

NASA-S-67-1425

## 56 DAY MISSION GAS STORAGE SYSTEMS

- GAS REQUIREMENTS
    - OXYGEN — HYDROGEN — NITROGEN — HELIUM
  - LONG DURATION WEIGHT TRADE-OFFS
    - CRYOGENIC STORAGE
- VS
- HIGH PRESSURE GAS STORAGE

FIGURE 8

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## 56 DAY MISSION OXYGEN SUMMARY

### MISSION REQUIREMENT

|                            |                     |                 |
|----------------------------|---------------------|-----------------|
| ● CLUSTER REPRESSURIZATION |                     | 376             |
| ● METABOLIC                | 2 LB/DAY/MAN        | 336             |
| ● LEAKAGE                  | 15.1 LB/DAY/CLUSTER | 846             |
| ● ELECTRICAL               | 2.2 KW              | 1937            |
| TOTAL                      |                     | <u>3495 LBS</u> |

### WEIGHT TRADEOFF

|                                           |          |
|-------------------------------------------|----------|
| ● HIGH PRESSURE GAS TANKS                 | 3500 LBS |
| ● CRYOGENIC (THREE 41.5 INCHES O D TANKS) | 960 LBS  |

FIGURE 9