lumbia University; Frank Press, California Institute of Technology; Carl F. Romney, Department of Defense; Kenneth Street, Jr., Lawrence Radiation Laboratory, University of California; John W. Tukey, Princeton University.

In addition, Warren Heckrotte, Lawrence Radiation Laboratory, Montgomery Johnson, Aeronutronic Systems, Inc., and Albert Latter, Rand Corporation, participated as special consultants to the panel.

Strauss Rejected as Commerce Secretary by Senate

Voting half an hour after midnight, 19 June, the United States Senate rejected by three votes the nomination of Lewis L. Strauss as Secretary of Commerce. The Senate action, which climaxed three months of growing controversy over the issue, represents the first rejection of a Cabinet appointee since 1925. Strauss, who was defeated by a 49 to 46 vote, is the eighth such nominee to be refused confirmation in the history of the country. He had been Acting Secretary of Commerce since his appointment by President Eisenhower last fall. Under the Constitution, the President's appointments must be made with the advice and consent of the Senate. After committee hearings on the nomination, which produced 1100 pages of testimony, Strauss' name went to the full Senate after approval by a narrow margin. Floor debate produced little new information, and the issue was pushed to a conclusion by Senate majority leader Lyndon Johnson (D-Tex.).

The course of events in the Strauss controversy represented a steady downward progression of the nominee's prospects. When the first confirmation hearings before the Interstate and Foreign Commerce Committee convened, 17 March, an informal poll showed the committee members to be 14 to 3 in favor of confirmation. As the sessions continued, the positions of many of the members changed, with the result that the final committee vote was a close 9 to 8 for confirmation. When the nomination came up for consideration by the full Senate, the general opinion in Washington was that Strauss would make it. However, very effective opposition, led by Senator Clinton Anderson (D-N.M.), and the negative position taken by the Senate majority leader, among other factors, resulted in Strauss' rejection.

Number of Foreign Scholars in U.S. Increases

The number of foreign students studying in the United States has increased by 38 percent in the last five years, the Institute of International Education has reported. The 47,245 students from 131 countries registered in U.S. colleges and universities this year represent a 9-percent increase over the number last year and an 86-percent increase over that of the academic year 1948–49. According to all available statistics the current figure represents the largest foreign-student population in any country of the world.

The postwar period has also produced a great increase in the exchange of university teachers and scholars, the institute reported in its 1959 edition of *Open Doors,* an annual statistical report on educational exchange. In 5 years, the number of foreign professors teaching in our schools has tripled. American colleges and universities reported 1937 foreign faculty members this year, in comparison to 635 in 1954–55. This was the first year on record that the United States, with 1842 American faculty members abroad, "imported" more professors than it "exported."

The sharp increase in both the "export" and "import" figures reflected the United States' growing concern with education in the physical sciences. Nine hundred and seven, or 47 percent, of the foreign professors brought to American schools this year were in this field. This was double the number of foreign science professors brought here last year. The number of American science professors who went abroad to teach and to do research was 389—43 percent more than last year.

"The increasing percentage of foreign students attracted by our science courses seems to show that the United States is achieving new status in science education," said IIE president Kenneth Holland in commenting on the survey.

The rapidly developing Middle East sent a record number of students here this year, according to *Open Doors.* This was the first year that more students came from the Middle East than from Europe to study in the United States. The largest number of foreign students (15,823) continued to come from the Far East, and the second largest number (10,249), from Latin America. The Middle East was third, with 6619, and Europe fourth, with 6601. Engineering, which claimed 23 percent of the students, continued to be the most popular field of study. The humanities, with 20 percent, was again second. Students from the Far East, the Middle East, and Latin America, concerned with the industrialization of their respective countries, again concentrated on engineering courses. Many of the new students in the physical sciences were also from the Far and Middle East.

Statistics on sources of financial support showed that, again this year, students who made up the largest single group (42 percent) supplied their own funds. Those in the next largest group (28 percent) were aided by scholarships from private organizations. There was a slight increase this year in the number of students supported by foreign governments; a particularly large number of African students received help from their own governments. The United States government gave scholarship aid to 4.8 percent of all students and joined with private organizations in supporting another 2 percent. These statistics again point up the vital role of private foundations and fraternal and civic organizations in bringing foreign students to our shores and also seem to indicate that the prestige of our schools is as much a factor in attracting students as the availability of scholarships.

Another reason for the influx of foreign students to this country was indicated by the large number who said they would welcome employment with the overseas branch of an American firm after graduation. Forty-one percent of the students answering the pertinent question in the survey expressed such an interest. More than half of these were engineering students, a third of them from the Far East.

The University of California was again the institution with the largest number of foreign students. Massachusetts Institute of Technology, however, had the highest percentage of foreign students—12 percent of its total enrollment. Massachusetts Institute of Technology also had more foreign faculty members (198) than any other United States college or university.

Archeological Work in Guatemala

An expedition from the University of Pennsylvania Museum has completed its fourth season of work at the ancient Maya site of Tikal, located near the center of the tropical rain forests of the Yucatan Peninsula's El Peten region in

northern Guatemala. The site is being explored and partially restored by the museum archeologists in cooperation with the Guatemalan government. The most important single discovery this year was that of the oldest known dated stone monument of the lowland Maya tribes. Clearly legible inscriptions on the weathered and fragmentary piece give a date which, by one correlation of the Mayan and Christian calendars, corresponds to A.D. 32 and, by another correlation, to A.D. 292. Regardless of which of these dates is used, the stela is 36 years older than the archeologically famous Stela 9, discovered at Uaxactun, Guatemala, in 1916 by the Carnegie Institution of Washington, D.C., and 28 years older than the jade plaque, known as the Leyden Plate, which was found near Puerto Barrios, Guatemala, in 1864. Archeologists have theorized, on stylistic grounds, that the Leyden Plate, although it was not found at Tikal, was produced there, because of its resemblance to other stone carvings from the same city.

Automatic Weather Station

A new automatic "weather bureau" that can be set up anywhere in the world as a complete, unattended observatory supplying key data to a central office has been designed and built for the U.S. Army.

The weather station, a steel cubicle 7 by 7 by 8 feet and weighing less than a ton, is equipped to report by teletype code, in 15 seconds, its identification; the air temperature, from minus 40° to plus 120°F; the dew point temperature; the wind direction and velocity; and the barometric pressure and rainfall. It can also be equipped with radiation monitoring and warning instruments.

The new unit is a compact, transportable, automatic meteorological station, designed to operate unattended and automatically, taking observations and reporting data over wire or radio facilities to any central location, either on demand or at prescribed intervals, as desired. There is no limit to the number of stations that may be combined to form a world-wide weather observation network.

The new equipment, by eliminating the need for human supervision, makes possible a major expansion of world-wide meteorological observation and forecasting at minimum cost and eliminates the need for personnel to be stationed in remote locations.

News Briefs

The Public Health Service reported in June on the levels of radioactivity in milk collected during March from 12 sampling stations across the country. According to the report, the averages for all radioisotopes in the milk samples remained below the levels which the National Committee on Radiation Protection and Measurements currently suggests as permissible for the general population.

The milk-sampling network is part of the service's program of measurement of radioactivity in air, water, and food. Milk was chosen for the initial study of specific isotopes in foods because it is the easiest of all foods to sample and is produced throughout the year in all sections of the country.

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The world's largest installation for distilling fresh water from sea water has recently been completed, at a cost of $10,600,000. The plant is located on the island of Aruba in the Netherlands West Indies, off the coast of Venezuela. Electricity is produced by a by-product of the water distillation plant, at a cost of less than 3 mills per kilowatt hour, it was reported.

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Devices which generate electric power directly from heat, without the use of boilers and spinning generators, were described at a meeting of the American Society of Mechanical Engineers in St. Louis last month. One such device, called a fuel cell, would burn conventional fuels to produce a flow of usable current. The other, called a thermionic converter, might use heat from a nuclear reactor or from the rays of the sun.

In a fuel cell, a fuel such as hydrogen, coal, or carbon monoxide reacts with oxygen from the air. Instead of heat, this reaction generates electricity directly. In its simplest form, a thermionic converter consists of a vacuum tube in which one piece of wire is heated until it gives off electrons, while another, colder, piece collects the electrons and feeds them to an outside circuit.

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The Marine Biological Association of India was founded in January, with S. Jones as president. The association expects to issue a journal half-yearly. Membership is open to all interested. Correspondence may be addressed to the Secretary, Marine Biological Association of India, Marine Fisheries P.O., Mandapam Camp, South India.

Scientists in the News

Sir HARRY MELVILLE, secretary of Department of Scientific and Industrial Research, London, will arrive in the United States on 24 August. He will visit Washington (25–28 August); Kingsport, Tenn.; Ottawa, Canada. On 2 September he will attend the Faraday Society meeting in Kingston, Ontario, Canada.

B. J. RENDLE, principal scientific officer, Forest Products Research Laboratory, Princes Risborough, Aylesbury, England, will arrive on 19 July. He will attend the Northeastern Forest Tree Improvement Conference, Burlington, Vt., 18–19 August, and the ninth International Botanical Congress, Montreal, Canada, in August. His itinerary includes Connecticut; New York; Wisconsin; Vancouver, B.C.; Ottawa; and Chalk River, Ont.

HENRY L. BOCKUS, professor and chairman of the department of medicine at the University of Pennsylvania Graduate School of Medicine for 30 years, retired on 1 July. Former graduate students presented a portrait of Bockus to the university at the first annual meeting of the Bockus International Alumni Society of Gastroenterology, which was organized last year in his honor. At the group's first banquet, attended by 180 physicians from the United States, Europe, Africa, the Near and Far East, and Latin America, Bockus was given a specially designed map of the world that showed the location of the 325 gastroenterologist alumni of his program.

EDWARD C. WENTE, scientific staff member of Bell Telephone Laboratories until his retirement in 1954, and pioneer inventor of important devices for the motion picture, recording, broadcasting, and television industries, has been awarded the Gold Medal of the Acoustical Society of America.

LILLIAN M. GILBRETH, engineer and former chairman of the department of personnel relations at Newark College of Engineering, has received the Allan R. Cullimore Medal. The medal was established last year in memory of Dr. Cullimore, NCE's first president.

MURRAY KORNFELD, founder and executive director of the American College of Chest Physicians, received the college's Gold Medal during its recent