

MILITARY SPECIFICATION

KIT, PORTABLE OPTICAL MICROSCOPE, MILITARIZED, 200X MAGNIFICATION  
FOR FIELD INSPECTION OF OPTICAL FIBERS

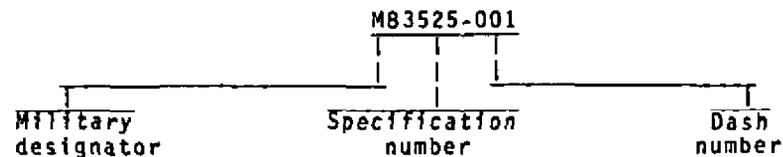
This specification is approved for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification describes a portable, compact, light-weight, militarized handheld microscope kit providing magnification of 200X, for use in the visual inspection of terminated or cleaved end of optical fibers in field applications.

1.2 Classification.

1.2.1 Military part number. The military part number shall consist of the letter "M", the basic number of the specification, and an assigned dash number (see 3.1), as shown in the following:



2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Specifications and standards. Unless otherwise specified, the following specifications and standards, of the issue listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation, form a part of this specification to the extent specified herein.

SPECIFICATIONS

FEDERAL

L-P-378	-	Plastic Sheet and Strip, Thin Gauge, Polyolefin.
NN-P-71	-	Pallet, Material Handling, Wood, Stringer Construction, 2 Way and 4 Way (Partial).
QQ-A-250/1	-	Aluminum 1100, Plate and Sheet.
QQ-A-250/2	-	Aluminum Alloy 3003, Plate and Sheet.
QQ-A-250/4	-	Aluminum Alloy 2024, Plate and Sheet.
QQ-A-250/8	-	Aluminum Alloy 5052, Plate and Sheet.
QQ-A-250/11	-	Aluminum Alloy 6061, Plate and Sheet.
QQ-A-250/12	-	Aluminum Alloy 7075, Plate and Sheet.
QQ-B-626	-	Brass, Leaded and Nonleaded; Rod, Shapes, Forgings and Flat Product With Finished Edges (Bar and Strip).
QQ-B-750	-	Bronze, Phosphor, Bar, Plate, Rod, Sheet, Strip, Flat Wire, and Structuring and Special Shaped Sections.
QQ-C-530	-	Copper-Beryllium Alloy Bar, Rod, and Wire (Copper Alloy Numbers 172 and 173).
QQ-C-533	-	Copper-Beryllium Alloy Strip (Copper Alloy Numbers 170 and 172).
QQ-S-763	-	Steel Bar Wire, Shape and Forging, Corrosion Resisting.
QQ-S-781	-	Strapping, Steel, and Seals.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Air Force Acquisition Logistics Division, Electronic Support Division AFLC, 2750 A3W/ES, Gentile AF Station, Dayton, Ohio 45444, by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

MIL-K-83525

- PPP-B-601 - Boxes, Wood, Cleated Plywood.
- PPP-B-621 - Boxes, Wood, Nailed and Lock-Corner.
- PPP-B-636 - Boxes, Shipping, Fiberboard.

MILITARY

- MIL-M-14 - Molding Plastics and Molded Plastic Parts, Thermosetting.
- MIL-P-116 - Preservation, Methods of.
- MIL-F-14072 - Finishes for Ground Electronic Equipment.
- MIL-I-17214 - Indicator, Permeability; Low-Mu (Go-No-Go).
- MIL-M-24519 - Molding Plastics, and Polyester Thermoplastic.
- MIL-C-28876 - Connectors, Fiber Optic Environment Resisting (For Shipboard Application) General Specification For.
- MIL-P-46174 - Plastic Molding Material, Polyphenylene Sulfide, Glass Fiber Reinforced.
- MIL-C-83522 - Connectors, Fiber Optics, Single Terminus, General Specification For.
- MIL-C-83524 - Microscope, Optical, Monocular, Compact, Portable Militarized 200X Magnification, For Field Inspection of Optical Fibers.
- MIL-C-83525 - Connectors, Fiber Optic, Circular, Environmental Resistant, Hermaphroditic.
- DOD-C-85045 - Cable, Fiber Optics, General Specification for (Metric).

STANDARDS

FEDERAL

- FED-STD-H28 - Screw-Thread Standards For Federal Services.

MILITARY

- MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes.
- MIL-STD-108 - Definition of and Basic Requirement for Enclosure for Electric and Electronic Equipment.
- MIL-STD-129 - Marking For Shipment and Storage.
- MIL-STD-147 - Palletized Unit Loads.
- MIL-STD-202 - Test Methods for Electronic and Electrical Component Parts.
- MIL-STD-130 - Identification Marking of US Military Property.
- MIL-STD-150 - Photographic Lenses.
- MIL-STD-454 - Standard General Requirements for Electronic Equipment.
- MIL-STD-810 - Environmental Test Methods.
- MIL-STD-889 - Dissimilar Metals.
- MIL-STD-1285 - Marking of Electrical and Electronic Parts.
- MIL-STD-45662 - Calibration Systems Requirements.

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

2.2 Other publications. The following documents form a part of this specification to the extent specified herein. The issues of the documents which are indicated as DOD adopted shall be the issue listed in the current DODISS and the supplement thereto, if applicable.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A 484 - General Requirements For Stainless and Heat-Resisting Wrought Steel Products (Except Wire).

ASTM A 582 - Free-Machining Stainless and Heat-Resisting Steel Bars, Hot Rolled or Cold Finished.

ASTM D 3951 - Packaging, Commercial.

(Applications for copies should be addressed to the American Society For Testing And Materials, 1916 Race Street, Philadelphia, PA 19103.)

(Industry association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.)

2.3 Order of precedence. In the event of a conflict between the text of this specification and the references cited herein, the text of this specification shall take precedence.

3. REQUIREMENTS

3.1 First article. The microscope kit furnished under this specification shall be products which have been tested and have passed the first article inspection specified (see 4.5 and 6.3).

3.2 Materials. Materials shall be as specified herein. However, when a definite material is not specified, a material shall be used which will enable the microscope kits to meet the performance requirements of this specification. Acceptance or approval of any constituent material shall not be construed as a guaranty of the acceptance of the finished product.

3.2.1 Metal. Unless otherwise specified (see 6.2), metal parts shall be aluminum, brass, steel, or copper.

3.2.1.1 Aluminum. Aluminum shall be as specified in QQ-A-250/1 (Aluminum 1100), QQ-A-250/2 (Alloy 3003), QQ-A-250/4 (Alloy 2024), QQ-A-250/8 (Alloy 5052), QQ-A-250/11 (Alloy 6061), or QQ-A-250/12 (Alloy 7075), anodized to meet the requirements of MIL-F-14072.

3.2.1.2 Brass. Brass shall be as specified in QQ-B-626.

3.2.1.3 Steel. Stainless steel shall be as specified in QQ-S-763, ASTM-A-484, or ASTM-A-582.

3.2.1.4 Copper alloys. Phosphor bronze shall be as specified in QQ-B-750, and brass shall be as specified in QQ-B-626.

3.2.1.5 Dissimilar metals. Where dissimilar metals are used in intimate contact with each other, protection against electrolysis and corrosion shall be provided. Dissimilar metals shall be as defined in MIL-STD-889. Dissimilar metals such as brass, copper, or steel (except corrosion-resisting steel, passivated in accordance with 3.2.3.2) shall not be used in intimate contact with aluminum or aluminum alloy.

3.2.2 Nonmagnetic materials. All parts shall be made from materials which are classed as nonmagnetic (permeability  $\leq 2 \mu$  using indicator per MIL-I-17214).

### 3.2.3 Restricted materials.

3.2.3.1 Flammable, explosive, or toxic. Material shall be nonflammable, non-explosive, and nontoxic over the operating temperature range.

3.2.3.2 Corrosion resistance. Portable optical microscope kits shall be of corrosion-resistant materials or treated to prevent corrosion.

3.2.3.3 Ferrous. Material containing more than 5 percent iron shall not be used for current carrying parts.

3.2.4 Plastic molded materials. Plastic molded material shall be in accordance with type SDG-F or type GDI-30F of MIL-M-14, or type GPT-30F of MIL-M-24519, or class 40, grade E, of MIL-P-46174. Reground materials shall not be used.

3.2.5 Fungus resistance. Finishes and materials must be certified that they meet the requirements of MIL-STD-454, requirement 4; all other materials or finishes must be tested in accordance with method 508 of MIL-STD-810.

3.2.6 Glass. Glass shall be of optical quality and free from imperfections, bubbles, pits, scratches or other visible defects producing distortion of magnified images viewed through the lens system. The glass shall contain no radioactive material.

3.3 Design and construction. The microscope kit shall have a maximum weight of 11 pounds and include the following:

- a. One monocular, focusable, compact, lightweight, handheld microscope including the housing, optical tube, illumination system, lens filter, and focusing mechanism, in accordance with the performance requirements of MIL-M-83524.
- b. Two 10X or 20X widefield eyepiece lenses in accordance with the performance requirements of MIL-M-83524.
- c. One objective lens in accordance with the performance requirements of MIL-M-83524.
- d. Adapters to accommodate bare fiber in accordance with DOD-C-85045 and connectors in accordance with MIL-C-28876, MIL-C-83522 and MIL-C-83526.
- e. Two spare batteries.
- f. One spare 1.10 to 1.20 watt lamp.
- g. One lanyard or one belt-type holster in accordance with the performance requirements of MIL-M-83524.
- h. Operating instructions.
- i. A list of parts and part numbers for each component supplied with the kit including separate part numbers for the basic microscope, the lenses, and the adapters. The parts list shall identify the manufacturer by FSCM number and shall also include the statement:  
"NOTE: When ordering a replacement microscope, do not reference military part number M83524-001, but use the manufacturers' part number shown on this parts list which identifies a microscope that meets the performance requirements of MIL-M-83524."
- j. One package of lens tissue, 50 sheets, minimum dimensions 2 by 3 inches.
- k. One 2-ounce plastic spray bottle of lens cleaner.
- l. Hard cover case not to exceed 11 by 14-1/2 by 10-1/2 inches with cushioning inserts to hold, isolate and protect the microscope and all its accessories.

3.3.1 Connector adapters. Optical fiber connector adapters shall allow simple insertion and withdrawal of the connector or bare fiber, whose dimensions shall be those specified in DOD-C-85045 and shall be capable of being held in a fixed position. The adapters shall be positioned so that the fiber is held parallel to the optical axis and so that a means is provided to rotate or otherwise move the fiber in an X-Y direction throughout the field.

3.3.2 Threaded parts. All threaded parts shall be in accordance with FED-STD-H28. Where practicable, all threads shall be in conformity with the coarse-thread series. The fine-thread series shall be used only for applications that might show a definite advantage through their use.

3.3.2.1 Engagement of threaded parts. All threaded parts shall engage by at least two full threads.

#### 3.4 Performance characteristics.

3.4.1 Visual resolving power. When tested in accordance with 4.7.2, resolutions less than those listed in appendix B of MIL-STD-150 shall constitute failure.

3.4.2 Case waterproof. When the case is tested in accordance with 4.7.3, there shall be no evidence of water/moisture accumulation inside the case.

3.4.3 Thermal shock. When tested in accordance with 4.7.4, there shall be no damage to any of the items in the kit.

3.4.4 Moisture resistance. When tested in accordance with 4.7.5, there shall be no damage to any of the items in the kit.

3.4.5 Salt spray. When tested in accordance with 4.7.6, there shall be no evidence of corrosion which could impair the operation of the items in the kit.

3.4.6 Vibration. When tested in accordance with 4.7.7, there shall be no damage to any of the items in the kit.

3.4.7 Shock. When tested in accordance with 4.7.8, there shall be no damage to any of the items in the kit.

3.5 Marking. The microscope kit shall be marked in accordance with MIL-STD-130 and MIL-STD-1285.

3.6 Workmanship. All parts, components, and assemblies of the microscope kit shall be clean and free from dust, dirt, or other harmful extraneous material. All exposed edges shall be rounded or beveled. There shall be no evidence of damaged or bent parts or assemblies.

#### 4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by 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.

4.1.1 Test equipment and inspection facilities. The contractor shall establish and maintain a calibration system in accordance with MIL-STD-45662.

4.2 Classification of inspections. The inspections specified herein are classified as follows:

- a. Materials inspection (see 4.3).
- b. First article inspection (see 4.5).
- c. Quality conformance inspection (see 4.6).

4.3 Materials inspection. Materials inspection shall consist of certification supported by verifying data that the materials listed in table I, used in fabricating the microscope kit and accessories, are in accordance with the applicable referenced specifications or requirements prior to such fabrication.

TABLE I. Materials inspection.

Component material	Requirement paragraph	Applicable specification
Aluminum	3.2.1.1	QQ-A-250/1, /2, /4, /8, /11, and /12; MIL-F-14072
Brass (lead and nonlead)	3.2.1.2	QQ-B-626
Steel	3.2.1.3	QQ-S-763, ASTM A 484, and ASTM A 582
Copper alloys		
Phosphor bronze	3.2.1.4	QQ-C-530 or QQ-C-533
Dissimilar metals	3.2.1.5	MIL-STD-889
Plastic, molded materials	3.2.4	MIL-M-14, MIL-M-24519, or MIL-P-46174
Fungus resistance	3.2.5	MIL-STD-454

4.4 Inspection conditions. Unless otherwise specified herein, all inspections shall be performed in accordance with the test conditions specified in the "GENERAL REQUIREMENTS" of MIL-STD-202.

4.5 First article inspection. First article inspection shall be performed by the contractor, after award of contract and prior to production, at a location acceptable to the Government. First article inspection shall be performed on sample units which have been produced with equipment and procedures normally used in production. First article approval is valid only on the contract under which it is granted, unless extended by the Government to other contracts.

4.5.1 Sample size. Two microscope kits shall be subjected to first article inspection.

4.5.2 Inspection routine. Sample units shall be subjected to the first article inspection specified in table II in the order shown.

4.5.3 Failures. Any failure shall be cause for refusal to grant first article approval. Battery failure shall not be cause for rejection.

TABLE II. First article inspection.

Inspection	Requirement paragraph	Test paragraph
Visual and mechanical	3.2, 3.3, 3.5, 3.6	4.7.1
Visual resolving power	3.4.1	4.7.2
Case waterproof	3.4.2	4.7.3
Thermal shock	3.4.3	4.7.4
Moisture resistance	3.4.4	4.7.5
Salt spray	3.4.5	4.7.6
Vibration	3.4.6	4.7.7
Shock	3.4.7	4.7.8
Visual resolving power	3.4.1	4.7.2
Visual and mechanical	3.2, 3.3, 3.5, 3.6	4.7.1

#### 4.6 Quality conformance inspection.

4.6.1 Inspection of product for delivery. Inspection of product for delivery shall consist of the inspections specified in table III in the order shown.

TABLE III. Quality conformance.

Inspection	Requirement paragraph	Test method paragraph	AQL (percent defective)
Visual resolving power	3.4.1	4.7.2	100% inspection
Visual and mechanical	3.2, 3.3, 3.5, 3.6	4.7.1	2.5

4.6.1.1 Inspection lot. An inspection lot shall consist of all microscopes produced under essentially the same conditions and offered for inspection at the same time.

##### 4.6.1.2 Sampling plan.

4.6.1.2.1 Visual resolving power inspection. The inspection shall be performed on 100 percent of the product supplied under this specification. Any microscope that fails shall be removed from the lot and not charged as a failure.

4.6.1.2.2 Visual and mechanical inspection. Statistical sampling and inspection shall be in accordance with MIL-STD-105 for general inspection level II. The acceptable quality level (AQL) shall be 2.5 percent defective.

4.6.1.2.2.1 Rejected lots. If an inspection lot is rejected, the manufacturer may rework it to correct the defects, or screen out the defective units, and resubmit for reinspection. Resubmitted lots shall be inspected using 100 percent inspection. Such lots shall be separate from new lots, and shall be clearly identified as reinspected lots.

#### 4.7 Methods of inspection.

4.7.1 Visual and mechanical inspection. The microscope kit shall be inspected as specified in 3.2, 3.3, 3.5, and 3.6 for the following major defects:

- a. Materials.
- b. Dimensions.
- c. Magnifying power not within 5 percent of nominal. Components missing or not as specified.
- d. Assembly incorrect.
- e. Marking.
- f. Workmanship.

4.7.2 Visual resolving power (see 3.4). The microscope kit shall be tested for visual resolving power viewing a high contrast resolution target through the microscope, using procedures specified in MIL-STD-150.

4.7.3 Case waterproof. Cases shall be tested in accordance with table III of MIL-STD-108, watertight enclosure. Following the test, the samples shall meet the requirements of 3.4.2.

4.7.4 Thermal shock. Samples shall be tested in accordance with method 107, test condition A of MIL-STD-202 (except temperature shall be  $-40^{\circ}\text{C}$  to  $+71^{\circ}\text{C}$ ). Following the test, the samples shall meet the requirements of 3.4.3

4.7.5 Moisture resistance. Samples shall be tested in accordance with method 106 of MIL-STD-202, omitting steps 7a and 7b. Following the test, the samples shall meet the requirements of 3.4.4.

4.7.6 Salt spray. Samples shall be tested in accordance with method 101, test condition B of MIL-STD-202. After the test, the samples shall meet the requirements of 3.4.5.

4.7.7 Vibration. Samples shall be tested in accordance with method 204, test condition D of MIL-STD-202. After the test, the samples shall meet the requirements of 3.4.6.

4.7.8 Shock. Samples shall be tested in accordance with method 516, test condition II of MIL-STD-810. Following the test, the samples shall meet the requirements of 3.4.7.

4.8 Inspection of packaging. Except when industrial packaging is specified, the sampling and inspection of the preservation and interior package marking shall be in accordance with the group A and B quality conformance inspection requirements of MIL-P-116. The sampling and inspection of the packing and marking for shipment and storage shall be in accordance with the quality assurance provisions of the applicable container specification and the marking requirements of MIL-STD-129. The inspection of industrial packaging shall be as specified in the contract (see 6.2).

## 5. PACKAGING

5.1 Preservation. Preservation shall be levels A, B, or industrial, as specified (see 6.2).

### 5.1.1 Level A.

5.1.1.1 Cleaning. Microscope kits shall be cleaned in accordance with MIL-P-116, process C-1.

5.1.1.2 Drying. Microscope kits shall be dried in accordance with MIL-P-116.

5.1.1.3 Preservative application. Preservatives shall not be used.

5.1.1.4 Unit packs. Microscope kits shall be unit packed one each in accordance with submethod IIc of MIL-P-116 insuring compliance with the applicable requirements of that specification. Each unit pack shall be placed in a supplementary container conforming to PPP-B-636, class weather resistant.

5.1.1.5 Intermediate packs. Intermediate packs are not required.

5.1.2 Level B. The requirements for level B shall be as specified for level A except that submethod IA-8 of MIL-P-116 shall be used as the method of preservation.

5.1.3 Industrial. The industrial preservation of microscope kits shall be in accordance with the requirements of ASTM D 3951.-82.

5.2 Packing. Packing shall be level A, B, or industrial, as specified (see 6.2).

5.2.1 Level A. Microscope kits, preserved as specified in 5.1, shall be packed in wood containers conforming to PPP-B-601, overseas type or PPP-B-621, class 2. Closure and strapping shall be in accordance with the applicable container specification except that metal strapping shall conform to QQ-S-781, type I, finish A.

5.2.2 Level B. Microscope kits, preserved as specified in 5.1, shall be packed in fiberboard containers conforming to PPP-B-636, class weather resistant, style optional, special requirements. The requirements for box closure, waterproofing and reinforcing shall be in accordance with method V of the PPP-B-636 appendix.

5.2.3 Industrial. The industrial packing of microscope kits shall be in accordance with the requirements of ASTM D 3951-82.

5.2.4 Unitized loads. Unitized loads, commensurate with the level of packing specified in the contract or order, shall be used whenever total quantities for shipment to one destination equal 40 cubic feet or more. Quantities less than 40 cubic feet need not be unitized. Unitized loads shall be uniform in size and quantities to the greatest extent practicable.

5.2.4.1 Level A. Microscope kits, packed as specified in 5.2.1, shall be unitized on pallets in conformance with the MIL-STD-147, load type I, with a wood cap (storage aid 5) positioned over each load.

5.2.4.2 Level B. Microscope kits, packed as specified in 5.2.2, shall be unitized as specified in 5.2.4.1 except that weather resistant fiberboard caps (storage aid 4) shall be used in lieu of wood caps.

5.2.4.3 Industrial. Unitization is not required for industrial packing.

### 5.3 Marking.

5.3.1 Levels A and B. In addition to any special or other identification marking required by the contract (see 6.2), each unit, supplementary and exterior container and unitized load shall be marked in accordance with MIL-STD-129. The complete military or contractor's type or part number, as applicable (including the FSCM), shall be marked on all unit and supplementary packs in accordance with the identification marking provisions of MIL-STD-129.

5.3.2 Industrial. Industrial marking shall be in accordance with ASTM D 3951.

### 5.4 General.

5.4.1 Exterior containers. Exterior containers (see 5.2.1, 5.2.2, and 5.2.3) shall be of a minimum tare and cube consistent with the protection required and shall contain equal quantities of identical stock numbered items to the greatest extent practicable.

5.4.2 Packaging inspection. The inspection of these packaging requirements shall be in accordance with 4.6.2.

### 5.4.3 Army acquisitions.

5.4.3.1 Level A and B packing. When the gross weight exceeds 200 pounds or the container length and width is 48 x 24 inches or more and the weight exceeds 100 pounds, 3 x 4 inch skids (laid flat) shall be applied in accordance with the requirements of the container specification. Palletization shall be required when the containers specified in 5.2.1 and 5.2.2 do not require skids; quantities per destination exceed either a total of 250 pounds (excluding the pallet) or a volume of 20 cubic feet; and the container size permits use of one of the pallet patterns of MIL-STD-147. A quantity of containers, packed as specified, except that container strapping may be omitted, shall be placed on a pallet, load type I conforming to MIL-STD-147. For level B, unit containers which meet these requirements may be palletized without further packing. The pallet shall conform to NN-P-71, type IV, group I or II woods. The load shall be "bonded" to the pallet by strapping conforming to QQ-S-781, type I, finish A, or shrink film conforming to L-P-378, type IV. Stretch wrap in accordance with MIL-STD-147 is authorized for shipments within the continental United States and for containerized shipments.

## 6. NOTES

6.1 Intended use. This microscope kit is intended for use as a portable visual inspection instrument used for the inspection of terminated or cleaved ends of optical fiber in field applications.

6.2 Ordering data.

6.2.1 Acquisition requirements. Acquisition documents should specify the following:

- a. Title, number, and date of this specification.
- b. Time frame required for submission of first article microscope, and number of microscopes required (see 3.3).
- c. When metal shall be other than as specified (see 3.2.1).
- d. Inspection of industrial packaging (see 4.6.2).
- e. Levels of preservation and packing required (see 5.1 and 5.2).
- f. If special or additional identification marking is required (see 5.3).

6.2.2 Replacement parts. The microscope kits provided under this specification are functionally interchangeable, but may not be physically interchangeable. When ordering replacement accessories for microscope kit, use the manufacturers' part number that was originally provided with the kit. When ordering a replacement microscope, do not reference military part number M83524-001 but use the manufacturers' part number that was originally provided with the kit. Any replacement microscopes, eyepiece lenses, objective lenses, adapters, lanyards, and holsters shall meet the performance requirements of MIL-M-83524.

6.3 First article microscope kit. When a first article inspection is required, the item will be tested and should be a first production item. The first article should consist of two units. The contracting officer should include specific instructions in acquisition documents regarding arrangements for examinations, and test approval of the documents first article. Any changes or deviations of production microscope kit from the approved first article microscope kit during production will be subject to the approval of the contracting officer. Approval of the first article microscope kit will not relieve the contractor of his obligation to furnish microscopes conforming to this specification.

6.4 Conditions for use of level B preservation. When level B preservation is specified (see 5.1.2), this degree of protection should be used for microscope kits under known favorable conditions during transportation, storage, and handling.

Custodians:  
 Army - CR  
 Navy - EC  
 Air Force - 85

Preparing activity:  
 Air Force - 85  
 (Project 6080-0001)

Review activities:  
 Army - AR, AT, GL, MI  
 Navy - US, SH  
 Air Force - 11, 17, 99  
 DLA - ES

User activities:  
 Army - AV, ME  
 Navy - MC, YD  
 Air Force - 19

Agent:  
 DLA - ES

**INSTRUCTIONS:** In a continuing effort to make our standardization documents better, the DoD provides this form for use in submitting comments and suggestions for improvements. All users of military standardization documents are invited to provide suggestions. This form may be detached, folded along the lines indicated, taped along the loose edge (*DO NOT STAPLE*), and mailed. In block 5, be as specific as possible about particular problem areas such as wording which required interpretation, was too rigid, restrictive, loose, ambiguous, or was incompatible, and give proposed wording changes which would alleviate the problems. Enter in block 6 any remarks not related to a specific paragraph of the document. If block 7 is filled out, an acknowledgement will be mailed to you within 30 days to let you know that your comments were received and are being considered.

**NOTE:** This form may not be used to request copies of documents, nor to request waivers, deviations, or clarification of specification requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

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# STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

(See Instructions - Reverse Side)

1. DOCUMENT NUMBER MIL-K-83525	2. DOCUMENT TITLE Kit, Portable Optical Microscope, Militarized, 200X .....
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3a. NAME OF SUBMITTING ORGANIZATION	4. TYPE OF ORGANIZATION (Mark one) <input type="checkbox"/> VENDOR <input type="checkbox"/> USER <input type="checkbox"/> MANUFACTURER <input type="checkbox"/> OTHER (Specify): _____
3b. ADDRESS (Street, City, State, ZIP Code)	

5. PROBLEM AREAS

a. Paragraph Number and Wording:

b. Recommended Wording:

c. Reason/Rationale for Recommendation:

6. REMARKS

7a. NAME OF SUBMITTER (Last, First, MI) - Optional	7b. WORK TELEPHONE NUMBER (Include Area Code) - Optional
7c. MAILING ADDRESS (Street, City, State, ZIP Code) - Optional	8. DATE OF SUBMISSION (YYMMDD)