

MIL-R-85664(AS)  
AMENDMENT 1  
7 JULY 1987

MILITARY SPECIFICATION

RECEIVER-TRANSMITTER, RADIO  
RT-1250A/ARC

This amendment forms a part of Military Specification MIL-R-85664(AS), dated 3 June 1985, and is approved for use within the Naval Air Systems Command, Department of the Navy and is available for use by all Departments and Agencies of the Department of Defense.

PAGE 1

Title: Add "and RT-1498/ARC"

PAGE 2

Specifications, Military, MIL-S-25879, second line: Delete "Fine" and substitute "Line".

PAGE 7

3.4, First sentence, line 2: Delete "design, construction, and workmanship" and substitute "design and construction".

PAGE 11

3.4.4.1.4, line 2: Delete "MIL-STD-810" and substitute "MIL-T-5422".

PAGE 11

3.4.4.3, line 2: Delete "Class 1" and substitute "Class 1/A".

PAGE 12

TABLE II, CE03/04: Add to end of sentence: "Transmit: Emissions up to 10 dB above spec limit at frequencies between 80 KHz and 210 KHz"

TABLE II, CE06, Transmit: Delete "No exceptions" and substitute "Compliance with paragraph 3.6.1.14.11.4"

TABLE II, RE02, Transmit: Delete "Transmit frequency up to 35dB above limit", and substitute "Transmit frequency for reference only."

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TABLE II, CS02, Add: "In TR+G Receive Mode, the signal susceptibility requirement may be reduced by 10dB."

TABLE II: Delete "CS04" and substitute with "CS04/08".

TABLE II, RS03, Receive: Delete sentence in its entirety, and substitute:  
"Susceptibility limit reduced to 0.1 volt/meter at frequencies offset  $\pm$  29MHz or  $\pm$  58MHz from harmonics of the first and second injection frequencies."

PAGE 13

TABLE III, Power density column: Delete "20", "160", "100" and "0.106" and substitute: "10.6" in six locations where deletions occurred.

TABLE III, V/M (ref) column: Delete "275", "775", "610", and "20" and substitute: "200" in six locations where deletions occurred.

PAGE 15

3.4.8, Delete second sentence and items a thru f.

PAGE 16

Figure 2, Delete "J4" designation and remove pictorially.  
Delete "25.9 (1.02) REF" dimension.  
Delete "63.5 (2.50) REF" dimension.

PAGE 17

Figure 3, Delete "J4" designation and remove pictorially.  
Delete "11.4 (.45) REF" dimension.

PAGE 18

3.6.1.1, a. Low VHF (FM), line two: Delete "homing".

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3.6.1.2: Add the following Cautionary Note:

"CAUTIONARY NOTE  
ARC-182 SERIAL CONTROL INTERFACE SPECIFICATION

All devices connected to the serial data bus should read and decode all data information. Further, the device should decode command word information to compare data sent versus data responses, to insure that no inconsistencies have occurred, either as a result of false clock pulses, bit transitions or external interference."

3.6.1.2, Add sentence 2: "Further definition of the serial interface is provided in MIL-C-85666."

3.6.1.3d. line 1: Delete "ADF/homing mode" and substitute "ADF mode". In line 4: Delete "or homing".

PAGE 22

TABLE V, Function column: Delete "/Homing (Right)".

TABLE V, Delete line: "J4 TPS-Bendix P/N 7037-8 Homing (left)".

3.6.1.9, Add "From +71°C to +95°C ambient temperature, the carrier frequency shall be within + 10 parts per million (± 10 Hz per MHz) of the selected operating frequency."

PAGE 23

3.6.1.12, line 1: Delete "three" and substitute "two".  
line 7: Delete "Two RF connectors" and substitute "An RF connector".  
line 8: Delete "and homing".  
line 9: Delete "/homing"  
line 10: Delete "and J4".  
line 11 and 14: Delete "/homing"

3.6.1.12.1, Delete from first sentence, lines 3 and 4 : "to switch between the ADF and homing antennas on the J3 antenna port".  
Delete from second sentence, line 5: "/homing".

3.6.1.13, line 3: Second sentence following "(dBm)" add "are at the input terminals and".

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3.6.1.13.4.1, Following last sentence: Add "From +71°C to +95°C ambient temperature, the audio output shall be 150mW minimum."

PAGE 28

3.6.1.13.16, line 3: Delete "8.0 KHz" and substitute "2.4 KHz".

3.6.1.13.17, lines 3 and 4: Delete "/homing".

PAGE 29

3.6.1.13.17.7: Delete in its entirety.

3.6.1.13.17.7.1: Delete in its entirety.

3.6.1.13.17.7.2: Delete in its entirety.

3.6.1.13.17.7.3: Delete in its entirety.

PAGE 30

3.6.1.13.17.7.5: Delete in its entirety.

3.6.1.13.18, line 3: Delete "/homing."

3.6.1.13.18.1, line 9: Delete "to over 2.75 volts by" and substitute "by 20dB to a range of 1.5V to 4.5 VRMS".

PAGE 33

3.6.1.14.8.2.3, line 5: Following second sentenc: Add "From + 71°C to +95°C ambient temperature, the distortion shall be not greater than fourteen percent."

3.6.1.14.8.2.3, line 10: Following the last sentence: Add "From +71°C to +95°C ambient temperature, the demodulated audio harmonic distortion shall be not greater than sixteen percent."

PAGE 34

3.6.1.14.8.3.4, line 2: Delete "25" substitute "20".

3.6.1.14.8.4, First line after table and following "operation": Add ",with antenna isolation of 50 dB,".

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PAGE 34 and 35

3.6.1.14.9: Delete in its entirety.

PAGE 35

3.6.1.14.14, line 1: Delete "CASS/DICASS operation" and substitute "CASS/DICASS OPERATION (RT-1498/ARC only)".  
Delete "radio set" and substitute "RT-1498/ARC".

PAGE 36

TABLE XII, 118-174 MHz, 4th harmonic: Delete "-66", substitute "-62",  
5th harmonic, delete "-66", substitute "-55".

TABLE XII, 225-400 MHz, 4th harmonic: Delete "-66" substitute "-55".

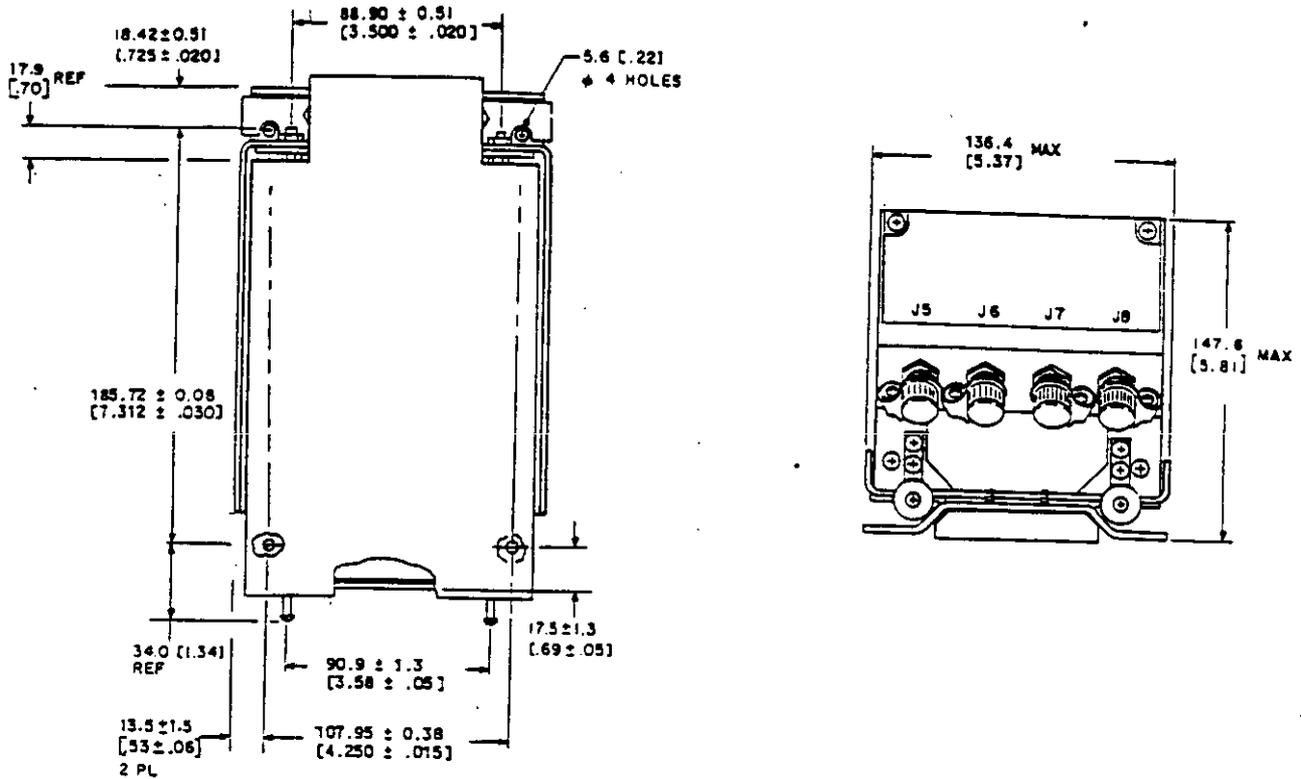
PAGE 39

3.6.1.18.f, Delete this subparagraph in its entirety.

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Delete Figure 4 and substitute new Figure 4.



DIMENSIONS ARE IN MILLIMETERS [INCHES]

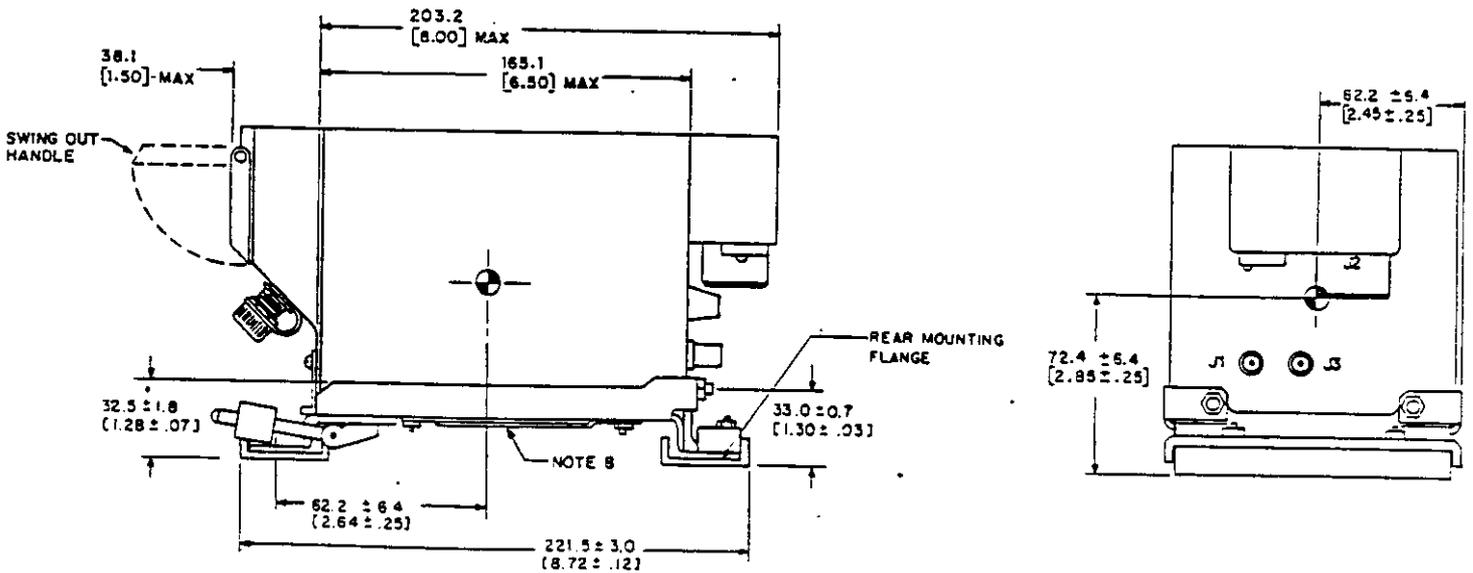


FIGURE 4. Electronic Equipment Mounting Base MT-4934/ARC and Radio Receiver-Transmitter RT-1250A/ARC, Outline and Mounting Dimensions

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Figure 5, Top right view: Delete "170.05, (6.695)" and substitute "172.9, (6.81)".

Figure 5: Delete in three places "NOTE 2".

Figure 5, Lower right view: Delete "J4" designation and remove pictorially.

PAGE 54

4.5.4.1, Third sentence: Delete in its' entirety and substitute:  
"The equipment shall be subjected to 4 1/2 hour of random vibration with equipment operating prior to the start of the temperature cycling and 4 1/2 hours of random vibration with equipment operating between temperature cycles 6 and 13."

PAGE 59 and 60

TABLE XVII: Delete "VHF Homing Indicator ID-1351/A SCS-405"  
Delete "C-10320A/ARC" and substitute "C-11628".  
Delete "SA-2157A/ARC" and substitute "SA-2498".

PAGE 62

TABLE XVIII, Pin 11: First sentence, line 1: Delete "applique" substitute "control".

TABLE XVIII, Pin 11: Add to end of Characteristics "When have quick control is not connected, Pin 41 must be HI."

PAGE 63

TABLE XVIII, Pin 18, Characteristics: Delete in its' entirety and substitute "1" = 4.8 VDC  $\pm$  0.5 VDC". "0" = 0.0 VDC  $\pm$  0.5 VDC."

TABLE XVIII, Pin 21: Delete all text and add under function heading "SPARE"

TABLE XVIII, Pin 22, Characteristics line 1: Add "(RT-1498/ARC)".

TABLE XVIII, Pin 22: Add a line 2 of data: in the Function column, Add "SPARE" and in the characteristics column add "(RT-1250A/ARC)" and I/O column insert "-".

TABLE XVIII, Pin 24: Delete all text and add under function heading "SPARE"

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TABLE XIX, NOTE, line 5: Delete "will be suppressed" and substitute "in the status word will be suppressed".

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