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The Files - RD-151, T.O. 1

31 December 1958

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Trip Report - Magnetic Coder/Keyer, CK-8

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1. On 16 December 1958 a visit was made to [redacted] to monitor progress on the development of the Magnetic Coder/Keyer, CK-8. Persons present at the discussions were:

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- OC-E/R&D-EP

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2. One requirement that this Agency has imposed on the development of the CK-8 is that the tape cartridge of the Coder be electrically and mechanically compatible with the AS-3 agent equipment developed by [redacted] under Project 2108. To help resolve this compatibility problem, a decision was made by representatives of [redacted]

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and this Agency to exchange test tapes between the two contractors. Such an exchange would quickly determine whether or not electrical compatibility existed. In part, this was not done because [redacted] recognized and attempted to correct the lack of electrical compatibility. [redacted] stated that an amplifier was constructed from a keying amplifier drawing supplied by [redacted]. Using this amplifier as a test vehicle, the start and stop veins of each character block were modified until proper keying was effected. Wright feels that electrical compatibility now exists and that test tapes will be shipped to [redacted] for final testing.

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3. Coder - The method of mechanically impressing the alphabetical and numerical information onto the magnetic recording tape remains the same. To insure electrical compatibility of the CK-8 with the AS-3, several modifications were made by reshaping the start and stop veins of the character blocks to effectively change the magnetic polarization to that of [redacted] polarization. Another improvement made was the attainment of equal pulse amplitude for each start and stop pulse of a character. This problem was resolved by employing a swivel action keeper to maintain even pressure against each individual vein of the character block whose code is being impressed on the tape.

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4. Keyer - Mechanically, the keyer is approximately 50% completed but no work has been started on the electronics. [REDACTED] stated that this work will now begin since the writer has supplied information on the voltages and currents to which the keyer will have to control. The information given is the keyer shall be capable of keying voltages up to 100 volts dc @ 200 milliamperes. These figures are only a maximum, and voltages and currents below this figure shall be keyed by the KE-8.

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5. Tape Cartridge - [REDACTED] Project Engineer, informed [REDACTED] that his company was going to modify the locating pins of their cartridge and would supply the necessary information when these modifications were completed. Work on [REDACTED] tape cartridge will be held up until this information is received.

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R&D Lab
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EP Chrono

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