

September 5, 1972

SMEAT DAILY REPORTNumber 30

This report covers the period from 0800 September 1, 1972 through 0800 September 5, 1972 (test days 38, 39, 40, and 41).

I. Significant Accomplishments - The SMEAT activities over the Labor Day weekend progressed satisfactorily. Three M092/093 protocols were completed. A problem was encountered with the data from the commander. All other scheduled activities were completed on time. The crew continues to perform in an excellent manner and their motivation remains high.

II. Problems

Ergometer made loud grinding noise + before it could be stopped, freewheeled - Had increased drag from motor or flywheel after that - 29 min

A. Hardware

1. On day 38, the reworked ergometer failed during a non-experiment exercise period. One of the crewmen had exercised at approximately 300 watts for 30 minutes when the ergometer started freewheeling. The ergometer was airlocked out of the chamber and a substitute unit passed in. Initial testing of the failed ergometer did not reveal any problems. A checkout run was made in which the ergometer was operated at 300 watts for approximately 36 minutes and a failure was encountered. The initial analysis of this failure indicated that a transistor had failed causing the unit to freewheel. A more detailed analysis is scheduled.

2. The T003 particle counter has been passed out of the chamber for calibration. It would appear that the particle counter is not giving useful or valid data.

3. The VCG data was lost on the CDR M093 run. The cause of this failure is being further investigated and this experiment protocol has been rescheduled for Tuesday.

B. Facility - None

C. Procedural - No major problems were encountered.

III. Medical

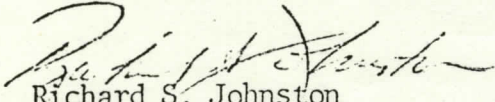
The crew remains in excellent health.

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IV. Future Activities

A planning meeting was held to discuss a formalized plan for the control, checkout, and disposition of all inchamber SMEAT equipment. The only posttest SMEAT altitude activities currently proposed are: a two-day 1/2 psi test to evaluate microbiological performance; the evaluation of the flight metabolic analyzer at sea level and at 5 psia; the design verification of the IMSS slide stainer; and a validation of the food tray heating capability at 14.7.


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