

TECHNICAL BULLETIN



**INSTALLATION INSTRUCTIONS FOR
INTERCOMMUNICATION SET, VEHICULAR
AN/VIC-3(V)16
(NSN 5830-01-462-3617) (EIC: NA)
IN A
MULTIPLE LAUNCH ROCKET SYSTEM
(M270 / M270A1)**

Approved for public release; distribution is unlimited.

HEADQUARTERS, DEPARTMENT OF THE ARMY

1 MAY 2000

TECHNICAL BULLETIN

NO. 11-5830-263-20-16

HEADQUARTERS,
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 1 MAY 2000

**INSTALLATION INSTRUCTIONS FOR
INTERCOMMUNICATION SET, VEHICULAR
AN/VIC-3(V)16
(NSN 5830-01-462-3617) (EIC: NA)
IN A
MULTIPLE LAUNCH ROCKET SYSTEM (M270 / M270A1)**

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes, or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms) or DA Form 2028-2 located in back of this manual direct to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: AMSEL-LC-LEO-D-CS-CFO, Fort Monmouth, New Jersey 07703-5007. The fax number is 732-532-1413, DSN 992-1413. You may also email your recommendations to AMSEL-LC-LEO-PUBS-CHG@cecom3.monmouth.army.mil

In either case a reply will be furnished direct to you.

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.

TABLE OF CONTENTS

SUBJECT	PAGE
SECTION I. INTRODUCTION.....	1
1.1 SCOPE.....	1
1.2 GENERAL INFORMATION.....	1
1.3 CONSOLIDATED INDEX OF ARMY PUBLICATIONS	2
1.4 MAINTENANCE FORMS, RECORDS, AND REPORTS.....	2
1.5 CORROSION PREVENTION AND CONTROL	2
SECTION II. PREPARATION FOR INSTALLATION.....	3
2.1 PREPARING THE VEHICLE	3
2.2 EXPENDABLE/DURABLE ITEMS.....	4
2.3 TOOLS AND TEST, MEASUREMENT AND DIAGNOSTIC EQUIPMENT	4
2.4 VIS COMPONENTS (PARTS LIST)	5
2.5 PRE-INSTALLATION STEPS AND PROCEDURES	8

TABLE OF CONTENTS (continued)

SUBJECT	PAGE
SECTION III. FFCS AND RIT CREW STATION/RADIO SWITCH SETTING PROCEDURES	9
3.1 FFCS CREW STATION ADDRESS SWITCH SETTING PROCEDURES	9
3.2 RIT RADIO SELECTION SWITCH SETTING PROCEDURES	9
SECTION IV. INSTALLATION INSTRUCTIONS	10
4.1 EQUIPMENT LOCATION AND SYSTEM CONFIGURATION DIAGRAMS	10
4.2 MASTER CONTROL STATION (MCS) INSTALLATION	12
4.3 FULL FUNCTION CREW STATION (FFCS) INSTALLATION	14
4.4 RADIO INTERFACE TERMINAL (RIT) INSTALLATION	16
4.5 MONITOR ONLY STATION (MOS) INSTALLATION	16
4.6 LOUDSPEAKER (LS) INSTALLATION	16
4.7 VIS CABLING INSTALLATION	18
SECTION V. POST-INSTALLATION	25
5.1 POST-INSTALLATION CHECKOUT PROCEDURES	25
5.2 POST-INSTALLATION OPERABILITY VERIFICATION PROCEDURES	25
APPENDIX A - REFERENCES	27
A-1. SCOPE	27
A-2. FORMS	27
A-3. TECHNICAL MANUALS	27
A-4. MISCELLANEOUS PUBLICATIONS	28

LIST OF TABLES

Number	Title	Page
Table 2-1.	Retained Items List	3
Table 2-2.	Expendable/Durable Items	4
Table 2-3.	Tools and Test, Measurement and Diagnostic Equipment	4
Table 2-4.	VIS Components (Parts List)	5
Table 4-1.	MCS Installation Parts	12
Table 4-2.	Chief's, Gunner's, and Driver's FFCS Installation Parts	14

LIST OF FIGURES

Number	Title	Page
Figure 2-1.	Illustrated Parts List	6
Figure 2-2.	Illustrated Parts List - Cables	7
Figure 3-1.	FFCS Crew Station Address Switch	9
Figure 4-1.	Equipment Location Diagram	10
Figure 4-2.	System Configuration Diagram	11
Figure 4-3.	MCS Installation	13
Figure 4-4.	Chief's, Driver's, and Gunner's FFCS Installation	15
Figure 4-5.	Loudspeaker Installation	16
Figure 4-6.	MCS and Gunner's FFCS Cabling	19
Figure 4-7.	Chief's FFCS Cabling	21
Figure 4-8.	Driver's FFCS Cabling	23
Figure 4-9.	Cable Loop Clamp(s) Mounted to Standoff or Ceiling	24
Figure 4-10.	Cable Loop Clamp Mounted to Shelf Wall	24

Section I. INTRODUCTION

1.1 SCOPE

This technical bulletin provides installation instructions for the Intercommunication Set, Vehicular AN/VIC-3(V), hereinafter referred to by its common name, VIS (Vehicular Intercommunication System). There are many current and future variations of this system, e.g. AN/VIC-3(V)1, (V)2, etc., designed for specific vehicles and/or platforms, each with its own unique technical bulletin. The version this technical bulletin covers and the vehicle/platform it is being installed in is:

“AN/VIC-3(V)16”

into the

“Multiple Launch Rocket System (M270 / M270A1)”

The information contained in this technical bulletin is the official authorization to perform the installation of the VIS at the Unit Maintenance Level.

1.2 GENERAL INFORMATION

a. Reference Publications

There are two manuals associated with the VIS, TM 11-5830-263-10 Operator's Manual, and TM 11-5830-263-20&P Unit Maintenance Manual (Including Repair Parts and Special Tools List (RPSTL)). Additionally, for periodic updated information on the VIS and its specific components refer to the CECOM Supply Bulletin and The Preventive Maintenance Monthly.

b. Purpose of Equipment

The AN/VIC-3(V) or VIS is an intercommunication and radio-control system designed for ground mobile combat vehicles. Digital audio enhances speech quality and intelligibility. Headsets that incorporate active noise reduction (ANR) circuitry increase the effectiveness of vehicle communications. They offer increased hearing protection in the noisy environment of combat vehicles.

c. Equipment Components

The AN/VIC-3(V) or VIS versions are configured for specific vehicles and/or platforms. When installed in a vehicle/platform it loses its identity. VIS is designed to replace the AN/VIC-1 or -2, in some cases utilizing the existing mounting hardware and brackets used by the AN/VIC-1 or -2. VIS consists of LRU's (Line Replaceable Units (Boxes)) (the type and quantity of which vary depending upon the specific vehicle and/or platform), various types of cables (highway, power, alarm, etc.), headsets (the type and quantity of which vary depending upon the specific vehicle and/or platform), brackets, and mounting hardware (nuts, bolts, screws, etc.) for securing both the LRU's and brackets. Every vehicle/platform contains one Master Control Station (MCS), a number of Full Function Crew Stations (FFCS), and a Permanent Magnet Loudspeaker (LS). Depending upon the vehicle/platform VIS is being installed in, it may also contain Radio Interface Terminal(s) (RIT) and Monitor Only Station(s) (MOS).

1.3 CONSOLIDATED INDEX OF ARMY PUBLICATIONS

Refer to the latest issue of DA PAM 25-30 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.

1.4 MAINTENANCE FORMS, RECORDS, AND REPORTS

a. Reports of Maintenance and Unsatisfactory Equipment

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pam 738-750, as contained in Maintenance Management Update.

b. Reporting of Item and Packaging Deficiencies

Fill out and forward SF364 (Report of Discrepancy (ROD)) as prescribed in AR 735-11-2/DLAR 4140.55/SECNAVINST 4355.18/AFR400-54/MCO 4430.3J.

c. Transportation Discrepancy Report (TDR)(SF361)

Fill out and forward Transportation Discrepancy Report (TDR) (SF361) as prescribed in AR 55-38/NAVSUPINST 4610.33C/AFR 75-18/MCO P4610.19D/DLAR 4500.15.

1.5 CORROSION PREVENTION AND CONTROL

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 problems can be corrected and improvements can be made to prevent the problem in the future.

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 may be a corrosion problem.

If a corrosion problem is identified, it can be reported using SF 368, Product Quality Deficiency Report (QDR). 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 the address specified in DA PAM 738-750, Functional User's Manual for the Maintenance Management System (TAMMS).

SECTION II. PREPARATION FOR INSTALLATION

Prior to preparing the vehicle for installation or actually installing the VIS this technical bulletin should be read in its entirety.

2.1 PREPARING THE VEHICLE

- a. To prepare the vehicle for installation, ensure that the site includes adequate lighting. Inspect the vehicle for damage that could effect installation. Have any such damage repaired before installing VIS.
- b. Installing the AN/VIC-3(V) into the vehicle/platform sometimes requires retaining the existing mounting hardware (and brackets) that were used to secure the AN/VIC-1 or -2 systems being replaced. Table 2-1 lists the items, if any, to be retained prior to installation.

Table 2-1. Retained Items List

Item Description and Part Number	Quantity
Retain interface plates and support brackets for FFCS and MCS for reinstallation of VIS	