

FORM 1410-50
10 FEB 1959

SECRET

10 February 1959

MEMORANDUM FOR: Deputy Director (Plans)

ATTENTION :

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SUBJECT : "Countdown" Modification Kits for System I and VI Recorders

REFERENCE : DPD-0751-59, dated 27 January 1959

1. The information recorder for Systems I and VI employs one quarter inch magnetic tape which moves at 2 $\frac{1}{4}$ inches per second. The frequency response of the recorder extends to a high limit of 3750 cycles per second, beyond which the response drops off sharply.
2. There have been several recent intercepts wherein it appears that a high PRF was employed which was beyond the present recording capability. With improvements in missile guidance and fire control radar it is considered likely that higher PRF's will be employed, possibly of the order of 10,000 - 15,000 cycles per second.
3. In order to provide recording capability for these higher frequencies without redesigning the entire recorder, HFB has developed a modification for the recorder which will permit recording frequencies as high as 15,000 cycles per second. This modification consists essentially of counting the incoming pulses and applying every fourth pulse to the recording heads, thus extending the upper frequency limit of the recorder from 3750 to 15,000 cycles per second.
4. It is recommended that a quantity of five of the above modification kits be procured for incorporation into existing recorders.

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ELINT Staff Officer

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