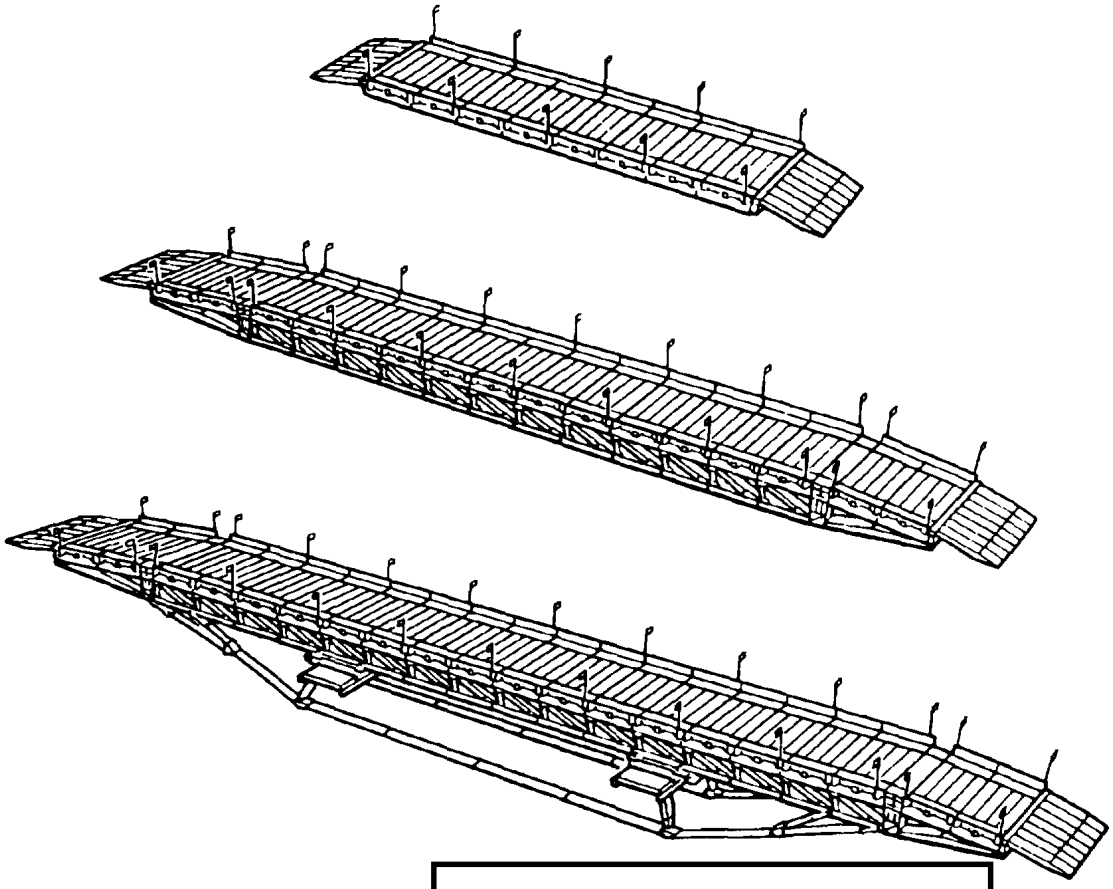
OPERATOR'S MANUAL



Equip. Desc. Page 1-8
Equip. Data Page 1-72
Prep. For Use Page 3-1
Design Pro. Formas Page 3-48
General Drills Page 4-1
Single Story Page 5-1
Double Story Page 6-1
Link Reinforced Page 7-1

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MEDIUM GIRDER BRIDGE
INCLUDING

BRIDGE SET	**NSN 5420-00-172-3520**
BRIDGE ERECTION SET	**NSN 5420-00-172-3519**
LINK REINFORCEMENT SET	**NSN 5420-01-139-1503**

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HEADQUARTERS, DEPARTMENT OF THE ARMY
AND HEADQUARTERS U.S. MARINE CORPS

16 FEBRUARY 1993

TECHNICAL MANUAL

NO. 5-5420-212-10-1

HEADQUARTERS
DEPARTMENT OF THE ARMY AND
HEADQUARTERS U.S. MARINE CORPS
WASHINGTON, D.C., 16 FEBRUARY 1993

OPERATOR'S MANUAL

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TABLE OF CONTENTS

		PAGE
	HOW TO USE THIS MANUAL	xix
CHAPTER 1.	INTRODUCTION	1-1
Section I.	GENERAL INFORMATION	1-1
1-1	SCOPE	1-1
1-2	MAINTENANCE FORMS AND RECORDS	1-1
1-3	REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS	1-1
1-4	NOMENCLATURE CROSS REFERENCE LIST	1-1
1-5	LIST OF ABBREVIATIONS	1-4
1-6	GLOSSARY	1-6

*This manual supersedes TM 5-5420-212-12, dated 18 April 1985, including all changes.

Page

Section II. EQUIPMENT DESCRIPTION 1-8
1-7 EQUIPMENT CHARACTERISTICS, CAPABILITIES AND FEATURES 1-8
1-8 BRIDGE LENGTH 1-10
a. Single Story 1-10
b. Double Story with and without LRS 1-10
1-9 LOCATION AND DESCRIPTION OF MAJOR COMPONENTS 1-15
1-10 EQUIPMENT DATA 1-72
Section III. PRINCIPLES OF OPERATION 1-85
1-11 INTERFACE OF MGB COMPONENTS 1-85
CHAPTER 2 OPERATING INSTRUCTIONS 2-1
Section I. PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) 2-1
2-1 INTRODUCTION 2-1
2-2 PREVENTIVE MAINTENANCE CHECKS AND SERVICES 2-1
Section II. OPERATION UNDER USUAL CONDITIONS 2-3
Section Ill. OPERATION UNDER UNUSUAL CONDITIONS 2-4
2-3 LAUNCHING IN HIGH WINDS 2-4
2-4 LAUNCHING UP STEEP SLOPES 2-6
CHAPTER 3 PREPARATION FOR USE 3-1
Section I. INTRODUCTION 3-2
Section II. SERVICE ON RECEIPT 3-2
3-1 INTRODUCTION 3-2
3-2 SERVICE ON RECEIPT 3-2
Section III. PRELIMINARY PLANNING 3-2
3-3 SAFE WORKING LOADS 3-2
a. General 3-2
b. To find the maximum allowable load ‘LOAD’ 3-2
c. Maximum loading of bridge components 3-5
3-4 PRELIMINARY STUDIES 3-8
3-5 SITE SELECTION 3-8
3-6 RECONNAISSANCE REPORT 3-14

		Page
3-7	CHOICE OF BRIDGE LENGTH AND CLASS	3-14
3-8	BRIDGE CONSTRUCTION TIMES	3-15
3-9	WORK PARTY REQUIRED	3-16
Section IV.	DESIGN	3-16
3-10	DESIGN PHASE 1	3-16
3-11	DESIGN PHASE 2	3-18
3-12	SINGLE STORY 4 thru 12 BAY DESIGN	3-18
3-13	SINGLE STORY 9 thru 12 BAY DESIGN ON RESTRICTED SITES	3-26
3-14	DOUBLE STORY 2E + 1 thru 2E + 12 BAY DESIGN	3-26
3-15	DOUBLE STORY 2E + 1 thru 2E + 12 BAY DESIGN ON RESTRICTED SITES	3-34
3-16	DOUBLE STORY 2E + 13 thru 2E + 22 BAY DESIGN w/o LRS	3-35
3-17	DOUBLE STORY 2E+13 thru 2E+22 BAY DESIGN WITH LRS	3-42
Section V.	TRANSPORT AND PALLETIZATION	3-57
3-18	TRANSPORT REQUIREMENTS	3-57
3-19	PALLETIZATION - SINGLE STORY	3-57
a.	Pallet Load SR DC 4 through 12	3-57
b.	Pallet Load ES 4 thru 7/8	3-41
c.	Pallet Load ES 1112	3-72
d.	Pallet Load SSE and SSE 6/8	3-75
e.	Pallet Load SSC 8 thru 12	3-79
3-20	PALLETIZATION - DOUBLE STORY	3-85
a.	Pallet Load LR/D	3-85
b.	Pallet Loads DSC, EOB1 and EOB2	3-86
c.	Pallet Load ED	3-96
d.	Pallet Loads DSC1 and DSC2	3-102
3-21	PALLETIZATION - LINK REINFORCEMENT	3-109
a.	Pallet Load LRS-1	3-109
b.	Pallet Load LRS-2	3-116
3-22	PALLETIZATION - SPARES PALLETS	3-122
3-23	LOADING PALLETS ON TRANSPORT VEHICLES	3-122
a.	Loading Pallets on Trailer	3-122
b.	Securing Pallets on Trailer	3-124
c.	Loading Pallet on Truck	3-128

		Page
d.	Securing Pallet on Truck	3-128
3-24	OFF-LOADING PALLETS FROM TRANSPORT VEHICLES	3-132
a.	Off-Loading Pallets from Trailer	3-132
b.	Off-Loading Pallets from Truck	3-134
c.	Off-loading on Normal Sites	3-136
d.	Off-loading on Restricted Sites	3-138
CHAPTER 4	**GENERAL DRILLS**	4-1
4-1	INTRODUCTION	4-2
4-2	PANEL POINT CODE AND CENTER OF GRAVITY	4-2
a.	Single Story	4-2
b.	Double Story and Link Reinforced	4-3
c.	Boom and Center of Gravity Marker	4-3
4-3	LAUNCHING NOSE CODE	4-3
4-4	LANDING ZONE NUMBER	4-4
4-5	ROLLER BEAMS	4-4
a.	Single Story	4-4
b.	Double Story 2E + I thru 2E + 12 bay	4-5
c.	Double Story Using Capsill Roller Beam	4-10
d.	Leveling and Re-staging Roller Beams	4-12
e.	Locking Roller Beams	4-14
4-6	CONNECTING TOP PANELS	4-16
a.	Top Panel to Top Panel or Bankseat Beam	4-16
b.	Top Panel to Top Panel - Double Story	4-16
c.	Top Panel to Junction Panel	4-17
d.	Use of Panel Erection Aid	4-17
4-7	CONNECTING BOTTOM PANELS	4-18
a.	Bottom Panel to Top and Bottom Panels	4-18
b.	Bottom Panel to Top and Junction Panels	4-20
4-8	ASSEMBLE FRONT END OF BRIDGE AND FIRST BAY (DOUBLE STORY)	4-20
a.	General	4-20
b.	Assembly	4-20
4-9	ASSEMBLE REAR END OF BRIDGE	4-25
a.	Single Story	4-25

		Page
b.	Double Story	4-27
4-10	CONNECTING LAUNCHING NOSE ROLLER	4-33
4-11	CONNECTING/DISCONNECTING LAUNCHING NOSE CROSS GIRDER & POSTS	4-33
a.	Single Story	4-33
b.	Double Story	4-34
c.	Setting Launching Nose Cross Girder	4-35
4-12	ASSEMBLING LAUNCHING NOSES FOR LAUNCH	4-36
a.	Single Story 1 thru S Bay	4-36
b.	Single Story 8 thru 12 Bay - Double Story 2E + 1 thru 2E + 18	4-38
c.	Link Reinforced 2E + 18 thru 2E + 22 and Double Story w/o Link 2E + 19 thru 2E+22	4-42
4-13	STRIPPING LAUNCHING NOSES DURING LAUNCH	4-45
a.	Bridges with a Single Story Nose	4-45
b.	Bridges with a Double Story Nose	4-46
4-14	ASSEMBLING LAUNCHING NOSES FOR DELAUNCH	4-47
a.	Single Story 8 thru 12 Bay. Double Story 2E + 1 thru 2E + 22	4-47
b.	Link Reinforced Bridges	4-49
4-15	LANDING ROLLER PEDESTAL	4-49
a.	Setting Up Landing Roller Pedestal	4-49
b.	Stability of Landing Roller Pedestal	4-51
c.	Recover Landing Roller Pedestal	4-52
4-16	FITTING LINK COMPONENTS	4-52
a.	Fitting Anchor Assembly and First Link	4-53
b.	Fitting Post Tensioning Assembly, Footwalk and Second Link	4-56
c.	Fitting Light Tackle	4-61
d.	Fitting Anti Flutter Tackle	4-62
e.	Tensioning	4-63
4-17	OPERATION OF PULLER	4-63
a.	Threading Cable into Puller and Taking Up Slack	4-63
b.	Preparing Puller to Take Load	4-64
c.	Selecting Speed	4-64
d.	Taking In	4-64
e.	Paying Out	4-64
f.	Anchoring the Puller	4-64

		Page
4-18	LAUNCHING BY VEHICLE	4-65
a.	Connecting Push Bar Cross Girder to Panel	4-65
b.	Connecting Push Bar Adapter and Push Bar	4-65
c.	Connecting Push Bar to Bankseat Beam	4-67
d.	Booming	4-68
e.	Disconnecting Push Bar	4-68
4-19	BOOMING/LAUNCHING THE BRIDGE	4-68
a.	Bridge on RB or FRB and RRB	4-69
b.	Bridge on CRB, FRB and RRB	4-70
4-20	JACKING	4-71
a.	General Principles	4-71
b.	Jack Operation	4-72
c.	Jack Post and Jack - Single Story	4-72
d.	Jack Post and Jack - Double Story	4-73
e.	Jacking Down - Single Story up to 8 Bay	4-74
f.	Jacking Down - Single Story over 8 Bay and All Double Story	4-78
g.	Jacking When Home Bank has Crossfall	4-81
h.	Jacking When Far Bank Has Crossfall	4-82
4-21	DAVITS	4-82
a.	General	4-82
b.	Lowering Bridge	4-82
4-22	CRANE	4-87
a.	General	4-87
b.	Lowering Bridge	4-87
4-23	PACKING ENDS OF BRIDGE	4-88
a.	General	4-88
b.	Packing	4-49
4-24	LAYING RAMPS	4-90
a.	General	4-90
b.	Procedure	4-90
4-25	LAYING DECKS	4-91
4-26	FITTING CURBS AND GUIDE MARKERS	4-92
4-27	STRIPPING ON ORIGINAL FAR BANK	4-93
a.	Removing Junction Panel	4-93

		Page
b.	Removing Bottom Panels	4-94
c.	Removing Top Panels	4-95
CHAPTER 5	**SINGLE STORY BRIDGE**	5-1
Section I.	GENERAL	5-2
Section II.	NORMAL SITES.	5-9
5-1	ASSEMBLY - SINGLE STORY -5 BAY	5-9
a.	Set Up and Align Roller Beam	5-9
b.	Assembly	5-9
5-2	DISASSEMBLY - SINGLE STORY-S BAY	5-14
a.	Preparation for Disassembly	5-14
b.	Disassembly	5-14
5-3	ASSEMBLY- SINGLE STORY- 12 BAY	5-20
a.	Set Up and Align Roller Beam	5-20
b.	Assembly	5-20
5-4	DISASSEMBLY - SINGLE STORY -12 BAY	5-27
a.	Preparation for Disassembly	5-27
b.	Disassembly	5-27
Section III.	RESTRICTED SITES	5-32
5-5	ASSEMBLY - SINGLE STORY - 12 BAY (Restricted Site)	5-32
a.	General	5-32
b.	Assembly	5-32
5-6	DISASSEMBLY - SINGLE STORY - 12 BAY (Restricted Site)	5-36
a.	General	5-36
b.	Disassembly	5-36
Section IV.	COUNTERWEIGHTS - SINGLE STORY	5-39
5-7	6 BAY - NORMAL SITE	5-39
5-8	7 BAY - NORMAL SITE	5-39
5-9	8 BAY - NORMAL SITE	5-39
5-10	9 AND 10 BAY- RESTRICTED SITE	5-40
5-11	11 AND 12 BAY - RESTRICTED SITE	5-40
Section V.	OVERBRIDGES - SINGLE STORY	5-41
5-12	GENERAL	5-41

		Page
5-13	DESIGN	5-41
5-14	ASSEMBLY	5-42
a.	Assembly using a launching nose	5-42
b.	Assembly without a launching nose	5-42
Section VI.	ANCHORAGE - SINGLE STORY	5-46
5-15	BASIC CONSIDERATIONS	5-46
5-16	TYPES OF ANCHORAGE	5-46
5-17	PICKET TYPE INSTALLATION	5-47
5-18	APPROACH GUY INSTALLATION	5-47
CHAPTER 6	**DOUBLE STORY BRIDGE**	6-1
Section I.	GENERAL	6-2
Section II.	NORMAL SITES	6-29
6-1	ASSEMBLY - DOUBLE STORY - 2E + 12 BAY	6-29
a.	Set up and align roller beams	6-29
b.	Assembly	6-29
6-2	DISASSEMBLY- DOUBLE STORY- 2E + 12 BAY	6-34
a.	Preparation for Disassembly	6-34
b.	Disassembly	6-34
6-3	DISASSEMBLY - DOUBLE STORY - 2E + 12 BAY (Normal Site - Original Far Bank)	6-40
a.	General	6-40
b.	Disassembly	6-40
6-4	ASSEMBLY 2E + 22 BAY - W/O LINK REINFORCEMENT	6-45
a.	Set up and align roller beams	6-45
b.	Assembly	6-45
6-5	DISASSEMBLY 2E + 22 BAY - W/O LINK REINFORCEMENT	6-50
a.	Preparation for Disassembly	6-50
b.	Disassembly	6-50
Section III.	RESTRICTED SITES	6-55
6-6	ASSEMBLY - DOUBLE STORY 2E + 12 BAY (Restricted Site)	6-56
a.	General	6-56
b.	Assembly	6-56
6-7	DISASSEMBLY - DOUBLE STORY - 2E + 12 BAY (Restricted Site - Near Bank)	6-58

		Page
a.	General	6-58
b.	Disassembly	6-58
6-8	DISASSEMBLY - DOUBLE STORY - 2E + 12 BAY (Restricted Site - Original Far Bank)	6-60
a.	General	6-60
b.	Disassembly	6-60
Section IV.	COUNTERWEIGHTS - DOUBLE STORY	6-64
6-9	2E + 19 thru 2E + 22 w/o LRS - NORMAL SITE	6-64
6-10	2E + 13 thru 2E + 18 W/O LRS - RESTRICTED SITE	6-64
6-11	2E + 19 thru 2E + 22 w/o LRS - RESTRICTED SITE	6-65
Section V.	OVERBRIDGES - DOUBLE STORY	6-67
6-12	GENERAL	6-67
6-13	DESIGN	6-67
6-14	ASSEMBLY	6-68
a.	Assembly Using a Launching Nose	6-68
b.	Assembly without a Launching Nose (2E + 3 through 2E + 12 bay double story)	6-68
Section VI.	ANCHORAGE - DOUBLE STORY	6-72
6-15	BASIC CONSIDERATIONS	6-72
6-16	TYPES OF ANCHORAGE	6-72
6-17	PICKET TYPE INSTALLATION	6-73
6-18	APPROACH GUY INSTALLATION	6-73
a.	General	6-73
b.	Installation	6-73
CHAPTER 7	**LINK REINFORCED BRIDGES**	7-1
Section I.	GENERAL	7-1
Section II.	NORMAL SITES	7-14
7-1	ASSEMBLY 2E + 22 BAY- LINK REINFORCED	7-14
a.	Set Up and Align Roller Beams	7-14
b.	Assembly	7-14
7-2	DISASSEMBLY - 2E + 22 BAY LINK REINFORCED	7-25
a.	Preparation for Disassembly	7-25
b.	Disassembly	7-25

		Page
7-3	DISASSEMBLY ON ORIGINAL FAR BANK	7-34
a.	General	7-34
b.	Skidding	7-34
c.	Disassembly, 22 Bay Link Reinforced	7-34
Section III.	COUNTERWEIGHTS - LINK REINFORCED BRIDGES	7-38
7-4	2E + 19BAY - NORMAL SITE	7-38
7-5	2E + 20 BAY - NORMAL SITE	7-38
7-6	2E +21 BAY-NORMAL SITE	7-38
7-7	2E + 22 BAY - NORMAL SITE	7-39
Section IV.	ANCHORAGE - LINK REINFORCED BRIDGES	7-40
CHAPTER 8	OPERATOR MAINTENANCE	8-1
Section I.	LUBRICATION	8-2
8-1	OPERATOR LUBRICATION	8-2
Section II.	TROUBLESHOOTING	8-2
8-2	OPERATOR TROUBLESHOOTING PROCEDURES	8-2
Section III.	MAINTENANCE PROCEDURES	8-7
8-3	OPERATOR MAINTENANCE PROCEDURES	8-7
8-4	BRIDGE MARKER GUIDE	8-8
a.	Removal	8-8
b.	Service/Repair	8-8
c.	Installation	8-9
8-5	END TAPER PANEL, BANKSEAT BEAM, JUNCTION PANEL, TOP PANEL, BOTTOM PANEL, LAUNCHING NOSE HEAVY (Resilient Mount)	8-10
a.	Removal	8-10
b.	Service/Repair	8-13
c.	Installation	8-13
8-6	BANKSEAT BEAM, JUNCTION PANEL, TOP PANEL, LAUNCHING NOSE HEAVY) (Shoot Bolt)	8-12
a.	Removal	8-13
b.	Service/Repair	8-13
c.	Installation	8-13
8-7	BOTTOM PANEL (Shoot Bolt)	8-14
a.	Removal	8-14

		Page
b.	Service/Repair	8-15
c.	Installation	8-15
8-8	ROLLER BEAM (Jack Hood, Roller Catch)	8-16
a.	Removal	8-16
b.	Service/Repair	8-17
c.	Installation	8-17
8-9	LAUNCHING NOSE CROSS GIRDER (Safety Catch)	8-18
a.	Removal	8-18
b.	Service/Repair	8-19
c.	Installation	8-19
8-10	LAUNCHING NOSE CROSS GIRDER (Pins and Chains)	8-20
a.	Removal	8-20
b.	Service/Repair	8-20
c.	Installation	8-21
8-11	HYDRAULIC JACK (15T)	8-22
a.	Service	8-22
8-12	HYDRAULIC JACK (20T)	8-24
a.	Service	8-24
8-13	JACK POST	8-26
a.	Removal	8-26
b.	Service/Repair	8-27
c.	Installation	8-27
8-14	ADJUSTABLE SUPPORT (Shoot Bolt)	8-28
a.	Removal	8-28
b.	Service/Repair	8-29
c.	Installation	8-29
8-15	ADJUSTABLE SUPPORT (Pins and Chains)	8-30
a.	Removal	8-30
b.	Service/Repair	8-31
c.	Installation	8-31
8-16	ADJUSTABLE SUPPORT (Leveling Screw)	8-32
a.	Removal	8-32
b.	Service/Repair	8-33
c.	Installation	8-33

		Page
8-17	FIXED SUPPORT (Pin and Trunnion)	8-34
a.	Removal	8-34
b.	Service/Repair	8-35
c.	Installation	8-35
8-18	JACKING BRACKET (Pins and Pulleys)	8-36
a.	Removal	8-36
b.	Service/Repair	8-37
c.	Installation	8-37
8-19	PULLER	8-38
a.	Service	8-38
8-20	ANTI-SKID COATING	8-40
a.	Path Painting	8-40
Appendix A	REFERENCES	A-1
Appendix B	COMPONENT OF END ITEM AND BASIC ISSUE ITEMS	B-1
Section I.	INTRODUCTION	B-1
B-1	SCOPE	B-1
B-2	GENERAL	B-1
B-3	EXPLANATION OF COLUMNS	B-1
Section II.	COMPONENTS OF END ITEM	B-2
B-4	BRIDGE SET	B-2
B-5	ERECTION SET	B-13
B-6	LINK REINFORCEMENT SET	B-31
Section III.	BASIC ISSUE ITEMS BRIDGE ERECTION SET, FIXED BRIDGE, UK MGB	B-49
Appendix C.	ADDITIONAL AUTHORIZATION LIST	C-1
Section I.	INTRODUCTION	C-1
C-1	SCOPE	C-1
C-2	GENERAL	C-1
C-3	EXPLANATION OF COLUMNS	C-1
Section II.	ADDITIONAL AUTHORIZATION LIST	C-2
Appendix D	EXPENDABLE/DURABLE SUPPLIES AND MATERIALS LIST	D-1
Section I.	INTRODUCTION	D-1

		Page
D-1	SCOPE	D-1
D-2	EXPLANATION OF COLUMNS	D-1
Section II.	EXPENDABLE DURABLE SUPPLIES AND MATERIALS LIST	D-1
Appendix E	COMPONENTS PER BRIDGE LENGTH, BASKET AND PALLET LOADS	E-1
E-1	COMPONENTS PER BRIDGE LENGTH	E-1
E-2	BASKET LOADS	E-12
a.	General	E-12
b.	Single Story	E-12
c.	Double Story	E-17
d.	Link Reinforced	E-29
E-3	PALLET LOADS	E-30
a.	Single Story	E-30
b.	Double Story	E-34
c.	Link Reinforced	E-56
Index		Index-1

LIST OF ILLUSTRATIONS

FIGURE **Page**

1-1	MGB	1-0
1-2	Single story MGB	1-8
1-3	Double story MGB	1-8
1-4	Link reinforced MGB	1-9
1-5	Launching Single Story Bridges up to 50ft (15.2m)	1-85
1-6	Launching Single Story Bridges over 50ft (15.2m)	1-86
1-7	Single Story Bridge in Place	1-86
1-8	Launching Double Story Bridges up to 102ft (31.1m)	1-87
1-9	Double Story Bridge in Place	1-88
1-10	Launching Bridges over 102ft (31.1m)	1-88
1-11	Launching Bridges from 144ft (43.9m) to 162ft (49m)	1-88
1-12	Link Reinforced MGB in Place	1-89
1-13	Lowering End of Bridge using Davits	1-89
1-14	MGB Components on Pallet for Transportation	1-90
3-1	Approaches - single and double story	3-9
3-2	Approaches - link reinforced MGB	3-10
3-3	Assembly site	3-12
3-4	Bank clearance - link reinforced bridges	3-13
3-5	Angle of Repose with Slope of Bank Less than 45 degrees	3-16
3-6	Angle of Repose with Slope of Bank More than 45 degrees	3-17
3-7	Site Profile for Push launch	3-22
3-8	Site Profile for Jack Launch	3-22
3-9	Key Construction Points for SS 4-12 Bay	3-23
3-10	Site Profile - DS 1-12 Bay	3-29
3-11	Double Story - Distance D, W & C	3-30
3-12	Double Story - Distance R, T, G, H, & N	3-30
3-13	Site Profile DS 13-22 Bay w/o LRS	3-37
3-14	DS 13-22 Bay w/o LRS - Distance R, T, G, H & N	3-38

FIGURE **Page**

3-15 Site Profile DS 13-22 Bay with LRS 3-45
3-16 DS 13-22 Bay with LRS - Distance R, T, G, H & N 3-46

LIST OF TABLES

TABLE **Page**

1-1 Bridge Length V Maximum Load Capability 1-11
1-2 Single Story Bridge Length V Gap Width 1-11
1-3 Double Story Bridge Length V Gap Width 1-12
1-4 Link Reinforced Bridge Length V Gap Width 1-13
1-5 Work Parties for MGB 1-14
1-6 Building Times (good conditions) 1-14
2-1 Preventive Maintenance Checks and Services Daily Schedule (visual)
- Bridge Assembled 2-2
2-2 Preventive Maintenance Checks and Services Monthly Schedule (visual)
- Bridge Disassembled 2-3
2-3 Launching conditions 2-4
3-1 Maximum loading for girders 3-4
3-2 Maximum loading for components 3-5
3-3 Soil bearing capacity 3-11
3-4 Maximum current velocity v bridge length 3-13
3-5 Maximum wind speed v bridge length 3-14
3-6 Bridge Selection Tables 3-15
3-7 SS Bridges 4 through 8 bays site and bridge dimensions 3-19
3-8 SS Bridges 9 through 12 bays site and bridge dimensions 3-19
3-9 Bearings 3-20
3-10 SS Bridges 4 thru 8 Bays Launch Design 3-23
3-11 SS Bridges 9 thru 12 Bays 3-24
3-12 MGB Pallets SS 3-25
3-13 Working parties and building times on good sites 3-25

TABLE		Page
3-14	SS Bridges (9 through 12 bay) on Restricted Sites	3-26
3-15	DS MGB Design 2E + 1 thru 2E + 12 Bays Site and Bridge Dimensions	3-26
3-16	Bearings DS 1-12 Bay	3-27
3-17	Rule 1 - DS 1 thru 12 Bay	3-31
3-18	Rule 2 - DS 1 thru 12 Bay	3-31
3-19	Rule 3 - DS 1 thru 12 Bay	3-32
3-20	Rule 4a and 4b - DS 1 thru 12 Bay	3-33
3-21	MGB Pallets DS	3-33
3-22	D S Working Parties and Building Times on Good Sites	3-33
3-23	Effect of increasing nose length (DS bridges) on R distance	3-34
3-24	DS MGB 2E + 13 through 2E + 22 bays (w/o LRS)	3-35
3-25	Bearings DS 13-22 Bay w/o LRS	3-36
3-26	Rule 1 - DS 13-22 Bay w/o LRS	3-39
3-27	Rule 2 - DS 13-22 Bay W/o LRS	3-39
3-28	Rule 3a and 3b - DS 13-22 Bay w/o LRS	3-40
3-29	MGB Pallets DS 13-22 Bay W/o LRS	3-40
3-30	Working Parties and Building Time on Good Sites - DS 13-22 Bay w/o LRS	3-41
3-31	DS MGB Designl3-22 Bays with LRS	3-42
3-32	Bearings	3-43
3-33	Rule 1 - DS 13-22 Bay with LRS	3-46
3-34	Rule 2 - DS 13-22 Bay with LRS	3-47
3-35	MGB Pallets DS 13-22 Bay with LRS	3-47
3-36	Working Parties and Building Time on Good Sites - DS 13-22 Bay with LRS	3-48
5-1	Building and Boom Table - 4 through 8 Bay Single Story (Normal site)	5-3
5-2	Building and Boom Table - 9 through 12 Bay Single Story (Normal Site)	5-4
5-3	Building and Boom Table - 9 through 12 Bay Single Story (Restricted Site)	5-5
5-4	Delaunch Table 4 through 8 Bay Single Story (Normal Site)	5-6
5-5	Delaunch Table - 9 through 12 Bay Single Story (Normal Site)	5-7

TABLE		Page
5-6	Delaunch Table - 9 through 12 Bay Single Story (Restricted Site)	5-8
5-7	Central and eccentric deflections - Single Story Bridges	5-42
6-1	Building and Boom Table - 2E + I through 2E + 6 Bay Double Story (Normal Site)	6-3
6-2	Building and Boom Table - 2E + 7 through 2E + 12 Bay Double Story (Normal Site)	6-4
6-3	Building and Boom Table - 2E + 13 through 2E + 17 Bay Double Story (w/o LRS) (Normal Site)	6-5
6-4	Building and Boom Table - 2E + 18 through 2E + 22 bay Double Story (w/o LRS) (Normal Site)	6-6
6-5	Building and Boom Table - 2E + 1 through 2E + 6 Bay Double Story (Restricted Site)	6-7
6-6	Building and Boom Table - 2E + 7 through 2E + 9 Bay Double Story (Restricted Site)	6-8
6-7	Building and Boom Table - 2E+ 10 through 2E + 12 Bay Double Story (Restricted Site)	6-9
6-8	Delaunch Table - 2E+ 1 through 2E + 6 Bay Double Story (Normal Site)	6-11
6-9	Delaunch Table - 2E+ 7 through 2E + 12 Bay Double Story (Normal Site)	6-12
6-10	Delaunch Table - 2E + 13 through 2E + 17 Bay Double Story (w/o LRS) (Normal Site)	6-13
6-11	Delaunch Table - 2E + 18 through 2E + 22 Bay Double Story (w/o LRS) (Normal Site)	6-14
6-12	Delaunch Table - 2E + 1 through 2E + 6 Bay Double Story (Normal Site - Original Far Bank)	6-15
6-13	Delaunch Table - 2E + 7 through 2E + 12 Bay Double Story (Normal Site - Original Far Bank)	6-16
6-14	Delaunch Table - 2E + 13 through 2E + 17 Bay Double Story (w/o LRS) (Normal Site -Original Far Bank)	6-17
6-15	Delaunch Table - 2E + 18 through 2E + 22 Bay Double Story (w/o LRS) (Normal Site - Original Far Bank)	6-18
6-16	Delaunch Table - 2E + 1 through 2E + 4 Bay Double Story (Restricted Site)	6-19
6-17	Delaunch Table - 2E + 5 through 2E + 6 Bay Double Story (Restricted Site)	6-20
6-18	Delaunch Table - 2E + 7 through 2E + 9 Bay Double Story (Restricted Site)	6-21
6-19	Delaunch Table - 2E + 10 through 2E + 12 Bay Double Story (Restricted Site)	6-22
6-20	Delaunch Table - 2E + 1 through 2E + 5 Bay Double Story (Restricted Site - Original Far Bank)	6-24
6-21	Delaunch Table - 2E + 6 through 2E + 9 Bay Double Story (Restricted Site -Original Far Sank)	6-25
6-22	Delaunch Table - 2E + 10 through 2E + 12 Bay Double Story (Restricted Site - Original Far Bank)	6-27

TABLE		Page
6-23	Minimum R Distance when using longer than standard launching noses	6-55
6-24	Central and eccentric deflections - Double Story Bridges	6-68
7-1	Building and Boom Table - 2E + 13 through 2E + 17 Bay Link Reinforced (Normal Site)	7-2
7-2	Building and Boom Table - 2E + 18 through 2E + 22 Bay Link Reinforced (Normal Site)	7-4
7-3	Delaunch Table - 2E + 13 through 2E + 17 Bay Link Reinforced	7-6
7-4	Delaunch Table - 2E + 18 through 2E + 22 Bay Link Reinforced	7-8
7-5	Delaunch Table - 2E + 13 through 2E + 17 Bay Link Reinforced (Normal Site - Original Far Bank)	7-10
7-6	Delaunch Table - 2E + 18 through 2E + 22 Bay Link Reinforced (Normal Site - Original Far Bank)	7-12
8-1	Operator Lubrication Table	8-2
8-2	Operator Troubleshooting	8-4
E-1	Components per Bridge Length (Single Story)	E-1
E-2	Components per Bridge Length (Double Story)	E-4
E-3	Components per Bridge Length (Link Reinforced)	E-9
E-4	Single Story Basket Loads	E-12
E-5	Double Story Basket Loads	E-17
E-6	Link Reinforced Basket Loads	E-29
E-7	Single Story Pallet Loads	E-30
E-8	Double Story Pallet Loads	E-34
E-9	Link Reinforced Pallet Loads	E-56

HOW TO USE THIS MANUAL

This manual is written to cover all levels of expertise in the use and operation of Medium Girder Bridge (MGB).

A general overview of all the manual is recommended before becoming familiar with the selected sections a user may require. The user should prepare fully by reading the appropriate procedures before moving to the bridge site. In particular, all users must be completely familiar with Chapters 1 and 4.

Chapter 1, Introduction, describes every MGB component and its use, so this is essential reading. Chapter 4, General Drills, describes how the bridge is coded during assembly/disassembly, how components are connected/disconnected, how the bridge is launched and how the bridge is raised or lowered to the ground. As these drills are used in all applications of MGB, it is essential that the operator understands them.

Chapter 2 describes operator Preventive Maintenance Checks and Services and then operation of MGB under unusual conditions, which is good reference for the experienced user.

If the user has to participate in site selection, reconnaissance, design or palletization, then Chapter 3 should be reviewed.

Chapters 5, 6 and 7 describe step by step assembly/disassembly procedures for selected bridges. The bridges described have been selected to be representative of that type of bridge, so that once the user is familiar with the selected bridge build (i.e. Assembly l2 bay double story, Chapter 6) he/she will be able to build all the other length bridges of that type (i.e. 9, 10 or 11 bay double story) with slight modification to the procedures and using the build and boom tables at the beginning of the chapter. A fully experienced user will be capable of assembling/disassembling any bridge using just the tables, which can also be found in TM 5-5420-212-10-2.

Maintenance of MGB at operator level is covered in Chapter 8. Unit and Direct Support maintenance procedures are found in TM 5-5420-212-23.

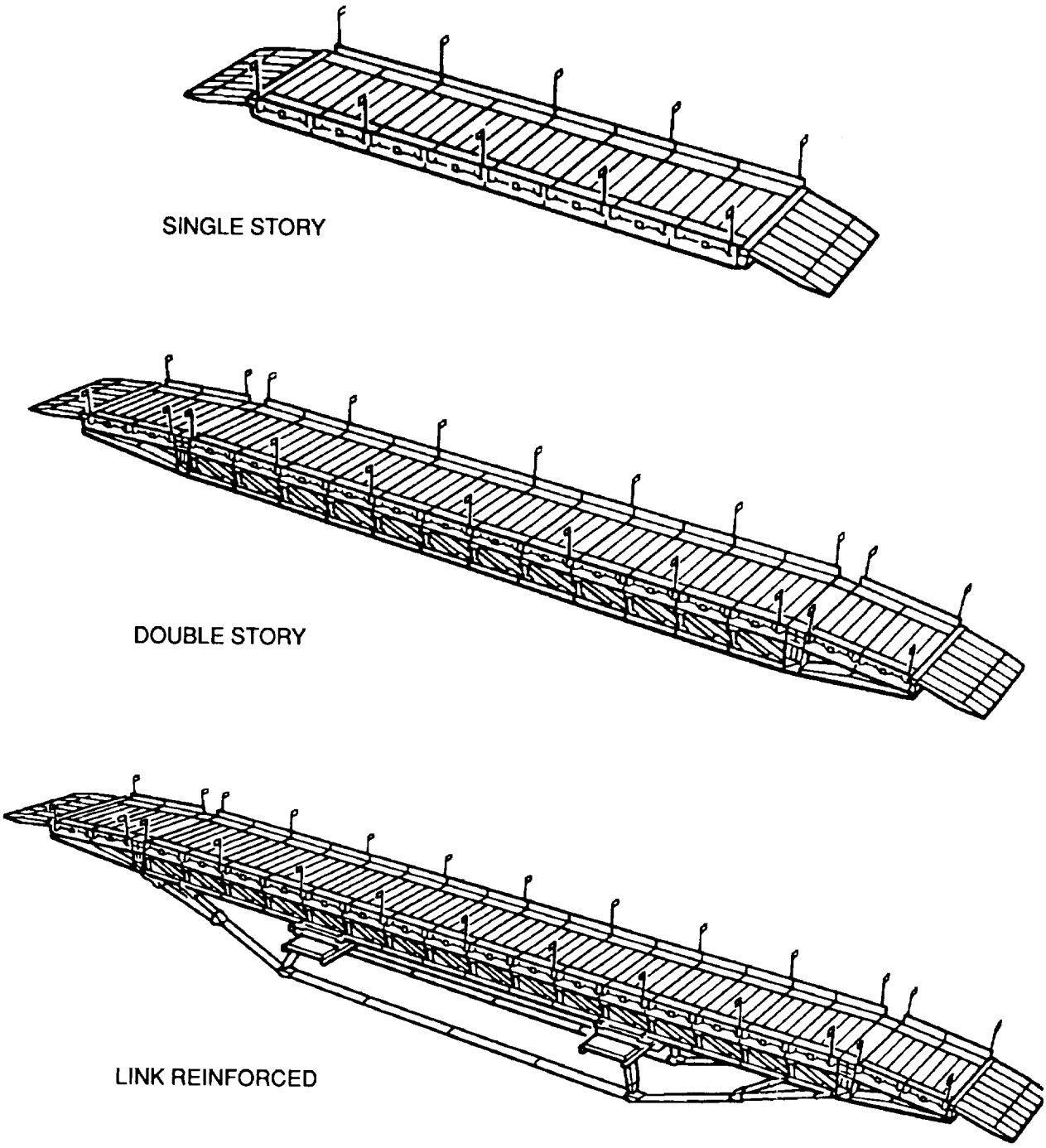

FIGURE 1-1. MGB

CHAPTER 1

INTRODUCTION

Section I. GENERAL INFORMATION.

1-1. SCOPE

This manual is written to cover all levels of expertise in the use and operation of Medium Girder Bridge (MGB). The instructions provided in Chapters 1 to 7 cover description of components and every phase of operation of MGB, from design and site selection, through to assembly and disassembly. Operator Maintenance is covered in Chapter 8.

The appendices list reference material, components of end item and basic issue items, additional authorization items, expendable/durable supplies and materials, and pallet and basket loads.

1-2. MAINTENANCE FORMS AND RECORDS

a. ARMY - 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).

b. MARINE CORPS - Maintenance forms and procedures will be those prescribed by TM4700-15/1.

1-3. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS

If your set 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. Tell us why a procedure is hard to perform.

a. ARMY - Put it on a SF368 (Quality Deficiency Report). Mail it to us at Headquarters Commander, US Army Aviation and Troop Command, ATTN: AMSAT-I-MDC, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. We'll send you a reply.

b. MARINE CORPS - EIR's should be submitted in accordance with MCO 1650.17 directly to: Commander, Marine Corps Logistics Base, ATTN: Code 850, Albany, GA 31704-5000.

1-4. NOMENCLATURE CROSS REFERENCE LIST

COMMON NAME	OFFICIAL NOMENCLATURE
Adjustable Support	Roller Beam Support, Adjustable, Bridge
Anchor Assembly (AA)	Anchor Piece Assembly
Anchorage Pin Assembly	Anchorage Pin Assembly, Mk 2
Anti-Flutter Tackle (AF)	Anti-Flutter Cable Assembly
Bankseat Beam (BSB)	Beam, Bankseat, Bridge
Baseplate (Single Story)	Baseplate, Roller Beam Support
Baseplate (Double Story)	Baseplate, Building Frame, Bridge

COMMON NAME	OFFICIAL NOMENCLATURE
Bottom Panel (BP)	Panel, Bottom, Bridge
Bracing Pin	Pin, Bracing
Bridge Marker Guide	Marker, Bridge, Guide Assembly
Building Pedestal (BP)	Pedestal, Building, Bridge
Capsill	Capsill, Bridging
Capsill Pin	Pin, Capsill
Carrying Bar	Carrying Bar, Bridge Parts
Carrying Handle	Carrying Handle
Curb	Curb, Bridge
Davit Post Assembly	Davit Post Assembly
Deck	Deck Unit, Bridging
End Taper Panel (ETP)	Panel, End Taper, Bridge
Equipment Bag	Bag, Equipment
Equipment Basket	Basket, Bridging, Equipment
Extractor Cable	Extractor, Cable Assembly
Fixed Support	Roller Beam, Support, Fixed, Bridge
Footwalk	Footwalk, Bridge
Footwalk Bearer	Bearer, Footwalk
Footwalk Post	Post, Footwalk, Bridge
Frame Cross Girder	Cross Girder, Building Frame, Bridge
Guard Rope	Rope, Guard
Hammer (Nylon Faced)	Hammer, Hand
Headless Panel Pin	Pin, Panel, Headless
Hydraulic Jack 15T	Jack, Hydraulic, Hand,15 Ton
Hydraulic Jack 20T	Jack, Hydraulic, Hand, 20 Tonne
Jack Hood	Bracket Assembly, Lifting
Jack Post	Post, Jacking, Bridge
Jack Seat	Jack Seating, Building Frame, Bridge
Jack Support	Support, Jack, Bridge