

~~TOP SECRET~~ [redacted]

10 Jan 1966

Critical Areas of the Collection Stations and equipment ~~xxxxxx~~...

Several areas are now or soon will be critical for attention in the R & D of new equipment ~~and the major limitation is the present~~

1. The LEL Preamplifier used with the New Az-El antennas is not working out as a reliable item.

2. The lack of an Azimuth Deviation(lobing)system for assisting the tracking operator is soon to be a critical area of the operations SOP.

3. Command Transmitter obsolescence is now limiting the logistic support of these items. A modern solid state one could be the answer.

4. Techniques for rapid Go-NO GO type comparator to automatically assure that the command operation is successful would materially increase the collection time at [redacted] This technique could be balanced against the possible "Stored Command" system to get the turn-on accomplished in a timely fashion. The command system has been designed by a process of evolution and maybe now it is time to go the route of going all the way to the state-of-the-art techniques on both ground and flight equipment.

5. Counter display indicator for the HRB Receiver

6. Threshold scheme for Second Generation Bay State.

7. Second generation Quality Control Analysis complex for [redacted]

The major overall limitation on the ability of the present group to make the progress in all these critical areas in the required time frame is the availability of technical type assistance to carry out the designs which are now easily within our capability. If the designer must be burdened by the time consuming burden of construction and assembly we are not getting our money's worth out of the present talent.

~~TOP SECRET~~ [redacted]

HANDLE VIA
BYEMAN-TAL-NE-KEYHOLE
CONTROL SYSTEMS JOINTLY