SMEAT DAILY REPORT

Number 20

This report covers the period between 0800 August 21, 1972 through 0300 August 22, 1972 (test day 27).

Significant Accomplishments - The 27th test day was passed by the SMEAT crew and test team without significant incident; however, some problems were uncovered in the M171 (Metabolic Activity) experiment hardware and created questionable data. The heaters which control the SMEAT cabin temperature were powered again and the temperature profile is in the process of being re-established. All other detailed test objectives (DTO's) were executed as planned with no noted deviations.

II. Problems

Hardware

The TM data from the M171 experiment became suspect when the minute volume and respiratory quotient values differed significantly from previous data points. However, the raw data from the special cable installed on the metabolic analyzer prior to the start of SMEAT gives satisfactory results for respiratory quotient. A special hand-held respiratory minute volume device is Deing verified for transfer to the crew for obtaining minute volume in an alternate manner. Also, the chamber gas composition will be monitored closely during the M171 runs to insure that the metabolic analyzer to chamber baseline does not shift.

B. Facility

None.

C. Procedures

None.

III. Environmental Conditions - No change in environmental conditions other than the low temperature reported yesterday which is being corrected to the maximum value of 75° F. desired for the next major medical experiment operations on 8/24/72.

Medical Summary - No change in the medical status of the crew has

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Management Committee