The United States representative at the Geneva conference on the discontinuance of nuclear weapons tests is presenting today a proposal for the ending of nuclear weapons tests in all the environments that can now be effectively controlled.

The new United States proposal would ban all tests above ground up to the greatest heights to which effective controls can now be agreed, all tests in the oceans, and all underground tests above the present limit (or "threshold") of detection and identification.

At the same time the proposal includes provision for a program of joint research and experimentation by the United Kingdom, the Union of Soviet Socialist Republics and the United States to improve the detection of small tests under ground and thus permit the extension of the ban to such tests. Extensive research and experimentation is already under way in the United States to improve detection instruments and techniques.

Would Allay World Concern

The new approach, if agreed to, should allay world-wide concern over possible increases in levels of radioactivity, since it discontinues all tests which can release radioactivity into the atmosphere.

As for underground tests, the proposal represents an effort to find ways around the significant disagreements that remained unresolved in the technical working group which reported to the conference in December. The proposal would ban those tests which cause seismic magnitude readings of 4.75 or more. This is the level that can now be adequately monitored. We propose to express the level in terms of signal strength, since Soviet and Western scientists are in substantial agreement as to the measurement of signals but not on the equivalent kiloton yields of seismic disturbances.

The United States, since the inception of the Geneva conference on the discontinuance of nuclear weapons tests, has persistently sought a lasting, safeguarded agreement banning all nuclear weapons tests. We have, at the same time, indicated willingness, as in our proposal of May 5, 1959, to move immediately to consolidate in a first step agreement, the broadest existing area of agreement while remaining difficulties are being worked out.

Major Difficulties Unresolved

With the failure to reach agreement after the technical conference which ended on Dec. 19, 1959, it became clear that a controlled, comprehensive agreement could not, at this time, be achieved without great improvement in instrumentation or a degree of on-site inspection which would be impractical to attempt. Lack of agreement at this conference has left unresolved major technical difficulties in detecting underground explosions as well as the procedures that must be established if on-site inspections are to be satisfactorily initiated and carried out.

In this situation, the United States is determined to make all possible progress toward the ultimate objective of the negotiations. We believe that the proposal placed before the conference today, if entered into in good faith by the parties concerned, will lead toward eventual prohibition of all nuclear weapons tests under the practical and adequate safeguards that we deem as indispensable prerequisites.

If accepted, the proposal will end forthwith, under assured controls:

(1) All nuclear weapons tests in the atmosphere;

(2) All nuclear weapons tests in the oceans;

(3) All nuclear weapons tests in those regions in space where effective controls can now be agreed on; and

(4) All controllable nuclear weapons tests beneath the surface of the earth.

Further Extension Expected

Moreover, it will permit, through a joint program of research and experimentation, the ban to be systematically extended to remaining areas under ground, where adequate control measures are not now possible to incorporate.

These are initial, far-reaching, but readily attainable steps. They are steps which offer an opportunity to consolidate the important progress made in the negotiations thus far. These steps will also allay worldwide concern over possible increases in levels of radioactivity. More importantly, they will greatly enhance the prospects for future international arms limitation and control agreements.

It is our hope that the Soviet Union, in the light of a reasoned and objective appraisal of the facts, will join with us in this constructive beginning. Such an agreement could be a milestone toward the securing of a just and enduring peace.

Filmed High-School Biology Course Offered by AIBS

A complete modern high-school biology course in color motion pictures has been introduced by the American Institute of Biological Sciences (2000 P St., NW, Washington 6, D.C.). The course will be available for use in American classrooms next September.

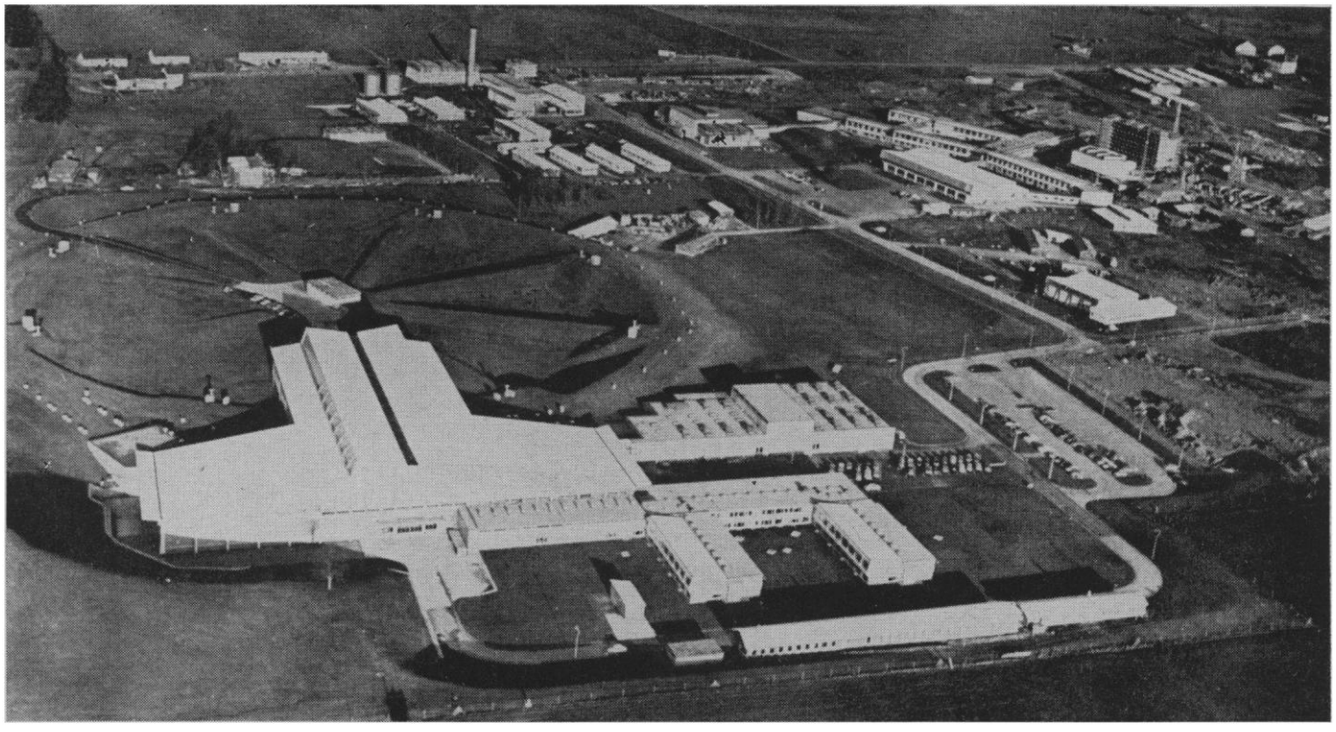
Planned and in production for more than 2 years, the film series embodies content recommended and approved by nearly 200 of the leading contemporary biologists and by members of professional organizations representing the great majority of America's biology teachers. These organizations include the AIBS, the National Association of Biology Teachers, and the National Science Teachers Association.

Portions of the course already have been pretested by 200 teachers with classes totalling 7000 pupils in large, small, urban, rural, public, and private high schools in all parts of the country, Hiden T. Cox, executive director of the AIBS, announced. "The overall response of these young people has been tremendous," Cox said. "Some changes were made as a result of the pretesting, but there are overwhelming indications of comprehension and learning through the films."

Use of Course Explained

The course employs modern instructional media and imaginative use of filmed material, including inserts showing prominent biologists and leading biological laboratories and field stations and inserts of portions of outstanding American and foreign research films. The inserts include cinemicrographic film, still photographs, and animated sequences.

A total of 120 films, each of 30 minutes' length, makes up the course. Each film is basically of the lecture-demonstration type. The complete package of 120 provides a full year of high-quality instruction (recommended usage is for not more than three films to be shown in any 1 week). Smaller units of 12 films on major areas of biological knowledge, or individual films



European Organization for Nuclear Research establishment at Meyrin, Switzerland. The T-shaped building in the foreground and the circular underground structure behind it house the new proton synchrotron, largest of its kind.

on specific subjects, will also be available to teachers to meet individual needs.

H. Burr Roney, project director and principal teacher in the filmed course, said it has been designed to be so flexible that any school may make use of it. While a small school with no teacher or facilities for biology instruction might use the series to advantage, the course, as planned, has four principal components—the classroom teacher, the films, a teacher's manual, and a study guide. The last two items are provided as integral parts of the course.

Roney commented, "We hope this series will make the best type of biological instruction available to every school in the nation. Our series is not intended in any way to replace the teacher—far from it. It is designed to fit into any program which any teacher uses."

Content Described

The inserted sequences, which make up more than 15 percent of the total footage, range from scenes of marine life in the West Indies to pictures of a University of California virus laboratory. They include presentations of living plant and animal forms in forest, marine, mountain, desert, and prairie environments, so that botanical, zoological, and ecological material not readily available in the classroom may be studied.

Emphasis throughout the AIBS course is on modern biology. Recent advances in radiation biology are stressed.

Over-all supervision of the content of the course has been a function of the AIBS committee on education, headed by Oswald Tippo, chairman of the department of botany at Yale University and former president of the Botanical Society of America. This committee, since pre-Sputnik days, has initiated a succession of far-reaching projects to improve and vitalize American education in the biological sciences at all levels.

The new film series was prepared with the support of the Fund for the Advancement of Education of the Ford Foundation and the Atomic Energy Commission.

Largest Proton Synchrotron Goes into Operation

The new 25-Bev alternating-gradient proton synchrotron of the European Organization for Nuclear Research, Meyrin, Switzerland, went into operation on 5 February. The facility has a large, T-shaped main laboratory building, auxiliary structures, and a wheel-shaped underground installation, about 656 feet in diameter, in which protons are accelerated up to 99.93 percent of the speed of light. Thirteen Western nations financed and built the $30-million center, which is open to scientists from all the participating countries and from some others, including India, Australia, and Israel. At present, this is the largest accelerator of its kind; however, a still larger installation is to be finished soon at the Brookhaven National Laboratory.

Scientists in the News

Herbert E. Longenecker, vice president of the professional colleges of the University of Illinois, has been appointed president of Tulane University. He is a specialist in the field of biochemistry and nutrition and a member of the technical advisory panel of biological and chemical warfare of the Department of Defense. He replaces **R. C. Harris**, who is retiring to become president of Mercer University, Macon, Ga.

Sara E. Branham, currently participating in the visiting biologist program