to be banned wholly and entirely? All we would do by this would be to mislead public opinion, for the testing would, in fact, go on underground and at great altitudes.

This means that our objective of preventing the manufacture of new and more destructive types of atomic weapons will not be achieved.

On the other hand, nuclear explosions at heights of over fifty kilometers will be poisoning the air and the soil just as well, by contaminating with radioactive fall-out the vegetation which forms part of the food of animals and penetrates the human organisms, as is the case at the present time.

I think you will agree with me if I say that there is no difference, from the point of view of concern for human health, between radioactive fall-out from explosions made at a height of forty kilometers or say sixty kilometers.

Consequently, from this point of view, too, the objective we must strive to achieve will not be achieved either. Therefore, the peoples would be justified in regarding and condemning the conclusion of an agreement to stop testing only in the atmosphere at heights of up to fifty kilometers as an unfair deal.

Nor is there any need to prove that such an agreement could be concluded only figuring on the lack of knowledge on the part of public opinion.

This is out of the question, however, nowadays, as scientists would at once grasp the meaning of such an agreement and explain that it would not solve the problem, since it would leave things just as they were before the agreement was concluded.

I believe, Mr. President, that we should not flinch in the face of the difficulties, but we should muster the strength of will and show appreciation of the need to conclude an agreement providing for stopping all tests of nuclear weapons—in the atmosphere, underground, under water and at great altitudes.

I think that it is quite possible to find such a solution to the problem of ending tests, on the basis of your proposals and ours, as would meet the interests of the nuclear nations as well as those of all the other countries and to establish such a control system as would insure the strict enforcement of the agreement.

The most essential point of difference between us seems to be the question of sending inspection teams to explore the phenomena suspected to be nuclear explosions.

You know that Mr. Macmillan, Prime Minister of Great Britain, suggested during his visit to Moscow that agreement could be reached on carrying out a predetermined number of annual inspections both on the territory of the Soviet Union and on the territory of the United States and Great Britain and in their possessions, should the reports of control posts provide evidence of phenomena which may be suspected as nuclear explosions.

There would, naturally, be few such inspections. I do not think, properly speaking, that there will have to be many visits to each country.

The very fact of a possible inspection of areas, where instruments will have indicated phenomena suspected of being nuclear explosions, would check the nations and individuals who would like to stage explosions in violation of the pledges they have assumed.

This is but natural, for in that case no nation, nor any of its organizations, would avoid a true inspection of the areas where nuclear explosions are assumed to be taking place. Such suspicions, naturally, should be based not on the wishful thinking of the men in the control agency, but on the objective instrument readings.

To conclude, I should like, Mr. President, to express the hope that the Soviet Government's proposals herein stated will be appreciated by you and that we shall achieve agreement on what is one of the most important and burning issues of the day. On our part, we shall bend every effort toward achieving an agreement to end nuclear tests, and you may rest assured that if we sign a document we shall punctually abide by the pledges we shall have assumed, even if there is no control, because it is public opinion, the opinion of the peoples, that the Soviet Union values most of all.

Democrats Appoint Science Advisers

The appointment of a 17-member Advisory Committee on Science and Technology to work with the Democratic Advisory Council has been announced by Paul M. Butler, chairman of the Democratic National Committee and of the council. The chairman of the new committee is Ernest C. Pollard, chairman of the biophysics department at Yale University. The committee is composed of 17 outstanding American scientists, including two Nobel Prize winners, covering the following fields: physics, genetics, botany, anatomy, biophysics, zoology, geochemistry, engineering, and geography. The group also includes members who have special competence in the relation of science to modern warfare.

In announcing the formation of the panel, Butler said: "The Council feels that the scientific community has not been consulted sufficiently on national policies in the past six years and has been listened to even less. We want Democratic policies to be as sound as possible from the scientific and technological points of view."

Pollard pointed out that "It is not intended that the new Committee prepare or issue public statements for purely political purposes. The Democratic Advisory Council and the members of our Committee recognize that scientific and technological facts should not be the property of any political party. At the same time, we are agreed that we must do everything possible to secure the most authoritative advice in these areas to assist in sound policy formation."

Committee Agenda Outlined

Pollard said that at a small organizing meeting of the committee, held in January of this year, there was general agreement on the following tentative and partial agenda for future work of the committee: study of the relation of science to national defense policy; formulation of an adequate national science policy; formulation of legislation to promote the free exchange of nonsecret data between nations; steps to permit freer communication between U.S. and foreign scientists and engineers and to encourage the holding of international conferences in the United States; study of scientific and technical aspects of foreign development programs and foreign aid; study of the technical aspects of disarmament and the feasibility of detecting nuclear and missile tests; evaluation of local and global health hazards resulting from civilian and military uses of atomic energy; conservation of natural resources, including strategic minerals, fossil fuels, and economically useful ores; research to develop new technologies for the future; research in medical science for the welfare of upper age groups, which form an increasingly large segment of the population; analyses of deficiencies in financial or other support of research programs in the United States; projections to forecast the impact of technology upon our society and anticipate problems before present trends make solutions impossible; appraisal of the adequacy of the U.S. national effort in space research; projection of the impact of automation techniques upon society; and recommendations concerning science in relation to education.

Members

The first meeting of the Science and Technology Committee was held in the Washington offices of the council on 26 April. In addition to Pollard, committee members include Samual K. Allison of the University of Chicago, Harrison S. Brown of California Institute of Technology, Leslie C. Dunn of Columbia University, Louis B. Flexner of the University of Pennsylvania, Trevor

Gardner of the Hycon Manufacturing Company (Washington, D.C.), H. Bentley Glass of Johns Hopkins University, David R. Goddard of the University of Pennsylvania, Frank Goddard of the California Institute of Technology, David L. Hill of New York City, Polykarp Kusch of Columbia University, Charles C. Lauritsen of California Institute of Technology, F. T. McClure of Johns Hopkins University, Richard B. Roberts of the Carnegie Institution (Washington, D.C.), John S. Toll of the University of Maryland, Harold C. Urey of the University of California (La Jolla), and Gilbert F. White of the University of Chicago.

National Space Council

At a hearing of the aeronautical and space sciences committee of the Senate, T. Keith Glennan, head of the National Aeronautics and Space Administration, refused last month to discuss the policy-making procedures of the National Space Council because of its "confidential" relationship to President Eisenhower. The council, established at the same time as NASA, has as members the President, the secretaries of State and Defense, the administrator of NASA, the chairman of the Atomic Energy Commission, and four other presidentially appointed persons. It has the role of advising the President on the broad outlines of aeronautical and space activities in the country.

After complaints had been made by various committee members, Glennan said that he would be glad to ask the President to reconsider the executive decision that makes the council meetings "privileged" with respect to Congressional inquiry. Since its formation about 5 months ago the council has had four formal meetings and one informal session, according to Glennan.

News Briefs

The United States and Canada have announced a nonmilitary cooperative research program for exploring the ionosphere over the Arctic. Under the program, the National Aeronautics and Space Administration will furnish several research rockets to the Canadian Defense Research Telecommunications Establishment. Later, probably toward the end of 1960, the United States will launch a satellite containing instruments designed and built in Canada.

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The U.S. Atomic Energy Commission has a nuclear energy exhibit in the Tokyo International Trade Fair, being held in Tokyo, Japan, 5–22 May. Some of the U.S. displays shown at the Second International Conference on the Peaceful Uses of Atomic Energy at Geneva, Switzerland, last September and new exhibits by U.S. individuals, colleges and universities, industrial firms, and government agencies comprise the commission's presentation. Highlight of the exhibit is the cutaway model of the Shippingport reactor pressure vessel and core that was on display at Geneva.

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A total of 255 reports on radiation sources, effects, measurements, and related problems have been submitted to the United Nations Scientific Committee on Effects of Atomic Radiation since it first began work 3 years ago. The reports have come from 30 governments on all continents, from four specialized agencies of the U.N., and from two nongovernmental scientific bodies. When the 15-member Scientific Committee held its sixth session at U.N. Headquarters 23 March to 1 April, it expressed hope that it would continue to receive relevant information on radiation levels and their effects from members of the U.N., the specialized agencies, or the International Atomic Energy Agency.

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Graduate Study in France, a publication designed for students planning a period of study at French institutions, has been issued by the French Cultural Services, 972 Fifth Ave., New York. It contains information on degrees, specialized institutes, fellowships, and teaching assistantships and gives details on application procedures, living accommodations, and visa requirements.

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The first internationally organized training course on radioisotope techniques designed specifically for the needs of the research worker in agriculture, forestry, fisheries, and nutrition is being arranged jointly by the Food and Agricultural Organization of the United Nations and the International Atomic Energy Agency, in cooperation with the United States Government and Cornell University. The 8-week course, to be held at Cornell beginning 20 July, will be open to nominees officially sponsored by member governments.

Grants, Fellowships, and Awards

Atherosclerosis. The Biochemistry Research Division, Sinai Hospital of Baltimore, Inc., has established a postdoctoral training program in lipid chemistry related to atherosclerosis and aging. The new program, which is supported by the National Heart Institute, will emphasize training in the newer techniques of gas chromatography and silicic acid column chromatography. Trainees with a Ph.D. in chemistry or biochemistry, or M.D.'s will be accepted for periods of from 2 months to 2 years; stipends will be provided from the program. Applications are now being received by the program director, Dr. David A. Turner, Biochemistry Research Division, Sinai Medical Center, Baltimore 15, Md.

Botany. The Committee on the Darbaker Prize of the Botanical Society of America is accepting nominations. Nonmembers of the society are eligible for the award, which is given for meritorious work in the study of the algae. The committee will base its judgment primarily on the papers published by the nominee during the last two full calendar years prior to the closing date for nominations. At present, the award will be limited to residents of North America, and only papers published in English will be considered. Nominations for the 1959 award, accompanied by a statement of the merits of the case and by reprints of the publications supporting the candidacy, should reach the chairman of the committee *before 1 June.* The chairman is Ruth Patrick, Academy of Natural Sciences of Philadelphia, Philadelphia, Pa.

Marine biology. The U.S. Atomic Energy Commission's Division of Biology and Medicine has announced that the Eniwetok Marine Biological Laboratory is again available for use by scientists for research that can be carried on advantageously on a central Pacific atoll. The laboratory is equipped for all types of biological collecting and for ecological, physiological, and radiobiological studies. Should investigators submit projects which fall within the interests of the Division of Biology and Medicine, funds may be made available for travel, per diem, and other expenses incurred in the course of the project.

Scientists should submit proposals for research at Eniwetok to the Chief, Environmental Sciences Branch, Division of Biology and Medicine, U.S. Atomic Energy Commission, Washington 25, D.C. Only men may go to Eniwetok, and a security clearance is mandatory. Because processing procedures require considerable time, proposals for conducting research at Eniwetok must be submitted at least 3 months before the expected date of departure.

Mycology. The New York Botanical Garden has announced the Gertrude S. Burlingham scholarship in mycology for advanced predoctoral summer study at the Garden. The scholarship will be granted annually. For the summer of 1959 the stipend will be $700; work under this appointment may begin any time after 1 July and should continue for approximately 3 months. Nominations or applications should reach the director *by 15 May.* Further information may be obtained from William C. Steere, New