

MIL-H-83511/4A
~~25 JUNE 1984~~
SUPERSEDING
MIL-H-83511/4
4 April 1978

MILITARY SPECIFICATION SHEET

HEADSET - MICROPHONE,
H-161E/GR

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The complete requirements for acquiring the headset-microphone described herein shall consist of this specification and the latest issue of MIL-H-83511.

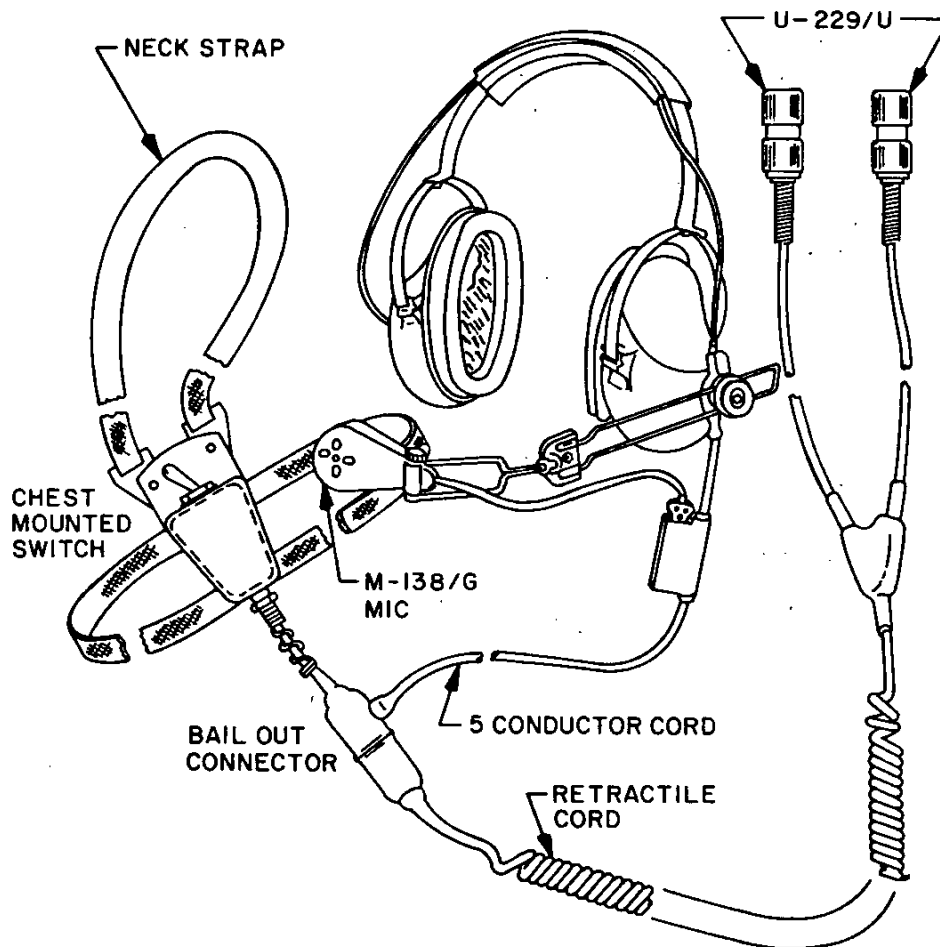
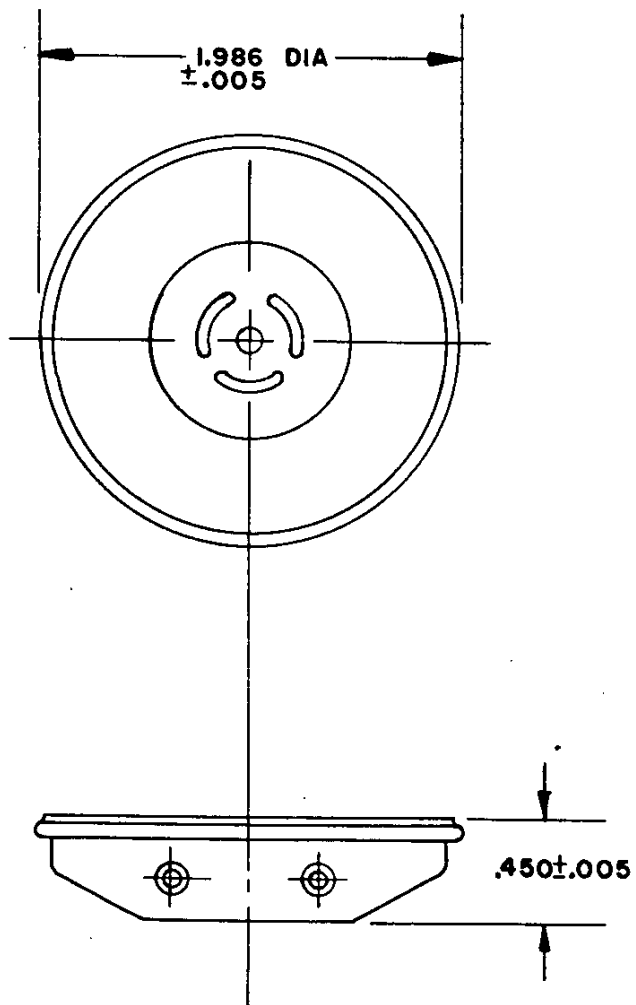


FIGURE 1. Headset-Microphone.

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INCHES	MM
.005	0.13
.450	11.43
1.986	50.44

FIGURE 2. Earphone.

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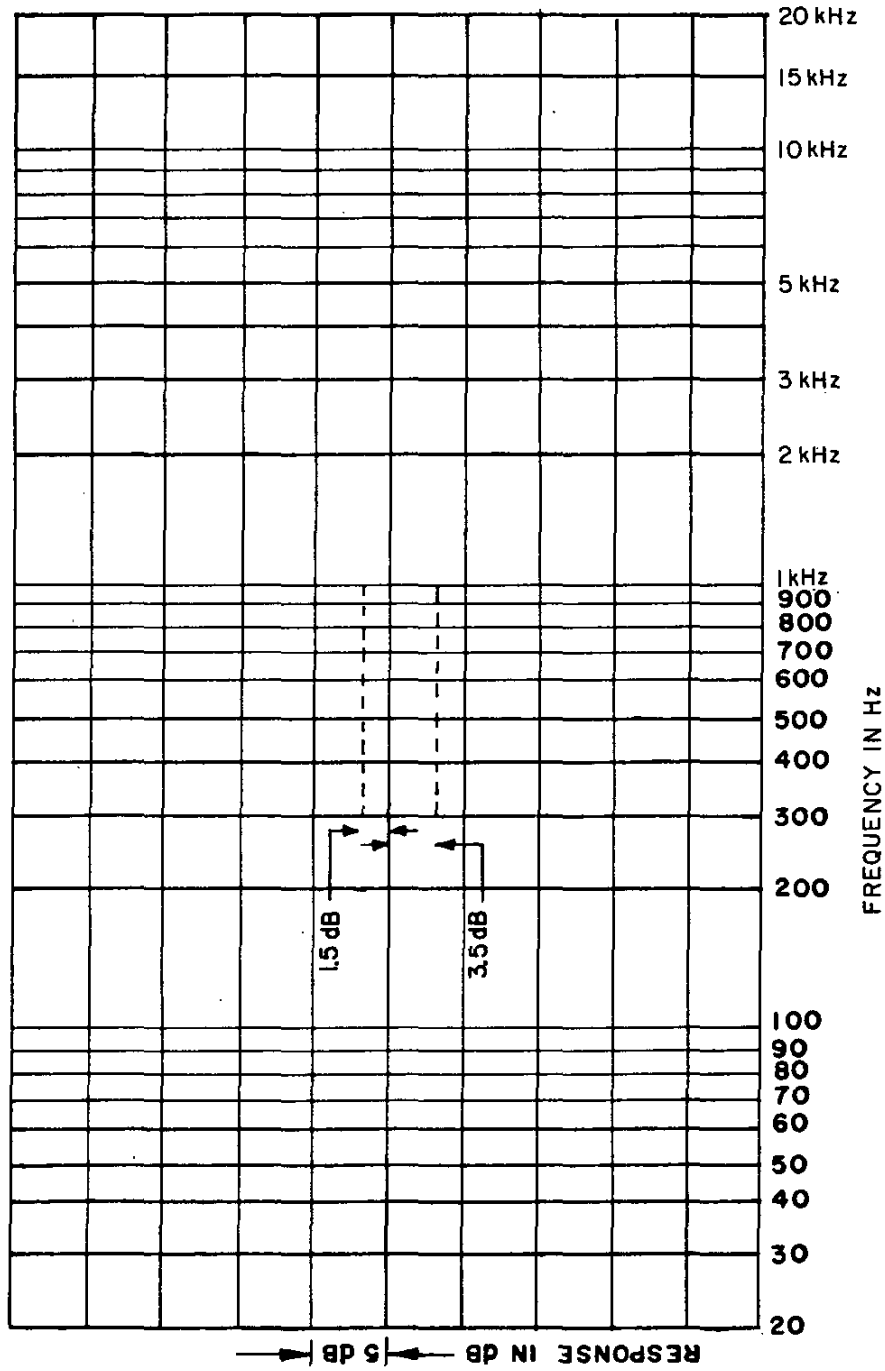


FIGURE 3. Frequency response limit curves.

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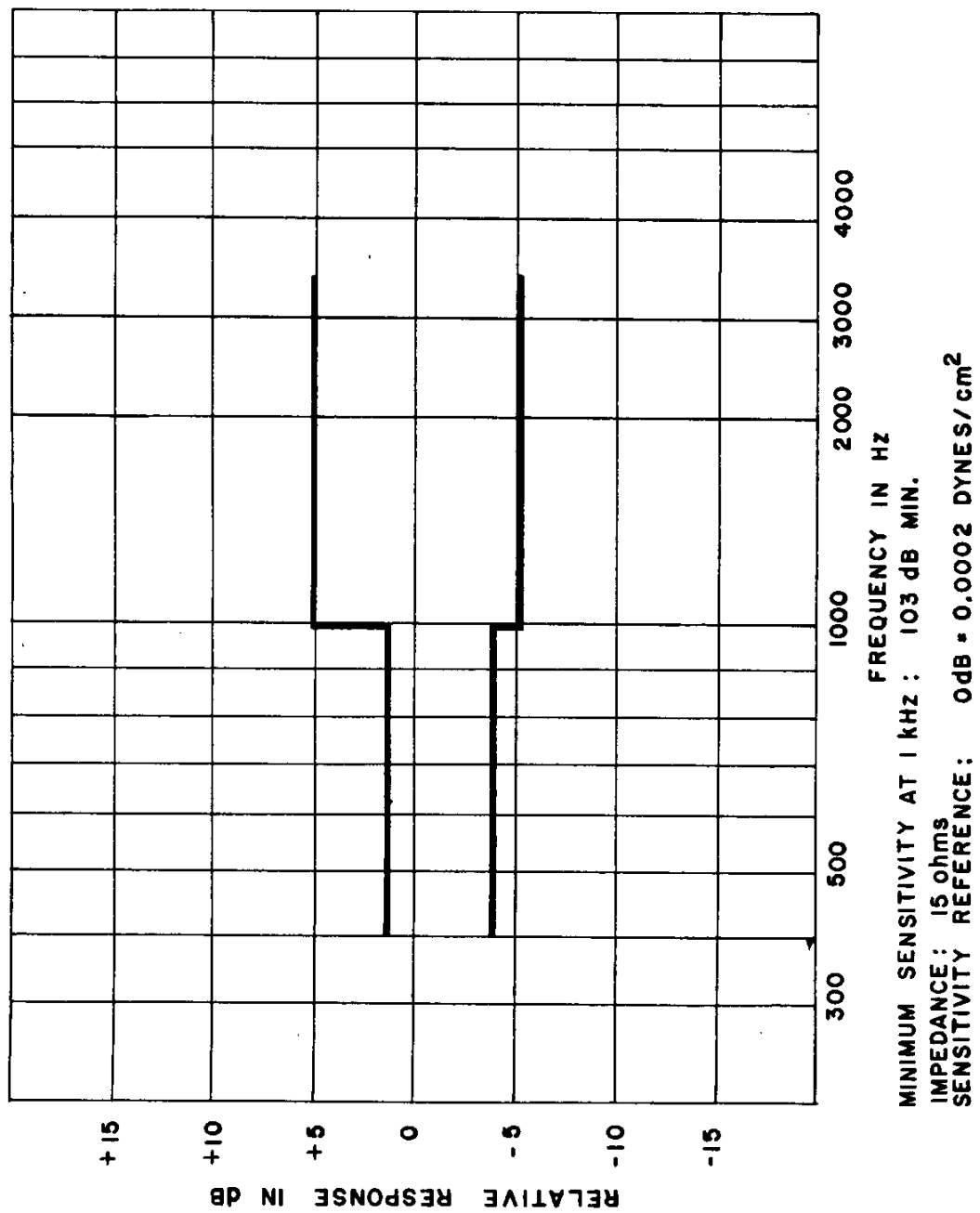
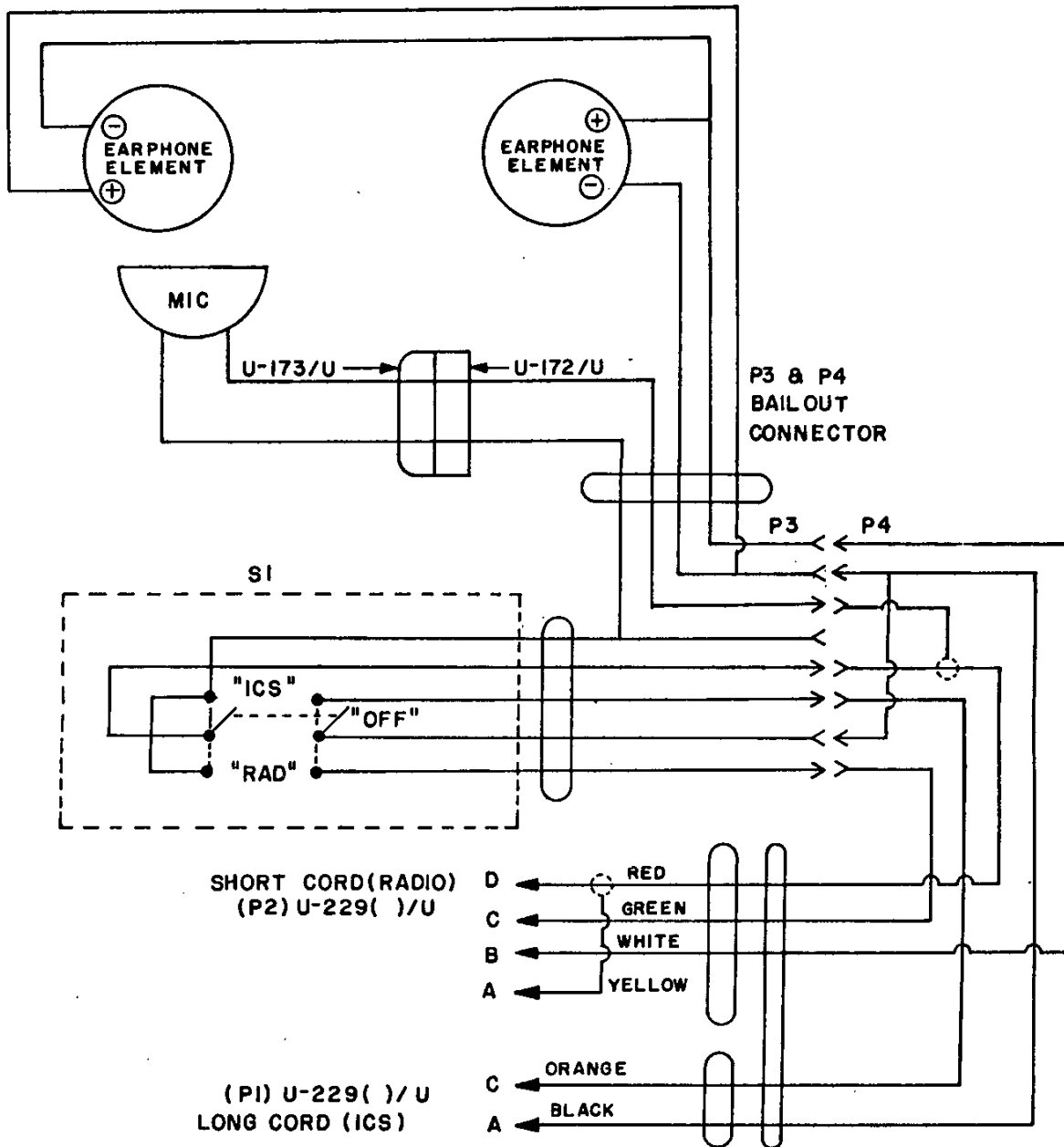


FIGURE 4. Earphone response limit.

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NOTE: Switch S1 is mechanically maintained in the "ICS" and "OFF" positions, but is spring returned from the "RAD" position to the "OFF" position. The "OFF" position is not labeled on the escutcheon.

FIGURE 5. Wiring diagram.

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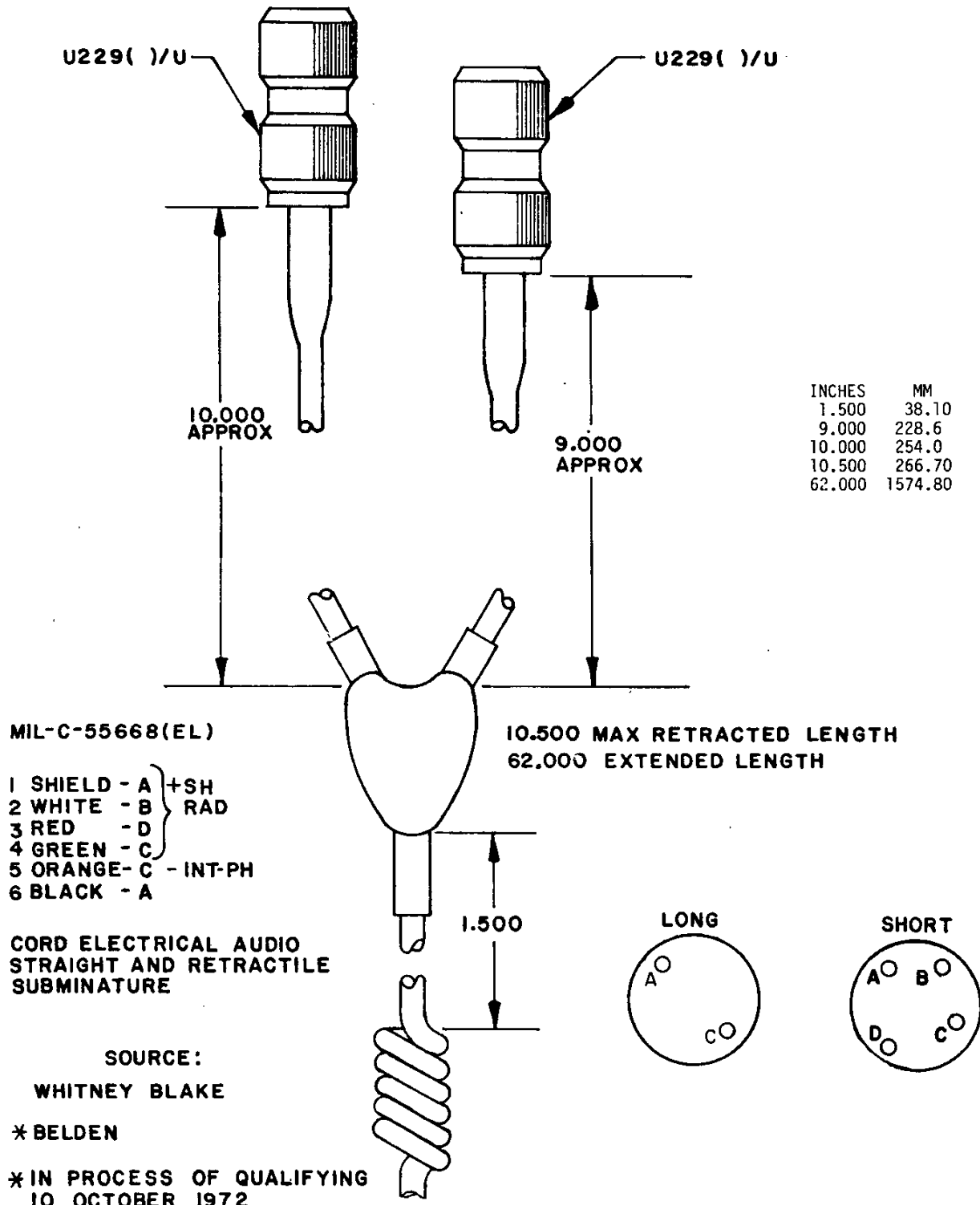


FIGURE 6. H-161E/GR cord below switch.

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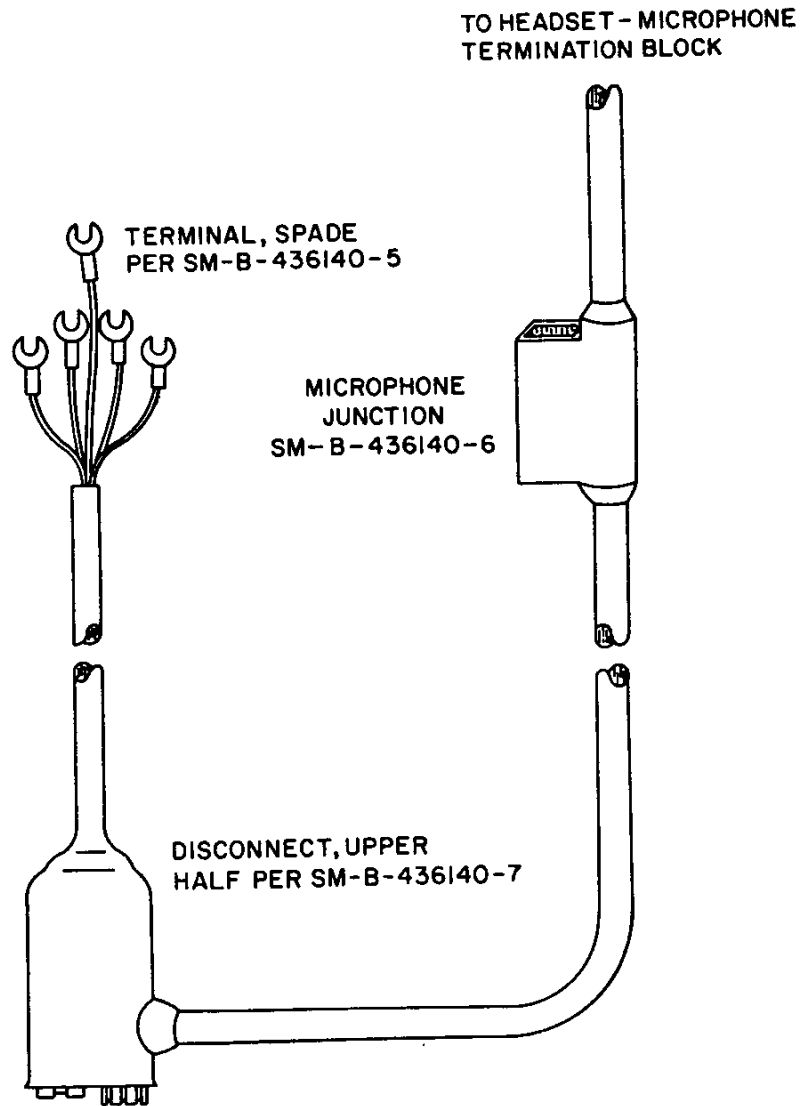


FIGURE 7. H-161E/GR cord above switch.

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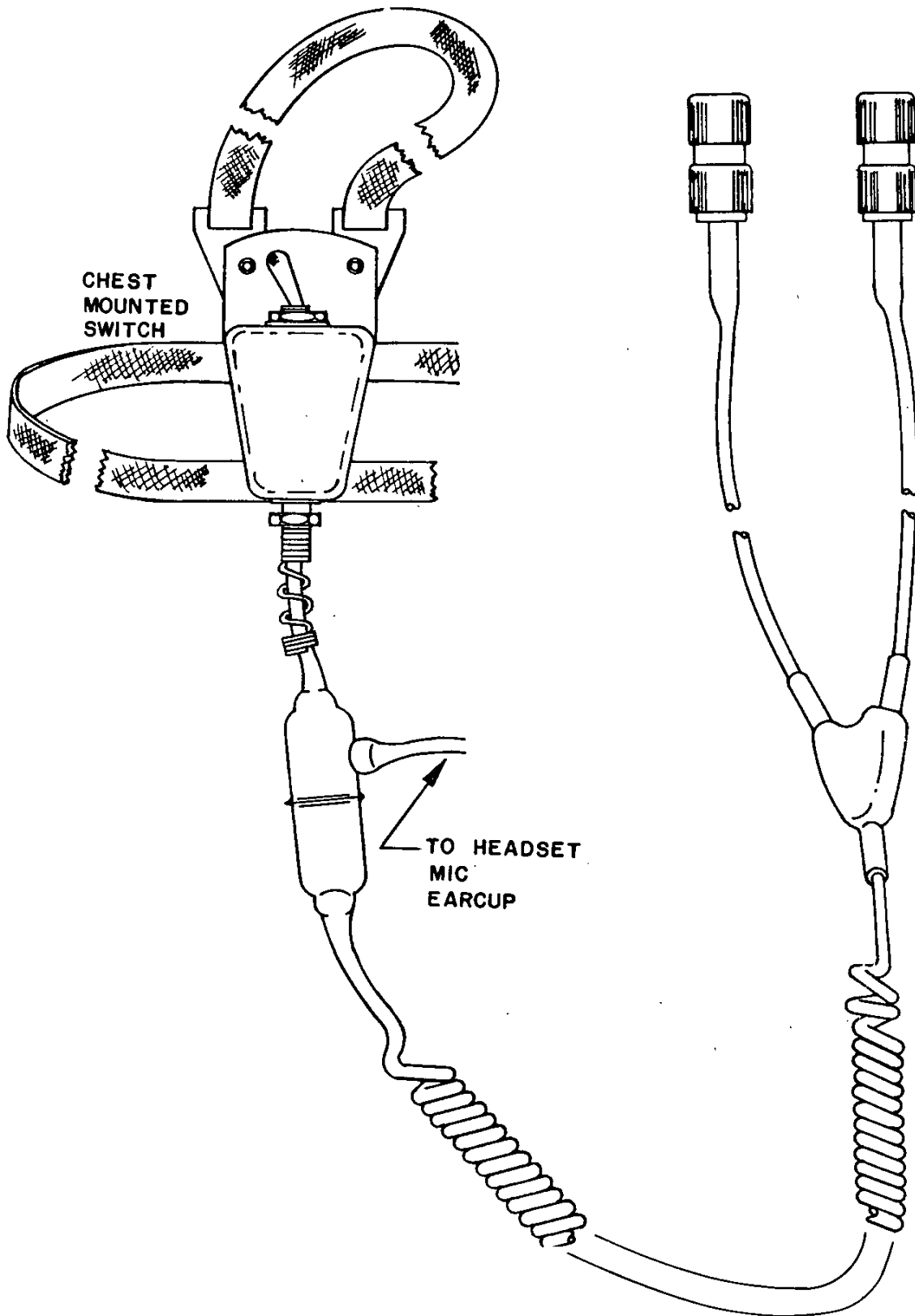


FIGURE 8. H-161E/GR cable and chest switch assembly.

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REQUIREMENTS:

Design and construction: See figure 1 and DL-SM-B-983686.

Earphones: Two required, Electro Voice model 993 or equal.

General configuration: See figure 2.

Frequency-response (earphone): Within the limits specified on figure 3.

Frequency-response range: 300 to 3,500 Hz.

Sensitivity: 106 dB re .0002 dynes/cm² at 1,000 Hz (see figure 4).

Distortion: 5 percent maximum within the frequency-response range.

Impedance: 1,000 ±100 ohms at 1,000 Hz with 1.0 volt applied across the terminals.

Insulation resistance: The insulation between any insulated metallic part of the earphone and the terminals shall withstand the test specified in the general specification without breakdown or decrease in insulation resistance below 1 megohm between these points.

Blast: 30 rounds of blast at peak pressure of 9.5 lb_f/in² with ±3 dB maximum degradation in performance after subsection to sensitivity and frequency-response tests.

Blowing sand and dust: Full performance while operating under desert conditions.

Microphone: M138, per MIL-M-26542/10.

Cordage: The headset-microphone H-161E/GR shall be provided with an electrical cable connected to each earphone and microphone, the other end of which is terminated in the bail out connector per SM-D-436304. Also terminated in this same connector is the chest switch assembly per SM-D-436135 (see figure 8). From the mating bail out connector, per SM-DL-436133, there shall be 49 inches of (retrax 6:1) cable terminated at a "Y" junction, the legs of which are 8 and 9 inches long, both terminated with separate U-229/U connectors. Connection shall be in accordance with wiring diagram and cable layout of interface (see figures 5, 6, and 7).

Cord assembly:

Headset to bail out connector - - - - -	25 inches (635.4 mm)
Chest mounted switch to bail out connector- - - - -	4 inches (101.6 mm)
Bail out connector to "Y" junction (retrax 6:1) - -	49 inches (1244.6 mm)
"Y" junction to U-229/U - - - - -	8 inches (203.2 mm)
"Y" junction to U-229/U - - - - -	9 inches (228.6 mm)

Switch: The switch connects to a retractile cord which is formed into a "Y" for intercom and radio-equipment connection.

Interchangeability: This assembly is completely interchangeable (functionally) with Headset-Microphone H-161(C)/GR. The chestset switch, earphone assemblies and microphone are completely interchangeable with those in the H-251/U equipment.

Revision letters are not used to denote changes due to the extensiveness of the changes.

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Custodians:
Army - ER
Navy - EC
Air Force - 85

Review activities:
Air Force - 99
DLA - ES

User activity:
Navy - MC

Agent:
DLA - ES

Preparing activity:
Air Force - 85
(Project 5965-0185)