

MIL-R-8592/3

25 June 1965

MILITARY SPECIFICATION

SURVIVORS SLING, RESCUE EQUIPMENT HELICOPTER

This specification is mandatory for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 This specification covers the detailed requirements for the survivors sling. The general requirements are covered in MIL-R-8592.

2. APPLICABLE DOCUMENTS

2.1 The following documents of the issue in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein.

SPECIFICATIONS

Federal

PPP-B-636	Box, Fiberboard
PPP-B-640	Boxes, Fiberboard, Corrugated, Triple, Wall

Military

MIL-P-116	Preservation, Methods of
MIL-R-8592	Rescue Equipment, Helicopter
MIL-L-10547	Liners, Case, and sheet, Overwrap Water-Vaporproof or Waterproof, Flexible
MIL-B-22205	Bags, Transparent, 'Flexible, Heat Sealable for Packaging Applications
MIL-B-43165	Bags, Polyethylene

FSC 4240

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STANDARDS

Military

MIL-STD-105	Sampling Procedures and Tables for Inspection by Attributes
MIL-STD-129	Marking for Shipment and Storage
MS22018	Snap, Parachute Harness Quick Fit Ejector
MS22045	Ring - Parachute Harness "v"
MS90380	Survivors Sling, Rescue

(Copies of specifications, standards and drawings required by suppliers in connection with specific procurement functions should be obtained from the procuring activity or as directed. by the contracting officer.)

3. REQUIREMENTS

3.1 Preproduction - The survivors sling furnished under this specification shall be a product which has been tested and passed the pre-production inspection specified herein.

3.2 Materials - All material shall be as specified on MS90380.

3.2.1 Protective treatment - When materials are used in the construction of the survivors sling that are subject to deterioration when exposed to environmental conditions, likely to occur during service usage, they shall be treated against such deterioration in such a manner that will in no way prevent compliance with the performance requirements of this specification. Protective coating which might crack, chip or scale during normal service life or under extremes of environmental conditions shall not be used.

3.2.2 Fungus proof materials - Materials which are nutrients for fungi shall not be used where it is practicable to avoid them. Where used they shall be treated with a fungicidal agent acceptable to the procuring activity.

3.3 Design- The survivors sling shall be designed in accordance with MS90380.

3.4 Performance -

3.4.1 Proof load - The survivors sling shall exhibit no evidence of damage, separation of the stitching, failure of the hardware, nor deformation of any part when tested as specified in Section 4.

3.5 Marking The following information shall be marked on the survivors sling in a durable and legible manner.

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Survivors sling
MS Part No.90380
Contract No.
Manufacturer's name or trade mark

3.6 Workmanship - The survivors sling shall be constructed and assembled to produce an item free from all defects which would-affect proper functioning in service. Particular attention shall be given to neatness, finish, and freedom of parts from all burrs and sharp edges. The survivors sling assembly shall conform to the quality and grade of product established by this specification. The occurrence of defects shall not exceed the acceptance criteria established herein.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection - Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirement: as specified herein. Except as otherwise specified, the supplier may utilize his own facilities or any commercial laboratory acceptable to the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure supplies and. services conform to prescribed requirements.

4.2 Classification of inspection - The inspection and testing of the survivors sling shall be classified as follows:

- (a) Preproduction inspection - Preproduction inspection consists of Inspection and tests performed on the survivors sling which are representative of the production item after award of a contract to determine that the production item meets the requirements of this specification.
- (b) Quality conformance inspection - Quality conformance inspection consists of inspection and tests performed on individual products or lots to determine conformance of the products or lots with the requirements set forth in this specification.

4.3 Preproduction inspection - The preproduction inspection of the equipment shall consist of inspection and tests for all of the requirements of this specification.

4.3.1 Preproduction samples - Unless otherwise specified, as soon as practicable after award of the contract or order, the manufacturer shall submit two preproduction samples. The samples shall be representative of the construction, workmanship and materials to be used during production. When a manufacturer is in continuous production of these slings from contract to contract submission of further preproduction samples on the new contract may be waived at the discretion of the procuring activity. Approval of the preproduction samples, or the waiving of preproduction inspection, does not preclude the requirement of submitting to quality conformance

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inspection. The preproduction samples shall be forwarded to the Supply Officer, Naval Air Engineering Center, Philadelphia, Pennsylvania 19112, Attention: Director, Aerospace Crew Equipment Laboratory. The samples shall be plainly marked with the following information:

Samples submitted by (name) (date) for preproduction inspection in accordance with the requirements of MIL-R-8592/3 under Contract No.

4.3.1.1 Upon the completion of the preproduction inspection, all the applicable Inspection reports, and when applicable, recommendations and comments pertinent for use in monitoring production shall be forwarded to the Government quality control representative. One approved preproduction sample shall be returned to the manufacturer for use- in monitoring production.

4.4 Quality conformance Inspection - The quality conformance inspection shall consist of visual examination.

4.4.1 Sampling -

4.4.1.1 Inspection lot - An inspection lot size shall be expressed in units of one survivors sling made under essentially the same conditions and from the same materials and components. The sample unit shall be one survivors sling assembly.

4.4.1.1.1 Preparation for delivery - An inspection lot size shall be expressed in units of one fully prepared shipping container fully prepared for delivery with the exception it need not be sealed.

4.4.1.1.2 Sampling for tests and examination of the survivors sling - The sample size, acceptance criteria, examinations and tests required for the survivors sling shall be as specified in Table I.

TABLE I

Sample Size, Acceptance Criteria, Examinations and Tests

	Type of Inspection	Paragraph		Sample Size	Acceptance Criteria
		Requirement	Method		
Visual examination	Critical and Minor		4.5.1	Every sling for critical defects and Inspection Level II 1 / for minor defects	Reject all units with any critical defects and an acceptable quality level of 6.5 defects per hundred units for minor defects

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TABLE I (Cent'd)

	Type of Inspection	Paragraph		Sample Size	Acceptance Criteria
		Requirement	Method		
Proof load	Critical	3 . 4 . 1	4.5.3	2 from each 1000 or fraction thereof	Acceptance number <i>zero</i> . Rejection number one
Preparation for delivery	Major		4.5.2	Inspection Level S-2 1/	Total AQL of 4.0 percent defective

1/ The sample size shall be based on the applicable size code letter corresponding to the specified inspection level of MIL-STD-105.

4.5 Inspection methods -

4.5.1 Visual examination - Every survivors sling shall be visually examined for defects to determine conformance to the requirements of this specification and MS93380. The classification and list of defects, Table II, shall be used to classify and enumerate the defects found .

TABLE II

Classification of Defects for Visual Examination of the Survivors Sling

Critical		Minor	
1.	Any material imperfections - foreign matter imbedded, holes or tears	201 .	Marking - missing, insufficient, incorrect, illegible, or not permanent
2.	Stitching missing, pattern not as specified, not type stitch or thread size specified	202.	Color not as specified
3*	Any component missing, malformed, fractured or otherwise damaged		
4.	Backstitching missing, broken stitches or runoff		
5.	Incorrect assembly or improper positioning of components		
6.	Faulty workmanship or other irregularities		

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4.5.2 Preparation for delivery - Each of the fully prepared shipping containers selected as a sample unit from the lot shall be examined to determine that the packaging, packing, and marking conform to this specification. The classification of defects, Table III, shall be used to classify the defects found.

TABLE III

Classification of Defects for Preparation for Delivery

Item	Defects
Exterior and interior markings	Missing, incorrect, incomplete, illegible; of improper size, location, sequence of method of application; markings not the same as the interior and exterior containers.
Packaging and packing materials	Any non-conforming component; any component missing, damaged, or otherwise defective.
Workmanship,	Inadequate application of the components such as incomplete closure of the unit, package, intermediate package, container flaps, or loose strapping, etc; bulging or distortion of the containers.
Exterior and interior weight or content	Number per container is more or less than required; gross or net weight exceeds the requirement.

4.5.3 Proof load - The survivors sling shall be assembled in a testing machine by looping the casing around the stationary head of the machine and attaching the parachute harness snap (MS22018) to the moving head of the machine. A load of 600 pounds shall be applied at a rate of jaw separation of one inch per minute. Upon the completion of this loading the parachute harness snap shall be removed and the parachute V ring (MS22045) attached to the moving head of the machine and the same load applied.

5. PREPARATION FOR DELIVERY

5.1 Packaging - Packaging shall be Level A or C, as specified (see 6.2).

5.1.1 Level A - The survivors sling shall be packaged in accordance with MIL-P-116, Method III. Each survivors sling shall be compactly folded, with the hardware placed in an innermost fold. The compactly folded unit shall then be placed within a transparent film bag and sealed. Excess air within the bag shall be expelled prior to sealing. The minimum thickness of the film shall be .002 inch; bags shall be fabricated in accordance with MIL-B-43165, Type I or MIL-B-22205, Type III. Each bagged sling shall then be packaged within a close fitting fiberboard container conforming to PPP-B-636, Class-Domestic, Grade 125 (minimum).

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5.1.2 Level C - The survivors sling shall be packaged in a manner that will prevent physical damage and deterioration during transit from the supply source to the point of delivery. The contractor commercial practice may be utilized when it conforms to the criteria stated herein.

5.2 Packing - Packing shall be Level A, B or C as specified by the procuring activity (see 6.2). Insofar as practicable, shipping containers shall contain items of one part number, contain identical quantities, be of uniform size and shape and effect a close fit for the contents.

5.2.1 Level A - The survivors sling, packaged as specified in 5.1.1, shall be packed for shipment in fiberboard shipping containers conforming to PPP-B-636, Class-Weather resistant, Grade V3s/V3c or PPP-B-640, Class 2, Grade A. The gross weight of each packed container shall not exceed 70 pounds for the PPP-B-636 container nor 200 pounds for the PPP-B-640 container. Each container shall be fitted with a waterproof case liner fabricated and sealed in accordance with MIL-L-10547. The container closure, sealing and banding procedure shall be accomplished in accordance with the procedure delineated in the appendix of the applicable specification.

5.2.2 Level B - The survivors sling, packaged as specified in 5.1.1 shall be packed for shipment in fiberboard containers conforming to PPP-B-636, Class-Domestic, Grade 275 (minimum) or PPP-B-640, Class 1, Grade A or B. The gross weight of each packed container shall not exceed 90 pounds for the PPP-B-636 container nor 200 pounds for the PPP-B-640 container. The closure and banding shall be accomplished in accordance with the procedure specified in the appendix of the applicable specification.

5.2.3 Level C - The survivors sling, packaged as specified, shall be packed for shipment in shipping containers that will afford protection against damage during transit from the supply source to the point of delivery. The pack shall as a minimum comply with the rules and regulations applicable to the mode of transportation utilized.

5.3 Marking - Interior and exterior shipping containers shall be marked in accordance with MIL-STD-129.

6. NOTES

6.1 Intended use - The helicopter survivors sling covered by this specification is used to assist personnel performing rescue work from helicopter aircraft.

6.2 Ordering data - Procurement documents should specify the following:

- (a) Title, number, and date of this specification.
- (b) Whether preproduction inspection is required. (See 4.3.1.)

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(c) Quantity.

(d) Selection of applicable levels of packaging and packing.

6.3 Certain provisions of this specification are the subject of International Standardization agreement (STANAG 3295 and 3281). When amendment, revision) or cancellation of this specification is proposed, the departmental custodians will inform their respective Departmental Standardization Offices so that appropriate action may be taken respecting the international agreement concerned.

Custodians:

Navy - WP

Air Force - 84

Army - MO

International interest (see Section 6)

Preparing activity:

Navy - WP

Review activities:

Navy - WF

Air Force - 11, 84

Army - MO

FOLD

DEPARTMENT OF THE NAVY
Naval Air Engineering Center
Philadelphia, Pennsylvania 19112

POSTAGE AND FEES PAID
NAVY DEPARTMENT

OFFICIAL BUSINESS

BuWeps Engineering Standardization Office (Code X)
Naval Air Engineering Center
Philadelphia, Pennsylvania 19112

FOLD

MIL-R-8592/3
AMENDMENT 1
3 February 1978

MILITARY SPECIFICATION

SURVIVORS, SLING, RESCUE EQUIPMENT HELICOPTER

This amendment forms a part of Military Specification MIL-R-8592/3 dated 25 June 1965, and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 1

2.1 SPECIFICATIONS, Military

Delete: "MIL-B-22205 Bags, Transparent, Flexible, Heat Sealable for Packaging Applications
MIL-B-43165 Bags, Polyethylene"

Add: "MIL-B-117 Bag Sleeve and Tubing - Interior Packaging"

Bottom of Page, Add:

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commanding Officer, Naval Air Engineering Center, ESSD, (Code 93) Lakehurst, New Jersey 08733 by using the self-addressed Standard Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

PAGE 2

3.1 - Delete and substitute the following:

"3.1 First Article Inspection - Unless specified, the survivors rescue sling furnished under this specification shall be a product which has been inspected and has passed the First Article inspection specified in 4.3 through 4.3.1.1"

3.4.1 - Delete and substitute the following:

"3.4.1 Proof Load - The survivor's sling, excluding the filler case and cover subassemblies, shall exhibit no evidence of damage, separation of the stitching, failure of the hardware, nor deformation of any part when tested as specified in 4.5.3."

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AMENDMENT 1

4.2 (a) - Delete and substitute the following:

"4.2 (a) First article inspection - First article inspection consists of inspection and tests performed on samples, which are representative of the production item after award of a contract to determine that the production item conforms to the requirements of this specification (see 3.1 and 4.3 through 4.3.1.1)".

4.3 - Delete and substitute the following:

"4.3 First Article Inspection - The first article inspection of the survivors rescue sling shall consist of inspection and tests for all of the requirements of this specification. "

4.3.1 - Delete and substitute the following:

"4.3.1 First article samples - Unless specified, as soon as practicable after award of the contract or order, the manufacturer shall submit two samples for First Article Inspection. The samples shall be representative of the construction, workmanship and materials to be used during production. When a contractor is in continuous production of these slings from contract to contract submission of further samples for First Article Inspection on the new contract may be waived at the discretion of the procuring activity. Approval of the First Article inspection samples, or the waiving of First Article Inspection, does not preclude the requirement of submitting to Quality Conformance Inspection. The First Article Inspection samples shall be furnished to the Government as directed by the contracting officer (see 6.2b). The samples shall be plainly marked with the following information:

Samples submitted by (Manufacturer's Name) (date)
For First Article Inspection in accordance with
the requirements of MIL-R-8592/3.under Contract No. _____ II

PAGE 4

4.3.1.1 - Delete and substitute the following: .

"4.3.1.1 Upon completion of the First Article Inspection, all the applicable inspection reports, and when applicable, recommendations and comments pertinent for use in monitoring production shall be forwarded to the cognizant Government activity. One approved First Article Inspection Sample shall be returned to the contractor for use in monitoring production."

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AMENDMENT 1

PAGE 6

5.1.1, line 7 - Delete "MIL-B-43165 Type I or MIL-B-22205 Type 111" and substitute "MIL-B-117 Type I, Class B".

PAGE 7

6.2(b) Delete and substitute the following:

"6.2(b) Whether First Article Inspection is required and where samples should be delivered (see 4.3.1)".

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6.4 - Add New Paragraph:

"6.4 Contract data requirements - When this specification is used in a procurement which incorporates a DD Form 1423 and invokes the provisions of 7-104.9(n) of the Armed Services Procurement Regulations, the data requirements identified below will be developed as specified by an approved Data Item Description (DD Form 1664) and delivered in accordance with the approved Contract Data Requirements List (DD Form 1423) incorporated into the contract. When the provisions of ASPR-7 - 104.9(n) are not invoked, the data specified below will be delivered by the contractor in accordance with the contract requirements. Deliverable data required by this specification is cited in the following paragraphs:

paragraph	Data Requirement	Applicable DID
4.3.1.1	First Article Inspection reports	DI-T-5329 - Inspection Test Reports"

6.5 - Add New Paragraph:

"6.5 When a first article is required, it shall be tested under the appropriate provision of 7-104.55 of the Armed Services Procurement Regulation. The first article should be a preproduction sample. The contracting officer should include specific instructions in all procurement instruments, regarding arrangements for examinations} test and approval of the first article."

Custodians:

Navy - AS

Air Force - 99

Preparing Activity:

Navy - AS

International Interest
See Section six (6)

Project No. 4240-0457

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INCH-POUND

**NOTICE
OF VALIDATION**

MIL-R-8592/3

24 October 1991

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SURVIVORS, SUNG, RESCUE EQUIPMENT HELICOPTER

MIL-R-8592/3 (1), dated 3 February 1978, has been reviewed and determined to be valid for use in acquisition.

Custodians:

Navy - AS

Air Force - 99

Preparing activity:

Navy - AS

