NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
WASHINGTON 25, D.C.

OFFICE OF THE ADMINISTRATOR

JUL 18 1967

MEMORANDUM for the Associate Administrator for Manned Space Flight

From: AD/Deputy Administrator

Subject: Lunar Mapping and Survey System (LMSS)

Reference: Memo to AD from P, subject as above, dated June 19, 1967

We have had a series of discussions on the requirements for the lunar mapping and survey system (LMSS), the results of which are summarized in the referenced memorandum from the Office of Program Plans and Analysis. On the basis of the requirements considered in this review, I have concluded that we are not justified in continuing with the LMSS in the NASA program.

In your memorandum of July 5, you suggested a justification for continuing the LMSS on the basis of the requirement for high resolution photography from lunar orbit in order to determine the status of equipment used in a lunar landing mission. In order to assess this suggestion, I would like a rapid analysis, perhaps conducted by Bellcomm, which will provide the following data:

1. What resolution requirements are assumed, and on what basis, for a useful evaluation of equipment on the lunar surface?

2. Compare the resolution capabilities from lunar orbit of:

   a. Block I LMSS
   b. Block II LMSS
   c. Hand-held CSM cameras
   d. CSM-mounted systems planned for APP-A and APP-B (highest quality)

3. Assuming the availability of each of the four systems noted above, what would be the factors affecting the schedules for each of these photographic missions? How soon could they be deployed if needed to investigate a lunar landing?

4. What are the investigatory techniques and approaches that have been under consideration in the event of difficulties on a lunar landing attempt?

The information requested above should be in the hands of the Office of Program Plans and Analysis by July 17 so that it may become one of the agenda items for the meeting on AAP planning now scheduled for July 19.

At the July 19 meeting, I would also like to discuss with you the possible uses, for other missions than lunar mapping and survey, of the two sets of LMSS equipments about to be delivered, so that we can achieve maximum benefit from our investment to date.

RCS Jr.

Robert C. Seamans, Jr.

cc: ML/Mathews