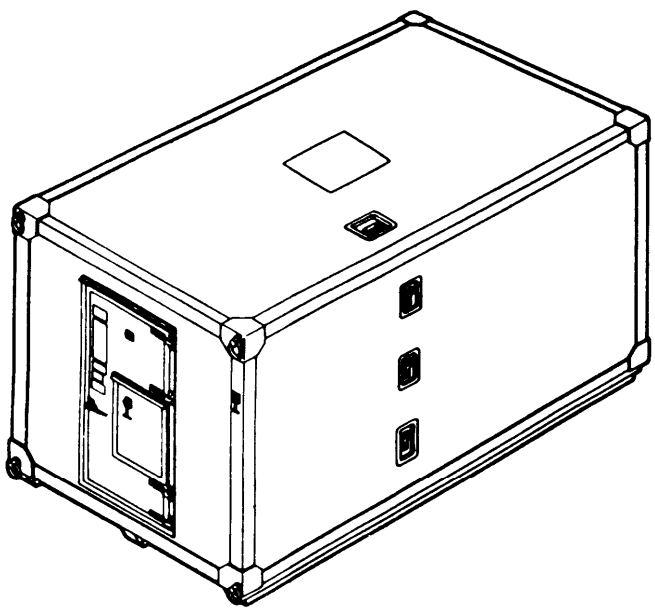
TECHNICAL MANUAL

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

SHELTER, ELECTRICAL EQUIPMENT S-280C/G (NSN 5411-01-092-0892)



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Operator's, Unit, Direct Support, and General Support Maintenance Manual

SHELTER, ELECTRICAL EQUIPMENT
S-280C/G NSN 5411-01-092-0892 (Unshielded)
S-280C/G NSN 5411-01-304-3069 (Shielded)

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, ATTN: AMSAT-I-MP, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. You may also submit your recommended changes by E-mail directly to <daf2028@st-louis-emh7.army.mil>. A reply will be furnished directly to you.

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Subject: DA Form 2028

1. ***From:*** Joe Smith
2. *Unit:* home
3. ***Address:*** 4300 Park
4. ***City:*** Hometown
5. ***St:*** MO
6. ***Zip:*** 7777
7. ***Date Sent:*** 19-OCT-93
8. ***Pub no:*** 55-2840-229-23
9. ***Pub Title:*** TM
10. ***Publication Date:*** 04-JUL-85
11. *Change Number:* 7
12. *Submitter Rank:* MSG
13. ***Submitter FName:*** Joe
14. *Submitter MName:* T
15. ***Submitter LName:*** Smith
16. ***Submitter Phone:*** 123-123-1234
17. ***Problem:*** 1
18. *Page:* 2
19. *Paragraph:* 3
20. *Line:* 4
21. *NSN:* 5
22. *Reference:* 6
23. *Figure:* 7
24. *Table:* 8
25. *Item:* 9
26. *Total:* 123
27. ***Text:***

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HOW TO USE THIS MANUAL

This manual was prepared to help keep your S-280C/G Unshielded and S-280C/G Shielded shelters in good operating condition. The front cover index is provided for quick reference to important information. There is also an alphabetical index at the back of the manual to locate specific items of information.

Warning pages are located at the front of this manual. You should read and completely understand all of 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 and Data	II	1-2

Section I. GENERAL INFORMATION

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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 S-280C/G Unshielded and S-280C/G Shielded shelters. Additional maintenance data relevant to a specifically configured shelter can be found in the applicable end item technical manual.

b. *Equipment Name and Model Number.* This technical manual describes Electrical Equipment Shelter S-280C/G Unshielded and S-280C/G Shielded. The S-280C/G Shielded shelter is equipped with radio frequency/electromagnetic interference shielding.

c. *Purpose of Equipment.* The S-280C/G Unshielded and S-280C/G Shielded are lightweight transportable shelters designed to house a wide variety of military systems and components.

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). Refer to the latest issue of DA Pam 25-30 (Consolidated Index of Army Publications and Blank Forms) to determine if there are new editions, changes or additional publications pertaining to the equipment.

1-3. Reporting Equipment Improvement Recommendations. 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 (Quality Deficiency Report). Mail it to: Commander, US 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 3-29 for shipment and storage preparation data.

1-6. Warranty Information. The S-280C/G Unshielded and S-280C/G Shielded shelters are warranted by Gichner Shelter Systems for 12 months or by Ramim Engineering Works, Ltd. for 24 months. Warranty starts on the date found on DA Form 2408-9 (Equipment Control Record) in the logbook. Report all defects in material or workmanship to your supervisor who will take appropriate action. Refer to Warranty Technical Bulletin TB 10-5411-207-14 (Gichner) or TB 10-5411-207-24-1 (Ramim).

1-7. List of Abbreviations.

EMI	Electromagnetic Interference
RFI	Radio Frequency Interference
RTV	Room Temperature Vulcanizing
TMDE	Test, Measurement, and Diagnostic Equipment

Section II. EQUIPMENT DESCRIPTION AND DATA

Subject	Para	Page
Equipment Characteristics, Capabilities, and Features	1-8	1-2
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1-8. Equipment Characteristics, Capabilities, and Features. The S-280C/G Unshielded and S-280C/G Shielded shelters are lightweight, relocatable shelters used to transport and house various types of equipment. The foam and beam shelter construction consists of aluminum face sheets enclosing a polyurethane foam composition core. The shelter is designed for outdoor use in all weather conditions. The shielded shelters are equipped with radio frequency/electromagnetic (RFI/EMI) shielding to protect the electronic equipment contained inside. The shield is a continuous metallic surface which includes the shelter panel outer face sheets and conductive materials which maintain continuity around joints, door openings, and other possible sources of radiation leak. Shielded shelters also have a 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 door jamb.

1-9. Location and Description of Major Components. (Figure 1-1)

ITEM		DESCRIPTION
1.	Door assembly	Provides personnel access to interior of shelter.
2.	Emergency exit panel assembly	Provides emergency personnel exit and allows fresh air to enter shelter
3.	Lifting and tiedown eye assembly	Provides hookup point for sling assembly when lifting shelter and when securing shelter onto truck.

4.	Towing eye assembly	Provides hookup point for cable assembly when towing shelter and for guide rope when guiding sling-lifted shelter into position.
5.	Pan assembly recessed steps	Allows access to roof
6.	Skid assemblies	Permit a fully equipped shelter to be towed for limited distance over rough terrain. They also provide forklift access

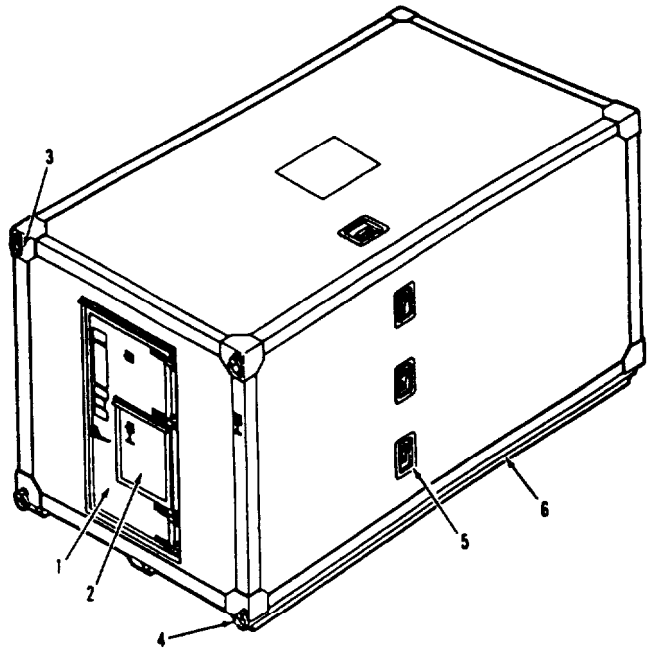

Figure 1-1. Major Shelter Components.

1-10. **Equipment Data.**

Height	**86.375 in (219.4 cm)**
Width	**87 in (220.9 cm)**
Length	**147 in (373.38 cm)**
Gross weight	**(Unshielded) 1,400 lbs (636.4 kg)**
	(Shielded) 1,400 lbs (640.9 kg)
Payload	**5,000 lbs**
Cubage	**640 ft^3 (59.4 m^3)**
Load on skids	**0.96 psi (4.69 kPa)**

1-11. **Shelter marking.** Shelter markings are shown in Figure 1-2. Lettering is stenciled or silkscreened in accordance with MIL-M-13231 GR II. The color used is black, MIL-C-46168.

NOTE

For camouflage shelters, lettering is green 383 on black background; and lettering is black on green and brown backgrounds (MIL-C-46168).