TM 1-1680-TNG-13&P

TECHNICAL MANUAL

OPERATOR AND FIELD MAINTENANCE MANUAL
INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST
FOR

HELMET SYSTEM, AIRCREW INTEGRATED HGU-56/P NSN 8415-01-394-6474 (EIC: NA)

HEADQUARTERS, DEPARTMENT OF THE ARMY
26 JULY 2007

WARNING SUMMARY

WARNING SUMMARY

For information concerning First Aid, refer to FM 4-25.11 (First Aid). This warning summary contains general safety warnings that must be understood and applied during operation and maintenance of the RQ-11B Small Unmanned Aircraft System (SUAS) . Failure to observe these warnings could result in serious injury or death to personnel.

WARNING

When donning helmet, ensure that nape strap pad is completely pulled down and that the keeper tab is taut. Failure to do so will decrease helmet stability and may cause injury to the wearer.

SAFETY, CARE AND HANDLING

NOTE

When traveling aboard commercial aircraft, always carry the AIHS with you; do not place it aboard as baggage. The AIHS will fit in most airline overhead storage compartments.

Aside from the Warnings, Cautions, and Notes listed in this manual, no specific safety, care, or handling procedures apply to the AIHS.

Within the scope of this manual there are no components, accessories, or instruments that require calibration. Special tools and test equipment shall be calibrated as specified in TB 43-180, Calibration Requirements for the Maintenance of Materiel.

LIST OF EFFECTIVE PAGES/WORK PACKAGES

INSERT LATEST UPDATED PAGES/WORK PACKAGES. DESTROY SUPERSEDED DATA.

Dates of issue for original and changed pages/work packages are:

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THE TOTAL NUMBER OF PAGES FOR FRONT AND REAR MATTER IS 7 AND THE TOTAL NUMBER OF WORK PACKAGES IN THIS MANUAL IS 22 CONSISTING OF THE FOLLOWING:

Page / WP No.	*Change No.	Page / WP No.	*Change No.	Page / WP No.	*Change No.	Page / WP No.	*Change No.
WP 0001 00	0	WP 0007 00	0	WP 0012 00	0	WP 0017 00	0
WP 0002 00	0	WP 0008 00	0	WP 0013 00	0	WP 0018 00	0
WP 0003 00	0	WP 0009 00	0	WP 0014 00	0	WP 0022 00	0
WP 0004 00	0	WP 0010 00	0	WP 0015 00	0		
WP 0005 00	0	WP 0011 00	0	WP 0016 00	0		

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TM 1-1680-TNG-13&P

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, D.C., 26 July 2007

TECHNICAL MANUAL

OPERATOR AND FIELD MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST

FOR

HELMET SYSTEM, AIRCREW INTEGRATED HGU-56/PNSN 8415-01-394-6474 (EIC: NA)

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can improve this manual. If you find mistakes or if you know of a way to improve procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) located at the back of this manual, directly to: Commander, U.S. Army Aviation and Missile Command, ATTN: AMSAM-MMC-MA-NP, Redstone Arsenal, AL 35898-5000. A reply will be furnished to you. You may also provide DA Form 2028 information to AMCOM via e-mail, fax or the World Wide Web. Our fax number is: DSN 788-6546 or Commercial (256) 842-6546. Our e-mail address is 2028@redstone.army.mil. Instructions for sending an electronic 2028 may be found at the back of this bulletin immediately preceding the hard copy 2028. For the World Wide Web use: https://amcom2028.redstone.army.mil.

CURRENT AS OF 26 July 2007

TABLE OF CONTENTS

WP Sequence No.

WARNING SUMMARY

HOW TO USE THIS MANUAL

CHAPTER 1 – GENERAL INFORMATION, EQUIPMENT DESCRIPTION AND THEORY OF OPERATION
- General Information 0001 00
- Equipment Description And Data 0002 00
- Theory Of Operation 0003 00

CHAPTER 2 – OPERATOR INSTRUCTIONS
- Controls and Indicators 0004 00
- OPERATION UNDER USUAL CONDITIONS 0005 00
- 0006 00

CHAPTER 3 – FIELD LEVEL TROUBLESHOOTING PROCEDURES
- Introduction To Troubleshooting 0007 00
- Troubleshooting Index 0008 00
- UNIT TROUBLESHOOTING 0009 00

CHAPTER 4 – FIELD LEVEL MAINTENANCE INSTRUCTIONS
- Service Upon Receipt 0010 00
- Introduction Preventive Maintenance Checks and Services (PMCS) 0011 00
- Preventive Maintenance Checks and Services (PMCS) 0012 00
- Maintenance 0013 00
- MICROPHONE BOOM Removal/Installation 0014 00

CHAPTER 5 - SUPPORTING INFORMATION
- References 0015 00
- Introduction To Maintenance Allocation Chart (MAC) 0016 00
- Maintenance Allocation Chart (MAC) 0017 00
- Introduction To Repair Parts And Special Tools List (RPSTL) 0018 00
- Repair Parts List 0019 00
- Group 0101 Helmet System, Aircrew Integrated 0019 00
- Group 0102 Helmet Assembly NHA Fig 1 ..... 0019 00
- Group 0103 Lining, Helmet, Shock, (TPL) Liner, Helmet,Cloth NHA Fig 2 ..... 0019 00
- Group 0104 Shell, Earphone,Assembly NHA Fig 2 ..... 0019 00
- Group 0105 Cord Assembly, Electrical NHA Fig 2 ..... 0019 00
- Group 0106 Stuffing Tube (SAB) NHA Fig 2 ..... 0019 00
- Group 0107 Microphone Shield NHA Fig 2 ..... 0019 00
- National Stock Number Index 0020 00
- Part Number Index 0021 00
- Components Of End Item (COEI) And Basic Issue Items (BII) Lists 0022 00

HOW TO USE THIS MANUAL

This manual describes the operating principles and technical details of the Helmet System, Aircrew Integrated (HGU-56/P) .

This manual attempts to cover all functional aspects of the Helmet System, Aircrew Integrated (HGU-56/P).

The operator and maintenance tasks covered are listed in the Table of Contents.

All task descriptions will lead the user step-by-step through the procedure. Before beginning a task, the user should read through the procedure completely to determine the procedure's goal, then go back and follow the steps as written.

Pay particular attention to all Warnings, Cautions, and Notes, as they contain information that will prevent injury to personnel, damage to the equipment or items of emphasis.

Status of Work Package revisions is found in the List of Effective Pages preceding the Table of Contents.

WARNINGS, CAUTIONS AND NOTES

The signal words WARNING, CAUTION, and NOTE are used to identify levels of hazard seriousness. These signal words are used throughout this document to emphasize critical information. Read and follow these statements to ensure personnel safety and prevent product damage. The signal words are defined below.

WARNING

A procedure, practice, or condition, etc. that may result in injury or death if not carefully observed or followed.

CAUTION

A procedure, practice, or condition, etc. that may damage equipment if not carefully observed or followed.

NOTE

A procedure, practice, or condition, etc. that is essential to emphasize.

CHAPTER 1

GENERAL INFORMATION,

EQUIPMENT DESCRIPTION AND THEORY OF OPERATION

FOR

HELEMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

(NSN: 8415-01-394-6474)

HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)
NSN 8415-01-394-6474 EIC: N/A
GENERAL INFORMATION

SCOPE

Type of Manual Operator and aviation unit maintenance manual.

Equipment Name and Model Number There is no Integrated Helmet Unit (IHU) model number.

Purpose of Equipment To provide a custom fitted helmet affording acoustic, eye, and head protection for aircrew personnel.

This operator's manual provides technical information and guidance for assembly, operation, and maintenance.

MAINTENANCE FORMS, RECORDS, AND REPORTS

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by (as applicable) DA Pam 750-8, The Army Maintenance Management System (TAMMS) Users Manual; DA PAM 738-751, Functional Users Manual for the Army Maintenance Management System - Aviation (TAMMS-A); or AR 700-138, Army Logistics Readiness and Sustainability.

IHADSS inspection record keeping will be accomplished by Aviation LifeSupport Equipment (ALSE) personnel.

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your Helmet needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design or performance. Put it on an SF 368 (Product Quality Deficiency Report). Mail it to US Army Aviation and Missile Command, ATTN: AMSAM-MMC-RF-FD, Sparkman Center, Redstone Arsenal, AL 35898-5230. We will send you a reply.

CORROSION PREVENTION AND CONTROL (CPC)

Corrosion Prevention and Control (CPC) of Army materiel is a continuing concern. It is important that any corrosion problems with this item be reported so that the problem can be corrected and improvements can be made to prevent the problem in future items.

While corrosion is typically associated with rusting of metals, it can also include deterioration of other materials, such as rubber and plastic. Unusual cracking, softening, swelling, or breaking of these materials maybe a corrosion problem.

If a corrosion problem is identified, it can be reported using SF 368. Use of key words such as "corrosion", "rust", "deterioration", or "cracking" will ensure that the information is identified as a CPC problem.

The form should be submitted to:

Director
Armament and Chemical Acquisition and Logistics Activity
ATTN: AMSTA-AC-MAS/ Customer Feedback Center
Rock Island, Illinois 61299-7630

OZONE DEPLETING SUBSTANCES (ODS)

The continued use of ODS has been prohibited by Executive Order 12856 of 3 August 1993. The use of ODS in Army IETMs is prohibited. A listing of these substances will be provided by the acquiring activity.

DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE

Refer to TM 750-244-1-5 for methods of destruction.

PREPARATION FOR STORAGE OR SHIPMENT

Instructions for storage or shipment are contained in the (PMCS) and TM 1-1500-204-23 (Series), General Aircraft Maintenance Manual.

WARRANTY INFORMATION

Not Applicable.

NOMENCLATURE CROSS-REFERENCE

The following is an alphabetical listing of common names used in this manual cross-referenced by official nomenclature.

Table 1. Nomenclature Cross Reference Table.

Common Name	Official Nomenclature
Communication Cable	Tempest Cord Assembly
Earphone	Receiver
Harness Assembly	Wire Harness
IHADSS	Integrated Helmet and Display Sight System
IHU	Helmet Unit, Integrated
Microphone and Boom Assembly	Boom Microphone

LIST OF ABBREVIATIONS/ACRONYMS

AAI	Additionally Authorized Items
AIHS	Aircrew Integrated Helmet System
ALSE	Aviation Life Support Equipment
ANVIS	Aviator's Night Vision Imaging System
BII	Basic Issue Items
CB	Chemical-Biological
COEI	Components of End Item
DAP	Digital-to-Analog Processor
DVA	Dual Visor Assembly
EAL	Energy-Absorbing Liner
EOHSS	Electro-Optic Helmet Sight System
FD/LS	Fault Detection and Location System
FLIR	Forward Looking Infrared Radar
HDU	Helmet Display Unit
IEA	Integrated Electronics Assembly
IHADSS	Integrated Helmet and Display Sighting System
IHU	Integrated Helmet Unit
MAC	Maintenance Allocation Chart
MTOE	Modified Table of Organization and Equipment
PMCS	Preventive Maintenance Checks and Services
RPSTL	Repair Parts and Special Tools List
SAU	Sensor Assembly Unit
S-HDU	Simulated Helmet Display Unit
SVA	Single Visor Assembly
TMDE	Test, Measurement, and Diagnostic Equipment
TPL	Thermoplastic Liner
SAB	Swivel Assembly, Boom
USAARL	United States Army Aviation Research Laboratory

QUALITY ASSURANCE (QA)

Quality assurance information you are required to use is explained in FM 3-04.500, Army Aviation Maintenance.

QUALITY OF MATERIAL

Material used for replacement, repair, or modification must meet the requirements of this manual. If quality of material requirements are not stated in this manual, the material must meet the requirements of the drawings, standards, specifications, or approved engineering change proposals applicable to the subject equipment.

SAFETY, CARE, AND HANDLING

Aside from the Warnings, Cautions, and Notes listed in this manual, no specific safety, care, or handling procedures apply to the AIHS.

When traveling aboard commercial aircraft, always carry the AIHS with you; do not place it aboard as baggage. The AIHS will fit in most airline overhead storage compartments.

CALIBRATION

Within the scope of this manual there are no components, accessories, or instruments that require calibration. Special tools and test equipment shall be calibrated as specified in TB 43-180, Calibration Requirements for the Maintenance of Materiel.

HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

NSN 8415-01-394-6474 EIC: N/A

EQUIPMENT DESCRIPTION AND DATA

EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES

SYSTEM SPECIFICATIONS

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

EQUIPMENT DATA

HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

NSN 8415-01-394-6474 EIC: N/A

THEORY OF OPERATION

CHAPTER 2

OPERATOR INSTRUCTIONS

FOR

HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

(NSN: 8415-01-394-6474)

OPERATOR INSTRUCTIONS

HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

NSN 8415-01-394-6474 EIC: N/A

CONTROLS AND INDICATORS

N/A

N/A

N/A

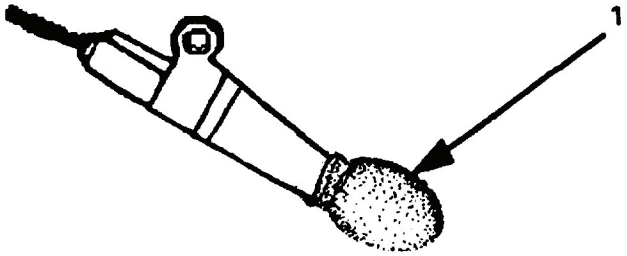

Figure 1. .

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS
HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)
NSN 8415-01-394-6474 EIC: N/A
OPERATION UNDER USUAL CONDITIONS

INITIAL SETUP:

DONNING/REMOVING

Operation of the AIHS consists of donning/removing the helmet and operating the components.

DONNING HELMET

WARNING

When donning helmet, ensure that nape strap pad is completely pulled down and that the keeper tab is taut. Failure to do so will decrease helmet stability and may cause injury to the wearer.

CAUTION

When donning or removing helmet, spread helmet just enough to clear head. Excessive spreading may damage helmet.

1. Hook thumbs over earcups and spread helmet slightly.
2. Position front edge of helmet firmly against forehead; rotate helmet rearward and down onto head.
3. Press helmet down firmly with both hands to ensure that helmet is properly positioned on head.
4. Fasten and adjust Chin Strap Figure 1 .
5. Adjust Nape Strap Figure 2 .

REMOVING HELMET

1. Loosen Chin Strap Figure 1 .
2. Hook thumbs over earcups and spread helmet slightly.
3. Rotate helmet off head.

DONNING/REMOVING CEP (CEP-EQUIPPED HELMETS ONLY)

1. If not already done, select the correct foam tip size (**standard, slim** or **short**) as follows:
    a. If you wear the **orange** or **blue** triple-flange earplug, select the **standard** foam tip.
    b. If you wear the **green** earplug, select the **slim** foam tip.
    c. A small percentage of users may require the **short** foam tip.
    d. If the correct size cannot be determined, ask your flight medical staff for help.
2. Attach the proper foam tip to each earplug by threading the plastic end of the foam tip onto the ear plug. Do not tighten too much; tighten only enough to seat the foam tip onto the CEP housing. About one revolution of the plastic end is usually enough.
3. Drape the CEP over your shoulders and on either side of your neck from the back so that the earplug attached to the shorter cord is on your right and the longer cord is on your left. (One way to remember this is "Long

DONNING/REMOVING CEP (CEP-EQUIPPED HELMETS ONLY) - CONTINUED

is Left.") This will ensure that the connector end is positioned toward the right in the back so it will reach the helmet connector.

WARNING

- Do not force the earplug into the ear. This may cause the foam tip to be pushed back, exposing the plastic tube inside. This will diminish hearing protection and may cause injury to the ear canal.
- Ensure that the proper foam tip is attached to each earplug before inserting the earplug into the ear.

4. Referring to the Figure, compress the foam tip (1) of one earplug to about 1/3 of its original diameter by rolling it between your thumb and index finger. This will ease insertion into the ear. Do not squeeze the foam tip flat. When compressing the foam tip, do not allow a crease to form. This will diminish hearing protection.
5. Referring to the Figure, hold the earplug housing (2) between the thumb and index finger on your hand on the same side as the earplug being fitted. With your other hand, reach behind your head and pull your ear on the same side as the earplug up and away from your head. This will straighten the ear canal to ease earplug insertion. Carefully insert the foam tip of the earplug into the ear.
6. Ensure that the earplug is positioned so that the wire rests in the notch at the bottom of the ear canal. Hold the plug for a few seconds until the foam expands inside the ear and will hold the plug in place.
7. Repeat Steps 4 - 6 for the other earplug.
8. Check the fit for each earplug by moving a cupped hand near the eat. The user should not perceive any change in sound level. If the sound level changes, this indicates an improper seal; repeat Steps 4 - 6 with new foam tips. If the foam tips still do not seal properly, repeat steps 4 - 6 with the next larger foam tip size. If the foam tips still do not seal properly, consult the local hearing conservation center.

NOTE

If you are not wearing a CB protective mask, do not perform Steps 9 and 10. The CEP extension cable (CEP199-X01) should be used **only with a CB protective mask**.

9. If the M45 mask is to be worn, refer to CEP Connected to Extension Cord figure and connect the CEP (1) to the extension cable (2). Then, don the mask.
10. If the M45 mask is to be worn, refer to Figure and connect the extension cable (2) to the helmet connector (1) before donning the helmet.
11. Don the helmet.
12. If the M45 mask is NOT worn, and you have NOT performed Steps 9 and 10. Grasp the CEP connector end (3) with the right hand. Push the connector end onto the connector (1) on the right rear of the helmet.

WARNING

Ensure that the volume level of the audio sent to the CEP is reduced. Damage to the wearer’s ears may result if the volume level is not reduced.

13. Rotate the intercommunications unit volume level to full off.

DONNING/REMOVING CEP (CEP-EQUIPPED HELMETS ONLY) - CONTINUED

14. Plug the communications cord into the intercommunications unit. Check for proper operation of the CEP and the receivers while slowly increasing the volume to a comfortable level.

REMOVING CEP

1. If you are NOT wearing the M45 mask and are NOT using the extension cable, disconnect the CEP connector end from the helmet connector before removing the helmet. If you are wearing a CB protective mask, remove the helmet; disconnect the extension cable from the helmet; disconnect the extension cable from the CEP after removing the CB protective mask; and proceed with Step 3.

2. Remove the helmet.

3. Remove each earplug by grasping the housing and pulling the earplug out of the ear.

4. Store the CEP in the container provided.

5. Store the CEP extension cable in a marked container so that it is available when needed.

CARE OF CEP

1. • Do not leave the CEP attached to the helmet when not in use; always store the CEP in the container provided.

2. • When the foam tips become soiled, remove them from the earplugs. Hand-wash the foam tips with warm water and mild soap, and allow them to air-dry. Do not wash the foam tips any more than necessary (about once a week); the more often they are washed, the sooner they will wear out.

3. • With normal use, the foam tips will last about one month. Discard the foam tips if the foam is degraded or pulled away from the plastic tube inside.

OPERATION OF STANDARD COMPONENTS

FASTENING/ADJUSTING CHIN STRAP

WARNING

ALWAYS wear the helmet with the chin-strap properly attached and adjusted. Failure to secure the chin strap will decrease helmet stability and may cause injury to the wearer.

1. Fasten the chin strap by inserting the strap through both D-rings, separating the rings, passing the strap over the outer ring (1), and inserting the strap back through the inner D-ring (2).

2. To tighten the chin strap, pull on end (3) to attain the desired fit. Tightening the chin strap will also tighten the earcup fit.

OPERATION OF STANDARD COMPONENTS - CONTINUED

3. To loosen the chin strap, rotate the outer D-ring up and to the left by pulling on the two tabs of the outer D-ring. Push the strap through the inner D-ring toward the left as needed to loosen or disengage the strap. Pull the section of the strap under the chin to the right.

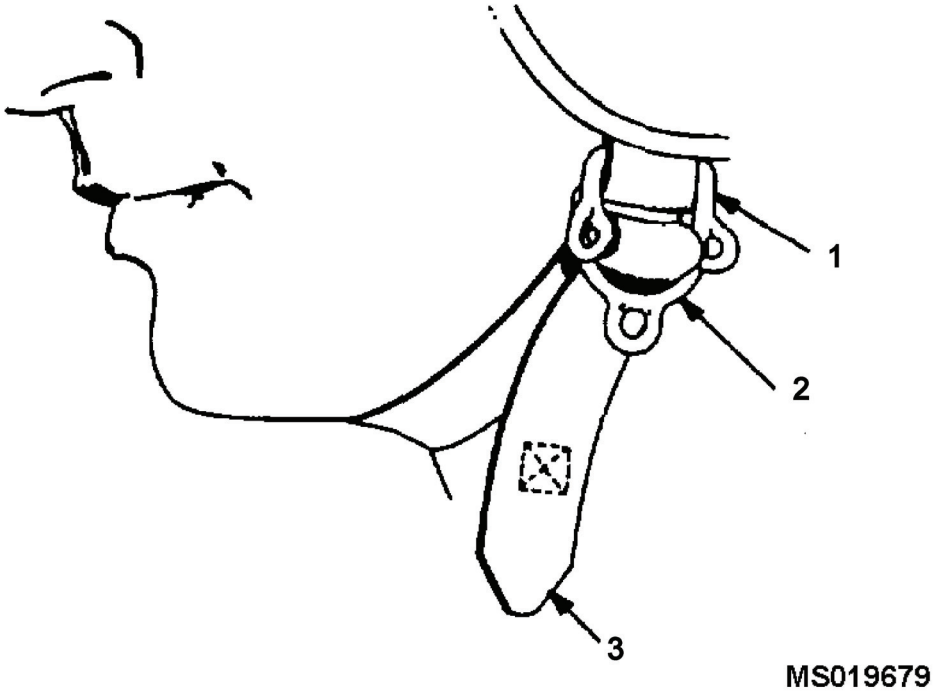

Figure 1. Correctly Fastened Chinstrap.

ADJUSTING NAPE STRAP

NOTE

When the nape strap is centered both nape straps will be the same length.

1. Adjust the nape strap pad (1) position using nape strap pull-tabs (2). Tighten by grasping the two tabs, pulling to the back, and then pulling from side-to-side until snug.

OPERATION OF STANDARD COMPONENTS - CONTINUED

2. To loosen the nape, flip buckles (3) towards the center of the nape strap pad. Straps will slide through buckles easily.

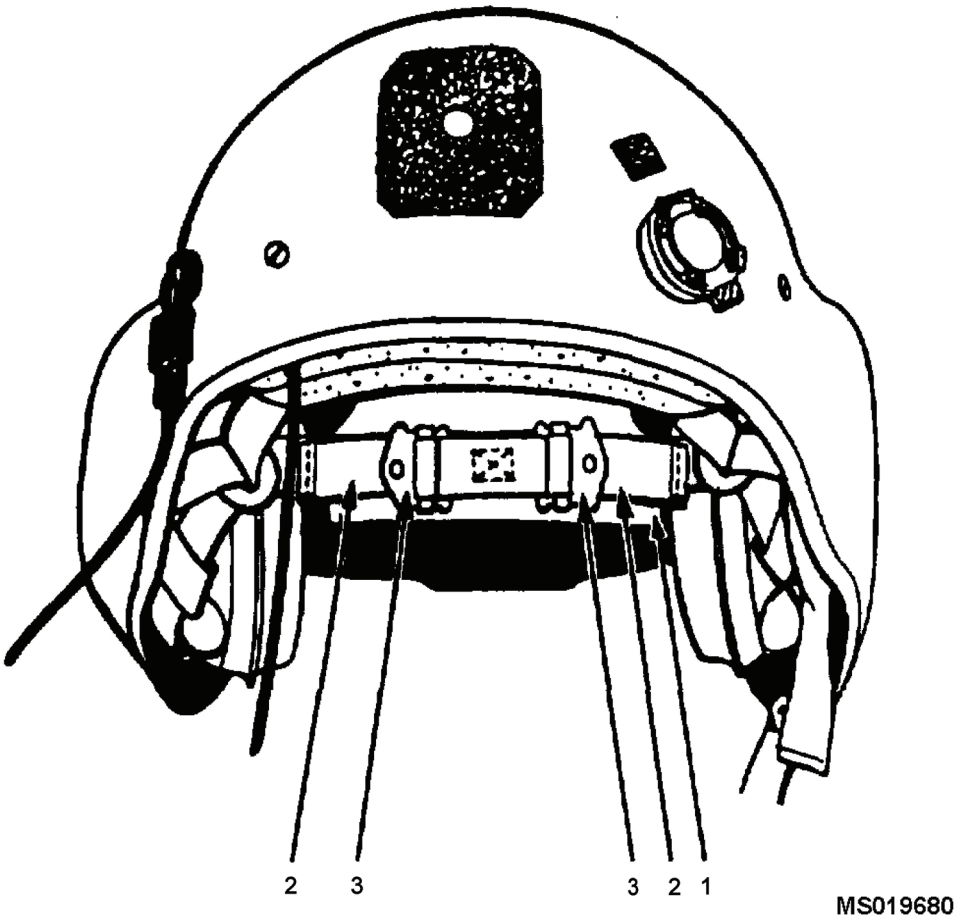

Figure 2. Nape Strap Adjustment Mechanisms.

RAISING/LOWERING VISORS

WARNING

(FOR LASER-PROTECTIVE VISORS)

Due to serious limitations imposed by the laser-protective visors on visual acuity outside the aircraft as well as on flight displays within the cockpit, the laser-protective visors will only be used when actual laser hazards exist. For day or night VFR flights at altitudes below low-level flight, the pilot will analyze the current situation and decide whether flight should continue with laser-protective devices in use. Considerations include local laser hazards, ambient light levels, and terrain. Approval for use must be annotated on the flight crew's mission brief.

The dark (bronze) laser-protective visors are not compatible with aircraft or ground support night lighting and are not safe for twilight or night flights. DO NOT USE THE BRONZE LASER-PROTECTIVE VISORS DURING TWILIGHT OR AT NIGHT.

OPERATION OF STANDARD COMPONENTS - CONTINUED

The bronze laser-protective visors will change the appearance of and possibly eliminate some red and/or green light sources. Testing indicates that some red lights take on an orange hue, some cockpit warning lights are difficult to read though still visible, and some cockpit gauges are illegible. DO NOT USE THE BRONZE LASER-PROTECTIVE VISORS FOR IFR FLIGHT.

The light (green) laser-protective visors will change the appearance of and possibly eliminate some red light sources. Testing indicates that some red lights take on an orange hue, some cockpit warning lights are difficult to read though still visible, the distance some exterior red lights are visible is reduced, and red cockpit map light are virtually unusable. USE EXTRA CAUTION AT NIGHT.

Do not attempt to use more than one laser visor at a time. Use of multiple laser filtering visors will not permit adequate vision to perform the required tasks.

If laser hazard occurs, do not stare at the laser source. Some lasers have secondary wavelengths that may cause eye damage; the laser-protective visors may not filter these wavelengths.

The laser-protective visors are not intended to protect against broad-spectrum bright light. Do not use the laser-protective visors to view solar eclipses, electric welding equipment, or other potentially eye-damaging light sources.

Do not use the laser-protective visors as a substitute for other types of laser eye protection. During maintenance or servicing of specific types of laser systems, wear correct eye protection as specified in the appropriate technical manual.

The laser-protective visors reduce ambient light levels available to the eye. Allow eyes to accommodate to reduced light before operations at dusk or dawn.

CAUTION

(FOR LASER-PROTECTIVE VISORS)

Scratching of laser lenses may degrade laser protection. Clean lenses according to instructions. Replace scratched lenses with new ones.

Exposure of laser lenses to direct sunlight may degrade laser protection. Avoid unnecessary exposure of lenses to sunlight.

Use the left-hand knob to raise or lower the outer visor. Use the right-hand knob to raise or lower the inner visor. To move the visor knob, brace your thumb against the visor track, squeeze the knob with your forefinger, and rotate the visor down or up as desired.

OPERATION OF STANDARD COMPONENTS - CONTINUED

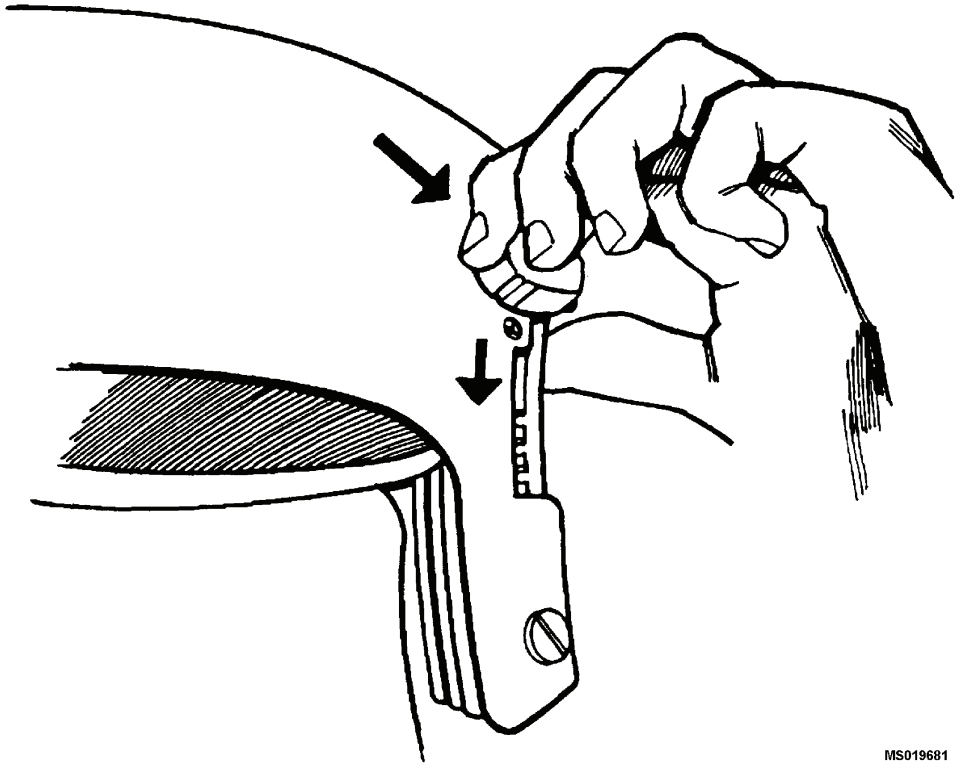

Figure 3. Moving Visor Knob.

OPERATING ANVIS GOGGLES

WARNING

Ensure that the ANVIS system mounted on your HGU-56/P is working properly in accordance with TM 11-5855-263-10 prior to using it. Failure to check the ANVIS or to be able to see the low battery warning light when using the ANVIS may result in a critical loss of equipment use.

Refer to TM 11-5855-263-10 for ANVIS operational procedures.

OPERATING COMMUNICATIONS SYSTEM

1. Ensure that the microphone cord is plugged into the communications cord connector at the rear of the helmet. If the helmet is CEP-equipped, also ensure that the CEP is plugged into the connector at the right rear of the helmet.

2. Plug the communication cord into the aircraft communications device.

3. Adjust the microphone to the proper operating position in front of the lips.

OPERATION OF STANDARD COMPONENTS - CONTINUED

4. Speak into the microphone and listen for feedback.

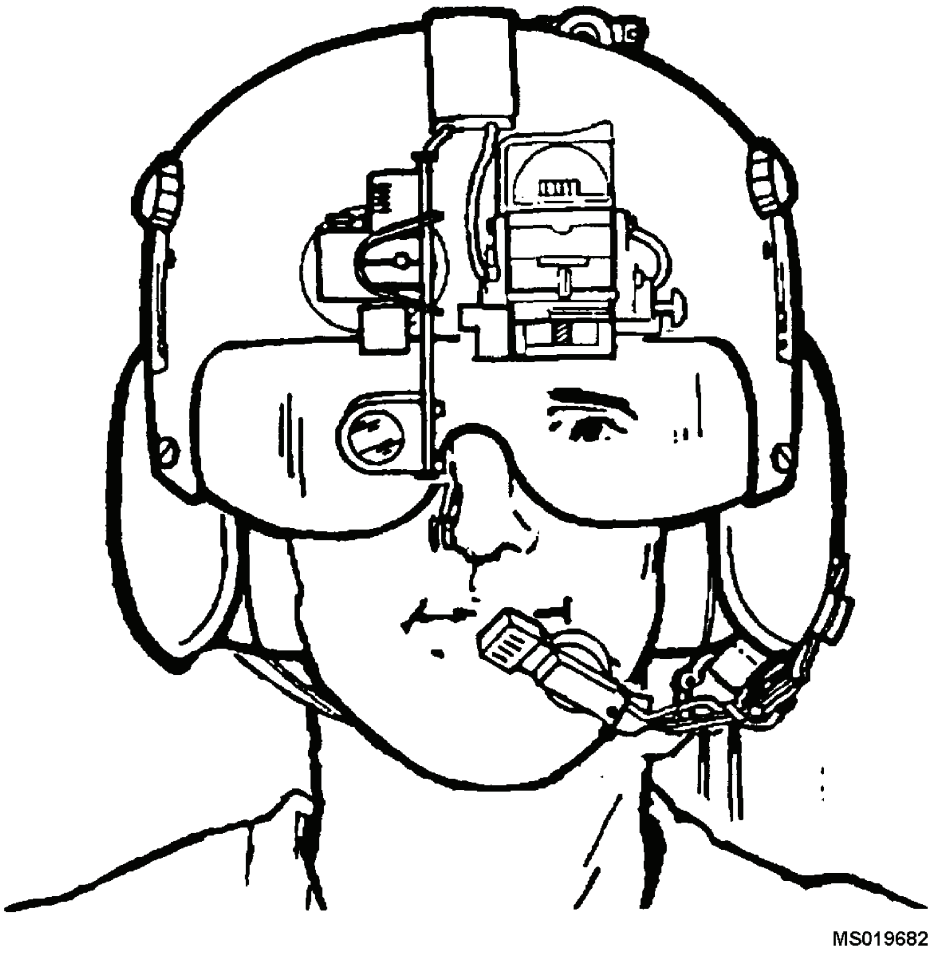

Figure 4. Proper Microphone Position.

OPERATION OF ADDITIONALLY AUTHORIZED ITEMS

Operating COBRA Dual Visor Module Components

1. Visors:. Raise and lower visors as in Raising/Lowering Visors.

2. AH-1 sight..

a. To deploy, rotate rod (1) downward until eyepiece is locked in place over eye area.

b. To adjust vertically, pinch tension spring (2), slide rod up or down as needed, and release spring.

OPERATION OF ADDITIONALLY AUTHORIZED ITEMS - CONTINUED

c. To stow, press button (3) located on the AH-1 sight base; sight will automatically move to the stowed position. If rod hits ANVIS mount, adjust rod for clearance.

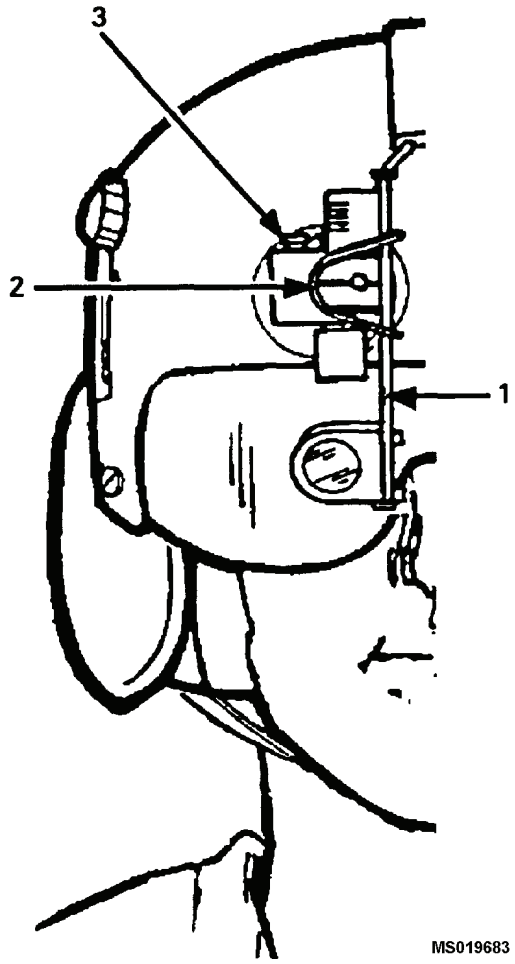

Figure 5. AH-1 Sight.

3. Operating MBU-12/P Oxygen Mask..

4. Refer to TM 55-1660-247-12.

5. Operating EOHSS Module..

6. For operation instructions, refer to Operator's Manual for ARMY AH-64A Helicopter, TM 1-1520-238-10

7. Attaching/Removing Maxillofacial Shield.

OPERATION OF ADDITIONALLY AUTHORIZED ITEMS - CONTINUED

WARNING

When using the anti-fogging solution described below, avoid getting the liquid solution into the eyes. Solution will irritate and may burn the eyes. In case of eye contact, flush with fresh water for 15 minutes. Contact physician if irritation persists. See package for other directions.

NOTE

To help prevent the visor lenses from fogging when the MFS is worn, apply two drops of Sea Drops anti-fogging solution to the inside surface of each lens. Rub the solution over the entire surface of the lens. Wait 10 seconds, then buff with a microfiber cloth or any soft, dry cloth until the lens is clear.

The helmet can be donned or doffed while the MFS is attached to either side and swung open. However, if the Lip Light is attached, the MFS should be swung open from the right side as worn to avoid disconnecting the light. (Refer to the manufacturer's instructions for operating the light.) The MFS can also be swung open while the helmet is worn, allowing the crewmember to eat or drink. If the helmet is stowed with the MFS attached, the shield should be secured to the helmet on both sides.

8. Position the pin (1) on one side of the MFS (3) into the slot (4) of the striker (5), and flip the latch (2) against the helmet shell. Ensure that the latch is locked in place.

9. Repeat for the other side.

10. Adjust the microphone boom as necessary so that it can be placed behind the MFS. To do this, loosed the knurled knob (6) on the boom swivel, move the boom forward or back until it can be placed under the recessed area (3) of the MFS. Tighten the knurled knob.

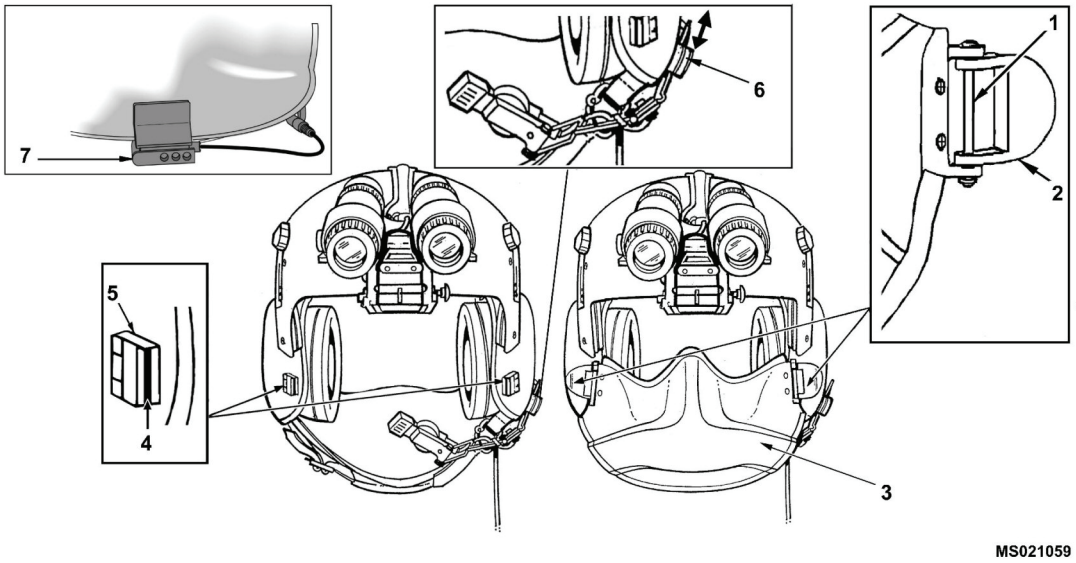

Figure 6. MFS Attachment.

REMOVING MFS

1. Flip the latch on one side of the MFS away from the helmet shell, and remove the pin from the slot.

OPERATION OF ADDITIONALLY AUTHORIZED ITEMS - CONTINUED

2. Repeat for the other side.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

INITIAL SETUP:

END OF WORK PACKAGE

CHAPTER 3

FIELD LEVEL MAINTENANCE

TROUBLESHOOTING PROCEDURES

FOR

HELEMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

(NSN: 8415-01-394-6474)

FIELD MAINTENANCE

HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

NSN 8415-01-394-6474 EIC: N/A

INTRODUCTION TO TROUBLESHOOTING

INTRODUCTION TO TROUBLESHOOTING

Use the Troubleshooting Index to locate the fault. The index points to the correct method for troubleshooting the Helmet System, Aircrew Integrated.

END OF WORK PACKAGE

FIELD MAINTENANCE

HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

NSN 8415-01-394-6474 EIC: N/A

TROUBLESHOOTING INDEX

Malfunction/Symptom	Troubleshooting Procedure
1. Unit Troubleshooting	WP 0009 00

END OF WORK PACKAGE

FIELD MAINTENANCE
HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)
NSN 8415-01-394-6474 EIC: N/A
UNIT TROUBLESHOOTING

INITIAL SETUP:

AVIATION UNIT MAINTENANCE TROUBLESHOOTING PROCEDURES

Aviation Unit Maintenance Troubleshooting Procedures provides an index of common malfunctions of helmet components and directs you to the procedures required to eliminate those malfunctions. When examining the table keep the following in mind:

1. You should first find the malfunction that most closely describes the problem, then perform the tests, inspections, and corrective actions in the order in which they are listed.

2. This manual may not list every possible malfunction. If you encounter a malfunction not listed in the table and are unable to solve it, notify your supervisor.

TROUBLESHOOTING PROCEDURE

UNIT TROUBLESHOOTING PROCEDURES

SYMPTOM
UNABLE TO RAISE OR LOWER VISOR LENS.

MALFUNCTION
Defective visor knob.

CORRECTIVE ACTION

1. Inspect for defective visor knob.
2. Replace defective visor in accordance with Dual Visor Assembly Repair.

MALFUNCTION
Defective visor knob.

CORRECTIVE ACTION

1. Inspect for defective visor tracks.
2. Replace defective visor tracks in accordance with Dual Visor Assembly Repair.

MALFUNCTION
Defective visor housing.

CORRECTIVE ACTION

1. Inspect for defective visor housing.
2. Replace defective visor housing in accordance with Dual Visor Assembly Repair.

MALFUNCTION
Defective visor lenses.

CORRECTIVE ACTION

1. Inspect visor lenses for defects.
2. Replace defective lens in accordance with Dual Visor Assembly Repair.

MALFUNCTION
Dust, dirt, and foreign objects in tracks and visor guides.

UNIT TROUBLESHOOTING PROCEDURES – Continued

CORRECTIVE ACTION

Disassemble visor assembly in accordance with Dual Visor Assembly Repair, and clean dust, dirt, and foreign objects from the tracks and visor guides using a soft cleaning cloth dampened with isopropyl alcohol and water. Reassemble visor.

SYMPTOM
UNABLE TO OPERATE GOGGLES.

MALFUNCTION

CORRECTIVE ACTION

Refer to TM 11-5855-263-10.

SYMPTOM
UNABLE TO POSITION AH-I SIGHT.

MALFUNCTION

CORRECTIVE ACTION

Send operator/wearer with helmet to armament technician (68J) for boresighting.

SYMPTOM
UNABLE TO FASTEN OR ADJUST CHIN STRAP.

MALFUNCTION
Defective hardware or webbing.

CORRECTIVE ACTION

1. Inspect retention assembly for defective hardware or webbing
2. Replace retention assembly in accordance with Retention Assembly.

SYMPTOM
UNABLE TO ADJUST NAPE STRAP

MALFUNCTION
Defective hardware or webbing

CORRECTIVE ACTION

1. Inspect retention assembly for defective hardware or webbing
2. Replace retention assembly in accordance with Retention Assembly.

SYMPTOM
UNABLE TO KEEP MICROPHONE IN POSITION.

MALFUNCTION
Loose screw

CORRECTIVE ACTION

1. Inspect boom, microphone assembly for loose screw
2. If unable to tighten screw, replace in accordance with WP 0014 00 Microphone Boom.

TROUBLESHOOTING PROCEDURE

COMMUNICATIONS

SYMPTOM
UNABLE TO COMMUNICATE

MALFUNCTION
Communications cord unplugged or communication unit not working.

CORRECTIVE ACTION

1. Ensure that communications cord is plugged into communication unit and that unit is working. Ensure helmet connector on left rear side of helmet is secured.
2. If still unable to hear, perform continuity check as follows:
   a. Disconnect microphone cable from microphone.
   b. Remove receivers.
   c. Using a multimeter (AN/URM-105 C or equivalent), perform Test 1 (refer to Table 1or as appropriate) in accordance with the appropriate chart for your communication system (standard or TEMPEST).
      (1) If no failure detected, proceed to step 2.f.
      (2) If a failure is detected, replace the communication cord in accordance with Communications System. Proceed to step 2.i.

NOTE

Numbers in test charts correspond to callouts in illustrations.

   d. Refer to Table 1 for Standards of Communication System.

Table 1. TEST 1. Standard Communications System.

FROM	TO	OPEN	SHORTED
1	2	Good	Bad
1	3	Bad	Good
1	5	Good	Bad
1	6	Good	Bad
2	4	Bad	Good
2	5	Good	Bad
2	6	Good	Bad
5	6	Good	Bad

NOTE

Numbers in test charts correspond to callouts in illustrations.

   e. Refer to Table 2 for TEMPEST Communications System.

COMMUNICATIONS – Continued

Table 2. TEST 1. TEMPEST Communications System.

FROM	TO	OPEN	SHORTED
1	2	Good	Bad
1	3	Bad	Good
1	5	Good	Bad
1	6	Good	Bad
2	5	Bad	Good
2	5	Good	Bad
2	6	Good	Bad
1	7	Good	Bad
2	7	Good	Bad
5	6	Good	Bad
5	7	Good	Bad
6	7	Good	Bad

f. Using a multimeter perform Test 2 (refer to Table 3 as appropriate) in accordance with the appropriate chart for your communication system (standard or TEMPEST).

(1) If no failure is detected, the communication cord is working. Replace earphone or microphone as necessary. Proceed to step 2.i.

(2) If a failure is detected, and you are using the standard communications system, unscrew the plug cover and check for any loose connections or cold solder joints. Resolder any defective connections. Proceed to step 2.i.

(3) If a failure is detected, and you are using the TEMPEST communications system, replace the communication cord in accordance with Communications System. Proceed to step 2.i.

NOTE

Numbers in test charts correspond to callouts in illustrations.

g. Refer to Table 3 for Standard Communications System

Table 3. TEST 2. Standard Communications System.

FROM	TO	OPEN	SHORTED
1 or 3	7	Bad	Good
2 or 4	9	Bad	Good
5	8	Bad	Good
6	10	Bad	Good

COMMUNICATIONS – Continued

NOTE

Numbers in test charts correspond to callouts in illustrations.

h. Refer to Table 4 Test Points for TEMPEST Communications System

Table 4. Test Points for TEMPEST Communications System.

1 or 3	9	Bad	Good
2 or 4	10	Bad	Good
7	11	Bad	Good
any lead	8	Good	Bad

i. Test communications system by connecting it to a working radio.

j. If communications system still does not work, replace communications cord.

END OF WORK PACKAGE

CHAPTER 4

FIELD LEVEL

MAINTENANCE INSTRUCTIONS

FOR

HELEMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

(NSN: 8415-01-394-6474)

FIELD MAINTENANCE

HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

NSN 8415-01-394-6474 EIC: N/A

SERVICE UPON RECEIPT

INITIAL SETUP:

SERVICE UPON RECEIPT OF MATERIEL

UNPACKING

END OF WORK PACKAGE

FIELD MAINTENANCE

HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

NSN 8415-01-394-6474 EIC: N/A

INTRODUCTION PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

INTRODUCTION PREVENTIVE MAINTENANCE CHECKS AND SERVICES FOR SUAS

The Helmet System, Aircrew Integrated should be inspected frequently and prior to each flight for damage. Any repairs that are not detailed in this section will require turn-in. Frequency of inspection is dependent upon environmental conditions, frequency of use, and unit Standing Operating Procedures (SOP).

1. This PMCS has been provided so equipment is kept in operating condition and ready for use.

a. Warnings and Cautions. Always observe the WARNINGs and CAUTIONs appearing in the PMCS table. WARNINGs and CAUTIONs appear before applicable procedures. Observe these WARNINGs and CAUTIONs to prevent serious injury to personnel or damage to equipment.

b. Explanations of Table Entries.

(1) Item No. Column. Numbers in this column are for reference. When completing DA Forms 2404 (Equipment Inspection and Maintenance Worksheet), include the item number for the check/service indicating a fault. Item numbers also appear in the order in which they must be performed.

(2) Interval Column. This column shows when to perform the procedure in the procedure column.

(a) The BEFORE **(B)** procedures must be done before launch or use of the equipment for its intended mission.

(b) DURING **(D)** procedures must be done during operation or while using the equipment for its intended mission.

(c) AFTER **(A)** procedures must be done immediately after recovery.

(d) WEEKLY **(W)** procedures must be done weekly.

(e) QUARTERLY**(Q)** procedures must be done quarterly.

(f) ANNUALLY**(AN)** procedures must be done annually.

(3) Item To Be Checked/Serviced Column. This column provides the location and the item to be checked or serviced. The item location is underlined.

(4) Procedure Column. This column gives the procedure to check or service the item listed in the Check/Service column to know if the equipment is ready or available for its intended mission or for operation. The procedure must be performed at the time specified in the interval column

(5) Equipment Not Ready/Available If: Column. Information in this column shows what faults will keep equipment from being capable of performing its mission. If a check or service Procedures shows faults listed in this column, do not operate the equipment. Follow SOP for maintaining the equipment or reporting equipment failure.

IDENTIFY FAULT

WARNING

Prior to performing maintenance procedures, the battery must be removed. Failure to comply may result in injury to personnel.

NOTE

Use a charged battery when attempting to identify electrical problems.

There are three main ways to identify problems with the AV:

- Conduct a visual inspection.
- Observe incorrect response to correct input.
- Swap working parts from a working AV to identify whether or not a part is damaged.

END OF WORK PACKAGE

FIELD MAINTENANCE

HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

NSN 8415-01-394-6474 EIC: N/A

PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

INITIAL SETUP:

Table 1. .

ITEM NO.	INTERVAL	MAN-HOUR	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
1			a. N/A		

MANDATORY REPLACEMENT PARTS

N/A

END OF WORK PACKAGE

FIELD MAINTENANCE

HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

NSN 8415-01-394-6474 EIC: N/A

MAINTENANCE

INITIAL SETUP:

NA

N/A

END OF WORK PACKAGE

FIELD MAINTENANCE

HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

NSN 8415-01-394-6474 EIC: N/A

MICROPHONE BOOM REMOVAL/INSTALLATION

INITIAL SETUP:

REMOVAL

MICROPHONE BOOM REMOVAL

1. Referring to illustration, remove the knurled thumbscrew (1) attaching the microphone to the boom.
2. Remove the boom clip (2) attaching the microphone cord to the boom.
3. Remove the center screw (5) attaching the swivel (4) and boom (3) to the helmet.

INSTALLATION

MICROPHONE BOOM INSTALLATION

1. Referring to illustration, reassemble the hardware as shown and attach the replacement boom and microphone to the helmet with the center screw and swivel.
2. Attach the microphone to the boom with the knurled thumbscrew.
3. Reattach the microphone cord to the boom with the boom clip.

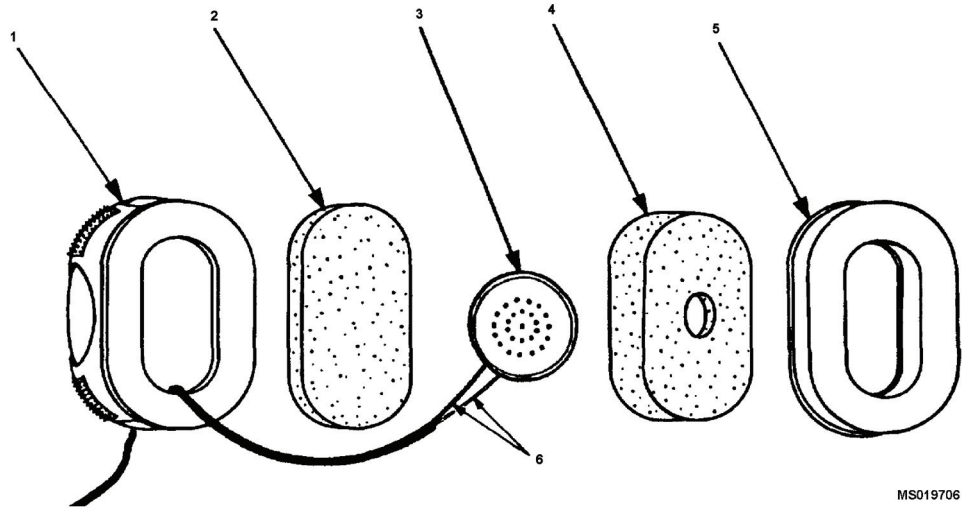

Figure 1. Boom and Microphone.

END OF WORK PACKAGE

CHAPTER 5

SUPPORTING INFORMATION

FOR

HELEMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

(NSN: 8415-01-394-6474)

SUPPORTING INFORMATION

HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

NSN 8415-01-394-6474 EIC: N/A

REFERENCES

SCOPE

This work package lists all Field Manuals, Technical manuals and miscellaneous publications referenced in this manual.

SUPPORTING INFORMATION

HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

NSN 8415-01-394-6474 EIC: N/A

INTRODUCTION TO MAINTENANCE ALLOCATION CHART (MAC)

INTRODUCTION

The Army Maintenance System MAC

This introduction provides a general explanation of all maintenance and repair functions authorized at the two maintenance levels under the Two-Level Maintenance System concept.

The MAC (immediately following the introduction) designates overall authority and responsibility for the performance of maintenance functions on the identified end item or component. The application of the maintenance functions to the end item or component shall be consistent with the capacities and capabilities of the designated maintenance levels, which are shown on the MAC in column (4) as:

- Field - includes two subcolumns, unit operator/crew (C) and unit maintenance (O) and Direct Support (F) maintenance.
- Sustainment - includes two subcolumns, general support (H) and Depot (D).

The tools and test equipment requirements (immediately following the MAC) list the tools and test equipment (both special tools and common tool sets) required for each maintenance function as referenced from the MAC.

The remarks (immediately following the tools and test equipment requirements) contain supplemental instructions and explanatory notes for a particular maintenance function.

Maintenance Functions

Maintenance functions are limited to and defined as follows:

1. Inspect. To determine the serviceability of an item by comparing its physical, mechanical, and/or electrical characteristics with established standards through examination (e.g., by sight, sound, or feel). This includes scheduled inspection and gagings and evaluation of cannon tubes.
2. Test. To verify serviceability by measuring the mechanical, pneumatic, hydraulic, or electrical characteristics of an item and comparing those characteristics with prescribed standards on a scheduled basis, i.e., load testing of lift devices and hydrostatic testing of pressure hoses.
3. Service. Operations required periodically to keep an item in proper operating condition; e.g., to clean (includes decontaminate, when required), to preserve, to drain, to paint, or to replenish fuel, lubricants, chemical fluids, or gases. This includes scheduled exercising and purging of recoil mechanisms.
4. Adjust. To maintain or regulate, within prescribed limits, by bringing into proper position, or by setting the operating characteristics to specified parameters.
5. Align. To adjust specified variable elements of an item to bring about optimum or desired performance.
6. Calibrate. To determine and cause corrections to be made or to be adjusted on instruments of test, measuring, and diagnostic equipment used in precision measurement. Consists of comparisons of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.
7. Remove/Install. To remove and install the same item when required to perform service or other maintenance functions. Install may be the act of emplacing, seating, or fixing into position a spare, repair part, or module (component or assembly) in a manner to allow the proper functioning of an equipment or system.
8. Replace. To remove an unserviceable item and install a serviceable counterpart in its place. "Replace" is authorized by the MAC and assigned maintenance level is shown as the third position code of the Source, Maintenance and Recoverability (SMR) code.
9. Repair. The application of maintenance services, including fault location/troubleshooting, removal/installation, disassembly/assembly procedures, and maintenance actions to identify troubles and restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module (component or assembly), end item, or system.

INTRODUCTION – CONTINUED

NOTE

The following definitions are applicable to the "repair" maintenance function:

Services. Inspect, test, service, adjust, align, calibrate, and/or replace.

Fault location/troubleshooting. The process of investigating and detecting the cause of equipment malfunctioning; the act of isolating a fault within a system or Unit Under Test (UUT).

Disassembly/assembly. The step-by-step breakdown (taking apart) of a spare/functional group coded item to the level of its least component, that is assigned an SMR code for the level of maintenance under consideration (i.e., identified as maintenance significant).

Actions. Welding, grinding, riveting, straightening, facing, machining, and/or resurfacing.

10. Overhaul. That maintenance effort (service/action) prescribed to restore an item to a completely serviceable/operational condition as required by maintenance standards in appropriate technical publications. Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.
11. Rebuild. Consists of those services/actions necessary for the restoration of unserviceable equipment to a like new condition in accordance with original manufacturing standards. Rebuild is the highest degree of materiel maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (e.g., hours/miles) considered in classifying Army equipment/components.

Explanation of Columns in the MAC

Column (1) Group Number. Column (1) lists FGC numbers, the purpose of which is to identify maintenance significant components, assemblies, subassemblies, and modules with the Next Higher Assembly (NHA).

Column (2) Component/Assembly. Column (2) contains the item names of components, assemblies, subassemblies, and modules for which maintenance is authorized.

Column (3) Maintenance Function. Column (3) lists the functions to be performed on the item listed in column (2). (For a detailed explanation of these functions refer to "Maintenance Functions" outlined above.)

Column (4) Maintenance Level. Column (4) specifies each level of maintenance authorized to perform each function listed in column (3), by indicating work time required (expressed as manhours in whole hours or decimals) in the appropriate subcolumn. This work time figure represents the active time required to perform that maintenance function at the indicated level of maintenance. If the number or complexity of the tasks within the listed maintenance function varies at different maintenance levels, appropriate work time figures are to be shown for each level. The work time figure represents the average time required to restore an item (assembly, subassembly, component, module, end item, or system) to a serviceable condition under typical field operating conditions. This time includes preparation time (including any necessary disassembly/assembly time), troubleshooting/fault location time, and quality assurance time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the MAC. The symbol designations for the various maintenance levels are as follows:

Field:

- C Operator or crew maintenance
- O Unit maintenance
- F Direct Support maintenance

Sustainment:

- H General support maintenance
- D Depot maintenance

INTRODUCTION – CONTINUED

NOTE

The "L" maintenance level is not included in column (4) of the MAC. Functions to this level of maintenance are identified by a work time figure in the "H" column of column (4), and an associated reference code is used in the REMARKS column (6). This code is keyed to the remarks and the SRA complete repair application is explained there.

Column (5) Tools and Equipment Reference Code. Column (5) specifies, by code, those common tool sets (not individual tools), common Test, Measurement and Diagnostic Equipment (TMDE), and special tools, special TMDE and special support equipment required to perform the designated function. Codes are keyed to the entries in the tools and test equipment table.

Column (6) Remarks Code. When applicable, this column contains a letter code, in alphabetical order, which is keyed to the remarks table entries.

Explanation of Columns in the Tools and Test Equipment Requirements

Column (1) Tool or Test Equipment Reference Code. The tool or test equipment reference code correlates with a code used in column (5) of the MAC.

Column (2) Maintenance Level. The lowest level of maintenance authorized to use the tool or test equipment.

Column (3) Nomenclature. Name or identification of the tool or test equipment.

Column (4) National Stock Number (NSN). The NSN of the tool or test equipment.

Column (5) Tool Number. The manufacturer’s part number, model number, or type number.

Explanation of Columns in the Remarks

Column (1) Remarks Code. The code recorded in column (6) of the MAC.

Column (2) Remarks. This column lists information pertinent to the maintenance function being performed as indicated in the MAC."

SUPPORTING INFORMATION

HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

NSN 8415-01-394-6474 EIC: N/A

MAINTENANCE ALLOCATION CHART (MAC)

Table 1. N/A.

(1)	(2)	(3)	(4) MAINTENANCE LEVEL					(5)	(6)
			FIELD			SUSTAINMENT			
GROUP NUMBER	COMPONENT/ ASSEMBLY	MAINTENANCE FUNCTION	UNIT C	O	DIRECT SUPPORT F	GENERAL SUPPORT H	DEPOT D	TOOLS AND EQUIPMENT REF CODE	REMARKS CODE
N/A	N/A								

Table 2. .

TOOLS OR TEST EQUIP REF CODE	MAINTENANCE LEVEL	NOMENCLATURE	NATIONAL STOCK NUMBER	TOOL NUMBER
	C			

Table 3. .

REMARK CODE	REMARKS

SUPPORTING INFORMATION

HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

NSN 8415-01-394-6474 EIC: N/A

INTRODUCTION TO REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)

INTRODUCTION

SCOPE

This RPSTL lists and authorizes spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE); and other special support equipment required for performance of Operator and Unit Level Maintenance of the Helmet System, Aircrew Integrated (HGU-56/P). It authorizes the requisitioning, issue, and disposition of spares, repair parts, and special tools as indicated by the source, maintenance, and recoverability (SMR) codes.

GENERAL

In addition to the Introduction work package, this RPSTL is divided into the following work packages.

1. Repair Parts List Work Packages. Work packages containing lists of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. These work packages also include parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Sending units, brackets, filters, and bolts are listed with the component they mount on. Bulk materials are listed by item name in FIG. BULK at the end of the work packages. Repair parts kits are listed separately in their own functional group and work package. Repair parts for reparable special tools are also listed in a separate work package. Items listed are shown on the associated illustrations.
2. Special Tools List Work Packages. Work packages containing lists of special tools, special TMDE, and special support equipment authorized by this RPSTL (as indicated by Basis of Issue (BOI) information in the DESCRIPTION AND USABLE ON CODE (UOC) column). Tools that are components of common tool sets and/or Class VII are not listed.
3. Cross-Reference Indexes Work Packages. There are two cross reference indexes work packages in this RPSTL: the National Stock Number (NSN) Index work package and the Part Number (P/N) Index work package. The National Stock Number Index work package refers you to the figure and item number. The Part Number Index work package refers you to the figure and item number.

EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES

ITEM NO. (Column (1)). Indicates the number used to identify items called out in the illustration.

SMR CODE (Column (2)). The SMR code containing supply/requisitioning information, maintenance level authorization criteria, and disposition instruction, as shown in the following breakout:

Source Code	Maintenance Code		Recoverability Code
XXXXX	XXXXX	XXXXX	XXXXX
1st two positions: How to get an item.	3rd position: who can install, replace, or use the item.	4th position: Who can do complete repair* on the item	5th position: Who determines disposition action on unserviceable items.

*Complete Repair: Maintenance capacity, capability, and authority to perform all corrective maintenance tasks of the "Repair" function in a use/user environment in order to restore serviceability to a failed item.

Source Code. The source code tells you how you get an item needed for maintenance, repair, or overhaul of an end item/equipment. Explanations of source codes follow:

INTRODUCTION – Continued

Source Code	Application/Explanation
PA	**NOTE** Items coded PC are subject to deterioration. Stock items; use the applicable NSN to requisition/request items with these source codes. They are authorized to the level indicated by the code entered in the 3rd position of the SMR code.
PB	
PC	
PD	
PE	
PF	
PG	
KD	Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance level indicated in the 3rd position of the SMR code. The complete kit must be requisitioned and applied.
KF	
KB	
MO-Made at unit/AVUM level	Items with these codes are not to be requisitioned/requested individually. They must be made from bulk material which is identified by the P/N in the DESCRIPTION AND USABLE ON CODE (UOC) column and listed in the bulk material group work package of the RPSTL. If the item is authorized to you by the 3rd position code of the SMR code, but the source code indicates it is made at higher level, order the item from the higher level of maintenance.
MF-Made at DS/AVIM level	
MH-Made at GS level	
ML-Made at SRA	
MD-Made at depot	
AO-Assembled by unit/AVUM level	Items with these codes are not to be requested/requisitioned individually. The parts that make up the assembled item must be requisitioned or fabricated and assembled at the level of maintenance indicated by the source code. If the 3rd position of the SMR code authorizes you to replace the item, but the source code indicates the item is assembled at a higher level, order the item from the higher level of maintenance.
AF-Assembled by DS/AVIM level	
AH-Assembled by GS level	
AL-Assembled by SRA	
AD-Assembled by depot	
XA	Do not requisition an "XA" coded item. Order the next higher assembly.(Refer to NOTE below.)
XB	If an item is not available from salvage, order it using the Commercial and Government Entity Code (CAGEC) and P/N.
XC	Installation drawings, diagrams, instruction sheets, field service drawings; identified by manufacturer's P/N.
XD	Item is not stocked. Order an XD-coded item through normal supply channels using the CAGEC and P/N given, if no NSN is available.

INTRODUCTION – Continued

Source Code	Application/Explanation
NOTE Cannibalization or controlled exchange, when authorized, may be used as a source of supply for items with the above source codes except for those items source coded "XA" or those AV support items restricted by requirements of AR 750-1.	

Maintenance Code. Maintenance codes tell you the level(s) of maintenance authorized to use and repair support items. The maintenance codes are entered in the third and fourth positions of the SMR code as follows:

Third Position. The maintenance code entered in the third position tells you the lowest maintenance level authorized to remove, replace, and use an item. The maintenance code entered in the third position will indicate authorization to the following levels of maintenance:

Maintenance Code	Application/Explanation
C-	Crew or operator maintenance done within unit/AVUM maintenance.
O-	Unit level/AVUM maintenance can remove, replace, and use the item.
F-	Direct support/AVIM maintenance can remove, replace, and use the item.
H-	General support maintenance can remove, replace, and use the item.
L-	Specialized repair activity can remove, replace, and use the item.
D-	Depot can remove, replace, and use the item.

Fourth Position. The maintenance code entered in the fourth position tells you whether or not the item is to be repaired and identifies the lowest maintenance level with the capability to do complete repair (perform all authorized repair functions).

NOTE

Some limited repair may be done on the item at a lower level of maintenance, if authorized by the Maintenance Allocation Chart (MAC) and SMR codes.

Maintenance Code	Application/Explanation
O -	Unit/AVUM is the lowest level that can do complete repair of the item.
F -	Direct support/AVIM is the lowest level that can do complete repair of the item.
H -	General support is the lowest level that can do complete repair of the item.
L -	Specialized repair activity (enter specialized repair activity designator) is the lowest level that can do complete repair of the item.

INTRODUCTION – Continued

Maintenance Code	Application/Explanation
D -	Depot is the lowest level that can do complete repair of the item.
Z -	Nonreparable. No repair is authorized.
B -	No repair is authorized. No parts or special tools are authorized for maintenance of "B" coded item. However, the item may be reconditioned by adjusting, lubricating, etc., at the user level.

Recoverability Code. Recoverability codes are assigned to items to indicate the disposition action on unserviceable items. The recoverability code is shown in the fifth position of the SMR code as follows:

Recoverability Code	Application/Explanation
Z -	Nonreparable item. When unserviceable, condemn and dispose of the item at the level of maintenance shown in the third position of the SMR code.
O -	Reparable item. When uneconomically reparable, condemn and dispose of the item at the unit level.
F -	Reparable item. When uneconomically reparable, condemn and dispose of the item at the direct support level.
H -	Reparable item. When uneconomically reparable, condemn and dispose of the item at the general support level.
D -	Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item are not authorized below depot level.
L -	Reparable item. Condemnation and disposal not authorized below Specialized Repair Activity (SRA).
A -	Item requires special handling or condemnation procedures because of specific reasons (such as precious metal content, high dollar value, critical material, or hazardous material). Refer to appropriate manuals/directives for specific instructions.

NSN (Column (3)). The NSN for the item is listed in this column.

CAGEC (Column (4)). The Commercial and Government Entity Code (CAGEC) is a five-digit code which is used to identify the manufacturer, distributor, or Government agency/activity that supplies the item.

PART NUMBER (Column (5)). Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items.

INTRODUCTION – Continued

NOTE

When you use an NSN to requisition an item, the item you receive may have a different P/N from the number listed.

DESCRIPTION AND USABLE ON CODE (UOC) (Column (6)). This column includes the following information:

1. The federal item name, and when required, a minimum description to identify the item.
2. P/Ns of bulk materials are referenced in this column in the line entry to be manufactured or fabricated.
3. Hardness Critical Item (HCI). A support item that provides the equipment with special protection from electromagnetic pulse (EMP) damage during a nuclear attack.
4. The statement END OF FIGURE appears just below the last item description in column (6) for a given figure in both the repair parts list and special tools list work packages.

QUANTITY (QTY) (Column (7)). The QTY (quantity per figure) column indicates the quantity of the item used in the breakout shown on the illustration/figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column instead of a quantity indicates that the quantity is variable and quantity may change from application to application.

EXPLANATION OF CROSS-REFERENCE INDEXES WORK PACKAGES FORMAT AND COLUMNS

1. National Stock Number (NSN) Index Work Package.
STOCK NUMBER Column. This column lists the NSN in National item identification number (NIIN) sequence. The NIIN consists of the last nine digits of the NSN.

NSN
(e.g., 5385- 01-574-1476)
NIIN
When using this column to locate an item, ignore the first four digits of the NSN. However, the complete NSN should be used when ordering items by stock number.

FIG. Column. This column lists the number of the figure where the item is identified/located. The figures are in numerical order in the repair parts list and special tools list work packages.
ITEM Column. The item number identifies the item associated with the figure listed in the adjacent FIG. column. This item is also identified by the NSN listed on the same line.

2. Part Number (P/N) Index Work Package. P/Ns in this index are listed in ascending alphanumeric sequence (vertical arrangement of letter and number combinations which places the first letter or digit of each group in order A through Z, followed by the numbers 0 through 9 and each following letter or digit in like order).
PART NUMBER Column. Indicates the P/N assigned to the item.
FIG. Column. This column lists the number of the figure where the item is identified/located in the repair parts list and special tools list work packages.
ITEM Column. The item number is the number assigned to the item as it appears in the figure referenced in the adjacent figure number column.

3. Reference Designator Index Work Package. Reference designators in this index are listed in ascending alphanumeric sequence (vertical arrangement of letter and number combination which places the first letter or digit of each group in order "A" through "Z," followed by the numbers "0" through "9" and each following letter or digit in like order).
REFERENCE DESIGNATOR Column. Indicates the reference designator assigned to the item.
FIG. Column. This column lists the number of the figure where the item is identified/located in the repair parts list or special tools list work package.
ITEM Column. The item number is the number assigned to the item as it appears in the figure referenced in the adjacent figure number column.

HOW TO LOCATE REPAIR PARTS

1. When NSNs or P/Ns Are Not Known.
   First. Using the table of contents, determine the assembly group to which the item belongs. This is necessary since figures are prepared for assembly groups and subassembly groups, and lists are divided into the same groups.
   Second. Find the figure covering the functional group or the subfunctional group to which the item belongs.
   Third. Identify the item on the figure and note the number(s).
   Fourth. Look in the repair parts list work packages for the figure and item numbers. The NSNs and part numbers are on the same line as the associated item numbers.
2. When NSN Is Known.
   First. If you have the NSN, look in the STOCK NUMBER column of the NSN index work package. The NSN is arranged in NIIN sequence. Note the figure and item number next to the NSN.
   Second. Turn to the figure and locate the item number. Verify that the item is the one you are looking for.
3. When P/N Is Known.
   First. If you have the P/N and not the NSN, look in the PART NUMBER column of the P/N index work package. Identify the figure and item number.
   Second. Look up the item on the figure in the applicable repair parts list work package.

SUPPORTING INFORMATION

HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

NSN 8415-01-394-6474 EIC: N/A

REPAIR PARTS LIST

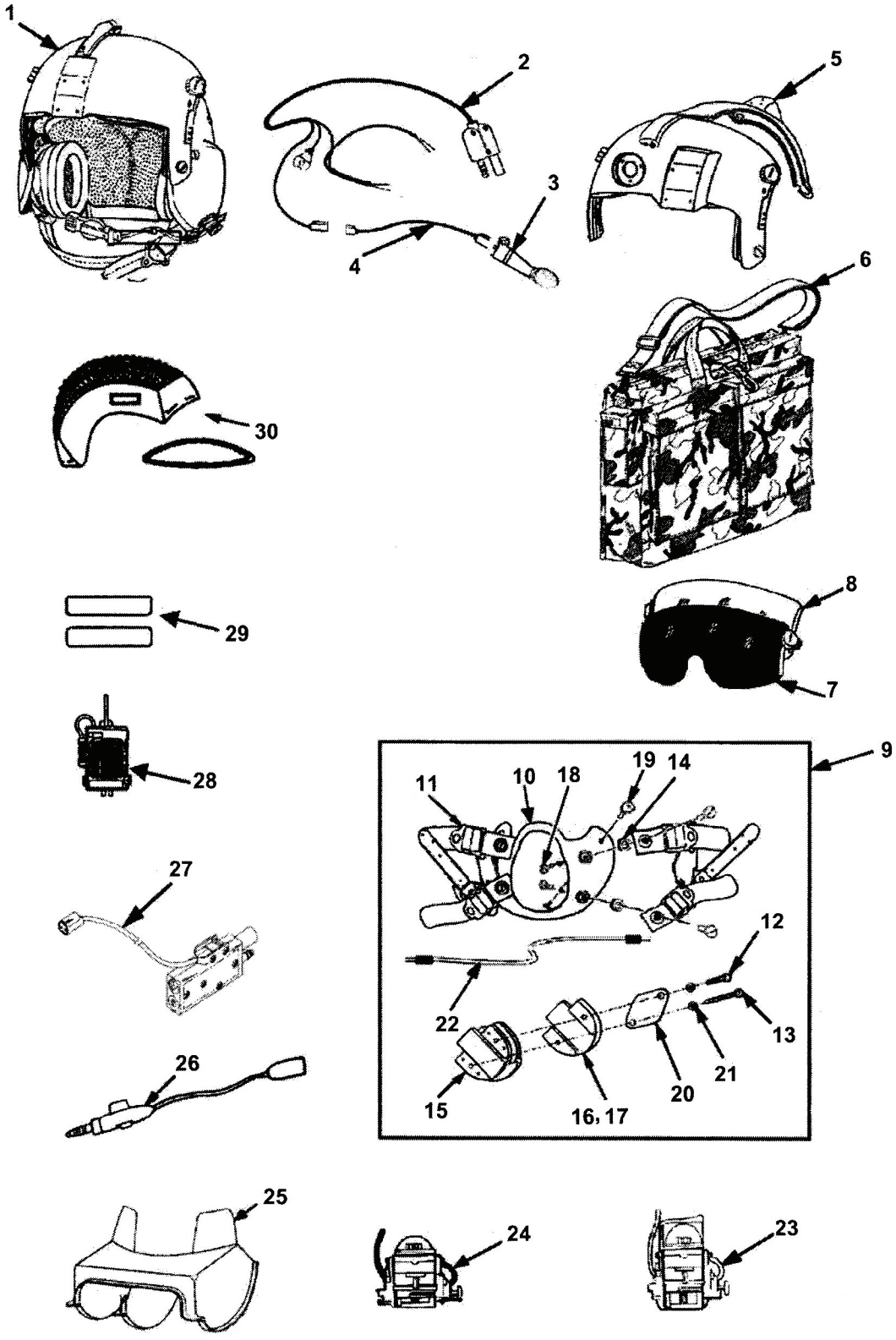

Figure 1. Helmet System, Aircrew Integrated

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE(UOC)	(7) QTY
					GROUP 0101	
					HELMET SYSTEM, AIRCREW INTEGRATED	
					FIGURE 1. HELMET SYSTEM, AIRCREW INTEGRATED	
1	PEOOO	8415-01-394-6474	81996	1680-01-ALSE-101-1	Helmet System, Aircrew Integrated UOC:SZ1	1
1	PEOOO	8415-01-394-6474	81996	1680-01-ALSE-101-2	Helmet System, Aircrew Integrated UOC:SZ2	1
1	PEOOO	8415-01-394-6474	81996	1680-01-ALSE-101-3	Helmet System, Aircrew Integrated UOC:SZ3	1
1	PEOOO	8415-01-394-6474	81996	1680-01-ALSE-101-4	Helmet System, Aircrew Integrated UOC:SZ4	1
1	PEOOO	8415-01-394-6474	81996	1680-01-ALSE-101-5	Helmet System, Aircrew Integrated UOC:SZ5	1
1	PEOOO	8415-01-394-6474	81996	1680-01-ALSE-101-6	Helmet System, Aircrew Integrated UOC:SZ6	1
2	PAOZZ		81996	1680-ALSE-160-3	. Cable, Assembly, Spec UOC:SZ1-SZ6	1
3	PAOZZ		81996	1680-ALSE-127-1	. Microphone, Linear UOC:SZ1-SZ6	1
4	PAOZZ		97427	94B8811	. Cord Assembly, Elec UOC:SZ1-SZ6	1
5	PEOOO		81996	1680-ALSE-201-1	. Dual Visor Assembly UOC:SZ1-SZ3	1
5	PEOOO		81996	1680-ALSE-201-2	. Dual Visor Assembly UOC:SZ4	1
5	PEOOO		81996	1680-ALSE-201-3	. Dual Visor Assembly UOC:SZ5	1
5	PEOOO		81996	1680-ALSE-201-4	. Dual Visor Assembly UOC:SZ6	1
6	PAOZZ		81996	1680-ALSE-255-1	. Bag, Flyer's Helmet UOC:SZ-SZ6	1
7	PAOZZ		81996	1680-ALSE-121-1	. Visor, Flyer's Helmet, Outer UOC:SZ1-SZ6	1
7	PAOZZ		81996	1680-ALSE-121-2	. Visor, Flyer's Helmet, 3 Notch UOC:SZ1-SZ6	1
8	PAOZZ		81996	1680-ALSE-120-1	. Visor, Flyer's Helmet, Inner UOC:SZ1-SZ6	1
8	PAOZZ		81996	1680-ALSE-120-2	. Visor, Flyer's Helmet, 2 Notch UOC:SZ1-SZ6	1
9	PAOZZ		81996	1680-ALSE-239-1	. Hardware, Kit, Mech UOC:SZ1-SZ6	1
10	KFOZZ		97427	89C7767	. . Cowling, MBU-12P MAS Part Of Kit P/N 1680-ALSE-239-1 ..... UOC:SZ1-SZ6	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE(UOC)	(7) QTY
11	KFOZZ		97427	89B7740	. . Strap, Oxygen Mask Part Of Kit P/N 1680-ALSE-239-1 UOC:SZ1-SZ6	4
12	KFOZZ		96906	MS51957-29B	. . SCREW, MACHINE: #6-32 PART OF KIT P/N 1680-ALSE-239-1 UOC:SZ1-SZ6	2
13	KFOZZ		96906	MS51957-31B	. . Screw, Machine:#6-32Part Of Kit P/N 1680-ALSE-239-1 UOC:SZ1-SZ6	2
14	KFOZZ		97427	92A8308	. . Washer Part Of Kit P/N 1680-ALSE-239-1 UOC:SZ1-SZ6	2
15	KFOZZ		97427	80C4839-1	. . Receiver, Jaw Assem Part Of Kit P/N 1680-ALSE-239-1 UOC:SZ1-SZ6	2
16	KFOZZ		97427	89B7828-1	. . Receiver Mounting B Part Of Kit P/N 1680-ALSE-239-1 UOC:SZ1-SZ6	1
17	KFOZZ		97427	89B7828-2	. . Receiver Mounting Part Of Kit P/N 1680-ALSE-239-1 UOC:SZ1-SZ6	1
18	KFOZZ		96906	MS51475-10B	. . Screw, Machine:#8-32 Part Of Kit P/N 1680-ALSE-239-1 UOC:SZ1-SZ6	4
19	KFOZZ		81996	1680-ALSE-165-2	. . Post Part Of Kit P/N 1680-ALSE-239-1 UOC:SZ1-SZ6	4
20	KFOZZ		97427	82A5722	. . Plate, Back Part Of Kit P/N 1680-ALSE-239-1 UOC:SZ1–SZ6	2
21	KFOZZ		96906	MS35335-58	. . Washer, Lock External Part Of Kit P/N 1680-ALSE-239-1 UOC:SZ1-SZ6	4
22	KFOZZ		81996	1680-ALSE-225-1	. . Cable Assembly, Radio Part Of Kit P/N 1680-ALSE-239-1 UOC:SZ1-SZ6	1
23	PAOZZ		54490	5002530	. Mount Assembly UOC:SZ1-SZ6	1
24	PAOZZ		54490	5002610	. Offset Mount Assembly UOC:SZ1-SZ6	1
25	PAOZZ		81996	1680-ALSE-110-1	. Restrictor, Vision UOC:SZ1-SZ6	1
26	PAOZZ		81996	1660EG097	. Adapter, Microphone UOC:SZ1-SZ6	1
27	PAOZZ		97427	94C8766	. Adapter, Microphone UOC:SZ1-SZ6	1
28	PAOZZ		97427	6011-5	. Interface Unit, Communication UOC:SZ1-SZ6	1
29	PAOZZ		97427	1680-ALSE-194-10	. Field Change Kit UOC:SZ1-SZ6	1
30	PAOOO		81361	5-1-2873-10	. Lining, Helmet, Shock (TPL) M45 UOC:XX Small	1
30	PAOOO		81361	5-1-2873-20	. Lining, Helmet, Shock (TPL) M45 UOC:X Small	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE(UOC)	(7) QTY
30	PAOOO		81361	5-1-2873-30	. Lining, Helmet, Shock (TPL) M45 ..... UOC:Small	1
30	PAOOO		81361	5-1-2873-40	. Lining, Helmet, Shock (TPL) M45 ..... UOC:Medium	1
30	PAOOO		81361	5-1-2873-50	. Lining, Helmet, Shock (TPL) M45 ..... UOC:Large	1
30	PAOOO		81361	5-1-2873-60	. Lining, Helmet, Shock (TPL) M45 ..... UOC:X Large	1

END OF FIGURE

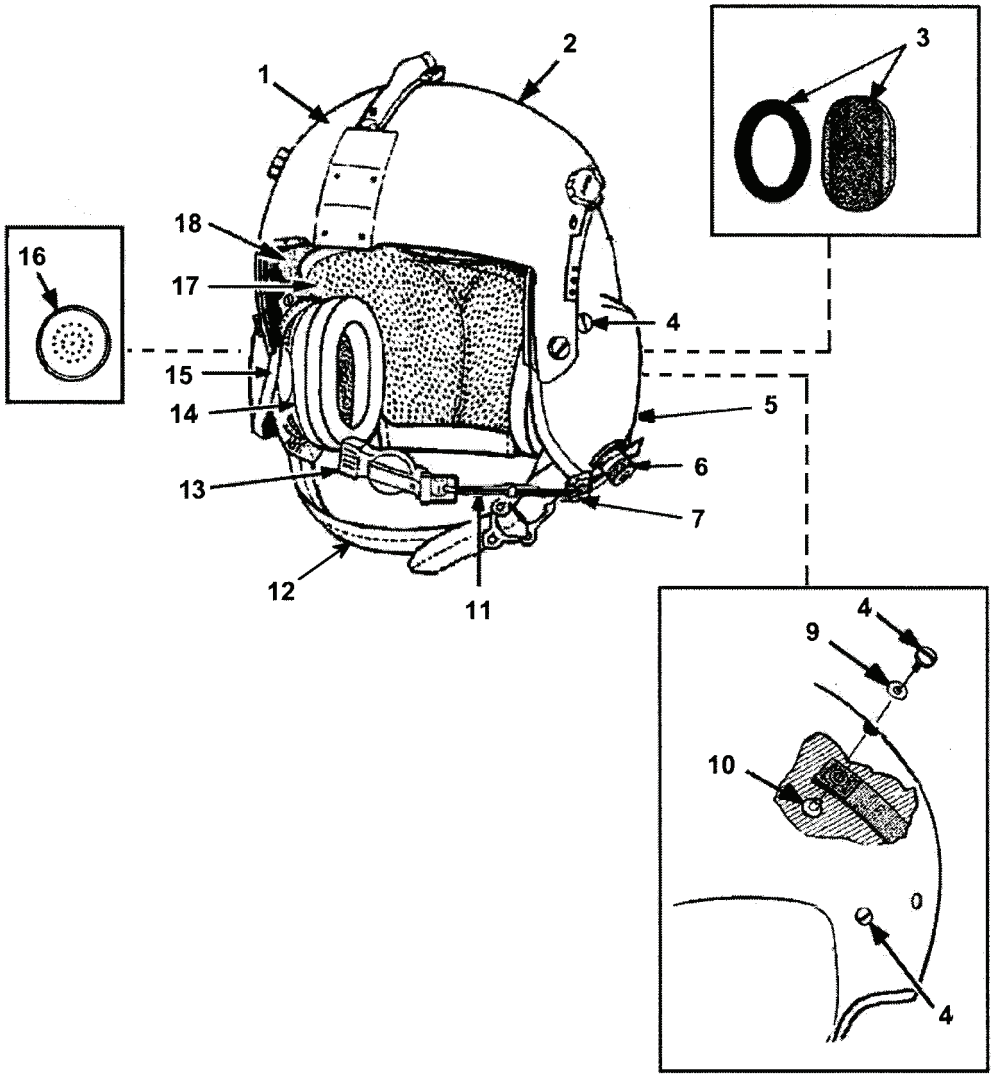

Figure 2. Helmet Assembly

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE(UOC)	(7) QTY
					GROUP 0102	
					HELMET ASSEMBLY NHA FIG 1	
					FIGURE 2. HELMET ASSEMBLY	
1	PEOOO		81996	1680-ALSE-101-1	Helmet Assembly UOC:SZ1	1
1	PEOOO		81996	1680-ALSE-101-2	Helmet Assembly UOC:SZ2	1
1	PEOOO		81996	1680-ALSE-101-3	Helmet Assembly UOC:SZ3	1
1	PEOOO		81996	1680-ALSE-101-4	Helmet Assembly UOC:SZ4	1
1	PEOOO		81996	1680-ALSE-101-5	Helmet Assembly UOC:SZ5	1
1	PEOOO		81996	1680-ALSE-101-6	Helmet Assembly UOC:SZ6	1
2	PAOOO		81996	1680-ALSE-200-1	. . Dual Visor Assembly UOC:SZ1-SZ6	1
3	PAOZZ		81996	1680-ALSE-139-1	. . Spacer Kit, Earcup, Flying UOC:SZ1-SZ6	1
4	PAOZZ		81996	1680-ALSE-274-9	. . Screw, Machine UOC:SZ1-SZ6	6
5	PAOZZ		81996	1680-ALSE-105-1	. . Shell, Flyer's Helmet UOC:SZ1-SZ3	1
5	PAOZZ		81996	1680-ALSE-105-2	. . Shell, Flyer's Helmet UOC:SZ4	1
5	PAOZZ		81996	1680-ALSE-105-3	. . Shell, Flyer's Helmet UOC:SZ5	1
5	PAOZZ		81996	1680-ALSE-105-4	. . Shell, Flyer's Helmet UOC:SZ6	1
6	PAOZZ		81996	1680-ALSE-163-1	. . Stuffing Tube (Sab) UOC:SZ1-SZ6	1
7	PAOZZ		81996	1680-ALSE-164-1	. . Boom, Microphone UOC:SZ1-SZ6	1
9	PAOZZ		81996	1680-ALSE-166-1	. . Washer, Spring Tension UOC:SZ1-SZ6	6
10	PAOZZ		81996	1680-ALSE-165-2	. . Post UOC:SZ1-SZ6	5
11	PAOZZ		97427	1680-ALSE-225-1	. . Cable Assembly Radio UOC:SZ1-SZ6	1
11	PAOZZ		81996	1680-ALSE-198-1	. . Cable Assembly Elect UOC:SZ1-SZ6	1
12	PAOZZ		81996	1680-ALSE-150-1	. . Strap Assembly, Chin UOC:SZ1-SZ6	1
13	PAOZZ		81996	1680-ALSE-199-1	. . Microphone Element UOC:SZ1-SZ6	1
14	PAOOO		81996	1680-ALSE-170-1	. . Earcup Assembly UOC:SZ1-SZ6	2
15	PAOZZ		81996	1680-ALSE-107-1	. . Beading Edge UOC:SZ1-SZ6	1
16	PAOZZ		81996	1680-ALSE-126-1	. . Earphone UOC:SZ1-SZ6	2

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE(UOC)	(7) QTY
17	PAOOO		81996	1680-ALSE-130-1	. . Lining, Helmet, Shock (TPL) UOC:SZ1	1
17	PAOOO		81996	1680-ALSE-130-2	. . Lining, Helmet, Shock (TPL) UOC:SZ2	1
17	PAOOO		81996	1680-ALSE-130-3	. . Lining, Helmet, Shock (TPL) UOC:SZ3	1
17	PAOOO		81996	1680-ALSE-130-4	. . Lining, Helmet, Shock (TPL) UOC:SZ4	1
17	PAOOO		81996	1680-ALSE-130-5	. . Lining, Helmet, Shock (TPL) UOC:SZ5	1
17	PAOOO		81996	1680-ALSE-130-6	. . Lining, Helmet, Shock (TPL) UOC:SZ6	1
17	PAOOO		81361	5-1-2873-10	. . Lining, Helmet, Shock (TPL) M45 UOC:XX Small	1
17	PAOOO		81361	5-1-2873-20	. . Lining, Helmet, Shock (TPL) M45 UOC:X Small	1
17	PAOOO		81361	5-1-2873-30	. . Lining, Helmet, Shock (TPL) M45 UOC:Small	1
17	PAOOO		81361	5-1-2873-40	. . Lining, Helmet, Shock (TPL) M45 UOC:Medium	1
17	PAOOO		81361	5-1-2873-50	. . Lining, Helmet, Shock (TPL) M45 UOC:Large	1
17	PAOOO		81361	5-1-2873-60	. . Lining, Helmet, Shock (TPL) M45 UOC:X Large	1
18	PAOZZ		81996	1680-ALSE-112-1	. . Lining,Helmet,Shock UOC:SZ1	1
18	PAOZZ		81996	1680-ALSE-112-2	. . Lining,Helmet,Shock UOC:SZ2	1
18	PAOZZ		81996	1680-ALSE-112-3	. . Lining,Helmet,Shock UOC:SZ3	1
18	PAOZZ		81996	1680-ALSE-112-4	. . Lining,Helmet,Shock UOC:SZ4	1
18	PAOZZ		81996	1680-ALSE-112-5	. . Lining,Helmet,Shock UOC:SZ5	1
18	PAOZZ		81996	1680-ALSE-112-6	. . Lining,Helmet,Shock UOC:SZ6	1
	PAOZZ		81996	1680-ALSE-109-1	. . Pad Set, Fitting, Flying (Not Shown) UOC:SZ1-SZ6	1
	PAOZZ		81996	1680-ALSE-115-1	. . Cap Plug, Protective (Not Shown) UOC:SZ1-SZ6	1

END OF FIGURE

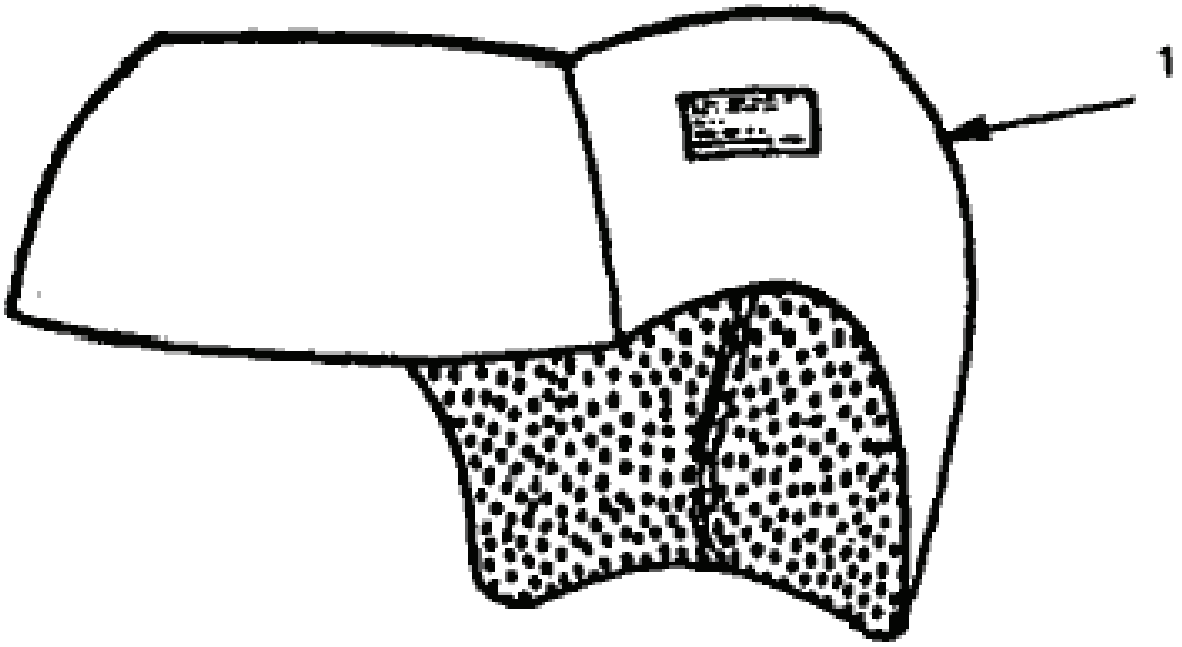

Figure 3. Lining, Helmet, Shock, (TPL) Liner, Helmet,Cloth

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE(UOC)	(7) QTY
					GROUP 0103	
					LINING, HELMET, SHOCK, (TPL) LINER, HELMET,CLOTH NHA FIG 2	
					FIGURE 3. LINING, HELMET, SHOCK, (TPL) LINER, HELMET,CLOTH	
1	PAOZZ		81996	1680-ALSE-131-1	Liner, Helmet, Cloth UOC:SZ1	1
1	PAOZZ		81996	1680-ALSE-131-2	Liner, Helmet, Cloth UOC:SZ2	1
1	PAOZZ		81996	1680-ALSE-131-3	Liner, Helmet, Cloth UOC:SZ3	1
1	PAOZZ		81996	1680-ALSE-131-4	Liner, Helmet, Cloth UOC:SZ4	1
1	PAOZZ		81996	1680-ALSE-131-5	Liner, Helmet, Cloth UOC:SZ5	1
1	PAOZZ		81996	1680-ALSE-131-6	Liner, Helmet, Cloth UOC:SZ6	1
					END OF FIGURE	

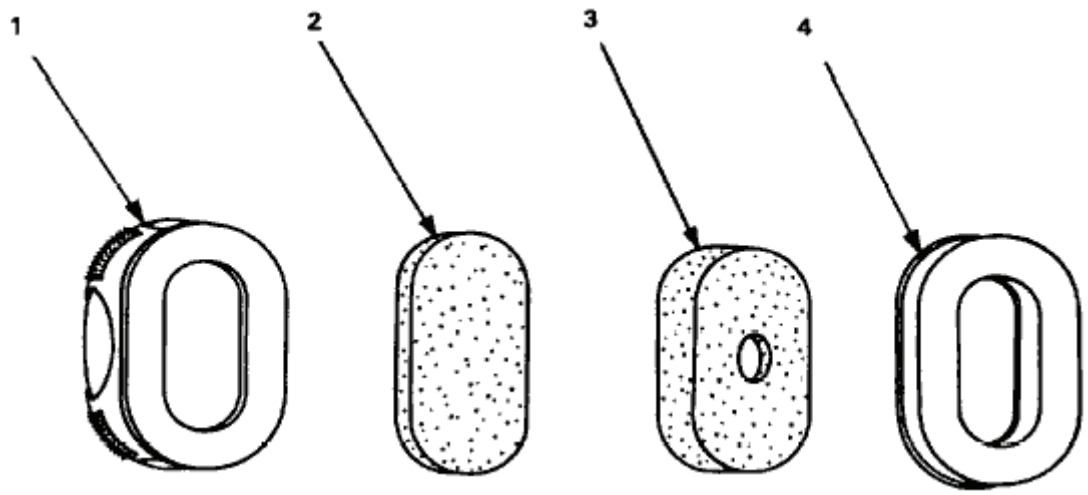

Figure 4. Shell, Earphone,Assembly

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE(UOC)	(7) QTY
					GROUP 0104	
					SHELL, EARPHONE,ASSEMBLY NHA FIG 2	
					FIGURE 4. SHELL, EARPHONE,ASSEMBLY	
	PAOZZ		81996	1680-ALSE-170-1	Shell Earphone Assembly ..... UOC:	1
1	PAOZZ		81996	1680-ALSE-171-1	. Shell, Earphone UOC:SZ1-SZ6	1
2	PAOZZ		81996	1680-ALSE-174-1	. Cushion, Ear UOC:SZ1-SZ6	1
3	PAOZZ		81996	1680-ALSE-176-1	. Receiver Retainer UOC:SZ1-SZ6	1
4	PAOZZ		97427	75C2990	. Seal Assembly, Earpad UOC:SZ1-SZ6	1
					END OF FIGURE	

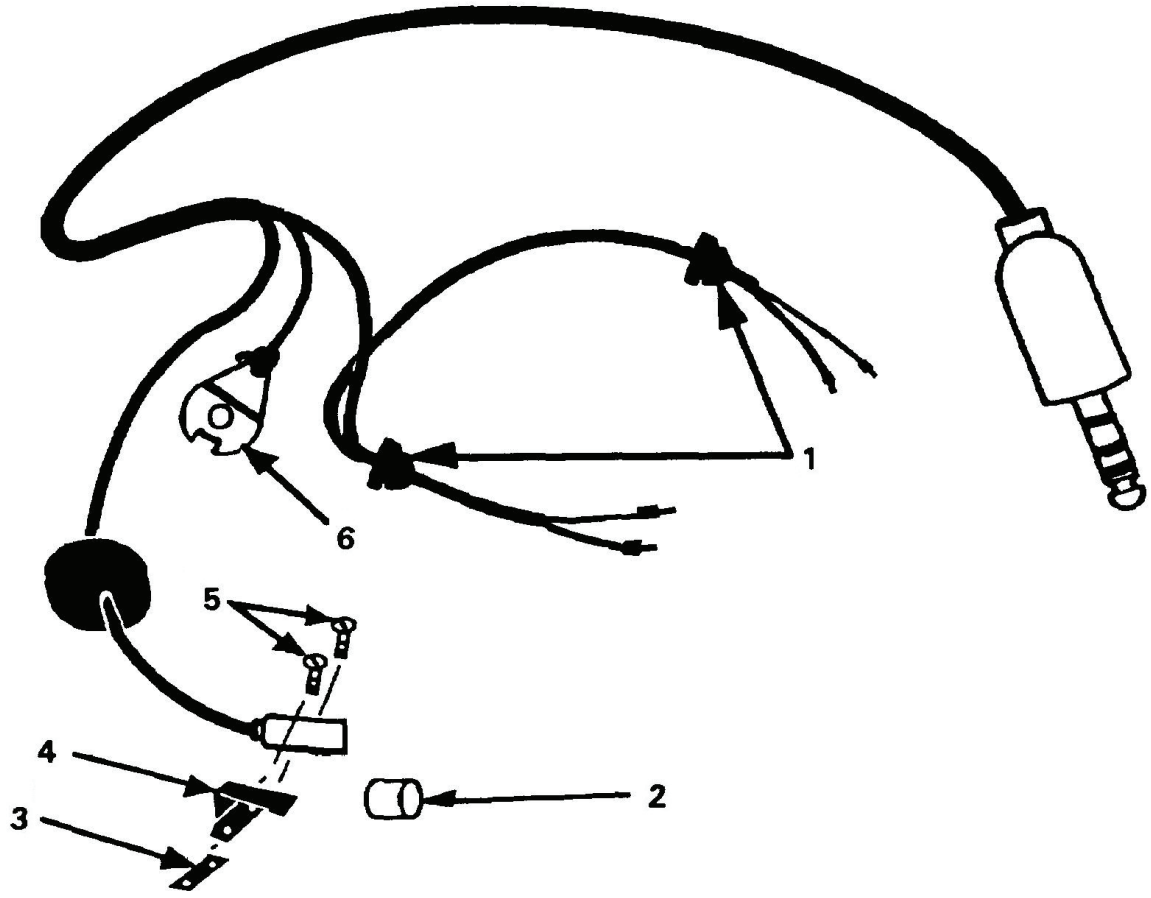

Figure 5. Cord Assembly, Electrical

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE(UOC)	(7) QTY
					GROUP 0105	
					CORD ASSEMBLY, ELECTRICAL NHA FIG 2	
					FIGURE 5. CORD ASSEMBLY, ELECTRICAL	
	PAOZZ		81996	1680-ALSE-210-1	Cord Assembly, Elect	1
1	PAOZZ		81996	1680-ALSE-169-1	. Grommet, Nonmetallic UOC:SZ1-SZ6	2
2	PAOZZ		81996	1680-ALSE-183-1	. Insulation Sleeving UOC:SZ1-SZ6	1
3	PAOZZ		81996	1680-ALSE-187-1	. Plate, Mending UOC:SZ1-SZ6	1
4	PAOZZ		97427	69B2035	. Bracket, Angle UOC:SZ1-SZ6	1
5	PAOZZ		81996	1680-ALSE-186-1	. Screw, Machine UOC:SZ-SZ6	2
6	PAOZZ		81996	1680-ALSE-184-1	. Plate Retaining, Ele	1
					END OF FIGURE	

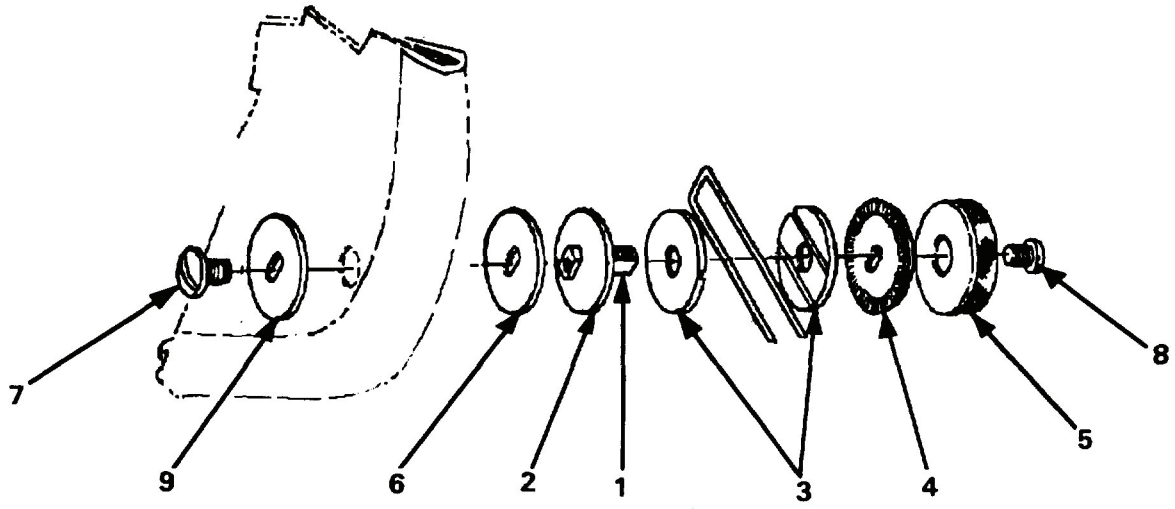

Figure 6. Stuffing Tube (SAB)

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE(UOC)	(7) QTY
					GROUP 0106	
					STUFFING TUBE (SAB) NHA FIG 2	
					FIGURE 6. STUFFING TUBE (SAB)	
	PAOZZ		81996	1680-ALSE-163-1	Stuffing Tube (SAB) UOC:SZ1-SZ6	1
1	PAOZZ		97427	78D4056-1	. Stud, Boom Support UOC:SZ1-SZ6	1
2	PAOZZ		97427	78D4056-2	. Washer (Boom Support) UOC:SZ1-SZ6	1
3	PAOZZ		97427	78D4056-3	. Washer, Grooved UOC:SZ1-SZ6	2
4	PAOZZ		97427	78D4056-4	. Washer, Special UOC:SZ1-SZ6	1
5	PAOZZ		97427	78D4056-5	. Nut Knurled UOC:SZ1-SZ6	1
6	PAOZZ		81996	1680-ALSE-179-1	. Washer Flat UOC:SZ1-SZ6	1
7	PAOZZ		97427	65A1560B	. Screw, Truss-Head, #10 ..... UOC:SZ1-SZ6	1
8	PAOZZ		96906	MS51957-41B	. Screw, Pan-Head #8-32 ..... UOC:SZ1-SZ6	1
9	PAOZZ		81996	1680-ALSE-177-1	. Washer, Swivel Assy UOC:SZ1-SZ6	1
					END OF FIGURE	

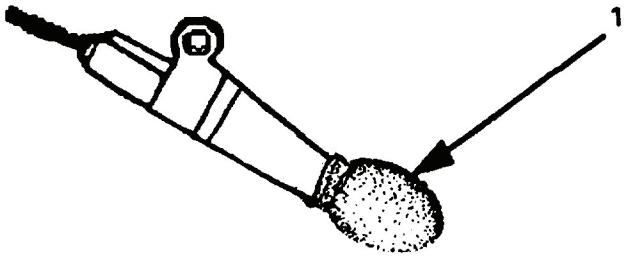

Figure 7. Microphone Shield

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE(UOC)	(7) QTY
					GROUP 0107	
					MICROPHONE SHIELD NHA FIG 2	
					FIGURE 7. MICROPHONE SHIELD	
1	PAOZZ		97427	94A8938	Shield, Microphone UOC:SZ1-SZ6	1
					END OF FIGURE	

SUPPORTING INFORMATION

HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

NSN 8415-01-394-6474 EIC: N/A

NATIONAL STOCK NUMBER INDEX

STOCK NUMBER	FIG.	ITEM
1550-01-538-9256	1	1

SUPPORTING INFORMATION

HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

NSN 8415-01-394-6474 EIC: N/A

PART NUMBER INDEX

PART NUMBER	FIG.	ITEM

FIELD MAINTENANCE

HELMET SYSTEM, AIRCREW INTEGRATED (HGU-56/P)

NSN 8415-01-394-6474 EIC: N/A

COMPONENTS OF END ITEM (COEI) AND BASIC ISSUE ITEMS (BII) LISTS

COMPONENTS OF END ITEM (COEI) AND BASIC ISSUE ITEMS (BII) LISTS INTRODUCTION

Scope

N/A.

General

The COEI and BII information is divided into the following lists:

- Components of End Item (COEI). This list is for information purposes only and is not authority to requisition replacements. These items are part of the . As part of the end item, these items must be with the end item whenever it is issued or transferred between property accounts. Items of COEI are removed and separately packaged for transportation or shipment only when necessary. Illustrations are furnished to help you find and identify the items.
- Basic Issue Items (BII). These essential items are required to place the in operation, operate it, and to do emergency repairs. Although shipped separately, BII must be with the during operation and when it is transferred between property accounts. Listing these items is your authority to request/requisition them for replacement based on authorization of the end item by the TOE/MTOE. Illustrations are furnished to help you find and identify the items.

Explanation of Columns in the COEI List and BII List

Column (1) ILLUS Number. Gives you the number of the item illustrated.

Column (2) National Stock Number (NSN). Identifies the stock number of the item to be used for requisitioning purposes.

Column (3) Description, CAGEC, and Part Number. Identifies the Federal item name (in all capital letters) followed by a minimum description when needed. The stowage location of COEI and BII is also included in this column. The last line below the description is the CAGEC (Commercial and Government Entity Code) (in parentheses) and the part number.

Column (4) Usable On Code. When applicable, gives you a code if the item you need is not the same for different models of equipment. (Add the following only as applicable. Replace Xs with appropriate codes and model numbers.) These codes are identified below:

CODE	USED ON
XXX	Model XXX
XXX	Model XXXX
XXX	Model XXXXX

Column (5) Unit of Issue (U/I). Indicates the physical measurement or count of the item as issued per the National Stock Number shown in column (2).

Column (6) Qty Rqr. Indicates the quantity required.

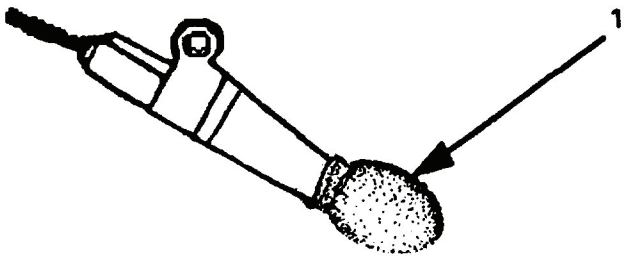

Figure 1. .

Table 1. Components Of End Item List.

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION CAGEC AND PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
N/A		N/A ()			

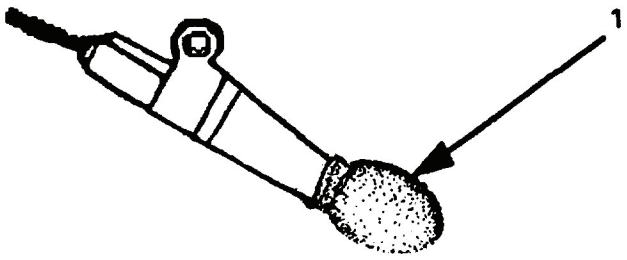

Figure 2. .

Table 2. Basic Issue Items List.

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION CAGEC AND PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
				EA	