

TECHNICAL MANUAL

OPERATOR'S AND UNIT
MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS
AND SPECIAL TOOLS LIST)
FOR

ULTRALIGHTWEIGHT
CAMOUFLAGE NET SYSTEMS
(ULCANS)

WOODLAND R/S AN/USQ-150
(NSN 1080-01-457-2956) (EIC: N/A)

WOODLAND R/T AN/USQ-160
(NSN 1080-01-475-0697) (EIC: N/A)

DESERT R/S AN/USQ-159
(NSN 1080-01-475-0696) (EIC: N/A)

DESERT R/T AN/USQ-158
(NSN 1080-01-475-0694) (EIC: (N/A))



INTRODUCTION

OPERATING
INSTRUCTIONS

MAINTENANCE
INSTRUCTIONS

REFERENCES

MAINTENANCE
ALLOCATION CHART

REPAIR PARTS AND SPECIAL
TOOLS LIST

COMPONENTS OF END ITEM
BASIC ISSUE ITEMS

ADDITIONAL AUTHORIZATION
LIST

EXPENDABLE AND DURABLE
ITEMS LIST

Approved for Public Release; Distribution is Unlimited

HEADQUARTERS, DEPARTMENT OF THE ARMY

1 January 2003

Technical Manual
No. 5-1080-250-12&P

TM 5-1080-250-12&P
HEADQUARTERS,
DEPARTMENT OF THE ARMY
Washington, DC, 1 January 2003

**Operator's and Unit Maintenance Manual
(Including Repair Parts and Special Tools List)**

**For
ULTRALIGHTWEIGHT CAMOUFLAGE NET SYSTEMS
(ULCANS)**

**WOODLAND R/S AN/USQ-150 (NSN 1080-01-457-2956) (EIC: N/A)
WOODLAND R/T AN/USQ-160 (NSN 1080-01-475-0697) (EIC: N/A)
DESERT R/S AN/USQ-159 (NSN 1080-01-475-0696) (EIC: N/A)
DESERT R/T AN/USQ-158 (NSN 1080-01-475-0694) (EIC: N/A)**

Current as of: 1 September 2002

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes, or if you know of any 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 back of this manual direct to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: AMSEL-LC-LEO-D-CS-CFO, Fort Monmouth, New Jersey 07703-5006. The fax number is 732-532-1413, DSN 992-1413. You may also e-mail recommendations to AMSEL-LC-LEO-PUBS-CHG@cecom3.monmouth.army.mil.

We will furnish you a reply.

TABLE OF CONTENTS

	Page
How To Use This Manual	v
CHAPTER 1 INTRODUCTION.....	1-1
Section I General	1-1
1-1 Scope.....	1-1
1-2 Purpose of Equipment	1-1
1-3 Consolidated Index of Army Publications and Blank Forms.....	1-1
1-4 Maintenance Forms, Records, and Reports	1-1
1-5 Reporting Equipment Improvement Recommendations (EIR)	1-2
1-6 Administrative Storage.....	1-2
1-7 Destruction to Prevent Enemy Use.....	1-2
Section II Equipment Description, Characteristics and Equipment Data.....	1-2
1-8 Equipment Description	1-2
a. Modular Camouflage Screen System	1-2
b. Repair Kit.....	1-2
c. Support System.....	1-3
d. Shape Disrupter Assemblies	1-3
1-9 ULCANS Applications and Configuration Data	1-3
1-10 Module Determination Chart.....	1-8

TABLE OF CONTENTS - Continued

	Page
1-11 Tabulated Data.....	1-10
1-12 Classification, Camouflage Screening Types, and Class.....	1-11
CHAPTER 2 OPERATING INSTRUCTIONS.....	2-1
Section I Operation Under Normal Conditions	2-1
2-1 General.....	2-1
Section II ULCANS Deployment/Retrieval Instructions	2-1
2-2 Deployment Instructions	2-1
a. ULCANS Deployment.....	2-2
b. Cool Down Period	2-2
c. Multiple Screen Assembly	2-3
d. Shape Disruption.....	2-3
e. Support Poles	2-13
f. Positioning Support Poles	2-13
g. Stakes.....	2-14
h. Special Assembly Instructions	2-14
i. Volatile Fuels and Hazardous Materials	2-15
j. Deployment Checks	2-15
k. ULCANS Entry/Egress Doorway.....	2-15
2-3 Retrieval Instructions, Multiple Screen Configuration	2-16
a. Normal Retrieval.....	2-16
b. Folding Instructions, ULCANS	2-16
c. Roll Method For Multiple Screens.....	2-17
d. Special Tools	2-17
Section III Operation Under Unusual Conditions	2-18
2-4 Operating Under Unusual Conditions	2-18
a. Inclement Weather	2-18
b. Emergency Retrieval.....	2-18
CHAPTER 3 MAINTENANCE INSTRUCTIONS	3-1
Section I Maintenance Requirements	3-1
3-1 Repair Requirements.....	3-1
Section II Maintenance Procedures	3-1
3-2 Screen Maintenance Procedures	3-1

TABLE OF CONTENTS - Continued

		Page
APPENDIX A	REFERENCES	A-1
APPENDIX B	MAINTENANCE ALLOCATION CHART	B-1
APPENDIX C	REPAIR PARTS AND SPECIAL TOOLS LIST	C-1

		Illus/ Figure	Page
Group	00	ULCANS (Class 1 - Woodland and Class 2 - Desert; Type IV (Gp-R/S) and Type III (Gp R/T))	C-1 C-8
	01	Camouflage Screening System	C-2 C-10
	0101	Screen, Camouflage (Hexagon) (No Parts Authorized)	
	0102	Screen, Camouflage (Rhombic) (No Parts Authorized)	
	02	Support, Camouflage Screening System	C-3 C-12
	0103	Repair Kit, Camouflage Net Set	C-4 C-14

APPENDIX D	COMPONENTS OF END ITEM AND BASIC ISSUE ITEMS LIST	D-1
APPENDIX E	ADDITIONAL AUTHORIZATION LIST	E-1
APPENDIX F	EXPENDABLE AND DURABLE ITEMS LIST	F-1

Glossary	Glossary-1
Index	Index-1

LIST OF ILLUSTRATIONS

Figure	Title	Page
1-1	Ultralightweight Camouflage Net Systems (ULCANS).....	1-1
1-2	ULCANS Components	1-3
1-3	Typical ULCANS Applications	1-5
1-4	Screen Configuration Data	1-7
1-5	Module Determination Chart.....	1-9
1-6	ULCANS Woodland, Type IV Radar Scattering Screen Identification Tag	1-13
1-7	ULCANS Radar Transparent Screen Identification Tag.....	1-14
2-1	Multiple Screen Assembly and Disassembly Instructions	2-4
2-2	Deployment/Retrieval/Storage Instructions, ULCANS	2-5
2-3	Doorway Entrance/Egress	2-16
3-1	ULCANS Camouflage Screen Repair	3-3
C-1	ULCANS (Class 1 - Woodland and Class 2 - Desert; Type IV (Gp-R/S) and Type III (Gp R/T))	C-8
C-2	Camouflage Screening System	C-10
C-3	Support, Camouflage Screening System	C-12
C-4	Repair Kit, Camouflage Net Set	C-14
D-1	ULCANS Components	D-3

LIST OF TABLES

Table	Title	Page
1-1	Screen Configuration Dimensions	1-8
1-2	Total System Weight.....	1-11
1-3	Number of Support System Components.....	1-12
1-4	Height of Support Poles.....	1-12

HOW TO USE THIS MANUAL

This manual is designed to help the user operate and maintain the Ultralightweight Camouflage Net System (ULCANS). Listed below are some of the features included in this manual to help locate and use the provided information.

NOTE

Radar Scattering is denoted as R/S
Radar Transparent is denoted as R/T

- A List of Effective Pages is included to help the user easily identify the latest information that is included in this manual.
- A Table of Contents is provided as a quick reference to the chapters and paragraphs that will be used often.
- Warnings, cautions, notes, and subject headings, as well as other essential information, are printed in bold type to make them easier to see.
- This manual contains exploded view illustrations that will assist the user with initial setup, assembly, and disassembly procedures.
- Chapter 1 provides the user with the description, characteristics, and theory of operation of the ULCANS, and its major components along with configuration instructions.
- Chapter 2 provides operational information with specific deployment and retrieval instructions.
- Chapter 3 describes screen maintenance and repair procedures and gives pole maintenance instructions.
- The Appendixes provide the user with: Identifying references, a Maintenance Allocation Chart (MAC), a Repair Parts and Special Tools List (RPSTL), a Component of End Items List (COEIL), a Basic Issue Items List (BIIL), an Additional Authorization List (AAL), and an Expendable and Durable Items List.
- A Glossary of common terms is also provided.

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. SCOPE.

This manual is for use when utilizing and maintaining the Ultralightweight Camouflage Net System, General Purpose Woodland, (Class 1) or Desert (Class 2), Radar Transparent, Type III, and Radar Scattering, Type IV, hereafter referred to as ULCANS. See Figure 1-1.

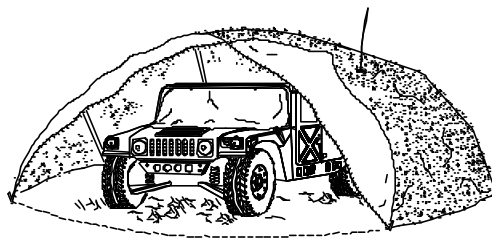
1-2. PURPOSE OF EQUIPMENT.

The ULCANS is designed to improve survivability of military hardware as an all weather modular concealment system that provides visual, near infrared, and radar signature reduction. The screens are made of a synthetic, ultralightweight, water resistant material. It is of snag resistant construction and is field repairable and maintainable. It is designed for easy, rapid deployment and recovery by a minimum of two (four for larger multi-screen setup) experienced soldiers. The service life of ULCANS Woodland or Desert, Type III or IV, is estimated to be 112 deployment and recovery cycles.

NOTE

ULCANS Radar Transparent (R/T) Type III will be used for general purpose concealment of ground radar equipment.

ULCANS Radar Scattering (R/S) Type IV will be used for general purpose concealment of ground non-radar equipment.



ULCANS 2-83-0469

Figure 1-1. Ultralightweight Camouflage Net Systems (ULCANS)

1-3. CONSOLIDATED INDEX OF ARMY PUBLICATIONS AND BLANK FORMS.

Refer to the latest issue of DA Pam 25-30 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.

1-4. MAINTENANCE FORMS, RECORDS, AND REPORTS.

a. Reports of Maintenance and Unsatisfactory Equipment. Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pam 738-750, Functional Users Manual for the Army Maintenance Management System (TAMMS).