

**MULTISERVICE
HELICOPTER SLING LOAD:

SINGLE-POINT LOAD
RIGGING PROCEDURES**

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**HEADQUARTERS
DEPARTMENT OF THE ARMY
UNITED STATES MARINE CORPS
DEPARTMENT OF THE NAVY
DEPARTMENT OF THE AIR FORCE
UNITED STATES COAST GUARD**

FIELD MANUAL 10-450-4
MARINE CORPS REFERENCE PUBLICATION 4-23E, VOL II
NAVAL WARFARE PUBLICATION 3-04.12
AIR FORCE JOINT MANUAL 11-223, VOL II
COMMANDANT INSTRUCTIONS M13482.2A

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30 May 1998, Washington, DC,

MULTISERVICE HELICOPTER SLING LOAD: SINGLE-POINT RIGGING PROCEDURES

PREFACE

This manual is one of a series of manuals for aviation and ground personnel who perform helicopter sling load missions ashore or aboard ship. Other manuals in this series are FM 10-450-3/MCRP 4-23E, VOL I/NWP 3-04.11/AFJMAN 11-223, VOL I/COMDTINST M13482.2A and FM 55-450-5/FMFRP 5-31, VOL III/NWP 42-1, VOL III/AFR 50-16, VOL III/COMDTINST M13482.4.

These manuals are a coordinated effort of the US Army, US Marine Corps, US Navy, US Air Force, and US Coast Guard. All services participate in the sling load certification program begun by the Army in 1984. These manuals include standardized rigging procedures and other information from that program. Chapters 2 through 14 contain rigging procedures for single-point loads which have been certified for sling load. Chapters 15 through 24 contain rigging procedures which have not been certified but have demonstrated acceptable static lift and flight characteristics during a flight test.

Efforts were made to standardize ground crew and hookup procedures and terminology. Where service-unique requirements apply to an entire chapter or body of text, the service initials are at the beginning of the chapter or text. Otherwise the initials are at the end of the applicable sentence.

Rigging equipment and procedures described in this manual may not be authorized for all aircraft or services because of equipment or service restrictions.

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*This publication supersedes FM 55-450-4, 11 February 1991.

MARINE CORPS PCN: 14400003900

**FM 10-450-4/MCRP 4-23E, VOL II/NWP 3-04.12/AFJMAN 11-223, VOL II/
COMDTINST M13482.3A**

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TABLE OF CONTENTS

	Paragraph	Page
PREFACE		i
CHAPTER 1 FUNDAMENTAL PRINCIPLES		
Introduction.....	1-1	1-1
Classification Definitions of Sling Loads	1-2	1-1
Certification of Equipment for Helicopter Sling Load	1-3	1-1
Requests for Sling Load Certification	1-4	1-2
Unique Items of Equipment or Operational Requirements	1-5	1-2
Equipment Rigging Procedures	1-6	1-2
General Rigging Instructions	1-7	1-3
CHAPTER 2 CERTIFIED SINGLE-POINT RIGGING PROCEDURES FOR WHEELED VEHICLES		
Introduction.....	2-1	2-1
M996/M997/M997A2 Truck, Ambulance, (HMMWV).....	2-2	2-1
M996/M1036/M1045/M1045A2/M1046 TOW Missile Carrier (HMMWV), M1025/M1025A2/M1026/M1043/M1043A2/M1044 Armament Carrier (HMMWV).....	2-3	2-4
M998/M1037 Modified (GVW 9,400 lbs)/M1038/M1097/M1097A2 Truck, Cargo, 1 1/4-ton (HMMWV)	2-4	2-7
M1037/M1042/M1097/M1097A1/M1097A2 Shelter Carrier (HMMWV) Without Shelter	2-5	2-10
M1037/M1042 Shelter Carrier (HMMWV) With S-250 or S-250E Shelter	2-6	2-12
M1097 Shelter Carrier, Heavy HMMWV, With S-250 or S-250E Shelter	2-7	2-15
M1037 Shelter Carrier (Heavy HMMWV) with Downsized Direct Support Section (DDSS) Shelter	2-8	2-18
M1037 Shelter Carrier (HMMWV) With S-318 Shelter	2-9	2-20
M1097/M1097A2 Shelter Carrier (HMMWV) With Lightweight Multipurpose Shelter (LMS)	2-10	2-22
M1037/M1042 Shelter Carrier (HMMWV) With Lightweight Multipurpose Shelter (LMS)	2-11	2-26
M1037/M1097 Shelter Carrier (HMMWV) With G15840 Smoke Generator Set, M157/M157A1E1	2-12	2-28
M998 (HMMWV) With Two MRC-127 Stacks	2-13	2-30
M998/M1038 (HMMWV) With Lightweight Tactical Fire Control Systems (LTACFIRE)/Tactical Terminal Control System (TTCS).....	2-14	2-32
M1037 (HMMWV) With AN/TPQ-36 Firefinder Generator Pallet	2-15	2-34
M1097 (H-HMMWV) With Antenna AS-3036/TSC on OA-9134/TSC Pallet Group	2-16	2-36

	Paragraph	Page
M1097 (H-HMMWV) With High Mobility Digital Group Multiplexer (DGM) Auxiliary Equipment Transportation Container (AETC) in 2 and 3 Mast Configurations	2-17	2-38
M1097 (H-HMMWV) With Fiberglass Cargo Bed Cover (CBC)	2-18	2-41
Light Armored Vehicle (LAV) (USMC)	2-19	2-44
M1097 (H-HMMWV) With AN/TPQ-42, Meteorological Hydrogen Generator (MHG)	2-20	2-46
M1097/M1113 Shelter Carrier (HMMWV) With Gitchner Model 1497A Shelter	2-21	2-48
M1097 (HMMWV) With Contact Maintenance Truck, Heavy (CMTH)	2-22	2-51
M1097 (HMMWV) With Enhanced Fiber Optic Guided Missile (EFOGM) Launcher	2-23	2-53
M1097 (HMMWV) With Sentinel AN/MPQ-64 Tactical Quiet Generator (TQG)	2-24	2-55
M1097A2 (HMMWV) With Secure Mobile Anti-Jam Tactical Terminal (SMART-T) Pallet	2-25	2-57
M1097A1 (HMMWV) With Remote Landing Site Tower (RLST)	2-26	2-59
M1113 (HMMWV) With M56 Smoke Generating System	2-27	2-61
M1097A2 (HMMWV) Soft Top Truck With Advanced Field Artillery Tactical Data Systems (AFATADS)	2-28	2-63
M1113 Truck, Utility, Expanded Capacity (HMMWV), With Lightweight Multipurpose Shelter (LMS)	2-29	2-65
M1097A2 Shelter Carrier (HMMWV) With Special Operations Media System (SOMS-B) in S-788G Shelter (LMS)	2-30	2-68
M1037 (HMMWV) With Compressed Air-Foam System, Mobile (CAFSM)	2-31	2-71
Prophet AN/MLQ-40 (V) on M1097 HMMWV	2-32	2-73
Helmit Hardtop (Amtech Corp) Cargo Bed Cover on M1097A2 HMMWV	2-33	2-75
Interim Fast Attack Vehicle (IFAV) Truck, Long Wheel Base	2-34	2-77
John Deere M-Gator (Model # VGM6X01001)	2-35	2-79
Two John Deere M-Gators, Model # VGM6X01001, Side by Side (Shotgun Method)	2-36	2-81

CHAPTER 3 CERTIFIED SINGLE-POINT RIGGING PROCEDURES FOR TRAILERS

Introduction	3-1	3-1
M416 1/4-Ton Trailer	3-2	3-1
M101A2/A3 3/4-Ton Trailer	3-3	3-3
M1048/M1073 Trailer	3-4	3-5
M1048 Trailer with Tracked Suspension System (TSS)	3-5	3-7
M149A2 Water Trailer (USMC)	3-6	3-9
M989 Heavy-Expanded Mobility Ammunition Trailer (HEMAT)	3-7	3-11
M989A1 Heavy-Expanded Mobility Ammunition Trailer (HEMAT II) ..	3-8	3-13
Mk14, Trailer, Container Hauler	3-9	3-15
Mk15, Trailer, Wrecker/Recovery	3-10	3-17
Mk16, Trailer, Fifth-Wheel Adapter	3-11	3-19
Mk17, Trailer, Drop-Side, Cargo	3-12	3-21

	Paragraph	Page
M116A2 Trailer with Antenna Groups, AS-3954/TRC (2 each) (USMC)	3-13	3-23
M116A2 Trailer with AN/TPQ-36 Firefinder Antenna Transceiver Group (ATG)	3-14	3-25
M116A2 Trailer with M894 18,000-BTU Air Conditioner and MEP-003A Generator	3-15	3-27
MKT-90 Field Kitchen Trailer	3-16	3-29
Hydraulic System Test and Repair Unit (HSTRU)	3-17	3-31
M116A2 Trailer, Single Channel Objective Tactical Terminal (SCOTT)	3-18	3-33
High Mobility Trailers (HMT), M1101/M1102	3-19	3-35
M116A3 Trailer with OE334 Antenna Coupler Group	3-20	3-37
Desert Operation Trailer (DOT) with Desert Operation Motorcycle (DOM)	3-21	3-39
HMT Trailer With Sentinel AN/MPQ-64 Antenna Transmitter Group (ATG)	3-22	3-41
HMT Trailer With Remote Landing Site Tower (RLST)	3-23	3-43
M105A3 Trailer	3-24	3-45
M332 Ammunition Trailer, 1 1/2-Ton	3-25	3-47
AS-4492/TSC, Lightweight, High Gain, X-band, Antenna (LHGXA) Trailer	3-26	3-49
XM1112 400 Gallon Water Trailer	3-27	3-51
M1082 Light Medium Tactical Vehicle (LMTV) and M1095 Medium Tactical Vehicle (MTV) Trailers	3-28	3-53
Small Portable Expeditionary Aeromedical Rapid Response (SPEARR) Trailer	3-29	3-55
Minimum Operating Strip Lighting System (MOSLS)	3-30	3-57
Assault Command Post With High Mobility Wheel Set	3-31	3-59

CHAPTER 4 CERTIFIED SINGLE-POINT RIGGING PROCEDURES FOR TRAILERS WITH MOUNTED GENERATORS

Introduction	4-1	4-1
M353 Trailer Chassis With Mounted Generators	4-2	4-1
M200A1 Trailer-Mounted Power Units, Generators, and Power Plants	4-3	4-3
M103A3 Trailer-Mounted Power Units, Generators, and Power Plants	4-4	4-7
M103A3/A4 Trailer-Mounted Power Units, Generators, and Power Plants	4-5	4-9
M116A2 Trailer-Mounted Power Units, Generators, and Power Plants	4-6	4-11
M116A3 Trailer-Mounted Power Units, Generators, and Power Plants	4-7	4-13
High Mobility Trailer (HMT) with AN/TJQ-35A Power Plant	4-8	4-15
High Mobility Trailer (HMT) with Tactical Quiet Generator Power Units	4-9	4-17
High Mobility Trailers (HMT) with Generator for Joint Surveillance Target Attack Radar (JSTAR) System	4-10	4-19

CHAPTER 5 CERTIFIED SINGLE-POINT RIGGING PROCEDURES FOR TRUCK AND TOWED COMBINATIONS

Introduction	5-1	5-1
--------------------	-----	-----

	Paragraph	Page
M973/M973E1/M1065/M1066 Small Unit Support Vehicle (SUSV)	5-2	5-1
M1067 Flatbed Small Unit Support Vehicle (SUSV)	5-3	5-5
 CHAPTER 6 CERTIFIED SINGLE-POINT RIGGING PROCEDURES FOR HOWITZERS AND WEAPONS SYSTEMS		
Introduction.....	6-1	6-1
M101A1 105-MM Howitzer with or without A-22 Cargo Bags	6-2	6-1
M102 105-MM Howitzer	6-3	6-4
M102 105-MM Howitzer with One A-22 Cargo Bag	6-4	6-6
M102 105-MM Howitzer with Two or Three A-22 Cargo Bags	6-5	6-8
Two M102 105-MM Howitzers	6-6	6-10
Two M102 105-MM Howitzers with One, Two, or Three A-22 Cargo Bags	6-7	6-12
M119 105-MM Howitzer, Folded/Towed Position	6-8	6-14
M119 105-MM Howitzer, Forward/Firing Position	6-9	6-16
M114A2 155-MM Howitzer, Towed	6-10	6-19
M119 105-MM Howitzer, Forward Firing Position, Platform Down with Additional Boxes of Ammunition	6-9.1	6-18.1
M198 155-MM Howitzer, Towed/Stowed	6-11	6-21
Two M101A1 155-MM Howitzers	6-12	6-23
M167 20-MM AA Gun (Vulcan) with or without One A-22 Cargo Bag	6-13	6-26
BMS-120 Battalion Mortar System	6-14	6-28
 CHAPTER 7 CERTIFIED SINGLE-POINT RIGGING PROCEDURES FOR GUIDED MISSILE SYSTEMS		
Introduction.....	7-1	7-1
M54A1/M54A2 Chaparral Launch Station	7-2	7-1
M85 Towed Chaparral Missile System	7-3	7-3
Continuous Wave Acquisition Radar (CWAR)	7-4	7-5
M192E1/M192-1 Zero Length Launcher	7-5	7-7
M501E3 Loader-Transporter, Guided Missile.....	7-6	7-9
M1E2 Loading and Storage Missile Pallet	7-7	7-11
Pedestal-Mounted Stinger (Avenger)	7-8	7-13
 CHAPTER 8 CERTIFIED SINGLE-POINT RIGGING PROCEDURES FOR ENGINEER EQUIPMENT		
Introduction.....	8-1	8-1
T-3 Tractor, Crawler	8-2	8-1
D5B Tractor, Dozer	8-3	8-3
Tractor, Full-Track, MC 1150E	8-4	8-5
Tractor, Wheeled, Industrial, Case Model 580	8-5	8-7
Small Emplacement Excavator (SEE)	8-6	8-9
High Mobility Materiel Handler (HMMH)	8-7	8-11
Ditching Machine	8-8	8-13
950BS Scoop Loader	8-9	8-15

	Paragraph	Page
130GS Grader	8-10	8-19
613BS Scraper, Elevating	8-11	8-21
613WDS Water Distributor	8-12	8-24
Roller, Towed, Vibrating	8-13	8-27
Mk155 Launcher, Mine Clearing	8-14	8-29
M68A2 Line Charge, Demolition with or without Mk22 Rocket Motor	8-15	8-31
Mk155 Launcher with or without M68A2 Demolition Line Charge and Mk22 Rocket Motor on M353 Trailer	8-16	8-33
Mk155 Launcher with or without M68A2 Demolition Line Charge and Mk22 Rocket Motor on M200A1 or Mobile-Trac System (MTS) Trailer	8-17	8-35
LRT-110, 7 1/2-Ton Crane	8-18	8-37
LRT-110, 7 1/2-Ton Crane (Boom)	8-19	8-39
LRT-110, 7 1/2-Ton Crane (Power Unit)	8-20	8-41
Truck, Forklift, MC-4000	8-21	8-43
Truck, Forklift, RT4000	8-22	8-45
MHE-270/MHE-271 Truck, Forklift, RT4000	8-23	8-47
Truck, Forklift, MC-6000	8-24	8-49
Extendable Boom Forklift (EBFL)	8-25	8-51
Welding Shop on M200A1 Trailer	8-26	8-53
250 CFM Air Compressor	8-27	8-55
Pneumatic Tool and Compressor Outfit/Hydraulic Pioneer Tool Outfit (PTO) on M353 Trailer	8-28	8-57
Fuel Dispensing System, Tactical Airfield (TAFDS)	8-29	8-59
Bath Unit Mounted on the M103 Trailer	8-30	8-61
Boat, Bridge Erection	8-31	8-63
Bridge, Medium Girder, Dry Gap (MGB)	8-32	8-65
Ribbon Bridge Ramp Bay	8-33	8-67
Ribbon Bridge Interior Bay	8-34	8-69
Water Purification Unit-Reverse Osmosis (ROWPU)	8-35	8-71
MS114 WFD Concrete Mixer	8-36	8-73
Towed Rollers	8-37	8-75
Tractor (Dozer), Full-Track, Type III, JD450G	8-38	8-77
Vibrating Roller, Caterpillar, RO-33	8-39	8-79
Countermine Miniflail	8-40	8-81

CHAPTER 9 CERTIFIED SINGLE-POINT RIGGING PROCEDURES FOR LIQUID CONTAINERS

Introduction	9-1	9-1
Lightweight Collapsible Fabric Tank	9-2	9-1
One to Four 500-Gallon Fuel Drums	9-3	9-3
Six 500-Gallon Fuel Drums, Empty	9-4	9-6
Storage Module, Fuel/Water, Six Compartment Container (SIXCON), Individual	9-5	9-8
Two Storage Modules, Fuel/Water, Six Compartment Container (SIXCON), (Stacked)	9-6	9-10

	Paragraph	Page
CHAPTER 10 CERTIFIED SINGLE-POINT RIGGING PROCEDURES FOR SHELTERS		
Introduction	10-1	10-1
AN/ASM-146 or AN/MSM-108 Electronic Shops	10-2	10-1
Communications or Electronic Systems Housed in S-250 Shelters	10-3	10-3
Communications or Electronic Systems Housed in Lightweight Multipurpose Shelter (LMS)	10-4	10-5
Communications or Electronic Systems Housed in S-280 Shelters	10-5	10-7
8- x 8- x 10-Foot Shelter Systems	10-6	10-10
Downsized Digital Group Multiplexer (DDGM) Shelter Assemblages	10-7	10-12
AN/TYC-5A Data Communications Terminal	10-8	10-14
AN/TRN-44 Tactical Air Navigation Shelter	10-9	10-16
Hardened Army Tactical Shelter (HATS)	10-10	10-18
Cradle Mounted AN/TPQ-32A Radar Set, Component of the AN/MPQ-49A Forward Area Alerting Radar (FAAR) System.	10-11	10-20
NATO Air Base Satcom (NABS) Shelter Pallet, AN/TSC-93B (V) 2 ..	10-12	10-22
Refrigerator, Rigid Box without Refrigerator Unit	10-13	10-24
 CHAPTER 11 CERTIFIED SINGLE-POINT RIGGING PROCEDURES FOR CONTAINERS		
Introduction	11-1	11-1
Pershing II in Container	11-2	11-1
Shipping/Storage Containers	11-3	11-3
Army Missile Systems Enclosure Assembly Launch Pods (EALP), One Container	11-4	11-5
Army Missile Systems Enclosure Assembly Launch Pods (EALP), Two Containers	11-5	11-7
M1A1 Full-Up Power Pack (FUPP) Container	11-6	11-9
Field Medical Oxygen Generation/Distribution System (FMOGDS) ...	11-7	11-11
Field Medical Oxygen Generation/Distribution System (FMOGDS) (Combined)	11-8	11-13
Distributed Explosive Technology (DET) System, Array Container	11-9	11-15
Distributed Explosive Technology (DET) System, Landing Craft, Air Cushioned (LCAC), Landing Interface Kit (LIK) Container, Single ...	11-10	11-17
Distributed Explosive Technology (DET) System, Landing Craft, Air Cushioned (LCAC), Interface Kit (LIK) Container, Doubled, Stacked .	11-11	11-19
 CHAPTER 12 CERTIFIED SINGLE-POINT RIGGING PROCEDURES FOR RADAR AND SATELLITE EQUIPMENT		
Introduction	12-1	12-1
AN/TPQ-37 Artillery-Loading Radar Set (Firefinder)	12-2	12-1
AN/TMQ-31 Radio Direction Finder	12-3	12-4
AN/TPQ-36 Firefinder Antenna Radar Set	12-4	12-6
AN/TPQ-36 Firefinder II	12-5	12-8
OE-361/G Quick Reaction Satellite Antenna	12-6	12-11

	Paragraph	Page
	AS-3471/TPN-22 Antenna Pallet (USMC).....	12-7 12-13
	Antenna Pallet Transit Frame	12-8 12-15
	Digital Group Multiplexer (DGM), Digital Antenna Mast Program (DAMP), 2 and 3 Antenna Pallet Configurations	12-9 12-17
	Digital Group Multiplexer (DGM), Auxiliary Equipment Transportation Container (AETC), 2 and 3 Mast Configurations	12-10 12-19
	Lightweight Generator Frame Assembly (AN/TSC-93B Reconfiguration) Satellite Communications Terminal	12-11 12-21
	Secure Mobile Anti-Jam Tactical Terminal (SMART-T) Pallet	12-12 12-23
CHAPTER 13	CERTIFIED SINGLE-POINT RIGGING PROCEDURES FOR GENERATOR SETS	
	Introduction.....	13-1 13-1
	Aviation Ground Power Unit (AGPU).....	13-2 13-1
	Aviation Direct Current Generator Set (ADCGS)	13-3 13-4
	Skid Mounted Generators	13-4 13-6
	MEP112A Generator Pallet	13-5 13-8
	NATO Air Base Satcom (NABS) Power Pallet AN/TSC-85 (V) 2	13-6 13-10
	Skid Mounted Tactical Quiet Generator Sets	13-7 13-12
CHAPTER 14	CERTIFIED SINGLE-POINT RIGGING PROCEDURES FOR MISCELLANEOUS EQUIPMENT	
	Introduction.....	14-1 14-1
	Forward Area Refueling Equipment (FARE).....	14-2 14-1
	Fire Extinguisher, Dry Chemical	14-3 14-3
	Rigid Raiding Craft	14-4 14-5
	2.75-inch Rocket Fastpack Pallet	14-5 14-7
	Special Divers Air Support System (SDASS)	14-6 14-9
	Two Mobile Oversnow Transport (MOST) Snowmobiles with or without Two Sleds	14-7 14-11
CHAPTER 15	SUITABLE SINGLE-POINT RIGGING PROCEDURES FOR WHEELED VEHICLES	
	Introduction.....	15-1 15-1
	M342A2 2 1/2-Ton Dump Truck with Winch	15-2 15-1
	M35A1/2 2 1/2-Ton Cargo Truck with Winch	15-3 15-3
	M54A2 5-Ton Cargo Truck with Winch	15-4 15-5
	M52A2 or M818 5-Ton Tractor with Winch	15-5 15-7
	Crane, Self-Propelled, for Army Aircraft Maintenance and Positioning (SCAMP)	15-6 15-9
CHAPTER 16	SUITABLE SINGLE-POINT RIGGING PROCEDURES FOR TRAILERS	
	Introduction.....	16-1 16-1

	Paragraph	Page
M105 1 1/2-Ton Trailer	16-2	16-1
M270A1 Semitrailer, Wrecker	16-3	16-3
M172A1 Semitrailer, Lowbed	16-4	16-5
Trailer, Flatbed, Tilt Deck, 15-Ton, 8-Wheel	16-5	16-7
Trailer-Mounted Welding Shop	16-6	16-9
LEB 300 Welding Machine on 2 1/2-Ton Trailer Chassis	16-7	16-11
Trailer-Mounted Compressor, Reciprocating	16-8	16-13
Trailer-Mounted AN/MTC-10	16-9	16-15
Trailer-Mounted Tool Outfit	16-10	16-17
Trailer-Mounted, Lube, Service Unit	16-11	16-19
Trailer, Bolster, M796	16-12	16-21
M149 Series Water Trailers	16-13	16-23
 CHAPTER 17		
SUITABLE SINGLE-POINT RIGGING PROCEDURES FOR HOWITZERS		
Introduction	17-1	17-1
M114A1 155-MM Howitzer with or without Accompanying Load	17-2	17-1
 CHAPTER 18		
SUITABLE SINGLE-POINT RIGGING PROCEDURES FOR ENGINEER EQUIPMENT		
Introduction	18-1	18-1
MRS-100 Wheeled Industrial Tractor	18-2	18-1
M5 8-Foot Aggregate Spreader	18-3	18-3
Roller, Towed, Vibrating, 1-Drum, 5-Ton, VRS55TM	18-4	18-5
Roller, Road, Towed, Wheeled, 13-Tire, 9-Ton	18-5	18-7
Tar Kettles	18-6	18-9
16SM Concrete Mixer	18-7	18-11
Road Sweeper, Towed	18-8	18-13
Sheepsfoot Roller, Two-Drum, MD-96	18-9	18-15
Model 1150 Full Tracked Tractor	18-10	18-17
M4K 4000-Pound Forklift	18-11	18-20
Floodlight Set, Trailer-Mounted	18-12	18-22
 CHAPTER 19		
SUITABLE SINGLE-POINT RIGGING PROCEDURES FOR LIQUID CONTAINERS		
Introduction	19-1	19-1
Tank, Fabric, Collapsible, 10,000-Gallon	19-2	19-1
60,000-Gallon Fuel System Supply Point	19-3	19-3
One to Six 250-Gallon Water Drums	19-4	19-5
 CHAPTER 20		
SUITABLE SINGLE-POINT RIGGING PROCEDURES FOR SHELTERS		
Introduction	20-1	20-1
Tool Set Aviation Maintenance, SE 1, Airmobile	20-2	20-1

	Paragraph	Page
	Shop, Portable, Aircraft Maintenance (SPAM)	20-3 20-3
CHAPTER 21	SUITABLE SINGLE-POINT RIGGING PROCEDURES FOR CONTAINERS	
	Introduction	21-1 21-1
	One CONEX Container	21-2 21-1
	Two CONEX Containers	21-3 21-3
CHAPTER 22	SUITABLE SINGLE-POINT RIGGING PROCEDURES FOR RADAR EQUIPMENT	
	Introduction	22-1 22-1
	AN/MPQ-4A Radar Set	22-2 22-1
CHAPTER 23	SUITABLE SINGLE-POINT RIGGING PROCEDURES FOR GENERATOR SETS	
	Introduction	23-1 23-1
	Trailer Mounted Generators	23-2 23-1
	7.5KW Generator Set	23-3 23-3
CHAPTER 24	SUITABLE SINGLE-POINT RIGGING PROCEDURES FOR MISCELLANEOUS EQUIPMENT	
	Introduction	24-1 24-1
	Company Level Field Feeding Kit	24-2 24-1
	350-GPM Pump Assembly	24-3 24-4
	Light Tactical Floating Raft Bridge	24-4 24-6
	Medium-Span Bridge	24-5 24-11
	M4T6 Bridge	24-6 24-13
APPENDIX A.	NATIONAL STOCK NUMBERS FOR SLINGS, NETS, AND SPARE PARTS	A-1
APPENDIX B.	SLING CONVERSION CHART	B-1
GLOSSARY		Glossary-1
REFERENCES		References-1

CHAPTER 1

FUNDAMENTAL PRINCIPLES

1-1. INTRODUCTION

This chapter contains general information about certification for helicopter sling load and explains the role of the Military Traffic Management Command Transportation Engineering Agency (MTMCTEA) and the Department of Defense (DOD) sling load certification authority. This authority rests with the US Army Soldier Systems Center (SSC). This chapter also explains the information contained in the equipment rigging procedures and gives some general rigging instructions.

1-2. CLASSIFICATION DEFINITIONS OF SLING LOADS

a. Certified Sling Loads. Certified sling loads are those items of equipment and their associated rigging procedures which have completed the evaluation and testing required by SSC for sling load certification. These rigging procedures are in Chapters 2 through 14. Only certified sling loads are authorized for the Marine Corps. The US Army SSC has indicated that any single point sling load certified under a specific aircraft is also certified for any aircraft with suitable lift capability. The following restrictions apply for sling load certification to remain in effect:

(1) The load must be within the lifting capability of the desired helicopter model and not exceed the rated capacity of the sling set being used.

(2) The load shall be rigged in accordance with the certified rigging procedure.

(3) The recommended stable airspeed specified for the load in the applicability section of the rigging procedure is a recommendation and not a restriction, unless so stated.

(4) This certification is limited to single-point loads only.

NOTE: When carrying loads at weights close to the aircraft hook limitations, close coordination with the aviation unit is required.

CAUTION

Loads weighing less than 6,000 pounds may not fly in a stable condition and may incur jet-tisoning problems when flown under a CH-53E helicopter. CH-53E units may have restrictions on flying light loads. Direct coordination with CH-53E units is encouraged.

b. Suitable Sling Loads. Suitable sling loads are those items of equipment and their associated rigging procedures that have not been certified but have demonstrated acceptable static lift and flight characteristics during a flight test. In most cases these loads were not pull tested in accordance with MIL STD 913, but are known loads which have been flown without incident for years and which SSC considers to be proven safe. These rigging procedures are in Chapters 15 through 24.

c. Unique Sling Loads. Unique loads are equipment carried on a one time or low-frequency basis, such as telephone poles, artillery targets, or barrier material. The lack of sling load certification in itself does not preclude a unit commander from carrying a load that is not certified. Each service is responsible for determining its policy on carrying loads that have not been certified for sling load.

d. Prohibited Sling Loads. Prohibited sling loads are items of equipment that are prohibited from sling loading as determined by each service. These loads have been denied sling load certification and are a safety hazard if carried. They have either structural deficiencies or have exhibited unstable flight characteristics during flight testing. Each service will identify these loads and transmit this information by separate list. Contact your service point of contact identified in the Preface if you have any questions regarding the classification of a particular load.

1-3. CERTIFICATION OF EQUIPMENT FOR HELICOPTER SLING LOAD

a. Objective. The objective of helicopter sling load certification is to assure the user that the equipment being transported can withstand the stresses of a sling load