent concentrations which are currently considered safe over a lifetime and which may occasionally be exceeded for short periods of time.

Other radioactive elements found were also well below the permissible limits. For the period ending May 1958, the 12-month average levels for these elements, in micromicrocuries per liter, were as follows: iodine-131, 27 to 234 (permissible limit, 3000); strontium-89, 23 to 76 (permissible limit, 7000). Barium-140, 19 to 88 (permissible limit, 200,000); cesium-137, 43 to 60 (permissible limit, 150,000).

## Science Legislation and the 85th Congress

In various issues of *Science* published during the period from last January to the present, there have appeared a number of items bearing the title Proposed Legislation. These items listed the bills introduced in Congress that seemed to have particular relevance to science, education, conservation, and other fields which might be of interest to readers of this magazine. During the course of the second session of the 85th Congress some of these bills were dropped, others were modified or incorporated into other legislation, and others were passed in the form in which they were introduced. Here, a review of a majority of these proposed bills is presented with notes on their history as they went through the legislative process and their status now, whether it be dead, pending, or public aw.

Two points should be kept in mind for a valid reading of the information presented. First, it should be realized that many bills receive no action because their provisions are transferred to another and different bill, and second, that many bills are imitative or are introduced more with the record in mind than with any hope or desire on the part of the sponsor that the bill actually be enacted.

Below, the précis of the bills are grouped according to the general field with which they are concerned. A brief statement of status follows the listing of each bill. (S, Introduced in the Senate; HR, introduced in the House of Representatives.)

### Education

S 2916. Provide for grants to states to assist them to increase salaries of teachers of science in secondary schools and provide necessary equipment to use in connection with instruction of scientific subjects in such schools. Thye (R-Minn.). Senate Labor and Public Welfare.

No action.

S 2917. Promote general welfare of U.S. by providing program of scholarships for college undergraduate and graduate level education to be administered by Commissioner of Education. Thye (R-Minn.). Senate Labor and Public Welfare.

No action.

S 2956. Amend Vocational Education Act of 1946 to promote scientific education. Monroney (D-Okla.), Kerr (D-Okla.), McNamara (D-Mich.). Senate Labor and Public Welfare.

No action.

S 3187. Strengthen national defense, advance cause of peace, and assure the intellectual pre-eminence of the U.S., especially in science and technology, through programs designed to stimulate their development. Hill (D-Ala.) and 26 other senators.

No action. Similar to HR 13247 National Defense Education Act (Public Law 864) [Science **127**, 389 (21 Feb. 1958); **128**, 289 (8 Aug. 1958); **128**, 521 (5 Sept. 1958)]

HR 9634. Expedite utilization of television facilities in our public schools and colleges, and in adult training programs. Boggs (D-La.). House Education and Labor.

No action, but a similar provision went into Public Law 864.

HR 9620. Amend P.L. 874, 81st Congress, re assistance for maintenance and operation of schools in federally impacted areas, extend its effectiveness for two additional years. Auchincloss (R-N.J.). House Education and Labor.

No action, but a similar bill (HR 11378) was passed and signed by the President (Public Law 620).

HR 9635. Provide for establishment of national program of science scholarships; provide for establishment of a program of loans to educational institutions to aid in providing adequate science facilities. Brooks (D-Tex.). House Education and Labor.

No action, but some provisions contained in Public Law 864.

HR 9905. Authorize Secretary of Defense to grant scholarships and fellowships in scientific fields to promote defense and security of U.S. Dingell (D-Mich.). House Armed Services.

No action.

HR 9830. Authorize appropriation of funds to assist States and Territories in financing a minimum foundation education program of public elementary and secondary schools, and in reducing inequalities of educational opportunities through public elementary and secondary schools, for general welfare. Perkins (D-Ky.). House Education and Labor.

No action.

S 3179. Authorize federal assistance to states and local communities in financing an expanded program of school construction to eliminate national shortage of classrooms. Kennedy (D-Mass.). Senate Labor and Public Welfare.

No action.

S 2938. Amend Internal Revenue Code of 1954 to allow additional income exemption for an individual who is a student at an educational institution above secondary level. Frear (D-Del.). Senate Finance.

No action.

S 3156. Provide for expansion of certain programs for advance education for teachers in science and for establishment of certain programs for advance education for teachers in the humanities. Flanders (R-Vt.), Bricker (R-Ohio). Senate Labor and Public Welfare.

No action. Some provisions in Public Law 864.

S 3311. Authorize assistance to states and local communities in remedying the inadequacies in number of their teachers and teachers' salaries and shortage in classrooms. Murray (D-Mont.), Mansfield (D-Mont.), Cooper (R-Ky), Morse (D-Ore.), McNamara (D-Mich.), Langer (R-N.D.). Senate Labor and Public Welfare.

No action.

HR 9692. Provide for a scholarship program to aid in maintaining and strengthening U.S. leadership in certain fields of science and technology. Martin (R-Mass.). House Education and Labor.

No action. Scholarship provision was dropped in National Defense Education Act. (Public Law 864.)

HR 10454. Establish a scholarship program to train scientists and technicians; provide scholarship beneficiaries be obligated to serve in Armed Forces