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WHIG INFO [] CITE [] 3714

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[] FOR LT COLONEL [], REFERENCE IS MADE TO THE FOLLOWING MESSAGES: [] 3370, WHIG 0436, AND [] 2198-5. WHIG 0436 STATES THAT THE VDE WAS NOT INTENDED TO HANDLE COMPLETELY THE DATA FROM MISSION 7158, BUT ONLY TO PROVIDE A RAPID INITIAL OUTPUT. HOWEVER, IT HAS BEEN ALMOST THREE MONTHS SINCE DEPLOYMENT OF 7158 AND THE ONLY USEABLE INTELLIGENCE FROM THIS MISSION THUS FAR HAS RESULTED FROM - AND ONLY FROM - THE VDE OUTPUT. REGARDLESS OF THE ORIGINAL INTENT FOR THE VDE, IT CANNOT BE DENIED THAT THE VDE ALONG WITH THE AMIE RECORDINGS HAVE DEMONSTRATED THAT SERIOUS PROBLEMS EXIST IN A DATA HANDLER OF THE TYPE TO BE USED WITH 7160. FURTHER, WE FEEL THAT SIMILAR PROBLEMS MAY ALSO EXIST WITH THE DATA HANDLER FOR MULTIGROUP. IT WOULD SEEM THAT, FROM THE LESSONS BEING LEARNED FROM 7158, A POSITIVE EFFORT SHOULD BE MADE TO PRECLUDE REPEATING SIMILAR MISTAKES IN THE FUTURE.

BOTH WHIG 0436 AND [] 2198-5 INDICATE THAT THERE IS A SIGNIFICANT DIFFERENCE BETWEEN THE BASIC LOGIC OF THE VDE AND THE 7160 DATA HANDLER; WHILE ON 8 SEP 65 AT SUNNYVALE, LOCKHEED PRESENTED A BRIEFING IN WHICH IT WAS STATED THAT THE 7160 DIGITIZER WAS ESSENTIALLY THE SAME AS THE VDE BEING USED WITH 7158. [] 2198-5 INDICATES THAT MANY OF THE ILLS OF THE DATA HANDLER WILL BE CURED MERELY BECAUSE THE FIRST PULSE DETECTED IS NOT USED IN DETERMINING THE PRI AND THEREFORE; *THE VDE PROBLEMS ENCOUNTERED IN MISSION 7158 WILL NOT HAVE NEARLY AS SERIOUS AN AFFECT UPON THE OPERATION AND RESULTS OF MISSION 7160.....* SAC IS NOT SO OPTIMISTIC AND CONSIDERS THIS TO BE A RATHER MINOR MODIFICATION AND ONE WHICH DOES NOT SIGNIFICANTLY CHANGE THE BASIC PROBLEM OF A SINGLE SIGNAL DIGITIZER ATTEMPTING TO OPERATE IN A MULTIPLE SIGNAL ENVIRONMENT. HOWEVER, WE SOLICITE YOUR FULL COMMENTS EXPLAINING IN DETAIL TO WHAT DEGREE THIS 7160 MODIFICATION WILL CORRECT THE PROBLEMS ENCOUNTERED IN THE VDE. IT WOULD APPEAR THAT A COMPLETE ERROR ANALYSIS OF THE 7160 DATA HANDLER BASED UPON THE SIGNAL DENSITIES REFLECTED BY 7158 AMIE RECORDINGS IS IN ORDER. IT IS SUGGESTED THAT, IF POSSIBLE TO DO SO, SEVERAL 7158 AMIE RECORDINGS BE PLAYED BACK INTO THE 7160 DATA HANDLER, RECORDED ON THE PAYLOAD RECORDER AND THEN PROCESSED IN THE NORMAL MANNER. THE RESULTS COULD THEN BE COMPARED WITH WHAT IS ACTUALLY ON THE AMIE TAPE THROUGH MANUAL READOUT OF APE FILM. [] 2198-5 ALSO STATES THAT THE 7160 DATA HANDLER SPEED IS COMPARABLE

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WITH THE SCAN RATE OF THE RECEIVERS. ACTUALLY THE SLOWER EFFECTIVE SCAN RATE CREATES A VERY SERIOUS PROBLEM; THE MINIMUM AREA OF LOCATION UNCERTAINTY WILL BE EVEN GREATER THAN FOR 7158 (WHICH IS INADEQUATE FOR THE OVERALL EOB REQUIREMENT). ACCORDING TO LOCKHEED, WE CAN ONLY RELY ON A MAXIMUM OF THREE OVERLAPPING CIRCLES. THE ANALOG BACKUP MENTIONED IN WHIG 0436 WAS NOT MADE KNOWN TO SAC AT THE TIME [REDACTED] 3370 WAS FORWARDED. IN FACT, ON 8 SEP 65, LOCKHEED STATED THAT 7160 WAS TO BE AN ALL DIGITAL PACKAGE, WITH NO ANALOG RECORDING CAPABILITY. THE ADDITION OF THE NARROW-BAND ANALOG (AND WE ASSUME AN ADJACENT DIGITAL TRACK) RECORDER SHOULD CERTAINLY HELP IF AN ADEQUATE GROUND DATA PROCESSING CAPABILITY IS AVAILABLE. NSA INDICATES THAT THEIR [REDACTED] SYSTEM WILL HANDLE THE JOB AND IF THE BASIC SYSTEM IS UNDERSTOOD CORRECTLY, SAC AGREES; HOWEVER, TO DATE SAC HAS NO KNOWLEDGE THAT [REDACTED] HAS DEMONSTRATED THE CAPABILITY TO ADEQUATELY ACCOMPLISH THIS TYPE OF PROCESSING.

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CFN 3714 X LT COLONEL [REDACTED] 3370 0436 2198-5 0436 VDE NOT INTENDED 7158 7158 VDE VDE CANNOT BE VDE AMIE 7160 7158 0436 2198-5 VDE 7160 8 SEP 65 SUNNYVALE LOCKHEED 7160 VDE 7158 2198-5 NOT USED PRI VDE 7158 NOT HAVE 7160 SAC NOT SO NOT SIGNIFICANTLY 7160 VDE 7160 7158 AMIE 7158 AMIE 7160 AMIE APE 2198-5 7160 7158 EOB LOCKHEED 0436 NOT MADE SAC 3370 8 SEP 65 7160 NO ANALOG NSA [REDACTED] NO KNOWLEDGE [REDACTED] BT NNN:

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