

TM 9-4931-376-13&P

TECHNICAL MANUAL

OPERATOR'S, AVIATION UNIT, AND AVIATION
INTERMEDIATE MAINTENANCE MANUAL WITH
REPAIR PARTS AND SPECIAL TOOLS LIST
(INCLUDING DEPOT MAINTENANCE REPAIR
PARTS AND SPECIAL TOOLS)

**BORESIGHT CONTROLLER XM34
PART NUMBER 8680400-505
NSN 4931-01-082-1547**

prepared by
Teledyne Systems Company
(17863)
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HEADQUARTERS, DEPARTMENT OF THE ARMY

MAY 81

Operator's, Aviation Unit, and Aviation Intermediate Maintenance Instructions

BORESIGHT CONTROLLER XM34, PART NUMBER 8680400-505

NSN 4931-01-082-1547

Current as of 8 May 1981

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 U.S. Army Armament Materiel Readiness Command, Rock Island, Illinois 61299, ATTN: DRSAR-MAS. A reply will be furnished to you.

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CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Scope. This manual is for use in operating and maintaining Boresight Controller XM34 (figure 1-1), hereinafter also referred to as the boresight controller. This manual provides information to familiarize operator and maintenance personnel with the physical, functional, and operating characteristics of the boresight controller.

1-2. Maintenance Forms and Records. Maintenance forms and procedures used for equipment maintenance will be those prescribed by TM 38-750.

1-3. Administrative Storage. Instructions for administrative storage are given in TM 740-90-1, Administrative Storage of Equipment.

1-4. Destruction of Army Material to Prevent Enemy Use. Instructions for

destruction of Army material to prevent enemy use will be as prescribed in TM 750-244-2.

1-5. Calibration. The boresight controller does not require calibration.

1-6. Reporting Equipment Improvement Recommendations (EIR). EIR can and must be submitted by anyone who is aware of an unsatisfactory condition with the equipment design or use. It is not necessary to show a new design or list a better way to perform a procedure, just simply tell why the design is unfavorable or why a procedure is difficult. EIR may be submitted on SF 368 (Quality Deficiency Report). Mail directly to Us. Army Armament Material Readiness Command, Rock Island, Illinois 91299, ATTN : DRSAR-MAO. A reply will be furnished to you.

Section II. DESCRIPTION AND TABULATED DATA

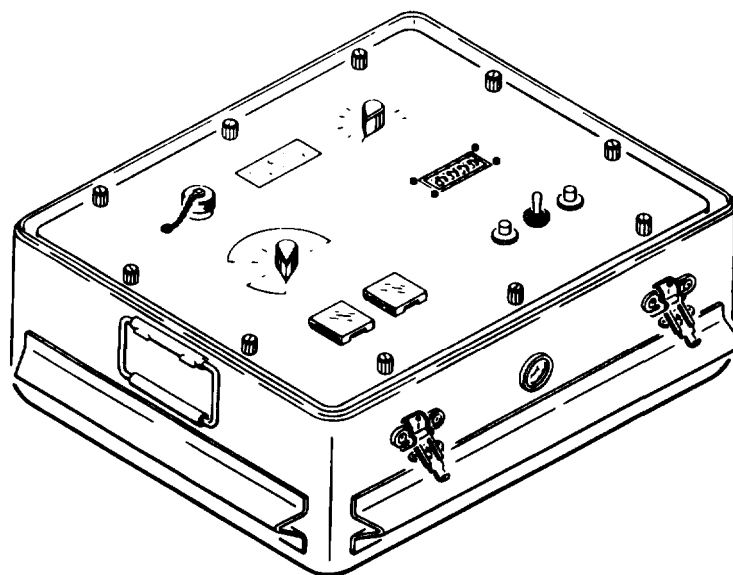
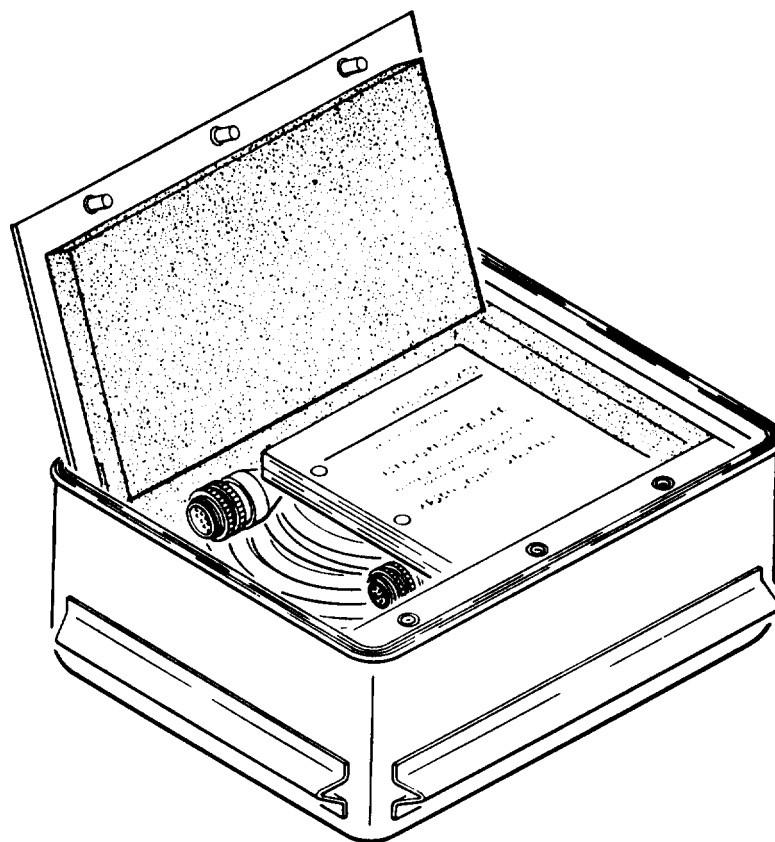
1-7. Description. This section provides purpose of equipment and physical descriptions for the boresight controller, and tabulated data.

1-8. Purpose of Equipment. The boresight controller provides a means for boresight error constants, referred to as offset data during boresighting operations at the helicopter, to be applied to the Fire Control Computer Assembly (FCC) working memory of Digital Fire Control Computer XM22. This data is then applied from the working memory to the Boresight Memory Assembly of XM22 for permanent, nondestructive core storage. The Boresight Memory Assembly is plugged into the FCC J5 connector but is removed and remains with the helicopter

when the FCC is removed and replaced. Should the FCC be replaced, the Boresight Memory Assembly is plugged into the replacement FCC as valid boresight offset data for that particular helicopter. The boresight controller interfaces with the FCC and the Boresight Memory Assembly as described in the following paragraphs.

1-9. Electrical Power and Data Interface. (See figure 1-2.) Cable assembly W1 interconnects electrical power and data between the FCC and boresight controller. Cable assembly W1 provides the following interface functions:

a. FILTERED +28 (+1, -6)V POWER INPUT from the FCC to the boresight controller.



NOTE:
COVER SHOWN REMOVED
AND INVERTED 180°.

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Figure 1-1. Boresight Controller XM34