18 March 1959

The Files - RD-93, T.O. 1

25X1A9a [redacted]

Conference Report - Subminiature Recorder, CB-7

1. On 9 March 1959 a conference was held with representatives of
25X1A5a1 the [redacted] at their plant in New Haven, Connecticut.
The purpose of this meeting was to discuss recent progress on this
task. Those participating were:

25X1A5a1 [redacted]
[redacted]-SRS/SA
25X1A9a [redacted] - OC-E/R&D-EF

2. This project had been temporarily suspended in March 1958 to
allow for an Agency review. In February 1959 action was initiated to
reactivate this project for a period of two months utilizing remaining
funds. As of this date the contractor has not been officially notified
to proceed with this task; however, they have started on their own. During
the past two weeks they had reported by telecon that they had made
several improvements on the CB-7 recorder. During a telecon on 27
25X1A5a1 February 1959, [redacted] claimed extremely gratifying results from
their new effort and they feel production will soon be quite feasible.
Also they stated that they would have evidence of their success in two
or three weeks. In another telecon from [redacted] on 3 March 1959, 25X1A5
they claimed to have made substantial gains toward an engineering model
representative of what can be expected as a finished product. When
25X1A5 questioned about when we could obtain this unit, [redacted] said, very
25X1A5 possibly by the end of March. [redacted] also wanted some guidance on
the packaging of the unit since the recent improvements have redistri-
buted components. This trip was made primarily to discuss these improve-
ments and to provide guidance to the contractor on the packaging of the
unit.

25X1A5a1 3. The [redacted] representatives presented their improvements
to the CB-7 in a breadboard form. With the exception of the motor, the
unit was entirely different from the CB-7 model shown to the writer on the
25X1A5a1 last trip to [redacted] in January 1959. The tape magazine had two
reels approximately 1 1/4 inches in diameter placed one on top of the
other. The tape travel was from the top reel past the record head to
the bottom reel, at a tape speed of 1.63 ips. The magazine was easily
inserted into the tape transport from the end via a guided channel and
its simplicity in design should facilitate quantity fabrication.

4. The new tape transport configuration has made additional space available for batteries to power the drive motor and provided other features such as, a one-minute tape-left warning device, an end-of-tape stop, and a start-stop switch. The dimensions of the tape transport including the tape magazine will be 2 1/4 x 1 1/2 x 9/16 inches. Due to this new design the motor load current is now approximately 17 ma which will considerably extend motor battery life. The latest CR-7 unit, prior to this new design had a current drain of 30 ma which made the battery life unacceptable.

5. The new record amplifier will not be more than 2 1/4 x 1 1/2 x 3/8 inches in dimensions. This unit will include a microphone and pre-amplifier and a record amplifier. It will have provisions for a high level input connection from external equipment and an output connection to the record head.

6. Because they were currently modifying the playback unit the only demonstration they could provide was the operation of the bread-board tape transport with tape magazine inserted.

25X1A5a1 7. At this time [redacted] said they would need more time and funds to construct an engineering model of this configuration. The writer 25X1A5a1 questioned [redacted] as to what model he was referring to in our telecon of 3 March 1959. The writer got the impression that the unit mentioned during this telecon, to be delivered by the end of March 1959, was an 25X1A5a1 engineering model. [redacted] explained that this would be a breadboard model of the new unit to prove the principals of operation and could not be considered as an engineering model.

8. After joint consideration of the new aspects by [redacted] and the writer, we decided that we would accept the breadboard model and an engineering report rather than provide additional time and funds. This should provide sufficient information on which to base specifications for an engineering model and prototype fabrication. [redacted] said he could have the breadboard model ready by 15 April 1959 but it would have certain limitations which can be corrected without difficulty with additional time and funds and should be considered if any testing of the unit is conducted. They are:

a. Frequency response of the unit probably will not meet the specifications because the head design is not as good as it should be.

b. Motor reliability will probably be poor because it was the only one fabricated and it has been subjected to rough duty during the development of the CR-7 recorder.

9. The following agreements were made at this meeting:

25X1A5a1 a. [redacted] will deliver a final engineering report at the end of the two month's work under this task.

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b. [redacted] will deliver a breadboard model of the CR-7 recorder and the playback unit by 15 April 1959 with the limitations as stated in paragraph 5.

c. Testing of the units will be conducted by [redacted] group (SPS/HA) or personnel properly briefed on the limitations of the units.

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