



3/10/67

BENDIX SYSTEMS DIVISION ANN ARBOR, MICH.
Design Information on RF Antenna
Cap for ALSEP Central Station Test-
ing

NO.

ATM 631

REV.NO.

PAGE 1 OF 2 PAGES

Murtaugh

A total of 2 antenna cap fixtures will be provided as GSE. One for use at KSC and one at Bendix.

The purpose of the cap will be to provide for containment of the RF energy transmitted from the ALSEP Central Station through its antenna and also to provide for RF coupling between the Central Station and the System Test Set for the transmit and receive functions. Figure 1 shows a sketch of the anticipated cap design and its use when integrated with the Central Station.

The antenna cap consists of a metal container lined on the inside with a suitable microwave absorber. A test antenna is installed inside for the RF interface via the Central Station antenna. Mounts are provided to position the ALSEP antenna within the cap, at a fixed distance from the test antenna, for the required power transfer. The mounts, consisting of a low loss plastic foam product, are lined at the ALSEP antenna contact surface with polyethylene sheets for abrasive resistance. The ALSEP antenna will lay on the mounts without any hold down clamps. The ALSEP antenna cable will exit through a slot in the rear cap cover.

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PAGE 2 OF 2 PAGES

G.S. 3/10/67

ANTENNA CAP
FIXTURE ASSEMBLY
2333830

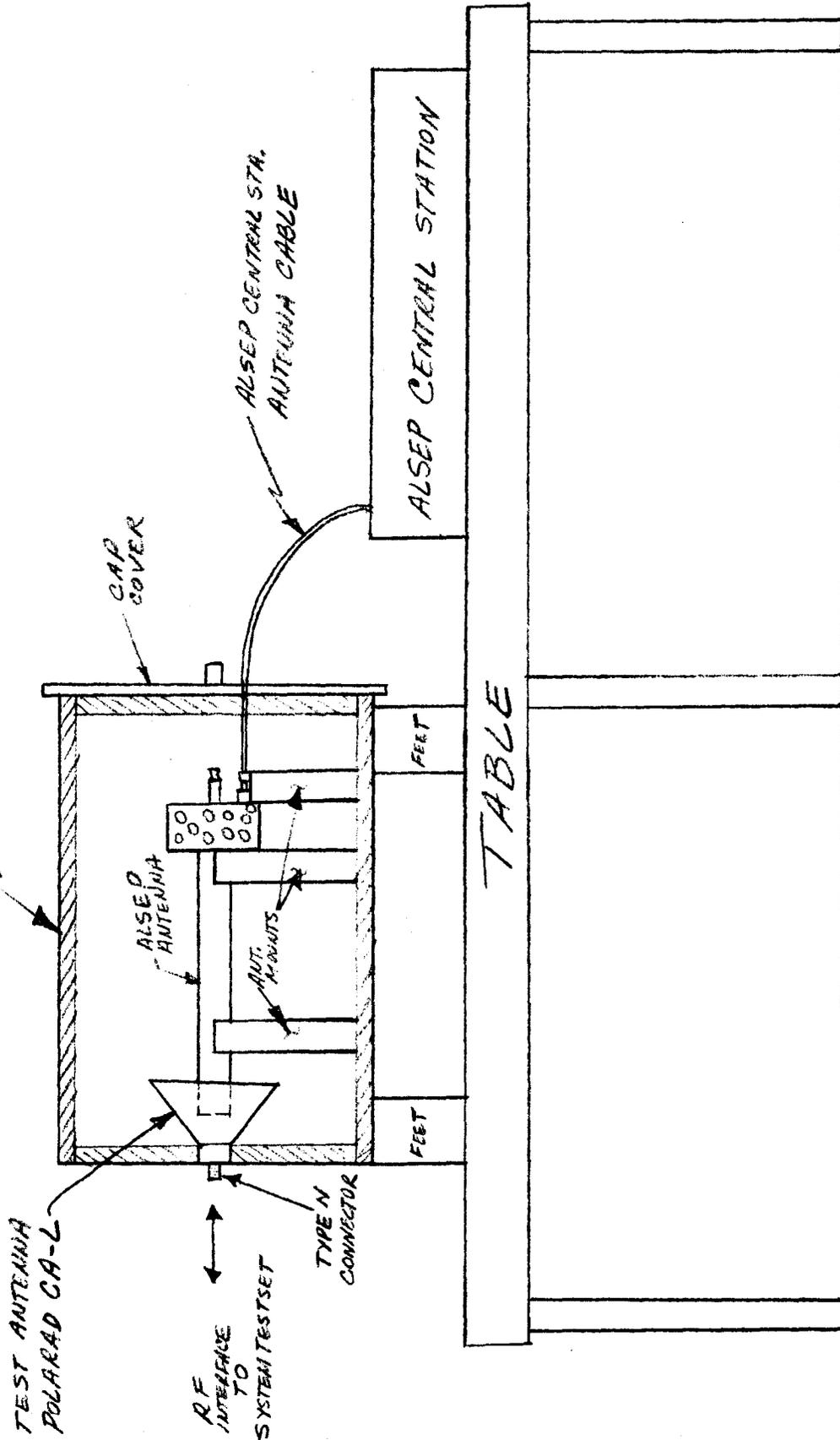


FIGURE 1 ANTENNA CAP CONFIGURATION