

BENDIA STOLEMS DIVISION A

SIDE/ALSEP Design & Deployment, Action Item B6-0712-28B

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This ATM answers action item B6-0712-28B brought about by PDR Chit 5-6 of the System PDR, July 11-12, 1966.

Technically, the SIDE PI is concerned that the SIDE be set on the lunar surface on its legs and not on the body of the package for thermal reasons and avoidance of dust contamination.

From the standpoint of over-all ALSEP deployment, it is necessary to activate the central station as early in the deployment sequence as possible because:

- 1. Establishing and confirming the central station function is necessary, and
- 2. From a crew point of view, early deployment is required because of the criticality of antenna pointing and the necessity for fine and precise task sequences required of the crew, prior to onset of fatigue.

Design of sunshield erection supports is predicted upon sunshield weight and the provision of adequate strength to support this weight. Very possibly, the sunshield could support an experiment. However, provision of additional weight support would most probably involve a central station weight penalty.

Conclusions:

- 1. The SIDE packaging must provide the capability to deploy its legs without interference with or deployment of, the ground plane. This will permit setting the experiment down either on its legs, on the sunshield, if desired, or on part of the magnetometer packaging.
- 2. Criticality of weight cannot permit weight increase for increased sunshield support strength.
- 3. Raising the sunshield by the crew with all experiments on the sunshield is not realistic and would unduly complicate sunshield tie-down design and location.
- 4. If the PI's technical requirement of avoiding thermal or contamination problems is met by SIDE packaging, it appears that this is not, nor should be, a constraint on an optimum deployment sequence.

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