

the statutory separation of civilian and military projects under the enabling legislation of the NASA and the jurisdictional problems involved. He commented: "I, for one, might be concerned about the difficulties that could be expected to arise in these negotiations, were it not that since 1915 the military services and the NACA have worked together—closely and harmoniously. The fact that we are moving into the new unexplored areas of space merely increases the essentiality of this effective partnership." In other talks Dryden has given examples of this civilian-military cooperation. Before the House Select Committee on Astronautics and Space Exploration he cited two examples of such work, both involving military missiles. They were the development of the "blunt-nose" concept for the design of missile warheads and the wind-tunnel tests which identified the gas eddy phenomenon which was destroying the early Jupiter missiles.

The new Deputy Administrator of the National Aeronautics and Space Administration, in accord with his long experience and extensive familiarity with the problems involved, is not given to sweeping statements on future developments in space activities. His attitude can best be seen in his closing words to the House Committee: "... I should like to echo the thought expressed by Dr. Killian and his committee, that we should be 'cautious and modest in our predictions and pronouncements about future space activities . . . and quietly bold in our execution.'"

Lysenkoism Again?

The character of Soviet participation in the International Congress of Genetics that took place recently in Montreal changed sharply just before the congress was to open. Last-minute cancellations were received from several scheduled speakers. At the same time, the Soviet delegation submitted further titles of papers to be delivered, so that the Soviet contributions to the meeting were predominantly of the controversial Lysenko school of genetics. Earlier it was thought that studies based on both the Lysenko school and on points of view closer to classical Western genetics would be reported by the Russians. (It has been rumored that several geneticists from East Germany who had intended to come to the congress had been unable to obtain exit permits for the trip.)

Trofim D. Lysenko, who rose to a position of power in Soviet science under Stalin, holds that in some cases acquired characteristics can be passed on to future generations. His views are in conflict with those of most Western geneticists.

In recent years Lysenko's influence seemed to have waned.

As a result of the Soviet delegation's program changes, the Permanent International Committee for Genetics Congresses passed the following resolution on 25 August and presented it to the final plenary session of the Montreal congress.

"The Permanent International Committee on Genetics Congresses considers it to be its duty to express deep concern over the fact that a number of Soviet geneticists who had submitted abstracts of papers to the X International Congress of Genetics failed to appear in Montreal. The Committee also deeply regrets the absence of representatives at the Congress of a number of other countries. It wishes to express its deepest sympathy and sends its warmest regards to all scientists who may have been prevented from attending the Congress by their governments.

"The IX International Congress of Genetics, meeting in Bellagio in 1953, passed a resolution that Genetics Congresses should not 'be held in any country to which it may be expected that scientists would be refused permission to enter on grounds of race, nationality, religion, place of birth, or political associations past or present.' The Permanent Committee takes this occasion to extend this policy by appealing strongly to all governments in the world to allow their scientists the right of unimpeded travel for scientific purposes, without regard of race, nationality, religion, place of birth, past or present political associations and, in view of the experiences at the current Congress, irrespective of whether their scientific views and work are in conformity with any official governmentally-shaped policies and ideology. We consider any attempt on the part of governments to interfere on political, ideological or other grounds with the free pursuit of science and free dissemination of scientific information as a serious violation of the basic principles of research. We appeal to the learned academies and scientific societies of all countries and to the United Nations and its organizations to exert all possible influence to persuade all governments to adhere to the principles outlined here. Their violation will, no doubt, spell the end of scientific freedom and therefore also of scientific progress."

School and College Enrollment

The nation's total school and college enrollment, increasing for the 14th consecutive year, will reach a new all-time peak of about 45 million in school year 1958-59, according to the U.S. Office of Education. One of every four persons in the United States will attend school

or college. Enrollment will be about 1,750,000 higher than the previous record enrollment of 43,195,000 last school year.

Public and private school enrollment in kindergarten through grade 8 is expected to total about 31,793,000, a gain of more than a million over last year's elementary school enrollment of 30,670,000.

A gain of almost half a million is expected in high school (Grades 9 through 12), with an enrollment of 8,880,000 in 1958-59 compared with 8,424,000 last year. For every 100 persons aged 14-17 years, 83 persons will be enrolled in high school. Ten years ago 75 in 100 were enrolled.

Colleges and universities are expected to enroll about 173,000 more students during the coming academic year than they did last year—3,623,000 this year, 3,450,000 last year.

Approximately 245,500 additional qualified teachers are needed this year 99,000 to replace teachers who died, retired, or left the profession to be married or take other employment last year; 55,000 to meet requirements of increased enrollments; and 91,000 to replace emergency teachers.

It is estimated that 90,300 men and women will enter the teaching profession for the first time this year and that 23,000 former emergency teachers will have attained qualified status. The remaining shortage of 132,200 will be met by a return to teaching by former teachers, by the employment of emergency teachers, and by the establishment of excessively large classes.

Neutron Cross Sections

A second, completely revised edition of BNL-325, *Neutron Cross Sections*, has been prepared at the Brookhaven National Laboratory. BNL-325, successor to the compilation AECU 2040, was originally prepared for the first International Conference on the Peaceful Uses of Atomic Energy at Geneva in 1955. Since then, it has been widely distributed by the Superintendent of Documents and has become the standard reference handbook of neutron cross sections. The second edition of BNL-325, available at the second International Conference in Geneva this month, will be put on sale by the Government Printing Office.

Of interest to reactor specialists and nuclear physicists alike, this second edition of BNL-325 contains carefully evaluated data on thermal cross sections and resonance parameters, as well as curves of partial and total cross sections as functions of energy. This work is international in coverage and includes the most recent data available from many laboratories throughout the world.