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

31 March 1959

25X1A9a

Trip Report - Coder/Keyer, CK-8

1. A visit was made on 13 March 1959 to [REDACTED] Skokie, Illinois, to monitor progress on the Coder/Keyer, CK-8. Persons participating in the discussions were:

25X1A5

25X1A5a1

[REDACTED]

25X1A9a

[REDACTED] - OC-E/R&D-EP

2. Keying Circuitry - The keying circuitry for the KE-8 was completed in breadboard form except for the final keying transistor. This circuitry utilizes 13 transistors for pulse forming and actual keying of the transmitter and has a form factor of 3-1/8 x 3-3/4 x 1/4 inches. [REDACTED] engineering consultant to [REDACTED], stated that he was nearing completion in his testing of the circuitry and would soon be ready to build the necessary number of units for inclusion in the KE-8 equipment.

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3. The size of the coder has been reduced to 4-1/4 x 3-3/8 x 1-9/16 inches and the keyer to 3-5/16 x 3-15/16 x 2-3/8 inches. We now have electrical compatibility with the AS-3 equipment, and to ensure mechanical compatibility, a tape cartridge for the AS-3 equipment will be requested from the [REDACTED] and delivered to [REDACTED].

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4. [REDACTED] stated that a gear drive might be used on the coder and there enhance the tape threading finger manipulation required if there was no objection to the following characteristic created by the gear drive. When coding intelligence onto the tape, the spacing between characters will change slightly as tape is transferred from one tape spool to the other because of changing diameters. In other words, the baud spacing between words will increase from 0.015 inches at start to 0.0155 or 0.0156 inches halfway through the tape, and at the end of the tape the baud spacing will be 0.0163 inches per baud. Discussing this with OC-T/CT, [REDACTED] stated that there was no objection to using the gear drive. This feature may also allow a slight reduction in the length of the coder.

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5. Delivery Date - Delivery of the prototype unit is scheduled for 31 March; however, [redacted] stated that his company could not meet this deadline and requested an extension. Furthermore, [redacted] felt that additional funds would be required to complete this project. The amount of additional time and funds is to be determined by [redacted] who will then submit a request to the Agency.

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6. [redacted] has received several samples of character blocks which were made by the [redacted], Geneva, New York. This type block is of a better quality than [redacted] could make by hand. There is no security problem involved here because the type (character blocks) contains only the start and stop veins and does not form any language character. To create a language character several veins must be milled off and then only when the top and bottom halves of the character block are properly positioned will a language character be formed.

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7. Information was requested by [redacted] as to what type of connectors should be used for battery connection and keying output connection. This request will be checked through Operation's personnel and the R&D Laboratory.

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[redacted]

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- Distribution:
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(1 April 1959)

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