

NASA Special Publication
Proposed SMEAT Report Outline #2
9/19/72

I. Summary Tech Writer

Brief highlights of the results of the test as a whole and the significant impacts on the Skylab Program.

II. Introduction Tech Writer

Test background, accomplishments, report description and acknowledgements.

III. Purpose Tech Writer

Reiteration of test objectives in past tense covering:

- a. Primary
- b. Secondary
- c. Detailed test objectives

IV. Test Description Correale

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|------------------------------------------------|----------------|
| a. Facility | Casey/Snedicor |
| b. Experiment Hardware (major items) | Huffstetler |
| c. Procedure/test operation/span time and crew | Leblanc |
| d. Test Management | Bush |
| e. Safety, Reliability and Quality Assurance | Spence |
| f. Nonmetallic Materials Control | Sauers/CSD |

Brief section(s) describing items and procedures, written in a past tense narrative including illustration, figures, photographs and sketches. Also hardware configuration identification and differences from flight items.

*V. Results by DTO Shumate

This section will lead off with a general paragraph(s) on the test as a whole and describe the method of reporting. Each DTO will be reported on separately or grouped and reported on in a single report where the individual investigator so determines. Each separate DTO report should follow the following format where applicable.

Purpose - State the purpose of the experiment/activity as specified in the approved DTO.

Summary - State briefly a summary of your DTO activity - what was learned; its success/failure attainment; any application to the flight program; etc.

Test Hardware - Briefly define the hardware used for the experiment/activity and state its type (qual unit, DVTU, SMEAT peculiar, etc) paying particular attention to the differences with flight configured hardware.

Test Methods - State the approach to your activity with particular emphasis on differences/similarity to the flight approach.

Results and Discussion - State and enumerate all pertinent data acquired. This may be done in terms of curves, tables, photographs, charts, or what have you. Explain the results and their meanings - both obvious and subtle.

Problems - Enumerate problems which were encountered during the running of the test which impacted your successful accomplishment of your objectives - particularly those which can be extrapolated to having a flight impact. This should embrace hardware, procedures, data and crew interface problems. For those problems which occurred, briefly state the real time solution and what solution is required, if any, for the flight program.

Flight Impact - A statement of what you learned and its impact on the flight program should be summarized here.

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|-----|----------------------------------------------------------------|-------------|
| 1. | 71-11 Metabolic Activity | Michel |
| 2. | 71-16 Vectorcardiogram | Hoffler |
| 3. | 71-15 Lower Body Negative Pressure | Johnson |
| 4. | 71-17 Sleep Monitoring | Shumate |
| 5. | 71-7 Heating Food Tray Operational System-Rapp/Turner/Humphrey | Ross |
| 6. | 71-18 IMSS | McKinney |
| 7. | 71-14 Specimen Mass Measurement | Kimzey |
| 8. | 71-10 SMEAT Hematology Program | Rambaut |
| 9. | 71-3 Bone Mineral Balance | " |
| | 71-9 Body Weight | " |
| | 71-12 Mineral Balance | " |
| | 71-13 Bioassay of Body Fluids | " |
| 10. | 71-6 In-Chamber CO ₂ Measurement | Waligora |
| 11. | 71-27 Urine System | Sauer |
| 12. | 71-25 Habitability/Crew Quarters | Bond |
| 13. | 71-20 OBS | Zieglschmid |
| 14. | 71-26 Aerosol Analysis | Harris |
| 15. | 71-1 Time and Motion | Rusnak |
| 16. | 71-2 Oral Microbiology and Hygiene | Frome |
| 17. | 71-4 SMEAT Atmosphere Analysis | Harris |
| 18. | 71-19 Microbiology | McQueen |
| | 71-28 Chamber Environmental Microbial Monitoring | Graves |
| 19. | 71-21 SMEAT Shower | Trombley |
| 20. | 71-22 SMEAT Environmental Noise | Homick |

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| 21. | 71-23 Data Acquisition System | Lowe |
| 22. | 71-24 SMEAT Sleep Restraint | Marak |
| 23. | 71-29 Housekeeping | Sauer |
| | 71-30 Personnel | Sauer |
| 24. | 71-32 CM CO ₂ Absorber | Tanner |

*VI. Test Results by Activity

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|----|-----------------------------------------|------------------|
| 1. | Crew Health | Ross |
| 2. | Experiment and Systems Hardware | Huffstetler |
| 3. | Crew Procedures/Timeline | Guillory/O'Neill |
| 4. | Crew Summary | Crippen |
| 5. | Data Processing | Moseley/FOD |
| 6. | Test Operations and Mission Simulations | Lowe |
| 7. | Facility Operations | Hinners |

*Include DR's and dispositions, failures, and resolutions, and Skylab impacts as to changes, verification of methods or procedures and general problems or successes. Include tables, graphs, figures, or illustrations to show points. Identify future efforts and unresolved questions.