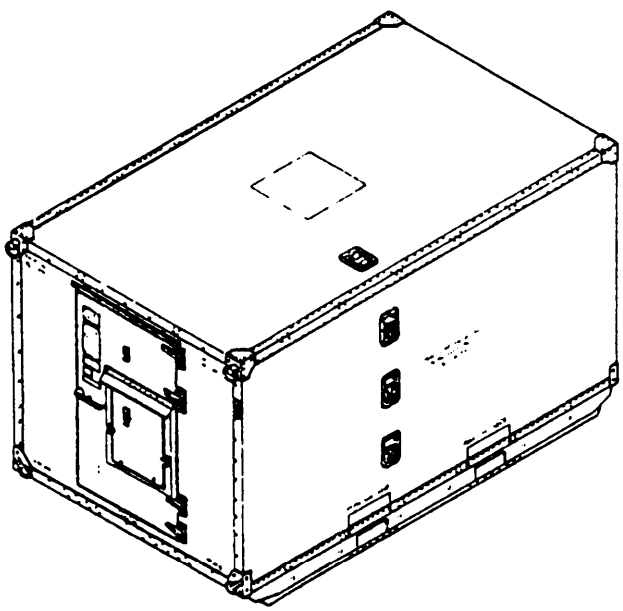
TM 10-5411-206-14

TECHNICAL MANUAL

OPERATOR'S, UNIT, DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL FOR

SHELTER, ELECTRICAL EQUIPMENT S-280B/G (NSN 5411-00-117-2868)

S-280B/G (SHIELDED) (NSN 5411-00-001-4093)



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DEPARTMENT OF THE ARMY
WASHINGTON D. C., 30 September 1993

Operator's, Unit, Direct Support and General Support Maintenance Manual for SHELTER, ELECTRICAL EQUIPMENT S-280B/G (NSN 5411-00-117-2868) S-280 B/G (Shielded) (NSN 5411-00-001-4093)

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 located in the back of this manual directly to: Commander, US Army Aviation and Troop Command, ATTN: AMSAT-I-MP, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. A reply will be furnished directly to you.

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HOW TO USE THIS MANUAL

This manual is designed to help you keep your shelter in good operating condition. The front cover index is provided for quick reference to important information. There is also an index located in the final pages for use in locating specific items of information.

Warning pages are located in the front of this manual. You should learn the warnings before Performing any maintenance on the equipment.

Paragraphs in this manual are numbered by chapter and order of appearance within a chapter. A subject index appears at the beginning of each chapter listing sections that are included in that chapter. A more specific subject index is located at the beginning of each section to help you find the exact paragraph you are looking for.

CHAPTER 1

INTRODUCTION

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General Information	I	1-1
Equipment Description	II	1-2

Section I. GENERAL INFORMATION

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Maintenance Forms and Records	1-2	1-1
Reporting Equipment Improvement Recommendations	1-3	1-1
Destruction of Army Materiel to Prevent Enemy Use	1-4	1-1
Preparation for Shipment and Storage	1-5	1-2
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1-1. **Scope.**

a. Type of Manual. This technical manual includes operator, unit, direct support and general support maintenance procedures for the basic S-280B/G and S-280B/G Shielded shelters. Additional maintenance data relevant to a configured shelter can be found in the applicable end item technical manual.

b. Equipment Name and Model Number. This technical manual covers electrical Equipment Shelters S-280B/G. Some configurations of the S-280B/G shelter are equipped with radio frequency/electromagnetic interference shielding.

c. Purpose of Equipment. The S-280B/G and S-280B/G Shielded are lightweight transportable shelters designed for use with the Area Type Communication Systems and other communication systems.

1-2. **Maintenance Forms and Records.** Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pam 738-750, The Army Maintenance Management System (TAMMS).

1-3. **Reporting Equipment Improvement Recommendations (EIRs).** If your Shelter 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: Commander, S Army Aviation and Troop Command, ATTN: AMSAT-I-MDO, 4300 Goodfellow Blvd., ST. Louis, MO 63120-1798. We'll send you a reply.

1-4. **Destruction of Army Materiel to Prevent Enemy Use.** Destruction of Army equipment to prevent enemy use shall be in accordance with TM 750-244-3.

1-5. **Preparation for Shipment and Storage.** Refer to paragraphs 3-21 through 3-24 for shipment and storage preparation data.

1-6. **List of Abbreviations.**

RFI	Radio Frequency Interference
EMI	Electromagnetic Interference
TMDE	Test, Measurement and Diagnostic Equipment
CARC	Chemical Agent Resistive Coating

Section II. EQUIPMENT DESCRIPTION

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Equipment Characteristics, Capabilities and Features	1-7	1-2
Location and Description of Major Components	1-8	1-2
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1-7. **Equipment Characteristics, Capabilities and Features.** The S-280B/G and S-280B/G Shielded shelters are lightweight, relocatable shelters used to transport and house ground communications equipment. The foam and beam shelter construction consists of aluminum face sheets enclosing a polyurethane foam composition core. The shielded shelters are equipped with radio frequency/electromagnetic interference (RFI/EMI) shielding to protect the electronic equipment contained inside. The shield is a continuous metallic surface which includes the shelter panel inner face sheets and conductive materials which maintain continuity around joints, door openings and other possible sources of radiation leakage. Shielded shelters also have an RFI/EMI filter inside the emergency exit panel. Shielded shelters can be identified by the metallic door gasket which mates with another conductive surface on the doorjamb. The shelter is designed for outdoor use in all weather conditions.

1-8. **Location and Description of Major Components.** (figure 1-1)

ITEM	DESCRIPTION
1. Door Assembly	Provides access to equipment contained in shelter.
2. Emergency exit panel	Contains air vent and filter and serves as an emergency exit. In shielded shelters, inner door also houses RFI/EMI filter.
3. Lifting eye assemblies	Provide hookup points for sling assembly when lifting shelter and when securing shelter onto truck.
4. Towing eye assemblies	Provide hookup points for guide rope when guiding sling-lifted shelter into position.
5. Roof Access Steps	Allow access to roof.

1-9. **Differences Between Models.** The S-280B/G Shielded shelter (NSN 5411-00-001-4093) differs from the S-280B/G (NSN 5411-00-117-2868) only in its radio frequency/electromagnetic suppression capabilities. Components of RFI/EMI shielding are described in paragraph 1-7.

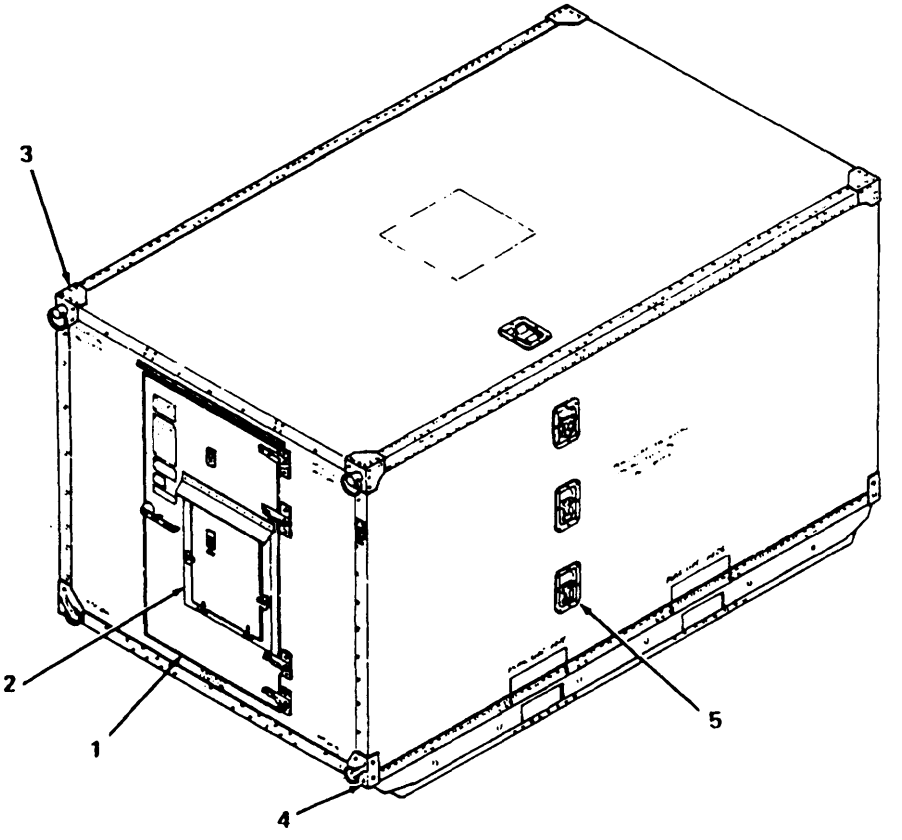

Figure 1-1. Major Shelter Components.

1-10. **Equipment Data.**

Height	83.325 in. (21 1.65 cm)
Width	87 in. (220.98 cm)
Length	147 in. (373.68 cm)
Gross weight	1380 lb (627 kg)
Cubage	617 ft^3 (17.47 m^3)
Load on skids	0.9 psi

1-11. **Shelter Marking.** Shelter markings are shown in figure 1-2. Lettering is stenciled or silkscreened in accordance with MIL-M-1321 GR II. The color used is black, MIL-C-46168.

1-12. **Safety, Care and Handling.** Throughout this manual are warnings, cautions and notes designed to protect personnel and equipment when handling the shelter. Learn the warnings on the warning page before attempting to perform maintenance on the shelter, and observe all warnings, cautions and notes as you come upon them in the text.