

URGENT

MWO effective date 31 August 2003 and completion date 30 August 2005

MWO 10-1670-269-55-1

MODIFICATION WORK ORDER

MODIFICATION OF THE MODIFIED IMPROVED RESERVE PARACHUTE SYSTEM (MIRPS)

NSN: 1670-01-420-4256 (EIC: N/A)

Headquarters, Department of the Army, Washington, D.C.

31 August 2003

REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this MWO. 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) directly to: Commander, US Army Soldier and Biological Chemical Command (SBCCOM), ATTN: AMSSB-RIM-L (N), Kansas St, Natick, MA 01760-5052. A reply will be provided to you.

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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1. PURPOSE. The Modified Improved Reserve Parachute System – Soft Loop Center Pull (MIRPS-SLCP) is an engineering enhancement to the currently fielded MIRPS pack tray (and ripcord assembly). This enhancement eliminates the potential for cone-lock, while also providing added ripcord protection. The MIRPS-SCLP enhancement was designed and tested as a retrofit to the current MIRPS pack tray and ripcord assembly.

Pictured in Figures 1 and 2 below, the MIRPS-SLCP enhancement eliminates the metal locking cones and cone mating hardware employed on the standard MIRPS pack tray and replaces them with standardized grommets and soft closing loops (similar to those used in Military Free Fall parachute systems). Additionally, a center pull ripcord handle replaces the standard side pull ripcord handle. The center pull ripcord handle incorporates two separated ripcord cables and pins to independently engage each respective soft loop. A textile (elastomer) ripcord pocket is installed on the top flap of the pack tray that ends up covered by the inspection flap when the flap is closed.

Retrofit of the current MIRPS pack tray to incorporate the MIRPS-SLCP enhancement is a relatively simple process wherein several components (e.g., metal locking cones, pack fasteners, etc.) are removed from the current MIRPS pack tray and new MIRPS-SLCP components are installed. The center pull ripcord handle is made from modifying the current side pull ripcord grip handle.



2. PRIORITY. This modification is classified as URGENT.

a. Equipment in Use. All MIRPS Pack Trays will be modified and completed no later than the scheduled completion date. MIRPS Pack Trays not modified after the expiration of the MWO completion date will be reported as Non Mission Capable (NMC), in accordance with applicable Army regulations. The MWO will be applied to unserviceable assets awaiting scheduled Organizational Maintenance providing the scheduled repair restores the MIRPS Pack Trays back to a Fully Mission Capable (FMC) status.

b. Equipment in Wholesale Depot Supply or Maintenance Activities. The MWO will be applied to serviceable MIRPS Pack Trays prior to issue and/or subsequent to the scheduled completion date.

3. END ITEM(S) OR SYSTEM(S) TO BE MODIFIED. This modification applies to all MIRPS.

Table 1. End Item to be modified.

Nomenclature	National Stock Number	Type and Model	CAGEC	Serial Number	LIN
Modified Improved Reserve Parachute, System (MIRPS)	1670-01-420-4256	MIRPS	81337	N/A	N68062

4. MODULES(S), (Components, Assemblies, Subassemblies, Boards, and Cards) TO BE MODIFIED. Not applicable.

5. PART(S) TO BE MODIFIED.

Nomenclature	National Stock Number	Type and Model	CAGEC	Serial Number
Pack Tray Assembly	1670-01-436-4798	MIRPS	81337	N/A
Ripcord Grip Assembly	1670-01-468-9174	N/A	81337	N/A

6. APPLICATION.

a. **TIME COMPLIANCE SCHEDULE:** The MWO effective date is 31 August 2003 and the completion date is 30 August 2005.

b. **LEVEL OF MAINTENANCE:** Contractor.

c. **WORK FORCE AND MAN-HOUR REQUIREMENTS:** A total of 1.5 man-hours are required for a single modification of the pack tray and installation of this MWO. Based on contractor workload requirements and quantities received (from the user), the estimated downtime per end item cannot be determined.

d. **MWO TO BE APPLIED PRIOR TO, OR CONCURRENTLY WITH THIS MWO:** Not applicable.

7. TECHNICAL PUBLICATIONS AFFECTED/CHANGED.

Table 2. Technical Publications Affected/Changed.

Army TM 10-1670-269-23&P	Unit and Intermediate Direct Support (DS) Maintenance Manual (including repair parts and special tools lists) for Parachute, Personnel Type: 24-Foot Diameter, Troop, Chest, Reserve and Modified Improved Reserve Parachute System (MIRPS)
Air Force T.O. 14D1-2-462-2	Same title as above.
Marine Corps TM 01135B-23&P/1	Same title as above.
NAVSEA SS400-AL-MMO-010	Same title as above.

8. MWO KIT(S)/PART(S) AND THEIR DISPOSITION.

- a. **Kit(s) / Part(s) Needed To Apply the MWO:** Not applicable, contractor provides all necessary assets.
- b. **Contents of MWO Kit:** Not applicable.
- c. **Bulk and Expendable Materials:** Not applicable.
- d. **Parts Disposition:** Not applicable.
- e. **Mandatory Replacement Parts:** Not applicable.

9. SPECIAL TOOLS; TOOL KITS; JIGS; TEST, MEASUREMENT AND DIAGNOSTIC EQUIPMENT (TMDE), AND FIXTURES REQUIRED.

- a. Knife: NSN 5110-00-162-2205

10. MODIFICATION PROCEDURES:

- Equipped units will disassemble the MIRPS IAW TM 10-1670-269-23&P; remove the MIRPS pack tray and ripcord grip assembly from the MIRPS parachute assembly.
- To regulate shipment costs, equipped units will package and ship to a pre-determined manufacturer both the MIRPS pack trays and MIRPS ripcord grips in minimum and maximum quantities to be provided under separate covers.

11. CALIBRATION REQUIRED. Not applicable.

12. WEIGHT AND BALANCE DATA. Not applicable.

13. QUALITY ASSURANCE REQUIREMENTS. Prior to returning a shipment, a First Article Test sample is required per manufacturer as well as periodic Lot Inspections conducted by government Defense Contracting Management Agency personnel. A Technical/Rigger Type Inspection (TRI) and an In-service Inspection will be completed at organizational level when placing the MIRPS back into service.

14. RECORDING AND REPORTING OF THE MODIFICATION RECORDS AND REPORT FORMS.

Records and reports. SBCCOM will assume responsibility for recording the MWO application data to the Modification Management Information System (MMIS). Once units receive their total quantity of assets back from the contractor, immediately notify CW3 Leo Venckus at DSN 256-6012 or commercial at (508) 233-6012.

15. MATERIEL CHANGE (MC) NUMBER:


This MWO is authorized by MC Number 1-01-08-0004.

16. MODIFICATION IDENTIFICATION:

Visual identification only. Once modified, the ripcord grip assembly will protrude from the top of the MIRPS pack tray vs. the right side and the ripcord grip pocket is removed.

By Order of the Secretary of the Army:

Official:


JOEL B. HUDSON
*Administrative Assistant to the
Secretary of the Army*
0318807

PETER J. SCHOOMAKER
*General, United States Army
Chief of Staff*

DISTRIBUTION:

To be distributed in accordance with Initial Distribution Number (IDN) 255754 requirements for MWO 10-1670-269-55-1.

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These are the instructions for sending an electronic 2028

The following format must be used if submitting an electronic 2028. The subject line must be exactly the same and all fields must be included; however only the following fields are mandatory: 1, 3, 4, 5, 6, 7, 8, 9, 10, 13, 15, 16, 17, and 27.

From: "Whomever" <whomever@avma27.army.mil>
To: amssbriml@natick.army.mil

Subject: DA Form 2028

1. From: Joe Smith
2. Unit: home
3. Address: 4300 Park
4. City: Hometown
5. St: MO
6. Zip: 77777
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:

This is the text for the problem below line 27.

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RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS For use of this form, see AR 25-30; the proponent agency is ODISC4.						Use Part II (<i>reverse</i>) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE 21 October 2003
TO: (<i>Forward to proponent of publication or form</i>) (<i>Include ZIP Code</i>) COMMANDER U.S. ARMY SOLDIER AND BIOLOGICAL CHEMICAL COMMAND ATTN: AMSSB-RIM-L KANSAS STREET NATICK, MA 01760-5052						FROM: (<i>Activity and location</i>) (<i>Include ZIP Code</i>) <i>PFC Jane Doe</i> <i>CO A 3rd Engineer BR</i> <i>Ft. Leonardwood, MO 63108</i>	
PART I – ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS							
PUBLICATION/FORM NUMBER TM 10-1670-296-23&P				DATE 30 October 2002	TITLE Unit Manual for Ancillary Equipment for Low Velocity Air Drop Systems		
ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON <i>(Provide exact wording of recommended changes, if possible).</i>	
	0036 00-2				1	<i>In table 1, Sewing Machine Code Symbols, the second sewing machine code symbol should be MD ZZ not MD 22.</i> <i>Change the manual to show Sewing Machine, Industrial: Zig-Zag; 308 stitch; medium-duty; NSN 3530-01-181-1421 as a MD ZZ code symbol.</i>	
<i>*Reference to line numbers within the paragraph or subparagraph.</i>							
TYPED NAME, GRADE OR TITLE Jane Doe, PFC				TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION 508-233-4141		SIGNATURE Jane Doe <i>Jane Doe</i>	

TO: <i>(Forward direct to addressee listed in publication)</i> COMMANDER U.S. ARMY SOLDIER AND BIOLOGICAL CHEMICAL COMMAND ATTN: AMSSB-RIM-L KANSAS STREET NATICK, MA 01760-5052	FROM: <i>(Activity and location) (Include ZIP Code)</i> <i>PFC Jane Doe</i> <i>CO A 3rd Engineer BR</i> <i>Ft. Leonardwood, MO 63108</i>	DATE 21 October 2003
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PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION NUMBER TM 10-1670-296-23&P	DATE 30 October 2002	TITLE Unit Manual for Ancillary Equipment for Low Velocity Air Drop Systems
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PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION
0066 00-1					4			<i>Callout 16 in figure 4 is pointed to a <u>D-Ring</u>. In the Repair Parts List key for figure 4, item 16 is called a <u>Snap Hook</u>. Please correct one or the other.</i>

SAMPLE

PART III – REMARKS *(Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)*

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE
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RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS For use of this form, see AR 25-30; the proponent agency is ODISC4.						Use Part II (<i>reverse</i>) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE
TO: (<i>Forward to proponent of publication or form</i>) (<i>Include ZIP Code</i>) Commander, US Army Soldier and Biological Chemical Command ATTN: AMSSB-RIM-L(N) (Woodrow Boucher) Kansas Street, Natick, MA 01760-5052						FROM: (<i>Activity and location</i>) (<i>Include ZIP Code</i>)	
PART I – ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS							
PUBLICATION/FORM NUMBER MWO 10-1670-269-55-1				DATE 31 August 2003	TITLE Modification Work Order, Modification of the Modified Improved Reserve Parachute System (MIRPS)		
ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON <i>(Provide exact wording of recommended changes, if possible).</i>	
<i>*Reference to line numbers within the paragraph or subparagraph.</i>							
TYPED NAME, GRADE OR TITLE				TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION		SIGNATURE	

TO: <i>(Forward direct to addressee listed in publication)</i> Commander, US Army Soldier and Biological Chemical Command ATTN: AMSSB-RIM-L(N) (Woodrow Boucher) Kansas Street, Natick, MA 01760-5052	FROM: <i>(Activity and location) (Include ZIP Code)</i>	DATE
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PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION NUMBER				DATE			TITLE	
PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION

PART III – REMARKS *(Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)*

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TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE
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The Metric System and Equivalents

Linear Measure

1 centimeter = 10 millimeters = .39 inch
 1 decimeter = 10 centimeters = 3.94 inches
 1 meter = 10 decimeters = 39.37 inches
 1 dekameter = 10 meters = 32.8 feet
 1 hectometer = 10 dekameters = 328.08 feet
 1 kilometer = 10 hectometers = 3,280.8 feet

Weights

1 centigram = 10 milligrams = .15 grain
 1 decigram = 10 centigrams = 1.54 grains
 1 gram = 10 decigrams = .035 ounce
 1 dekagram = 10 grams = .35 ounce
 1 hectogram = 10 dekagrams = 3.52 ounces
 1 kilogram = 10 hectograms = 2.2 pounds
 1 quintal = 100 kilograms = 220.46 pounds
 1 metric ton = 10 quintals = 1.1 short tons

Liquid Measure

1 centiliter = 10 milliliters = .34 fl. ounce
 1 deciliter = 10 centiliters = 3.38 fl. ounces
 1 liter = 10 deciliters = 33.81 fl. ounces
 1 dekaliter = 10 liters = 2.64 gallons
 1 hectoliter = 10 dekaliters = 26.42 gallons
 1 kiloliter = 10 hectoliters = 264.18 gallons

Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch
 1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches
 1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet
 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet
 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
 1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch
 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches
 1 cu. meter = 1000 cu. decimeters = 35.31 feet

Approximate Conversion Factors

<i>To change</i>	<i>To</i>	<i>Multiply by</i>	<i>To change</i>	<i>To</i>	<i>Multiply by</i>
inches	centimeters	2.540	ounce-inches	newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29.573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	newton-meters	1.356	metric tons	short tons	1.102
pound-inches	newton-meters	.11296			

Temperature (Exact)

°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C
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