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Telephone:

NSF, Sterling 3-2140, Ext. 3589
NAS, Executive 3-8100, Exts., 450, 488

FOR RELEASE

FRIDAY, JULY 29, 1955

PLANS FOR CONSTRUCTION OF EARTH
SATELLITE VEHICLE ANNOUNCED

Plans for the construction of a small, unmanned, earth-circling satellite vehicle to be used for basic scientific observations during the forthcoming International Geophysical Year were announced today by Detlev W. Bronk, President of the National Academy of Sciences, and Alan T. Waterman, Director of the National Science Foundation. The project, which is entirely scientific in nature, will be sponsored by these two organizations as part of the United States program of participation in the International Geophysical Year. Technical advice and assistance will be provided by the scientists of the Department of Defense who have long been engaged in research on the upper atmosphere. The Department of Defense will provide the required equipment and facilities for launching the satellite. XOF 68
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The program for such a vehicle was stimulated by a resolution passed by the Special Committee for the International Geophysical Year (French abbreviation CSAGI) at its Rome Meeting in October, 1954. It is planned that the developmental work be completed in time for a successful launching during the International Geophysical Year, which is a period set aside during 1957 and 1958 for worldwide observations in the fields of the earth sciences by some 40 nations. The planning for this period of intensive research on an international basis is under the sponsorship of the International Council of Scientific Unions (ICSU) which established CSAGI to plan, organize, and direct the cooperative effort. Each participating country is planning and developing its own program for this period, and the results obtained will be made available to the scientists of the world.

In its resolution, the Committee stressed the great importance of observations of extraterrestrial radiations and geophysical phenomena for extended periods of time. The Committee's recommendation urged that participating nations give consideration to the construction of small satellite vehicles, instrumented to provide such data as may be feasible from outside the earth's atmosphere.

The Chairman of the U. S. National Committee for the International Geophysical Year has formally notified the President of CSAGI that the United States' program of participation now includes definite plans for the launching of small satellites during that period. The text of this letter is appended.

The atmosphere of the earth acts as a huge shield against many of the types of radiation and objects that are found in outer space. It protects the earth

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from things which are known to be or might be harmful to human life, such as excessive ultra-violet radiation, cosmic rays, and those solid particles known as meteorites. At the same time, however, it deprives man of the opportunity to observe many of the things that could contribute to a better understanding of the universe. In order to acquire data that are presently unobtainable, it is most important that scientists be able to place instruments outside the earth's atmosphere in such a way that they can make continuing records of the various properties about which information is desired. In the past vertical rocket flights to extreme altitudes have provided some of the desired information, but such flights are limited to very short periods of time. Only by the use of a satellite can sustained observations in both space and time be achieved. Such observations will also indicate the conditions that would have to be met and the difficulties that would have to be overcome, if the day comes when man goes beyond the earth's atmosphere in his travels.

The satellite itself will orbit around the earth for a period of days, gradually circling back into the upper atmosphere where it will eventually disintegrate harmlessly.

The National Academy of Sciences-National Research Council, which represents the interests of United States scientists in the International Council of Scientific Unions, is responsible for development of the scientific program to be undertaken by this country during the International Geophysical Year. The Academy-Research Council established the U. S. National Committee for the International Geophysical Year, composed of leading American scientists, to plan and carry out the International Geophysical Year program. This committee is assisted by twelve technical panels dealing with the various phases of the program of which the earth satellite is a part.

Special Federal appropriations being made in support of United States participation in the International Geophysical Year are being administered by the National Science Foundation which is coordinating Government interests in the over-all program.

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Attachment