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NATIONAL ACADEMY OF SCIENCES
NATIONAL RESEARCH COUNCIL
OF THE UNITED STATES OF AMERICA

UNITED STATES NATIONAL COMMITTEE
INTERNATIONAL GEOPHYSICAL YEAR 1957-58

April 20, 1959

MEMORANDUM

To: James R. Killian, Jr., Special Assistant to the President for
Science and Technology

From: R. W. Porter, Chairman, USNC-IGY Technical Panel on the Earth
Satellite Program
H. Odishaw, Executive Director, U. S. National Committee for
the International Geophysical Year

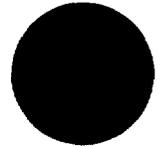
Subject: Information to be Presented 29 April 1959, at National Academy
of Sciences Symposium on Argus Results

It is understood that partial declassification of the Argus experiment is now under review in connection with the forthcoming symposium to be held April 29 during the regular meetings of the National Academy of Sciences. It is strongly urged that this review seek to permit the maximum release of data consistent with security and, in particular, the reasonably precise reporting of data on the sizes, times, and places of the Argus bursts.

1. Such data are necessary if the various papers having to do with observed effects are to be scientifically meaningful.

To be sure, a competent scientist can arrive at reasonably accurate estimates of the time, place, and perhaps even the yield of an explosion by theoretical analyses of his own observations and/or other available data. In fact, some scientists appear already to have done so. It may be assumed that many additional scientists, at home and abroad, will now review available magnetometer, ionospheric, neutron counter, and other geophysical records to determine which variations may be correlated with the Argus events. Thus, it may be doubted whether continued classification of these data will serve useful purposes of security.

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However, the scientific value of this experiment surely lies in its ability to confirm or negate theoretical analyses of natural phenomena by providing a known incremental disturbance. To realize this value, the scientific community requires adequate data regarding the disturbance. It will not suffice to permit a few U. S. scientists to use these data and then, without disclosing their calculations, state that a particular theory has been verified or not verified.

While all of the limiting factors may not be known to us, the military significance of releasing accurate values for the time, height, latitude and longitude of each burst would not appear to be great, inasmuch as these tests were made over the open ocean and approximate data are already known.

As to the sizes of the bursts, it may be adequate:

(i) to indicate whether all were the same, or if not, what their relative strength was; and

(ii) to give the absolute strength to a reasonably meaningful value, preferably the nominal value itself, but at least within a factor of two of that value.

2. It is important to give the greatest possible appearance of frankness in order to offset the impression that the United States has not lived up to its responsibilities in an international program.

Even though the Argus experiment, as such, was not officially a part of the IGY, their relationship appears now to be inextricable. Both the domestic and foreign press have accused the United States of cynicism in conducting a secret military experiment within the framework of the International Geophysical Year program. All specifics that may now be revealed should be presented so as to counter this charge to the greatest degree possible.

To the extent that data basic to the experiment can be revealed, this situation may be retrieved; it seems possible that Argus may, if reported with reasonable candor, be accepted as a major experiment in geophysics and one in which the world scientific community can participate.

On the other hand, if data basic to scientific understanding are withheld, the world will question U. S. conduct in this matter. Furthermore, substance may be given to the view that the Argus disturbance was a gratuitous interference with natural phenomena during a period of international scientific observation of those same phenomena. If the artificial factors are not accurately assessed, the observations of natural factors become of uncertain value and perhaps useless.



3. Precise information would aid in deflating alarmist interpretations of the experiment, particularly with reference to fall-out. General assurances will not achieve this objective in the absence of supporting facts.

It is not suggested here that the characteristics of the devices that produced the bursts, or the devices that carried them aloft, or other data of military significance be discussed or revealed.

