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TO: Inspection Section/Contract Branch/PD/OL

FROM: OC-E/R&D-EP

Date 22 August 1955

Contract No. PSC-234-UNV

Report No. 1
(If final, so state)

Contractor [Redacted]

25X1

Address Silver Spring, Maryland

Commodity/Service Modification of Minifons and related antennas Classification CONFIDENTIAL

No. of Prototypes See original requisition.

Contract Completion Date _____

Progress of Contractor Very satisfactory
(If unsatisfactory, indicate reasons under comments)

Comments: The discrepancies encountered in the Minifon as contained in the attached

Memorandum to the Files have greatly increased the actual work required by the manu-
facturer when compared to his previously established and contemplated modifications.
His initiative and effort are highly commendable.

Recommended Action: Close liaison will be maintained as regarding technical features.

R&D Inspection Form _____

Inspected by: L. B. Roy

Division : OC-E/R&D-EP

Telephone : 3152

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DOC	<u>6</u>	REV DATE	<u>5/5/80</u>	BY	<u>37169</u>
ORIG COMP	<u>33</u>	OPI	<u>56</u>	TYPE	<u>02</u>
ORIG CLASS	<u>C</u>	PAGES	<u>3</u>	REV CLASS	<u>C</u>
JUST	<u>22</u>	NEXT REV	<u>2010</u>	AUTH:	<u>HR 10-2</u>

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The Files

26 August 1955

[REDACTED]

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Inspection Report - Modified Minifon - [REDACTED]
 Visit of 22 August 1955

25X1

1. Government furnished equipment: The inspection revealed that only 14 Minifons had been furnished to the contractor. One Minifon has not been received by the contractor.

2. Minifon Variations: Of the 14 Minifons received by [REDACTED] more than four different models were included. These variations occur as a result of different components and different component values being utilized at the time of production. In addition, several distinctively different circuit wiring arrangements have been encountered. For the purpose of this contract, [REDACTED] is making an effort to arrange it so that all of the units will be modified in accordance with a single master wiring diagram. It will not be possible for [REDACTED] to insure that each Minifon has identical physical size components.

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3. Examination of the Minifon units revealed that new tubes have been employed. Thus the units furnished require two (2) each tube-type DF-651 and one (1) each DL-651. It has been established that these tubes have a rectangular envelope with a maximum thickness of .210" and were manufactured in Belgium. It has been further established that these tubes are no longer manufactured nor will they be manufactured for future replacement purposes. These tubes are electrically replaceable in the Minifon units by the standard DF-67 and DL-67 types. However, these types have a circular envelope with a mean dimension of .322" diameter. This increase in diameter requires greater modification consideration as regards to space considerations. The new Minifons further employ a new motor battery. This battery is of American manufacture, and is the Burgess 3XX7 (10 1/2 volt) motor battery. Its size and configuration are more closely comparable to the original Minifon motor battery. It has been determined that by utilizing this battery sufficient voltage is available to permit the governor contacts of the Minifon motor to operate. It is anticipated that this feature will increase the overall accuracy of the Minifon recorder, as opposed to the condition encountered when the Mallory mercury cell motor battery is employed. The writer has not determined the operating capacity of this new battery.

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Inspection Report - Modified Minifon -2-

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4. Availability: With the exception of one component, it is anticipated that the modifications of the Minifon receiver will be accomplished prior to 14 September. Actual delivery will be predicated upon the delivery to the contractor (for each modification) of one each 6 MFD sub-miniature capacitor. All work, except reassembly, can be accomplished pending the arrival of this critical unit. The contractor is attempting to obtain a Telex type headphone output jack, which is of the shorting type. If the contractor is successful in obtaining this item, it will alleviate the necessity for a dummy shorting plug being procured. This action will have distinct operational advantage in that a small shorting plug could easily be lost during normal field operating conditions. The contractor has included a pulse stretcher circuit which will utilize a Hughes HD-6007 Silicon Diode. It has been determined that the IPC MB series cable connectors and receptacles cannot be procured prior to October. It has been necessary, therefore, to authorize the contractor to employ the SM series of connectors. In this connection the contractor has been advised that the IPC MB connectors, as specified in this contract, should be procured but under a services contract and not as an extension of this contract. The service contract will require the inclusion of new antenna crystal mount termination caps. Details of this item will be firmed up at the time the MB series of connectors are available.

5. ELINT Antennas: It was determined that the materials required for the fabrication of the associated ELINT antennas under this contract were on hand, and the fabrication, machining, and plating were underway. However, the processing of all of the mechanical components had not advanced to a point where final fabrication and assembly could be initiated. The antennas will start becoming available about 16 September 1955. More specific scheduling will be available about the first of September.

6. STERILIZATION CONSIDERATION: The contractor is removing the Geise-American adhesive-secured labels from the interior of the Minifon cover plates. The contractor will cut a circular terminated bar of a suitable configuration to cover the engraved Geise-American, Chicago, Illinois, U.S.A., marker. This head - bar will be used to completely obliterate the engraved marking presently encountered. This in turn will be paint-filled.

R&D-EP/LBR/mvm

cc: R&D Subject File ✓
 R&D Monthly Report (2)
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