

MISSING PAGE

ORIGINAL DOCUMENT MISSING PAGE(S):

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SUBJECT: SBC-1 Evaluation

5. During the month of January the ESB projects engineers continued to evaluate the SBC-1. The following additional fault was found.

a. On received signals, where the suppressed carrier was weak (but acceptable), noise in the AFC carrier chain caused the reactance oscillator to shift erratically, causing the audio tone outputs to shift frequency and thus cause errors in copy.

6. Three units were returned to T&I from [REDACTED] We were advised by [REDACTED] that all faults had been repaired. 25X1A5a1

7. Two of the three units were rejected. The following faults were found:

a. In one unit there was a noise burst from the AFC which interrupted copy as described above in Para 5-a. Presumably it was still coming from the oven.

b. In another unit the sensitivity of the AFC carrier chain was low, and the unit would not lock in on a suppressed carrier of -20 db.

c. The third unit was found to be in good operating condition.

8. While examining the units, an additional problem became apparent. Several failures of the drift alarm amplifier oscillator tube, a 6U8A, revealed that this circuit was critical enough to require "hand selection" of the tube. Although not extensively tested, life of tubes in the circuit seems to be shortened.

9. Conversations with U. S. NAVY personnel based at their receiving site in Hawaii, revealed that they were having exactly the same problems with eleven SBC-1's which they were using.

10. The SBC-1 in its present stage of manufacturing is not recommended as a reliable unit suitable for field use.

[REDACTED] 25X1A9a

Distribution:

Original - Routing & File
② - Monthly Report
1 - AES Chrono
1 - Project File
1 - PES
1 - TSB