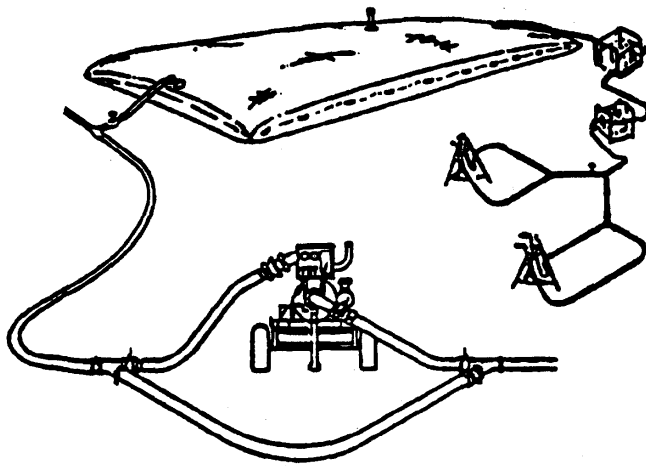


TECHNICAL MANUAL
OPERATOR'S, UNIT AND DIRECT SUPPORT
MAINTENANCE MANUAL
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TACTICAL WATER DISTRIBUTION
EQUIPMENT
SYSTEM (TWDS) SET 10-MILE SEGMENT,
MODELS 06749-0183-81, 110-00-0000,
919 AND 10
NSN 4320-01-122-3547
NSN 4320-01-168-0591
NSN 4320-01-168-0590
NSN 4320-01-221-6006

EQUIPMENT DESCRIPTION

OPERATING INSTRUCTIONS

OPERATOR PREVENTIVE MAINTENANCE
CHECKS AND SERVICES

OPERATOR MAINTENANCE PROCEDURES

UNIT MAINTENANCE PREVENTIVE
CHECKS AND SERVICES

UNIT MAINTENANCE PROCEDURES

DIRECT SUPPORT MAINTENANCE
PROCEDURES

MAINTENANCE ALLOCATION CHART

INDEX

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

* This manual, together with TM 10-4320-344-10, TM 10-4320-344-24 and LO 10-4320-344-12 supersede TM 5-4320-303-10, dated 14 April 1986 and TM 5-4320-303-24, dated 13 June 1986.

HEADQUARTERS, DEPARTMENT OF THE ARMY
30 JUNE 1993

TECHNICAL MANUAL

NO. 10-4320-303-13

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON D.C., 30 June 1993

**Operator's, Unit, and Direct Support
Maintenance Manual
TACTICAL WATER DISTRIBUTION EQUIPMENT
SYSTEM (TWDS) SET 10-MILE SEGMENT,
MODEL 06749-0183-81, 110-00-0000, 919 AND 10
(NSN 4320-01-122-3547; NSN 4320-01-168-0591;
NSN 4320-01-168-0590; NSN 4320-01-221-6006)**

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 these procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual directly to: Commander, US Army Aviation and Troop Command, AITN: AMSAI-I-MP, 4300 Goodfellow Blvd. St. Louis, MO 63120-1798. You may also submit your recommended changes by E-mail directly to <mpmt%avma2g8st-louis-emh7.army.mil>. A reply will be furnished directly to you. Instructions for sending an electronic 2028 may be found at the back of this manual immediately preceding the hard copy 2028.

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HOW TO USE THIS MANUAL

DESCRIPTION OF THE MANUAL.

Manual Organization. This manual is designed to help you operate and maintain the TWDS. Read the warning pages located in the front of the manual before operating or doing maintenance on the equipment.

The front cover of this manual provides an index that lists subjects that are commonly used. Each item indexed on the front cover has a black box at the edge of the cover. There is a corresponding black box on the first text page for each subject listed on the cover index.

The Table of Contents is provided for quick reference to the subjects covered by each chapter, section, and appendix. Chapters 2 through 6 also have a subject index that lists the major paragraphs in alphabetical order under the section title.

The major elements of this manual are its chapters and appendixes. The chapter and appendixes can be divided into one or more sections. This manual has six chapters and seven appendixes.

A glossary follows the last appendix. The glossary lists and explains the special or unique abbreviations and the unusual terms used in this manual.

An alphabetical index follows the glossary. That index is for use in locating specific items of information.

Locating a Malfunction. Finding the cause of a malfunction, troubleshooting, is the first step in fixing the equipment and returning it to operation. Follow these simple steps to determine the root of the problem:

- a. Turn to the Table of Contents in the manual.
- b. Locate "Troubleshooting" under the chapter that covers your level of maintenance. Turn to the page indicated.

Preparing for a Task. Be sure that you understand the entire maintenance procedure before beginning any maintenance task. Make sure that all parts, materials, and tools are handy. Read all steps before beginning. Prepare to do the task as follows:

- a. Carefully read the entire task before starting. It tells you what you will need and what you have to know to start the task.
- b. Obtain all listed equipment, tools, and parts.

How to do the Task. Read the entire task. Be sure that you understand the entire procedure. Perform the task. Be sure to obey all WARNINGS and CAUTIONS.

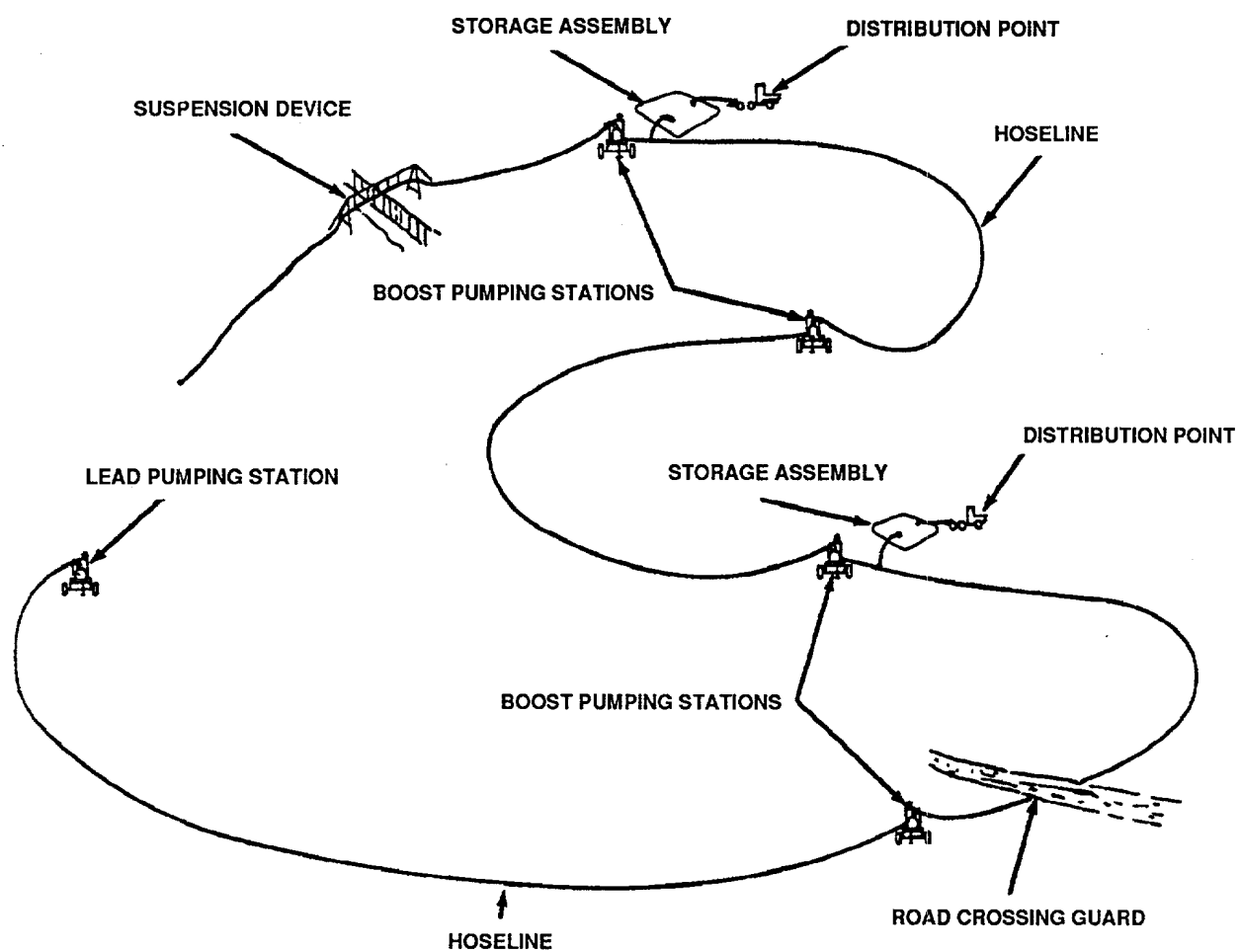


Figure 1-1. Tactical Water Distribution Equipment System (TWDS) Set 10-Mile Segment.

CHAPTER 1
INTRODUCTION
SECTION I. GENERAL INFORMATION

1.1 SCOPE.

This manual is for your use in operating and maintaining the Tactical Water Distribution Equipment System (TWDS) Set 10-Mile Segment models 06794-0183-81 (NSN 4320-01-122-3547), 110-00-0000 (NSN 4320-01-168-0591), 919 (NSN 4320-01-0590), and 10 (NSN 4320-01-221-6006). All four models of the TWDS perform the same function. The TWDS is depicted in Figure 1-1. This manual covers general information needed by the operator, descriptions of the TWDS, functional descriptions of how the TWDS works, operating instructions, operator maintenance instructions, unit maintenance instructions, direct support maintenance instructions, and general support maintenance instructions for the equipment. The TWDS receives water from large storage and distribution units, water purification units, host nation support, or additional TWDS. The TWDS transports this water to small distribution points, additional TWDS, or large storage and distribution units. The TWDS is capable of transporting up to 720,000 (seven-hundred twenty thousand) gallons of water in a 24 hour period. The TWDS is not intended for use with brackish or contaminated water or at temperatures below 320 F (0° C).

1.2 MAINTENANCE FORMS, RECORDS AND REPORTS.

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by (as applicable) DA Pam 738-750, The Army Maintenance Management System (TAMMS) (Maintenance Management Update); DA Pam 738-751, Functional Users Manual for the Army Maintenance Management System-Aviation (TAMMS-A); or AR 700-138, Army Logistics Readiness and Sustainability.

1.3 DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE.

Destruction of Army materiel to prevent enemy use shall be in accordance with TM 750-244-3.

1.4 PREPARATION FOR STORAGE OR SHIPMENT.

Reference paragraph 4.19 through 4.23 for instruction for the preparation for storage or shipment of the TWDS.

1.5 QUALITY ASSURANCE (QA).

There are no QA procedures applicable to the equipment covered in this technical manual.

1.6 NOMENCLATURE CROSS-REFERENCE.

Shortened nomenclature is used in this manual to make procedures easier for you to read. A cross-reference between the shortened nomenclature and the official nomenclature is shown in Table 1-1.