

MEMORANDUM FOR FILES

January 26, 1962

SUBJECT: Ad hoc Life Sciences Committee of the SSB convened with Dr. Newell in his office, 9:15 a.m., January 25

Present: Messrs. Pittendrigh, Hartline, Lambertsen, Newell, Nicolaides, Quimby, Jacobs, Peavey, Derbyshire

Dr. Newell described the essential parts of the recent NASA reorganization, pointing out that the biological program at NASA was now divided between two offices, the Office of Manned Space Flight and the Office of Space Sciences. Manned Space Flight has chosen to limit its program strictly to the active flight projects, that is, Mercury, Gemini and Apollo. No research not required by one of these programs will be considered. The Office of Space Sciences currently considers its program in space biology to consist of two parts: (a) exobiology and (b) the influence of the environment on biological material. Dr. Newell pointed out that this leaves a gray area between the two offices which no one is considering. For example, the study of higher animals such as man and the general biology areas of ecological systems, human factors and so forth. He reported that the NASA now has established a committee to look at the biological field as a whole and to recommend how this gray area might be handled. He suggested that this might result in the establishment of some biological activity in the Office of Advanced Research & Technology.

Messrs. Quimby and Jacobs then presented the current programs of the Office of Space Sciences in exobiology and environmental biology, respectively. This material is contained in a paper presented to the AAAS Denver meeting by Quimby (previously distributed) and a paper, "Environmental Biology," by Jacobs which is attached.

At the conclusion of these presentations, Mr. Nicolaides pointed out the capabilities and responsibilities of the Office of Space Sciences, that is, (1) control of all launch vehicles less than the Saturn and (2) most satellites. He pointed out that this meant that Space Sciences now had access to and responsibility for the tools necessary to perform its mission.

At this point Messrs. Quimby and Jacobs were excused and the group turned to consideration of biological program problems in the Office of Space Sciences.

It was agreed that except for the program in exobiology there is no scientifically sound program in the Office of Space Sciences at this time. Dr. Newell asked the group for advice on the question of developing a recoverable satellite system for biological experiments in

space. He pointed out that if such a system were needed at some future time, the biological community must say so and work must be started. If biologists do not ask for such a system, it will not be planned and it will not be ready. He called the group's attention to last year's plans for utilization of the Mercury capsules for biological recoverable laboratories, pointing out that all of these plans were cancelled when the Mercury capsules became unavailable through a change in the manned flight program. He predicted that reliance on capabilities developed elsewhere for other reasons would always suffer the same fate and that therefore if a recoverable system for biological experiments was needed his office would, of necessity, have to plan for and budget a specific development.

While the group was generally inclined to answer this question in the affirmative, it felt that so important a question should be debated by the members of the Board's biological committees. It was agreed that the committees would consider utilization of nonrecoverable satellites, the need for special ground-based laboratories, laboratory pilot experiments prior to space flight, and the gray area and overlap problems resulting from the compartmentalization of biology in NASA.

Dr. Newell appealed to the group for assistance in securing a competent scientist to serve as his Director of Bioscience Programs, identifying this as his outstanding problem. There was agreement in the group that this position was one of national importance and that it was indeed an urgent matter. The group felt that the position could not be filled on a rotating basis but that the right man might be able to utilize senior consultants, after the pattern on the ONR London office, at some later time. The group agreed to undertake the task of filling this position and accepted the responsibility for establishing initial contacts with selected candidates on Dr. Newell's behalf. (Subsequently the group agreed to enlist the support of Dr. Bronk and possibly appropriate divisions of the National Research Council to broaden its membership and to emphasize the importance which it attaches to this responsibility.)

In the discussion of several possible candidates it was noted that the emeritus class should not be overlooked. The existing civil and military services should also not be neglected.

In response to a question, Dr. Newell expressed his interest in having a biological policy paper containing specific action elements and advice on what to do for his use. The group agreed to prepare such a document and provide it as soon as possible. Dr. Newell also indicated his interest in receiving personal comments from members of the group.

The group also agreed, at Dr. Newell's request, to be available for frequent meetings with him in support of the biological side of the Office of Space Sciences.

Concern was expressed by the group on the quality of the Ames scientific program and of its plans for considerable expansion. Dr. Newell advised the group that the Ames program came under his control and was currently being held in a status quo. He pointed out, however, that without a competent biological director he was in no position to take other action.

In response to a question from Dr. Lambertsen concerning the establishment of clear lines of authority and responsibility relative to biology in NASA, Dr. Newell suggested that this would never appear on paper. In his opinion, agreement can be reached by focusing on a single question, what is to be done and then proceeding. He noted that to try to tidy up all aspects on a philosophical basis would require years of debate.

G. A. Derbyshire

cc: C. S. Pittendrigh
C. J. Lambertsen
H. K. Hartline
J. Lederberg
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GAD: eft