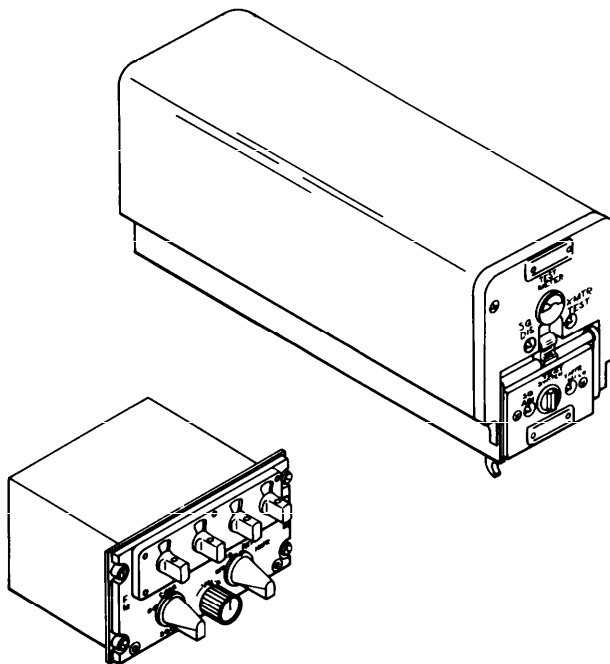


TECHNICAL MANUAL

AVIATION INTERMEDIATE MAINTENANCE MANUAL



PRINCIPLES OF OPERATION PAGE 1-4

PERFORMANCE TESTS PAGE 2-2

TROUBLESHOOTING PAGE 2-50

ALINEMENT/ADJUSTMENTS PAGE 2-126

REPAIR AND REPLACEMENT PAGE 2-150

RADIO SET AN/ARC-131 (NSN 5821-00-937-4686)

HEADQUARTERS, DEPARTMENT OF THE ARMY

13 SEPTEMBER 1985

Technical Manual

No. 11-5820-670-30

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 13 September 1985

AVIATION INTERMEDIATE MAINTENANCE MANUAL

**RADIO SET AN/ARC-131
(NSN 5821-00-937-4686)**

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 the back of this manual direct to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: AMSEL-ME-MP, Fort Monmouth, New Jersey 07703-5007. A reply will be furnished direct to you.

		Page
CHAPTER 1	INTRODUCTION	1-1
Section I	General Information	1-1
II	Equipment Description	1-3
III	Principles of Operation	1-4
CHAPTER 2	MAINTENANCE	2-1
Section 1	Repair Parts, Special Tools, and TMDE	2-1
II	Performance Tests	2-2
III	Troubleshooting	2-50
IV	Alinement and Adjustment Procedures	2-126
V	Repair and Replacement Procedures	2-150
APPENDIX A	REFERENCES	A-1
B	EXPENDABLE SUPPLIES AND MATERIALS LIST	B-1
GLOSSARY		Glossary 1
INDEX		Index 1
FOLDOUTS		Located in Rear of Manual

* This manual supersedes TM 11-5820-670-34 Direct Support and General Support (Aviation Intermediate) Maintenance Manual Radio Set AN/ARC-131, 16 February 1978.

HOW TO USE THIS MANUAL

This manual is designed to help you maintain Receiver-Transmitter, Radio RT-823/ARC-131 and Control, Radio Set C-7088/ARC-131 which are components of Radio Set AN/ARC-131.

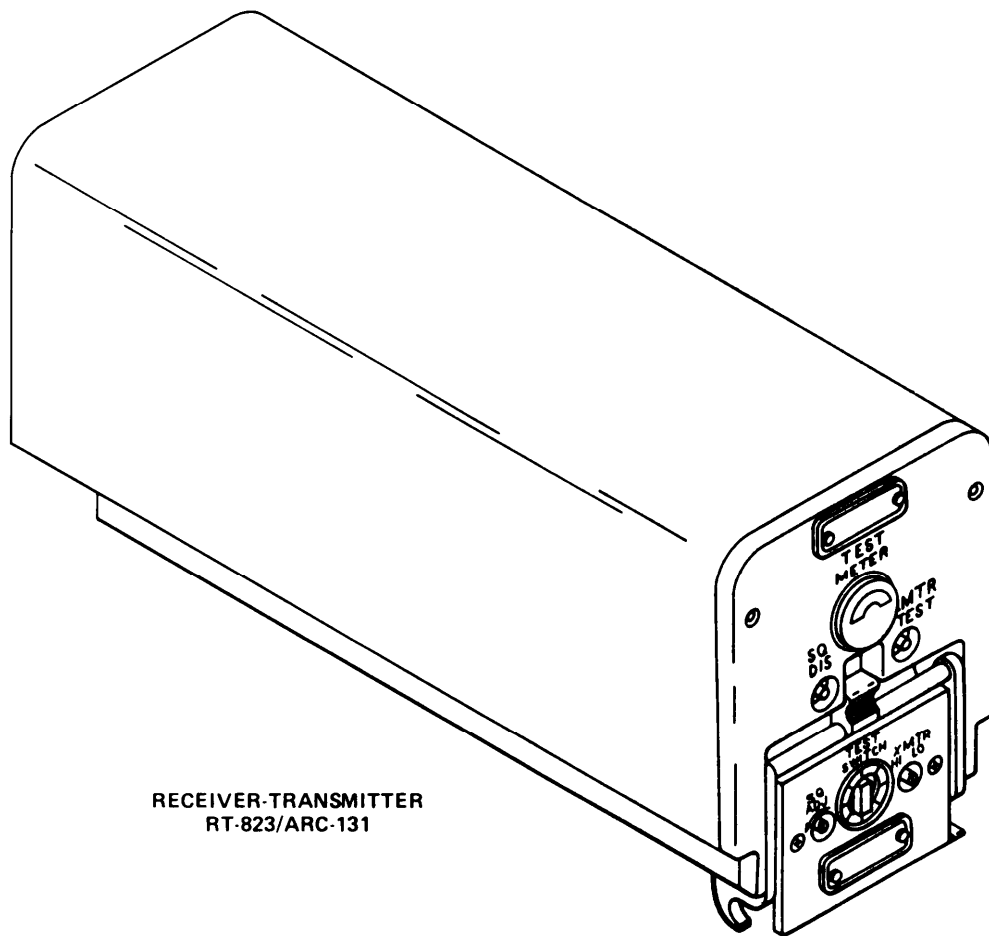
A front cover index is provided for quick reference to important information contained in this manual. Each item appearing on the front cover is boxed and identified by topic, with the page number where the information is located.

Paragraphs in this manual are numbered by chapter and order of appearance within a chapter. A subject index appears at the beginning of each section to help you find the exact paragraph you are looking for.

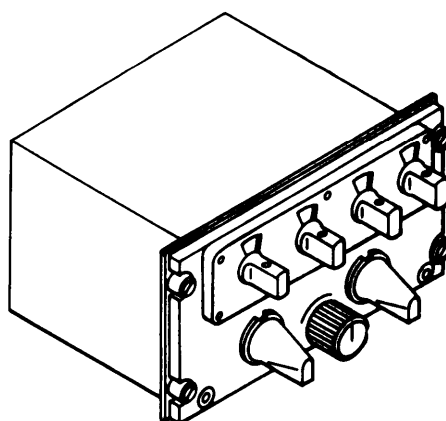
Measurements in this manual are given in both US standard and metric units. A metric to US standard conversion chart can be found in the back of this manual.

There are warnings at the beginning of this manual. Before doing maintenance on the equipment, learn the warnings and always follow safety procedures and precautions.

Step by step procedures with illustrations give you all the necessary information needed to maintain the equipment. The steps must be followed in exact sequence. Do not attempt any shortcuts.



RECEIVER-TRANSMITTER
RT-823/ARC-131



RADIO SET CONTROL
C-7088/ARC-131

EL1AT231

Radio Set AN/ARC-131

CHAPTER 1

INTRODUCTION

Subject	Section	Page
General Information	I	1-1
Equipment Description	II	1-3
Principles of Operation	III	1-4

OVERVIEW

This chapter will familiarize you with Radio Set AN/ARC-131. It contains general information about the equipment, references to pertinent forms and publications, equipment specifications, and principles of operation.

Section I GENERAL INFORMATION

Subject	Para	Page
Scope	1-1	1-1
Maintenance Forms, Records, and Reports	1-2	1-1
Reporting Equipment Improvement Recommendations (EIR)	1-3	1-2
Consolidated Index of Army Publications and Blank Forms	1-4	1-2
Destruction of Army Electronics Materiel to Prevent Enemy Use	1-5	1-2
Administrative Storage	1-6	1-2
Nomenclature Cross-Reference List	1-7	1-2
Safety, Care, and Handling	1-8	1-3

1-1. SCOPE.

Type of Manual: Direct support maintenance manual.

Equipment Names and Model Numbers: Receiver-Transmitter Radio RT-823/ARC-131 and Control, Radio Set C-7088/ARC-131, parts of Radio Set AN/ARC-131.

Purpose of Equipment: To provide two-way, voice communication between aircraft in flight and aircraft and ground stations, frequency modulated (fm) in the 30.00 to 75.95 MHz frequency range.

1-2. MAINTENANCE FORMS, RECORDS, AND REPORTS.

REPORT OF MAINTENANCE AND UNSATISFACTORY EQUIPMENT

Department of the Army forms and procedures used for equipment maintenance will be those prescribed in DA Pam 736-750 as contained in Maintenance Management Update.

REPORT OF PACKAGING AND HANDLING DEFICIENCIES

Fill out and forward SF 364 (Report of Discrepancy (ROD)) as prescribed in AR 735-11-2/DLAR 4140.55/NAVMATINST 4355.73A/AFR 400-54/MCO 4430.3F.