

TECHNICAL MANUAL

**OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT AND
GENERAL SUPPORT MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST)
FOR
DEVIATION CALIBRATOR, 70D2-1MW and 70D2-2MW
(COLLINS RADIO GROUP UNIT)
(NSN 6625-00-450-4277)**

HEADQUARTERS, DEPARTMENT OF THE ARMY

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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 or DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 direct to: Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07703.

In any case, a reply will be furnished direct to you.

This manual is an authentication of the manufacturer's commercial literature which, through usage, has been found to cover the data required to operate and maintain this equipment. Since the manual was not prepared in accordance with military specifications and AR-310-3, the format has not been structured to consider levels of maintenance.

Table of Contents

SECTION		Page
	0. INTRODUCTION	0.1
	1. GENERAL DESCRIPTION	1
	2. UNIT CHARACTERISTICS	2
	3. CIRCUIT DESCRIPTION.....	2
	4. MAINTENANCE	4
	5. PARTS LIST	7
	6. PART NUMBER-NATIONAL STOCK NUMBER CROSS-REFERENCE INDEX ..	11
APPENDICES	A. REFERENCES	A-1
	B. MAINTENANCE ALLOCATION CHART	B-1
	C. DIFFERENCE DATA SHEET	C-1

LIST OF TABLES

Table 1	Unit Identification	2
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LIST OF ILLUSTRATIONS

Figure	Title	
1	70D2-2MW Deviation Calibrator	1
2	Typical Application	2
3	Simplified Block Diagram.	3
4	70D2-() MW, Schematic Diagram	*

* A fold-in page, located in the back of the manual.

SECTION 0. INTRODUCTION

0.1. Scope

This manual describes the 70D2-1MW and 70D2-2MW Deviation Calibrator (fig. 1). Throughout this manual the equipment is referred to as the Deviation Calibrator.

0.2. Indexes of Publications

a. DA Pam 310-4. Refer to the latest issue of DA Pam 310-4 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.

b. DA Pam 310-7. Refer to DA Pam 310-7 to determine whether there are modification work orders (MWO's) pertaining to the equipment.

0.3. 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 described by TM 38-750, The Army Maintenance Management System.

b. *Report of Packaging and Handling Deficiencies.* Fill out and forward DD Form 6 (Packaging Improvement Report) as prescribed in AR 700-58/NAVSUPINST 4030.29/AFR 71-13/MCO P4030.29A and DLAR 4145.8.

c. *Discrepancy in Shipment Report (DISREP) (SF 361).* Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55-38/NAVSUPINST 4610.33B/AFR 75-18/MCO P4610.19C and DLAR 4500.15.

0.4. Reporting Equipment Improvement Recommendations (EIR)

If your 70D2-1MW and 70D2-2MW 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. Tell us why a procedure is hard to perform. Put it on an SF 368 (Quality Deficiency Report). Mail it to Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07703. A reply will be furnished direct to you.

0.5. Administrative Storage

Administrative storage of equipment issued to and used by Army activities shall be in accordance with TM 740-90-1.

0.6. Destruction of Army Electronics Materiel

Destruction of Army electronics materiel to prevent enemy use shall be in accordance with TM 750-244-2.

SECTION 1. GENERAL DESCRIPTION

1.1 Purpose of Unit

The deviation calibrators (figure 1) are normally used with other test equipment to adjust and calibrate the deviation sensitivity of an if. discriminator, which in turn may be used to set the deviation ratio of an associated

transmitter in a microwave system. See figure 2 for a typical application.

The units differ only in the deviation ratio of the calibrated output and the related frequency determining components. See table 1 for unit identification.

1.2 Unit Description

The deviation calibrators are transistorized, etched circuit, self-contained units mounted in a rigid cabinet with a carrying handle. Connectors,

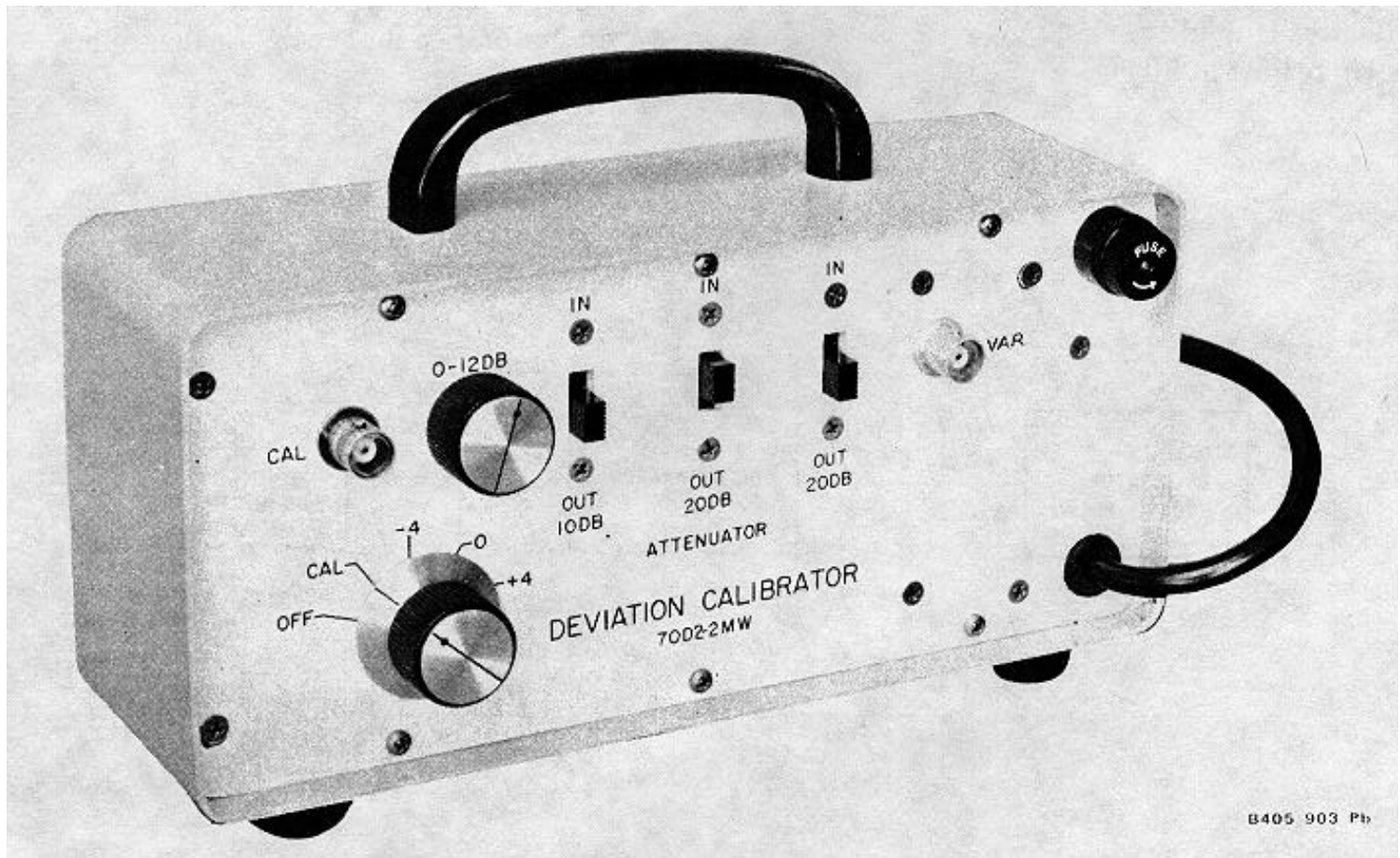


Figure 1. 70D2-2MW Deviation Calibrator.