

and the dose rates (measured in roentgens per hour) that can be expected on the surface at various distances from ground zero, Rand has published a *Catalog of Fallout Patterns* (RM-1676-AEC) by Greenfield, Rapp, and Patricia A. Walters. This catalog portrays fallout patterns covering four levels of bomb yield and some 20-odd typical wind situations.

The civil defense expert may construct, on coordinate paper, a wind "structure" indicating wind direction and force at various altitudes, from conventional and readily available observations of radiosonde balloons. Matching this structure by eye against an index of wind structures in the catalog, he selects the one that fits and is able to depict the fallout patterns associated with that wind situation. These patterns—most of them cigar-shaped, stretching downwind from ground zero—provide him with estimates of the dose-rates to be expected from an atomic explosion. For example, it would show that a 1 megaton bomb falling on a U.S. city under typical June winds condition would deposit a lethal dose of radioactive debris 20 miles downwind; people would be made ill as far as 100 miles downwind.

Marlborough Man

Reconstruction of the skull of the "Marlborough man," whose fossilized skeleton was discovered at Salisbury, Rhodesia, in 1956, has been completed by E. Trevor Jones. In an article in the *Central African Journal of Medicine*, he comments that the skull is that of a man "not resembling any existing race living in Africa today." Some features of the bone structure, he points out, differ from those of both the European and the Bantu. The Marlborough man had a large head and heavy jaw similar to that of the Boscop man discovered in South Africa.

Oldest Hospital and Medical School Unite

An agreement of affiliation between the Pennsylvania Hospital's Department for Sick and Injured, Philadelphia, and the University of Pennsylvania School of Medicine has been announced. It will be effective in September. This joint action is an agreement of professional affiliation between the staffs of the two institutions. The affiliation unites in a close working relationship Pennsylvania Hospital, the nation's first hospital, founded in 1751 by Benjamin Franklin, and the nation's first school of medicine, established in 1765 at the University of Pennsylvania,

which also had been founded by Franklin.

The first teaching of medicine in the United States was done on the wards of the Pennsylvania Hospital, and the students from the University of Pennsylvania School of Medicine have been taught there ever since the school was founded. The new agreement, discussions of which were first held about 1800, now places official seal upon a mutually cooperative educational effort that has been in effect for almost two centuries.

Dentistry Survey

A 2-year survey of dentistry in the United States will begin this year under the direction of a commission headed by Arthur S. Flemming, president of Ohio Wesleyan University and until recently director of the Office of Defense Mobilization in Washington. The announcement of Flemming's appointment was made by the American Council on Education, which is conducting the \$400,000 survey at the request of the American Dental Association. The first four members of the commission that will serve with Flemming are as follows: Lawrence A. Kimpton, chancellor, University of Chicago; W. Howard Chase, president, Communications Counselors, Inc., New York; Willard C. Fleming, dean, School of Dentistry, University of Pennsylvania; and Charles P. McCormick, chairman, McCormick and Company, Baltimore.

The commission membership will reflect not only the broad interests of the dental profession but also the interests of those whom the profession serves. The commission will select a director of the survey. His staff, at headquarters in Chicago, will include an assistant director, five or six technical and editorial staff associates, and a secretarial and clerical staff of six to eight persons.

The commission will be assisted in specific areas of the work by four committees: dental education, dental research, dental health, and dental practice. The survey is financed by grants as follows: the Kellogg Foundation, \$250,000; Americal Dental Association, \$120,000; Rockefeller Brothers Fund, \$25,000; and the Louis W. and Maud Hill Family Foundation, \$5000.

Radioactive Minerals in India

The Atomic Energy Department, Bombay, India, has announced discovery of large radioactive mineral deposits "somewhere in northern India." The announcement said that the deposits are even richer than those of the Travancore sands in southern India, and

that investigations so far show that 3.3 million tons of ore contain 300,000 tons of thorium and 10,000 tons of uranium of 10 percent and 0.4 percent concentration, respectively.

Mathematics Camp

The University of Kansas will hold its second annual Science and Mathematics Camp on the campus, 16-28 June. This is one of a very few such camps. At Kansas attendance is limited to 80 high-school sophomores, juniors, and seniors.

The purpose of the camp is to acquaint the participants with the various scientific areas, with the aim of interesting able high-school students in a career in science. Fifteen different sciences are represented on the program.

Some scholarship aid is available. The camp staff is derived from the university's faculty. For 1957, the camp director is D. Paretsky of the department of bacteriology, and the associate director is C. H. Phoenix of the psychology department.

U.S. Invitation to U.N. Nuclear Conference

The United States has invited the United Nations to hold its second atoms for peace conference, scheduled for 1958, in Chicago. The tentative plan has been to meet again in Geneva, as in 1955. However, in a letter to U.N. Secretary General Dag Hammarskjöld, United States Ambassador James J. Wadsworth, who has been in charge of American policy at the U.N. on peaceful uses of the atom, said that Chicago "would consider it a great honor to be permitted to play host to this great international event."

International Zoonoses Center

The first international center for studying animal-borne diseases affecting man was recently dedicated in Azul, Argentina. The Pan American Zoonoses Center, which is planned as a clearinghouse for scientific knowledge from many lands, will be concerned with testing vaccines and other biologicals, training personnel, and furnishing consultation services by pooling the talents of physicians, veterinarians, and public health officials.

There are approximately 100 zoonoses, and in this country some of them present a problem that is coming to the forefront as a public health hazard. In recent years, more than 80 zoonotic diseases, including brucellosis and toxoplasmosis, have been detected in the