

SCIENCE AND TECHNOLOGY ADVISORY COMMITTEE FOR MANNED SPACE FLIGHT
(STAC)

STAC in a letter to Mr. Webb of November 22, 1966 concerning NASA's program and planning for the coming years states that "while *Exploration of the Solar System* should be a general and continuing goal of NASA, it does not encompass all important missions. There are also a number of scientific experiments to be done in space which do not involve examination of the solar system or any astronomical object. From a scientific point of view, astronomical observations of objects outside our own solar system from the vantage point of space vehicles, and hence without interference of the earth's atmosphere, represent one of the most rewarding applications of space technology, and should be an important and continuing part of the space effort."

Also, it continues:

"Major parts of the manned space effort which we envisage as a minimum reasonable program are as follows:

1. * * *

2. * * *

3. Manned space stations will be needed for a variety of purposes. By a space station we mean an earth satellite maintained in orbit over a period as long as about one year, and furnishing the necessities of life for man continuously or from time to time over a comparable period with the possibility of his doing useful work in orbit. Such a station will be needed to test man's ability to operate in space for the time periods required for interplanetary travel. In addition, use of a space station, at least on an intermittent basis, seems worthwhile for an orbiting astronomical observatory, for some other varieties of scientific experiments, and for engineering testing."

Members of the STAC who signed the above letter are:

Luis W. Alvarez, University of California, Berkeley, Calif.

Stanley Bennett, University of Chicago.

Francis H. Clauser, University of California, Santa Cruz, Calif.

Lee A. DuBridge, California Institute of Technology.

Leo Goldberg, Harvard University.

Gordon J. F. MacDonald, Institute of Defense Analyses, Arlington, Va.

William G. Shephere, University of Minnesota.

William B. Shockley, Stanford University.

William H. Sweet, Massachusetts General Hospital, Boston, Mass.

Charles H. Townes, Massachusetts Institute of Technology.

John R. Whinnery, University of California, Berkeley, Calif.

George D. Zuidema, Johns Hopkins Hospital, Baltimore, Md.

Dr. MUELLER. The funding for ground based telescopes has traditionally been supplied by the National Science Foundation. The need for ground based telescopes is one that is being met. It is not an area in which we attempt to make a judgment. We rather rely upon the advice of our scientific colleagues in that field to make these judgments.

Mr. DADDARIO. This question having been put to you and having been examined, I believe it would be helpful if we could have that for the record.

Mr. TEAGUE. Yes.

Dr. MUELLER. Thank you. We will be pleased to provide you with a detailed example of the kind of study we are doing in advanced missions.

(Information requested is as follows:)

NASA is currently studying orbital astronomical support facility concepts in order to identify those that will allow us to take advantage of the opportunities for astronomical observations outside the earth's atmosphere for the advancement of scientific knowledge. In defining these concepts we are examining the requirements for a broad program of observations, the potential instruments involved, flight missions and the interactions among these requirements. A copy of the work statement follows: