August 31, 1972

SMEAT DAILY REPORT

Number 28

1067

This report covers the period from 0800 August 30, 1972, through 0800 August 31, 1972 (test day 36).

I. Significant Accomplishments - During this reporting period, three M171 and M092 experiment protocols were completed by the crew. The SMEAT team exercised the MSFN communication discipline throughout the performance of these experiments. This exercise entailed interrupted voice communications as would be experienced during an actual Skylab mission and the data dump of the medical experiment data at the end of the day. The tapes were turned over to the MSC computation center for analysis and are scheduled to be completed sometime on August 31. All other scheduled DTO crew activities were accomplished as scheduled.

II. Problems

A. Hardware

The crew experienced a series of problems with the urine volume measuring system. The crew had problems with fitting three hoses to the urine volume measuring system. The crew also reported poor QA with the funnels and receivers. Cognizant MSFC personnel are following up on these problems.

- B. Facility None
- C. Procedural None
- III. Medical The mission surgeon reports that the crew remains in good health.

. IV. Scheduled Activities

- 1. At the principal investigator (PI) meeting held on August 29 and 30, the problems with the VCG electrode and the 133 electrode were discussed and it was determined that a dermatologist should be consulted to determine if in-chamber test should be performed by the SMEAT crew to provide a better understanding of these problems. In addition, this consultatant will be asked to devise a series of tests to be performed on all of the Skylab crewmen to better understand if any alergic reaction problems exist with the stomaseal on M133 electrode paste.
- 2. The science pilot has reported that he feels that there is some loss in muscle strength due to the confinement in the chamber. The medical team has been requested to devise a battery of tests which can be performed by the crew for the balance of the chamber test and for posttest followup to determine if there has been some loss in muscle strength.

- 3. The Skylab Program has experienced problems with the Mosite inserts used in various equipment stowage containers. It has been found that this closed seal foam expands at reduced pressures causing problems in opening drawers and achieving proper seals. The Skylab Program Office is developing a series of tests to be performed on various pieces of equipment which utilize Mosite. At some point in the SMEAT program, various items will be passed into the crew to evaluate the effects of the 5 psi atmosphere on those items which contain Mosite.
- 4. There has been considerable discussion by the crew and various members of the MSC medical team concerning data pass in to the SMEAT crewmen. To preclude a reoccurrence of this problem, the TOMC Chairman has asked that a schedule be developed for medical data pass ins to the crew. Adherence to this schedule will be reviewed at the regular morning SMEAT meeting.
- 5. The M133 PI has requested a telephone conference with the crewmen to discuss the M133 data and overall experiment performance.

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Management Committee