

3 August 1977

SUPERSEDING
MIL-H-11134D (Sig C)
7 October 1960, and
MIL-M-11095A (Sig C)
13 August 1953

MILITARY SPECIFICATION

HANDSET H-33()/PT

This specification is approved for use by the Electronics Command, Department of the Army, and is available for use by all Departments and Agencies of the Department of Defense.

- 1. SCOPE
- 1.1 This specification covers one type of handset having a carbon microphone; designated as Handset H-33()/PT. (See 6.1 and 6.3.)
- 2. APPLICABLE DOCUMENTS
- 2.1 <u>Issues of documents</u>. The following documents of the issue in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commanding General, US Army Electronics Command, ATTN: DRSEL-RD-TS-S, Fort Monmouth, N.J. 07703 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.



SPECIFICATIONS

FEDERAL

T-T-871	Twine, Fibrous Cotton
NN-P-71	Pallet, Materials-handling, Wood
QQ-S-781	Strapping, Steel, Flat and Seals
PPP-B-566	Box, Folding, Paperboard
PPP-B-585	Box, Wood, Wirebound
PFP-B-601 PPP-B-621	Boxes, Wood, Cleated-Plywood
PPP-B-621	Boxes, Wood, Nailed and Lock-Corner
PPP-E-636	Boxes, Fiber
PPP-B-640	Box, Fiberboard, Corrugated, Triple Wall
PPP-C-843	Cushioning material, Cellulosic
PPP-F-320	Fiberboard, Corrugated and Solid Sheet Stock
PPP-S-760	Strapping, Nonmetallic (and Connectors)
PPP-T-97	Tape, Pressure-Sensitive Adhesive

MILITARY

MIL-P-116	Preservation-packaging, Methods of
MIL-P-11268	Parts, Materials, and Processes Used in
•	Electronic Equipment
MIL-M-13231	Marking of Electronic Items
MIL-F-14072	Finishes for Ground Electronic Equipment

STANDARDS

FEDERAL

FED-STD-356		Commercial	Packaging	of	Supplies	and
•	•	Equipmen	nt		_	

MILITARY

MIL-STD-105	Sampling Procedures and Tables for In-
	spection by Attributes
" MIL-STD-129	Marking for Shipment and Storage
MIL-STD-147	Palletized and Containerized Unit Loads
MIL-STD-202	Test Methods for Electronic and Electrical
	Component Parts



MILITARY

MIL-STD-252 Wired Equipment, Classification of Visual and Mechanical Defect

MIL-STD-454 Standard General Requirements for Electronic Equipment

MIL-STD-810 Environmental Test Methods

DRAWINGS

ELECTRONICS COMMAND

SC-GL-57501	Gage Set for U-77/U, U-126/U, U-127/U, U-161/U, U-163/U
SC-C-61800	Microphone Flament M-35/U
SC-D-76326	Handle Assy
SC-DL-105364	Handset H-33()/PT
SC-C-105379	Receiver Element Assy
SC-B-105380	Insert

NAVY

SK-N-864 Simulated Gun Blast Producing Equipments

(Copies of documents required by contractors in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer).

2.2 Other publications. The following documents form a part of this specification to the extent specified herein. Unless otherwise indicated, the issue in effect on date of invitation for bids or request for proposal shall apply.

AMERICAN NATIONAL STANDARUS INSTITUTE (ANSI)

S3.7 - Coupler Calibration of Earphones

S1.10 - Calibration of Microphones

S1.12 - Specifications for Laboratory Standard Microphones

(Application for copies should be addressed to the American Mational Standards Institute, 1430 Broadway, New York, N.Y. 10018.)



INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

258 - Test Procedure for Clost-Talking Pressure-Type Microphones

(Application for copies should be addressed to the IEEE Order Dept., 145 Hoes Lane, Piscataway, N.J. 08854).

(Technical society and technical association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.)

3. REQUIREMENTS

- 3.1 <u>First Article</u>. When specified in the contract or purchase order, the contractor shall furnish sample units for first article inspection and approval (See 4.3).
- 3.2 <u>Construction</u>. The equipment shall be constructed in accordance with the requirements of this specification and Drawing and Data List SC-DL-105364 (including the requirements for parts, materials and processes thereon) (See 4.4).
- 3.3 Parts. materials and processes: general. In addition to the requirements of this specification, the requirements of MIL-P-11268, including the selection requirements therein, shall apply (See 4.4).
- 3.4 <u>Finish</u>. The equipment shall be finished in accordance with MIL-F-14072 and the equipment drawings (See 4.4).
- 3.5 Marking. Marking shall conform to Specification MIL-M-13231 (See 4.4).
- 3.6 Performance characteristics.
- 3.6.1 <u>Insulation resistance</u>. The insulation resistance between connector pins intended to be insulated from each other and between all pins connected together and external metal shall be 10 megohms minimum.
- 3.6.2 Operation. The handset shall transmit and receive intelligible voice signals without buzzing, rattling or other spurious sounds. Transmission shall be possible only with the push-to-talk switch depressed.
- 3.6.3 <u>Microphone (M-35/U)</u>.



3.6.3.1 Response.

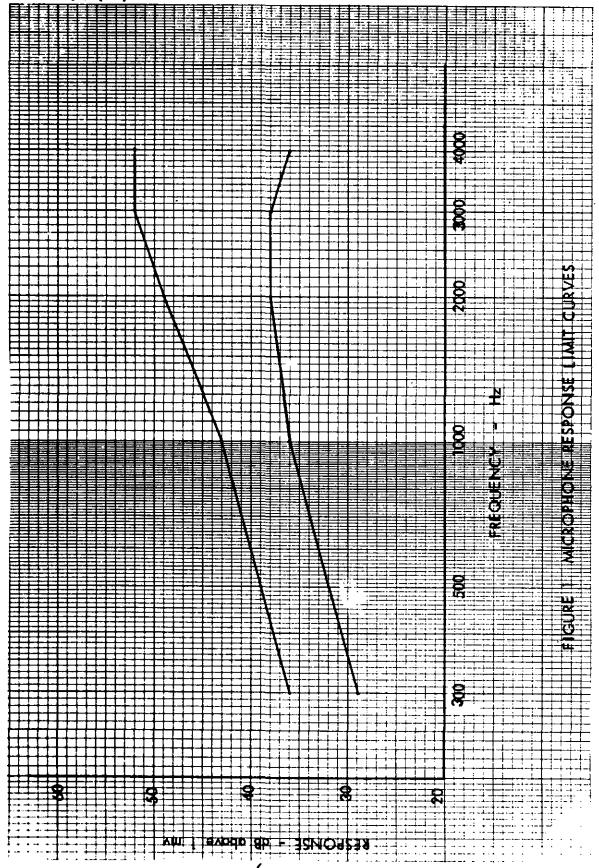
a. With the plane of the acoustic entrance vertical, a bias current of 85 milliamperes direct current (madc) and a sound pressure input of 28 dynes per square centimeter, the power output of the microphone in the range of 300 to 4000 Hertz (Hz) shall fall within the envelope of Figure 1. For any bandwidth indicated below for the various frequency ranges, the change in response from the lowest to the highest frequency in the band shall not exceed the limits shown.

Eandwidth (Hz)	Frequency Range (Hz)	Change in	Response (dB)
100	300-1000	0	+3
300	1000-2000	-1	+5
300	2000-3000	-2	+1
200	3000-3500	-3	+2.5
500	3500-4000	-5	+3

- b. The response of the microphone shall be within 5 dB of the response obtained in a., above, when measured with the microphone rotated in a vertical plane +90, -90, +45 and -45 degrees.
- c. With the plane of the acoustic entrance vertical, a bias voltage of 1.5 volts direct current (vdc) and a sound pressure input of 28 dynes per square centimeter, the power output of the microphone shall be not less than the values shown below.

Frequency (Hz)	Response (dB above 1 my)		
300	9		
500	14		
1000	. 22		
2000	28		
3000	29		

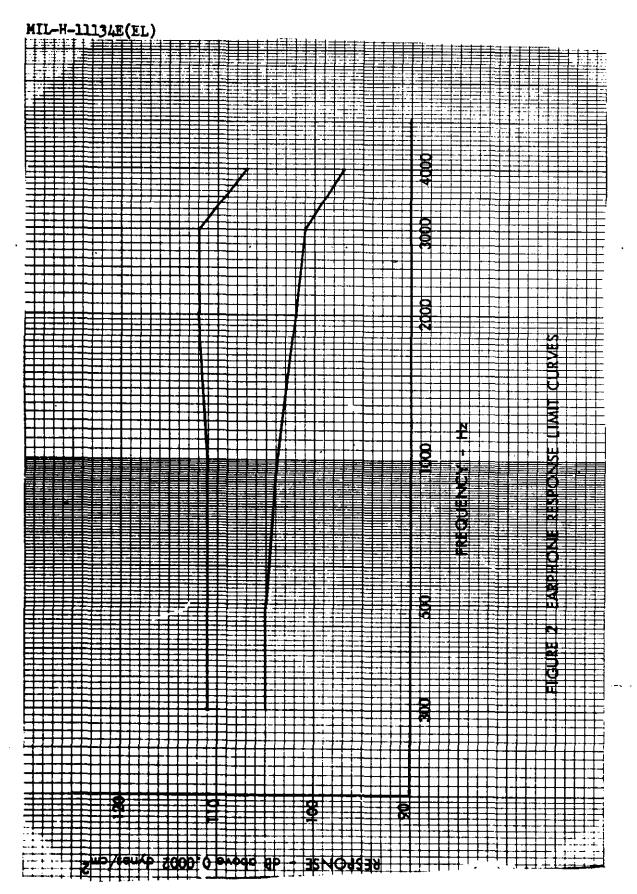




- 3.6.3.2 <u>Impedance</u>. The output impedance of the microphone shall be 40 ohms $\pm 20\%$.
- 3.6.3.3 <u>Unagitated current</u>. With a bias voltage of 6 vdc and a load resistance of 30 ohms, the bias current through the microphone prior to agitation (preconditioning) shall not exceed 125 madc.
- 3.6.3.4 Carbon noise. Carbon noise shall not exceed 2.25 millivolts (mv).
- 3.6.3.5 Aging. The frequency response of the microphone following vibration shall be within 2 dB of the response prior to aging. In addition, carbon noise shall not exceed 12.7 mv and the impedance shall not have increased by more than twice the value prior to aging.

3.6.4 Earphone.

- 3.6.4.1 Response. The acoustic output of the earphone shall be within the limits shown in Figure 2 when 2 milliwatts (1.1v) at frequencies in the range of 300 to 4000 Hs is applied to the test circuit.
- 3.6.4.2 Overload. The earphone shall show no more than 3 dB change from its original response curve, after being subjected to the test specified in 4.7.2.4.2.
- 3.6.4.3 <u>Impedance</u>. The input impedance of the earphone at 1000 Hs shall be 300 ohms plus 50 or minus 30 ohms.
- 3.6.5 Push to talk switch (See 4.7.2.5).
- 3.6.5.1 <u>Make-break sequence</u>. The microphone contacts shall make before the control contacts make. The control contacts shall break before the microphone contacts break.





- 3.6.5.2 Endurance. The switch shall be capable of 500,000 make-break operations when tested in accordance with 4.7.2.5.2.
- 3.7 <u>Fnvironmental</u>. The equipment shall meet the following environmental conditions.

3.7.1 Temperature.

- 3.7.1.1 Low. During and after testing as specified in 4.8.1.1, the equipment shall meet the requirements of 3.6.3.1 and 3.6.4.1 with no more than a 2 dB change in response.
- 3.7.1.2 <u>High</u>. During and after testing as specified in 4.8.1.2, the equipment shall meet the requirements of 3.6.3.1 and 3.6.4.1 with no more than a 2 dB change in response.
- 3.7.2 <u>Humidity</u>. The equipment shall exhibit no physical damage such as corrosion, rust, blistering, swelling or deterioration of parts and materials, and shall meet the requirements of 3.6.3.1 and 3.6.4.1 during the operating times specified in 4.8.2.
- 3.7.3 Altitude (Elevation). The equipment shall meet the requirements of 3.6.3.1 and 3.6.4.1 with no more than a 5 dB change in frequency response at altitudes up to 10,000 feet above sea level after storage at 50,000 feet above sea level.
- 3.7.4 <u>Leakage (Immersion)</u>. The equipment shall meet the requirements of 3.6.1, 3.6.3.1 and 3.6.4.1 following the test of 4.8.4. There shall be no evidence of water leakage into the handset.
- 3.7.5 <u>Plast</u>. The equipment shall meet the requirements of 3.6.3.1 and 3.6.4.1 with no more than a 4 dB change in frequency response for the microphone and 1.5 dB for the earphone following thirty rounds of blast at a peak pressure of 9.5 pounds per square inch (psi).
- 3.7.6 <u>Vibration</u>. The equipment shall meet the requirements of 3.6.1 and 3.6.2 following the tests of 4.8.6.
- 3.8 <u>Interchangeability</u>. Like units, assemblies, subassemblies and replaceable parts shall conform to Requirement 7 of MIL-STD-454 (See 4.9).

- 3.9 Workmanship. The equipment shall be manufactured and assembled in accordance with Requirement 9 of MIL-STD-454 (See 4.6).
- 4. QUALITY ASSURANCE PROVISIONS
- 4.1 Responsibility for Inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure that supplies and services conform to prescribed requirements.
- 4.2 <u>Classification of Inspection</u>. The inspection requirements specified herein are classified as follows:
- a. First Article inspection (See 4.3). Does not include packaging.
 - b. Inspections covered by subsidiary documents (See 4.4).
 - c. Quality conformance inspections.
- (1) Quality conformance inspection of equipment before packaging (See 4.5).
 - (2) Quality conformance inspection of packaging (See 4.10).
- 4.3 <u>First Article</u>. Unless otherwise specified in the contract or purchase order, the First Article inspection shall be performed by the contractor.
- 4.3.1 First Article units. The contractor shall furnish nine First Article units of Handset H-33()/PT.

- 4.3.2 First Articla inspection. The First Article inspection shall consist of the inspections specified in subsidiary documents covering the items listed in 4.4, and the inspections specified for Group A, Group B and Group C (See Tables I,II,III respectively). The inspection shall be performed in the following order: 4.4, Group A and Group B for all units; and Group C as specified in Table III. After completion of Group C environmental tests, conforming units shall be reinspected and shall pass all Group A inspection.
- 4.3.3 <u>First Article data</u>. The First Article test plan and test report shall be furnished as required in the contract or purchase order.
- 4.3.4 <u>Failures</u>. One or more failures shall be cause for refusal to grant first article approval.
- 4.4 Inspections covered by subsidiary documents: The following shall be inspected under the applicable subsidiary document as part of the inspection required by this specification, and the inspection requirement specified in the contract or purchase order.

<u>Item</u>	Where required
Construction	3.2
Parts, materials and processes-general	3.3
Finish	3.4
Marking	3.5

- 4.5 Quality conformance inspection of equipment before packaging. The contractor shall perform the inspection specified in 4.4, 4.5.1 through 4.5.4. This does not relieve the contractor of his responsibility for performing any additional inspection which is necessary to control the quality of the product and to assure compliance with all specification requirements.
- 4.5.1 Group A inspection. Each unit on contract or purchase order shall be inspected for conformance to the inspections specified in Table I. Discrete lots shall be formed from units that pass this inspection. Factors of lot composition not defined herein or in the contract or purchase order, shall be in accordance with MIL-STD-105. Each lot shall be subject to sampling inspection, utilizing the procedures of MIL-STD-105, using the general inspection levels and AQLs indicated in Table I.

4.5.1.1 Order of inspection within Group A. Group A inspection shall be performed in an order satisfactory to the Government except that the operational inspection shall be last.

Table I. Group A inspection

Inspection	Req Para Insp Para	AQL		
		Tueb 1414	Major	Minor
Visual & Mechanical	3.9	4.6	1%	4%
Electrical				
Ins Resistance	3.6.1	4.7.2.1	1%	*
Operation	3.6.2	4.7.2.2	1%	*
Microphone				
Response	3.6.3.1	4.7.2.3.1	1%	#
Impedance	3.6.3.2	4.7.2.3.2	1%	#
Earphone				
Response	3.6.4.1	4.7.2.4.1	1%	#
Impedance	3.6.4.3	4.7.2.4.3	1%	*

^{*} All electrical and operational defects are considered major.

^{4.5.2 &}lt;u>Group B Inspection</u>. Group B inspection shall normally be performed on inspection lots that have passed Group A inspection and on samples selected from units that have been subjected to and met the Group A inspection. This inspection shall conform to Table II and to the special inspection levels of Table I of MIL-STD-105.

^{4.5.2.1} Group B Sampling Plans. The Group B sampling plans for the AQLs listed in Table II shall be Inspection Level S-4.

4.5.2.2 Order of Inspection Within Group B. Group B inspection shall be performed in an order satisfactory to the government.

Table II Group B inspection

Inspection	Req Para	Insp Para	AQL
Make-break sequence Interchangeability	3.6.5.1 3.8	4.7.2.5.1 4.9	4.0% 6.5%
Microphone Unagitated	3.6.3.3	4.7.2.3.3	4.0%
Earphone Overload	3.6.4.2	4.7.2.4.2	4.0%

- 4.5.3 <u>Group C Inspection</u>. Group C inspection shall be performed on units that have passed Group A and Group B inspection. The inspection shall consist of the inspections specified in Table III.
- 4.5.3.1 Sampling for Group C inspection. For Subgroup 1, two samples each of the Handset shall be selected at random from each 500 units or fraction thereof produced. Each sample shall be tested to all tests of the Subgroup. For Subgroup II, five samples shall be selected at random from each 1000 units or fraction thereof produced. One sample shall be tested against each test. For Subgroup III, two samples shall be selected at random from each 2000 units or fraction thereof produced. One sample shall be tested against each test. The first samples of each test subgroup shall be selected from the first production lot.
- 4.5.3.2 Group C Failures. Actions required relative to Group C failures shall be as specified in the contract or purchase order.
- 4.5.4 Reinspection of Conforming Group C Sample Units. Unless otherwise specified, sample units which have been subjected to and passed Group C inspection may be accepted on contract provided all damage is repaired and the sample units are resubjected to and pass Group A and Group B inspection.

Table III Group C inspection

Inspection	Req Para	Insp Para
Subgroup I		
Carbon noise	3.6.3.4	4.7.2.3.4
Leakage(Tmmersion)	3.7.4	4.8.4
Subgroup II		
Temperature	3.7.1	4.8.1
Humidity	3.7.2	4.8.2
Altitude	3.7.3	4.8.3
Vibration	3.7.6	4.8.6
Aging	3.6.3.5	4.7.2.3.5
Subgroup III		
Endurance	3.6.5.2	4.7.2.5.2
Blast	3.7.5	4.8.5

^{4.6 &}lt;u>Visual and mechanical</u>. The equipment shall be examined for compliance with 3.9. Classification of defects shall be in accordance with MIL-STD-252.

4.7 Performance requirements.

- 4.7.1 Test equipment and procedures. Except as otherwise specified herein, test equipment and procedures shall conform to IEEE Standard 258 and ANSI S3.7.
- a. The secondary sound pressure reference standard shall be a Type L (not M or H) pressure microphone conforming to ANSI S1,12 calibrated in accordance with ANSI S1.10.
- b. The distance from the face of the microphone to the plane of the opening of the artificial voice shall be 0.25 inch. The voltage across the voice coil of the artificial voice shall be calibrated to provide a sound pressure level of 28 dynes per square centimeter in the frequency range of 300 to 4000 Hz.

- c. In the test circuit of Figure 2 of Standard 258, RL is 40 ohms non-inductive, C is 100 microfarad, Ebb is 24 vdc and the variable resistor is 250 ohms.
- d. The sound pressure level of 28 dynes per square centimeter (103dB) shall be used in place of the 94 dB specified in the IEEE Standard.
- e. Microphone and earphone tests of 4.7.2.3 and 4.7.2.4 shall be performed on the elements only. All other tests shall be performed with the elements installed in the handset. Measurements shall be made at the connector U-161 terminals.
- f. Continuous trace response data are required for the microphone element.

4.7.2 Methods of inspection.

- 4.7.2.1 <u>Insulation resistance</u>. The assembly shall be tested in accordance with Method 302, test condition B, of MIL-STD-202 to meet the requirements of 3.6.1. There shall be no evidence of arcing or insulation breakdown during the test.
- 4.7.2.2 <u>Operation</u>. Establish a test circuit by providing a battery bias supply between connector pins E and C, connect pin C to pin B through a 100 mf capacitor, and connect pin D to pin F and pin H to pin A. Speak into the microphone. Sidetone shall be heard in the earphone only when the push-to-talk switch is depressed (See 3.6.2).

4.7.2.3 Microphone.

4.7.2.3.1 Response.

- a. Perform the power response test of the microphone in the vertical position with a bias current of 85 made and determine compliance with 3.6.3.la.
- b. Perform the power response test of the microphone as in a., above, with the microphone rotated in a vertical plane +90, -90, +45 and -45 degrees and determine compliance with 3.6.3.1.b.
- c. Perform the power response test of the microphone as in a., above, with the bias supply of battery and variable resistor replaced with a bias battery of 1.5 vdc and determine compliance with 3.6.3.1.c.

- 4.7.2.3.2 <u>Impedance</u>. Using the test circuit of 4.7.2.3.la, 1000 Hz, measure the voltage (dc) across the microphone and the direct current flowing through it and determine that their ratio complies with 3.6.3.2.
- 4.7.2.3.3 <u>Unagitated current</u>. The microphone under test shall not be preconditioned (agitated) prior to this test. Use the test circuit as in 4.7.2.3.la, except that the bias voltage and variable resistor combination shall be replaced with a bias battery of 6 vdc and the load resistor reduced to 30 ohms. During a ten minute period, measure the peak current flowing through the microphone for compliance with 3.6.3.3.
- 4.7.2.3.4 <u>Carbon noise</u>. Using the test circuit as in 4.7.2.3.1a, except that the bias current shall be adjusted to 170 made and the sound pressure level shall be 70 dynes per square centimeter, perform the test in accordance with the IEEE Standard and determine compliance with 3.6.3.4.
- 4.7.2.3.5 Aging. Perform the measurements of Frequency response, Impedance and Carbon Noise, before and after the vibration sweep specified in the IEEE Standard to determine compliance with 3.6.3.5.

4.7.2.4 Earphone.

- 4.7.2.4.1 Response. Constant-available-power (2mw) frequency response measurements shall be made at 300, 500, 1000, 2000, 3000 and 4000 Hz. Response measurements shall be made in accordance with ANSI S3.7 in a Type-1 Earphone Coupler except that the coupling weight shall be one kilogram. Determine compliance with 3.6.4.1.
- 4.7.2.4.2 Overload. Operate the earphone at ten volts, 400 Hz, for a period of 10 hours. Repeat the Response tests at the 2 milliwatt level for compliance with 3.6.4.3.
- 4.7.2.4.3 <u>Impedance</u>. Using the procedures described in AMSI S3.7, measure the impedance at 1000 Hs for compliance with 3.6.4.4.

4.7.2.5 Push-to-talk switch.

4.7.2.5.1 <u>Make-break sequence</u>. Connect suitable low current lamp indicating circuits to pins F and H of the connector (control circuit) and to pins E and D of the connector (microphone circuit). Slowly operate and release the push-to-talk switch and determine compliance with 3.6.5.1.

4.7.2.5.2 Endurance. Connect a resistive load in series with 24 volts IX between connector pins F and H (control circuit) and adjust the load to one ampere. Operate the switch to full travel and off at a rate of 25 to 60 cycles per minute for a total of 500,000 cycles. At the conclusion of the test, determine compliance with 3.6.5.1, 3.6.5.2 and 3.6.5.3.

4.8 Environmental conditions.

4.8.1 Temperature.

- 4.8.1.1 Low. The equipment shall be tested in accordance with Method 502.1, Procedure 1 of MIL-STD-810. The storage temperature shall be minus 55°C, maintained for four hours, and the operating temperature shall be minus 40°C. Prior to, during and following the test, the equipment shall meet the requirements of 3.7.1.1.
- 4.8.1.2 <u>High</u>. The equipment shall be tested in accordance with Method 501.1, Procedure 1 of MIL-STD-810. The storage temperature shall be 70°C, maintained for two hours and the operating temperature shall be 65°C. Prior to, during and following the test, the equipment shall meet the requirements of 3.7.1.2.
- 4.8.2 <u>Humidity</u>. The equipment shall be tested in accordance with Method 507.1, Procedure II of MIL-STD-810, with measurements made during the last five hour period of each cycle. Prior to, during and following the test, the equipment shall meet the requirements of 3.7.2.
- 4.3.3 Altitude. The equipment shall be tested in accordance with Method 500.1, Procedure 1 of MIL-STD-810 except that the pressure in Step 2 shall first be raised to 50,000 feet above sea level. Prior to, during and following the test, the equipment shall meet the requirements of 3.7.3.
- 4.8.4 <u>Leakage (Immersion)</u>. The equipment shall be tested in accordance with Method 512.1, Procedure 1 of MIL-STD-810 and meet the requirements of 3.7.4 prior to and following the test.

- 4.8.5 Blast. Mount the handset under test on the carriage of the Simulated Gun Blast Producing Equipment in accordance with U.S. Navy Drawing SK-N-864 with the front edge of the earphone element in the test plane and with its axis coincident with that of the explosion chamber. Subject the handset to 30 rounds of blast at a peak pressure of 9.5 psi. Determine compliance with 3.7.5.
- 4.8.6 <u>Vibration</u>. The equipment shall be tested in accordance with Method 201 of MIL-STD-202. Determine compliance with 3.7.6.
- 4.9 <u>Inspection for dimensional interchangeability</u>. The dimensions listed below shall be gaged to determine conformance to the physical interchangeability requirement of 3.8. When a dimension is not within specified or design limits, it shall be considered a major defect.
- a. Receiver Element dimensions shown on drawing SC-C-105379 and SC-B-105380.
 - b. Microphone Element dimensions shown on drawing SC-C-61800.
 - c. Decimal dimensions on Handle Assy drawing SC-D-76326.
- d. Connector U-161/U shall be inspected using gages per SC-GL-57501.
- 4.10 Quality conformance inspection of packaging. Fackaging shall be inspected in accordance with MIL-P-116 to determine conformance to the requirement of Section 5.
- 4.11 Rough handling test (packaging). When rough handling test in accordance with MIL-P-116 is required by the contract, the operational test of 4.7.2.2 shall be conducted to determine freedom from malfunction caused by rough handling.
- 5. PACKAGING
- 5.1 <u>Preservation</u>. Preservation shall be level A, B or Commercial, as specified (See 6.2).
- 5.1.1 <u>Lavel A</u>.
- 5.1.1.1 Cleaning. Handset H-33()/PT shall be cleaned in accordance with process C-1 of MIL-P-116.

- 5.].1.2 <u>Drying.</u> Handset H-33()/PT shall be dried in accordance with the applicable procedure of MIL-P-116.
- 5.1.1.3 Preservative application. None required.
- 5.1.1.4 Unit packing. Unit packing shall be in accordance with the methods prescribed in MIL-P-116 as specified herein.
- 5.1.1.4.1 <u>Technical literature</u>. Each technical literature shall be unit packed method IC-1.
- 5.1.1.4.2 Handset H-33()/PT. Each handset shall be individually unit packed Method III as follows: Secure the cord to the handset with twine conforming to T-T-871. Cushion each handset by wrapping with cushioning material conforming to PPP-C-843, type II. Place the cushioned item within a close-fitting box conforming to PPP-R-566, variety 2. Place the technical literature, unit packed as specified in 5.1.1.4.1, on top of the contents directly under the lid of the box. Close the box in accordance with the appendix of the box specification.
- 5.1.1.4.3 <u>Intermediate packing</u>. Multiples of 5 not to exceed 20 handsets, unit packed as specified in 5.1, shall be placed within a close-fitting fiberboard box conforming to PPF-B-636, W5c. Close the box in accordance with the appendix of the box specification.
- 5.1.2 <u>Level B</u>. Cleaning, drying, preservative application, unit packing and intermediate packing shall be as specified in 5.1.
- 5.1.3 <u>Commercial preservation</u>. Freservation shall be in accordance with FED-STD-356.
- 5.2 <u>Packing</u>. Packing shall be level A,B or Commercial, as specified (See 6.2). Shipping containers for level A and B shall be capable of stacking and supporting superimposed loads during shipment and storage without damaging the container(s) or its contents.

- 5.2.1 Level A. A quantity of Handset H-33()/PT, unit packed as specified in 5.1, shall be packed within a close-fitting box conforming to PPP-E-601, overseas type; PPP-E-621, style 4, class 2; or PPP-E-585, style 2 or 3, class 3. When the gross weight exceeds 200 pounds, or the container length and width is 48 x 24 inches or more and the weight exceeds 100 pounds, 3 x 4 inch skids, laid flat, shall be applied in accordance with the requirements of the container specification, or if not specified in the specification, in a manner which will adequately support the item and facilitate the use of material handling equipment. Closure and strapping shall be in accordance with the applicable container specification or appendix thereto except that metal strapping shall conform to QQ-S-781, type I, finish A.
- 5.2.1.1 Unitization. Palletization shall be required when: containers specified in 5.2.1 do not require skids; quantities per destination comprise a pallet load; and container size permits use of one of the pallet patterns of MIL-STD-147. A quantity of containers, packed as specified in 5.2.1, except that strapping may be omitted, shall be placed on a pallet, load type I, conforming to MIL-STD-147. The pallet shall conform to NN-P-71, type IV, group I or II woods. The load shall be "bonded" to the pallet by strapping conforming to QQ-S-781, type I, finish A, or shrink film.
- 5.2.2 Level B. A quantity of Handset H-33()/PT, unit packed as specified in 5.1, shall be packed within a close-fitting fiberboard box conforming to PPP-B-640, class 2, style E, or PPP-B-636, type CF, class weather-resistant. The gross weight of boxes conforming to PPP-B-640 shall not exceed 250 pounds. Closure shall be in accordance with the appendix of the applicable box specification. Reinforcing shall be by pressure-sensitive filament tape banding or nonmetallic strapping conforming to PPP-T-97 and PPP-S-760, respectively; selection of the material and application shall be in accordance with the appendix of the applicable box specification. When the gross weight exceeds 200 pounds, or the container length and width is 48 x 24 inches or more and the weight exceeds 100 pounds, containers will be pallet-mounted on pallets conforming to NN-P-71, group I or II woods. The load shall be "bonded" to the pallet by strapping conforming to QQ-S-781, type I, finish A, or shrink film. When a single unit is shipped to a single destination. no packing is required; the unit container shall serve as the shipping container. Reinforcing shall be as specified above.

- 5.2.2.1 Unitization. Palletization shall be required when quantities per destination comprise a pallet load. A quantity of Handset H-33()/PT, unit packed as specified in 5.1, shall be placed on a pallet, load type I, conforming to MIL-STD-147. The pallet shall conform to NN-P-71, type IV, group I or II woods. A fiberboard cap shall be employed over the load having two sides extending down the stacked load at least 12 inches to accommodate marking requirements. The cap shall be fabricated of fiberboard conforming to PPP-F-320, class weather-resistant, W5s or V3c. The load shall be "bonded" to the pallet by strapping conforming to QQ-S-781, type I, finish A, or shrink film.
- 5.2.3 <u>Commercial packing</u>. Packing shall be in accordance with FED-STD-356.

5.3 Marking.

- 5.3.1 <u>Military marking</u>. In addition to any special marking required by the contract or order, interior packs and exterior shipping containers shall be marked in accordance with MIL-STD-129.
- 5.3.2 Commercial marking. In addition to any special marking required by the contract or order, interior packs and exterior shipping containers shall be marked in accordance with FED-STD-356.

6. NOTES

- 6.1 Intended use. Handset H-33()/PT utilizes a 300 ohm earphone element, a 40 ohm carbon type microphone, a push-to-talk switch and a six foot (extended) retractile cord terminating in a ten pin audio connector (U-161/U). It is intended for use with radio equipment such as the AN/CRC-106.
- 6.2 Ordering Data. Procurement documents should specify the following:
- a. Title, number and date of this specification and any amendment thereto.
- b. Level A, level P or Commercial preservation and packing (See Section 5).
 - c. When the rough handling test is required (See 4.11).
 - d. The number of First Article samples required (See 4.3.1).

6.3 Nomenclature. The parentheses in the nomenclature will be deleted or replaced by a letter identifying the particular design; for example: H-33W/PT. The contractor should apply for nomenclature in accordance with the applicable clause in the contract.



- 6.4 Verification inspection. Verification by the Government will be limited to the amount deemed necessary to determine compliance with the contract and will be limited in severity to the definitive quality assurance provisions established in this specification and the contract. The amount of verification inspection by the Government will be adjusted to make maximum utilization of the contractor's quality control system and the quality history of the product.
- 6.5 Environmental. Environmental pollution prevention measures are contained in the packaging material specifications referenced herein. Refer to material specifications or procuring activity for recommended disposability methods.

Custodian:

Preparing Activity

Army - EL

Army - EL

Project No. 5965-A155





STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS: This form is provided to solicit beneficial comments which may improve this document and enhance its use. DoD contractors, government activities, manufacturers, vendors, or other prospective users of the document are invited to submit comments to the government. Fold on lines on reverse side, staple in corner, and send to preparing activity. Attach any pertinent data which may be of use in improving this document. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity. A response will be provided to the submitter, when name and address is provided, within 30 days indicating that the 1426 was received and when any appropriate action on it will be completed.

the 1426 was received and when any appropriate action on it will be completed. NOTE: This form shall not be used to submit requests for waivers, deviations or clarification of specification requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.			
DOCUMENT IDENTIFIER (Number) AND TITLE MIL-H-111 34E(EL) HA	NDSET H-33()/PT		
NAME OF ORGANIZATION AND ADDRESS OF SUBMITTER			
VENDOR USER MANUFACTURER			
1. HAS ANY PART OF THE DOCUMENT CREATED PROBLEMS OR REQUUSE? IS ANY PART OF IT TOO RIGID, RESTRICTIVE, LOOSE OR AMI A. GIVE PARAGRAPH NUMBER AND WORDING			
B. RECOMMENDED WORDING CHANGE			
C. REASON FOR RECOMMENDED CHANGE(S)	,		
Z. REMARKS			
SUBMITTED BY (Printed or typed name and address Optional)	DATE		

DD FORM 1426

FOLD

POSTAGE AND FEES PAID



OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

Commander
US Army Electronics Command
ATTN: DRSEL-RD-TS-S
Fort Monmouth, NJ 07703



