

TECHNICAL MANUAL

OPERATOR'S MANUAL: DISPLAYS, ARO,

AND ALERT DEFINITIONS

GUIDED MISSILE

AIR DEFENSE SYSTEM

AN/TSQ-73

**This copy is a reprint which includes current
pages from Changes 1 through 14.**

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**OPERATOR MANUAL: DISPLAYS, ARO, AND ALERT DEFINITIONS
GUIDED MISSILE AIR DEFENSE SYSTEM AN/TSQ-73**

Current to Tape Version 34.1

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

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CHAPTER 1

INTRODUCTION

Section I. INTRODUCTION

1-1. Scope. This manual contains the necessary information to operate Air Defense System, Guided Missile AN/TSQ-73 (AN/TSQ-73 system). This manual is one of seven manuals comprising the AN/TSQ-73 system operator's manual listed in table 1-1 and is published for the use and guidance of personnel responsible for operation of the equipment. Refer to TM 9-1430652-10-6 for operational data including an index and a list of terms and abbreviations used in the operator's manual.

1-2. Maintenance Forms and Procedures Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA PAM 738-750 as contained in the Maintenance Management Update.

1-3. Destruction of Army Materiel to Prevent Enemy Use. If capture of this equipment appears imminent, or if the equipment must be abandoned, it should be destroyed to prevent enemy use. Destruction procedures should be carried out only on orders from the cognizant authority. Refer to TM 43-0002-21 for

procedures required for destruction of the equipment and related system materiel to prevent enemy use. Recorded tape transport cartridges and classified manuals are priority items requiring destruction.

1-4. Reporting Equipment Improvement Recommendations. If your AN/TSQ-73 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 at the address listed in DA PAM 738750. We will send you a reply.

1-5. References. Refer to List of Applicable Publications (LOAP) manual TM 9-1425-655-L for a list of related publications and reference documents.

1-6. Official Nomenclature. AN/TSQ-73 system nomenclatures associated with the equipment described herein are listed in table 1-2. For further identification, a cross-reference is provided for the common name used in this technical manual.

Table 1-1. AN/TSQ-73 Operator Manuals

TM number	Contents
TM 9-1430-652-10-1	Chapter 1--Introduction, Displays, ARO, and Alert Definitions
TM 9-1430-652-10-2	Chapter 2--Controls and Indicators
TM 9-1430-652-10-3	Chapter 3--Initialization Chapter 4--Operating Instructions Chapter 5--Map Generation Chapter 6--Raid Generation Chapter 7--Simulation Operation Chapter 8--Data Reduction and Recording Chapter 9--Field Utilities Function
TM 9-1430-652-10-4	Chapter 10--Data and Voice Communication Operating Procedures
TM 9-1430-652-10-5	Chapter 11--Radar Interface Equipment Alinement Procedures
TM 9-1430-652-10-6	Chapter 12--Operational Data and Index
TM 9-1430-652-10-7	Chapter 13--Electronic Warfare (Confidential) Chapter 14--Reference Data (Confidential)

Table 1-2. AN/TSQ-73 Official Nomenclature

Official nomenclature	Common name
Air Defense System, Guided Missile AN/TSQ-73(V)	AN/TSQ-73 system (battalion configuration)
Shelter, Electrical Equipment S-529/TSQ-73(V)	AN/TSQ-73 system (brigade configuration)
Console, Assault Fire Command, Guided Missile	System shelter (battalion configuration)
OJ-299/TSQ-73(V)	System shelter (brigade configuration)
Data Display Group `OD-96`/TSQ-73(V)	Display console
Recorder-Reproducer, Guided Missile System,	Data display group (DDG)
RD-449/TSQ-73(V)	Magnetic Tape Unit (MTU)
Test Set, Electronic Circuit Plug-In Unit	Module test set (MTS)
TS-3317/TSQ-73(V)	

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Section II. DISPLAY DESCRIPTIONS

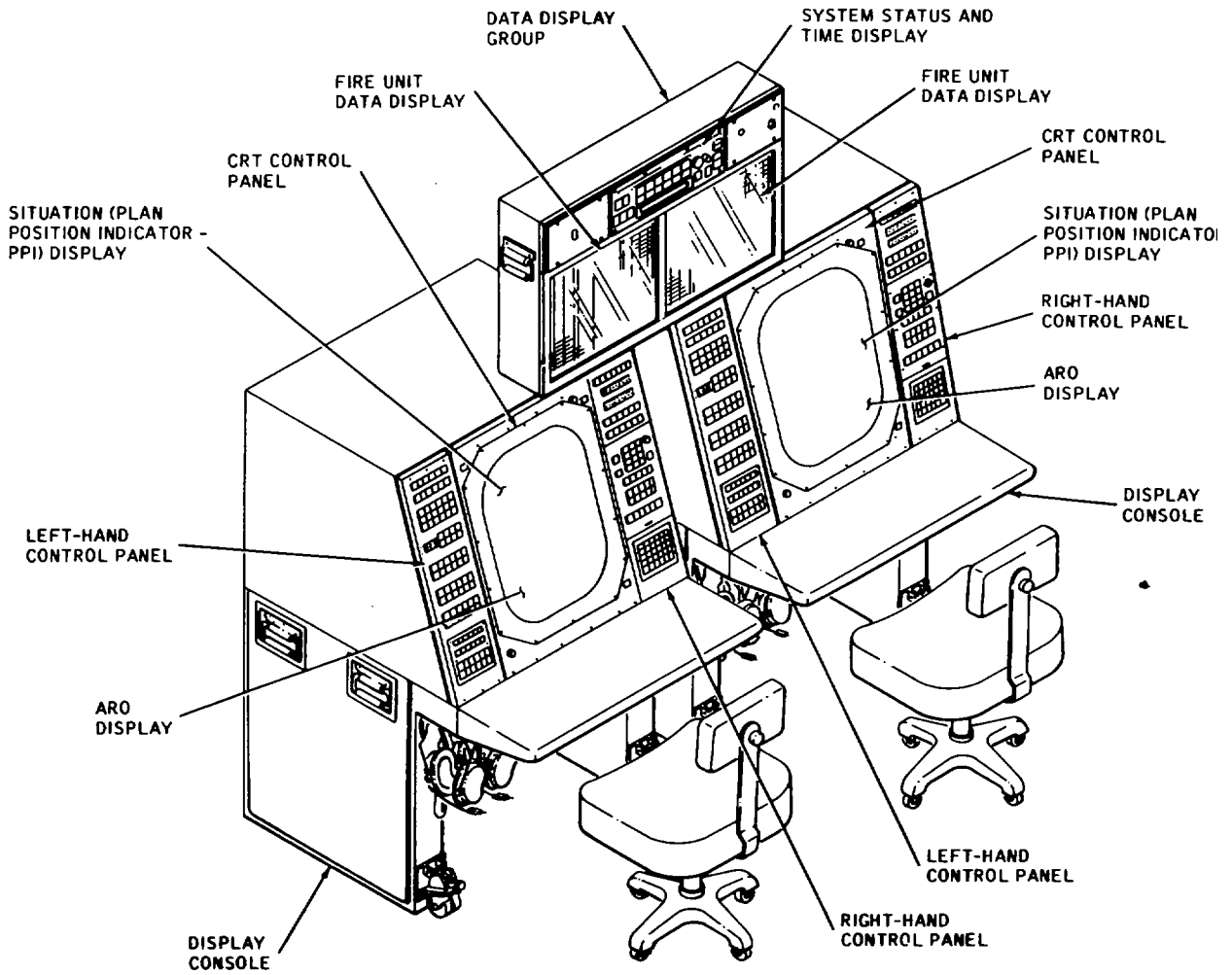
1-7. General. Operational displays for the AN/TSQ-73 system operator are provided by the display equipment consisting of Guided Missile Assault Fire Command Console OJ-299/TSQ-73 (V) (display console) and Data Display Group OD-96/TSQ-73(V) (data display group; also referred to as DDG). Depending on system configuration, up to eight display consoles and two DDGs may be used.

1-8. Operational Displays. The AN/TSQ-73 system operational displays consist of the cathode-ray tube (CRT) display, located in the center section of the display console, and the light emitting diode (LED) matrix displays, located in the center and lower portions of the DDG. The console CRT display surface is divided into two functionally different display areas: situation display (or PPI), and the auxiliary readout (ARO) display. The situation display presents a two dimensional representation of the surrounding air and ground space using symbol, straight line segments, and alphanumerics. The ARO display portion of the CRT

contains summary data for fire units, jam strobes, filter data, amplifying data for operator designated symbols, system status information in fixed tabular formats, and Computer Command (CC) entries with computer responses. The DDG status board displays are comprised of a local time display and a fire unit data display. Figure 1-1 shows the relative location of the various system operational displays. Console CRT display content (except for ARO system status data) is under operator control, while status board displays are fixed.

1-9. Content Sections III and IV contain the symbols, straight lines, and alphanumerics used to display operational information on the situation display and ARO, respectively. Section V contains the DDG status board operational displays. Section VI contains the alert displays. In order to provide a complete treatment of system operational alerts in a single location, the console alert indicators are included in section VI.

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Figure 1-1. System Operational Displays Physical relationships

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