

put it across to the public and the Congress, using the press, radio, service clubs, and many other means to achieve its objectives. The Commission aims to promote a national understanding of the vital need for a sufficient, well-trained, national force of scientists and to inspire a national policy for recruiting and training well-qualified young people with a minimum of inefficiency and uncertainty arising from the needs of the armed forces.

Miscellany

The Award of Honor of the National Safety Council has been presented to the Atomic Energy Commission in recognition of the safety record achieved in the atomic energy program during 1952, when the frequency of occupational injuries per million man-hours worked in all categories of the program decreased 50 percent below the average for the previous three years, and the severity of injuries was reduced 33 percent. The injury rate in the atomic energy program has declined steadily since the end of 1949. Frequency of injuries from accidents in the program dropped from 5.40 per million man-hours in 1949 to 2.51 in 1952. The injury rate for American industry decreased from 10.14 to 8.40 per million man-hours during the same period.

Radioisotope shipments by international airlines have now been made possible as a result of regulations approved in November by the International Air Transport Association Traffic Conference. Under the new code, short-lived radioisotopes can be transported to regions they formerly could not reach. According to Conference Chairman Ray W. Ireland, the new regulations make the airlines the first medium of transportation to have uniform international rules for carrying cargoes that require special handling.

Atmospheric diffusion and penetration into buildings of allergenic pollens and industrial contaminants are being investigated by the University of Michigan's Engineering Research Institute under the sponsorship of the Geophysics Research Directorate of the Air Force Cambridge Research Center. The Department of Civil Engineering and School of Public Health are associated with the Institute in the research program.

A new approach to weather forecasting is about to be put into operation by the U. S. Weather Bureau with the aid of the Navy and Air Force. In brief, the method involves feeding analyzed meteorological data from the weather network into an electronic computer which, on the basis of a mathematical model of the atmosphere, then gives a numerical pressure-field forecast for the next 24 to 36 hours. The project was started in 1946 when John von Neumann and Jules Charney of the Institute for Advanced Study at Princeton were given the problem of developing a feasible forecasting technique.

The limiting magnitude of the 200-inch Hale telescope on Mt. Palomar has been determined to be 23, which means that the minimum brightness of faint ob-

jects capable of being photographed is about 6.3 million times dimmer than the dimmest stars visible to the naked eye. This first definite calibration of the telescope's limiting magnitude, which has been made by William A. Baum of the Mt. Wilson and Palomar Observatories, is somewhat better than the previously estimated figure, and according to Ira S. Bowen, director of the Observatories, "is equal to the most optimistic estimate of hoped-for performance made during the planning of the telescope".

Visual observation of any aurora that may occur during next June's solar eclipse was suggested in 1952 by British geophysicist Sydney Chapman as a possible means of increasing our store of knowledge about this puzzling and spectacular phenomenon. Although there are rare cases of visual observation of daytime auroral displays on record they ordinarily cannot be seen even if present because of the sky brightness. To make their observation more complicated, aurorae are concentrated in a narrow zone in the far northern and southern latitudes. However, the region in which the 1954 eclipse appears total crosses the auroral zone in the vicinity of southern Greenland, with about two minutes of totality available for auroral measurements should any displays occur during the brief period of darkness. In an article in the December issue of *Sky and Telescope*, Chapman and D. W. N. Stibbs consider in detail the possibility of detecting such an aurora, and the value of whatever information could be obtained. In fact, merely establishing the presence of a daytime aurora is of interest.

INSDOC, otherwise the Indian National Scientific Documentation Center, was established in 1951 under an agreement with UNESCO whereby the latter would provide technical assistance for a period of three years. A report by INSDOC covering 1952-1953 describes its current activities, which concern information (mainly bibliographical), document procurement, and scientific translations. The document procurement service involves finding and obtaining copies of scientific or technical articles required by workers in India, with microfilm or photostat copies being supplied in most cases. The translation work turned out to be so great that 23 part-time translators had to be engaged to supplement the permanent INSDOC staff, with over a thousand pages of translations having been prepared so far.

In commemoration of the 80th birthday of William W. Coblentz the November 1953 issue of the *Journal of the Optical Society of America* has been devoted to the applications of infrared to science and technology. Dr. Coblentz, together with Drs. A. H. Pfund and H. M. Randall, did most of the early work in this field, and he has published over 400 papers on the infrared and on other problems in radiometry. The 38 articles in the *Journal* deal mainly with infrared spectrometry and its applications in the study of molecular structure, the composition of the atmosphere, the solar spectrum, certain biological problems, and similar topics.