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Memorandum

EP 64-335

DATE: 30 December 1964

TO : The Files: Contract 924, Task Order 7

25X1A9a

FROM : Mr. [REDACTED]

SUBJECT: Trip Report - RS-100 with [REDACTED], 25X1A5a1

25X1A

1. Project Description:

The RS-100 Radio Set consists of a 2-24 Mc transmitter for 300 WPM CW at 20 watts output and manual CW at 10 watts output; a 2-24 Mc receiver for either AM, CW, or SSB; a 300 WPM keyer; and an appropriate power supply. This set is approximately 9" x 12" x 5".

2. Contractual Information:

- a. Initial Cost: \$910,701.00 Overrun: \$116,386 Increase In Scope: \$207,344
- b. Request for Procurement Action: 16 July 1963
- c. Initiation Date: 9 September 1963
- d. Completion Date: 31 March 1965
- e. Deliverable Items: 1 Engineering Model
10 Service Test Models
Increase In Scope: 10 Additional Units

3. Date of Meeting: 18 December 1964

4. Place of Meeting: [REDACTED]

5. Persons Attending:

Agency

Non-Agency

25X1A9a

Mr. [REDACTED]

[REDACTED]

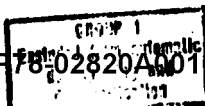
25X1A

6. Contractor's Performance:

- a. On schedule and expected to remain so: Yes
- b. Within obligated funds and expected to remain so: Yes
- c. Satisfactory technical performance: Yes

7. Project Status:

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7. Project Status:

Eight of the ten service test models have already been shipped. The first of these, which was received in October, was returned at this meeting for updating. This, along with two others, will be shipped by the first week in January.

The PS-100 line filter has been changed by the elimination of two inductors. These inductors, which were intended to block RF from the power lines, were saturating on peak loads and causing erratic operation of the PS-100. Measurements of broadband and CW conducted interference is considerably higher than what is normally considered acceptable. However, this conducted interference may not be particularly significant when compared with the radiation from the RS-100 antenna. The engineering model of the PS-100 has been through shock, vibration, immersion, temperature, and humidity tests. Prior to shipment the first week in January, it will also go through salt spray tests.

25X1A5a1 [REDACTED] expressed considerable concern about the reliability of the OS-100. No one unit has yet worked over the full temperature range. By a delicate and complicated oscillator coil tuning procedure, each OS-100 could be brought into specification, but this is a costly and time consuming operation, not readily adaptable to quantity production. There is a general feeling of a need for a thorough analysis of the synthesizer lock-on scheme and feedback loop dynamics. It was agreed that the OS-100's will be accepted as presently constructed with the understanding that [REDACTED] will submit this analysis, together with suggestions for improvement. [REDACTED] has completed eight of the OS-100's.

25X1A5a1 [REDACTED] received approval for production of the second ten units on 24 December. An incentive was added for delivery by 31 March 1965. Orders were placed the last week in November for all components, but some of these are long lead items that could delay the 31 March delivery. [REDACTED] is quoting eight weeks for delivery of the transmitter tuning capacitors; [REDACTED] is quoting eight weeks for delivery of the mode selector switches; [REDACTED] Corporation is quoting eight weeks for delivery of the first receiver tuning capacitor and twelve weeks for delivery of the last three. Any slippage in these deliveries may cause a corresponding delay in the delivery of RS-100's.

[REDACTED] has asked 25X1A5a1

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Mountain View, California

25X1A5a1
[REDACTED] has asked for permission to display and/or demonstrate and/or generally market the RS-100 to various other government agencies. Their stated goal is twofold: To drum up interest in the RS-100 and to demonstrate [REDACTED] capability. [REDACTED] was told that there would be no objection to this in about six months, but at the moment we insist upon maintaining control over disclosure. [REDACTED] then offered to make a ten minute movie about the RS-100 in anticipation of a future marketing effort. This would be done at no charge to the contract and the film would be available to us. This was agreed to with the stipulation that the script be approved prior to filming. It is expected that the film will be completed sometime in February.

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[REDACTED]

25X1A9a

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(30 December 1964)

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