

DEPARTMENT OF THE ARMY TECHNICAL MANUAL 11-487M
MILITARY STANDARDIZATION HANDBOOK

AUDIO ,EQUIPMENT



24 June 1966

FSC 5965

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, D. C., 23 June 1966

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NO: State AG (3)

USAR: None.

For explanation of abbreviations used, see AR 320-50.

DEPARTMENT OF DEFENSE
Washington 25, D.C.

MIL-HDBK-173
Audio Equipment

1. This standardization handbook was developed by the Department of Defense with the assistance of Industry in accordance with established procedures.
2. This publication was approved on 24 JUNE 1966 for printing and inclusion in the military standardization handbook series.
3. This document provides basic and fundamental information on audio equipment including chestsets, handsets, headsets, loudspeakers and microphones. It provides information and guidance to personnel concerned with selection of the above items used with audio amplifiers, intercommunication and radio receiving equipment. The handbook is not intended to be referenced in purchase specifications except for informational purposes, nor shall it supersede any specification requirements.
4. Every effort has been made to reflect the latest information on audio equipment. It is the intent to review this handbook periodically to insure its completeness and currency. Users of this document are encouraged to report any errors discovered and any recommendations for changes or inclusions to the U.S. Army Electronics Command (AMSEL-PP-TEP-2), Ft. Monmouth, N.J. or to the Defense Electronics Supply Center (DESC-EMT), Dayton, Ohio 45401.

CONTENTS
(Sections numerically listed by Federal Stock Number)

<u>Section</u>		<u>Page</u>
1	INTRODUCTION (General information, Purpose, and Scope) -----	1.1.1
2	CHEST SETS, ELECTRICAL-----	2.1.1
	(Alphabetical/numerical listing)-----	2.1.1
	<u>Federal stock number</u> <u>Item name/part number</u>	
	5965-164-8076 Chest Set H-18/GT -----	2.3.1
	5965-184-8084 Chest Set H-17/GT -----	2.2.1
	5965-164-8086 Chest Set H-28/GR -----	2.5.1
	5965-170-3630 Chest Set H-19/U -----	2.4.1
	5965-223-4495 Chest Set T-35-----	2.7.1
	5965-807-9159 Chest Set H-152U-----	2.6.1
3	LOUDSPEAKERS, PERMANENT MAGNET -----	3.1.1
	(Alphabetical/numerical listing)-----	3.1.1
	<u>Federal stock number</u> <u>Item name/part number</u>	
	5965-128-2983 Loudspeaker LS-103()/TIQ-2-----	3.2.1
	5965-221-5775 Loudspeaker AP-11-ST592-----	3.4.1
	5965-243-6420 Loudspeaker L8-166/U -----	3. 5.1
	5965-252-0803 Loudspeaker NT-491814-----	3.29. 1
	5965-280-7806 Loudspeaker 5A07-----	3.9.1
	5965-280-8475 Loudspeaker L-116/U -----	3.3.1
	5965-284-6579 Loudspeaker LS-306 ()/SIC-----	3.27.1
	5965-284-6708 Loudspeaker P5T-C596; 612833-----	3.10.1
	5965-284-7456 Loudspeaker M15-----	3.11.1
	5965-285-0744 Loudspeaker LS-11A-----	3. 12.1
	5965-296-1808 Loudspeaker Ls-387/SIC-----	3.25.1
	5965-296-2547 Loudspeaker LS-169/G -----	3.26.1
	5965-296-3398 Loudspeaker NT-49546 -----	3.13.1
	5965-296-6052 Loudspeaker PM-69E-----	3.14.1
	5965-518-4343 Loudspeaker LS-170 ()/PFP-1 -----	3.15.1
	5965-518-4344 Loudspeaker 12984 -----	3.16.1
	5965-519-6610 Loudspeaker SK8163-----	3.17.1
	5965-538-4485 Loudspeaker LS-180/U -----	3.8.1
	5965-543-0264 Loudspeaker 3A070T -----	3.18.1
	5965-581-9978 Loudspeaker SP8B -----	3.19. 1
	5965-583-4106 Loudspeaker LS-450/B -----	3.20.1
	5965-588-4870 Loudspeaker LS-455/U -----	3.7.1
	5965-608-0130 Loudspeaker LS-211/AIC-13 (3-mounting holes) -----	3.21.1
	5965-615-0758 Loudspeaker LS-444/WIH -----	3.22.1
	5965-636-1761 Loudspeaker LS-215 ()/U -----	3.23.1
	5965-636-2181 Loudspeaker LS-388/SIC -----	3.25.1
	5965-636-2462 Loudspeaker LS-305 ()/SIC-----	3.27.1
	5965-665-0590 Loudspeaker LS-203/U -----	3.24.1
	5965-710-5780 Loudspeaker LS-211/AIC-13 (6-mountig holes) -----	3.21.1
	5965-892-3597 Loudspeaker LS-474/U -----	3.28.1
	5965-892-3665 Loudspeaker LS-445/U -----	3.6.1

CONTENTS (Continued)
(Sections' numerically listed by Federal Stock Number)

<u>Section</u>		<u>page</u>
4	HEADSETS ----- (Alphabetical/numerical listing)-----	4.1.1 4.1.1
	<u>Federal stock number</u> <u>Item name/part number</u>	
	5965-160-1055 Headset HS-186A-----	4.9.1
	5965-160-2451 Headset 7161D -----	4.16.1
	5965-162-9056 Headset HS-32 -----	4.10.1
	5965-170-4815 Headset Model, "A" #.200-----	4.2.1
	5965-243-7782 Headset H-16 (/)U-----	4.3.1
	5965-253-1302 Headset P-104J535-1-----	4.14.1
	5965-256-8687 Headset 24076-----	4.17.1
	5965-280-3629 Headset NT-49985-A-----	4.13. 1
	5965-284-8925 Headset 159-----	4.15.1
	5965-285-0745 Headset NT-49507B-----	4.12.1
	5965-295-7160 Headset HS-33A -----	4.11.1
	5965-504-6370 Headset H-113/U-----	4. 5. 1
	5965-651-7372 Headset H-43B/U -----	4.4.1
	5965-841-1372 Headset H-158/AIC -----	4. 7.1
	5965-856-0552 Headset H-154/AIC -----	4. 6.1
	5965-892-3893 Headset H-220/U-----	4.8.1
5	HEADSET - MICROPHONES ----- (Alphabetical/numerical listing)-----	5.1.1 5.1.1
	<u>Federal stock number</u> <u>Item name/part number</u>	
	5965-221-0999 Headset-Microphone H-66/U-----	5.4.1
	5965-237-8048 Headset-Microphone H-62/U-----	5.2.1
	5965-237-8049 Headset-Microphone H-63/U-----	5.3.1
	5965-583-4865 Headset-Microphone H-108B/U-----	5. 5.1
	5965-670-2931 Headset-Microphone H-163/U-----	5.7.1
	5965-715-4031 Headset-Microphone H-172/U-----	5. 8.1
	5965-755-4656 Headset-Microphone H-157/AIC -----	5. 6.1
6	HEADSET - CHEST SETS ----- (Alphabetical/numerical listing)-----	6.6.1 6.6.1
	<u>Federal stock number</u> <u>Item name/part number</u>	
	5965-391-0552 Headset-Chest Set H-35A/U-----	6.4.1
	5965-577-6172 Headset-Chest Set H-164/U-----	6.5.1
	5965-606-6699 Headset-Chest Set A475-----	6.3.1
	5965-811-1202 Headset-Chest Set A603-----	6.2.1
	5965-996-6214 Headset-Chest Set A330-----	6.2.1
	5965-996-6215 Headset-Chest Set A602-----	6.2.1

CONTENTS (Continued)
(Sections numerically listed by Federal Stock Number)

<u>Section</u>		<u>Page</u>
7	HANDSETS ----- (Alphabetical/numerical listing)-----	7.1.1 7.1.1
	<u>Federal stock number</u> <u>Item name/part number</u>	
	5965-249-8157 Handset A257-2 -----	7.2.1
	5965-294-6113 Handset A555-----	7.3.1
	5965-665-3480 Handset NT-51007A-----	7.10.1
	5965-669-9145 Handset H-60/PT-----	7.7.1
	5965-679-9501 Handset H-169/U-----	7.8.1
	5965-808-6261 Handset A560/S50-----	7.5.1
	5965-816-7984 Handset A560/S10-----	7.4.1
	5965-840-8849 Handset H-203/U-----	7.9.1
	5965-993-6127 Handset H-33F/PT-----	7.6.1
8	MICROPHONES ----- (Alphabetical/numerical listing)-----	8.1.1 8.1.1
	<u>Federal stock number</u> <u>Item name/part number</u>	
	5965-050-8167 Microphone M-30A/U-----	8.6.1
	5965-164-7314 Microphone T-45 -----	8.19.1
	5965-170-4793 Microphone DN500 -----	8.2.1
	5965-170-5232 Microphone M-105/U-----	8.16.1
	5965-194-9773 Microphone M-6A/UR-----	8.3.1
	5965-194-9774 Microphone M-8/PIQ-1-----	8.4.1
	5965-254-9228 Microphone M-34/AIC-----	8.9.1
	5965-268-2601 Microphone 9808-----	8.24.1
	5965-284-9318 Microphone 55S-----	8.20.1
	5965-285-0647 Microphone 76B-----	8.21.1
	5965-295-8965 Microphone M-43/U-----	8.10.1
	5965-295-8966 Microphone M-51/UR-----	8.12.1
	5965-505-4877 Microphone M-44A/U-----	8.11.1
	5965-538-4473 Microphone M-85/U-----	8.15.1
	5965-539-7328 Microphone 602D-----	8.23.1
	5965-620-4955 Microphone M-33A/AIC-----	8.8.1
	5965-636-1925 Microphone 205STCKK-----	8.22.1
	5965-639-6621 Microphone M-32B/AIC-----	8.7.1
	5965-646-4678 Microphone M-52B/U-----	8.13.1
	5965-665-0999 Microphone M-58/U-----	8.14.1
	5965-665-2769 Microphone RS-38-D2-----	8.18.1
	5965-789-1654 Microphone M-109/U-----	8.17.1
	5965-892-0722 Microphone M-29B/U-----	8.5.1
9	ACTIVITY SYMBOLS -----	9.1.1

SECTION 1.

INTRODUCTION

1. GENERAL INFORMATION

1.1 Purpose.

a. To provide a handbook, intended as a guide, to assist designers in the selection of parts and to furnish reference material that will serve to further the Standardization Program.

b. To outline criteria pertaining to the use, choice, and application of audio equipment for military functions.

1.2 Scope. This handbook consists of audio equipment that is used by the Army, Navy, Air Force.

1.3 Drawing configurations. The drawings used in this handbook are typical and are not necessarily the exact configuration for each item of equipment.

1.4 Data not available. Blank spaces have been left under appropriate headings to permit the user of this publication to enter any data that could not be determined during preparation.

1.5 Page numbering. The page-numbering sequence was established to make possible further additions or deletions to this handbook without disrupting the initial page-numbering sequence.

1.1.1

SECTION 2.

CHEST SETS

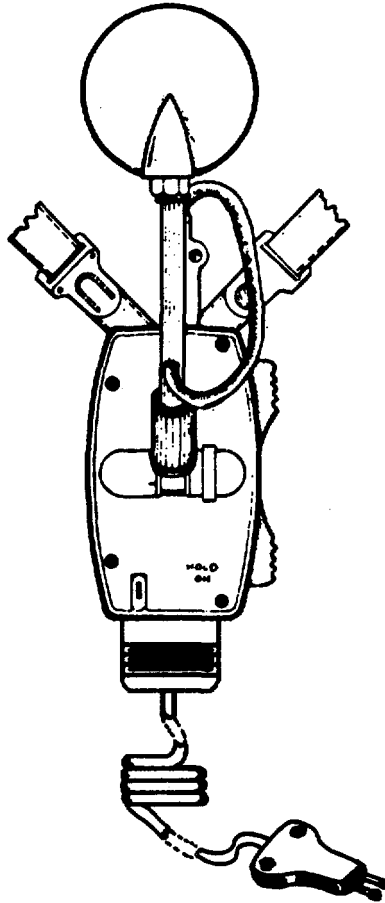
<u>Nomenclature, model or part number</u>	<u>Page</u>
H-17/GT -----	2.2.1
H-18/GT -----	2.3.1
H-19/U -----	2.4.1
H-28/GR -----	2.5.1
H-152/U-----	2.6.1
T-35-----	2.7.1

2.1.1

ITEM NAME: CHEST SET

NOMENCLATURE: H-17/GT

FEDERAL STOCK NO: 5965-164-8084



FUNCTIONAL DESCRIPTION:

Chest Set, electrical, H-17/GT is a telephone type transmitter mounted on a steel chest plate by an adjustable steel arm. This chest unit is used as a basic part of chest sets H-18/GT and H-28/GT.

CONSISTS OF:

- 1 Chest Unit T-51
- 1 Signal Transmitter Assembly Drawing Number SC-D-17107
- 1 Cord CX-714/U

RELATIONSHIP TO SIMILAR EQUIPMENT:

ITEM NAME: CHEST SET

NOMENCLATURE: H-17/GT (Cont)

FEDERAL STOCK NO: 5965-164-8084

PHYSICAL DESCRIPTION:

Dimensions:

Height -----6 inches (152.40 mm)
Width -----2-1/4 inches (57.16 mm)
Depth -----4-1/2 inches (114.30 mm)
Weight -----Not rated

ADDITIONAL PHYSICAL DATA:

Microphone Data:

Type Carbon
Mounting -----Arm Mounted

TECHNICAL DESCRIPTION: (MICROPHONE)

INPUT

Operating Current -----30 milliamperes

OUTPUT

Nominal Impedance -----28 ohms
Frequency Range -----300 to 3,000 cps

TECHNICAL DESCRIPTION: (SWITCH BOX)

Switch Function: Connects Microphone circuit and control circuit contacts

Switch Electrical Ratings:

Current Rating -----2 amperes control circuit 150 ma microphone circuit
Connector Designation -----Microphone Jack mates with plug PL-291
Headset Jack mates with plug PL-54

ADDITIONAL TECHNICAL DATA:

Environmental Limitations:

Equipment Operating:

Temperature -----40° F to +131° F
Elevation -----Up to 10,000 feet above sea level
Relative Humidity -----Up to 98 percent

Equipment Nonoperating:

Temperature -----80° F to +131° F
Elevation -----Up to 50,000 feet above sea level
Relative Humidity -----Up to 100 percent including condensation caused
by temperature changes

REFERENCE DATA and LITERATURE

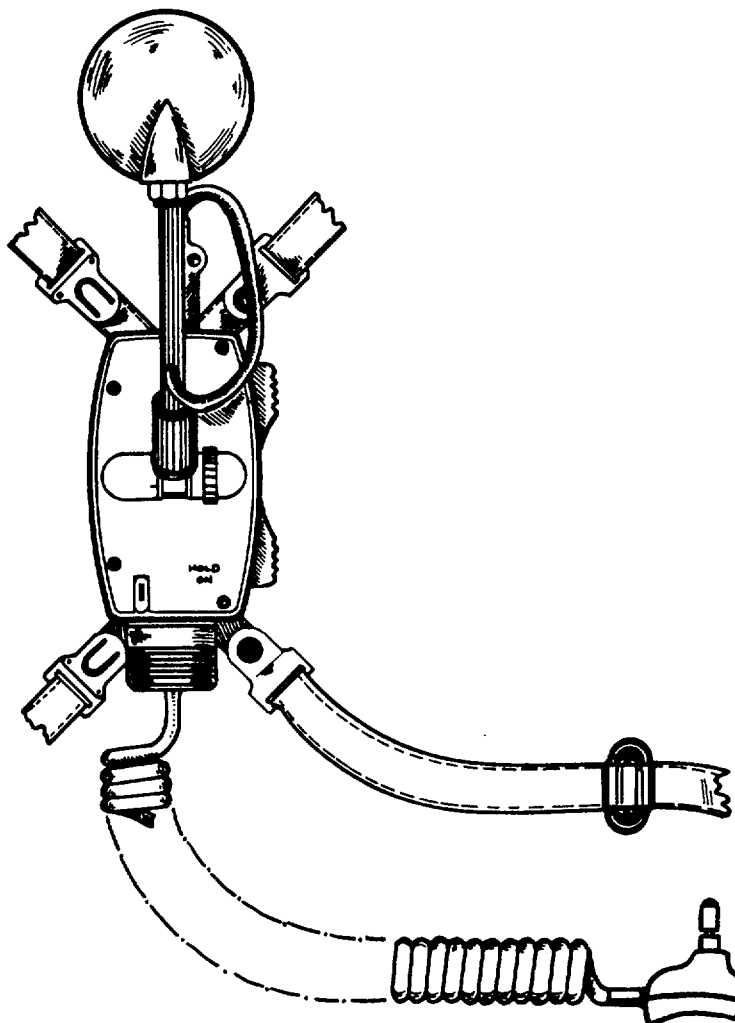
MIL-C-13064
MIL-M-13189
MSS 5965-2

MANUFACTURER CODE	PART NUMBER
80058	H-17/GT

ITEM NAME: CHEST SET

NOMENCLATURE: H-18/GT (Cont)

FEDERAL STOCK NO: 5965-164-8076



FUNCTIONAL DESCRIPTION:

Chest Set, electrical, H-18/GT is a telephone type transmitter mounted on a chest plate by an adjustable steel arm. This equipment is used with Radio Set AN/CRD-2, Radio Set AN/TTG-1, Switchboard BD-71, Switchboard BD-72, Switchboard BD-91, Switchboard BD-101, Flash Range Set GR-4, Flash Range Set GR-8, Radio Set AN/TRL, Switchboard BD-110, Radar Set AN/FPG-2; Telephone Central Office Set TC-1, Telephone Central Office Set TC-2, and Telephone Central Office Set TC-4.

ITEM NAME: CHEST SET

NOMENCLATURE: H-18/GT

FEDERAL STOCK NO: 5965-164-8076

CONSISTS OF:

- 1 Chest Unit H-17/GT
- 1 Cord CX-67/GR
- 1 Signal Strap ST-25
- 1 Switch

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Dimensions: (Chest Unit)

Height -----6 inches (152.40 mm)
Width -----2-1/4 inches (57.15 mm)
Depth-----4-1/2 inches (114.30 mm)
Weight -----Not rated

ADDITIONAL PHYSICAL DATA:

Microphone Data:

Type -----Carbon
Mounting-----Chest Plate Mounted

Cord Data:

Length-----Not rated
No. of Conductors -----3
No. of Connectors -----2
Connector Designation-----JK-53 Plug (Chest Set End) U-31/GT (System End)

TECHNICAL DESCRIPTION: (MICROPHONE)

INPUT

Operating current-----60 milliamperes

OUTPUT

Nominal Impedance -----30 ohms
Frequency-----300 to 3,000 cps

TECHNICAL DESCRIPTION: (SWITCH BOX)

Switch Function: Connects Microphone circuit and control circuit contacts

Switch Electrical Ratings:

Current Rating -----2 amperes control circuit 150 ma microphone circuit
Connector Designation-----Microphone Jack mates with Plug PL-291 Headset
Jack mates with Plug PL54

ITEM NAME: CHEST SET

NOMENCLATURE: H-18/GT (Cont)

FEDERAL STOCK NO: 5965-164-8076

ADDITIONAL TECHNICAL DATA:

Environmental Limitations:

Equipment Operating:

Temperature-----80° F to + 160° F
Elevation-----Up to 10, 000 feet above sea level
Relative Humidity-----Up to 100 percent including condensation caused
by temperature changes
Vibration-----No mechanical resonance below 55 cps

REFERENCE DATA and LITERATURE

MIL-C-13064

MIL-M-13189

SC-D-17105

ARCS Research and Development Corp Standardization of Chest Sets Purification Report Contract DA 36-039, SC66416, Final Report Technical Analysis Phase Contract DA 36-039, SC66416

MSS 5965-2

MANUFACTURER CODE	PART NUMBER
80058	H-18/GT

ITEM NAME: CHEST SET

NOMENCLATURE: H-19/U

FEDERAL STOCK NO: 5965-170-3630

No illustration available

FUNCTIONAL DESCRIPTION:

Chest Set H- 19/U is basically a microphone with a push-to-talk switch mounted on a brass chest plate. The set is intended for general purpose uses and as part of Remote Control Equipment AN/TRA-2 and other equipment.

CONSISTS OF:

- 1 Microphone Type FI as modified per Western Electric Specification D- 141914
- 1 Chest Plate
- 1 Switch
- 1 Cordage CO-145
- 1 Plug PL-68

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Dimensions: (Chest Plate)

Length-----4-1/4 inches (107. 95 mm)
Width -----4-1/2 inches (114. 30 mm)
Depth-----1/16 inch (1. 59 mm)
Weight -----Not Rated

ADDITIONAL PHYSICAL DATA:

Microphone Data:

Type -----Carbon
Mounting-----Yoke Mounted

Cord Data:

Length-----10 feet (3. 05 m)
Number of Conductors -----3
Number of Connectors -----1
Connector Designation-----PL-68

TECHNICAL DESCRIPTION: (MICROPHONE)

INPUT

Operating Current -----Not Rated

OUTPUT

Nominal Impedance -----40 Ohms
Frequency Range -----250 to 3,500 Cps

ITEM NAME: CHEST SET
NOMENCLATURE: H-19/U (Cont)
FEDERAL STOCK NO: 5965-170-3630

TECHNICAL DESCRIPTION: (SWITCHBOX)

Switch Function:

Push-to-talk switch

REFERENCE DATA and LITERATURE

ARCS Research and Development Corporation Standardization of Chest Sets; Purification Report
Contract DA36-039, SC66416

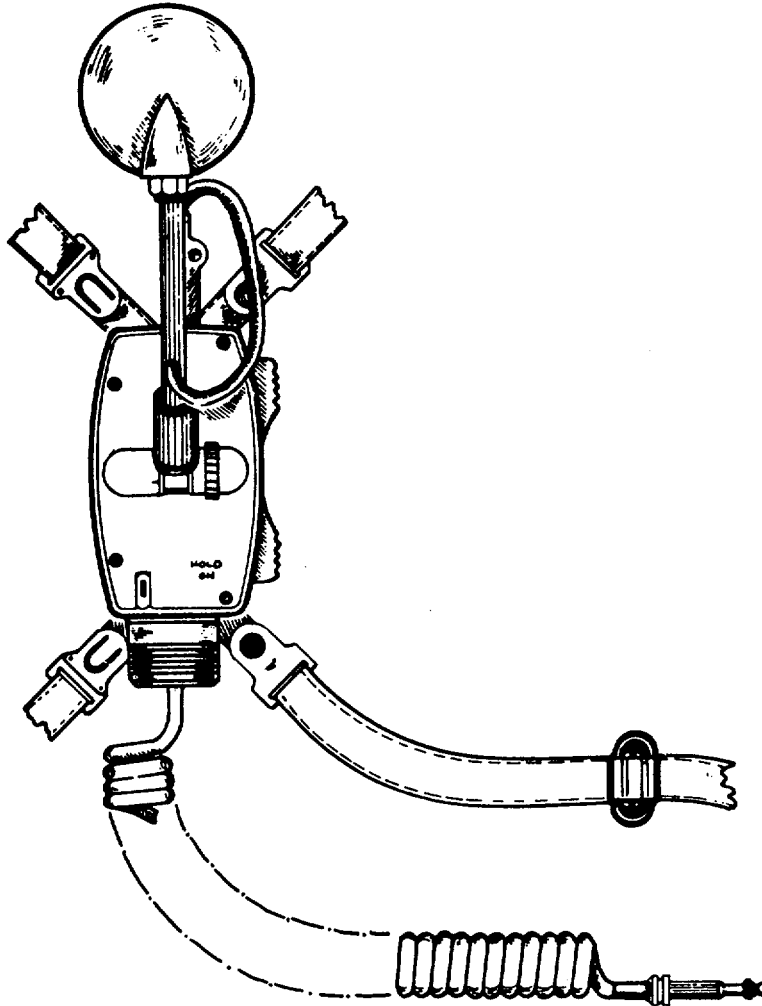
ARCS Research and Development Corporation Standardization of Chest Sets; Final Report of Technical
Analysis Phase Contract DA36-039, SC66416

MANUFACTURER CODE	PART NUMBER
80058	H-19/U

ITEM NAME: CHEST SET

NOMENCLATURE: H-28/GR

FEDERAL STOCK NO: 5965-164-8086



FUNCTIONAL DESCRIPTION:

Electrical Chest Set H-28/GR is composed of a transmitter assembly, chest unit, and cord assembly. The equipment is used as a microphone with either wire or radio equipment. Provision is also made for connecting a headset for two way communication. This chest set may be used with Remote Control Equipment AN/TRQ-2, Radio Control Central AN/TRQ-1 or Radio Set AN/CRC-3.

ITEM NAME: CHEST SET
NOMENCLATURE: H-28/GR (Cont)
FEDERAL STOCK NO: 5965-164-8086

ADDITIONAL TECHNICAL DATA:

Environmental Limitations:

Equipment Operating:

Temperature-----40° F to +131° F
Elevation-----Up to 10, 000 feet above sea level
Relative Humidity-----Up to 98 percent

Equipment Nonoperating:

Temperature-----80° F to + 160° F
Elevation-----Up to 50, 000 feet above sea level
Relative Humidity-----Up to 100 percent including condensation caused
by temperature changes
Vibration-----No mechanical resonance below 55 cps

REFERENCE DATA and LITERATURE

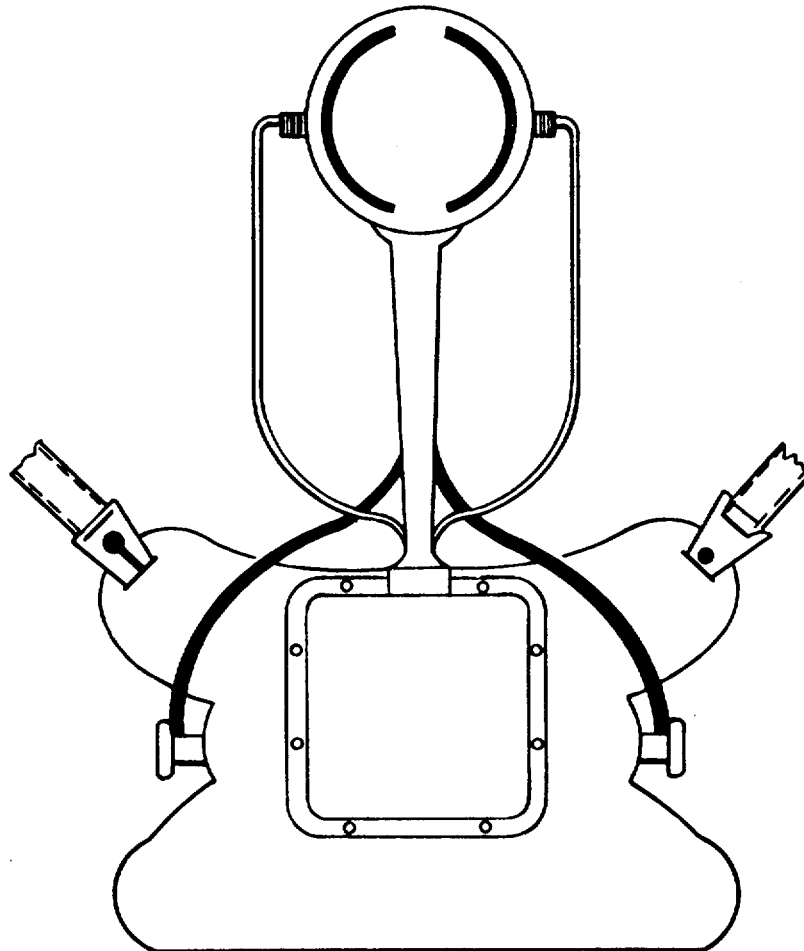
MIL-C-13064
MIL-M-13189
SC-D-17462
SC-D-19222
ARCS Research and Development Corp Standardization of Chest Sets Final Report
Technical Analysis Phase Contract DA36-039, SC66416
MSS 5965-2

MANUFACTURER CODE	PART NUMBER
80058	H-28/GR

ITEM NAME: CHEST SET

NOMENCLATURE: H-152/U

FEDERAL STOCK NO: 5965-807-9159



FUNCTIONAL DESCRIPTION:

Chest Set H-152/U consists of a boom mounted carbon microphone with integral switch, a junction box, supporting chest plate, and system cable. This set is designed for shipboard exterior communication use.

ITEM NAME: CHEST SET

NOMENCLATURE: H-152/U (Cont)

FEDERAL STOCK NO: 5965-807-9159

CONSISTS OF:

- 1 Chest Set Assembly Type RE51001
- 1 Microphone Type RE51001-10
- 1 Chest Plate Type B101505
- 1 Cable Clamp Type AN-3057-6
- 1 Switch
- 1 Connector AN-3106A-14S-5P
- 1 Cord Type MMOP-5
- 1 Junction Box Type B101506

RELATIONSHIP TO SIMILAR EQUIPMENT:

Similar to NT 51090-A except H-152/U has noise-canceling microphone.

PHYSICAL DESCRIPTION:

Weight -----Not more than 1-1/2 pounds

ADDITIONAL PHYSICAL DATA:

Microphone Data:

Type -----Carbon
Mounting-----Yoke Mounted

System Cable Data:

Length-----20 feet (6.10 m)
Number of Conductors-----2
Number of Connectors-----1
Connector Designation-----AN-3106-14S-5P permanently wired by means of
solder lugs in the junction box

Microphone Cable Data:

Length-----6 inches (152.4 mm)
Jacket Material-----Rubber
Connection-----Permanently wired in junction box through water tight
gland

TECHNICAL DESCRIPTION: (MICROPHONE)

INPUT

Operating Current -----Not Rated

OUTPUT

Nominal Impedance -----33Ohms
Frequency Range -----200 to 5,000 Cps

ITEM NAME: CHEST SET
NOMENCLATURE: H-152/U (Cont)
FEDERAL STOCK NO: 5965-807-9159

TECHNICAL DESCRIPTION: (SWITCH BOX)

Switch Function:

Connect microphone circuit and a control circuit

Switch Electrical Ratings:

Current Rating -----1 amp AC
Voltage Rating -----110 volts at 60 Cps

ADDITIONAL TECHNICAL DATA:

Environmental Limitations:

Temperature-----40° to +65° C
Humidity -----Up to 90% Relative Humidity
Salt Spray-----Salt spray resistant

REFERENCE DATA and LITERATURE

NAVY (BU SHIPS) DWG REC-51001 and REA51001-1.

MANUFACTURER CODE	PART NUMBER
80064	H-152/U
78711	H-152/U

ITEM NAME: CHEST SET

NOMENCLATURE: T-35

FEDERAL STOCK NO: 5965-223-4495

No illustration available

FUNCTIONAL DESCRIPTION:

Chest Set T-35 is a telephone type transmitter mounted on a metal chest plate. It is primarily intended for intercommunication between two direction finders or between a direction finder central. This chest set is part of Signal Corps Radio Sets SCR-206-C, SCR-555-C, and SCR-556-1.

CONSISTS OF:

- 1 Chest Plate T-26A
- 1 Cord CC-342
- 1 Plug PL-51 (attached to cord)
- 1 Microphone 491909
- 1 Switch SW-229

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Dimensions:

Length -----10 inches (254. 00 mm)
 Width-----3 inches (6. 20 mm)
 Height-----5 inches (127.00 mm)
 Weight -----Not rated

ADDITIONAL PHYSICAL DATA:

Microphone Data:

Type -----Carbon
 Mounting-----Yoke Mounted

Cord Data:

Length-----10 feet (3. 05 m)
 Number of Conductors -----3
 Number of Connectors -----1
 Connector Designation-----PL-51
 Jacket Material-----Synthetic Rubber

TECHNICAL DESCRIPTION: (MICROPHONE)

INPUT

Operating Current -----320 milliamperes, maximum

OUTPUT

Nominal Impedance -----40 Ohms
 Frequency Range -----300 to 3,000 Cps

ITEM NAME: CHEST SET

NOMENCLATURE: T-35 (Cont)

FEDERAL STOCK NO: 5965-223-4495

ADDITIONAL TECHNICAL DATA:

Environmental Limitations:

Equipment Operating

Temperature-----40° F to + 125° F

Relative Humidity-----Up to 98 percent

Equipment Nonoperating.

Temperature-----80° F to + 160° F

Relative Humidity-----Up to 100 percent including condensation caused by
temperature changes.

Vibration -----No mechanical resonance below 55 cycles per second

REFERENCE DATA and LITERATURE

MIL-M- 13189

Pricing Guide For Signal Corps Equipment Signal 5-5

MANUFACTURER CODE	PART NUMBER
80058	T-35

SECTION 3

LOUDSPEAKERS

<u>Nomenclature, model or part number</u>	<u>Page</u>
AP-11-ST592	3.4.1
LS-11A	3.12.1
LS-103()/TIQ-2	3.2.1
LS-116/U	3.3.1
LS-166/U	3.5.1
LS-169/G	3.26.1
LS-170()/PFP-1	3.15.1
LS-180/U	3.8.1
LS-203/U	3.24.1
LS-211/AIC-13.....	3.21.1
LS-215 ()/U	3.23.1
LS-305 ()/SIC, LS-306 ()/SIC	3.27.1
LS-387/SIC, LS-388 ()/SIC.....	3.25.1
LS-444/WIH.....	3.22.1
LS-445/U	3.6.1
LS-450/B	3.20.1
LS-455/U	3.7.1
LS-474/U	3.28.1
M15	3.11.1
NT-49546	3.13.1
NT-491814	3.29.1
PM-69E	3.14.1
P5T-C5696.....	3.10.1
SK8163.....	3.17.1
SP8B	3.19.1
3A070T.....	3.18.1
5A07	3.9.1
12984	3.16.1
612833	3.10.1

3.1.1

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: LS-103()TIQ-2

FEDERAL STOCK NO: 5965-128-2983

No illustration available

FUNCTIONAL DESCRIPTION:

The LS-103 is a permanent magnet dynamic, reentrant horn type loudspeaker. The unit is rugged in construction and will operate over a wide temperature range and under harsh environmental conditions. The LS-103 is primarily intended for use as part of Public Address Set AN/TIQ-2.

CONSISTS OF:

- 1 Loudspeaker, Permanent Magnet LS-103/TIQ-2

RELATIONSHIP TO SIMILAR EQUIPMENT:

Used with Public Address Set AN/TIQ-2

PHYSICAL DIMENSIONS:

Diameter -----12 inches (304. 80 mm)
Mounting Dimensions -----Adjustable mounting bracket with 27/32 inch mounting hole
Terminal/Connector
Designation -----5 binding posts, Hugh H. Eby, Inc. No. 96-V (or equal) mounted on a phenolic terminal block

Over-all Dimensions:

Diameter-----19-1/16 inches (484. 19 mm)
Length-----26 inches (660. 50 mm)
Weight -----14 pounds

ADDITIONAL PHYSICAL DATA:

Horn thread size-----1-3/8-18
Loudspeaker color -----Green
Horn material-----Steel, Aluminum, or Bronze Alloys
Vertical adjustment -----Provides for adjustment in the vertical plane
Fasteners -----4 fasteners for attaching horn and driver cover

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----15 Ohms
Power handling rating -----20 watts normal; 25 watts peak (warble tones)
Frequency range -----200 to 6,000 cps

ADDITIONAL TECHNICAL DATA:

Environmental Data:

Nonoperating Conditions:

Temperature-----From -80° F (24 hours max.) to + 160° F (4 hours max.)
Relative Humidity-----97% indefinitely, 100% for 4 hours
Elevation-----25, 000 feet above sea level

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: LS-103()/TIQ-2 (Cont)

FEDERAL STOCK NO: 5965-128-2963

Operating Conditions:

Temperature-----From -65° F (72 hours max.) to + 150° F (4 hours max.)
Relative Humidity-----97%, 100% for 4 hours
Elevation-----10, 000 feet above sea level

Driver Unit Data:

Power Handling Capacity -----25 watts at 175 cps
Weight -----4 pounds maximum
Magnet Material -----Alnico Number 5 or equal

Transformer Data: -----Primary impedances 250, 500, 1, 000, and 2, 500 ohms

Resistant Characteristics:-----Resistant to vibration, gun blast, moisture and shock

REFERENCE DATA and LITERATURE

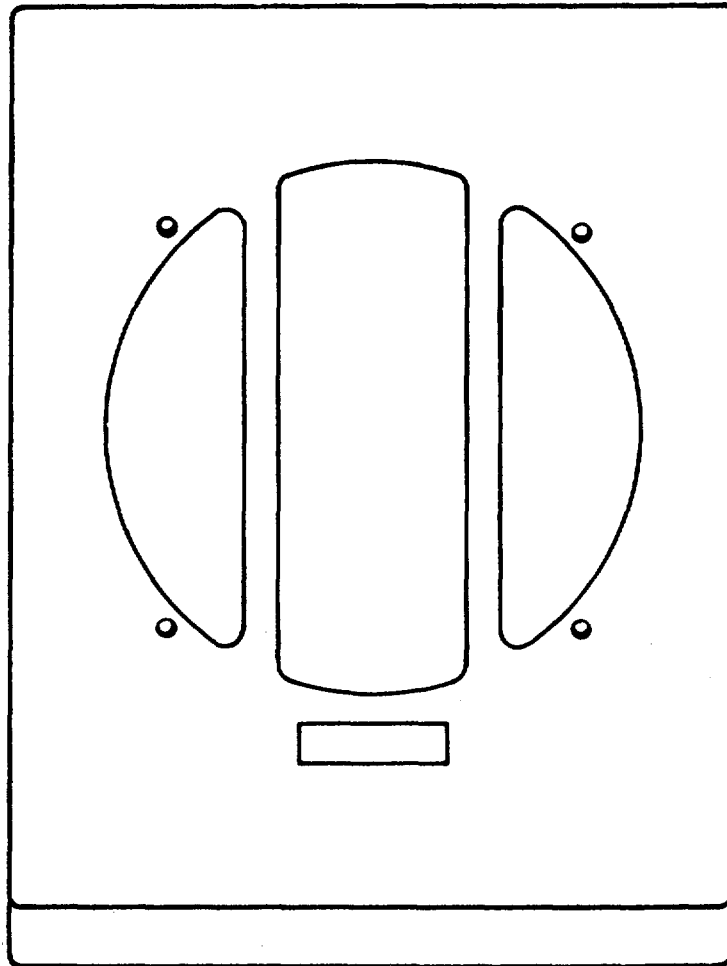
MIL- L- 13941
MSS 5965
Final Report - Standardization of Loudspeakers Prepared by Stromberg-Carlson

MANUFACTURER CODE	PART NUMBER
80058	LS-103()/TIQ-2
87771	LS-103()/TIQ-2

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: LS-116/U

FEDERAL STOCK NO: 5965-280-8475



FUNCTIONAL DESCRIPTION:

The LS-116/U is a permanent magnet 12 inch loudspeaker mounted in a wooden cabinet. It is intended for use in the reproduction of speech or music from radio equipment, recorder-reproducers or public address systems.

CONSISTS OF:

- 1 Loudspeaker LS-448/U
- 1 12 Inch Loudspeaker
- 1 Output Transformer
- 1 Cable Assembly
- 1 Terminal Board and Cable Assembly
- 1 Cabinet

RELATIONSHIP TO SIMILAR EQUIPMENT:

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: LS-116/U (Cont)

FEDERAL STOCK NO: 5965-280-8475

PHYSICAL DESCRIPTION:

Nominal Diameter-----12 inches (304. 80 mm)
 Mounting Dimensions-----2 mounting brackets with 1/4 inch slotted bole
 located on the top spaced 8-3/16 inches center
 to center; 1 mounting bracket with 3/16 inch
 diameter hole located on the bottom

Over-all Dimensions:

Length-----17-5/16 inches (439.74 mm)
 Width-----9-3/4 inches (247.65 mm)
 Height-----14-5/8 inches (371.4 0 mm)

ADDITIONAL PHYSICAL DATA:

Cabinet Data -----Completely inclosed in a "tilt-type" wall cabinet
 with the front opening covered with grille cloth

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----8 ohms
 Power handling rating-----14 watts normal; 20 watts peak (warble tones)
 Frequency range -----150 to 7,000 cps

ADDITIONAL TECHNICAL DATA:

Input Transformer Data-----Primary winding is tapped to provide impedances
 of 500/1, 000/1, 500/2, 000 ohms *10 percent at
 1, 000 cps when an 8 ohm loudspeaker is connect-
 ed to the secondary winding and has a power
 handling capacity of 14 watts at 1, 000 cp.

ENVIRONMENTAL DATA:

Operating Conditions:

Temperature-----From -65° F to + 160° F
 Elevation-----Up to 10, 000 feet above sea level
 Relative Humidity-----Up to 95 percent
 Salt-Laden Air-----As encountered in coastal regions

Nonoperating Conditions:

Temperature-----From -80° F to + 160° F for 73 hours
 Elevation-----Up to 50, 000 feet above sea level
 Relative Humidity-----Up to 100 percent

REFERENCE DATA and LITERATURE

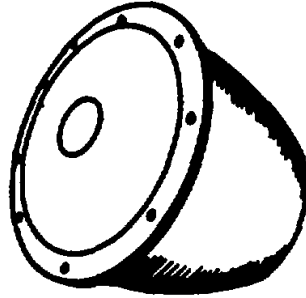
MIL- 13078
 MIL-10911
 Final Report-Standardization of Loudspeakers Prepared by Stromberg-Carlson

MANUFACTURER CODE	PART NUMBER
80058	LS-116/U

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: COMMERCIAL AP-11-ST592

FEDERAL STOCK NO: 5965-221-5775



FUNCTIONAL DESCRIPTION:

This unit is a cone type loudspeaker. It is designed for panel mounting and is fully enclosed by a streamline-shaped cover with protective front screen. Facilities are provided inside the cover to mount a transformer (which is not provided). The frequency response permits speech to be intelligible in the presence of electrical and acoustical extraneous noises.

This loudspeaker is used for paging and intercom functions and can be used for "talk-back" purposes. It is part of Control Unit C-65/CRC-2.

3.4.1

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: COMMERCIAL AP-11-ST592 (Cont)
FEDERAL STOCK NO: 5965-221-5775

CONSISTS OF:

- 1 Loudspeaker, Permanent Magnet Jensen Radio Mfg. Co., Part No. AP-11-ST592

RELATIONSHIP TO SIMILAR EQUIPMENT:

This loudspeaker is similar to Jensen Radio and Mfg. Co. Loudspeaker Model AP-10-ST590 except that it does not have a mounting base.

PHYSICAL DESCRIPTION:

Nominal Diameter-----5 inches (127. 00 mm)
Mounting Dimensions-----8 holes 1/4 inch diameter equally spaced on 4-3/4 inch mounting diameter.

Over-all dimensions:

Diameter-----5 inches (127. 00 mm)
Depth-----5-1/8 inches (130. 18 mm)
Weight-----1-1/4 pounds

ADDITIONAL PHYSICAL DATA:

Case Finish-----Gray Hammer

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----3 to 4 ohms
Power handling rating-----5 watts maximum (warble tones)
Frequency range-----Not Rated

REFERENCE DATA and LITERATURE

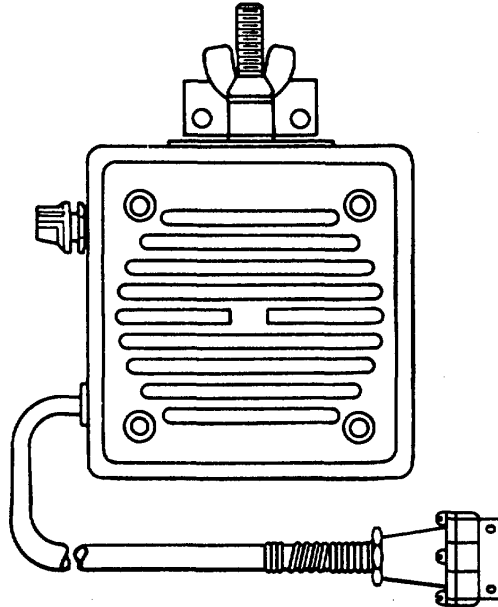
Jensen Radio Mfg. Company Catalog 1070-B and 1070
MSS 5965-6

MANUFACTURER CODE	PART NUMBER
32001	AP-11-ST592

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: LS-166/U

FEDERAL STOCK NO: 5965-234-6420



FUNCTIONAL DESCRIPTION:

This unit is a four inch, direct radiator, dynamic type loudspeaker. It is housed in a metal inclosure and is resistant to weather, gunblast, immersion, humidity, temperature extremes, and bounce. The unit is intended for use with ground service tactical equipments where resistance to gun-fire and immersion are requirements.

CONSISTS OF:

- 1 Permanent Magnet Loudspeaker LS-448/U
- 1 Cable CX-1576/U

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Cone Diameter -----4 inches (101.60 mm)
Mounting Dimensions -----Adjustable mounting bracket
with two 9/32 inch diameter
holes spaced 1-1/2 inch
C to C
Plug -----U-77/U

Over-all Dimensions:

Length -----7-1/32 inches (178. 59 mm)
Width-----5-21/32 inches (143.67 mm)
Depth-----3-5/16 inches (84. 14 mm)

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: LS-166/U (Cont)
FEDERAL STOCK NO: 5965-243-6420

ADDITIONAL PHYSICAL DATA:

Case Material -----Metal

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----8 ohms
Power handling rating -----2 watts (warble tones)
Frequency range -----300 to 7,000 cps

ADDITIONAL TECHNICAL DATA:

Transformer Data -----600 ohms primary impedance

Environmental Data:

Operating Conditions:

Temperature-----From -65 deg F to + 160 deg F
Elevation-----5,000 feet above sea level
Relative Humidity-----95 percent

Nonoperating Conditions:

Temperature-----From -80 deg F to + 160 deg F for 72 hours
Elevation-----50, 000 feet above sea level
Relative Humidity-----100 percent

REFERENCE DATA and LITERATURE

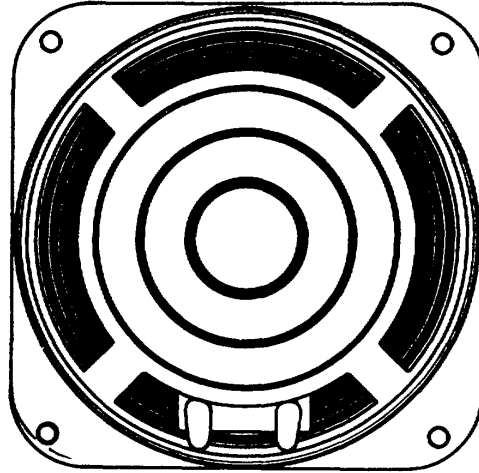
MIL-L-12632
MSS 5965-6

MANUFACTURER CODE	PART NUMBER
80058	LS-166/U
80063	LS-166/U
87771	LS-166/U

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: LS-445/U

FEDERAL STOCK NO: 5965-892-3665



FUNCTIONAL DESCRIPTION:

Loudspeaker LS-445/U is an unencased, 2-watt, gunblast and immersion resistant permanent magnet type loudspeaker unit. It has a 4-inch diameter cone with a voice coil impedance of 8 ohms.

CONSISTS OF:

- 1 Permanent Magnet Loudspeaker -----LS-445/U

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Diameter -----4 inches (101.60 mm)

Mounting Dimensions:

Four number 10 - 24 thd tapped holes on 3-5/16 inch by 3-5/16 inch mounting centers.

Terminal/Connector Designation -----Two Solder Type terminals

Over-all Dimensions:

Length -----4 inches (101.60 mm)
Width -----4 inches (101.60 mm)
Depth -----2-3/8 inches (maximum) (60.33 mm)
Weight -----1/2 lbs.

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: LS-445/U (Cont)
FEDERAL STOCK NO: 5965-892-3665

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----8 ohms ±1 ohm
Power handling rating-----2 watts, normal
Frequency range -----300 to 7,000 cps

ADDITIONAL TECHNICAL DATA:

Environmental Service:

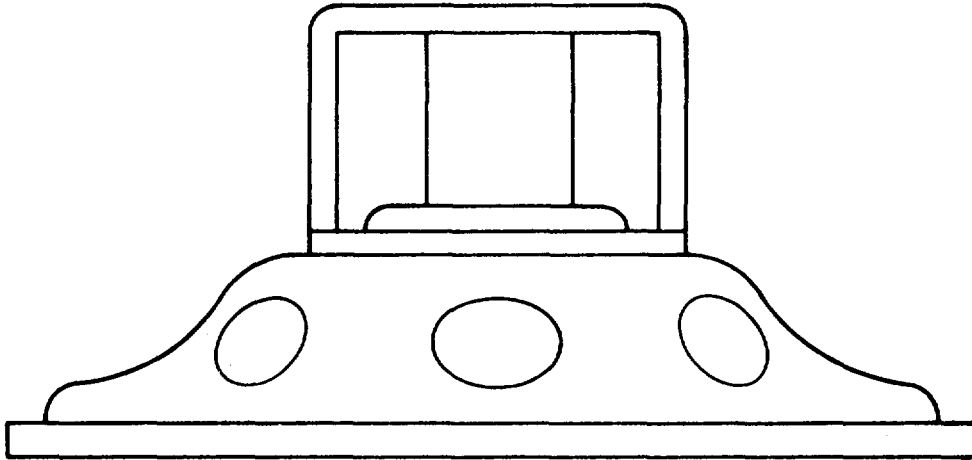
Temperature-----80° F to + 160° F
Moisture -----In accordance with Method 106, of MIL-STD-202
Immersion-----3 feet of tap water for 24 hours
Bounce-----In accordance with MIL-L-12606
Fungus-----Treated for moisture and fungus resistance
in accordance with MIL-T-152

REFERENCE DATA and LITERATURE

MSS 5965-6
MIL-L-12606
Drawing SC-D-53366
Pricing Guide for Signal Corps Equipment SIG 5-5

MANUFACTURER CODE	PART NUMBER
80063	LS-445/U
32001	P4-SB-2
87771	LS-445/U

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: LS-445/U
FEDERAL STOCK NO: 5965-588-4870



FUNCTIONAL DESCRIPTION:

Loudspeaker LS-455/U is an unencased, 2-watt, permanent magnet type loudspeaker unit. It has a 4-inch diameter cone with a voice coil impedance of 3.2 ohms. It is suitable for use in announcing - equipment, shipboard.

CONSISTS OF:

- 1 Permanent Magnet Loudspeaker -----LS-455/U

RELATIONSHIP TO SIMILAR EQUIPMENT:

This speaker, with appropriate transformer, is interchangeable with NT-49817.

PHYSICAL DESCRIPTION:

Diameter -----4 inches (101.60 mm)

Mounting Dimensions:

Four .187 dia. holes on 3.312 inch mounting centers and four .250 dia. holes on .687 x 4.562 inch mounting centers.

Over-all Dimensions:

Length-----4.062 inches (103.17 mm)
Width-----4.062 inches (103.17 mm)
Depth-----1.875 inches (maximum) (47.63 mm)

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: LS-445/U (Cont)
FEDERAL STOCK NO: 5965-588-4870

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----3.2 ohms
Power handling rating-----5 watts, peak
Frequency range -----200 to 5,000 cps

ADDITIONAL TECHNICAL DATA:

Environmental Service:

Moisture -----In accordance with Method 106 o MIL-8TD-202
Shock -----MIL-T-17113 (Type 1)
Vibration -----MIL-STD-167 (Type 1)

REFERENCE DATA and LITERATURE

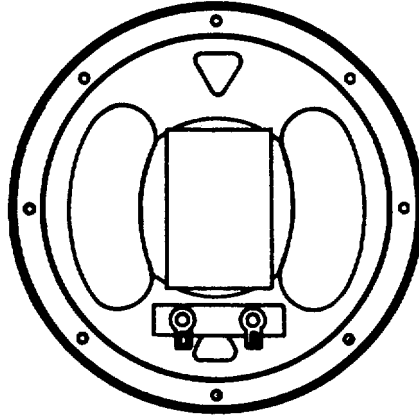
Navy (BuShips) Dwg. RE 49C724
MSS 5965-6

MANUFACTURER CODE	PART NUMBER
80063	LS-445/U
87771	C4BN06001

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: LS-180/U

FEDERAL STOCK NO: 5965-538-4485



FUNCTIONAL DESCRIPTION:

This unit is a permanent magnet unencased loudspeaker. The unit has an 8 inch cone. It is capable of withstanding extreme temperature changes. The unit is rugged and light, and is designed for general purpose use. This speaker is moisture, vibration, and shock resistant.

CONSISTS OF:

- 1 Loudspeaker, Permanent Magnet-----LS-180/U

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Diameter -----8 inches (203.20 mm)
Mounting Dimensions-----Eight 0.200 inch diameter mounting holes spaced
45 degrees apart on 3.813 inch radius.
Terminal/Connector Designation-----2 solder lug type on terminal board

Over-all Dimensions:

Diameter -----8-1/4 inches maximum (209.55 mm)
Depth-----5 inches maximum (127.00 mm)
Weight -----3-1/2 pounds maximum

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: LS-180/U (Cont)
FEDERAL STOCK NO: 5965-538-4485

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----8 ohms + 1 ohm
Power handling rating-----9 watts (warble tones)
Frequency range -----150 to 7, 000 cps

ADDITIONAL TECHNICAL DATA:

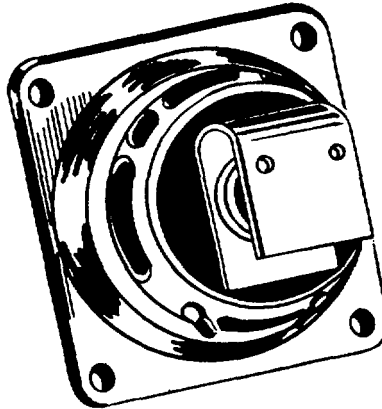
Temperature Range (Nonoperating) -----80° F to + 160° F

REFERENCE DATA and LITERATURE

MIL-L-10911
Final Report - "Standardization of Loudspeakers" Prepared by Stromberg-Carlson

MANUFACTURER CODE	PART NUMBER
80058	LS-180/U
81349	LS-180/U

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: COMMERCIAL 5A07
FEDERAL STOCK NO: 5965-280-7806



FUNCTIONAL DESCRIPTION:

This unit is a small, shallow construction, cone type loudspeaker. Mounting is accomplished by 4 clearance holes located on the rim or by 2 holes centered on the bracket.

CONSISTS OF:

- 1 Loudspeaker, Quam Nichols Model 5A07

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Nominal Diameter-----5 inches (127.00 mm)
Over-all Dimensions:
Length-----4-5/8 inches (117.48 mm)
Width -----4-5/8 inches (117.48 mm)
Depth-----1-7/8 inches (47.63 mm)

Mounting Dimensions:

4 mounting holes on rim 3-5/16 inches center to center
or two holes centered on bracket.

Weight -----1/2 lb.

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----3.2 ohms 10 percent
Power handling rating -----3.5 watts, peak (warble tones)
Frequency range -----125 to 6,000 cys

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: COMMERCIAL 5A07 (Cont)

FEDERAL STOCK NO: 5965-280-7806

ADDITIONAL TECHNICAL DATA:

Resonant Frequency-----200 cps \pm 15 percent

REFERENCE DATA and LITERATURE

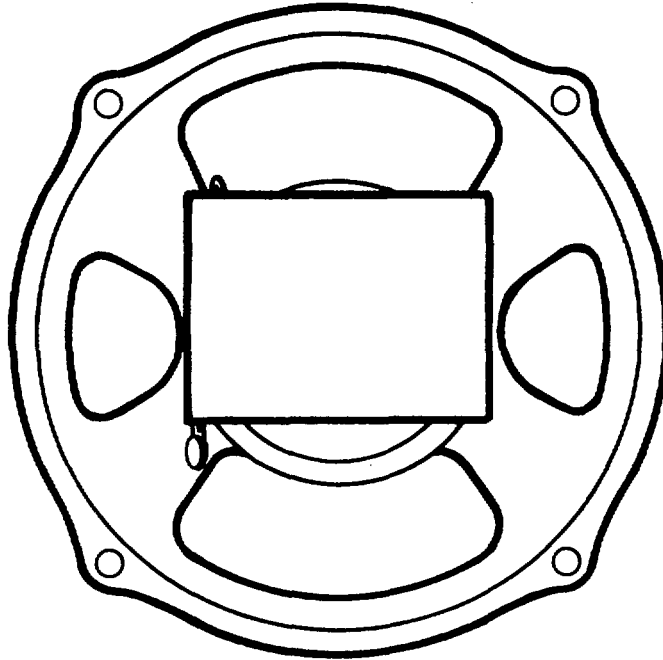
Quam Nichols Catalog 63
MSS 5965-6

MANUFACTURER CODE	PART NUMBER
74199	5A07

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: COMMERCIAL P5T-C5696; 61283

FEDERAL STOCK NO: 5965-284-6708



FUNCTIONAL DESCRIPTION:

This unit is a permanent magnet moving voice coil-type loudspeaker. It is designed to be used with 16 mm. sound motion picture projection sets suitable for use under the severe operating and handling conditions encountered in service in tropical temperature and arctic climates both ashore and afloat.

CONSISTS OF:

- 1 Permanent Magnet Loudspeaker P5T-C5696

RELATIONSHIP TO SIMILAR EQUIPMENT:

Used on Motion Picture Sound Projector AQ-2A(1)

PHYSICAL DESCRIPTION:

Diameter -----5 inches (127.00 mm)
Mounting Dimensions -----Four holes 5/32 inches in diameter spaced 90
degrees apart on 2-11/32 inch radius
Terminal/Connector Designation -----Solder Lug Type

Over-all Dimensions:

Diameter -----5 inches (127.00 mm)
Depth-----2-5/8 inches (66.63 mm)

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: COMMERCIAL P5T-C5696; 61283 (Cont)

FEDERAL STOCK NO: 5965-284-6708

ADDITIONAL PHYSICAL DATA:

Magnet Material -----Alnico No. 5 or equal
Cone Treatment -----Fungus Resistant
Air Gap Clearance -----0.009 inch either side of the voice coil

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----8 ohms \pm 10 percent
Power handling rating -----10 watts (warble tones)
Frequency range -----80 to 8,000 cps

ADDITIONAL TECHNICAL DATA:

REFERENCE DATA and LITERATURE

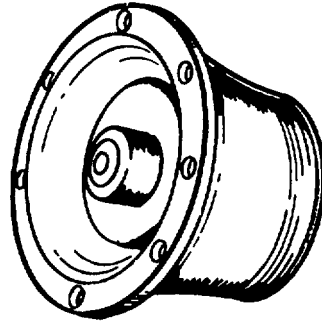
MIL-P-49
Bell and Howell Drawing No. 612833
MSS 5965-6

MANUFACTURER CODE	PART NUMBER
32001 06650	P5T-C5696 612833

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: COMMERCIAL Model M15

FEDERAL STOCK NO: 5965-284-7456



FUNCTIONAL DESCRIPTION:

This loudspeaker is a compact reflex speaker designed for flange or flush mounting in cabinets, walls, etc. The unit has a waterproof construction and withstands destructive, corrosive agents such as humidity, salt spray, wind, and rain. The voice coil diaphragm assemblies are tropicalized and the driver mechanism is sealed in an airtight weather-proof housing. As well as being suitable for paging and public address systems the speaker is designed to operate as a highly sensitive microphone whenever talk-back communication is desired.

3.11.1

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: COMMERCIAL Model M15 (Cont)
FEDERAL STOCK NO: 5965-284-7456

CONSISTS OF:

1 Loudspeaker LTV University Loudspeaker Model M15

RELATIONSHIP TO SIMILAR EQUIPMENT:

LTV University Model M15 can also be obtained with 4 or 45 ohm voice coil impedance.

PHYSICAL DESCRIPTION:

Nominal Diameter-----5-1/2 inches (139.70 mm)

Over-all Dimensions:

Length-----4-7/16 inches (112.71 mm)
Diameter-----5-1/2 inches (139.70 mm)

Mounting Dimensions:

6 holes on 4-7/8 inch mounting diameter (123. 83 mm)

Weight -----2-1/2 lbs,

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----8 ohms
Power handling rating -----5 watts (10 watts above 500 cps) (warble tones)
Frequency range -----500 to 13, 000 cps

REFERENCE DATA and LITERATURE

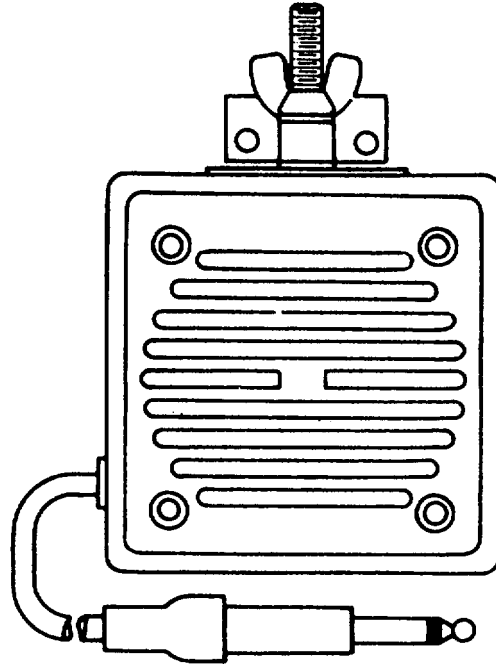
LTV University Loudspeakers Inc. Commercial Catalog 78A155F
The Radio Electronic Master 26th Edition
University Loudspeakers Technilog
MSS 5965-6

MANUFACTURER CODE	PART NUMBER
87771	M15

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: LS-11A

FEDERAL STOCK NO: 5965-285-0744



FUNCTIONAL DESCRIPTION:

This unit is a four inch, direct radiator, dynamic type loudspeaker. It is housed in a metal inclosure and is resistant to weather, gunblast and immersion. The unit is intended for use with ground service tactical equipments where resistance to gun-fire and immersion are requirements.

CONSISTS OF:

1 Loudspeaker, Permanent Magnet LS-11A

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Diameter -----4 inches (101. 60 mm)
Mounting Dimensions -----Adjustable mounting bracket with two 9/32 inch
diameter holes spaced 1-1/2 inch C to C
Plug -----PJ-055B

Over-all Dimensions:

Length -----7-1/32 inches (178.59 mm)
Width-----4-29/32 inches (124.62 mm)
Depth-----3-5/16 inches (84. 14 mm)

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: LS-11A (Cont)
FEDERAL STOCK NO: 5965-285-0744

ADDITIONAL PHYSICAL DATA:

Case Material -----Metal

TECHNICAL DESCRIPTION

INPUT

Voice coil impedance-----8 ohms
Power handling rating-----2 watts (warble tones)
Frequency range -----300 to 7,000 cps

ADDITIONAL TECHNICAL DATA:

Transformer data-----250 ohms primary impedance
Resistant Characteristics-----Resistant to gun-blast, immersion, humidity,
temperature extremes, and bounce

Environmental Data:

Operating Conditions:

Temperature-----From - 65 deg F to + 160 deg F
Elevation-----5,000 feet above sea level
Relative Humidity-----95 percent
Salt-Laden Air -----As encountered in coastal regions

Nonoperating Conditions:

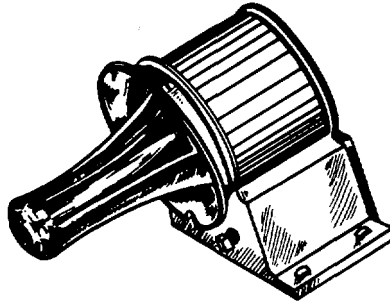
Temperature -----From -80 deg F to +160 deg F for 72 hrs
Elevation -----50, 000 feet above sea level
Relative Humidity -----100 percent

REFERENCE DATA and LITERATURE

MIL-L-12606
MIL-L 12632

MANUFACTURER CODE	PART NUMBER
81349	LS-11A
80063	LS-11A
87771	LS-11A

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: NT-49546
FEDERAL STOCK NO: 5965-296-3398



FUNCTIONAL DESCRIPTION:

This loudspeaker is an aluminum all die case reflexed air column speaker with a radial deflector for 360 degree horizontal dispersion. The speaker is resistant to salt spray, gases, live steam, fungus, and harmful dust. The unit, which is a multiduty loudspeaker, includes a tapped, variable primary impedance line or output transformer and a T-pad volume level control. It may be used in applications where ruggedness is a prime requirement.

CONSISTS OF:

1 Loudspeaker, NT-49546

Including:

1 Volume Control, LTV University Loudspeakers Part No. 19 E 13

1 Transformer, LTV University Loudspeaker Part No. 5430

RELATIONSHIP TO SIMILAR EQUIPMENT:

Similar to LTV University Model MSR-T.

PHYSICAL DESCRIPTION:

Over-all Dimensions:

Height -----10-15/16 inches (277. 81 mm)

Width -----7-3/4 inches (196. 85 mm)

Depth-----8 inches (203.20 mm)

Mounting Dimensions: Two 3/8-inch diameter holes 6-7/8 inches center to center.

Weight -----10-1/4 lbs.

Finish-----Navy gray, semi-gloss

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: NT-49546 (Cont)
FEDERAL STOCK NO: 5965-296-3398

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----16 ohms
Power handling rating -----10 watts, normal; 15 watts, peak
Frequency range -----200 to 5, 000 cps

ADDITIONAL TECHNICAL DATA:

Transformer Data:

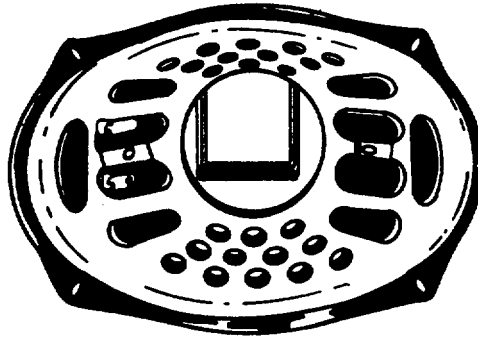
Primary Impedances -----600 ohms; 1200 ohms; 1800 ohms; 2400 ohms;
3000 ohms
Secondary Impedance -----16 ohms
Terminal Types -----2 solder lugs for secondary; 6 screw type terminals
for primary

REFERENCE DATA and LITERATURE

LTV University Loudspeakers Inc. Drawing Number 1915
LTV University Loudspeakers Inc. Commercial Catalog 78A155F
MSS 5965-6

MANUFACTURER CODE	PART NUMBER
80064	NT-49546
81501	MSR-M
87771	NT-49546

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: COMMERCIAL PM-69E
FEDERAL STOCK NO: 5965-296-6052



FUNCTIONAL DESCRIPTION:

This loudspeaker is a permanent magnet, oval type speaker suitable for use with automotive radios, public address systems, and for general purpose use.

CONSISTS OF:

- 1 Loudspeaker Cleveland Electronics Type PM-69E

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Nominal Diameter-----6 X 9 inches, oval

Over-all Dimensions:

Length-----9-1/8 inches (231.78 mm)
Width-----6-3/8 inches (161.93 mm)
Depth-----3-3/8 inches (85.73 mm)

Mounting Dimensions:

Four mounting slots spaced 4-5/8 inches by 6-9/16 inches center to center,
Weight-----3/4 lbs.
Terminal/Connector Type-----2 - Clip Type (Fahnestock)

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: COMMERCIAL PM-69E (Cont)
FEDERAL STOCK NO: 5965-296-6052

ADDITIONAL PHYSICAL DATA:

Magnet Material -----Alnico V
Magnet Weight -----2.15 ounces

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----3.2 ohms + 10 percent
Power handling rating -----4 watts, normal; 10 watts, peak (warble tones)
Frequency range -----60 to 8, 000 cps

ADDITIONAL TECHNICAL DATA:

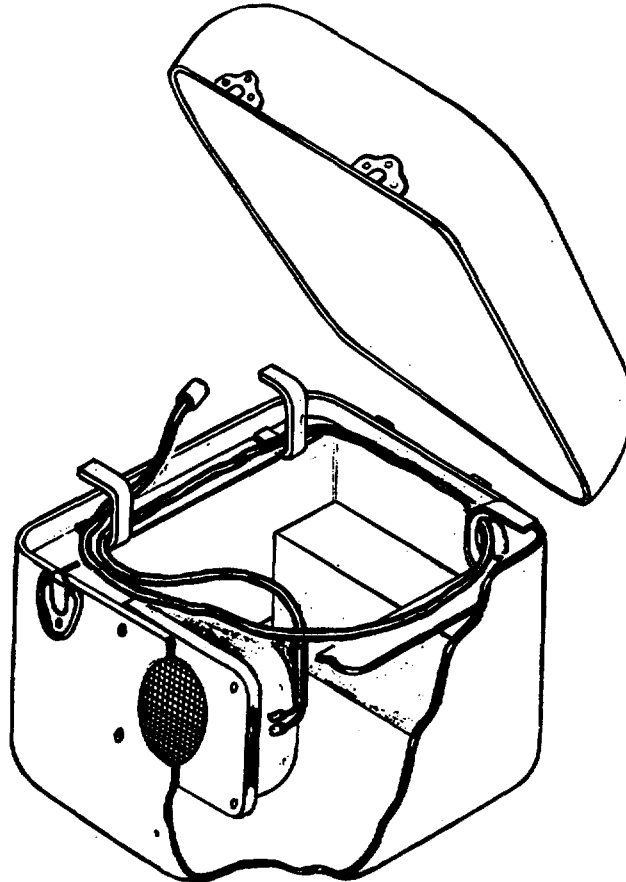
Cone Resonant Frequency -----70 to 95 cps

REFERENCE DATA and LITERATURE

Cleveland Electronics Company Drawing PM69E
Cleveland Electronics Company Catalog Form 562A
MSS 5965-6

MANUFACTURER CODE	PART NUMBER
86194	PM-69E

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: LS-170 ()/PPF-1
FEDERAL STOCK NO: 5965-518-4943



FUNCTIONAL DESCRIPTION:

This unit is a permanent magnet moving coil type loudspeaker. The loudspeaker is housed in a carrying case and is designed to be used with 16 m. m. sound motion picture projection sets suitable for use under severe operating and handling conditions encountered in service in tropical temperature and arctic climates both ashore and afloat.

CONSISTS OF:

- 1 Permanent Magnet Loudspeaker 620066

RELATIONSHIP TO SIMILAR EQUIPMENT:

This loudspeaker is the same as FSN 5965-518-4344 except it is without transformer. Used on Motion Picture Sound Projection Equipment IC/QEB-ID, AS-2(1), AS-7A

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: LS-170 ()/PPF-1 (Cont)

FEDERAL STOCK NO: 5965-518-4343

PHYSICAL DESCRIPTION:

Nominal Diameter-----8 inches (203.20 mm)
Mounting Dimensions-----4 mounting holes spaced 90 degrees apart on a
3-13/16 inch (96. 84 mm) radius
Terminal/Connector Designation-----Solder Lug Type

Over-all Dimensions:

Diameter -----8-1/8 inches (206.38 mm)
Depth-----4- 5/16 inches (109.54 mm)

ADDITIONAL PHYSICAL DATA:

Case Dimensions:

Length -----14 inches (355.60 mm)
Width-----9 inches (228. 60 mm)
Height-----14 inches (355.60 mm)

Cable Data:

Length -----75 feet (22.86 m)
Connector-----Cannon type XLR-3-12C

Magnet Material -----Alnico No. 5 or equal

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----16 ohms t 10 percent at 1, 000 cps
Power handling rating -----25 watts, normal, 40 watts, peak (warble tones)
Frequency range -----100 to 10, 000 cps

ADDITIONAL TECHNICAL DATA:

REFERENCE DATA and LITERATURE

DWG SC-DL-339163
MSS 5965-6

MANUFACTURER CODE	PART NUMBER
32001	P8Q-C6881
06650	620066
80063	LS-170()/PPF-1

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: COMMERCIAL 12984

FEDERAL STOCK NO: 5965-518-4344

No illustration available

FUNCTIONAL DESCRIPTION:

This unit is a permanent magnet moving coil type loudspeaker. The loudspeaker is housed in a carrying case and is designed to be used with 16 m. m. sound motion picture projection sets suitable for use under severe operating and handling conditions encountered in service in tropical temperature and arctic climates both ashore and afloat.

CONSISTS OF:

1 Permanent Magnet Loudspeaker 12984

RELATIONSHIP TO SIMILAR EQUIPMENT:

Part of, Navy Type IC/QEB-ID, Projector Set, Motion Picture Sound. This loudspeaker is the same as LS-170 ()/PPF-1 except it has a transformer.

PHYSICAL DESCRIPTION:

Diameter -----8 inches (203.20 mm)
Mounting Dimensions -----8 mounting holes spaced 45 degrees apart on a
3-13/16 inch (96. 84 mm) radius
Terminal/Connector Designation -----Solder Lug Type

Over-all Dimensions:

Diameter -----8-1/8 inches (206. 38 mm)
Depth-----4-3/8 inches (111. 13 mm)

ADDITIONAL PHYSICAL DATA:

Case Dimensions:

Length-----14 inches (365.60 mm)
Width -----9 inches (228. 60 mm)
Height -----14 inches (355.60 mm)

Cable Data:

Length-----75 feet (22. 86 m)
Connector -----Cannon type XL-13-12SC
Magnet Material-----Alnico No. 5 or equal

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----16 ohms ±10 percent at 1, 000 cps
Power handling rating -----25 watts, normal; 40 watts, peak (5 minutes)
Frequency range -----100 to 10, 000 cps

ADDITIONAL TECHNICAL DATA:

Transformer Data:

Primary Impedance -----1000 ohms
Secondary Taps -----Will permit the output power to be reduced from
20 watts to 0. 31 watts in steps of 3 db with a 70
volt input signal

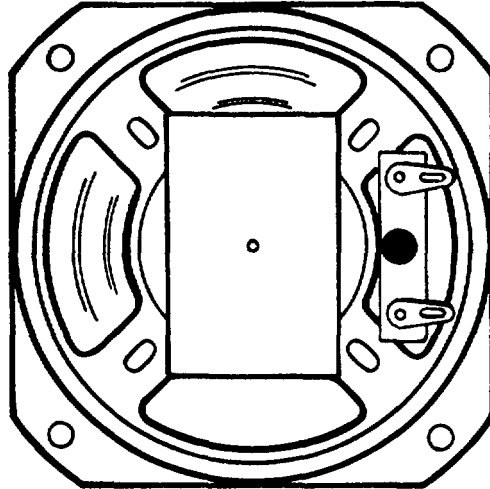
ITEM NAME: LOUDSPEAKER
NOMENCLATURE: COMMERCIAL 12984 (Cont)
FEDERAL STOCK NO: 5965-518-4344

REFERENCE DATA and LITERATURE

MSS 5965-6
Final Report- "Standardization of Loudspeakers" Prepared by Stromberg-Carlson

MANUFACTURER CODE	PART NUMBER
17462	12984

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: COMMERCIAL SK 8163
FEDERAL STOCK NO: 5965-519-6610



FUNCTIONAL DESCRIPTION:

This unit is a permanent magnet dynamic type loudspeaker capable of reproducing sounds in the frequency range of 400 to 4000 cps. The unit is rugged and capable of operation under severe environmental conditions.

CONSISTS OF:

- 1 Permanent Magnet Loudspeaker SK 8163

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Diameter -----3-1/2 inches (88.90 mm)
Mounting Dimensions -----Four mounting holes 3/16 inch in diameter spaced
on 2-25/32 inch mounting centers.
Terminal/Connector Designation -----Solder Lug Type

Over-all Dimensions:

Length -----3-7/16 inches (87.31 mm)
Width -----3-7/16 inches (87.31 mm)
Depth -----2 inches (50.80 mm)

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: COMMERCIAL SK 8163 (Cont)

FEDERAL STOCK NO: 5965-519-6610

ADDITIONAL PHYSICAL DATA:

Magnet Material -----Alnico No. 5 (2.15 ounce)

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----3.2 ohms i 10 percent
Power handling rating -----5 watts (warble tones)
Frequency range -----400 to 4, 000 cps

ADDITIONAL TECHNICAL DATA:

Environmental Data:

Operating Conditions:

Altitude-----10, 000 feet above sea level
Temperature-----From -54 to + 85 degrees C
Humidity -----100 percent

Nonoperating Conditions:

Altitude-----40, 000 feet above sea level
Temperature-----From -29 to + 71 degrees C
Humidity -----100 percent

REFERENCE DATA and LITERATURE

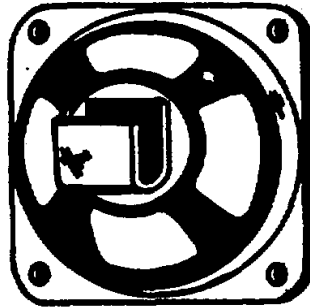
Olympic Radio Drawing No. SK 8163
MSS 5965-6

MANUFACTURER CODE	PART NUMBER
85995	SK 8163

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: COMMERCIAL 3A070T

FEDERAL STOCK NO: 5965-543-0264



FUNCTIONAL DESCRIPTION:

This unit is a 3-1/2 inch permanent magnet speaker utilizing a 0.65 ounce Alnico V magnet. A mylar plastic film on the cone provides a resistance to moisture, dirt, and sand abrasion. Air gap surfaces are cadmium plated and enameled. The unit is therefore suitable for use in outdoor service.

CONSISTS OF:

1 Loudspeaker Quam Nichols Model No. 3A070T

RELATIONSHIP TO SIMILAR EQUIPMENT:

3.18.1

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: COMMERCIAL 3A070T (Cont)

FEDERAL STOCK NO: 5965-543-0264

PHYSICAL DESCRIPTION:

Nominal Diameter-----3-1/2 inches (88.90 mm)

Overall Dimensions:

Length-----3-15/32 inches (88. 11 mm)

Width -----3-15/32 inches (88.11 mm)

Depth-----1-33/64 inches (38.50 mm)

Mounting Dimensions:

Four 0.200 inch diameter holes located 90 degrees apart and 2-25/32 inches (70. 64 mm) center to center.

Magnet Weight -----0. 65 ounces

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----3.2 ohms

Power handling rating -----2.5 watts, peak (warble tones)

Frequency range -----150 to 5, 000 cps

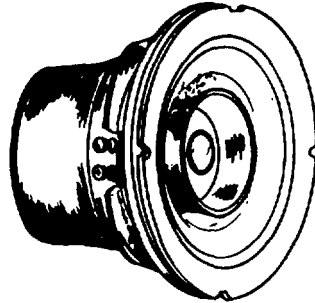
ADDITIONAL TECHNICAL DESCRIPTION:

REFERENCE DATA and LITERATURE

Quam Nichols Catalog 683
Military Supply Standard MSS 5965-6

MANUFACTURER CODE	PART NUMBER
74199	3A070T

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: COMMERCIAL SP8B
FEDERAL STOCK NO: 5965-581-9978



FUNCTIONAL DESCRIPTION:

This unit is a full range permanent magnet loudspeaker in which the mass of the bass cone and its voice coil coupling compliance are so proportioned as to decouple the bass cone mechanically, above the crossover frequency. It is free from phasing dips, and can be used for general purpose full range reproduction.

CONSISTS OF:

- 1 Loudspeaker, Electro-Voice, Model SP8B

RELATIONSHIP TO SIMILAR EQUIPMENT:

3.19.1

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: COMMERCIAL SP8B (Cont)
FEDERAL STOCK NO: 5965-581-9978

PHYSICAL DESCRIPTION:

Diameter -----8-3/8 Inches (212.73 mm)

Mounting Dimensions:

Four holes 9/32 inch diameter equally spaced on 7-5/8 inch (193.68 mm) mounting circle.

Terminal/Connector Designation -----Two binding posts

Over-all Dimensions:

Diameter -----8-3/8 inches (212.73 mm)

Depth-----4-3/4 inches (120.65 mm)

Baffle Aperture-----7-1/8 inches diameter (180.98 mm)

Weight -----6 lbs. 15 oz.

ADDITIONAL PHYSICAL DATA:

Materials:

Frame -----Die Cast Zinc

Magnet-----Ceramic

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----16 ohms

Power handling rating-----20 watts, normal; 40 watts, peak

Frequency range -----50 to 13,000 cps

ADDITIONAL TECHNICAL DATA:

SPECIAL FEATURES:

Incorporates mechanical tweeter

REFERENCE DATA and LITERATURE

MBS 5965-6

Electro-Voice Specification Sheet----- Part No. 53232

Electro-Voice Customer Spec Sheet----- Part No. 808-1635C

MANUFACTURER CODE	PART NUMBER
81134	SP8B

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: LS-450/B

FEDERAL STOCK NO: 5965-583-4106

No illustration available

FUNCTIONAL DESCRIPTION:

The LS-450/B is a permanent magnet dynamic loudspeaker for speech communication between the interior of a submarine and the bridge or escape hatch. It may also be used as a microphone in two-way conversation. The unit will operate under pressure conditions from atmospheric pressure to high pressure present at submarine operating depths. The unit is protected against normal sea exposure and freezing spray conditions by encapsulating the moving voice coil assembly in silicone rubber.

CONSISTS OF:

- 1 Loudspeaker, Permanent Magnet, LS-450/B

RELATIONSHIP TO SIMILAR EQUIPMENT:

Electrically and dimensionally interchangeable with the IC/SHA-IR Loudspeaker (Per BuShips Dwg. 900-S 6502-73987 Rev. O). The output sound pressure level of the LS-450/B is about 8 db lower than the IC-SHA-IR output level with the same input power.

PHYSICAL DESCRIPTION:

Diameter -----6 inches (152.40 mm)
Mounting Dimensions -----Four mounting holes 9/16 inch (14.29 mm) in diameter on 2-3/8 inch by 3-7/8 inch (60.33 by 98.43 mm) mounting centers
Terminal/Connector Designation -----Two No. 8-32 binder head machine screws on terminal board.

Over-all Dimensions:

Diameter -----6 inches (152.40 mm)
Depth -----5 inches (127.00 mm)
Weight -----14 pounds

ADDITIONAL PHYSICAL DATA:

TECHNICAL DESCRIPTION:

INPUT
Voice coil impedance-----16 ohms
Power handling rating -----5 watts (25 watts, max) (warble tones)
Frequency range -----600 to 5,000 cps

ADDITIONAL TECHNICAL DATA:

Output as a Microphone-----01 volts with 16 ohms load and 100 db sound pressure level 775-1225 cps.

Environmental Data:

Pressure Proof
Freeze Proof
Submersible

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: LS-450/B (Cont)
FEDERAL STOCK NO: 5965-583-4106

REFERENCE DATA and LITERATURE

Jensen Instruction Note 184A

MANUFACTURER CODE	PART NUMBER
80058	LS-450/B
32001	LS-450/B

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: LS-211/AIC-13

FEDERAL STOCK NO: 5965-608-0130 (3 mounting holes)
5965-710-5780 (6 mounting holes)

No illustration available

FUNCTIONAL DESCRIPTION:

The LS-211/AIC-13 is a permanent magnet loudspeaker. It is intended to be used as part of Public Address Set AN/AIC-13 to transmit audio messages at low altitudes or at ground level within a military aircraft or from a military aircraft on the ground to personnel in the immediate vicinity.

CONSISTS OF:

1 Permanent Magnet Loudspeaker LS-211/AIC-13

RELATIONSHIP TO SIMILAR EQUIPMENT:

Part of Public Address Set AN/AIC-13

PHYSICAL DESCRIPTION:

Over-all Dimensions:

Length-----7-17/32 inches (191.29)
Width -----6-3/4 inches (171.45 mm)
Depth-----5-7/16 inches (138.11 mm)
Weight -----5-1/2 pounds maximum

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----Between 10.5 and 14.5 ohms
Power handling rating -----20 watts, peak (warble tones)
Frequency range -----200 to 7,000 cps

ADDITIONAL TECHNICAL DATA:

Resistant Characteristics-----Resistant to: extreme operating temperature,
explosive decompression, humidity, fungus,
vibration, shock, and salt spray.

REFERENCE DATA and LITERATURE

MIL-L-25547
MSS 5965-6

MANUFACTURER CODE	PART NUMBER
81349	LS-211/AIC-13
87771	LS-211/AIC-13

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: LS-444/WIH

FEDERAL STOCK NO: 5965-615-0758

No illustration available

FUNCTIONAL DESCRIPTION:

The LS-444/WIH is a direct radiator, permanent magnet type loudspeaker. The unit is furnished with a matching transformer and controls within an enclosure. The loudspeaker is intended for use with Naval motion picture and entertainment installations.

CONSISTS OF:

- 1 Permanent Magnet Loudspeaker LS-444/WIH
- Including:
- 1 Channel Selector
 - 1 Volume Control
 - 1 Transformer

RELATIONSHIP TO SIMILAR EQUIPMENT:

Similar to LS-443/WIH

PHYSICAL DESCRIPTION:

Diameter -----8 inches (203.20 mm)
Mounting Dimensions -----Three 1/2 inch (12.70 mm) diameter mounting
holes on isosceles triangle with 8-3/4 inch
(222.25 mm) base and 8 inch (203.2 mm) altitude.

Over-all Dimensions:

Length -----15 inches (381.00 mm)
Width -----9 inches (228.60 mm)
Height -----15 inches (381.00 mm)

ADDITIONAL PHYSICAL DATA:

Material of Enclosure -----Metal or fibrous glass reinforced polyester plastic

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance -----8 ohms
Power handling rating -----5 watts (warble tones)
Frequency range -----120 to 7, 000 cps

ADDITIONAL TECHNICAL DATA:

Transformer Winding Data -----Primary winding tapped at; 5 volt-amperes, 2.5 va,
1.25 va, .63 va, .31 va, .15 va with a 8 ohm
resistive load and a 70.7 volt line. Secondary
winding tapped at; 5 va, 1.25 va, and .31 va with
a 8 ohm resistive load and 70.7 v applied to the
5 va Primary winding.

Channel Selector -----5 positions. It will be so connected that it will
switch its two output leads to any one of 4 separate
inputs. The unconnected position shall be at the
CCW end and marked "OFF"

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: LS-444/WIH (Cont)

FEDERAL STOCK NO: 5965-645-0758

Volume Control -----6 Positions. It will connect one lead from the channel selector to the various taps of the line-to-voice coil transformer.

REFERENCE DATA and LITERATURE

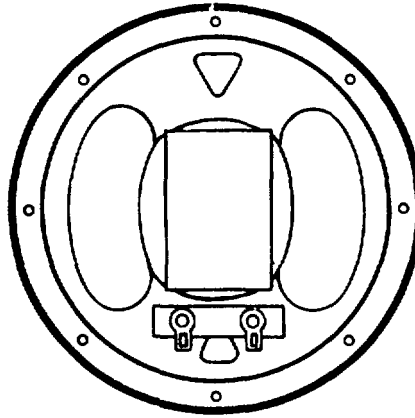
MIL-L-17080
MSS 5965-6

MANUFACTURER CODE	PART NUMBER
80064	LS-444/WIH
81349	LS-444/WIH

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: LS-215 ()/U

FEDERAL STOCK NO: 5965-636-1761



FUNCTIONAL DESCRIPTION:

The LS-215 ()/U is a permanent magnet, direct radiator, dynamic type loudspeaker. It employs an input transformer and is housed in a metal inclosure. It is intended for general purpose use in radio, wire, and public address equipment which is generally sheltered.

CONSISTS OF:

- 1 Loudspeaker, Permanent Magnet, LS-215 ()/U

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Diameter -----6 inches (152.40 mm)
Mounting Dimensions (of housing) -----Four No. 1/4-20 screws on 6-1/4 inch by 6-1/4 inch (158.75 mm) mounting centers.
Mounting Dimensions (of speaker) -----Eight mounting holes 0.200 inch (5.08 mm) in diameter spaced 45 degrees apart on 3.062 inch (77.77 mm) radius.
Terminal/Connector Designation -----Three screw type on a connecting block.

Over-all Dimensions:

Length -----8 inches (203.20 mm)
Width -----8 inches (203.20 mm)
Depth -----4 inches (101.6 mm)
Weight (Speaker Only) -----2 pounds maximum

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: LS-215 ()/U (Cont)

FEDERAL STOCK NO: 5965-636-1761

ADDITIONAL PHYSICAL DATA:

Case Material -----Metal
Terminal Markings -----1 - 3, 8000 ohms; 1 - 2, 600 ohms; 2 - 3, 4000 ohms

TECHNICAL DESCRIPTION:

INPUT
Voice coil impedance-----4 ohms
Power handling rating-----2 watts, nominal
Frequency range -----150 to 7,000 cps

ADDITIONAL TECHNICAL DATA:

Environmental Data:

Nonoperating Conditions:

Temperature-----From -80 deg. F (24 hr. max.) to +160deg. F
(4 hr. max.)
Relative Humidity-----97% indefinite, 100% for 4 hours.
Elevation-----25, 000 feet above sea level.

Operating Conditions:

Temperature-----From -65 deg. F (72 hr. max.) to + 150 deg. F
(4 hr. max.)
Relative Humidity-----97% and 100% for 4 hours.
Elevation-----10, 000 feet above sea level
Resistant Characteristics-----Resistant to: dust, salt, air, vibration, bounce,
and shock

REFERENCE DATA and LITERATURE

MIL-L-10911
MIL-L-13073
MSS 5965
Final Report-"Standardization of Loudspeakers" Prepared by Stromberg-Carlson

MANUFACTURER CODE	PART NUMBER
80058	LS-215()/U
81349	LS-215()/U

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: LS-203/U

FEDERAL STOCK NO: 5965-665-0590

No illustration available

FUNCTIONAL DESCRIPTION:

This unit is a four inch, direct radiator, dynamic type loudspeaker. It is housed on a metal inclosure and is resistant to weather, gunblast and immersion. The unit is intended for use with ground service tactical equipment where resistance to gun-fire and immersion are requirements.

CONSISTS OF:

1 Loudspeaker, Permanent Magnet, LS-203/U
Accessories 1 Cord Assembly, CD-1251 (5 feet long)

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Nominal Diameter-----4 inches (101.60 mm)
Mounting Dimensions-----Adjustable mounting bracket with two 9/32 inch
(7.14 mm) diameter holes spaced 1-1/2 inch
(38.10 mm) C to C
Terminal/Connector Designation-----Solder Lug Type

Over-all Dimensions:

Length-----7-1/32 inches (178.59 mm)
Width-----4-29/32 inches (124. 62mm)
Depth-----3-3/16 inches (80.96 mm)

ADDITIONAL PHYSICAL DATA:

Case Material-----Metal

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----8 ohms
Power handling rating-----2 watts, nominal
Frequency range-----9300 to 7, 000 cps

ADDITIONAL TECHNICAL DATA:

Transformer Data-----4000 ohms primary impedance
Resistant Characteristics-----Resistant to gun-blast, immersion, humidity,
temperature extremes, and bounce

Environmental Data:

Operating Conditions:

Temperature-----From -65° F to + 160° F
Elevation-----5, 000 feet above sea level

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: LS-203/U (Cont)
FEDERAL STOCK NO: 5965-665-0590

Environmental Data: (Cont.)

Operating Conditions: (Cont)

Relative Humidity-----95 percent
Salt-Laden Air-----As encountered in coastal regions

Nonoperating Conditions:

Temperature-----From -80 F to +1600 F for 72 hours
Elevation-----50,000 feet above sea level
Relative Humidity-----100 percent,

REFERENCE DATA and LITERATURE

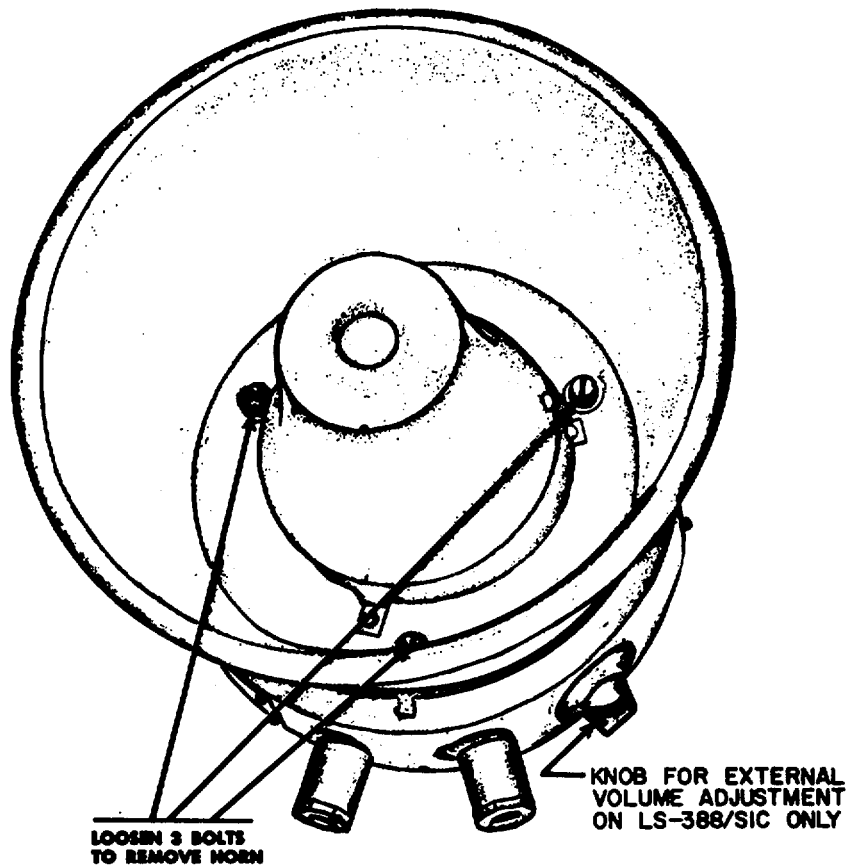
MIL-L-12606
MIL-L-12632
Final Report- "Standardization of Loudspeakers" prepared by Stromberg-Carlson

MANUFACTURER CODE	PART NUMBER
81349	LS-203/U
87771	LS-203/U

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: LS-387.SIC; LS-388/SIC

FEDERAL STOCK NO: 5965-296-1808; 5965-636-2181



FUNCTIONAL DESCRIPTION.

The L8-387/SIC and 11-388/SIC are high power loudspeakers intended for use on shipboard. They provide good speech intelligibility and good reproduction of alarm signs. in areas with high noise levels.

CONSIST OF:

1 Loudspeaker L1B-87/8IC or L8-388/SIC

including:

1 Transformer FN N5950-548-4829

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: LS-387/SIC; LS-388-SIC (Cont)

FEDERAL STOCK NO: 5965-296-1808; 5965-636-2181

RELATIONSHIP TO SIMILAR EQUIPMENT:

The LS-387/SIC is identical to the LS-388/SIC except for the method of volume adjustment. On the LS-387/SIC volume is adjusted internally by connecting a movable jumper to any one of five terminals inside the speaker case. The LS-388/SIC volume is adjusted by a five-position tap switch which is accessible on the outside of the case.

PHYSICAL DESCRIPTION:

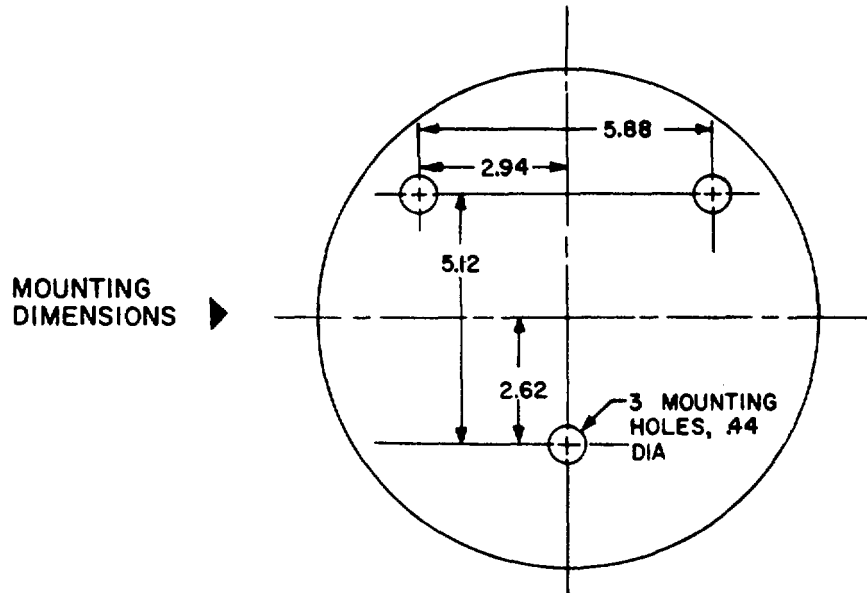
Nominal diameter -----12 inches (304.8 mm)

Mounting Dimensions:

Refer to the following figure, Mounting Dimensions, for arrangement of mounting holes:

Over-all Dimensions:

Length-----10 inches (254.0 mm)
Diameter-----12-5/8 inches (320.68 mm)
Weight-----23 lbs.



ADDITIONAL PHYSICAL DATA:

Material: Horn Assembly and Case are Brass.
Finish: Light Gray, Semi-Gloss

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: LS-387/SIC; LS-388/SIC (Cont)
FEDERAL STOCK NO: 5965-296-1808; 5965-636-2181

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----13.5 ohms
Power handling rating -----7.5 watts, peak
Frequency range -----400 to 4, 000 cps

ADDITIONAL TECHNICAL DATA:

Transformer Data:

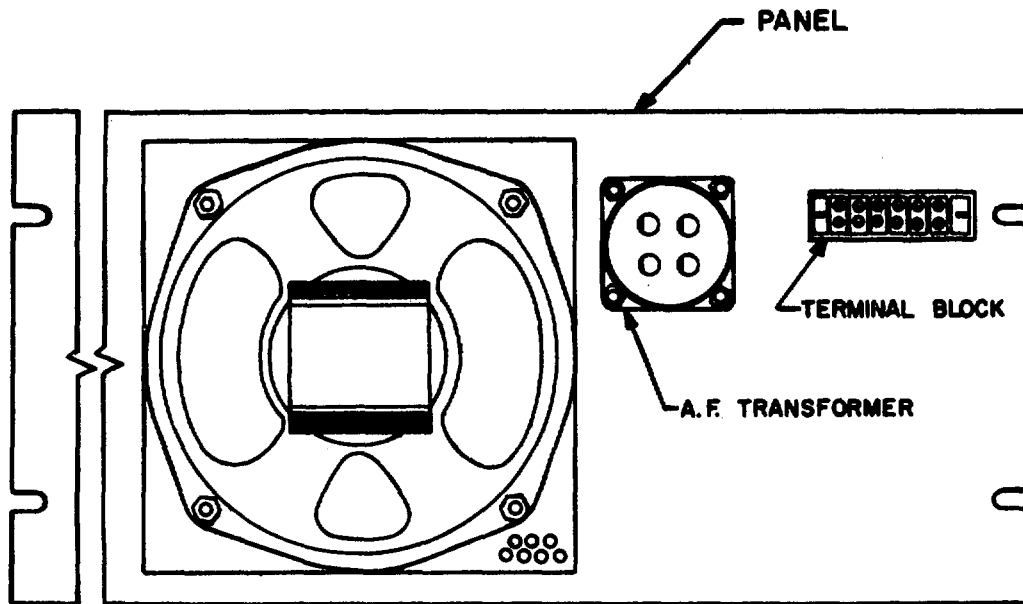
The transformer is tapped to allow use with either a 50 or 70 volt audio line.
Primary impedances at 70 volt tap: 670; 3100; 10, 200; 18,400; 22, 000 ohms.
Primary impedances at 50 volt tap: 350; 1,550; 5, 200; 9,600; 11,300 ohms.

REFERENCE DATA and LITERATURE

Jensen Manufacturing Instruction Note No. 129-B
MIL-A-20222

MANUFACTURER CODE	PART NUMBER
32001	LS-387/SIC
32001	LS-388/SIC

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: LS-169/G
FEDERAL STOCK NO: 5965-296-2547



FUNCTIONAL DESCRIPTION:

The LS-169G is a six-inch permanent magnet loudspeaker suitable for general use.

CONSISTS OF:

- 1 Loudspeaker, Permanent Magnet NT491814
- 1 Panel and Grill
- 1 Attenuator
- 1 Terminal Block Type 8TB6

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Speaker Dimensions:

Nominal Diameter -----6 inches (152.4 mm)
Depth-----4-3/8 inches (111.13 mm)

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: LS-169/G (Cont)
FEDERAL STOCK NO: 5965-296-2547

Panel Dimensions:

Length -----19 inches (482.6 mm)
Height-----6-1/2 inches (165.1 mm)

Mounting Dimensions:

Four mounting slots 7/16 x 1/4 inches are located at the corners of a 18-1/4 K 4 inches rectangle.

Weight -----6 pounds

ADDITIONAL PHYSICAL DATA:

Panel Material-----Aluminum

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----4 ohms
Power handling rating -----2 watts, normal; 5 watts, peak
Frequency range -----200 to 5,000 cps

ADDITIONAL TECHNICAL DATA:

Harmonic distortion-----7 percent maximum

Transformer Impedance at Primary -----600 ohms

REFERENCE DATA and LITERATURE

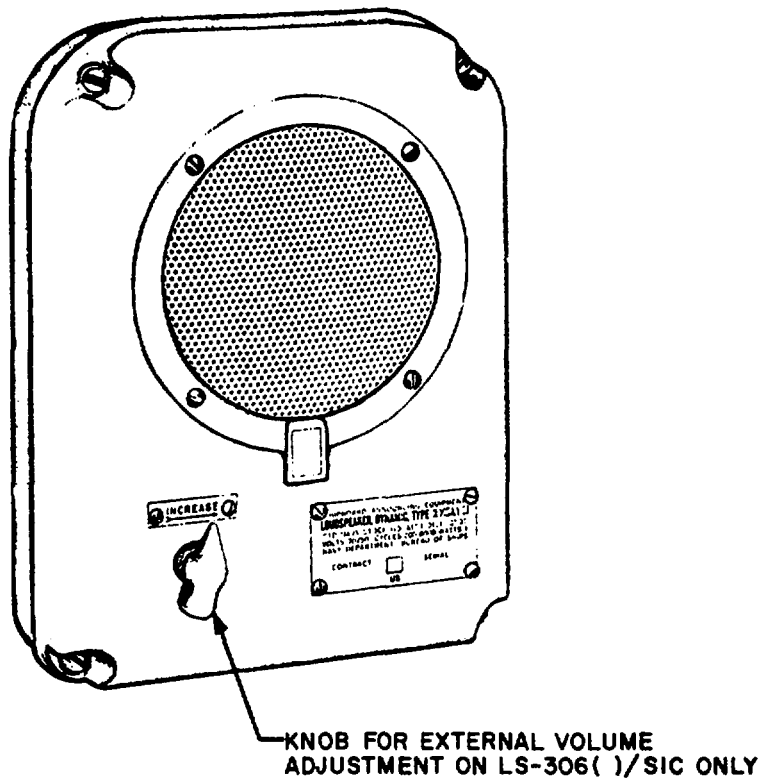
BuShips Drawing RE 49F 773
BuShips Drawing RE 49C 764

MANUFACTURER CODE	PART NUMBER
80058	LS-169/G

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: LS-305 ()/SIC; LS-306()/SIC

FEDERAL STOCK NO: 5965-636-2462; 5965-284-6579



FUNCTIONAL DESCRIPTION:

The LS-305 ()/SIC and LS-306 ()/SIC are low power loudspeakers intended for reproduction of speech and alarm signals in sheltered areas of ships, such as living spaces, in which the noise level is comparatively low.

CONSISTS OF:

- 1 Loudspeaker, Dynamic LS-305 ()/SIC or LS-306 ()/SIC

RELATIONSHIP TO SIMILAR EQUIPMENT:

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: LS-305 ()/SIC; LS-306 ()/SIC (Cont)

FEDERAL STOCK NO: 5965-636-2462; 5965-284-6579

PHYSICAL DESCRIPTION:

Nominal Diameter-----11 inches (279.4 mm)

Over-all Dimensions:

Length -----10-15/16 inches (277.81 mm)

Width-----8-1/4 inches (209.55 mm)

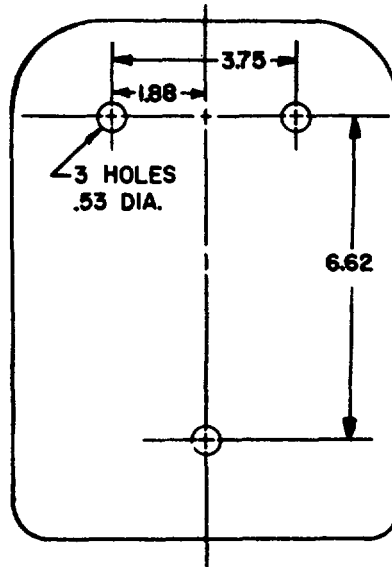
Depth-----4-7/16 inches (112.71 mm)

Mounting Dimensions:

Refer to the following figure, arrangement of mounting holes:

Weight -----6 lbs. est.

ARRANGEMENT OF MOUNTING HOLES: ►



ADDITIONAL PHYSICAL DATA:

Case Material: Aluminum
Finish: Alkyd Resin Enamel, Light Navy Gray

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----7 ohms
Power handling rating-----Not rated
Frequency range -----200 to 8,000 cps

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: LS-305 ()/SIC; LS-306()/SIC (Cont)
FEDERAL STOCK NO: 5965-636-2462; 5965-264-6579

ADDITIONAL TECHNICAL DATA:

Transformer Data:

The line transformer is tapped to allow use with either a 50 to 70 volt audio line.
The input impedances available at the 70 volt tap at one kilocycle per second are:
5200; 16, 900; 41, 900; 59, 200; 71, 000 ohms.
The input impedances at the 50 volt tap at one kilocycle are: 2600; 8200; 20,400;
29, 200; 35, 500 ohms.

REFERENCE DATA and LITERATURE

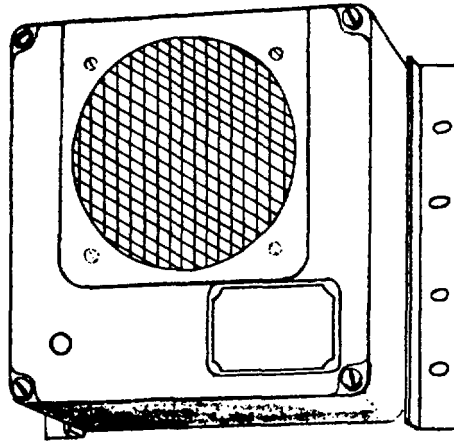
Jensen Manufacturing Company Instruction Note No. 171B.
MIL-A-20222
MIL-P-15328
MIL-E-15090 (Type 3, Class 2)
MIL-V-173A

MANUFACTURER CODE	PART NUMBER
32001	LS-305()/SIC or LS-306()/SIC

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: LS-474/U

FEDERAL STOCK NO: 5965-892-3597



FUNCTIONAL DESCRIPTION:

The ILS474/U Loudspeaker is designed as a general purpose unit having provision for mounting on a wall, rack panel, or table top.

CONSISTS OF:

- 1 Loudspeaker LS474/U
- Including:
 - 1 Cabinet, Including Mounting Brackets
 - 1 Matching Transformer

RELATIONSHIP TO SIMILAR EQUIPMENT:

Similar to LS-195/U except for the single primary impedance transformer and elimination of attenuator.

ACCESSORIES:

A volume control, FSN N5905-201-3680, can be mounted on the front panel by removing the hole plug.

Two loudspeakers may be mounted on relay rack CY-597A/G.

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: LS-474/U (Cont)
FEDERAL STOCK NO: 5965-892-3597

PHYSICAL DESCRIPTION:

Weight ----- Not available

Dimensions:

Length -----8-9/16 inches (217.49 mm)
Width-----8-11/16 inches (220. 66 mm)
Depth-----5 inches (127. 0 mm)
Nominal Cone Diameter-----6 inches (152.4 mm)

Mounting Dimensions:

4-7/32 inch diameter mounting holes spaced 4. 33 inches center to center.
4 mounting holes on flanges provide for installation on a bulkhead.,

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----3.2 ohms
Power handling rating-----4 watts, nominal
Frequency range -----200 to 5, 000 cps

ADDITIONAL TECHNICAL DATA:

Transformer Primary Impedance-----600 ohms

REFERENCE DATA and LITERATURE

Fidelity Amplifier Company Instruction Sheet No. 100

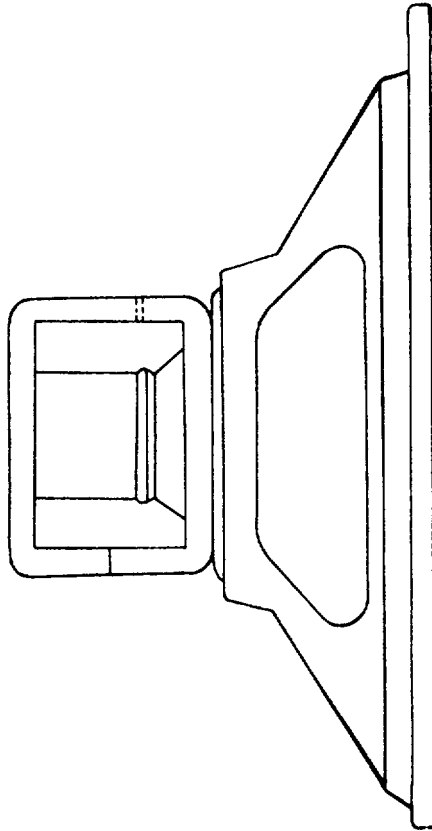
MIL-L-17061

MANUFACTURER CODE	PART NUMBER
81349	LS-474/U

ITEM NAME: LOUDSPEAKER

NOMENCLATURE: NT-491814

FEDERAL STOCK NO: 5965-252-0803



FUNCTIONAL DESCRIPTION:

The NT-491814 is a six-inch low impedance loudspeaker resistant to shock, vibration, and salt spray, which is suitable for shipboard and general purpose use.

CONSISTS OF:

- 1 Loudspeaker, Permanent Magnet NT-491814

3.29.1

ITEM NAME: LOUDSPEAKER
NOMENCLATURE: NT-491814 (Cont)
FEDERAL STOCK NO: 5965-252-0803

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Nominal Diameter-----6 inches (152.4 mm)
Diameter -----6-1/8 inches (155.58 mm)
Depth-----3-1/8 inches (79. 38 mm)
Weight-----Not available

ADDITIONAL PHYSICAL DATA:

Mounting Dimensions:

Four slots . 203 x . 297 inches at the corners of a 4-1/4 inch square.

Finish:

All corrosive metal parts finished in gray enamel.

TECHNICAL DESCRIPTION:

INPUT

Voice coil impedance-----3. 2 ohms at 400 cps
Power handling rating -----4 watts
Frequency range -----200 to 5, 000 cps

ADDITIONAL TECHNICAL DATA:

REFERENCE DATA and LITERATURE

RE49C764
MIL-E- 16400
MIL-STD-202, Method 102A
MIL-S-901, (Type 1, Grade 1)
MIL-STD-167, (Type 1)

MANUFACTURER CODE	PART NUMBER
70215	B7240

SECTION 4

HEADSETS

Nomenclature, model or part number	Page
"A" #200-----	4.2.1
H-16 ()/U-----	4.3.1
H-43B/U-----	4. 4.1
H-113/U-----	4.5.1
H-154/AIC-----	4.6.1
H-158/AIC-----	4.7.1
H-220/U-----	4.8.1
HS-1B6A-----	4.9.1
HS-32-----	4.10.1
HS-33A-----	4.11.1
NT-49507B-----	4.12.1
NT-49985A-----	4.13.1
P-104J535-1-----	4.14.1
159-----	4.15.1
716D-----	4.16.1
24076-----	4.17.1

4.1.1

ITEM NAME: HEADSET

NOMENCLATURE: COMMERCIAL "A" #200

FEDERAL STOCK NO: 5965-170-4815



FUNCTIONAL DESCRIPTION:

This headset contains two crystal type earphone receivers mounted in a metal double band headband. The headset is primarily intended for use with the recorder and reproducer type number TCB-2 made by Dictaphone Corporation. The headset has a relatively flat response and is suitable for general purpose, voice applications in the laboratory or studio.

CONSISTS OF:

- 2 Earphone Receivers Brush Development Co. Type B-2107
- 1 Headband

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Dimensions: (Earphone)

Depth-----15/16 inches (23.81 mm)
Diameter -----2-5/64 inches (52.78 mm)

Cord Data:

Length-----5 feet (1524. 00 mm)
No. of Conductors -----2
No. of Connectors -----2
Connector Designation-----Phone Tip, Brush Development Drawing No. B2024
Jacket Material-----Cotton Braid

ITEM NAME: HEADSET
NOMENCLATURE: COMMERCIAL "A" #200 (Cont)
FEDERAL STOCK NO: 5965-170-4815

ADDITIONAL PHYSICAL DATA:

Headband Data:

Material -----Metal
Padding -----Cloth
Type -----Double Band Fixed

TECHNICAL DESCRIPTION: (HEADSET)

INPUT

Quantity of Earphones -----2
Nominal Impedance -----1 megohm \pm 20 percent
Frequency Range -----100 to 8, 000 cps

ADDITIONAL TECHNICAL DATA:

Environmental Limitations:

Pressure Cycling -----0 to 50, 000 feet

REFERENCE DATA and LITERATURE

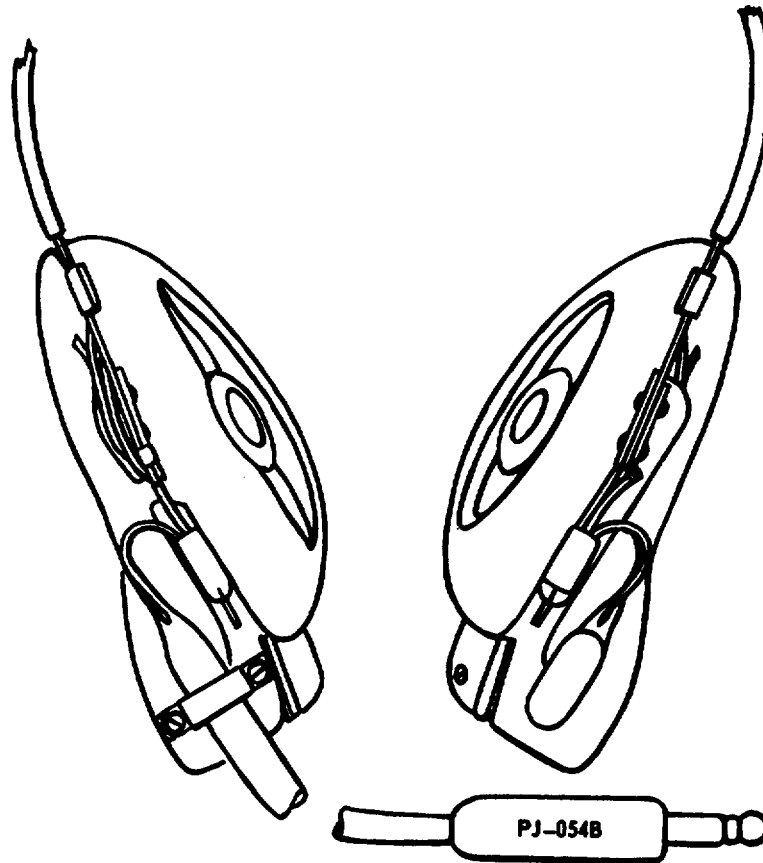
Brush Electronics Company Form No. 812
Brush Electronics Company Folder P-20

MANUFACTURER CODE	PART NUMBER
09215	"A" #200

ITEM NAME: HEADSET

NOMENCLATURE: H-16()/U

FEDERAL STOCK NO: 5965-243-7782



FUNCTIONAL DESCRIPTION:

Headset H-16()/U is intended to be used in noisy locations such as tarok, destroyers, etc. It consists of two magnetic receiver elements and two matching transformers. The ear-cups incorporate slide adjustment for attachment to the headband.

CONSISTS OF:

- 2 Magnesium Earcups, MX-239()/U and MX-240()/U
- 2 Magnetic Receiver Elements R-30-U
- 2 Matching Transformers
- 1 Headband MX-175()/U
- 1 Cord
- 1 Plug PJ-054B

RELATIONSHIP TO SIMILAR EQUIPMENT:

ITEM NAME: HEADSET

NOMENCLATURE: H-16()/U (Cont)

FEDERAL STOCK NO: 5965-243-7782

PHYSICAL DESCRIPTION:

Earphone Dimensions:

Over-all Diameter -----29/32 inches (23.02 mm)
Depth -----11/16 inches (17.46 mm)

Cord Data:

Length -----65-1/8 inches (1, 654.18 mm)
Jacket Material -----Rubber
Number of Connectors -----1
Connector Designation -----PJ- 054B

ADDITIONAL PHYSICAL DATA:

Headband Data:

Type -----Single Band Adjustable
Material -----Rubber-covered Metal

TECHNICAL DESCRIPTION:

INPUT

Quantity of Earphones -----2
Nominal Impedance -----8,000 ohms (in series)
Frequency Range -----400 to 2, 600 cps

ADDITIONAL TECHNICAL DATA:

Transformer Data:

Primary Impedance -----400 ohms
Secondary Impedance -----20 ohms

ENVIRONMENTAL LIMITATIONS:

Temperature Range:

In Operation -----40° F to + 125° F
In Transportation -----65° F to + 183° F
Salt atmosphere -----As in coastal regions and ocean transportation
Dust -----Withstands particles between 10 and 50 microns in any reasonable distribution and concentration
Altitude -----Sea level to 50, 000 feet
Immersion -----Withstands immersion in 6 inches of water for ten minutes

REFERENCE DATA and LITERATURE

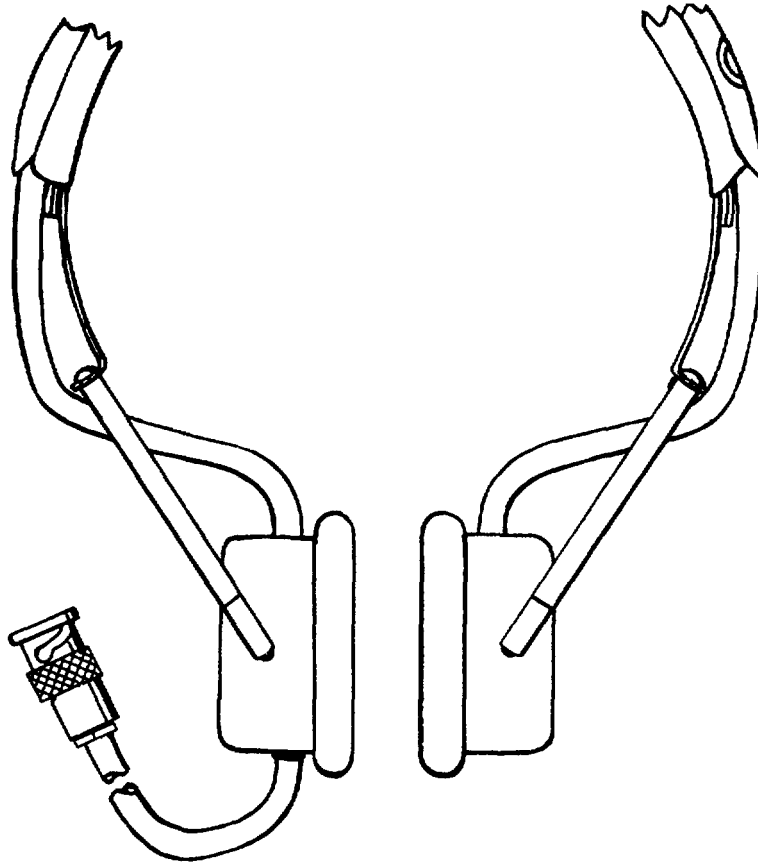
MIL- H- 12487

MANUFACTURER CODE	PART NUMBER
80063	H-16()/U

ITEM NAME: HEADSET

NOMENCLATURE: H-43B/U

FEDERAL STOCK NO: 5965-651-7372



FUNCTIONAL DESCRIPTION:

The H-43B/U is a high impedance, two-earphone headset suitable for use under the standard military metal helmet.

CONSISTS OF:

- | | | |
|---|---------------|----------------------|
| 1 | Earphone | Navy Type CTE-491964 |
| 1 | Earphone | Navy Type CTE-491965 |
| 1 | Headband | Type 14146-1 |
| 1 | Cord Assembly | |
| 1 | Connector | UG-88()/U |

RELATIONSHIP TO SIMILAR EQUIPMENT:

Similar to and interchangeable with headset H-43/U.

ITEM NAME: HEADSET
NOMENCLATURE: H-43B/U (Cont)
FEDERAL STOCK NO: 5965-651-7372

PHYSICAL DESCRIPTION:

Dimensions: (Earphone)

Depth-----1 inch (25.4 mm)
Diameter-----2 inches (50.8 mm)

Cord Data:

Length-----34 inches (863.6 mm)
No. of Conductors-----2
Connector Designation-----UG-88()/U
Jacket Material-----Rubber

ADDITIONAL PHYSICAL DATA:

Headband Data:

Material-----Steel
Padding-----Cloth
Type-----Single Band, Adjustable

TECHNICAL DESCRIPTION: (HEADSET)

INPUT

Quantity of Earphones-----2
Nominal Impedance-----20, 000 ohms + 20 percent (in series)
Frequency Range-----Not rated

ADDITIONAL TECHNICAL DATA:

FREQUENCY OF MAXIMUM RESPONSE:

1, 000 cps \pm 150 cps

HARMONIC DISTORTION

15 percent maximum at 1, 000 cps and an input level of one milliwatt

ENVIRONMENTAL LIMITATIONS

Temperature range-----40° C to +55° C

REFERENCE DATA and LITERATURE

Telephonics Corporation Drawing No. 167C000 Sept. 25, 1961

MANUFACTURER CODE	PART NUMBER
80058	H-43B/U

ITEM NAME: HEADSET
NOMENCLATURE: H-113/U
FEDERAL STOCK NO: 5965-504-6370



FUNCTIONAL DESCRIPTION:

This Electrical Headset, H-113/U, is a general purpose headset used as a receiver for radio and wire equipment. It contains two magnetic earphone receivers suspended on a single band steel headband.

CONSISTS OF:

- 1 Electrical Headset H-113/U
Consisting of:
 - 2 Earphone Receivers Connecticut Telephone and Electric Corp. Part Number G-14225
 - 1 Headband
 - 2 Earphone Cushions Connecticut Telephone and Electric Corp. Part Number G- 14205

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Dimensions: (earphone)

Depth-----0. 603 inch (15.32 mm)
Diameter-----1-63/64 inches (50. 40 mm)

Cord Data:

Length-----16 inches (351. 60 mm)
Number of Conductors-----2
Number of Connectors-----1
Connector Designation-----PJ-054B
Jacket Material-----Rubber

ITEM NAME: HEADSET

NOMENCLATURE: H-113/U (Cont)

FEDERAL STOCK NO: 5965-504-6370

ADDITIONAL PHYSICAL DATA:

Headband Data:

Material -----Steel
 Padding -----Plastic
 Type -----Single Band, Adjustable

TECHNICAL DESCRIPTION: (HEADSET)

INPUT

Quantity of Earphones -----2
 Nominal Impedance -----600 ohms
 Frequency Range -----300 to 4, 000 cps

ADDITIONAL TECHNICAL DATA:

ENVIRONMENTAL LIMITATIONS:

Equipment Nonoperating:

Temperature Range -----80° F to +160° F (High temperature extreme not more than 4 hours, and low temperature extreme not more than 24 hours at any one time.)
 Relative Humidity -----Up to 97 percent for indefinite period. Exposure at 100 percent with condensation for 4 hours.
 Elevation -----Up to 50, 000 feet above sea level.
 Orientation -----Indefinite storage in any orientation.
 Salt Spray -----Withstands 20 percent salt spray test, Method 101, Condition A, MIL-STD-202.
 Vibration -----Withstands Vibration test of MIL-H-11190.
 Bounce -----Withstands Bounce test of MIL-H-11190.
 Shock -----Withstands 3 foot drops on each corner, edge, and face onto a 2 inch tin floor backed by concrete or rigid steel frame.
 Blast -----ithstands gunblast test of MIL-STD-108, degree 2.

Equipment Operating:

Temperature Range -----40° F to + 150° F (High temperature extreme not more than 4 hours and low extreme not more than 72 hours.)
 Relative Humidity -----Up to 97 percent indefinitely 100% with condensation for 4 hours.
 Elevation -----Up to 15, 000 feet above sea level.

REFERENCE DATA and LITERATURE

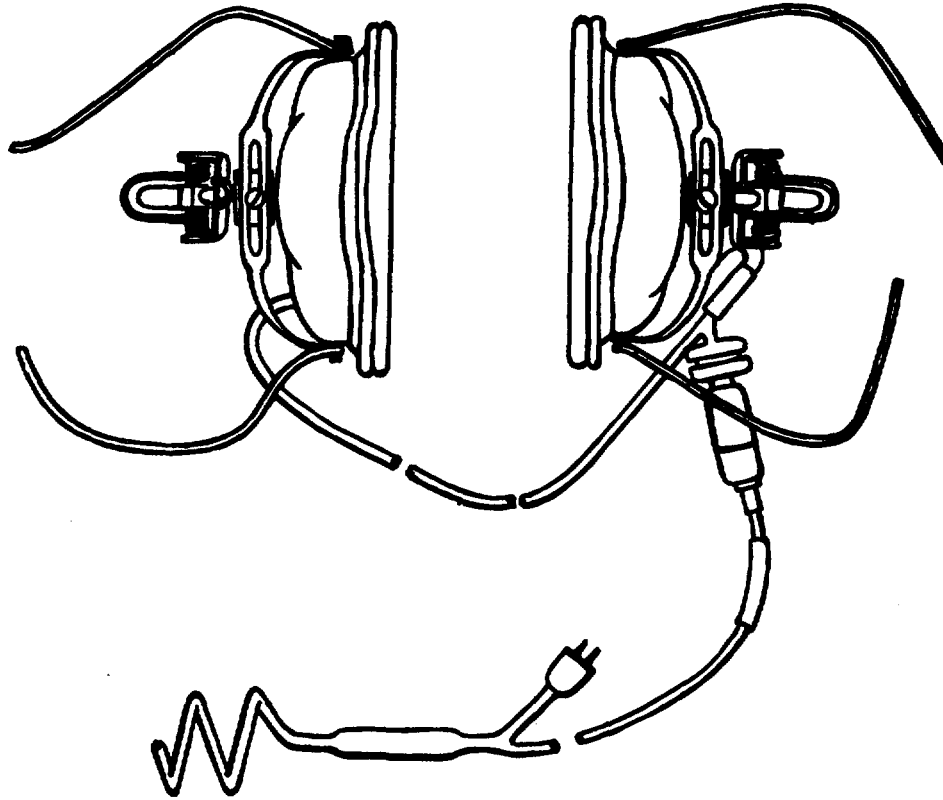
MIL-H-11190
 MSS 5965-1
 Telephonics Corporation Final Report of Technical Analysis Phase of Standardization Studies and Surveys of Headsets and Headset-Microphones

MANUFACTURER CODE	PART NUMBER
80058	H-113/U

ITEM NAME:

NOMENCLATURE:

FEDERAL STOCK NO:



FUNCTIONAL DESCRIPTION:

The H-154/AIC is intended for use with Flying Helmet HGU-2A/P. The headset included a plug connector to plug in a low-impedance dynamic microphone which is mounted in an oxygen mask. The headset is intended for use with Intercommunication Sets AN/AIC-10 and AN/AIC-18 to provide communication of high intelligibility under the extreme noise conditions encountered in military aircraft.

CONSISTS OF:

- 2 Earphones H- 143/AIC
- 2 Earphone Shells MX-3678/AIC and MX-3679/AIC
- 2 Cord Assemblies CX4707A/AIC and CX4708A/AIC

RELATIONSHIP TO SIMILAR EQUIPMENT:

ITEM NAME: HEADSET

NOMENCLATURE: H-154/AIC (Cont)

FEDERAL STOCK NO: 5965-856-0552

PHYSICAL DESCRIPTION:

Earphone Dimensions:

Nominal Diameter-----2 inches (50.8 mm)
Depth-----0.45 inches (11.43 mm)

Cable Data: (CX-4707A/AIC)

Length-----1 foot 7 inches (482.6 mm)
Jacket Material-----Nylon Braid

Cable Data: (CX-4708/AIC)

Length-----2 feet 3 inches (685.8 mm)
Jacket Material-----Nylon Braid

ADDITIONAL PHYSICAL DATA:

Headband Data:

TypeSingle band, adjustable
Material-----Plastic covered steel
Connector type -----Phone plug

TECHNICAL DESCRIPTION:

INPUT

Quantity of Earphones -----2
Nominal Impedance -----10 ohms (in parallel)
Frequency Range -----100 to 5,000 cps

ADDITIONAL TECHNICAL DATA:

ENVIRONMENTAL LIMITATIONS:

Temperature -----55° C to + 85° C
Altitude-----Sea level to 25,000 feet

REFERENCE DATA and LITERATURE

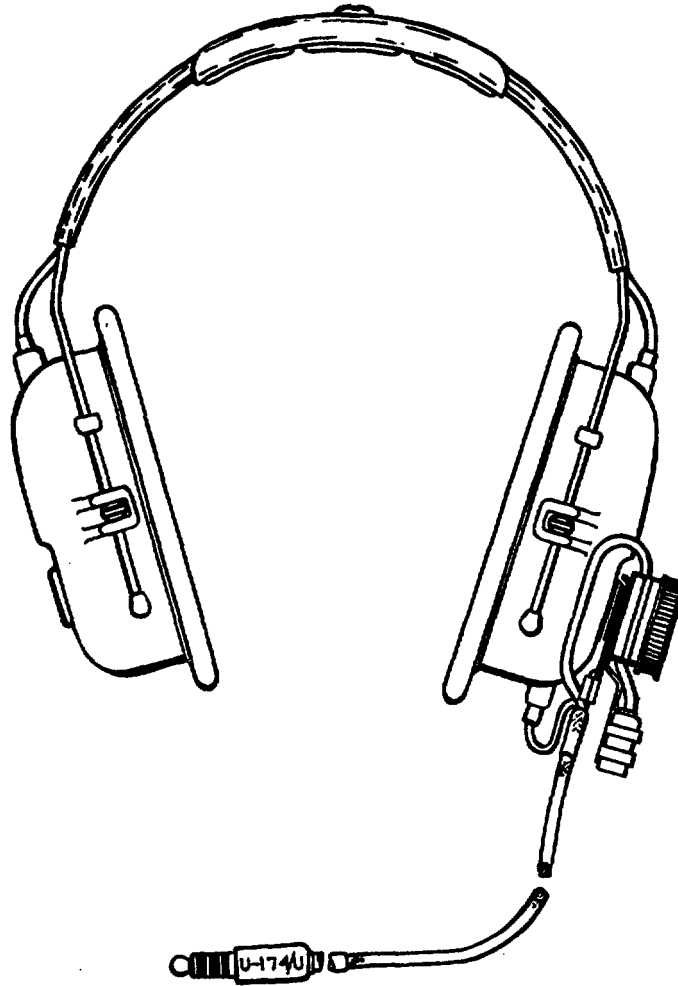
MIL-H-27467
MIL-E-25670
AF Drawing 60D4292

MANUFACTURER CODE	PART NUMBER
82872	10557
80058	H-154/AIC

ITEM NAME: HEADSET

NOMENCLATURE: H-158/AIC

FEDERAL STOCK NO: 5965-841-1372



FUNCTIONAL DESCRIPTION:

The H- 158/AIC is a headband type headset intended for use at low altitudes as part of Intercommunication Set AN/AIC-10() to provide communication of high intelligibility under the extreme noise conditions encountered in Military Aircraft.

CONSISTS OF:

- 2 Earphones H-143/AIC
- 2 Earphone Shells MX-2508/AIC and MX-3473/AIC
- 1 Headband MX-2506/AIC
- 2 Cord Assemblies CX-4434/U and CX-4435/U
- 1 Microphone Bracket MT-2007/AIC
- 1 Connector Telephone plug type U-174/U

ITEM NAME: HEADSET

NOMENCLATURE: H-158/AIC (Cont)

FEDERAL STOCK NO: 5965-841-1372

RELATIONSHIP TO SIMILAR EQUIPMENT

Headset H-158/AIC is similar to headset-microphone H-157/AIC, except for the microphone.

PHYSICAL DESCRIPTION:

Earphone Dimensions:

Nominal Diameter -----2 inches (50. 8 mm)
Depth -----0.45 inches (11. 43 mm)

Cord Data: (CX-4434/U)

Length -----1 foot 4 inches (406.4 mm)
Jacket Material -----Nylon braid

Cord Data: (CX-4435/U)

Length -----2 feet 4-1/2 inches (723. 9 mm)
Jacket Material -----Nylon braid

ADDITIONAL PHYSICAL DATA:

Headband Data:

Type -----Single Band
Construction -----Extruded plastic webbing over two steel wires

Connector Data:

Number of Connectors -----1
Connector Type -----Telephone Plug
Earphone Weight -----35 Grams Max.

TECHNICAL DESCRIPTION: (EARPHONE)

INPUT

Quantity of Earphones -----2
Nominal Impedance -----10 ohms (in parallel)
Frequency Range -----100 to 5, 500 cps

ADDITIONAL TECHNICAL DATA:

ENVIRONMENTAL LIMITATIONS:

Temperature -----55° C to + 85° C
Altitude (Operation) -----25, 000 feet
Altitude (Transportation) -----50, 000 feet

REFERENCE DATA and LITERATURE

MIL-H-26541

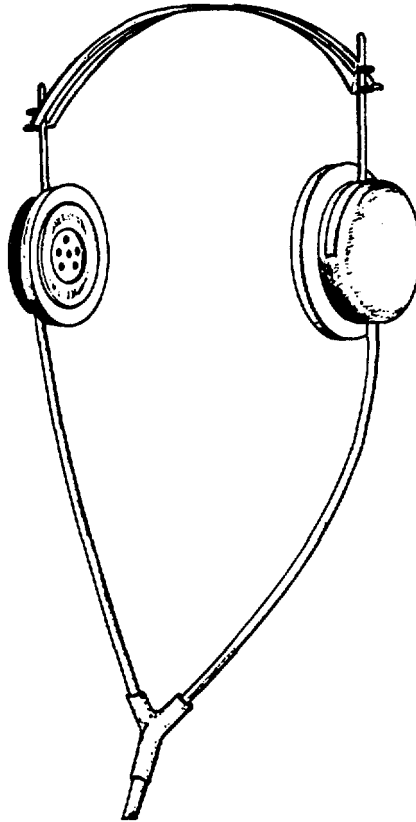
Air Force Drawing 58C 12682

MANUFACTURER CODE	PART NUMBER
80058	H-158/AIC
82872	10558

ITEM NAME: HEADSET

NOMENCLATURE: COMMERCIAL H-220/U

FEDERAL STOCK NO: 5965-892-3893



FUNCTIONAL DESCRIPTION:

This headset contains two high-fidelity, crystal type earphones with adjustable headband, cord, and a telephone plug. It is a special purpose unit.

CONSISTS OF:

1 Headset H-220/U

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Headset Cord Data:

Length-----73 ± 3 inches (1854.2 mm ± 76.2 mm) (from
earphones to plug)
No. of Conductors -----2
Covering-----Plastic
Connector Designation-----PJ-055B

ADDITIONAL PHYSICAL DATA:

Weight -----8 oz.

ITEM NAME: HEADSET
NOMENCLATURE: COMMERCIAL H-220/U (Cont)
FEDERAL STOCK NO: 5965-892-3893

TECHNICAL DESCRIPTION: (HEADSET)

INPUT

Quantity of Earphones -----2
Impedance -----50, 000 ohms at 1, 000 cps
Frequency Range -----50 to 10, 000 cps

ADDITIONAL TECHNICAL DATA:

REFERENCE DATA and LITERATURE

MSS 5965-1A

MANUFACTURER CODE	PART NUMBER
06743	H-220/U

ITEM NAME: HEADSET

NOMENCLATURE: HS-16A

FEDERAL STOCK NO: 5965-160-1055



FUNCTIONAL DESCRIPTION:

Headset HS-16A contains two magnetic earphone receivers mounted in an adjustable, double band steel headband. The headset, for maximum performance, is peaked at 1000 cps and it is primarily intended for use with Code Practice Equipment Type Number EE-81. However, it is suitable for other code applications.

CONSISTS OF:

1	Electrical Headset	HS- 16A
2	Earphone Receiver	Murdock Corp. Type B
1	Headband	HB-1
1	Connecting Cord	CC-338

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Dimensions: (Earphone)

Depth-----1-1/4 inches (31. 75 mm)
Diameter -----2-3/8 inches (60. 33 mm)

ITEM NAME: HEADSET

NOMENCLATURE: HS-16A (Cont)

FEDERAL STOCK NO: 5965-160-1055

PHYSICAL DESCRIPTION: (Cont)

Cord Data:

Length-----54 inches (1371.60 mm)
 Quantity of Conductors -----2
 Quantity of Connectors -----2
 Connector Designation-----Pin Plugs
 Jacket Material-----Cotton Braid

ADDITIONAL PHYSICAL DATA:

Headband Data

Material -----Steel
 Padding-----Cloth
 Type -----Double Band Fixed

TECHNICAL DESCRIPTION: (HEADSET)

INPUT

Quantity of Earphones -----2
 Nominal Impedances-----520 ohms (in series)
 Frequency Range -----100 to 1, 400 cps

ADDITIONAL TECHNICAL DATA:

Receiver Resonant Frequency -----1050 ± 100 cycles per second
 Receiver D-C Resistance -----56 ohms + 10%

Environmental Limitations:

Equipment Nonoperating:

Temperature Range -----80° F to + 160° F (High temperature extreme not more than 4 hours; low temperature extreme not more than 24 hours at any one time.)
 Relative Humidity-----Up to 97 percent indefinitely; exposure at 100 percent with condensation for four hours.
 Elevation-----Up to 25, 000 feet above sea level

Equipment Operating:

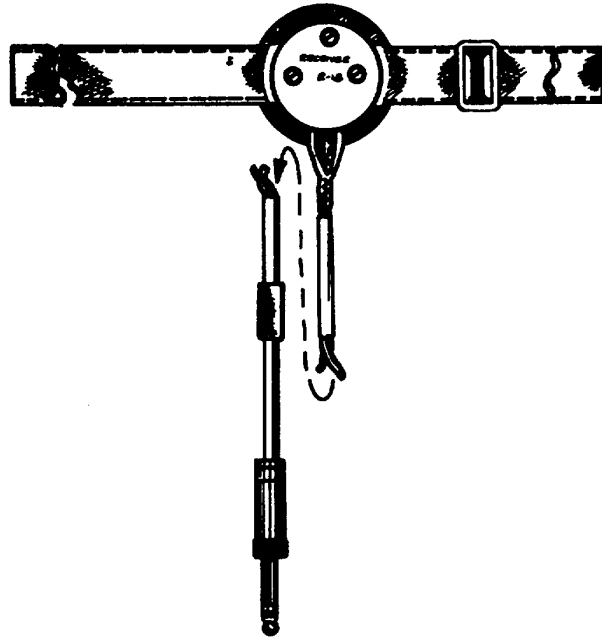
Temperature Range -----65° F to + 150° F (High temperature extreme not more than 4 hours; low extreme not more than 72 hours at any one time)
 Relative Humidity-----Up to 97 percent indefinitely; 100% with condensation for 4 hours
 Elevation-----Up to 10, 000 feet above sea level

REFERENCE DATA and LITERATURE

MIL-H-12993
 Telephonics Corporation Final Report of Technical Analysis Phase of Standardization Studies and Surveys of Headsets and Headset Microphones
 MSS 5965-1

MANUFACTURER CODE	PART NUMBER
80063	HS-16A
76596	HS-16A

ITEM NAME: HEADSET
NOMENCLATURE: HS-32
FEDERAL STOCK NO: 5965-162-9056



FUNCTIONAL DESCRIPTION:

This electrical Headset HS-32 contains one magnetic earphone receiver mounted in an adjustable, single cotton webbing headband. The headset is suitable for radiac detector and code applications as well as other general purpose uses.

CONSISTS OF:

- 1 Receiver Assembly R-18
- 1 Cord Clamp SC-A-7676
- 1 Cord Assembly CC-305-B
- 1 Plug PJ-055B

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Dimensions: (Earphone)

Depth-----1-7/32 inches (30.96 mm)
Diameter-----2-3/8 inches (60.33 mm)

Cable Data:

Length-----36 inches (914. 40 mm)
No. of Conductors -----2
No. of Connectors -----1
Connector Designation-----PJ-055B
Jacket Material-----Rubber

ITEM NAME: HEADSET
NOMENCLATURE: HS-32 (Cont)
FEDERAL STOCK NO: 5965-162-9056

ADDITIONAL PHYSICAL DATA:

Headband Data:

Material -----Cotton Web
Padding-----Cotton Web
Type -----Single land Adjustable

TECHNICAL DESCRIPTION: (HEADSET)

INPUT

Quantity of Earphones -----1
Nominal Impedance -----250 ohms
Frequency Range -----Not rated

ADDITIONAL TECHNICAL DATA:

Environmental Limitations:

Pressure Cycling -----0 to 50,000 feet
Shock -----12 five-foot drops onto concrete surface with minimal
electrical and physical damage.

REFERENCE DATA and LITERATURE

Signal Corps Drawing Number SM-D-7614
Telephonics Corporation Final Report of Technical Analysis Phase of
Standardization Studies and Surveys of Headsets and Headset-Microphones
MSS 5965-1

MANUFACTURER CODE	PART NUMBER
80063	HS-32

ITEM NAME: HEADSET
NOMENCLATURE: HS-33A
FEDERAL STOCK NO: 5965-295-7160



FUNCTIONAL DESCRIPTION:

This electrical Headset, HS-33A, contains two dynamic type earphone receivers mounted on an adjustable, double band, steel headband. The headset is suitable for general purpose voice communications and may be used in aircraft.

CONSISTS OF:

- 2 Earphone Receivers Type ANB-H1
- 2 Ear Cushions
- 1 Headband Type HB7

RELATIONSHIP TO SIMILAR EQUIPMENT:

This Headset is a part of Headset-Microphone H-46A/UR

4.11.1

ITEM NAME: HEADSET
NOMENCLATURE: HS-33A (Cont)
FEDERAL STOCK NO: 5965-295-7160

PHYSICAL DESCRIPTION:

Dimensions: (Earphone)

Depth-----1 inch (25.40 mm)
Diameter-----2-3/64 inches (51.99 mm)

Cord Data:

Length-----17 inches (431.80 mm)
Quantity of Conductors -----2
Quantity of Connectors -----1
Connector Designation-----PL-354
Jacket Material-----Cotton Braid

ADDITIONAL PHYSICAL DATA:

Headband Data:

Material -----Steel
Padding-----Leather
Type -----Double Band, Adjustable

TECHNICAL DESCRIPTION: (HEADSET)

INPUT

Quantity of Earphones -----2
Nominal Impedance -----600 ohms ± 15 percent
Frequency Range -----100 to 4, 000 cps (approx.)

ENVIRONMENTAL LIMITATIONS:

Pressure Cycling -----0 to 50, 000 feet

REFERENCE DATA and LITERATURE

MSS 5965-1
Telephonics Corporation Final Report of Technical Analysis Phase of Standardization
Studies and Surveys of Headsets and Headset-Microphones
MIL-H-005795 (USAF)
AF Drawing 57C12534

MANUFACTURER CODE	PART NUMBER
80063	HS-33A

ITEM NAME: HEADSET

NOMENCLATURE: NT-49507B

FEDERAL STOCK NO: 5965-285-0745



FUNCTIONAL DESCRIPTION:

This electrical headset contains two magnetic receivers mounted on an adjustable, single band, steel headband. The unit is designed for use under combat helmets and for rugged field conditions. It is salt-spray resistant.

CONSISTS OF:

- 2 Earphone Receiver NT-49505 (A)
- 2 Earphone Cushion NT-49506A
- 1 Headband NT-49504
- 1 Cord NT-49503B
- 1 Plug PJ-054B
- 1 Extension cord (when specified)

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Dimensions: (Earphone).

Depth-----5/8 inch (including screw) (15.88 mm)
Diameter-----1-15/16 inches (49.21 mm)

Cord Data:

Length-----9 inches (228.6 mm)
No. of Conductors -----2
No. of Connectors -----1
Jacket Material-----Polychloroprene

ITEM NAME: HEADSET

NOMENCLATURE: NT-49507B (Cont)

FEDERAL STOCK NO: 5965-285-0745

ADDITIONAL PHYSICAL DATA:

Headband Data:

Material -----Steel
Cover-----Vinyl
Type -----Single Band, Adjustable

Extension Cord data:

Length-----65 inches
No. of Conductors -----2

Connector Data:

One jack -----JJ-026
One plug-----PJ-055B
Jack and plug -----Waterproof sheath
Cable-----Tinsel insulated class SP of MIL-C-3849

TECHNICAL DESCRIPTION:

INPUT

Quantity of Earphones -----2
Nominal Impedance -----600 ohms (series)
Frequency Range -----300 to 4, 000 cps

ADDITIONAL TECHNICAL DATA:

Environmental Limitations:

Impact-----Headset withstands 12 drops from 10 feet to concrete floor
Temperature Range -----67° F to + 149° F
(storage)

REFERENCE DATA and LITERATURE

MSS 5965-1
Headset MIL-H-3679
Earphone MIL-E-17884
NAVY Drawing, RE51D123, Rev B
Plug PJ-054B, MIL-P-642
Extension Cord, MIL-C-3849
Extension Cord Jack, MIL-J-641
Extension Cord Plug, MII.-P-642

MANUFACTURER CODE	PART NUMBER
78711	20013
82872	--
81812	--

ITEM NAME: HEADSET
NOMENCLATURE: NT-49985A
FEDERAL STOCK NO: 5965-280-3629



FUNCTIONAL DESCRIPTION:

This headset contains two magnetic earphone receivers mounted on a fixed, double band, metal headband. The headset has a relatively fiat response and is suitable for general purpose voice communications. It is also used with Sonic Equipment SPEC-6C (Surface Special Radar).

CONSISTS OF:

2	Earphone Receivers	Type Number 49016
1	Headband	
1	Cord	Type Number 49101

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Dimensions: (Earphone)

Depth-----	3/4 inch (19.05 mm)
Diameter-----	1-3/4 inches (44.45 mm)

Cord Data:

Length-----	5 feet (1524. 00 mm)
Quantity of Conductors -----	2
Connector Designation-----	PJ-055B
Jacket Material-----	Rubber

ADDITIONAL PHYSICAL DATA:

Headband Data:

Material -----	Metal
Padding-----	Leather
Type -----	Double Band, Fixed

ITEM NAME: HEADSET
NOMENCLATURE: NT-49985A (Cont)
FEDERAL STOCK NO: 5965-280-3629

TECHNICAL DESCRIPTION: (HEADSET)

INPUT

Quantity of Earphone-----2
Nominal Impedance -----600 ohms (series connected)
Frequency Range -----300 to 4, 000 cps

ADDITIONAL TECHNICAL DATA:

Environmental Limitations:

Pressure Cycling -----00 to 50, 000 feet

REFERENCE DATA and LITERATURE

MIL-STD-242

MSS 5965-1

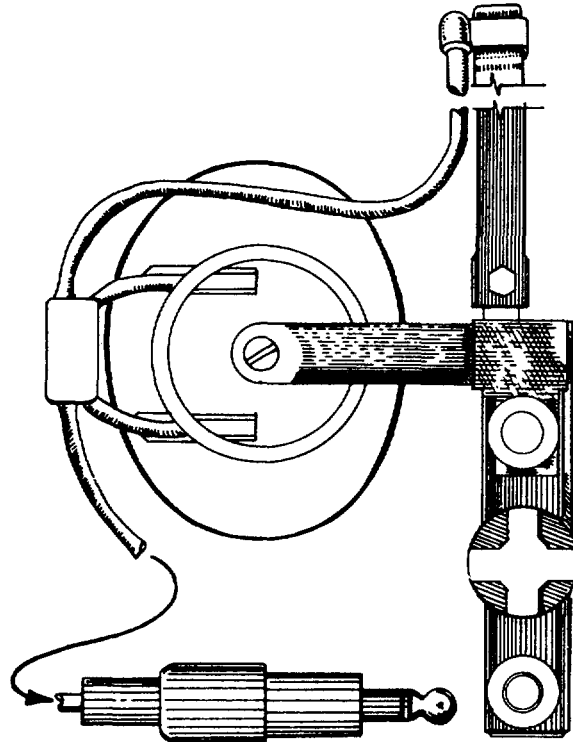
Telephonics Corporation Final Report of Technical Analysis Phase of Standardization Studies and Surveys of Headsets and Headset-Microphones

MANUFACTURER CODE	PART NUMBER
80064	NT-49985A

ITEM NAME: HEADSET

NOMENCLATURE: COMMERCIAL P-104J535-1

FEDERAL STOCK NO: 5965-253-1302



FUNCTIONAL DESCRIPTION:

This electrical headset contains two magnetic type earphone receivers suspended from an adjustable, single band, steel headband. The unit is primarily intended for use with Mine Detector DT-44/PRS-3.

CONSISTS OF:

2	Earphone Receivers	SCL-1249
1	Headband	
1	Clothing Clip	
1	Cord Assembly	
1	Plug	PJ-054B

RELATIONSHIP TO SIMILAR EQUIPMENT:

This item is the same as the H-62/U Headset - Microphone, but it is without the microphone.

ITEM NAME: HEADSET

NOMENCLATURE: COMMERCIAL P-104J535-1 (Cont)

FEDERAL STOCK NO: 5965-253-1302

PHYSICAL DESCRIPTION:

Dimensions: (Earphone)

Depth-----1/2 inch (12.70 mm)
 Diameter-----3 inches vertical (76.20 mm)
 2-1/2 inches horizontal (63. 50 mm)

Cord Data:

Length-----5 feet (1524.00 mm)
 No. of Conductors-----2
 No. of Connectors-----2
 Connector Designation-----Solder Lug
 Jacket Material-----Rubber

ADDITIONAL PHYSICAL DATA:

Headband Data:

Material-----Steel
 Padding-----Plastic
 Type-----Single

TECHNICAL DESCRIPTION: (HEADSET)

INPUT

Quantity of Earphones-----2
 Nominal Impedance-----600 ohms
 Frequency range-----Not rated

ADDITIONAL TECHNICAL DATA:

Environmental Limitations:

Pressure Cycling-----0 to 50,000 feet

REFERENCE DATA and LITERATURE

Telephonics Corporation Final Report of Technical Analysis Phase of Standardization Studies and Surveys of Headsets and Headset - Microphones.
 MSS 5965-1

MANUFACTURER CODE	PART NUMBER
24446	P-104J535-1

ITEM NAME: HEADSET

NOMENCLATURE: COMMERCIAL 159

FEDERAL STOCK NO: 5965-284-8925

No illustration available

FUNCTIONAL DESCRIPTION:

This electrical headset contains two magnetic type earphone receivers mounted on an adjustable, double band, steel headband. The headset is suitable for heavy duty radio service where a peaked response at 1, 000 cycles per second is required.

CONSISTS OF:

- 2 Earphone Receivers, Trimm Inc. Part Number 160-4
- 1 Headband

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Dimensions (Earphone):

Depth-----3/4 inch (19. 05 mm)
Diameter-----2-1/8 inches (53.98 mm)

Cord Data:

Length-----5 feet (1524. 00 mm)
Number of Conductors-----2
Number of Connectors-----1
Connector Designation-----Trimm Inc. Part Number 0870
Jacket Material-----Cotton Braid

ADDITIONAL PHYSICAL DATA:

Headband Data:

Material -----Steel
Padding-----Cloth
Type -----Double Band, Adjustable

TECHNICAL DESCRIPTION:

INPUT

Quantity of Earphones -----2
Nominal Impedance -----600 ohms (series connected)
Frequency Range -----Peaked at 1, 000 cps

ADDITIONAL TECHNICAL DATA:

ITEM NAME: HEADSET

NOMENCLATURE: COMMERCIAL 159 (Cont)

FEDERAL STOCK NO: 5965-284-8925

ENVIRONMENTAL LIMITATIONS:

Pressure Cycling -----0 to 50, 000 feet

Moisture and Fungus-----Moisture Resistant and Fungus Proof

REFERENCE DATA and LITERATURE

MSS 5965-1
Telephonics Corporation Final Report of Technical Analysis Phase of Standardization
Studies and Surveys of Headsets and Headset-Microphones.

MANUFACTURER CODE	PART NUMBER
81812	159

ITEM NAME: HEADSET
NOMENCLATURE: COMMERCIAL 716D
FEDERAL STOCK NO: 5965-160-2451



FUNCTIONAL DESCRIPTION:

This headset consists of a single magnetic type earphone receiver mounted on a single steel headband. The headset has a relatively flat response and is suitable for general purpose voice applications.

CONSISTS OF:

- 1 Earphone Receiver Western Electric Type Number 716A
- 1 Headband

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Dimensions: (Earphone)

Depth-----1-3/16 inches (30.16 mm)
Diameter-----2-27/64 inches (61. 52 mm)

Cord Data:

Length-----6 feet (1828. 80 mm)
No. of Conductors -----2
No. of Connectors -----1
Connector Designation-----PJ-068
Jacket Material-----Cotton Braid

ITEM NAME: HEADSET
NOMENCLATURE: COMMERCIAL 716D (Cont)
FEDERAL STOCK NO: 5965-160-2451

ADDITIONAL PHYSICAL DATA:

Headband Data:

Material -----Steel
Padding -----Cardboard
Type -----Single Band Fixed

TECHNICAL DESCRIPTION: (HEADSET)

INPUT

Quantity of Earphones -----1
Nominal Impedance -----130 ohms ± 15 percent
Frequency Range -----100 to 2, 900 cps

ADDITIONAL TECHNICAL DATA:

Environmental Limitations:

Pressure Cycling (nonoperating) -----0 to 50, 000 feet

REFERENCE DATA and LITERATURE

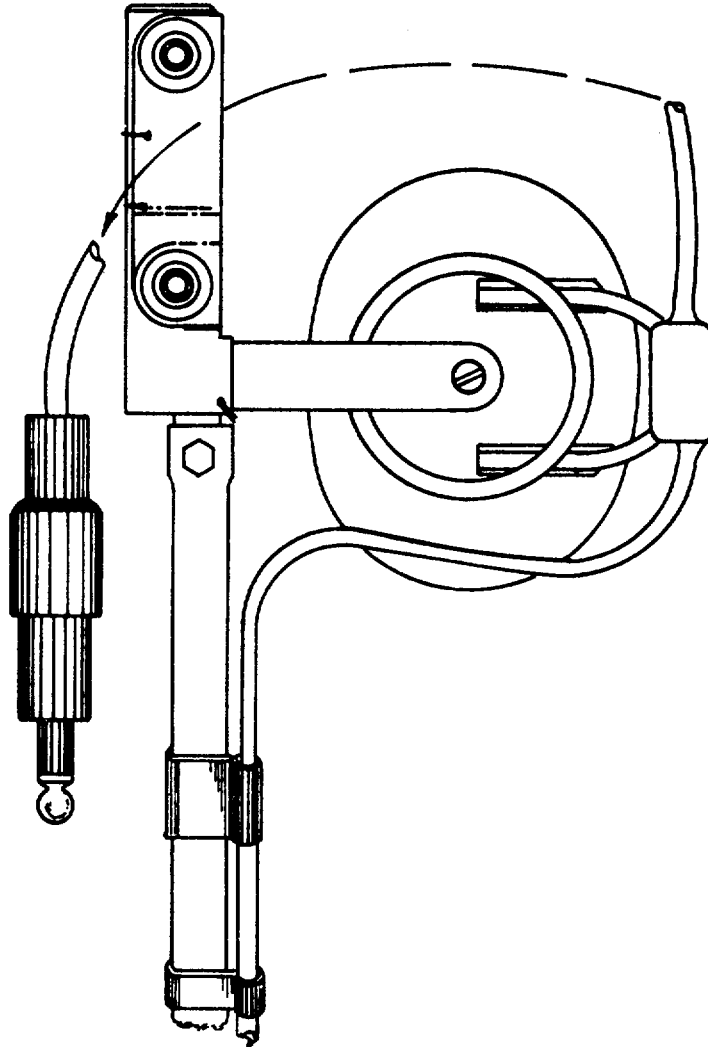
Telephonics Corporation Final Report of Technical Analysis Phase of
Standardization Studies and Surveys of Headsets and Headset- Microphones
MSS 5965-1

MANUFACTURER CODE	PART NUMBER
64959	716D

ITEM NAME: HEADSET

NOMENCLATURE: COMMERCIAL 24076

FEDERAL STOCK NO: 5965-256-8687



FUNCTIONAL DESCRIPTION:

This unit contains two magnetic type earphone receivers mounted on an adjustable steel headband. This unit is used as a maintenance item for Headset-Microphone H-62/U.

CONSISTS OF:

- 1 Headset, Electrical

RELATIONSHIP TO SIMILAR EQUIPMENT:

This is a maintenance item for H-62/U Headset-Microphone.

4.17.1

ITEM NAME: HEADSET

NOMENCLATURE: COMMERCIAL 24076 (Cont)

FEDERAL STOCK NO: 5965-256-8687

PHYSICAL DESCRIPTION:

Dimensions: (Earphone)

Depth-----3/8 inches (9.53 mm)
Diameter-----2 inches (50. 8 mm)

Cord Data:

Length-----14-1/2 inches (368. 30 mm)
No. of Conductors -----2
Connector Designation-----PJ-054

ADDITIONAL PHYSICAL DATA:

Headband Data:

Material -----Steel
Type -----Adjustable
Earphone Covering -----Rubber

TECHNICAL DESCRIPTION:

INPUT

Quantity of Earphones -----2
Nominal Impedance -----300 ohms each earphone
Frequency Range -----300 to 4, 000 cps

ADDITIONAL TECHNICAL DATA:

Environmental Data:

Nonoperating:

Temperature-----80 deg. F to + 160 deg. F
Relative Humidity-----97% indefinite, 100% for 4 hours
Elevation-----50, 000 feet above sea level.

Operating:

Temperature-----40 deg. F to +150 deg. F
Relative Humidity-----97% indefinite, 100% for 4 hours
Elevation-----15, 000 feet above sea level.

REFERENCE DATA and LITERATURE

MIL-H-11190
Telephonics Corp. Drawing 24076
Drawing SC-C-53605

MANUFACTURER CODE	PART NUMBER
78711	24076

SECTION 5

HEADSET - MICROPHONES

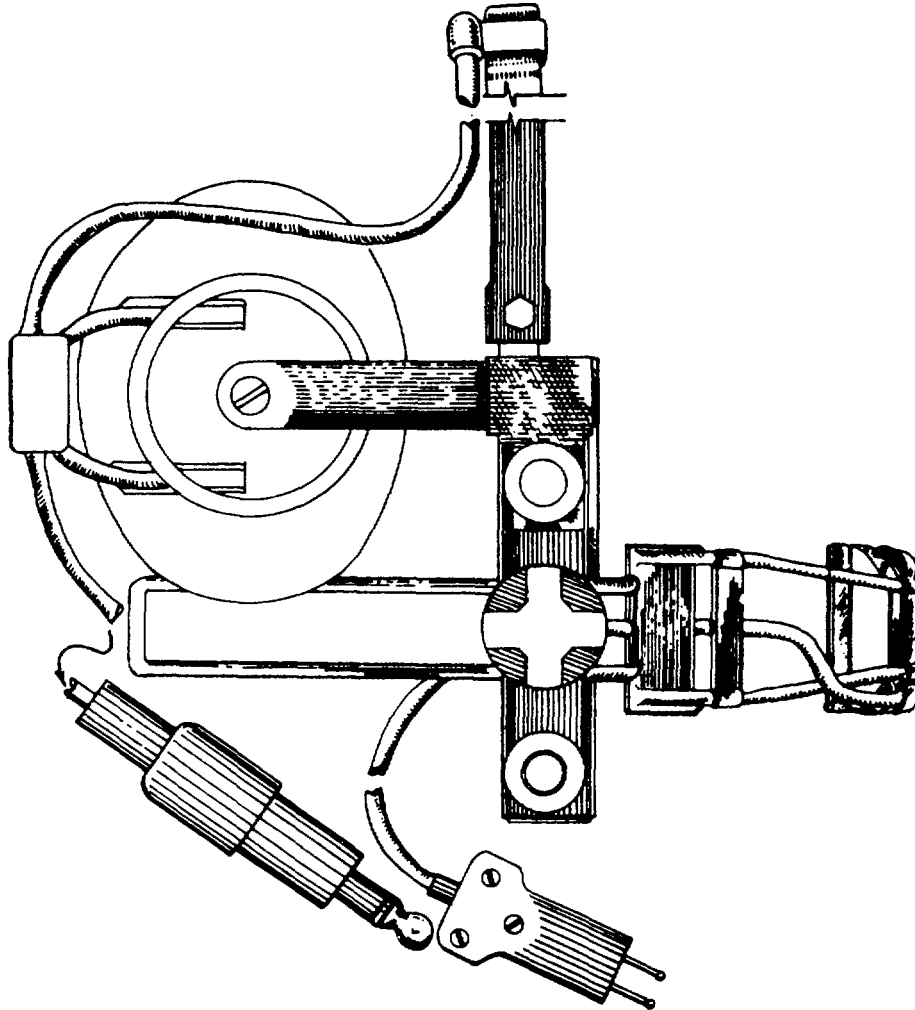
<u>Nomenclature, model or part number</u>	<u>Page</u>
H-62/U-----	5.2.1
H-63/U-----	5.3.1
H-66/U-----	5.4.1
H-108B/U-----	5.5.1
H-157/AIC-----	5.6.1
H-163/U-----	5.7.1
H-172/U-----	5.8.1

5.1.1

ITEM NAME: HEADSET-MICROPHONE

NOMENCLATURE: H-62/U

FEDERAL STOCK NO: 5965-237-8048



FUNCTIONAL DESCRIPTION:

Headset-Microphone H-62/U is a combination headset and microphone assembly which contains two magnetic earphone receivers suspended from an adjustable steel headband and a carbon type boom microphone mounted on the right side of the headband. The headset is suitable for most general purpose headset-microphone applications relating to ground communications equipment.

CONSISTS OF:

- | | | |
|---|-----------------------------|---------|
| 2 | Earphone Receivers NT-49505 | |
| 1 | Carbon Microphone | M-51/UR |
| 1 | Plug | PJ-054 |
| 1 | Plug | PJ-292 |

RELATIONSHIP TO SIMILAR EQUIPMENT:

ITEM NAME: HEADSET - MICROPHONE

NOMENCLATURE: H-62/U (Cont)

FEDERAL STOCK NO: 5965-237-8048

PHYSICAL DESCRIPTION:

Microphone Cord Data:

Length-----14 inches (355. 60 mm)
Quantity of Conductors -----2
Quantity of Connectors -----1
Connector Designation-----PJ-292

Headset Cord Data:

Length-----16 inches (406.40 mm)
Quantity of Conductors -----2
Quantity of Connectors -----1
Connector Designation-----PJ-054

ADDITIONAL PHYSICAL DATA:

Headset Data:

Material -----Steel
Padding-----Synthetic Rubber
Type -----Single, Adjustable

Mounting and Suspension Data:

Earphones -----Suspended on Headband
Microphone -----Mounted on adapter fastened to right side of
headband

TECHNICAL DESCRIPTION: (HEADSET)

INPUT

Quantity of Earphones -----2
Nominal Impedance -----600 ohms
Frequency Range -----300 to 4, 000 cps

TECHNICAL DESCRIPTION: (MICROPHONE)

INPUT

Operating Current -----50 milliamperes

OUTPUT

Nominal Impedance -----100 ohms
Frequency Range -----300 to 4, 000 cps

ADDITIONAL TECHNICAL DATA:

Headset-Microphone Environmental Limitations:

Equipment Nonoperating:

Temperature Range -----80° F to + 160° F (High temperature extreme
not more than 4 hours, and low temperature
extreme not more than 24 hours at any one time.)
Relative Humidity-----Up to 97 percent for indefinite period
Exposure at 100 percent with condensation for
four hours
Elevation-----Up to 50, 000 feet above sea level

ITEM NAME: HEADSET - MICROPHONE

NOMENCLATURE: H-62/U (Cont)

FEDERAL STOCK NO: 5965-237-8048

Equipment Nonoperating: (Cont)

Orientation-----Indefinite storage in any orientation
Salt Spray-----Withstands 20 percent salt spray test, Method 101,
Condition A, MIL-STD-202
Vibration-----Withstands Vibration test of MIL-H-11190
Bounce-----Withstands Bounce Test of MIL-H-11190
Shock-----Withstands 3 foot drops on each corner edge and
face onto a 2 inch fir floor backed by concrete or
rigid steel frame
BlastWithstands gunblast test of MIL-STD-108 (degree 2)

Equipment Operating:

Temperature Range-----40° F to + 150° F (High temperature extreme not
more than 4 hours and low temperature extreme not
more than 72 hours)
Relative Humidity-----Up to 97 percent indefinitely; 100% with condensation
four hours
Elevation-----Up to 15, 000 feet above sea level

REFERENCE DATA and LITERATURE

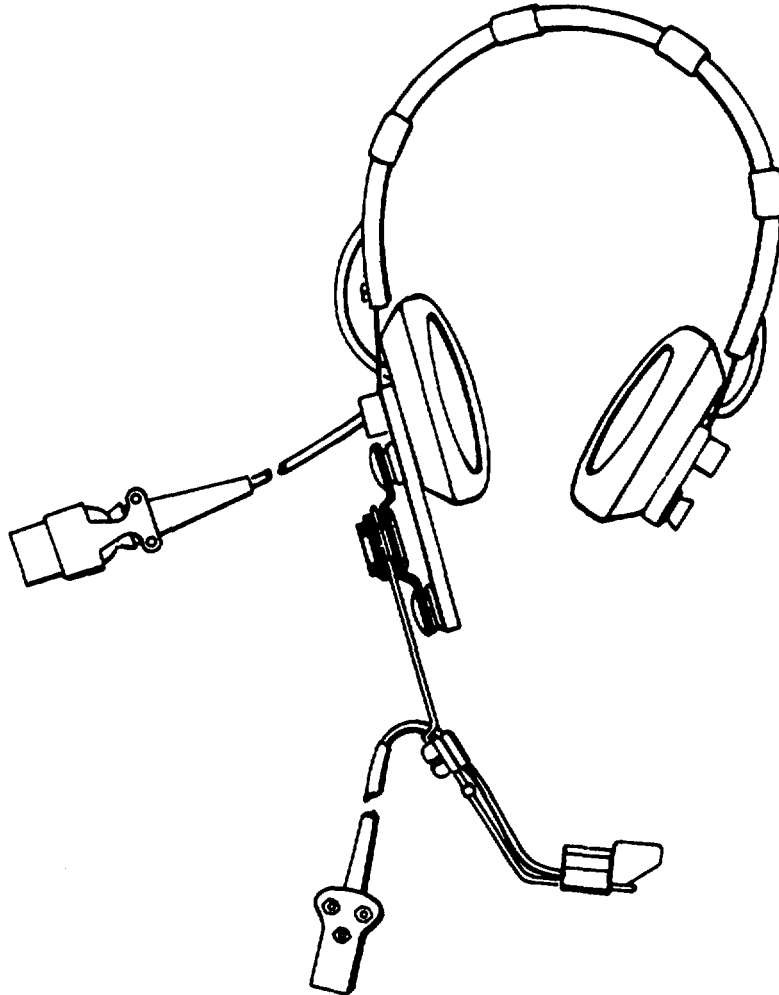
MIL-E-17884 - Earphone
MIL-H-11190 - Headset
MIL-M-5794 - Microphone
Telephones Corporation Drawing Number 20016
MSS 5965-1
Pricing Guide for Signal Corps Equipment SIG5-5

MANUFACTURER CODE	PART NUMBER
80058	H-62/U
78711	TC-209

ITEM NAME: HEADSET - MICROPHONE

NOMENCLATURE: H-63/U

FEDERAL STOCK NO: 5965-237-8049



FUNCTIONAL DESCRIPTION:

Headset-Microphone H-63/U is a combination headset and microphone assembly which contains two magnetic earphone receivers suspended on a fixed steel headband, and a carbon type boom microphone mounted on the right side of the headband. The headset is intended primarily for use with Ground Radio Communications Equipment AN/MRG-20 and as a receiver for other radio and wire equipment.

CONSISTS OF:

- 2 Earphone Receivers Roanwell Part Number 9869
- 1 Microphone Unit M-51/UR
- 1 Headband
- 1 Cord Assembly

ITEM NAME: HEADSET - MICROPHONE

NOMENCLATURE: H-63/U (Cont)

FEDERAL STOCK NO: 5965-237-8049

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Microphone Cord Data:

Length-----14 inches (355. 60 mm)
No. of Conductors -----2
No. of Connectors -----1
Connector Designation-----JJ-055

Headset Cord Data:

Length-----16 inches (406.40 mm)
No. of Conductors -----2
No. of Connectors -----1
Connector Designation-----Lionel Corporation Part No. 7511-18

ADDITIONAL PHYSICAL DATA:

Headband Data:

Material -----Steel
Padding-----Rubber
Type -----Single band, fixed

Mounting and Suspension Data:

Earphones -----Suspended on headband
Microphone -----Mounted on adapter fastened to right side of headband

TECHNICAL DESCRIPTION: (HEADSET)

INPUT

Quantity of Earphones -----2
Nominal Impedance -----600 ohms
Frequency Range -----300 to 4, 000 cps

TECHNICAL DESCRIPTION: (MICROPHONE)

INPUT

Operating Current -----50 milliamperes

OUTPUT

Nominal Impedance -----100 ohms
Frequency Range -----300 to 4, 000 cps

ADDITIONAL TECHNICAL DATA:

Headset-Microphone Environmental Limitations:

Equipment Nonoperating

Temperature Range -----80° F to + 160° F (High temperature extreme not
-----more than 4 hours, and low temperature extreme
-----not more than 24 hours at any one time.)
Relative Humidity-----Up to 97 percent for indefinite period. Exposure
-----at 100 percent with condensation for 4 hours.
Elevation-----Up to 50, 000 feet above sea level
Orientation -----Indefinite storage in any orientation

ITEM NAME: HEADSET - MICROPHONE

NOMENCLATURE: H-63/U (Cont)

FEDERAL STOCK NO: 5965-237-8049

ADDITIONAL TECHNICAL DATA: (Cont)

Equipment Nonoperating: (Cont)

Salt Spray -----Withstands 20 percent salt spray test, Method 101, Condition A, MIL-STD-202

Vibration -----Withstands Vibration test of MIL-H-11190

Bounce-----Withstands Bounce test of MIL-H-11190

Shock -----Withstands 3 foot drops on each corner edge and face onto a 2-inch fir floor backed by concrete or rigid steel frame

Blast -----Withstands gunblast test of standard MIL-STD-108 degree 2

Equipment Operating:

Temperature Range -----40° F to + 150° F (High temperature extreme not more than 4 hours and low extreme not more than 72 hours)

Relative Humidity-----Up to 97 percent indefinitely; 100% with condensation for 4 hours

Elevation-----Up to 15, 000 feet above sea level

REFERENCE DATA and LITERATURE

MIL-H-11190 for Headset

MIL-M-5794 for Microphone

MSS 5965-1

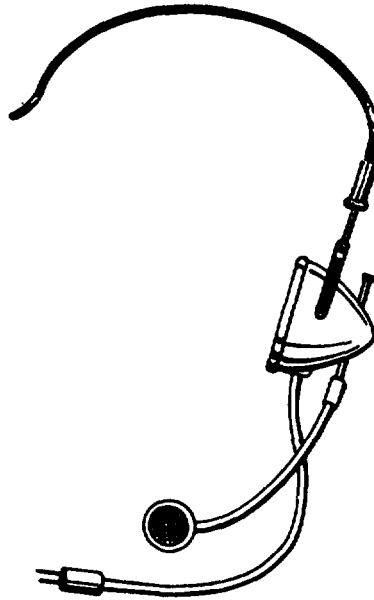
Telephonics Corporation Final Report of Technical Analysis Phase of Standardization Studies and Surveys of Headsets and Headset-Microphones Pricing Guide for Signal Corps Equipment Sig 5-5

MANUFACTURER CODE	PART NUMBER
80058	H-63/U

ITEM NAME: HEADSET - MICROPHONE

NOMENCLATURE: H-66/U

FEDERAL STOCK NO: 5965-221-0999



FUNCTIONAL DESCRIPTION:

Headset-Microphone H-68/U is a combination headset and carbon type microphone assembly which contains one magnetic earphone receiver suspended on a steel headband, and a carbon type boom microphone mounted on the right side of the headband. The headset is a telephone operator's headset.

CONSISTS OF:

- 1 Earphone Receiver (including cushion)
- 1 Microphone Unit
- 1 Headband
- 1 Switch
- 1 Cord Assembly

RELATIONSHIP TO SIMILAR EQUIPMENT:

5.4.1

ITEM NAME: HEADSET - MICROPHONE

NOMENCLATURE: H-66/U (Cont)

FEDERAL STOCK NO: 5965-221-0999

PHYSICAL DESCRIPTION:

Headset Cord Data:

Length-----60 inches (1524 mm)
No. of Conductors -----2
No. of Connectors -----None
Plug-----W. E. Co. type No. 289B
Cotton braid-water repellent type.

ADDITIONAL PHYSICAL DATA:

Headband Data:

Material-----Steel

Mounting and Suspension Data:

Earphones -----Suspended on headband
Microphone -----Mounted on adapter fastened to right side of
headband

TECHNICAL DESCRIPTION: (HEADSET)

INPUT

Quantity of Earphone-----1
Nominal Impedance -----300 ohms
Frequency Range -----Not rated

TECHNICAL DESCRIPTION: (MICROPHONE)

OUTPUT

Nominal impedance -----40 ohms
Frequency range -----200 to 3,000 cps

ADDITIONAL TECHNICAL DATA:

REFERENCE DATA and LITERATURE

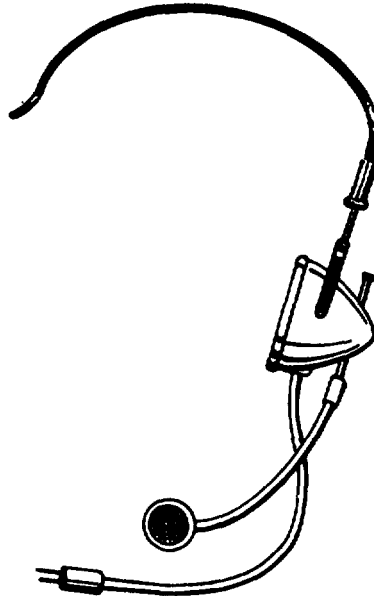
MSS 5965-1A

MANUFACTURER CODE	PART NUMBER
80058	H-66/U

ITEM NAME: HEADSET - MICROPHONE

NOMENCLATURE: H-108B/U

FEDERAL STOCK NO: 5965-583-4865



FUNCTIONAL DESCRIPTION:

Headset-Microphone H-108B/U provides communication and monitoring facilities for an operator's use at switchboards, desks, and PBX (Private Branch Exchange) positions. It is a part of Telephone Central Office Group, Manual AN/GTA-6() and various other telephone equipments. Cord CX-1245()/U or Cord CX-4396()/U is required for use with Headset-Microphone H-108B/U but is not supplied as part of the equipment.

CONSISTS OF:

- I Headset-Microphone H-108B/U

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Dimensions: (Receiver Element)

Diameter-----1.64 inches (41.66 mm)
Thickness -----0.72 inches (18.29 mm)

Dimensions: (Microphone Element)

Diameter-----1.28 inches (35.51 mm)
Thickness -----0.41 inches (10.41 mm)

Headband Data:

Type -----Single Band, Adjustable
Material -----Stainless Steel
Padding-----Vinylite

ITEM NAME: HEADSET - MICROPHONE

NOMENCLATURE: H-108B/U (Cont)

FEDERAL STOCK NO: 5965-583-4865

MOUNTING AND SUSPENSION DATA:

Earphone-----Mounted on bracket attached to headband.
 Microphone-----Mounted in a plastic case at one end of a square aluminum boom which is attached at the other end to the earphone housing.

CORD DATA:

Length -----32-1/2 inches (81.28 mm)
 Type Tinsel
 Jacket Material -----Rubber
 Number of Conductors -----3
 Connector Type -----Polarized Plug

MECHANICAL DESCRIPTION: (HEADSET)

INPUT

Quantity of Earphones -----1
 Nominal Impedance -----300 ohms at 1, 000 cycles
 Frequency Range -----300 to 3, 000 cps

TECHNICAL DESCRIPTION: (MICROPHONE)

INPUT

Operating Current-----60 milliamperes

OUTPUT

Nominal Impedance -----25 ohms
 Frequency Range -----300 to 4, 000 cps

ADDITIONAL TECHNICAL DATA:

Resistant Properties: Tie H-108B/U resists the effects of sand and dust, fungus, and salt spray.

Temperature:

Operating-----54° C to + 52° C
 Nonoperating-----62° C to +71° C

Power Supply: The equipment is designed to be operated from a 24 · 4 volt DC power source.

REFERENCE DATA and LITERATURE

MIL-H-26827

MIL-E-5272

MANUFACTURER CODE	PART NUMBER
80058	H-108B/U
82872	10336

ITEM NAME: HEADSET - MICROPHONE

NOMENCLATURE: H-157/AIC

FEDERAL STOCK NO: 5965-755-4656



FUNCTIONAL DESCRIPTION:

The H-157/AIC headset-microphone is used as part of Intercommunications Set AN/AIC-10() at low altitudes to provide high-intelligibility communication under the extreme noise conditions encountered in military aircraft and to provide maximum comfort and minimum fatigue compatible with optimum intelligibility.

CONSISTS OF:

- 2 Earphones -----H- 143/AIC
- 2 Earphone Shells -----MX-2508/AIC and MX-3473/AIC
- 1 Headband -----MX-2506/AIC
- 2 Cord Assemblies -----CX-4434/U and CX-4435/U
- 1 Microphone Bracket -----MT-2007/AIC
- 1 Microphone -----M- 87/AIC
- 1 Cord Assembly -----CX-4434/U
- 1 Connector -----U-174/U

RELATIONSHIP TO SIMILAR EQUIPMENT:

Similar to headset H-158/AIC except for the microphone.

ITEM NAME: HEADSET - MICROPHONE

NOMENCLATURE: H-157/AIC (Cont)

FEDERAL STOCK NO: 5965-755-4656

PHYSICAL DESCRIPTION:

Earphone Dimensions:

Nominal diameter -----2 inches (50. 8 mm)
 Depth-----0. 45 inches (11. 43 mm)

Microphone Dimensions-----Not available

CORD DATA: -----(CX-4434/AIC)

Length -----1 foot 4 inches (406. 4 mm)

Jacket Material -----Nylon braid

CORD DATA: -----(CX-4435/AIC)

Length -----2 feet 4-1/2 inches (723.9 mm)

Jacket Material -----Nylon braid

ADDITIONAL PHYSICAL DATA:

Connector Data:

Connector Type-----Telephone Plug

Connector Designation-----U-174/U

Headband Data:

Type -----Single Band

Construction-----Extruded plastic web between two headband wires

Mounting and Suspension Data:

Microphone -----Mounted on bracket which fits either earcup and
 -----locks when bracket thumbscrew is tightened.

TECHNICAL DESCRIPTION: (MICROPHONE)

INPUT

Operating Current -----Not applicable

OUTPUT

Nominal Impedance -----3.5 ohms

Frequency Range -----200 to 5, 000 cps

TECHNICAL DESCRIPTION: (EARPHONE)

INPUT

Quantity of Earphones -----2

Nominal Impedance -----10 ohms (in parallel)

Frequency Range -----100 to 5, 500 cps

ADDITIONAL TECHNICAL DATA:

ENVIRONMENTAL LIMITATIONS:

Temperature -----55° C to +85° C

Altitude-----Up to 35, 000 feet

REFERENCE DATA and LITERATURE

MIL-H-26312
 MIL-H-26541
 MIL-M-26542

MANUFACTURER CODE	PART NUMBER
80058	H-157/AIC
82872	10057

ITEM NAME: HEADSET - MICROPHONE

NOMENCLATURE: H-163/U

FEDERAL STOCK NO: 5965-670-2931



FUNCTIONAL DESCRIPTION

The H-163/U is a headset-microphone intended for use in good communications.

CONSISTS OF:

2	Receiver Assemblies	FSN 5965-296-4044
1	Microphone Assembly	FSN 5965-296-9456
1	Headband Assembly	
1	Cord	
1	Connector	PJ-068

PHYSICAL DESCRIPTION:

Earphone and Microphone Dimensions: Not Available

Connector Data:

Connector Type-----Telephone Plug
Connector designation-----PJ-068

Cord Data:

Length-----5 feet (1524.0 mm)
Number of Conductors-----3
Type-----Tinsel

ADDITIONAL PHYSICAL DATA:

Suspension Data:

Earphones mounted in housings suspended from headband.
Microphone mounted in housing on square boom anchored inside left earphone housing.

ITEM NAME: HEADSET - MICROPHONE

NOMENCLATURE: H-163/U (Cont)

FEDERAL STOCK NO: 5965-670-2931

HEADBAND TYPE:

Single band covered with a material providing a maximum degree of traction.

TECHNICAL DESCRIPTION: (HEADSET)

INPUT

Quantity of Earphones -----2
Nominal Impedance -----300 ohms
Frequency Range -----300 to 2, 600 cps

TECHNICAL DESCRIPTION: (MICROPHONE)

INPUT

Operating Current -----75 ma.

OUTPUT

Nominal Impedance -----20 ohms
Frequency Range -----300 to 2, 600 cps

ADDITIONAL TECHNICAL DATA:

Earphone Type -----Magnetic
Microphone Type-----Carbon
Power Requirement -----24 ± 4 volts, dc

ENVIRONMENTAL LIMITATIONS:

Temperature -----Up to 70° C
Altitude (Transportation)-----Up to 40,000 feet

REFERENCE DATA and LITERATURE

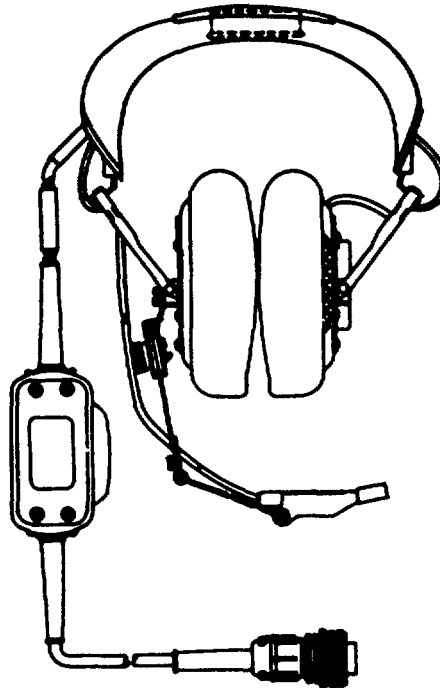
MIL-H-9697

MANUFACTURER CODE	PART NUMBER
82872	11046
88243	226
80058	H-163/U

ITEM NAME: HEADSET - MICROPHONE

NOMENCLATURE: H-172/U

FEDERAL STOCK NO: 5965-715-4031



FUNCTIONAL DESCRIPTION:

The H-172/U is an extremely low-distortion, dynamic, noise-canceling headset-microphone which contains a transistor preamplifier in the headband.

CONSISTS OF:

- 1 Dynamic receiver element
- 2 Earphone cushions
- 1 Headband assembly PC-16
- 1 Microphone, M-87/AIC
- 1 Cord (Microphone) MMOP-5
- 1 Cord assembly
- 1 Cord and plug assembly, Plug U-173/U
- 1 Connector 10-109614S-5P
- 1 Transistor preamplifier
- 1 In-line switch, D. P. S. T.

RELATIONSHIP TO SIMILAR EQUIPMENT:

5.8.1

ITEM NAME: HEADSET - MICROPHONE

NOMENCLATURE: H-172/U (Cont)

FEDERAL STOCK NO: 5965-715-4031

PHYSICAL DESCRIPTION:

Dimensions:

Headband width (unextended) -----6 1/2 inches (165.1 mm)
Earphone face (with cushion) -----4-3/4 x 5-3/8 inches (120.65 mm x 136.53 mm) oval
Earphone depth (with cushion)-----2-1/4 inches (57.15 mm)

Cord Data:

Length (headband to switch) -----24 inches (609.6 mm)
Length (switch to connector) -----51 inches (1295.4 mm)
Number of conductors -----5
Insulation -----synthetic rubber

TECHNICAL DESCRIPTION:

Earphone:

Impedance (at 1,000 cps) -----600 ohms
Frequency range -----100 to 4500 cps

Microphone:

Impedance -----3 ohms
Frequency range -----300 to 4500 cps

ADDITIONAL TECHNICAL DATA:

Environmental Limitations:

Temperature (nonoperating)-----60° C to +75° C
Temperature (operating) -----0° C to +50° C
Resistant to salt spray and humidity.

REFERENCE DATA and LITERATURE

MIL-M-26542
BuShips Drawing RE51 127E

MANUFACTURER CODE	PART NUMBER
82872	H-172/U

SECTION 6

HEADSET - CHEST SETS

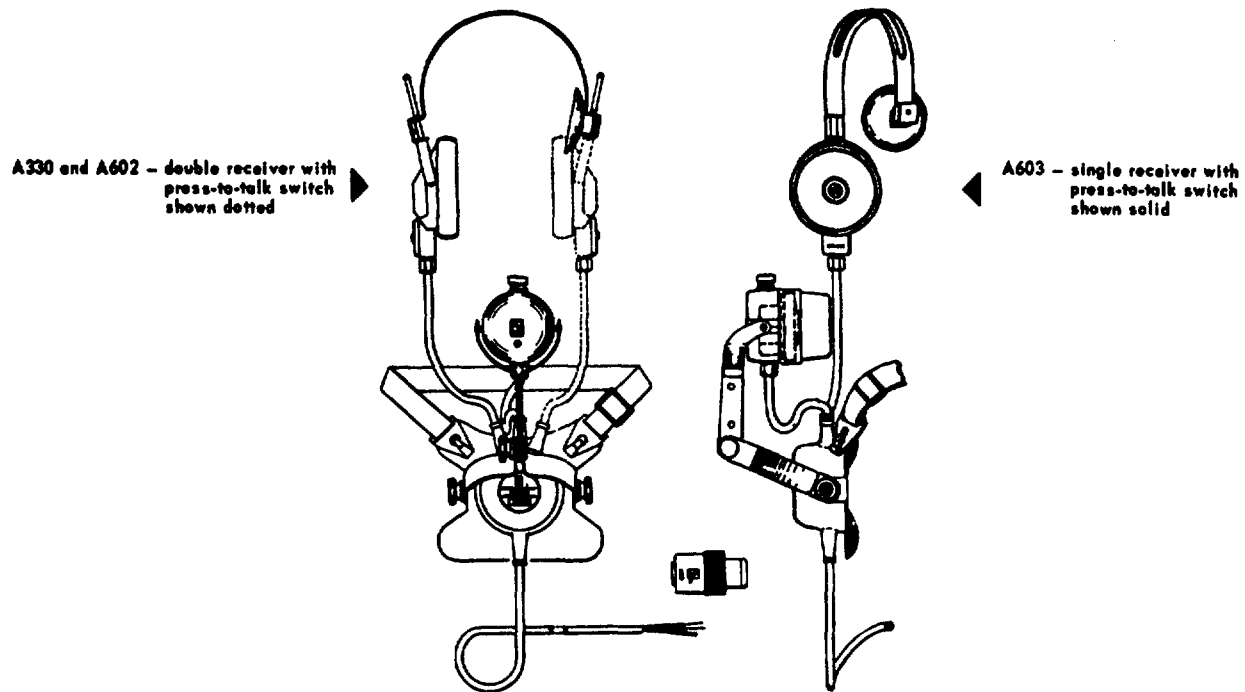
<u>Nomenclature, model or part number</u>	<u>Page</u>
A330, A602, A803 -----	6.2.1
A475 -----	6.3.1
H-35A/U-----	6.4.1
H-164/U-----	6.5.1

6.1.1

ITEM NAME: HEADSET - MICROPHONE

NOMENCLATURE: COMMERCIAL A330, A602, A603

FEDERAL STOCK NO: 5965-996-6214, 5965-996-6215,
5965-811-1202



FUNCTIONAL DESCRIPTION:

The headset-chest sets consist of a headset plus a chest-plate assembly to which is mounted an adjustable transmitter and a junction box. The sets differ in being equipped with either a single or a double receiver and in being with or without a push-to-talk switch. All the sets are weathertight and suited to rugged outdoor use.

CONSISTS OF:

- 1 Headband Assembly UA1933 (Single Receiver, A603 only), UA1929 (Double Receiver, A330 and A602 only)
- 1 or 2 Receiver Assembly UA1636
 - 1 Sound Powered Transmitter UA1614-15 (A330 only), UA1614-12 (A602 and A603 only)
 - 1 Receiver Cord Set UA1809
 - 1 Transmitter Cord Set UA1808
 - 1 Neckstrap UA1629
 - 1 Cord Set UA1810

ITEM NAME: HEADSET - CHEST SET

NOMENCLATURE: A330, A602, A603, (Cont)

FEDERAL STOCK NO: 5965-996-6214, 5965-996-6215,
 5965-811-1202

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Headset Data.

Ear Cushion Diameter-----3 inches (76.2 mm)
 Ear Cushion Depth-----1-1/4 inches (31.75 mm)

CHEST SET DATA:

Height -----9 inches (228.6 mm)
 Width -----5 inches (127.0 mm)
 Depth-----4 inches (101. 6 mm)

TOTAL WEIGHT:

A602-----44 ounces
 A603-----39 ounces
 A330-----43 ounces

ADDITIONAL PHYSICAL DATA:

Cable Length-----10 feet (3, 048. 0 mm)
 Junction Box Material -----Molded Neoprene
 Chest Plate Material-----Aluminum
 Suspension-----Neck Strap
 Microphone Type-----Dynamic
 Cable Data-----Not available

TECHNICAL DESCRIPTION: (MICROPHONE)

INPUT

Operating Current-----Not available

OUTPUT

Nominal DC Impedance -----A602, A603: 12. 7 ohms A330: 62 ohms
 AC Impedance-warble frequency
 test, 500 to 2, 600 cps-----A602, A603: 200 ohms A330: 1, 200 ohms
 Frequency Range -----500 to 2, 500 cps

TECHNICAL DESCRIPTION: (EARPHONE)

INPUT

Nominal DC Impedance -----162 ohms
 Frequency Range -----500 to 2, 500 cps
 AC Impedance-warble frequency
 test, 500 to 2, 600 cps-----1, 200 ohms

ADDITIONAL TECHNICAL DATA:

REFERENCE DATA and LITERATURE

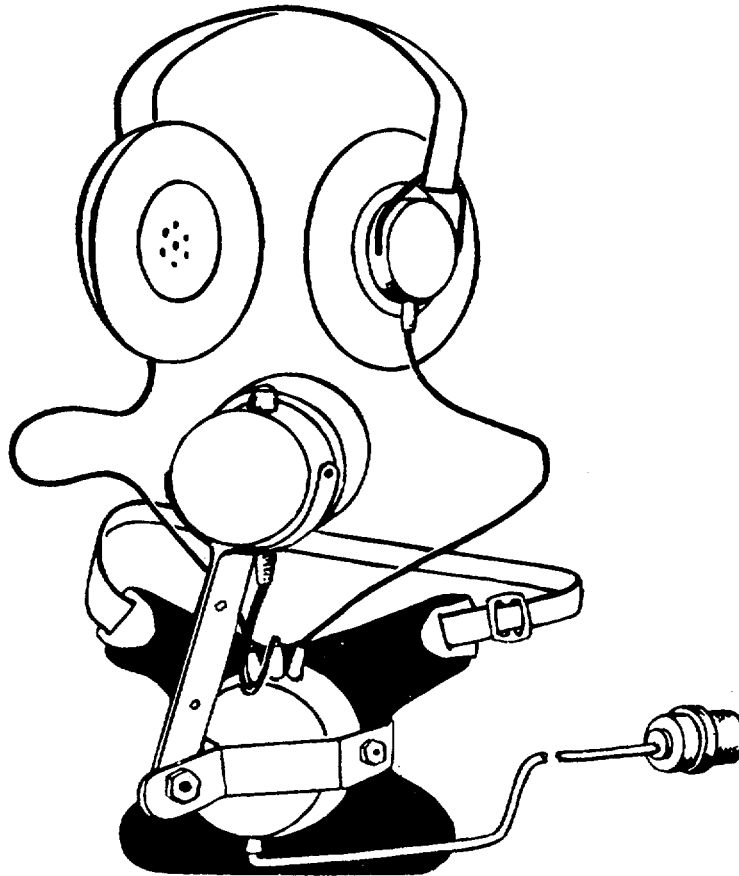
United States Instrument Corporation Data Sheet No. D662-1

MANUFACTURER CODE	PART NUMBER
78957	A330
78957	A602
78957	A603

ITEM NAME: HEADSET - CHEST SET

NOMENCLATURE: A475

FEDERAL STOCK NO: 5965-606-6699



FUNCTIONAL DESCRIPTION:

The A475 is a sound powered headset-chest set specially designed for shipboard use. The complete set will withstand immersion and heavy salt spray.

CONSISTS OF:

1	Headband	U. S. I. Drawing No. 5080
1	Transmitter Assembly	U. S. I. No. UA1611-2
2	Receiver Assemblies	U. S. I. No. UA1611-1
1	Chestplate	U. S. I. No. 5498
1	Junction Box	U. S. I. No. 7060
1	Receiver Cable	U. S. I. No. 4826-1
1	Transmitter Cable	U. S. I. No. 4826-2
1	Jack Plug and Cable Assy	U. S. I. No. UA2647

RELATIONSHIP TO SIMILAR EQUIPMENT:

Similar to headset-chest sets A330, A602, A603.

ITEM NAME: HEADSET - CHEST SET

NOMENCLATURE: A475 (Cont)

FEDERAL STOCK NO: 5965-606-6699

PHYSICAL DESCRIPTION:

HEADSET DIMENSIONS:

Earphone diameter (with cushion) -----4-1/2 inches (114. 3 mm)
Earphone depth (with cushion)-----2 inches (50. 8 mm)

CHEST SET DIMENSIONS:

Nominal height -----6-1/2 inches (165. 1 mm)
Nominal width -----5-1/2 inches (139.7 mm)
Nominal depth-----4-1/2 inches (114. 3 mm)
Cord length -----20 feet (609. 60 mm)
Weight -----4-1/2 pounds

ADDITIONAL PHYSICAL DATA:

Ear Cushion Material-----Nylon-covered Neoprene
Chestplate Material-----Aluminum
Junction Box Material -----Rubber
Cordset Composition-----Tinsel
Connector Designation -----Navy Type S-74211
Chestplate Suspension-----Neck Strap

TECHNICAL DESCRIPTION: (MICROPHONE)

INPUT

Operating Current -----Not applicable

OUTPUT

Nominal Impedance -----60 ohms
Frequency range -----500 to 2, 8600 cps

TECHNICAL DESCRIPTION: (EARPHONES)

INPUT

Quantity of Earphones -----2
Nominal Impedance -----1,200 ohms
Frequency Range -----500 to 2, 500 cps

ADDITIONAL TECHNICAL DATA:

REFERENCE DATA and LITERATURE

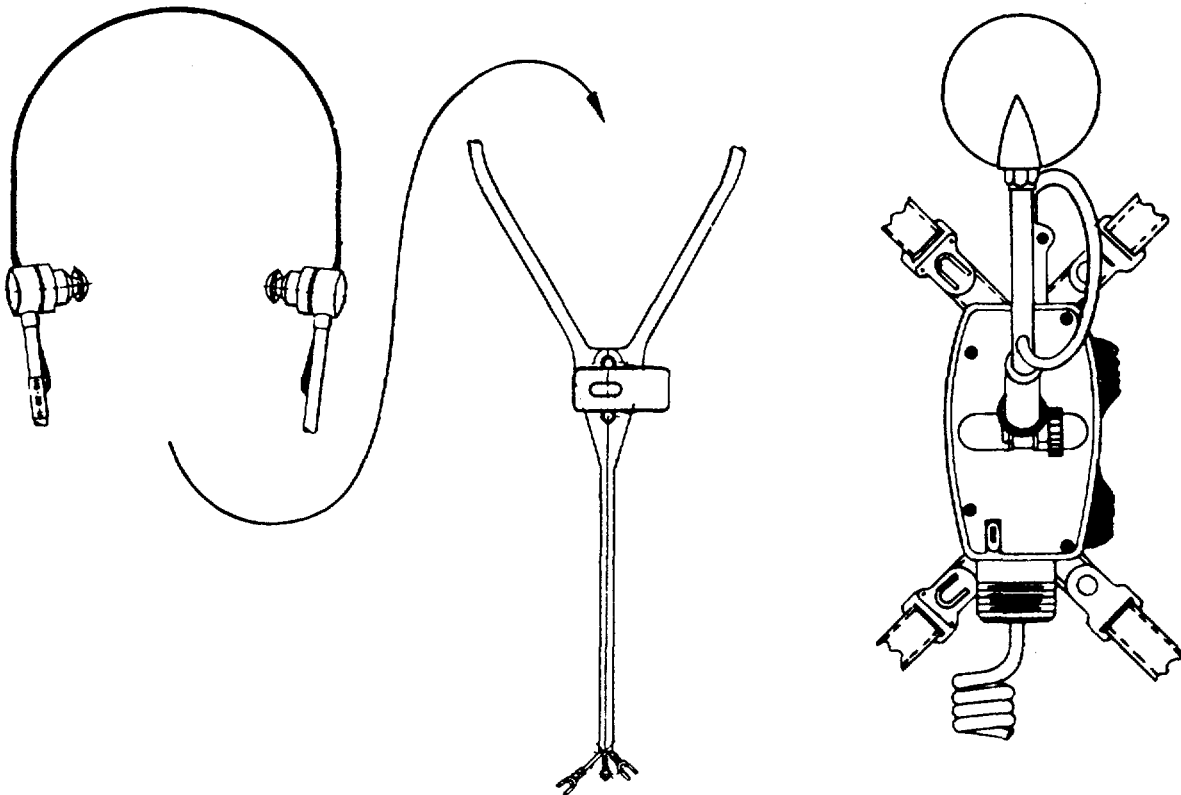
United States Instrument Corporation Drawing No. A475
United States Instrument Corporation Catalog No. 500B
MIL-T-15514 (Type SA7B)

MANUFACTURER CODE	PART NUMBER
78957	A475

ITEM NAME: HEADSET - CHEST SET

NOMENCLATURE: H-35A/U

FEDERAL STOCK NO: 5965-391-0552



FUNCTIONAL DESCRIPTION:

Head - Chest Set H-35A/U is a telephone type transmitter and headset. The transmitter is mounted on a chest plate by an adjustable steel arm. This head-chest set is suitable for general purpose use.

CONSISTS OF:

1 Headset - Chest Set H-35A/U

Consisting Of:

- 1 Headset HS-30-()
- 1 Cord CD-604

ITEM NAME: HEADSET - CHEST SET

NOMENCLATURE: H-35A/U (Cont)

FEDERAL STOCK NO: 5965-391-0552

TECHNICAL DESCRIPTION: (MICROPHONE)

INPUT

Operating current-----60 milliamperes

OUTPUT

Nominal Impedance -----30 ohms

Frequency Range -----300 to 3, 000 cps

TECHNICAL DESCRIPTION: (EARPHONE)

INPUT

Quantity of Earphones -----2

Nominal Impedance -----250 ohms (series connected)

Frequency Range -----400 to 2, 200 cps

TECHNICAL DESCRIPTION: (SWITCHBOX)

Switch Function: Connects Microphone circuit and control circuit contacts.

ADDITIONAL TECHNICAL DATA:

Environmental Limitations:

Equipment Operating:

Temperature-----40° F to +131° F

Elevation-----Up to 10, 000 feet above sea level

Relative Humidity-----Up to 98 percent

Equipment Nonoperating:

Temperature-----80° F to + 160° F

Elevation-----Up to 50, 000 feet above sea level

Relative Humidity-----Up to 100 percent including condensation
caused by temperature changes

Vibration -----No mechanical resonance below 55 cps

REFERENCE DATA and LITERATURE

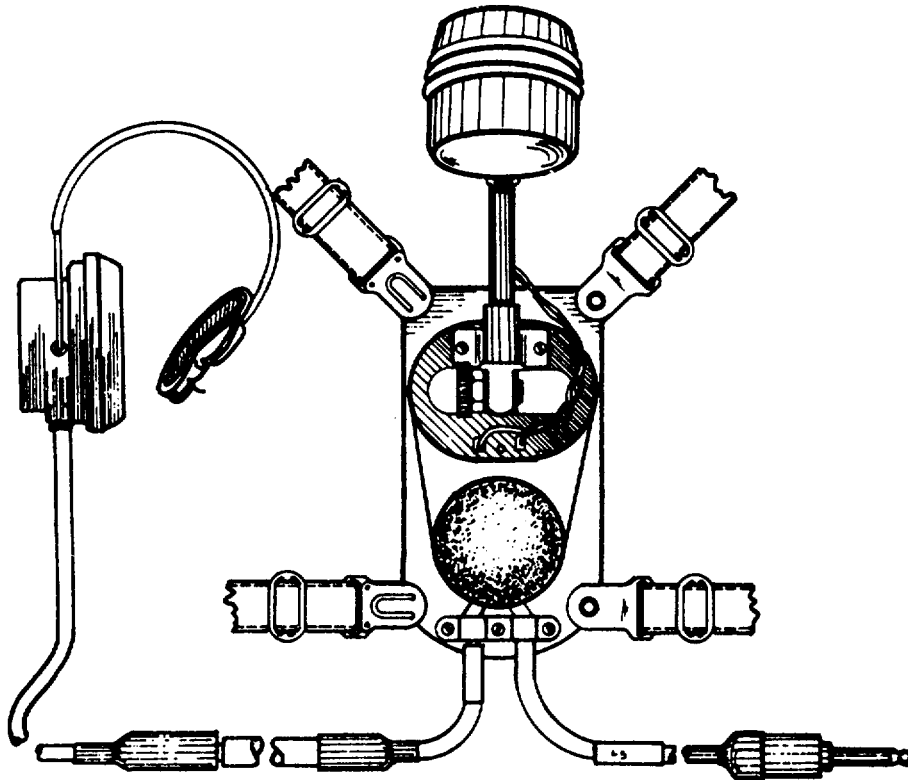
MIL-C-13064
MIL-M-13189
MIL-H-13109
Drawing SC-D-17105
MSS 5965-1

MANUFACTURER CODE	PART NUMBER
80058	H-35A/U

ITEM NAME: HEADSET - CHEST SET

NOMENCLATURE: H-164/U

FEDERAL STOCK NO: 5965-577-6172



FUNCTIONAL DESCRIPTION:

Headset-Chest Set is primarily designed for connection to another identical headset-chest set for sound-powered two station communication. This headset-chest set is frequently used as part of timing and Telephone Sets ML-110 and ML-210 and may also be used with Radar Sets AN/FPG-1, AN/FPG-2, and AN/MPF-1 Model 9.

CONSISTS OF:

- 1 Telephone Transmitter Drawing SC-D-8329 1 Strap ST-24
- 1 Chest Plate
- 1 Telephone Receiver Drawing SC-D-8335 1 Strap ST-25
- 1 Headband
- 1 Cord CD-1175
- 1 Cord CD-1176
- 1 Cord CD- 1174
- 1 Earphone

ITEM NAME: HEADSET - CHEST SET

NOMENCLATURE: H-164A/U (Cont)

FEDERAL STOCK NO: 5965-577-6172

RELATIONSHIP TO SIMILAR EQUIPMENT:

This headset-chest set is similar to headset-chest set HS-19 except it does not require a battery supply for operation of the transmitter.

PHYSICAL DESCRIPTION:

Dimensions: (Approximate for Chest Unit)

Height -----11 inches (279.40 mm)
Width -----4 inches (101. 60 mm)
Depth -----4 inches (101. 60 mm)
Weight -----Completely assembled sound powered unit without housing or cords, weighs less than 5 ounces.

ADDITIONAL PHYSICAL DATA:

Microphone Data:

Type -----Sound Powered
Mounting -----Yoke Mounted

Headset Cable and Connector: Cord No. CD-1176, terminated in Military Plug PL-54.

Junction Box Headset Connector: Cord No. CD-1174 is permanently wired in the junction box, and clamped to the chest plate; a short length of this cord extends beyond the chest plate and is terminated in a Military Type JK-26 jack. This cable joins with the headset cable.

System Cable and Connectors: The system cable, Cord No. CD-1175, is permanently wired in the junction box; the system end of the cable is terminated in a Military Type PL-55 plug.

TECHNICAL DESCRIPTION: (MICROPHONE)

INPUT

Operating Current -----Not applicable

OUTPUT

Nominal Impedance -----1024 ohms

Frequency Range -----Not rated

TECHNICAL DESCRIPTION: (EARPHONE)

INPUT

Quantity of Earphones -----1

Nominal Impedance -----1024 ohms

Frequency Range -----900 to 1, 200 cps

ADDITIONAL TECHNICAL DATA:

ITEM NAME: HEADSET - CHEST SET

NOMENCLATURE: H-164A/U

FEDERAL STOCK NO: 5965-577-6172

Environmental Limitations:

Equipment Operating:

Temperature-----40° F to + 131° F
Relative Humidity-----Up to 98 percent
Orientation -----Any Orientation
Dust-----As encountered during heavy traffic over dry clay roads

Equipment nonoperating:

Temperature-----80° F to + 160° F
Relative Humidity-----Up to 100 percent
Immersion-----10 minutes in tap water to a depth of 6 inches
Salt Spray, Blast, and Shock -----In accordance with MIL-H-12930
Vibration -----In accordance with MIL-H-12930

REFERENCE DATA and LITERATURE

MIL-H-12930 (Signal Corps)
Drawing SC-D-8327; SC-DL-114906
MSS 5965-2
Pricing Guide for Signal Corps Equipment Sig 5-5

MANUFACTURER CODE	PART NUMBER
80063	H-164A/U

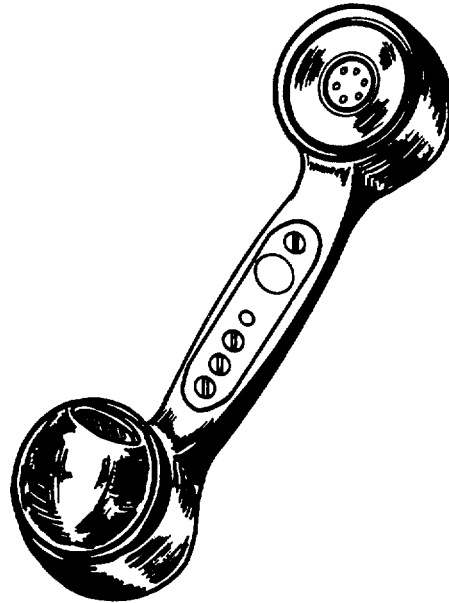
SECTION 7

HANDSETS

<u>Nomenclature, model or part number</u>	<u>Page</u>
A157-2 -----	7.2.1
A555 -----	7.3. 1
A560/S10 -----	7.4.1
A560/S50 -----	7.5.1
H-33F/PT -----	7.6.1
H-60/PT -----	7.7.1
H-169/U -----	7.8.1
H-203/U -----	7.9.1
NT-51007A -----	7.10.1

7.1.1

ITEM NAME: HANDSET
NOMENCLATURE: COMMERCIAL A257-2
FEDERAL STOCK NO: 5965-249-8157



FUNCTIONAL DESCRIPTION:

This handset is a sound powered type containing a dynamic receiver element and a dynamic microphone element. This handset is rugged and weather proof and may therefore be used for outdoor applications. The unit has a built-in press-to-operate switch. Transmitter and receiver units are plug-in type. It is suitable for most general purpose handset applications.

CONSISTS OF:

- 1 Receiver Unit U.S. Instrument Part No. UA1614-3
- 1 Switch U.S. Instrument Part No. UA781-2
- 1 Handset Handle U.S. Instrument Part No. UA1525
- 1 Mouthpiece U.S. Instrument Part No. UA976-1
- 1 Transmitter Unit U.S. Instrument Part No. UA1614-q
- 1 Cable U.S. Instrument Part No. 1678

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Dimensions: (Over-all)

Length-----9 inches (228.60 mm)
Width -----2-5/16 inches (58.74 mm)
Depth (Transmitter End)-----4-1/8 inches (104.78 mm)
Weight -----22 ounces without cord.

ITEM NAME: HANDSET

NOMENCLATURE: COMMERCIAL A257-2 (Cont)

FEDERAL STOCK NO: 5965-249-8157

PHYSICAL DESCRIPTION: (Cont)

Cord Data:

Length-----4-1/2 feet (1371.60 mm)
No. of Conductor -----2
No. of Connector -----2
Type Connector-----Lug Type

TECHNICAL DESCRIPTION: (MICROPHONE)

INPUT

Operating Current -----Not applicable

OUTPUT

Nominal Impedance -----1, 600 ohms
Frequency Rate -----500 to 2, 500 cps

TECHNICAL DESCRIPTION: (EARPHONE)

INPUT

Quantity of Earphones -----1
Nominal Impedance -----1, 150 ohms
Frequency Rate-----500 to 2, 500 cps

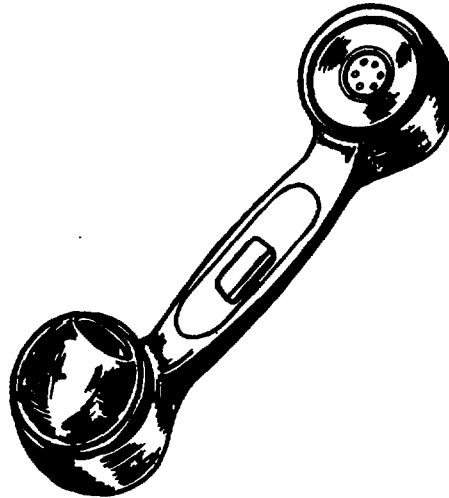
ADDITIONAL TECHNICAL DATA:

REFERENCE DATA and LITERATURE

United States Instrument Corporation Data Sheet I64
United States Instrument Corporation Catalog 500B TRE. C4R. 5-62 10M
M88 5965-4

MANUFACTURER CODE	PART NUMBER
78957	A257-2

ITEM NAME: HANDSET
NOMENCLATURE: COMMERCIAL A555
FEDERAL STOCK NO: 5965-294-6113



FUNCTIONAL DESCRIPTION:

This handset is a sound powered type containing a magnetic receiver element and a magnetic microphone element. This handset is rugged and weatherproof and may therefore be used for outdoor applications. The unit is useful for most general purpose telephone applications.

CONSISTS OF:

- 1 Receiver Unit U. S. Instrument Corp. Part No. UA1814-15
- 1 Receiver Ear Cap U. S. Instrument Corp. Part No. 1055
- 1 Handset Handle U. S. Instrument Corp. Part No. 1980
- 1 Transmitter Unit U. S. Instrument Corp. Part No. UA1614-15
- 1 Mouthpiece U. S. Instrument Corp. Part No. 976-1
- 1 Cable Assembly U. S. Instrument Corp. Part No. 2467-?

RELATIONSHIP TO SIMILAR EQUIPMENT:

Similar to the A-560 handset except that the A-580 is equipped with a push-to-talk switch.

PHYSICAL DESCRIPTION:

Dimensions (Over-all),

Length-----9 inches (228.60 mm)
Width -----2-5/16 inches (58.74 mm)
Depth-----4-1/8 inches (104.78 mm)
Weight -----20 ounces (approximate)

ITEM NAME: HANDSET
NOMENCLATURE: A555 (Cont)
FEDERAL STOCK NO: 5965-294-6113

PHYSICAL DESCRIPTION: (Cont)

Cord Data:

Length-----4 feet (1219.20 mm)
No. of Conductors -----2
Jacket Material-----Rubber

TECHNICAL DESCRIPTION: (MICROPHONE)

OUTPUT

DC Resistance -----60 ohms
AC Impedance (Warble frequency
test, 500 to 2, 500 cps)-----1, 400 ohms
Frequency Range -----500 to 2, 500 cps
Frequency of Maximum Response -----Approximately 1, 700 cps

TECHNICAL DESCRIPTION: (EARPHONE)

INPUT

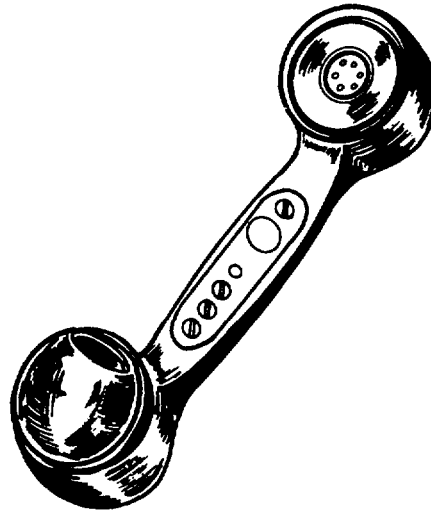
DC Resistance -----60 ohms
AC Impedance (Warble frequency
test, 500 to 2, 500 cps)-----1,140 ohms
Frequency Range -----500 to 2, 500 cps

REFERENCE DATA and LITERATURE

- U. S. Instrument Corp. Drawing No. A555
- U. S. Instrument Corp. Data Sheet No. D657-1
- U. S. Instrument Corp. Catalog 500B

MANUFACTURER CODE	PART NUMBER
78957	A555

ITEM NAME: HANDSET
NOMENCLATURE: COMMERCIAL A560/S10
FEDERAL STOCK NO: 5965-816-7984



FUNCTIONAL DESCRIPTION:

The A560/S10 is a rugged, weatherproof, sound powered handset employing magnetic receiver and transmitter elements. It is applicable to most general telephone purposes.

CONSISTS OF:

- 1 Receiving and transmitting instrument U.S. Inst. Corp. Part No. UA1614-15
- 1 Receiver Ear Cap U.S. I. C. 1055
- 1 Telephone Handle U. S. I. C. 974-1
- 1 Mouthpiece U. S.I. C. 976-1
- 1 Cable Assy U.S. I. C. UA2467-7
- 1 Connector Plug

RELATIONSHIP TO SIMILAR EQUIPMENT:

Similar to the A555 except for the press-to-talk switch. Identical to the A560/S50 except for the plug.

PHYSICAL DESCRIPTION:

Length-----9 inches (228.6 mm)
Width -----2-5/16 inches (58. 74) mm)
Depth (Transmitter End)-----4-1/8 inches (104.78 mm)
Weight (Without Cord)-----22 ounces

ADDITIONAL PHYSICAL DATA:

Cord Data:

Length-----4 feet (1,219.2 mm)
Number of Conductors-----2
Jacket Material-----Rubber

Connector Data:

Telephone Type
Shank Length (Including Tip)-----938 inches
Shank Diameter -----875 inches

ITEM NAME: HANDSET

NOMENCLATURE: COMMERCIAL A560/S10 (Cont)

FEDERAL STOCK NO: 5965-816-7984

TECHNICAL DESCRIPTION: (MICROPHONE)

INPUT

Operating Current-----Not applicable

OUTPUT

DC Impedance -----60 ohms

AC Impedance (Warble
frequency test,

500 to 2, 500 cps)-----1, 400 ohms

Frequency Range -----500 to 2, 500 cps

Frequency of Maximum

Response -----Approximately 1,700 cps

TECHNICAL DESCRIPTION: (EARPHONE)

INPUT

DC Impedance -----60 ohms

AC Impedance (Warble
frequency test,

500 to 2, 500 cps)-----1,140 ohms

Frequency Range -----500 to 2, 500 cps

ADDITIONAL TECHNICAL DATA:

REFERENCE DATA and LITERATURE

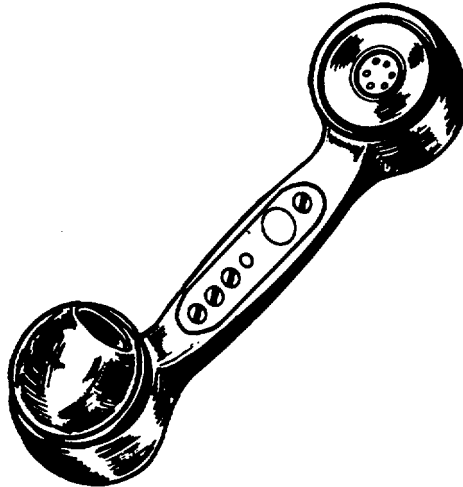
U.S Instrument Corp. Drawing No. A560K

U.S. Instrument Corp. Data Sheet No. D657-1

U.S. Instrument Corp. Catalog 500B

MANUFACTURER CODE	PART NUMBER
78957	A560/S10

ITEM NAME: HANDSET
NOMENCLATURE: COMMERCIAL A560/S50
FEDERAL STOCK NO: 5965-808-6261



FUNCTIONAL DESCRIPTION:

The A560/S50 is a rugged, weatherproof, sound powered handset employing magnetic receiver and transmitter elements. It is applicable to most general telephone purposes.

CONSISTS OF:

- 1 Receiving and Transmitting Instrument U.S. Instrument Corporation Part No. UA-1614-15
- 1 Receiver Ear cap U. S. I. C. 1055
- 1 Telephone Handle U.S. I. C. 974-1
- 1 Mouthpiece U.S.I.C. 976-1
- 1 Connector Plug

RELATIONSHIP TO SIMILAR EQUIPMENT

Similar to the A555 except for the press-to-talk switch. Identical to the A560/S10 except for the plug.

PHYSICAL DESCRIPTION:

Length -----9 inches (228.6 mm)
Width-----2-5/16 inches (58.74 mm)
Depth (Transmitter End)-----4-1/8 inches (104. 78)
Weight (without cord) -----22 ounces

ITEM NAME: HANDSET

NOMENCLATURE: COMMERCIAL A560/S50 (Cont)

FEDERAL STOCK NO: 5965-808-6261

ADDITIONAL PHYSICAL DATA:

Cord Data:

Length-----4 feet (1, 219.2 mm)
Number of Conductors-----2
Jacket Material-----Rubber

Connector Data:

Telephone Type
Shank length (Including tip)-----1.25 inches (31.75 mm)
Shank Diameter -----2.50 inches (63.50 mm)

TECHNICAL DESCRIPTION: (MICROPHONE)

INPUT

Operating Current-----Not applicable

OUTPUT

DC Impedance-----60 ohms
AC Impedance (Warble frequency test,
500 to 2, 500 cps)-----1,400 ohms
Frequency Range -----500 to 2, 500 cps
Frequency of Maximum Response -----Approximately 1, 700 cps

TECHNICAL DESCRIPTION: (EARPHONE)

INPUT

DC Impedance-----60 ohms
AC Impedance (Warble frequency test,
500 to 2,500 cps)-----1,140 ohms
Frequency Range -----500 to 2, 500 cps

ADDITIONAL TECHNICAL DATA:

REFERENCE DATA and LITERATURE

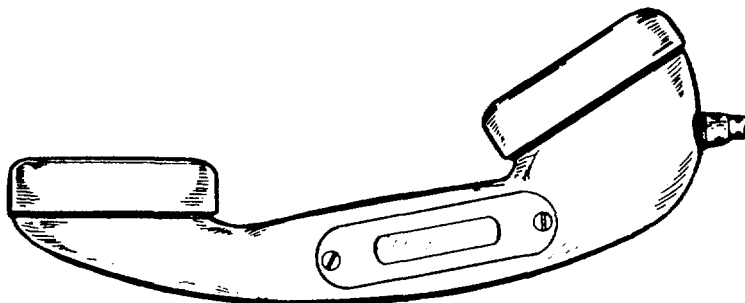
U.S. Instrument Corp. Drawing No. A560K
U.S. Instrument Corp. Data Sheet No. D657-1
U.S. Instrument Corp. Catalog 500B

MANUFACTURER CODE	PART NUMBER
78957	A560/S50

ITEM NAME: HANDSET

NOMENCLATURE: H-33F/PT

FEDERAL STOCK NO: 5965-993-6127

FUNCTIONAL DESCRIPTION:

Handset H-33F/PT is a battery powered type handset intended for use with radio equipment. The unit is waterproof and withstands severe environmental conditions. This handset is therefore suitable for outdoor use. It is used as part of Control Group AN/GRA-6.

CONSISTS OF:

- 1 Handset H-33F/PT
- Including:
 - 1 Microphone Element M-35/U
 - 1 Receiver Element Signal Corps Drawing No. SC-C-105379
 - 1 Switch Assembly 104-B-23
 - 1 Handle Assembly Drawing No. SC-D-76326
 - 1 Cable Assembly U-161/U

RELATIONSHIP TO SIMILAR EQUIPMENT:PHYSICAL DESCRIPTION:Dimensions (Over-all):

Length-----7-7/16 inches (188.91 mm)

Depth-----3-1/16 inches (77.79 mm)

Dimensions: (Receiver)

Depth-----7/8 inch (22. 23 mm)

Diameter-----2-1/16 inches (52.39 mm)

Dimensions: (Microphone)

Diameter-----1-5/8 inches (41.28 mm)

Depth-----0.390 inch (9.91 mm)

Cord Data:

Length (Retracted) -----11 inches (279.4 mm)

Length (Extended) -----48 inches (1219. 2 mm)

No. of Conductors-----7

Connector Designation-----Pin type

Weight -----Not Rated

ITEM NAME: HANDSET
NOMENCLATURE: H-33F/PT (Cont)
FEDERAL STOCK NO: 5965-993-6127

TECHNICAL DESCRIPTION: (MICROPHONE)

INPUT

Operating Current-----100 ma

OUTPUT

Nominal Impedance -----40 ohms
Frequency Range -----300 to 4, 000 cps

TECHNICAL DESCRIPTION: (EARPHONE)

INPUT

Quantity of Earphones -----1
Nominal Impedance -----300 ohms
Frequency Range -----300 to 4, 000 cps

ADDITIONAL TECHNICAL DATA:

ENVIRONMENTAL LIMITATIONS:

Equipment Operating:

Temperature-----40° F to + 150° F
Elevation-----Up to 10, 000 feet

Equipment Nonoperating:

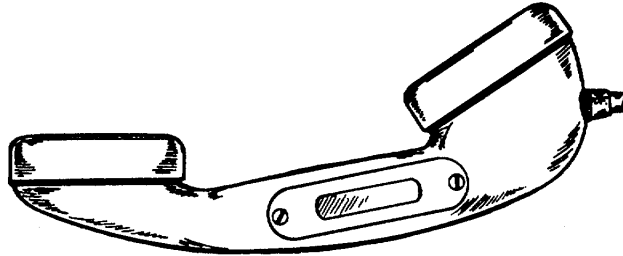
Temperature-----80° F to + 160° F
Relative Humidity-----Up to 98%
Elevation-----10, 000 to 50, 000 feet above sea level
Immersion-----3 feet of water for 2 hours
Blast-----In accordance with MIL-H-11134

REFERENCE DATA and LITERATURE

MIL-H-11134 (Sig. C)
Telephonics Corporation Drawing 10056
MSS 5965-4

MANUFACTURER CODE	PART NUMBER
78711	6461
80058	H-33F/PT
82872	8Z872

ITEM NAME: HANDSET
NOMENCLATURE: H-60/PT
FEDERAL STOCK NO: 5965-669-9145



FUNCTIONAL DESCRIPTION:

Handset H-60/PT is a battery powered handset primarily designed for use with Telephone Sets Type TA-H3/PT and TA-312.

CONSISTS OF:

- 1 Handset H-60/PT
- Including:
- 1 Telephone Receiver Element TA-235/PT
 - 1 Telephone Transmitter TA-117/PT
 - 1 Switch Assembly SA-129/PT
 - 1 Cord Assembly CX-2151/PT
 - 1 Handset Handle SM-C-207934

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Dimensions: (Over-all)

Length-----8-7/16 inches (214.31 mm)
Depth-----2-51/64 inches (71.04 mm)
Width-----2-19/32 inches (65.88 mm)
Weight-----Not rated

Cord Data:

Length-----9 inches (228.60 mm)
No. of Conductors-----10
Connector Type-----Audio Pin Type

ITEM NAME: HANDSET

NOMENCLATURE: H-60/PT (Cont)

FEDERAL STOCK NO: 5965-669-9145

TECHNICAL DESCRIPTION: (MICROPHONE)

INPUT

Operating Current -----125 milliamperes

OUTPUT

Nominal Impedance -----35 ohms
 Frequency Range -----300 to 3, 000 cps

TECHNICAL DESCRIPTION: (EARPHONE)

INPUT

Quantity of Earphones -----1
 Nominal Impedance -----150 ohms
 Frequency Range -----500 to 3, 000 cps

ENVIRONMENTAL LIMITATIONS:

Equipment Operating:

Temperature ----- -40° F to + 131° F
 Elevation ----- Up to 10, 000 feet above sea level. Remains operable during descent from 1, 500 feet at rate of 50 feet per second.
 Relative Humidity ----- Up to 95 percent.
 Dust ----- As encountered during heavy traffic over dry clay roads.

Equipment Nonoperating

Temperature ----- -80° F to + 160° F
 Elevation ----- Up to 50, 000 feet above sea level.
 Relative Humidity ----- Up to 100 percent including condensation resulting from temperature changes.
 Immersion ----- 3 feet of water for 10 minutes.
 Salt Spray ----- Withstands 20% salt spray at 960 F for 100 hours.
 Drop ----- Withstands at least 6 drops from 4 foot height onto a concrete floor.
 Shock, Vibration, Blast, and Bounce ----- In accordance with MIL-H-11966 (Sig. C)
 Insects and Fungi ----- As encountered in tropical service

REFERENCE DATA and LITERATURE

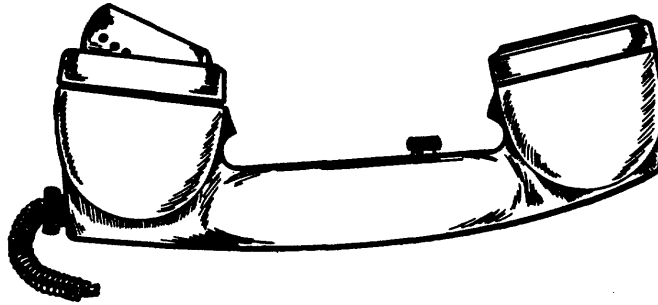
MIL-H-11996 (Sig. C)
 Signal Corps Drawing SC-D-207907
 MSS 5965-4

MANUFACTURER CODE	PART NUMBER
80058	H-60/PT

ITEM NAME: HANDSET

NOMENCLATURE: H-169/U

FEDERAL STOCK NO: 5965-679-9501



FUNCTIONAL DESCRIPTION:

This unit is a noise canceling type handset containing a magnetic earphone element and a microphone with a transistorized amplifier. The handset is suitable for general use in telephone circuits.

The handset is battery powered.

CONSISTS OF:

- 1 Microphone Amplifier N5965-624-4134
- 1 Mouthpiece
- 1 Receiver Element N5965-678-5305
- 1 Receiver Cap N5965-683-2075
- 1 Handset Handle (MIL-M-19833, GDI 30 or MM-22544, Type 4).
- 1 Cord Protector Assembly
- 1 Cord Assembly CX-1846()/U
- 1 Switch Soft Action 3 Pole Shorting

RELATIONSHIP TO SIMILAR EQUIPMENT:

Similar to NT-51007A

ITEM NAME: HANDSET
NOMENCLATURE: H-169/U (Cont)
FEDERAL STOCK NO: 5965-679-9501

PHYSICAL DESCRIPTION:

Dimensions (Overall):

Length-----9-9/64 inches (229.79 mm)
Width (Transmitter End) -----2-23/32 inches (69. 06 mm)
Depth (Transmitter End)-----4-1/16 inches (103. 19 mm)

TECHNICAL DESCRIPTION: (MICROPHONE)

INPUT

Operating Current -----Not rated

OUTPUT

Nominal Impedance -----Not rated
Frequency Range -----300 to 5, 000 cps

TECHNICAL DESCRIPTION: (EARPHONE)

INPUT

Quantity of Earphones -----1
Nominal Impedance -----600 ohms
Frequency Range -----200 to 5, 000 cps

ADDITIONAL TECHNICAL DATA:

Microphone Amplifier Type -----Dynamic Noise Canceling
Receiver Element Type-----Magnetic
Switch Type -----Push-to-talk

REFERENCE DATA and LITERATURE

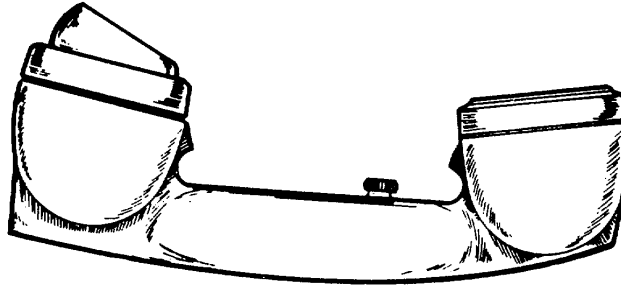
Navy Dwg RE-51 128E
Cable Assembly, Drawing Navy RE-49C 605
Receiver, MIL-E-17884
Microphone, MIL-M-23813 and MIL-M-5794

MANUFACTURER CODE	PART NUMBER
80058	H-169/U

ITEM NAME: HANDSET

NOMENCLATURE: H-203/U

FEDERAL STOCK NO: 5965-840-8849



FUNCTIONAL DESCRIPTION:

The H-203/U is a sound powered receiver-transmitter employing magnet earphone and microphone elements. This handset is suitable for general use in telephone circuits.

CONSISTS OF:

- | | | |
|---|--------------------|--|
| 1 | Microphone Element | U. S. Instrument Corp. Part No. UA1614-1 |
| 1 | Receiver Element | U. S. Instrument Corp. Part No. UA1614-1 |
| 1 | Handset Handle | U. S.I. C. Part No. 974-2 |
| 1 | Cord | U.S.I. C. Part No, UA2467-2 |
| 1 | Pushbutton Switch | U. S. I. C. Part No. UA2175-1 |

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Weight -----Not available

Dimensions:

Length-----9 inches (228.6 mm)
Width -----2-5/16 inches (58.74 mm)
Depth-----4-1/8 inches (104.78 mm)

ADDITIONAL PHYSICAL DATA:

Cord Data:

Length, Retracted -----1 foot (304. 8 mm)
Length, Extended (Approximate) -----8 feet (1,228.8 mm)
No. of Conductors -----2
No. of Connectors -----2
Connector Type-----Lug type

ITEM NAME: HANDSET

NOMENCLATURE: H-203/U (Cont)

FEDERAL STOCK NO: 5965-840-8849

TECHNICAL DESCRIPTION: (MICROPHONE)

OUTPUT

DC Resistance -----90 ohms
AC Impedance -----1, 690 ohms
Frequency Range -----500 to 2, 500 cps
Frequency of Maximum Response -----Approximately 1,700 cps

TECHNICAL DESCRIPTION: (EARPHONE)

INPUT

DC Resistance-----60 ohms
AC Impedance-----1,150 ohms
Frequency Range-----500 to 2,500 cps

REFERENCE DATA and LITERATURE

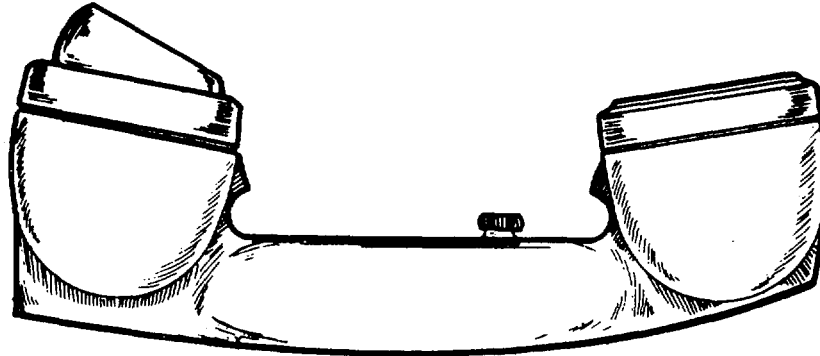
- U. S. Instrument Corp. Drawing, Sound Powered Handset Type H-203/U
- U. S. Instrument Corp. Data Sheet D657-1

MANUFACTURER CODE	PART NUMBER
80058	H-203/U

ITEM NAME: HANDSET

NOMENCLATURE: NT-51007A

FEDERAL STOCK NO: 5965-665-3480



FUNCTIONAL DESCRIPTION:

Handset NT-51007A is a heavy duty, battery powered handset intended for general purpose use. The handset contains a carbon microphone and a magnetic type earphone receiver housed in a phenolic case.

CONSISTS OF:

- 1 Handset Body
- 1 Transmitter Unit Roanwell No. 10118 or equal
- 1 Receiver Unit Roanwell No. 10088 or equal
- 1 Switch Roanwell No. 10060 or equal
- 1 Cord Protector Assembly Roanwell No. 17290 or equal

RELATIONSHIP TO SIMILAR EQUIPMENT:

This handset is similar to Roanwell Part No. 10230 handset, except that the Roanwell handset has a 5 conductor rubber covered coil cord terminated in AN-3106-14S-5P Plug. This is H-169 handset with a carbon microphone and a different cord.

PHYSICAL DESCRIPTION:

Dimensions: (Over-all)

Length-----9-3/64 inches (229.79 mm)
Depth-----4-1/16 inches (103.19 mm)
Diameter (Transmitter and
Receiver) -----2-1/2 inches (63.50 mm)

ITEM NAME: HANDSET

NOMENCLATURE: NT-51007A (Cont)

FEDERAL STOCK NO: 5965-665-3480

TECHNICAL DESCRIPTION: (MICROPHONE)

INPUT

Operating Current -----Not rated

OUTPUT

Nominal Impedance -----35 ohms

Frequency Range -----Not rated

TECHNICAL DESCRIPTION: (EARPHONE)

INPUT

Quantity of Earphones -----1

Nominal Impedance -----600 ohms

Frequency Range -----Not rated

ADDITIONAL TECHNICAL DATA:

REFERENCE DATA and LITERATURE

Roanwell Corporation Data Sheet DS-38
Roanwell Corporation Drawing 10044/SPEC
NAVY Drawing RE 51D 121G

MANUFACTURER CODE	PART NUMBER
80064	NT-51007A
82872	10044

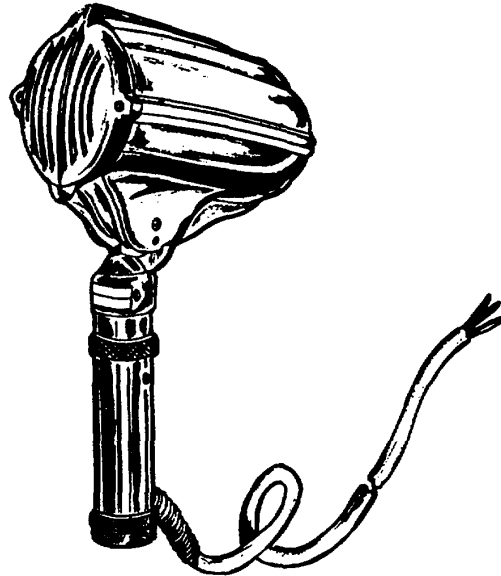
SECTION 8

MICROPHONES

<u>Nomenclature, model or part number</u>	<u>Page</u>
DN500 -----	8.2.1
M-6A/UR -----	8.3.1
M-8/PIQ-1 -----	8.4.1
M-29B/U -----	8.5.1
M-30A/U -----	8.6.1
M-32B/AIC -----	8.7.1
M-33A/AIC -----	8.8.1
M-34/AIC -----	8.9.1
M-43/U -----	8.10.1
M-44A/U -----	8.11.1
M-51/UR -----	8.12.1
M-52B/U -----	8.13.1
M-58/U -----	8.14.1
M-85/U -----	8.15.1
M-105/U -----	8.18.1
M-109/U -----	8.17.1
RS-38-D2 -----	8.18.1
T-45 -----	8.19.1
55S -----	8.20.1
76B -----	8.21.1
205STCKK -----	8.22.1
602D -----	8.23.1
9808 -----	8.24.1

8.1.1

ITEM NAME: MICROPHONE
NOMENCLATURE: COMMERCIAL DN500
FEDERAL STOCK NO: 5965-170-4793



FUNCTIONAL DESCRIPTION:

This unit is a medium impedance desk and stand type dynamic microphone. It is omni-directional and may be employed for communication and general purpose uses.

CONSISTS OF:

1 Microphone, Astatic Corp. DN500

RELATIONSHIP TO SIMILAR EQUIPMENTS:

Various commercial sources.

PHYSICAL DESCRIPTION:

Weight -----28 oz., less cable

Dimensions (Nominal):

Length-----7 Inches (177.80 mm)
Width -----2-5/8 Inches (66. 68 mm)
Height -----4-5/32 Inches (105. 57 mm)

Cable Data:

Length-----Up to 25 feet
No. of Conductors -----2 under shield
No. of Connectors -----See Special features

ITEM NAME: MICROPHONE

NOMENCLATURE: COMMERCIAL DN500 (Cont)

FEDERAL STOCK NO: 5965-170-4793

ADDITIONAL PHYSICAL DATA:

Mounting:

Mounts on 5/8-27 threaded stands

TECHNICAL DESCRIPTION:

INPUT

Operating Current -----Not applicable

OUTPUT

Frequency Range -----50 to 7, 500 cps

ADDITIONAL TECHNICAL DATA:

Special Features:

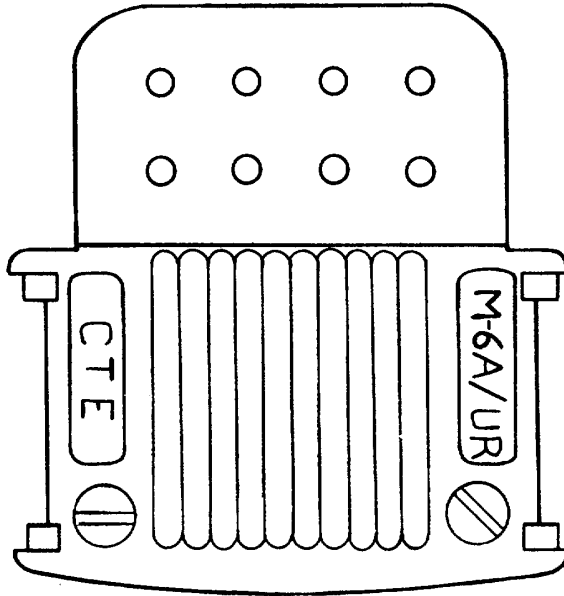
Internal connector (F-24) permits disconnecting cable and adapter from microphone.
Head hinged to allow 90° backward movement from horizontal position.

REFERENCE DATA and LITERATURE

MSS 5965-3
DN Series ASTATIC Specifications Sheet Form No. M-132
ASTATIC Response Curve RC #243
ASTATIC Drawing No. D-182

MANUFACTURER CODE	PART NUMBER
70638	DN500

ITEM NAME: MICROPHONE
NOMENCLATURE: M-6A/UR
FEDERAL STOCK NO: 5965-194-9773



FUNCTIONAL DESCRIPTION:

Carbon microphone unit, single-Button, close-talking, noise-canceling, with a current of 60 ma. The unit mounts in the clip of microphone boom, MT-521/U.

CONSISTS OF:

- 1 Microphone element, Carbon M-6A/UR

RELATIONSHIP TO SIMILAR EQUIPMENT:

Similar to microphone unit M-6/UR except for performance requirements. Interchangeable.

PHYSICAL DESCRIPTION:

Weight -----1 ounce, max.

Dimensions:

Length-----1-1/4 inches (31.75 mm)
Width -----1/2 inch (12.7 mm)
Height -----1-3/8 inches (34.93 mm)

ITEM NAME: MICROPHONE
NOMENCLATURE: M-6A/UR (Cont)
FEDERAL STOCK NO: 5965-194-9773

ADDITIONAL PHYSICAL DATA:

Case Material: High-temperature, high-impact plastic

TECHNICAL DESCRIPTION:

INPUT

Operating Current -----60 milliamperes

OUTPUT

Nominal Impedance -----40 to 100 ohms

Frequency Range -----300 to 4,000 cps

ADDITIONAL TECHNICAL DATA:

Environmental Data:

Altitude-----Operationally used up to 15, 000 feet, but
withstands altitudes up to 50, 000 feet
without permanent damage.

REFERENCE DATA and LITERATURE

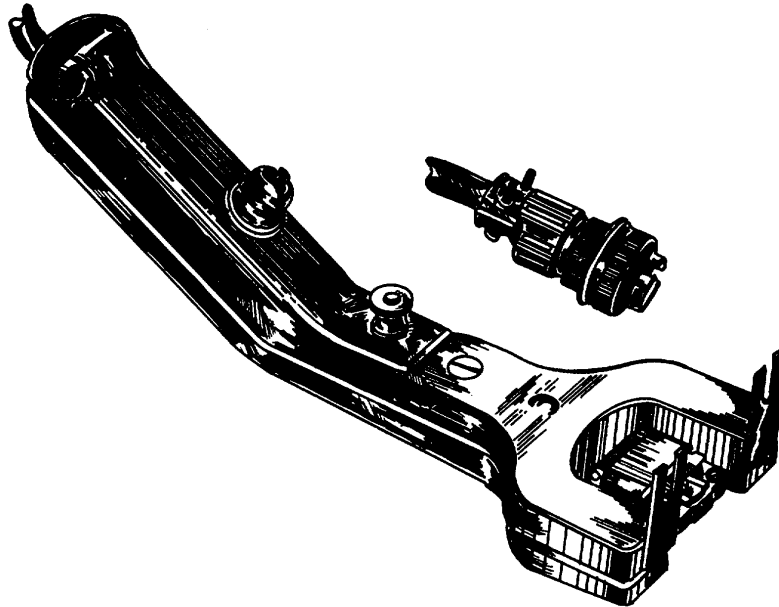
SC-B-53683
MIL-M-5794

MANUFACTURER CODE	PART NUMBER
72724	M-6A/UR
80058	M-6A/UR

ITEM NAME: MICROPHONE

NOMENCLATURE: M-8/PIQ-1

FEDERAL STOCK NO: 5965-194-9774



FUNCTIONAL DESCRIPTION:

This unit is a hand-held, noise canceling carbon type microphone designed to be used with Public Address Set AN/PIQ-1. This item is immersion, pressure, and shock resistant.

CONSISTS OF:

- 1 Microphone, Carbon M-8/PIQ-1
- Including:
 - 1 Microphone Unit M-51/UR
 - 1 Handle
 - 1 Cabl
 - 1 Press-to-talk switch

8.4.1

ITEM NAME: MICROPHONE

NOMENCLATURE: M-8/PIQ-1 (Cont)

FEDERAL STOCK NO: 5965-194-9774

RELATIONSHIP TO SIMILAR EQUIPMENT:

Used with Public Address Set AN/PIQ-1
Employs microphone element M-51/UR.

PHYSICAL DESCRIPTION:

Weight -----17 ounces including cable

Dimensions:

Length-----9-3/4 inches (247.65 mm)

Width -----4-1/4 inches (107.95 mm)

Height -----3-1/8 inches (79.38 mm)

Cable Data:

Length-----3 feet (914.40 mm)

No. of Conductors -----2

Connector Designation-----145-5P

ADDITIONAL PHYSICAL DATA:

Material -----Plastic

Finish-----Black

TECHNICAL DESCRIPTION:

INPUT

Operating Current -----50 milliamperes

OUTPUT

Nominal Impedance -----60 ohms at 1,000 cps

Frequency Range -----300 to 4,000 cps

ADDITIONAL TECHNICAL DATA:

Nonoperating Conditions:

Temperature-----80 deg. F to +160 deg. F.

Relative Humidity-----100 percent

Elevation-----Up to 50,000 feet above sea level

Operating Conditions:

Temperature-----40 deg. F to +150 deg. F

Relative Humidity-----98 percent

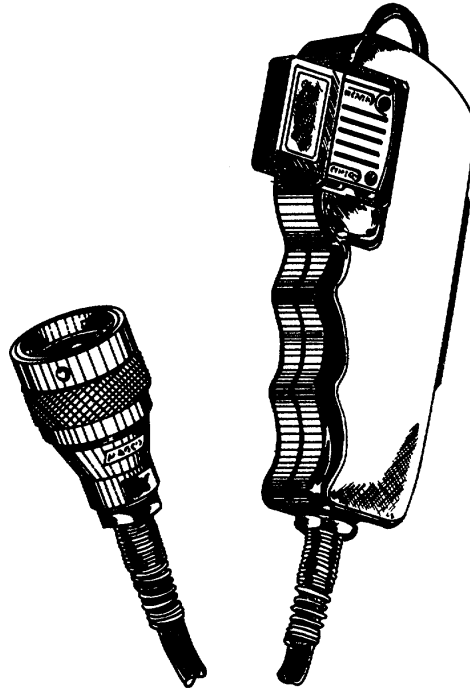
REFERENCE DATA and LITERATURE

MIL-P-13271

MIL-M-5794

MANUFACTURER CODE	PART NUMBER
80058	M-8/PIQ-1

ITEM NAME: MICROPHONE
NOMENCLATURE: M-29B/U
FEDERAL STOCK NO: 5965-892-0722



FUNCTIONAL DESCRIPTION:

Carbon microphone M-29B/U is a low impedance unit with a noise canceling feature and is suitable for use in places where high level background noises are encountered. This item is immersion resistant.

The unit consists of an M-51/UR microphone element mounted in a holder which contains a push-to-talk switch. The switch may also be used to operate external circuitry. It has a coiled retractable cord which is extendable to five feet.

CONSISTS OF:

- 1 Microphone, Carbon, M-29B/U
- Including:
 - 1 Microphone Cover, CW-292/U
 - 1 Handle
 - 1 Five-conductor retractable cord with a ten-pin connector
 - 1 Microphone Unit M-51/UR

ITEM NAME: MICROPHONE
NOMENCLATURE: M-29B/U (Cont)
FEDERAL STOCK NO: 5965-892-0722

RELATIONSHIP TO SIMILAR EQUIPMENT:

Similar to M-52B/U, difference being the M-52B/U has a 3-conductor cable and telephone plug.

PHYSICAL DESCRIPTION:

Weight -----14-1/2 ounces including cable

Dimensions:

Length-----5-11/16 inches (144.46 mm)

Width -----1 inch (25.40 mm)

Height -----3 inches (76.20 mm)

Cable Data:

Length-----5 feet, extended (1524.00 mm)

No. of Conductors -----5

No. of Connectors -----1

Connector Plug -----U-161/U

TECHNICAL DESCRIPTION:

INPUT

Operating Current -----50 milliamperes

OUTPUT

Nominal Impedance -----60 ohms at 1,000 cps

Frequency Range -----300 to 4,000 cps

ADDITIONAL TECHNICAL DATA:

Environmental Data:

Operating Temperature ----- -40 deg. F to +150 deg. F

Nonoperating Temperature ----- -80 deg. F to +160 deg. F

Relative Humidity (nonoperating)-----90 to 98 percent

Elevation-----Up to 10,000 feet above sea level

Switch Data-----Push-to-talk type

REFERENCE DATA and LITERATURE

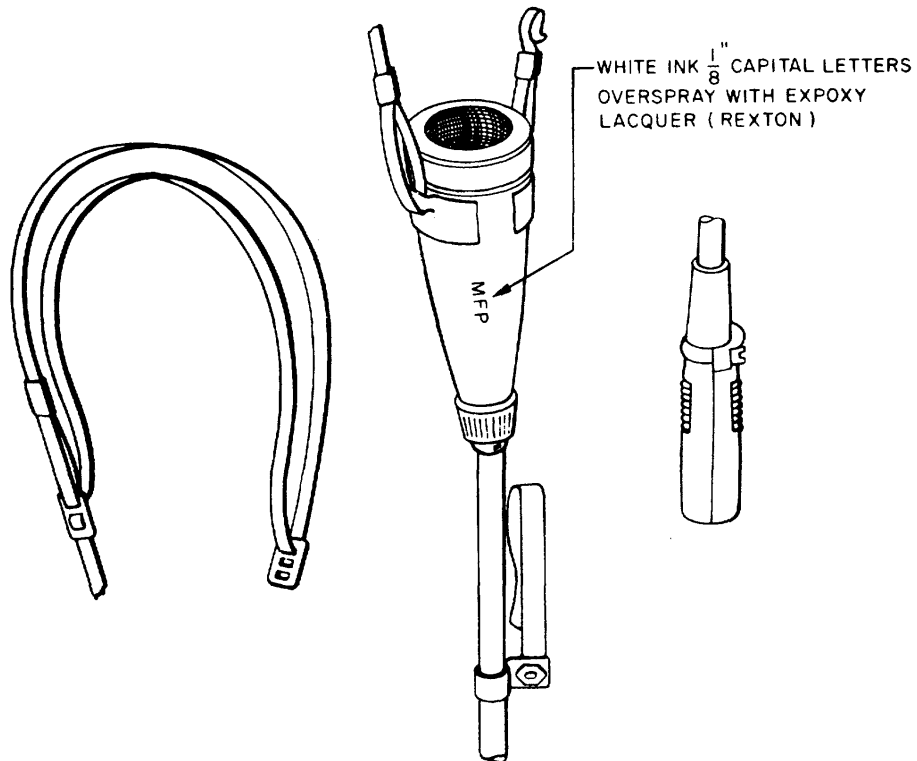
MIL-M-11193
Drawing and Data List SC-DL-85584
MIL-M-5794, Microphone Element
MIL-C-3884, Cord

MANUFACTURER CODE	PART NUMBER
81349	M-29B/U
80058	M-29B/U

ITEM NAME: MICROPHONE

NOMENCLATURE: M-30A/U

FEDERAL STOCK NO: 5965-050-8167



FUNCTIONAL DESCRIPTION:

The M-30A/U is a low impedance, non directional dynamic microphone. It is designed to be hung on a neck strap clipped to the lapel, held in the hand, used on a desk stand, or suspended from a boom. It is used wherever microphone concealment, individual mobility, or free movement of the hand is desired. It is equipped with a pop-proof wire mesh grille which minimizes wind and breath blasts.

8.6.1

ITEM NAME: MICROPHONE

NOMENCLATURE: M-30A/U (Cont)

FEDERAL STOCK NO: 5965-050-8167

CONSISTS OF:

- 1 Microphone, Dynamic M-30A/U
- Including:
 - 1 Cord Assembly
 - 1 Neck Strap 582-43
 - 1 Cable and Plug Assembly 81A113
 - 1 Belt Strain Relief Clip
 - 1 Cable WS-2/U

RELATIONSHIP TO SIMILAR EQUIPMENT:

Similar to Electro-Voice Model 646.

PHYSICAL DESCRIPTION:

Weight (nominal) -----6-1/2 ounces without cable or neck cord.

Dimensions:

Length-----6-7/16 inches (153.99 mm) cable not included
Diameter-----1-1/8 inches (20. 58 mm)

Cable Data:

Length-----15 feet (4572. 00 mm)
No. of Conductors -----2 shielded
Connector Designation-----Cannon XLR-3-12C

TECHNICAL DESCRIPTION:

INPUT

Operating Current -----Not applicable

OUTPUT

Nominal Impedance -----150 ohms
Frequency Range -----50 to 10,000 cps

ADDITIONAL TECHNICAL DATA:

Environmental Data:

Temperature:

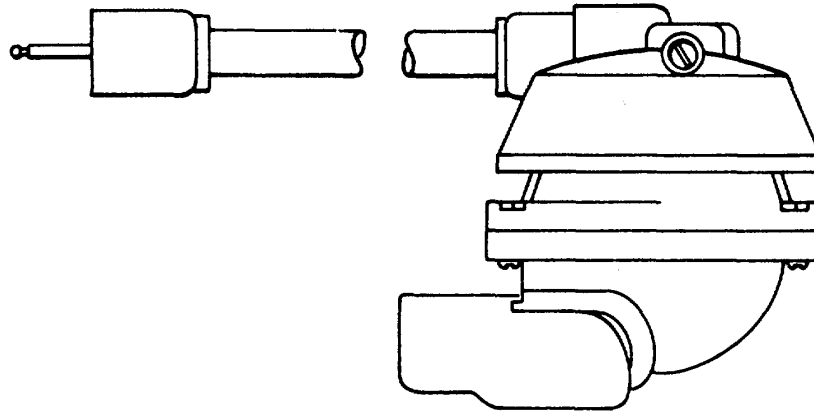
Operating-----40 deg. F to + 125 deg. F
Storage -----80 deg. F to +160 deg. F
Altitude (Transport) -----50,000 feet

REFERENCE DATA and LITERATURE

MIL-M- 11051

MANUFACTURER CODE	PART NUMBER
81349	M-30/U
81134	646S
87771	M-30A/U

ITEM NAME: MICROPHONE
NOMENCLATURE: M-32B/AIC
FEDERAL STOCK NO: 5965-639-6621



FUNCTIONAL DESCRIPTION:

The M-32B/AiC is a noise-canceling moving-coil microphone designed for use with oxygen mask Type A-13-A or MS22001 to provide communication in Military Aircraft at altitudes where the use of an oxygen mask is required.

CONSISTS OF:

1 Microphone, M-32B/AIC

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Microphone Type-----Dynamic
Dimensions (Over-all):
Length-----1-1/4 inches (31.75 mm)
Width -----1-1/4 inches (31.75 mm)
Height -----1-3/4 inches (44.45 mm)

Weight -----2-1/2 ounces max.

ADDITIONAL PHYSICAL DATA:

Cable Data:
Length (Extended) -----18-1/2 inches (469.9 mm)
Number of Conductors-----2
Shielding-----Unshielded
Impedance -----3 ohms
Termination -----Integral Cable Type Connector

ITEM NAME: MICROPHONE

NOMENCLATURE: M-32B/AIC (Cont)

FEDERAL STOCK NO: 5965-639-6621

TECHNICAL DESCRIPTION:

INPUT

Operating Current -----Not applicable
Polarizing Voltage -----Not rated

OUTPUT

Nominal Impedance -----3 ohms
Frequency Range -----200 to 6, 000 cps

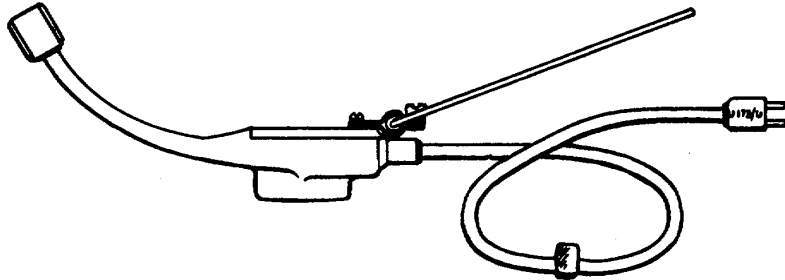
ADDITIONAL TECHNICAL DATA:

REFERENCE DATA and LITERATURE

MIL-M-9434

MANUFACTURER CODE	PART NUMBER
80058	M-32B/AIC
81134	681-2162

ITEM NAME: MICROPHONE
NOMENCLATURE: M-33A/AIC
FEDERAL STOCK NO: 5965-620-4955



FUNCTIONAL DESCRIPTION:

Microphone, dynamic M-33A/AIC is a low impedance, low output level boom-mounted microphone. It is designed to be mounted on headset assemblies which position the microphone against the operator's lips, permitting hand-free communication. It is suited for vehicular, aircraft, and other noisy locations where the operation of the communication equipment is incident to operation of other equipments. The close-talking design reduces the percentage of distant noise picked up from operating machinery, thereby allowing intelligible communication under extreme ambient noise conditions.

CONSISTS OF:

- 1 Microphone, Dynamic M-33A/AIC
Including:
 - 1 Cable Assembly

RELATIONSHIP TO SIMILAR EQUIPMENT:

Similar to M-33/AIC, the difference being that the cable assembly on the M-33A/AIC is removable. Part of Headset-Microphone H-78A/AIC, and H-101()/U

PHYSICAL DESCRIPTION:

Weight -----3-1/8 ounces maximum

Dimensions:

Length-----5 inches (127.00 mm)(exclusive of cable)
Width (max. point)-----1-1/8 inches (28.58 mm)
Height (overall)-----2-27/64 inches (61.52 mm)

Cable Data:

Length-----13 inches (330.20 mm)
No. of Conductors -----2
No. of Connectors -----2
Connector Designation-----U-173/U

ADDITIONAL PHYSICAL DATA:

Diaphragm Material-----Metal

ITEM NAME: MICROPHONE
NOMENCLATURE: M-33A/AIC (Cont)
FEDERAL STOCK NO: 5965-620-4955

TECHNICAL DESCRIPTION:

INPUT

Operating Current -----Not applicable.

OUTPUT

Nominal Impedance -----3 ohms \pm 0.2 ohms at 1, 000 cps
Frequency Range -----200 to 9, 000 cps

ADDITIONAL TECHNICAL DATA:

Environmental Characteristics:

Ambient Operating Conditions:

Temperature ----- -55 deg. C to 71 deg. C
Humidity -----100 percent
Explosive Decompression-----Pressure reduction from 22 in. hg. (8000 ft.) to
7 in. hg (35, 000 ft.) in 0. 1 second
Immersion-----3 ft. of water

REFERENCE DATA and LITERATURE

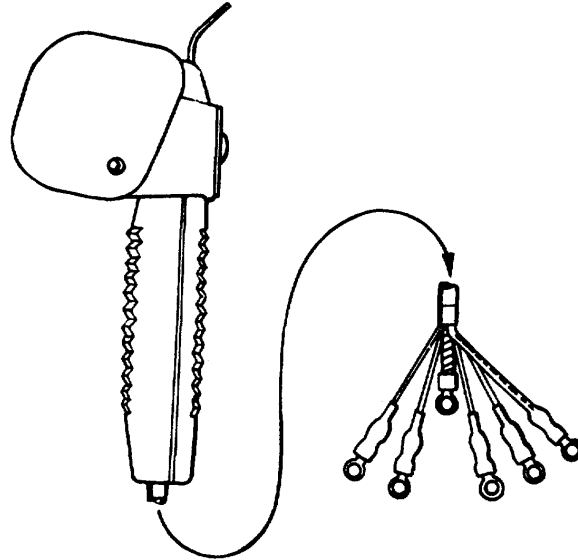
MIL-M-55233

MANUFACTURER CODE	PART NUMBER
80058	M-33A/AIC
82872	10300

ITEM NAME: MICROPHONE

NOMENCLATURE: M-34/AIC

FEDERAL STOCK NO: 5965-254-9228



FUNCTIONAL DESCRIPTION:

Microphone M-34/AIC is a hand-held noise-canceling, moving-coil microphone intended for use in military aircraft as a component of Intercommunication Set AN/AIC-10.

CONSISTS OF:

- 1 Microphone, M-32/AIC
- Including:
- 1 Cable Assembly, WF-14/U

RELATIONSHIP TO SIMILAR EQUIPMENT

PHYSICAL DESCRIPTION:

Dimensions (Over-all):

Length-----6 inches (152. 4 mm)
Width -----1.8 inches (45.72 mm)
Height -----1. 7 inches (43. 18 mm)

Cable Data

Cable Designation-----WF-14/U
Length-----5 feet (1524. 0 mm)
No. of Conductors -----5
No. of Connectors -----None
Weight -----12-1/2 ounces maximum

ITEM NAME: MICROPHONE

NOMENCLATURE: M-34/AIC (Cont)

FEDERAL STOCK NO: 5965-254-9228

ADDITIONAL PHYSICAL DATA:

Switch Type -----Push-to-talk

TECHNICAL DESCRIPTION:

INPUT

Operating Current -----Not applicable

OUTPUT

Nominal Impedance -----2.3 ohms

Frequency Range -----200 to 6, 000 cps

Electrical Output -----3. 7 microvolts per dyne per square centimeter at
1, 000 cps measured across a 5 ohm load.

ADDITIONAL TECHNICAL DATA:

Directional Characteristics:

Below 2,000 cycles per second -----Bidirectional

Above 2,000 cycles per second -----Unidirectional

ENVIRONMENTAL LIMITATIONS

Fungus Resistance -----Withstands fungus-resistance, Test Procedure 1
of MIL-E-5272.

Salt Spray -----Withstands the 50-hour test specified in
MIL-E-5272.

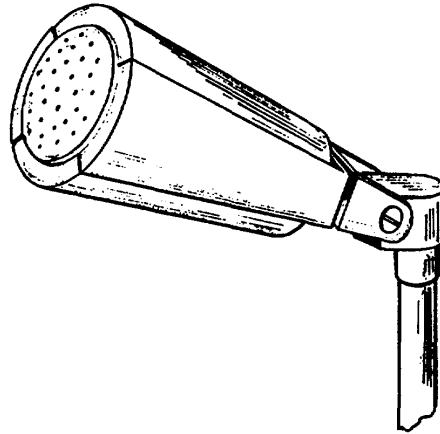
Temperature range -----55° C to +51° C

REFERENCE DATA and LITERATURE

MIL-M-9472
MIL-E-5272

MANUFACTURER CODE	PART NUMBER
80058	M-34/AIC
83642	M034/AIC

ITEM NAME: MICROPHONE
NOMENCLATURE: M-43/U
FEDERAL STOCK NO: 5965-295-8965



FUNCTIONAL DESCRIPTION:

Microphone M-43/U is a low impedance omni-directional stand mounted unit, intended for general purpose and public address system use. The unit has a relatively flat frequency response from 150 to 4500 cps which is devoid of any pronounced dips or peaks. Since extremes in weather and temperature do not significantly degrade the microphone's performance it is suitable for both indoor and outdoor applications.

CONSISTS OF:

1 Microphone M-43/U

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Weight -----11 oz.

Dimensions:

Length-----4 inches, maximum (101.6 mm)

Diameter-----3 inches, maximum (76. 2 mm)

Cable Data:

Length-----None

No. of Conductors -----Not Applicable

Connector Designation-----Cannon Type XL-3-11SC

ITEM NAME: MICROPHONE

NOMENCLATURE: M-43/U (Cont)

FEDERAL STOCK NO: 5965-295-8965

ADDITIONAL PHYSICAL DATA:

Mounting Data:

Type -----Stand mounted
Dimensions -----Threaded 5/8-inch diameter by 27 threads per inch

Adjustable Head:

Permits tilting up to 90° from normal vertical position. Can hold at any desired angle within this range.

TECHNICAL DESCRIPTION:

INPUT

Operating Current -----Not applicable

OUTPUT

Frequency Range -----150 to 4, 000 cps

ADDITIONAL TECHNICAL DATA:

Extreme Environmental Capabilities:

Equipment Operating:

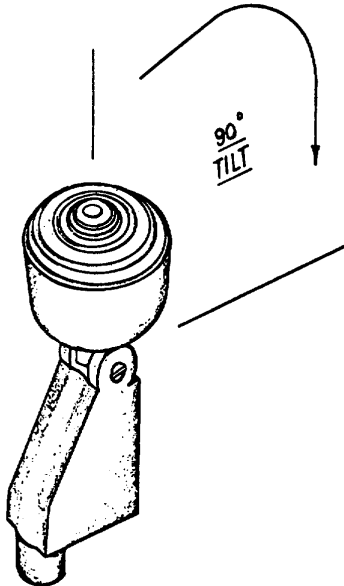
Temperature-----+32° F to +150° F
Relative Humidity-----100 percent

REFERENCE DATA and LITERATURE

MSS 5965-3
MIL-M- 11101B

MANUFACTURER CODE	PART NUMBER
80058	M-43/U

ITEM NAME: MICROPHONE
NOMENCLATURE: M-44A/U
FEDERAL STOCK NO: 5965-505-4877



FUNCTIONAL DESCRIPTION:

Carbon microphone is a high fidelity type microphone. It is intended for use in studio and broadcast stations.

CONSISTS OF:

- 1 Microphone, dynamic, Carbon, M-44A/U

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Weight-----1 lb. (less cable)

Dimensions:

Length-----6-1/4 inches (158.75 mm)

Dia -----2 inches (50. 8 mm)

Cable Data:

Length-----

No. of Conductors -----3 (1 shield and 2. 150 ohms balanced)

No. of Connectors -----1

Connector Designation-----Cannon Plug Type XLR-3-12C

ITEM NAME: MICROPHONE
NOMENCLATURE: M-44A/U (Cont)
FEDERAL STOCK NO: 5965-505-4877

ADDITIONAL PHYSICAL DATA:

Mounting Data:

Type -----May be stand mounted
Method -----5/8-27 thread
Finish -----Satin Chrome

Swivel Data:

Self-adjusting type permits tilting of the head through 90 degrees.

TECHNICAL DESCRIPTION:

INPUT

Operating Current -----Not applicable.

OUTPUT

Impedance -----150 ohms.
Frequency Range -----50 to 15, 000 cps

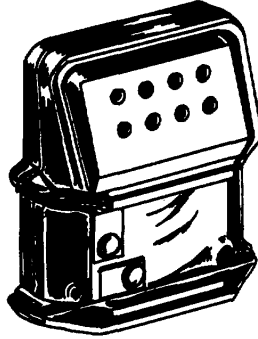
REFERENCE DATA and LITERATURE

MANUFACTURER CODE	PART NUMBER
81134	635

ITEM NAME: MICROPHONE

NOMENCLATURE: M-51/UR

FEDERAL STOCK NO: 5965-295-8966



FUNCTIONAL DESCRIPTION:

Carbon microphone is a low impedance noise-canceling microphone. It is designed to be inserted into a holder in the make up of other microphones such as the M-52B/U or M-29/U. It is blast-and water-proof and is well suited for use under adverse physical conditions.

CONSISTS OF:

1 Microphone, Element, Carbon, M-51/UR

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Weight -----1 ounce

Dimensions:

Length-----1-1/4 inches (31.75 mm)

Width -----31/64 inches (12.30 mm)

Height -----1-25/64 inches (35.32 mm)

ADDITIONAL PHYSICAL DATA:

Case Data:

Material -----Plastic

Finish -----Black

ITEM NAME: MICROPHONE
NOMENCLATURE: M-51/UR (Cont)
FEDERAL STOCK NO: 5965-295-8966

TECHNICAL DESCRIPTION:

INPUT

Operating Current -----50 milliamperes

OUTPUT

Nominal Impedance -----60 ohms at 1, 000 cps

Frequency Range -----300 to 4, 000 cps

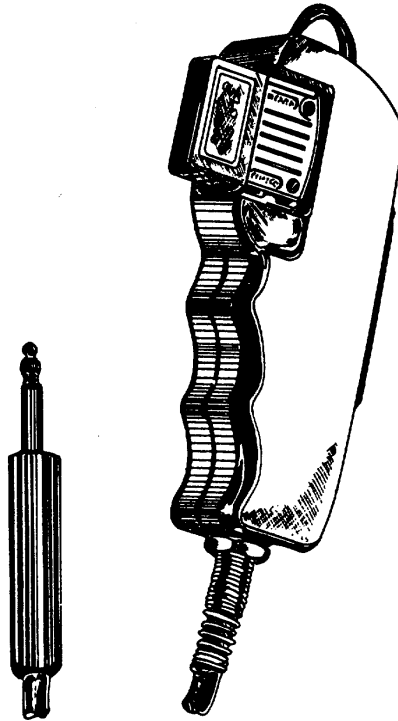
ADDITIONAL TECHNICAL DATA:

REFERENCE DATA and LITERATURE

MIL-M-5794
SC-C-77023

MANUFACTURER CODE	PART NUMBER
81349	M-51/UR

ITEM NAME: MICROPHONE
NOMENCLATURE: M-52B/U
FEDERAL STOCK NO: 5965-646-4678



FUNCTIONAL DESCRIPTION:

Carbon Microphone M-52B/bJ is a low impedance unit with a noise canceling feature and is suitable for use in places where high level background noises are encountered. The unit consists of an M-51/UR microphone element mounted in a holder which contains a push-to-talk switch. The switch may also be used to operate external circuitry. It has a coiled, retractable cord which is extensible to 5 feet.

CONSISTS OF:

- 1 Microphone, Carbon, M-52B/U
- Including:
 - 1 Microphone Cover, CW-292 ()/U
 - 1 Handle
 - 1 3-conductor, Nonretractable Cord with a Telephone Plug
 - 1 Microphone Unit, M-51/UR

ITEM NAME: MICROPHONE

NOMENCLATURE: M-52B/U (Cont)

FEDERAL STOCK NO: 5965-646-4678

RELATIONSHIP TO SIMILAR EQUIPMENT:

Similar to M-29 ()/U, the difference being the M-29 ()/U has a 5 conductor cable equipped with a 10 pin connector.

PHYSICAL DESCRIPTION:

Weight -----14-1/2 ounces including cable

Dimensions:

Length-----5-11/16 inches (144.46)mm)

Width -----1 inch (25.40 mm)

Height -----3 inches (76.20 mm)

Cable Data:

Length-----5 feet (1524. 00 mm)

No. of Conductors -----3

No. of Connectors -----1

Connector Designation-----Telephone Type Plug

ADDITIONAL PHYSICAL DATA:

Case Data:

Material -----Plastic

Finish-----Black

TECHNICAL DESCRIPTION:

INPUT

Operating Current -----50 milliamperes

OUTPUT

Nominal Impedance -----60 ohms at 1,000 cps

Frequency Range -----300 to 4, 000 cps

ADDITIONAL TECHNICAL DATA:

Noise Cancellation -----13 db minimum signal to noise ratio

Switch Data-----Push-to-talk type

Environmental Data:

Operating Temperature -----40 deg. F to + 150 deg. F

Nonoperating -----80 deg. F to + 160 deg. F

Relative Humidity (nonoperating)-----90 to 98 percent

Immersion (nonoperating)-----3 feet of water for 2 hours

Elevation-----Up to 10, 000 feet above sea level

REFERENCE DATA and LITERATURE

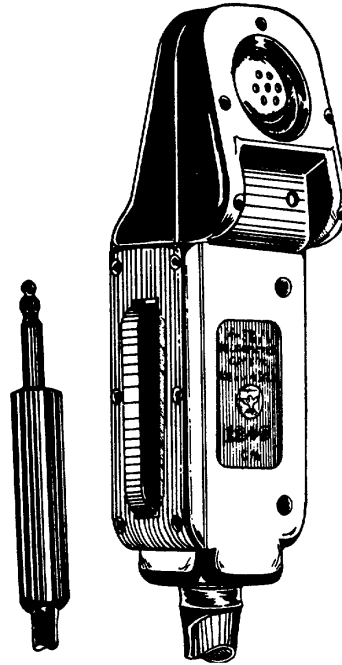
MIL-M-11193
SC-DL-76334

MANUFACTURER CODE	PART NUMBER
81349	M-52B/U
80058	M-52B/U

ITEM NAME: MICROPHONE

NOMENCLATURE: M-58/U

FEDERAL STOCK NO: 5965-665-0999



FUNCTIONAL DESCRIPTION:

Carbon microphone M-58/U is a hand-held noise canceling microphone. It is a rugged unit that is designed to be used over a wide variety of environmental extremes. It features a push to talk switch. The cable is terminated in a standard PJ-068 plug.

CONSISTS OF:

1 Microphone, Carbon, M-58/U

RELATIONSHIP TO SIMILAR EQUIPMENT:

Replaces M-29/U microphone

PHYSICAL DESCRIPTION:

Weight -----10 ounces

8.14.1

ITEM NAME: MICROPHONE

NOMENCLATURE: M-58/U (Cont)

FEDERAL STOCK NO: 5965-665-0999

Dimensions:

Length-----1-15/16 inches (49. 21 mm)
Width -----1-3/4 inches (44. 45 mm)
Height -----5-7/8 inches (149. 23 mm)

Cable Data:

Length-----4 feet (1219. 20 mm)
No. of Conductors -----2
Connector Designation-----PJ-068

ADDITIONAL PHYSICAL DATA:

Case Data:

Material -----Molded, High Temperature, High Impact Plastic
Finish -----Black

TECHNICAL DESCRIPTION:

INPUT

Operating Current -----60 milliamps

OUTPUT

Nominal Impedance -----100 ohms
Frequency Range -----9300 to 4, 000 cps

ADDITIONAL TECHNICAL DATA:

REFERENCE DATA and LITERATURE

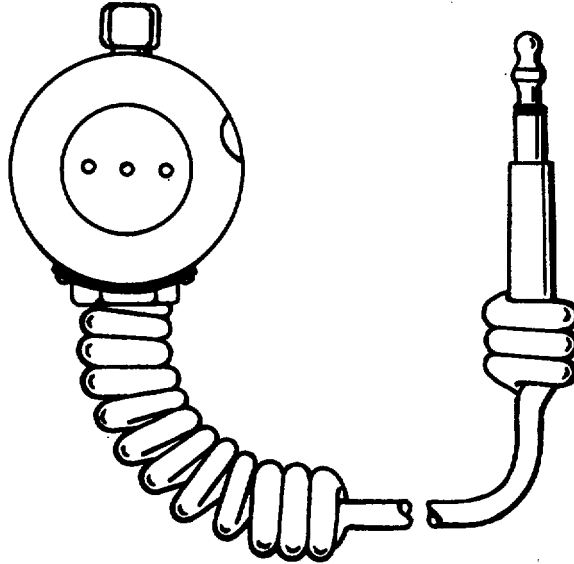
MIL-M-21365

MANUFACTURER CODE	PART NUMBER
80058	M-58/U

ITEM NAME: MICROPHONE

NOMENCLATURE: M-85/U

FEDERAL STOCK NO: 5965-538-4473



FUNCTIONAL DESCRIPTION:

The M-85/U is a hand-held push-to-talk carbon microphone suited to general-purpose use.

CONSISTS OF:

- 1 Microphone, Carbon M-85/U
- Including:
 - 1 Retractable Cord
 - 1 Connecting Jack, PJ-068

RELATIONSHIP TO SIMILAR EQUIPMENT:

Similar- to NT-51004C except that it uses a retractile cord.

PHYSICAL DESCRIPTION:

Weight -----10. 5 ounces, max. (including baffle cap, holder,
and retractile cord)

Dimensions:

Length-----2-7/16 inches (61. 91 mm)
Width -----2-1/8 inches (53.98 mm)
Depth-----1-5/16 inches (33.34 mm)

ITEM NAME: MICROPHONE
NOMENCLATURE: M-85/U (Cont)
FEDERAL STOCK NO: 5965-538-4473

Cable Data:

Length-----13 inches (327. 2 mm) coiled
No. of Conductors -----3
Connector Designation-----PJ-068

ADDITIONAL PHYSICAL DATA:

Case Data:

Material -----Plastic
Finish-----Polished or satinized dull finish

TECHNICAL DESCRIPTION:

INPUT

Operating Current -----60 milliamperes

OUTPUT

Nominal Impedance -----100 ohms, dc
Frequency Range -----300 to 4, 000 cps

ADDITIONAL TECHNICAL DATA:

REFERENCE DATA and LITERATURE

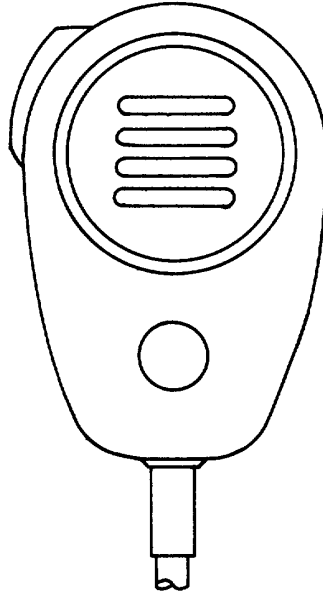
MIL-M-2714
MSS 5965-3

MANUFACTURER CODE	PART NUMBER
08288	M-85/U
81349	M-85/U

ITEM NAME: MICROPHONE

NOMENCLATURE: M-105/U

FEDERAL STOCK NO: 5965-170-5232



FUNCTIONAL DESCRIPTION:

The M-105/U is a high-impedance, non-directional, hand-held dynamic microphone intended for general use,

CONSISTS OF:

- 1 Microphone, M-105/U
- 1 Cable, Coiled Cord, 1/4-Mandrel

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Weight -----10.5 oz. (less cable)

Dimensions:

Length-----3-7/8 inches (98.43 mm)
Width -----2-9/16 inches (65. 09 mm)
Depth-----1-9/16 inches (39.69)

ITEM NAME: MICROPHONE
NOMENCLATURE: M-105/U (Cont)
FEDERAL STOCK NO: 5965-170-5232

Cable Data:

Length-----6 feet 6 inches (1381. 2 mm)
No. of Conductors -----2 unshielded, 1 shielded, all under a rubber
jacket.
Connector Designation-----Amphenol MC-3M

ADDITIONAL PHYSICAL DATA:

Case Data:

Material -----High impact cyclac
Finish-----Blue-gray

TECHNICAL DESCRIPTION:

INPUT

Operating Current-----Not applicable

OUTPUT

Impedance -----25, 000 ohms
Output Level-----55 db (0 db equals 1mv/10 dynea/cm².)
Frequency Range -----100 to 7,000 cps

ADDITIONAL TECHNICAL DATA:

Polar Pattern -----Non-directional
Switch-----Short-circuits microphone in "OFF" position,
closes control circuit in "ON" position
EIA Sensitivity Rating -----151 db, high impedance

REFERENCE DATA and LITERATURE

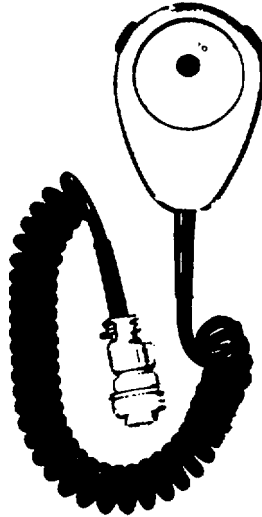
Electro-Voice, Inc., Part No. 600, Spec 3951

MANUFACTURER CODE	PART NUMBER
81134	M-105/U

ITEM NAME: MICROPHONE

NOMENCLATURE: M-109/U

FEDERAL STOCK NO: 5965-789-1654



FUNCTIONAL DESCRIPTION:

The M- 109/U is an extremely low distortion hand-held dynamic noise-canceling microphone that transmits voice communication of reliable intelligibility in high ambient noise level areas. It is used mainly with single side band communication equipment.

CONSISTS OF:

- 1 Microphone M- 109/U
- Including:
 - 1 Transistor preamplifier
 - 1 Cable
 - 1 Connector MS-3106A-145-5P
 - 1 Clamp MS-3057-6

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Weight -----Not available

Dimensions:

Length-----2-9/16 inches (65 09 mm)
Width -----2-1/2 inches (63.5 mm)
Height -----3-3/4 inches (95. 25 mm)
Switch type-----Dual push-to-talk

ITEM NAME: MICROPHONE
NOMENCLATURE: M-109/U (Cont)
FEDERAL STOCK NO: 5965-789-1654

Cable Data:

Length-----5 feet (extended)
No. of Conductors -----Not available
Connector Designation-----MS-3106A-14S-5P

TECHNICAL DESCRIPTION:

INPUT

Operating Current -----Not applicable

OUTPUT

Nominal Impedance -----30 ohms
Frequency Range -----300 to 5, 000 cps

ADDITIONAL TECHNICAL DATA:

Polar-pattern -----Unidirectional
Polarization Voltage Rating-----12 volts

REFERENCE DATA and LITERATURE

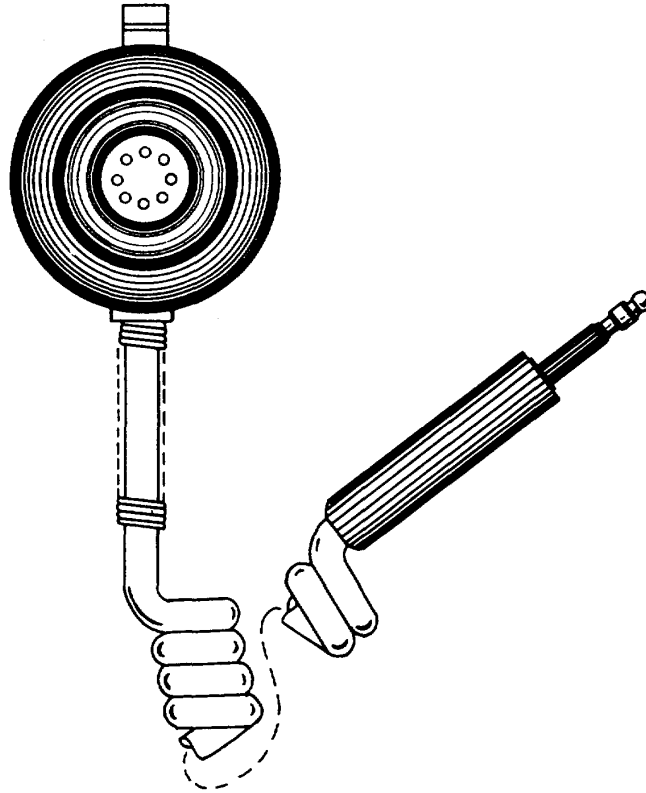
Roanwell Company Drawing Number 3208, Rev. 2
RE51D130 and RE51F128

MANUFACTURER CODE	PART NUMBER
80058	M-109/U
82872	M-109/U

ITEM NAME: MICROPHONE

NOMENCLATURE: COMMERCIAL RS-38-D2

FEDERAL STOCK NO: 5965-665-2769



FUNCTIONAL DESCRIPTION:

The RS-38-D2 is a hand-held, noise-canceling, carbon microphone designed for use in situations in which the ambient noise level is high. The microphone employs a differential diaphragm action. The microphone is suitable for voice communications in any environment where background noise presents a problem.

CONSISTS OF:

- 1 Microphone, Carbon, RS-38-D2

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Weight -----7 ounces

ITEM NAME: MICROPHONE

NOMENCLATURE: COMMERCIAL RS-38-D2 (Cont)

FEDERAL STOCK NO: 5965-665-2769

Dimensions:

Diameter-----2-1/8 inches (53.98 mm)
Thickness -----1-9/16 inches (39. 69 mm)

Cable Data:

Length-----52 inches (1320. 80 mm)
No. of Conductors -----2
No. of Connectors -----1
Connector Designation-----PJ-068

ADDITIONAL PHYSICAL DATA:

Material of Case-----Phenolic

TECHNICAL DESCRIPTION:

INPUT

Operating Current -----50 milliamperes

OUTPUT

Nominal Impedance -----100 ohms at 1, 000 cps
Frequency Range -----300 to 4, 000 cps

ADDITIONAL TECHNICAL DATA:

REFERENCE DATA and LITERATURE

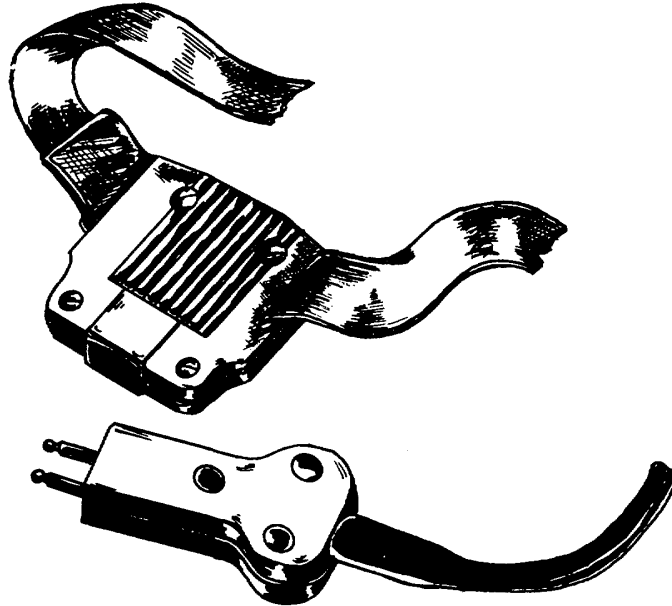
Telephonics Data Sheet For Hand-held Microphones
MIL-M-18314

MANUFACTURER CODE	PART NUMBER
78711	RS-38-D2

ITEM NAME: MICROPHONE

NOMENCLATURE: T-45

FEDERAL STOCK NO: 5965-164-7314



FUNCTIONAL DESCRIPTION:

The T-45 carbon microphone is a low impedance, face mounted, noise canceling microphone. A 13 db signal-to-noise ratio makes this microphone suitable for use under quiet or high ambient noise conditions. This unit is designed for use with ground equipment.

CONSISTS OF:

- 1 Microphone, Carbon T-45
- Including:
 - 1 Face Strap, ST-53
 - 1 Plug, PL-291
 - 1 Microphone Cover, CW-290 ()/U
 - 1 Microphone Unit, M-51/UR
 - 1 Cord

RELATIONSHIP TO SIMILAR EQUIPMENT:

Used with Intercommunication Set PA-8- 11.

ITEM NAME: MICROPHONE

NOMENCLATURE: T-45 (Cont)

FEDERAL STOCK NO: 5965-164-7314

PHYSICAL DESCRIPTION:

Weight-----1-1/2 ounces (including cable)

Dimensions:

Length-----1-1/4 inches (31.75 mm)

Width-----31/64 inches (12.30 mm)

Height-----1-19/64 inches (32.94 mm)

Cable Data:

Length-----13 inches (330. 20 mm)

No. of Conductors-----2

Connector Designation-----PL-291

ADDITIONAL PHYSICAL DATA:

Case Data:

Material-----Plastic

Finish-----Black

TECHNICAL DESCRIPTION:

INPUT

Operating Current-----30 milliamperes

OUTPUT

Nominal Impedance-----60 ohms at 1, 000 cps

Frequency Range-----300 to 4, 000 cps

ADDITIONAL TECHNICAL DATA:

Nonoperating Conditions:

Temperature-----80 deg. F to + 160 deg. F

Relative Humidity-----95 percent

Elevation-----Up to 30, 000 feet above sea level

Operating Conditions:

Temperature----- -40 deg. F to + 132 deg. F

Relative Humidity-----95 percent

Elevation-----10, 000 feet

REFERENCE DATA and LITERATURE

MIL-M-11703

MIL-M-5794

MANUFACTURER CODE	PART NUMBER
81349	T-45
80063	T-45
21964	UA-12037

ITEM NAME: MICROPHONE
NOMENCLATURE: COMMERCIAL 55S
FEDERAL STOCK NO: 5965-284-9318



FUNCTIONAL DESCRIPTION:

The microphone 55S is a compact, unidirectional, multi impedance, dynamic type microphone. It may be connected directly to a 30-50 ohm line, 150-250 ohm line, or other high impedance in the range of 40, 000 ohms. Selection of various values of impedance is made possible by the use of a three position switch. The polar pattern is cardioid.

The unit is suitable for use with low gain tape recorders and PA systems, high quality PA systems, and recording systems.

CONSISTS OF:

- 1 Microphone, Dynamic 55S
- 1 Cable

RELATIONSHIP TO SIMILAR EQUIPMENT:

Similar to Shure Type 55SW. The difference is the 55SW has an ON-OFF Switch.

PHYSICAL DESCRIPTION:

Weight -----1-5/8 lb. (less cable)

Dimensions:

Length-----3-1/16 inches (77.79 mm)
Width -----2-3/16 inches (55.56 mm)
Height -----7-3/8 inches (187.33 mm)

ITEM NAME: MICROPHONE
NOMENCLATURE: COMMERCIAL 55S (Cont)
FEDERAL STOCK NO: 5965-284-9318

Cable Data:

Length-----18 feet (5486. 40 mm)
No. of Conductors -----2 shielded
Connector Designation-----Amphenol Type MC3M

ADDITIONAL PHYSICAL DATA:

Mounting Data:

Type -----May be stand-mounted
Method-----5/8-27 thread
Finish-----Satin Chrome

Swivel Data:

Self-adjusting type permits tilting of the head through 80 degrees.

TECHNICAL DESCRIPTION:

Input

Operating Current -----Not applicable

Output

Nominal Impedance -----38, 150, and 40, 000 ohms
Frequency Range -----50 to 15, 000 cps

ADDITIONAL TECHNICAL DATA:

1, 000 CPS Response:

"L" Position of Impedance Switch:

Loaded with 50 Ohms -----88 db (0 db = 1 volt per microbar)

"M" Position of Impedance Switch:

Loaded with 250 Ohms -----82 db (0 db = 1 volt per microbar)

"H" Position of Impedance Switch:

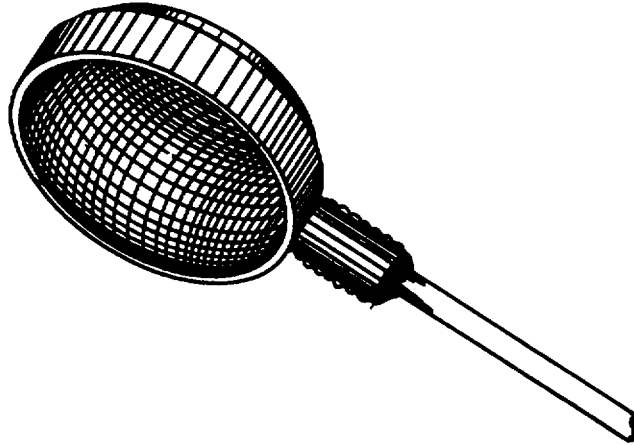
Loaded with 100, 000 Ohms-----59 db (0 db = 1 volt per microbar)

REFERENCE DATA and LITERATURE

Shure Brothers Data Sheet 27A174
Shure Brothers General Catalog 61

MANUFACTURER CODE	PART NUMBER
54715	55S

ITEM NAME: MICROPHONE
NOMENCLATURE: COMMERCIAL 76B
FEDERAL STOCK NO: 5965-285-0647



FUNCTIONAL DESCRIPTION:

This unit is a pressure-actuated diaphragm-type crystal microphone designed for high quality reproduction of speech. The unit is a lapel microphone suitable for public address, broadcast from portable transmitters, and all general uses where clear, intelligible reproduction of speech is of primary importance and where the user must be able to move freely at all times. Microphone has a clip on the back.

CONSISTS OF:

- 1 Microphone, Crystal 76B
- Including:
- 1 Cable

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Weight -----6-3/4 ounces (cable included)
1-1/2 ounces (microphone only)

Dimensions:

Diameter -----1-29/32 inches (48. 42 mm)
Thickness -----3/4 inches (19. 05 mm) (1-3/16 inches
including clip)

8.21.1

ITEM NAME: MICROPHONE
NOMENCLATURE: COMMERCIAL 76B (Cont)
FEDERAL STOCK NO: 5965-285-0647

Cable Data

Length-----20 feet (6096 mm)
No. of Conductors -----1 shielded

ADDITIONAL PHYSICAL DATA:

Mounting Data -----Alligator Clip
Finish-----Iridescent Gray

TECHNICAL DESCRIPTION:

INPUT

Operating Current -----Not applicable.

OUTPUT

Nominal Impedance -----Equivalent to a 1, 500 pf capacitor
Frequency Range -----30 to 6, 000 cps

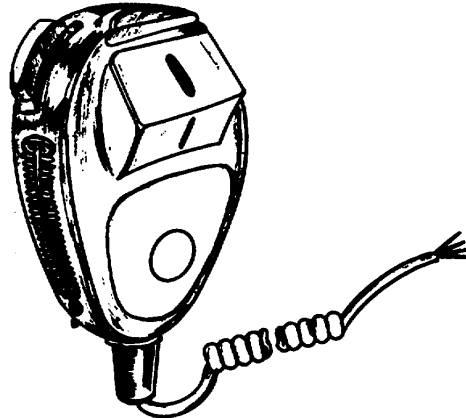
ADDITIONAL TECHNICAL DATA:

REFERENCE DATA and LITERATURE

Shure Brothers Data Sheet 27-09 (6-57)

MANUFACTURER CODE	PART NUMBER
54715	76B

ITEM NAME: MICROPHONE
NOMENCLATURE: COMMERCIAL 205STCKK
FEDERAL STOCK NO: 5965-636-1925



FUNCTIONAL DESCRIPTION:

This unit is a carbon, handheld microphone used for close talking, noise canceling, general purpose applications. It is designed to be used under ambient noise conditions of up to 115 DB. It is blastproof, waterproof, shock resistant, and is suited generally for use under adverse physical conditions. A push-to-talk switch is included.

CONSISTS OF:

- 1 Microphone, Electro Voice, Part No. 205STCKK

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Weight-----12 Ounces

Dimensions:

Length-----3-15/16 Inches (100.01 mm)
Width -----2-3/8 Inches (60. 33 mm)
Height -----2 Inches (50.80 mm)

Cable Data:

Length-----Extensible to 6 feet (1828. 80 mm)
No. of Conductors -----4
No. of Connectors -----None

ITEM NAME: MICROPHONE

NOMENCLATURE: COMMERCIAL 205STCKK (Cont)

FEDERAL STOCK NO: 5965-636-1925

ADDITIONAL PHYSICAL DATA:

Case Data:

Material -----High-impact Phenolic
Finish -----Black

Cable Data:

Type -----Coiled Cord
Jacket Material -----Rubber (Black)
Length Extended -----6 feet (1828.80 mm)
Length Retracted -----12 inches (304.80 mm)

TECHNICAL DESCRIPTION:

INPUT

Operating Current -----10 to 50 Ma

OUTPUT

Frequency Range -----100 to 4, 000 cps

ADDITIONAL TECHNICAL DATA:

Switch Data:

Push-to-talk switch with leaf contacts completing the microphone circuit and a relay control circuit in the "ON" position.

Temperature Range -----40° F to + 185°F

REFERENCE DATA and LITERATURE

MSS 5965-3

Electro-Voice Engineering Drawing, Part No. 205-576.

Electro-Voice Engineering Data Sheet, Model 205STCKK, Part No. 53076

MANUFACTURER CODE	PART NUMBER
81134	205STCKK

ITEM NAME: MICROPHONE
NOMENCLATURE: COMMERCIAL 602D
FEDERAL STOCK NO: 5965-539-7328



FUNCTIONAL DESCRIPTION:

This unit is a general purpose, low impedance, noise-canceling, hand-held microphone designed for high articulation speech transmission under high ambient noise conditions. It is suitable for either indoor or outdoor use. It may be used for mobile systems, marine services, or public address systems when hand-held microphones are required.

CONSISTS OF:

1 Microphone, Electro Voice Inc. Model 602D

RELATIONSHIP TO SIMILAR EQUIPMENT:

PHYSICAL DESCRIPTION:

Weight -----12-1/4 Ounces

Dimensions:

Length-----3-15/16 Inches (100.01 mm)
Width -----2-3/8 Inches (60.33 mm)
Height -----2 Inches (50.80 mm)

Cable Data:

Length-----Extensible to 6 feet (1828. 80 mm)
No. of Conductors -----4 (2 Shielded)
No. of Connectors -----Not Applicable
Connector Designation-----Not Applicable

ADDITIONAL PHYSICAL DATA:

Cable Data:

Material -----High-impact Phenolic
Finish -----Black

Cable Data:

Type -----Coiled Cord, 1/4-nch Mandrel
Jacket Material-----Rubber (black)
Extended Length -----6 feet (1828. 80 mm)

ITEM NAME: MICROPHONE

NOMENCLATURE: COMMERCIAL 602D (Cont)

FEDERAL STOCK NO: 5965-539-7328

TECHNICAL DESCRIPTION:

INPUT

Operating Current -----Not applicable

OUTPUT

Frequency Range -----100 to 7, 000 cps

ADDITIONAL TECHNICAL DATA:

Switch Data:

Push-to-talk switch with leaf contacts shorting microphone in "OFF" position, completing microphone circuit and a relay control circuit in the "ON" position.

REFERENCE DATA and LITERATURE

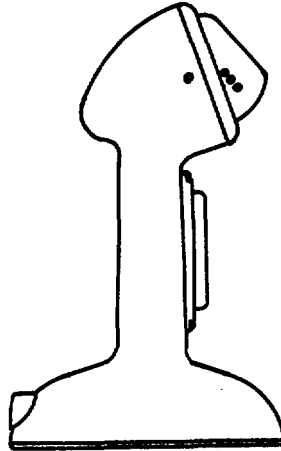
MSS 5965-3
Electro-Voice Engineering Data Sheet, Part No. 53077
Electro-Voice Specification Drawing, Part No. 602

MANUFACTURER CODE	PART NUMBER
81134	Model 602D

ITEM NAME: MICROPHONE

NOMENCLATURE: COMMERCIAL 9608

FEDERAL STOCK NO: 5965-268-2601



FUNCTIONAL DESCRIPTION:

This unit is a desk stand noise-canceling carbon microphone which permits speech to be transmitted clearly while minimizing unwanted noise.

CONSISTS OF:

- 1 Microphone, Carbon Roanwell Corporation 9808

RELATIONSHIP TO SIMILAR EQUIPMENT:

Part of JCENS Control Tower Console CY-442/CRS.

PHYSICAL DESCRIPTION:

Dimensions:

Diameter-----5-1/3 inches (at base) (135. 47 mm)
Height -----8-1/32 inches (203. 99 mm)

ADDITIONAL PHYSICAL DATA:

Material-----Die Cast Zinc Alloy
Finish-----Black Enamel
Connector Data-----Screw type on terminal board

ITEM NAME: MICROPHONE
NOMENCLATURE: COMMERCIAL 9808 (Cont)
FEDERAL STOCK NO: 5965-268-2601

TECHNICAL DESCRIPTION:

INPUT

Operating Current -----50 milliamperes

OUTPUT

Nominal Impedance -----860 ohms

Frequency Range -----300 to 4, 000 cps

ADDITIONAL TECHNICAL DATA:

Signal to Noise Ratio-----14 db minimum

Switch Data-----Push-to-talk type

REFERENCE DATA and LITERATURE

Roanwell Data Sheets DS-5 and DS-21

MANUFACTURER CODE	PART NUMBER
82872	9808

Custodians:

Army - EL
Navy - SH
Air Force - 85

Preparing activity:

Army - EL
(Project 5965-0067)

Review activities:

Army - EL, MI, MO, MU
Navy - SH
Air Force - 85

User activities:

Army - None
Navy - None
Air Force - None

9.1.1

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