

EXTRACT FROM - Army Ground Force - EQUIPMENT REVIEW BOARD - Part IIPROPOSED MILITARY CHARACTERISTICS FOR PORTABLE LIGHTWEIGHT SPEECH
SECURITY EQUIPMENT

AN/6SQ-4

1. Purpose. Purpose of this speech security equipment is to provide security to voice communication over wire and radio circuits in regimental, battalion, and company nets.

2. Operational Characteristics.

a. The equipment shall effectively conceal from an enemy the sense of a message transmitted through the equipment.

b. Concealment of the sense of message transmitted shall be effected through a changeable key or setting which is capable of being so varied that capture of the equipment will not lead to reduction of the security of voice transmissions. Design of the equipment shall provide security for a minimum period of ten hours subsequent to each key change.

c. Equipment shall be:

(1) Operable as terminal equipment and require no modification of the radio sets or telephone equipment with which it works.

(2) So designed that preliminary adjustment can be performed by trained wire or radio operators.

(3) So designed that the setting of the key and operation of equipment after installation and preliminary adjustment will be possible by an untrained operator.

(4) So designed, if practicable, that it can be connected by plugs into the microphone and headset cords of a radio set or into the handset cord of a field telephone.

d. The equipment shall provide a clear unmistakeable, uncomfortable warning to the user if transmission in the clear is occurring.

e. Equipment shall operate satisfactorily at ambient temperatures from -40° to +120°F.

f. Power consumption shall be as low as is feasible. Power supply shall, if practicable, be from the battery of the radio set with which the equipment is being used. Operation from a separate battery shall be possible.

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2. g. Equipment shall be capable, with the addition of a suitable vibrator type power supply and shock proof mounting, of being operated in a vehicle from standard 12-volt and 24-volt vehicle batteries.

3. Physical Characteristics.

a. The equipment shall be of such size and shape as to be readily carried on a standard quartermaster pack-board.

b. Equipment will not weigh more than 15 pounds exclusive of primary source of power.

c. Equipment shall be waterproof and capable of operating under all conditions encountered by tactical radio equipment.

PROPOSED MILITARY CHARACTERISTICS FOR PORTABLE SPEECH SECURITY EQUIPMENT AN/GSQ-5

1. Purpose. Purpose of this speech security equipment is to provide security to voice communication over wire and radio circuits in Army, Corps, and Division nets.

2. Operational Characteristics.

a. The equipment shall effectively conceal from an enemy the sense of a message transmitted through the equipment.

b. Concealment of the sense of message transmitted shall be effected through a changeable key or setting which is capable of being so varied that capture of the equipment will not lead to reduction of the security of voice transmissions. Design of the equipment shall provide security for a minimum period of 72 hours subsequent to each key change.

c. Equipment shall be:

- (1) Operable as terminal equipment and require no modification of the radio sets or telephone equipment with which it works.
- (2) So designed that preliminary adjustment can be performed by trained wire or radio operators.
- (3) So designed, if practicable, that it can be connected by plugs into the microphone and headset cords of a radio set or into the handset cord of a field telephone.

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2. c. (4) So designed that the setting of the key and operation of equipment after installation and preliminary adjustment will be possible by an untrained operator.
- d. The equipment shall provide a clear unmistakeable, uncomfortable warning to the user if transmission in the clear is occurring.
- e. Equipment shall operate satisfactorily at ambient temperatures from -40° F. to $+120^{\circ}$ F.
- f. Power consumption shall be as low as is feasible. Power supply shall, if practicable, be from the battery of the radio set with which the equipment is being used. Operation from a separate battery shall be possible.

3. Physical Characteristics.

- a. The equipment shall be of such size, shape, and weight as to be readily transported and operated in a 3/4 ton weapon carrier.
- b. Equipment shall be waterproof and capable of operating under all conditions encountered by tactical radio equipment.