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MEMORANDUM TO FILE

5 April 1969

Subj: Significant facts concerning SISS ZULU site survey:

1. During the past year the SISS ZULU data collection system has undergone significant transition from the Historic Analog system to the Futuristic Field-Digitizer system. These shall be described in some detail as follows:

I. HISTORIC ANALOG SYSTEM.....

In general the system has had an evolution over a period of over 8 years and has two remote antenna systems capable of training in both azimuth and elevation. The antenna is in the VHF region with (4 over 4) tuned YAGI cross polarized/<sup>receiving</sup> elements.

The receiving electronics consists of a special purpose Linear-phase type solid state receiver with adaptive threshold and digitally controlled local oscillator. There are \_\_\_\_\_ each of these receivers connected to each antenna through a special multicoupler. In addition ~~xxx~~ to these Data-Receivers there is another VHF Telemetry receiver used for aiming the antenna to a beacon. The aiming processes are entirely manual and under real-time operator adjustment.

There is a Time-of-day digital timing system and standard frequency oscillator which ~~drives~~ the capstan of the ~~xx~~ magnetic tape recorders as well.

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HANDLE VIA  
BYEMAN  
COMINT SYSTEM ONLY

3.31

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FN

42-9-175

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ATTN:

Washington, D.C. 20360

Thru AF MILPR Management Office, Washington  
D. C. 2033

8. F. 514: (Agency, Name, Telephone Number of Originator)

HQ. SAMSO (AFSC)

Air Force Unit Post Office

Los Angeles, California 90045

9. ITEMS ☐ ARE ☒ ARE NOT INCLUDED IN THE INTERSERVICE SUPPLY SUPPORT PROGRAM AND REQUIRED INTERSERVICE SCREENING ☐ HAS ☒ HAS NOT BEEN ACCOMPLISHED

The purchasing activity will not authorize any deviation from the specifications or other provisions cited in this MIPR without first obtaining the approval of the requiring activity. Such deviations will be confirmed in writing.

II.	GRAND TOTAL
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\$395,000

12. TRANSPORTATION ALLOTMENT (Used if FOB Contractor's Plant)

See Para 4 of attached AFLC/AFS Form 37

13. INVOICES TO: (Payment will be made by)

AFSC (AFSC)  
Accounting & Finance Office (SMCA)  
Air Force Unit Post Office, Los Angeles, CA 90045  
See Para 5 of attached AFEC/AFSC Form 37

14. FUNDS FOR PROCUREMENT ARE PROPERLY ALLOCATED TO THE ALLIANCE SET FORTH BELOW (THE AVAILABLE BALANCES OF WHICH ARE SUFFICIENT TO COVER THE ESTIMATED TOTAL PRICE)

57X3020 1194730 F299998.31C 1594200

Accounting & Finance Officer

17. DATE \_\_\_\_\_

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DD FORM 448  
1 OCT 60

PREVIOUS EDITION OF THIS FORM IS OBSOLETE.

CONTROL SYSTEMS SCINTLY

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NOTE TO H.Q. LORENZEN 5600

2 April 69.

## 1. Problem AREAS

## A. Third Floor Work, Request for (On North end of Bld 56).

Continued pressure of R & D effort on 56R06-29 has caused this to be farmed out, mostly to HRB-Singer at State College. The NRL team has been forced out of this highly inspiring area mostly due to lack of adequate Laboratory space (400+ square feet of Lab for 4 NRL and 4 HRB-Singer Engineers). This will shrink by the necessity of having a Hallway pass through this vital area when the two rooms are added out on the roof of the present two story addition on the North end of Bld 56.

## B. Not only is the vital R &amp; D effort going elsewhere, but even more important is the demand for a resident computer like the ones deployed overseas. At this time we are entirely dependant upon the Software support from HRB-Singer and in reality Fred Hellrich should have an NRL team to direct this and an instrumentation complex like those overseas where the the R &amp; D, Documentation, SOP, and Training processes could be efficiently undertaken. This plea for a domestic R &amp; D Site may become a reality if NSG really gets behind this program

It is therefore suggested that when [ ] computer is ordered, that we order one for NRL/Domestic R & D site use also. Due to the excess of FY-69 Funds it is also suggested that we purchase an instrument for NSA...while they were highly impressed by their tour at State college, the politics at Ft. Meade make it nearly impossible for them to fund a small computer at a time when they are fostering remote terminals for their own large CDC 6600's (Still 2 to 3 years away though). We have heard by msg that NSA will pay the bill for [ ] \$395 K out of POTTS budgetxxx the Computer part only costs about \$250K. The danger is, do we want to Foster NSA entry xxxxxx to this extent into chain of command for directing the computer resource in [ ]. In the past they are very clever at setting the comfortable pace rather than the inspired route. They might just strangle Lt. Potts team with trivial tasks so that the real capability of the digital system would be stunted.

We need your thoughts on the wisdom of this one.....

- 2.
2. [ ] was here Monday on the subject of the "First Design Detail Meeting for Mission 7107"...he went over the selection of the bands
  - (2) the wisdom of a higher orbit...not needed
  - (3) General Search vs. EOB vs ALERT
  - (4) [ ] desire for a digital system NOW...they may want to fund a part of it now to assure that they get it....DO YOU CONCUR???

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