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DEPARTMENT OF THE ARMY TECHNICAL MANUAL

**OPERATOR, ORGANIZATIONAL, DIRECT AND
GENERAL SUPPORT MAINTENANCE MANUAL**

**LABORATORY, AIR MOBILE
AVIATION FUEL
NSN 6640-00-902-9711**

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OPERATOR'S ORGANIZATIONAL, DIRECT SUPPORT
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REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistake 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, U.S. Army Troop Support & Aviation Materiel Readiness Command. ATTN: DRSTS-MTPS, 4300 Goodfellow Boulevard, St. Louis MO 63120. Amply will be furnished directly to you.

TABLE OF CONTENTS

	Paragraph	Page
CHAPTER 1.	INTRODUCTION	1-1
Section I.	General	1-1
II.	Description and Data	1-6 1-3
CHAPTER 2.	OPERATING INSTRUCTIONS	2-1
CHAPTER 3.	OPERATOR/ORGANIZATIONAL MAINTENANCE INSTRUCTIONS	3-1
Section I.	Operator and Organizational Maintenance	3-1 3-1
II.	Calibration Instructions	3-20 3-39
CHAPTER 4.	DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE INSTRUCTIONS	4-1
Section I.	Repair Parts, Special Tools and Equipment	4-1 4-1
II.	Troubleshooting	4-3 4-1
APPENDIX A	REFERENCES	A-1
APPENDIX B	COMPONENTS OF END ITEM	B-1
APPENDIX C	ABBREVIATIONS	c-1
APPENDIX D	MAINTENANCE ALLOCATION CHART	D-1
INDEX	I-1

LIST OF ILLUSTRATIONS

Figure	Title	Page
1-1	Front Three-Quarter View of Air Mobile Aviation Fuel Laboratory	1-3
1-2	Rear Three-Quarter View of Air Mobile Aviation Fuel Laboratory	1-4
1-3	Cutaway Drawing Showing Location of Equipment, Apparatus, Cabinets and Drawers On The Left Side of the Laboratory	1-6
1-4	Cutaway Drawing Showing Location of Equipment, Apparatus, Cabinets and Drawers On The Right Side of the Laboratory	1-7
1-5	Interior View of Front of Laboratory	1-8
1-6	Interior View of Rear of Laboratory	1-9
1-7	Electrical System, Wiring Diagram (Sheet 1 of 2)	1-12
1-7	Electrical System, Wiring Diagram (Sheet 2 of 2)	1-13
2-1	Location of Leveling Devices and Keys	2-3
2-2	Main Power Control Panel	2-7
2-3	Water System	2-8
2-4	Air System	2-13
2-5	Exhaust Fan Assembly of the Air-Purging System	2-18
2-6	Analytical Balance	2-22
2-7	Arresting Lever Positions of Analytical Balance	2-22
2-8	Reid Vapor Pressure Apparatus	2-24
2-9	Manometer	2-26
2-10	Distillation Test Apparatus and Copper Corrosion Apparatus	2-28
2-11	Solvent Filtering Dispenser	2-29
2-12	Detector Scale Conversion Chart - Free Water Content For Selected Sample Volumes	2-36
2-13	Water Demineralizer Unit	2-37
3-1	Fill Inlet Oil Cup To Make Level With SAE 10 Lubricating Oil	3-14
3-2	Second Side-Arm Liquid Droplets in Series Keeps Liquid Droplets or Water Vapor Out of Pump	3-14
3-3	Adjusting Vacuum Level by Turning Valve System of Inlet Regulator Valve	3-21
3-4	Electrical Controls In Right Front Corner of Laboratory	3-22
3-5	Alarm System Detector and Control Unit Disassembled (Sheet 1 of 2)	3-23
3-5	Alarm System Detector and Control Unit Disassembled (Sheet 2 of 2)	3-24
3-6	Top View of Analytical Balance	3-25
3-7	Weighing Pan and Stirrup Bearing Plate	3-28
3-8	Tare Ring and Tare Boat	3-30
4-1	Ice Maker	4-6
4-2	Use a Wrench to Remove Inlet Regulator Valve on Vacuum Side of Pump	4-24
4-3	With CM Eyedropper Inject 2-3 cc of Solvent Into Orifice Formerly Occupied by Inlet Regulator Valves While Blocking Off Vacuum Hose Connector	4-24

LIST OF ILLUSTRATIONS (Continued)

Figure	Title	Page
4-4	Cleaning Chemistone Filter Element with Solvent	4-27
4-5	Removing End Plate Gives Access to Pump Vanes, When Replacing a Vane, Notched Edge of Vane Should Be Towards Rotor Shaft	4-27
4-6	Drawer Removal Procedure	4-28
4-7	Removing Attaching Hardware From Under Counter	4-29
4-8	Bottom View of Components in Apparatus	4-31
4-9	Removing Setscrew and Knob from Auto-Transformer	4-32
4-10	Tag All Wiring to Auto-Transformer	4-33
4-11	Location of Apparatus Connector	4-34
4-12	Heater Board Being Lifted from Apparatus	4-35
4-13	Heater Board Removed from Apparatus	4-36
B-1	Drawer No. 1	B-14
B-2	Cabinet No. 2	B-15
B-3	Drawer No. 3	B-16
B-4	Cabinet No. 4	B-17
B-5	Drawer No. 5	B-18
B-6	Drawer No. 6	B-19
B-7	Drawer No. 7	B-20
B-8	Drawer No. 8	B-21
B-9	Drawer No. 9	B-22
B-10	Cabinet No. 10	B-23
B-11	Drawer No. 11	B-24
B-12	Cabinet No. 12 (Sheet 1 of 2)	B-25
B-12	Cabinet No. 12 (Sheet 2 of 2)	B-26
B-13	Auxiliary Drawer of Cabinet No. 13 (Sheet 1 of 2)	B-27
B-13	Auxiliary Drawer of Cabinet No. 13 (Sheet 2 of 2)	B-28
B-14	Water Tank -in Cabinet No. 16	B-29
B-15	Auxiliary Drawer of Cabinet No. 10	B-30
B-16	Drawer No. 15	B-31
B-17	Drawer No. 16	B-32
B-18	Cabinet No. 17	B-33
B-19	Drawer No. 18	B-34
B-20	Cabinet No. 19	B-35
B-21	Drawer No. 20	B-36
B-22	Cabinet No. 21	B-37
B-23	Drawer No. 22	B-38
B-24	Cabinet No. 23	B-39

LIST OF TABLES

Number	Title	Page
3-1	Preventive Maintenance Checks and Services (PMCS)	3-2
3-2	Electrical System Troubleshooting	3-5
3-3	Water System Troubleshooting	3-9
3-4	Air System Troubleshooting	3-17
3-5	Reid Vapor Pressure Apparatus Troubleshooting	3-33
3-6	Manometer Troubleshooting	3-35
4-1	Oven Troubleshooting	4-3
4-2	Ice Maker Troubleshooting	4-9
4-3	Reid Vapor Pressure Apparatus Troubleshooting	4-22
4-4	Vacuum Pump Troubleshooting	4-26
4-5	Vacuum Pump Flow Rates	4-26

CHAPTER 1
INTRODUCTION

Section I. GENERAL

1-1. SCOPE.

This manual is published for use by personnel to whom the air-mobile aviation fuel laboratory (NSN 6640-00-902-9711) is issued. It is intended as a guide for operating and maintaining the utility and test equipment. The manual provides a description of the laboratory and equipment and includes operating instructions, general safety procedures, and operator and organizational maintenance. Appendix A gives a list of pertinent references; Appendix B gives the components of end item and basic issue items; Appendix C is a list of abbreviations used in this manual and Appendix D contains the Maintenance Allocation Chart.

1-2. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR).

EIR's 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's may be submitted on SF 368 (Quality Deficiency Report). Instructions for preparing EIR's are provided in TM 38-750, The Army Maintenance Management System. Mail directly to Commander Headquarters, U.S. Army Troop Support and Aviation Materiel Readiness Command, ATTN: DRSTS-MEM, 4300 Goodfellow Blvd., St. Louis, MO 63120. A reply will be furnished directly to you.

1-3. MAINTENANCE FORMS AND RECORDS.

Equipment maintenance forms and procedures for their use are contained in TM 38-750, The Army Maintenance Management System (TAMMS).

1-4. DESTRUCTION OF ARMY MATERIAL TO PREVENT ENEMY USE.

a. Demolition of Shelter and Contents. Methods of destruction should achieve such damage to equipment and repair parts that it will not be possible to restore the equipment to a usable condition in the combat zone either by repair or cannibalization.

b. Mechanical Destruction. Using an axe, pick, mattock, sledge or any other heavy implement, damage all vital elements such as controls, switches and valves, electric motors and any other major assemblies and components.

WARNING

Point blank firing at equipment with weapons should not be attempted unless the safety of all personnel in the area is assured.

c. Gunfire. Fire on equipment with the heaviest weapons available, aiming at the major assemblies and controls. Although one well placed direct hit may render the equipment inoperative, several hits may be required for complete destruction of all components. For additional information on procedures for destruction of equipment to prevent enemy use, refer to TM 750-244-3.

1-5. ADMINISTRATIVE STORAGE

a. Storage Site.

(1) Select the best available site for administrative storage. Separate stored equipment from equipment in use. Conspicuously mark the area "Administrative Storage".

(2) Covered space is preferred. When sufficient covered space for all items to be stored is not available, priority should be given to items which are most susceptible to deterioration.

(3) Open sites should be improved hardstand, if available. Unimproved sites should be firm, well-drained, and kept free of excessive vegetation.

b. Storage Plan.

(1) Store equipment so as to provide maximum protection from the elements and to provide access for inspection, maintenance and exercising. Anticipate removal or deployment problems and take suitable precautions.

(2) Take into account environmental conditions, such as extreme heat or cold; high humidity; blowing sand, dust, or loose debris; soft ground, mud, heavy snows, earthquakes, or combinations thereof and take adequate precautions.

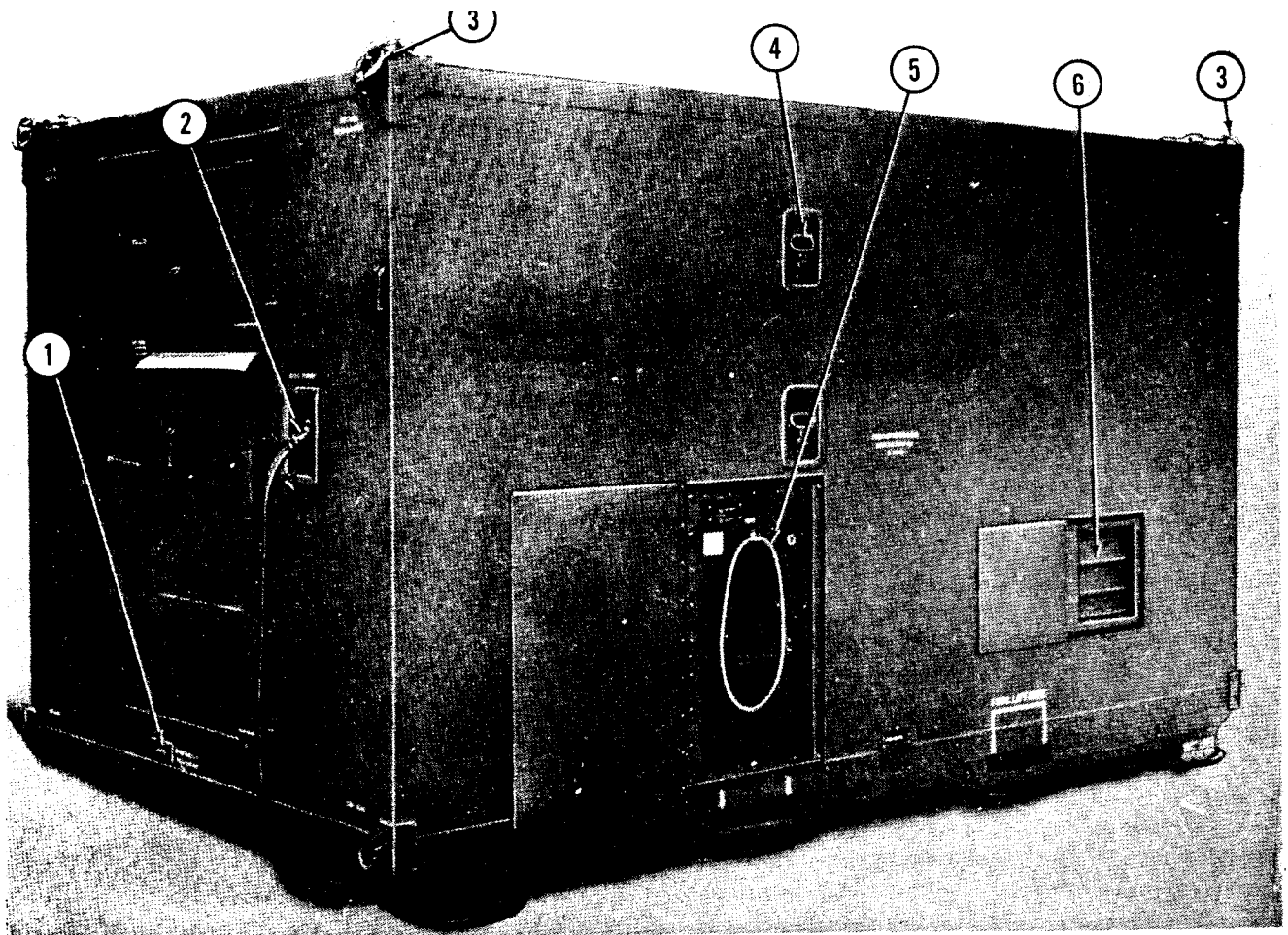
(3) Establish a fire plan and provide for adequate fire-fighting equipment and personnel.

(4) For further information, refer to TM 740-90-1 (Administrative Storage).

Section II. DESCRIPTION AND DATA

1-6. DESCRIPTION.

The laboratory is a completely self-contained unit that needs only an external power source, a water supply, and a waste-water disposal facility when in operation. The laboratory is essentially an S-280 B/G military shelter (figs. 1-1 and 1-2) that has been modified to accommodate all of the equipment, apparatus, instruments and supplies needed to conduct fuel quality testing in the forward areas. It is designed for rapid movement by ground or air transportation and for quick on site setup. The laboratory will function in an ambient temperature ranging from -40 degrees F to +125 degrees F (-40 degrees C to 51.5 degrees C).



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|-------------------------------|-------------------------|
| 1. Leveling device | 4. Tiedown device |
| 2. Power cable junction box | 5. Air conditioner vent |
| 3. Lifting and tiedown points | 6. Exhaust fan outlet |

Figure 1-1. Front Three-Quarter View of Airmobile Aviation Fuel Laboratory