**INCH-POUND** 

MIL-H-26626D 01 NOVEMBER 1994 SUPERSEDING MIL-H-26626C 05 OCTOBER 1987

## MILITARY SPECIFICATION

# HOSE ASSEMBLY, TETRAFLUOROETHYLENE, OXYGEN

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

- 1. Scope
- 1.1 <u>Scope</u>. This specification covers tetrafluroethylene-lined, wire braid-covered oxygen hose assemblies with flared tube style and fittings.
- 1.2 <u>Reference identification number</u>. The reference identification number is formatted per applicable MS sheets (see 6.2).
  - 2.1 Government documents.
- 2.1.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation (see 6.2).

**SPECIFICATIONS** 

**FEDERAL** 

PPP-C-1797 Cushioning Material, Resilient, Low Density, Unicellular Polypropylene Foam

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Oklahoma City Air Logistics Center TICLA, Tinker AFB, OK 73145-5990 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A FSC 4720 DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

# **MILITARY**

M1L-P-116	Preservation, Methods of
MIL-B-131	Barrier Material, Watervaporproof, Greaseproof,
	Flexible, Heat-Sealable
MIL-C-5501	Caps And Plugs, Protection, Dust and Moisture
	Seal
MIL-S-8879	Screw Threads, Controlled Radius Root With
	Increased Minor Diameter, General
	Specification For
MIL-O-27210	Oxygen, Aviator's Breathing, Liquid And Gas
MIL-G-27617	Grease, Aircraft And Instrument, Fuel And Oxidizer Resistant

#### **STANDARDS**

### **FEDERAL**

FED-STD-101	Preservation, Packaging And Packing Materials: Test Procedures
FED-STD-209	Clean Room And Work Station Requirements Controlled Environment

#### **MILITARY**

	MIL-STD-100	Engineering Drawing Practices
	MIL-STD-105	Sampling Procedures And Tables For Inspection By Attributes
	MIL-STD-121	Barrier Material, Greaseproofed, Waterproofed, Flexible
	MIL-STD-129	Marking For Shipment And Storage
	MIL-STD-130	Identification Marking Of US Military Property
	MIL-STD-889	Dissimilar Metals
	MIL-STD-970	Standard & Specification Order Of Precedence For The Selection Of
	MIL-STD-2073-1	Procedures For Development And Application Of Packaging
		Requirements
	MS21344	Fitting-Installation Of Flared Tube, Straight Threaded Connectors,
Design		Standard For
_	MS24548	Hose Assembly, Tetrafluoroethylene, Oxygen
	MS33656	Fitting End Standard Dimensions For Flared Tube Connection And
		Gasket Seal Air Force-Navy Aeronautical AN818 Nut, Tube Coupling,
		Short .

(Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Standardization Document Order Desk, 700 Robbins Ave, Building 4D, Philadelphia, PA 19111-5094.)

2.1.2 Other Government documents, drawings, and publications. The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

Air Force Drawing - AF8148650 Cleaning, Inspection And Packaging Of Breathing Oxygen Equipment.

2.2 Non-Government Publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the document which are DOD adopted

are those listed in the issue of the DODISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DODISS are the issues of the documents cited in the solicitation (see 6.2).

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

**ASTM D 5118** 

Standard Practice For Fabrication Of

Fiberboard Shipping Box

ASTM D 1974-91

Standard Practice For Methods Of Closing, Sealing, And Reinforcing Fiberboard Shipping Containers

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103-1137.)

(Non-Government standards and other publications are normally available from the organizations that prepare or distribute the documents. These documents also may be available in or through libraries or other informational services.)

2.3 Order of precedence. In the event of a conflict between the text of this specification and the references cited herein (except for associated detail specifications, specification sheets, AN or MS standards), the text of this specification shall take precedence. Nothing in this specification, however, shall supersede applicable laws and regulations unless a specific exemption has been obtained.

## 3. REQUIREMENTS

- 3.1 MS sheets. The individual item requirements shall be as specified herein hand in accordance with the applicable MS sheet. In the event of any conflict between the requirements of this specification and the MS sheet, the latter shall govern.
- 3.2 Qualification. Hoses furnished under this specification shall be products which are authorized by the qualifying activity for listing on the applicable qualified products list (QPL) at the time set for opening of bids (see 4.4 and 6.3).
- 3.2.1 <u>Selection of specifications and standards</u>. Specifications and standards for the necessary commodities and services not specified herein shall be selected in accordance with MIL-STD-970.

## 3.3 Material.

- 3.3.1 <u>Nonmetallic material</u>. Any nonmetallic material that is easily deteriorated or otherwise affected adversely by continued use with oxygen shall not be used.
- 3.3.2 Metals. Metals shall be of the corrosion resistant or treated to resist corrosion caused by fuels, salt fog, or atmospheric conditions as may be encountered in storage or normal service. Metals shall be protected against such corrosion that will in no way prevent compliance with performance requirements of this specification. The use of protective treatment that will crack, chip, peel, or scale with age or extremes of atmospheric conditions shall be avoided.
- 3.3.3 <u>Dissimilar metals</u>. Dissimilar metals as defined by MIL-STD-889 shall not be used in intimate contact with each other unless suitably protected against electrolytic corrosion.

- 3.3.4 <u>Recycled and reclaimed material</u>. Recycled and reclaimed materials shall be encouraged to the maximum extent possible provided all requirements of this specification are met and the material does not jeopardize the intended end use of the item.
- 3.3.5 <u>Material conformance</u>. Materials shall conform to applicable specifications as specified herein. Materials that are not covered by specifications, or that are not specifically described herein, shall be of the best quality, of the lightest practicable weight, and suitable for the purpose intended.
- 3.4 <u>Design and construction</u>. The assembly shall be designed for an operating pressure of not less than 500 pounds per square inch gage (psig) and shall be in accordance with MS24548. The hose assembly shall consists of a seamless tetrafluoroethylene inner tube, or equivalent, reinforced with wire braid, or braids of corrosion-resistant steel and with AN818 end fittings attached. Prior to assembling, all parts shall be free of oil, grease, and other foreign matter. No lubricants, other than water, shall be used in assembling unless specifically approved by the contracting activity.
- 3.4.1 <u>Inner tube</u>. The inner tube shall be of a seamless construction and uniform gage. It shall have a smooth bore and shall be free from pitting or projections on the inner surface of the tube. If compounding of tetrafluoroethylene and other ingredients is used in the formulation of the inner tube material, both the added ingredients and the final compound shall be nontoxic and odor free in the presence of oxygen over the temperature range of -297° to +260°F.
- 3.4.2 <u>Reinforcement.</u> The reinforcement shall consist of wire braid, or braids, of corrosion-resistant steel of sufficient strength and corrosion resistance to meet the requirements of this specification.
- 3.4.3 <u>End Fittings</u>. The end fitting shall be designed to connect to a flared tube end fitting conforming to MS33656. The end fittings shall be coupling nuts which are in conformance with the AN818 envelope. The end fitting shall be attached to the hose by a method that is not intended to permit removal.
- 3.4.4 <u>Threads</u>. All screw threads shall be in accordance with MIL-S-8879. A ten (10) percent increase to the MIL-S-8879 maximum thread tolerance is permissible for the coupling nut thread after proof testing, i.e., the maximum pitch diameter may be exceeded by ten percent of the pitch diameter tolerance.
- 3.4.5 <u>Plugs.</u> End openings in the hose assemblies shall be closed with threaded plugs to prevent dust and foreign matter form entering the hose during shipping and storage.
- 3.4.6 Toxic products and formulations. The material shall have no adverse effect on the health of personnel when used for its intended purpose. Questions pertaining to this effect shall be referred by the contracting activity to the appropriate departmental medical service who will act as advisor to the contracting agency (see 4.8).
- 3.4.7 <u>Lubricants</u>. Lubricants qualified to MIL-G-27617 (Krytox 240 type) shall be used sparingly on the sealing surface and threads of mating MS33656 fitting ends to prevent leakage when fittings are torqued to the minimum values. The quantity of lubricant used shall not exceed that required to generate a thin film. All visible evidence of the lubricant shall be removed from the hose fittings prior to packaging and shipment.
- 3.5 Environmental conditions. Environmental conditions shall be as defined in each test condition and start at local ambient temperature and barometric pressure. This information shall be recorded at the time of inspection and shall be available for computation of test data to normal temperature and pressure (NTP) conditions (see 4.6.1).

- 3.6 Performance.
- 3.6.1 <u>Proof pressure</u>. The hose assembly shall withstand a gas proof pressure of 1,000 psig without leakage around the fittings or through the walls of the hose (see 4.7.2.1).
- 3.6.2 <u>Burst pressure</u>. The hose assembly shall not burst, leak, blow off, nor the end fittings loosen when tested with burst pressure test (see 4.7.2.2).
- 3.6.3 <u>Tensile strength.</u> The hose assembly shall withstand a load of at least 300 pounds without failure (see 4.7.2.3).
  - 3.6.4 High temperature. The hose assembly shall pass the test specified in 4.7.2.4.
  - 3.6.5 Low temperature. The hose assembly shall pass the test specified in 4.7.2.5.
- 3.6.6 Low temperature bending. The hose assembly shall not crack when bent 180 degrees around a mandrel after being exposed to a temperature of -297° +10°F for not less than 15 minutes (see 4.7.2.6).
- 3.6.7 Low temperature vibration. The hose shall not leak nor be damaged as a result of subjection to vibration for at least 3 hours at approximately -297°F, with a double amplitude of 0.060 inch and the frequency cycling between 10 and 50 cycles per second (Hz) (see 4.7.2.7).
- 3.6.8 Odor. The hose assembly, when tested as specified in 4.7.2.8, shall be rejected if an objectionable odor is detected by two or more of the personnel checking the hose (see 4.7.2.8).
- 3.6.9 <u>Contamination</u>. The hose assemblies shall not be contaminated by foreign objects or material residue when tested as specified (see 4.7.2.9).
- 3.7 <u>Interchangeability</u>. All parts having the same manufacturer's part number shall be functionally and dimensionally interchangeable. The drawing number requirements of MIL-STD-100 shall govern changes in the manufacturer's part numbers.
- 3.8 <u>Identification of product.</u> Equipment, assemblies, and parts shall be marked for identification in accordance with MIL-STD-130, except the National Stock Number shall be omitted from the nameplate. The special marking, specified in 3.8.1 shall be added.
- 3.8.1 <u>Hose assembly.</u> The hose assembly shall be identified by a permanently attached metal tags marked with the information listed below. This tag shall not be removed upon installation of the hose assembly in an aircraft. The tag shall be fastened to the hose in such manner as to prevent movement of the tag.

HOSE ASSEMBLY, TETRAFLUOROETHYLENE, OXYGEN MIL-H-26626
MS part No.
Manufacturer's name or trademark
US

3.9 <u>Workmanship.</u> All parts of the hose assembly shall be manufactured in accordance with the commercial practice. All details of workmanship shall be of the highest quality in order to insure proper functioning of the equipment under conditions of high altitude usage. The finished assemblies (both

internally and externally) shall be clean and free from oils, greases, dirt, and all other foreign materials or defects that might affect appearance or functionability.

# 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 (examinations and tests) 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 this specification where such inspections are deemed necessary to ensure supplies and services conform to prescribed requirements.
- 4.1.1 Responsibility for compliance. All items shall meet all requirements of section 3 and 5. The inspection set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements, however, this does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to accept defective material.
  - 4.2 <u>Classification of inspection</u>. The inspection of the hose shall be classified as follows:
    - a. Qualification inspection (see 4.4).
    - b. Quality conformance inspection (see 4.5).
- 4.3 <u>Inspection conditions</u>. Unless otherwise specified, all inspections shall be performed in accordance with the environmental restrictions of paragraph 3.5.
- 4.4 Qualification inspection. Qualification inspection shall consist of subjecting the qualification samples to all the examinations and tests specified herein (see 4.7).
- 4.4.1 Qualification inspection report. A qualification inspection report shall be prepared and three copies shall be forwarded with the samples specified in 4.4.2, to the qualifying agency or as directed by the contracting activity.
- 4.4.2 Qualification samples. Qualification samples shall consist of eight hose assemblies. The samples shall be identified with the manufacturer's part number and any additional information required by the letter authorizing qualification and forwarded to the activity responsible for qualification or as directed by the letter of authorization (see 6.3).
- 4.4.3 <u>Retention of qualification</u>. To retain qualification, the contractor shall forward a report to the qualifying activity at 2 year intervals, certifying that the item(s) is still being manufactured under the same conditions as originally qualified. The qualifying activity shall establish the initial reporting date.
- 4.4.4 <u>Failures</u>. Failures in excess of those allowed by Table I shall be cause for refusal to grant qualification.
  - 4.4.5 Noncompliance. If a sample fails to pass any inspection, the manufacturer shall notify the

qualifying activity and the cognizant inspection activity of such failure and take corrective action on the materials or processes, or both, as warranted, and on all units of products which can be corrected and which were manufactured with essentially the same materials and processes, and which are considered subject to the same failure. Acceptance and shipment of the product shall be discontinued until corrective action, acceptable to the qualifying activity has been taken. After the corrective action has been taken, the inspection shall be repeated on additional sample units. Inspection may be reinstituted; however final acceptance and shipment shall be withheld until the inspection has shown that the corrective action was successful. In the event of failure after reinspection information concerning the failure shall be furnished to the cognizant inspection activity and the qualifying activity.

- 4.5 Quality conformance inspection. Quality conformance inspection shall consists of the examinations and tests specified in Table I.
  - 4.5.1 Sampling.
  - 4.5.1.1 <u>Inspection lot applications.</u>
- 4.5.1.1.1 <u>Hose.</u> An inspection lot size shall be expressed in units of hose assemblies. The sample unit shall be one hose assembly of a specific MS dash number. The inspection lot shall consists of hose assemblies manufactured under the same conditions and from the same materials and components.
- 4.5.1.1.2 <u>Packaging.</u> An inspection lot size shall be expressed in units of one fully prepared shipping container, containing hose assemblies of one size fully prepared for delivery from essentially the same materials and components. The sample unit shall be one shipping container, containing hose assemblies of one size, fully prepared for delivery with the exception that it need not be sealed.
- 4.5.1.2 <u>Sampling and acceptance criteria</u>. Sample size and acceptance criteria shall be as specified in Table 1. Sampling shall be in accordance with MIL-STD-105.
- 4.6 <u>Inspections conditions</u>. Unless otherwise specified, all inspections shall be performed in accordance with the tests specified in this specification.
- 4.6.1 <u>Temperature and pressure</u>. Unless otherwise specified, tests shall be performed at ambient temperature and barometric pressure. The temperature and barometric pressure shall be recorded at the time of inspection. The information shall be available for computation of test data, where required, to normal temperature and pressure (NTP) conditions. NTP conditions are 29.92 inches of mercury and 70° F. Test instruments shall be calibrated or adjusted according to their required usage in performing individual tests.
- 4.6.2 <u>Torque</u>. The torque applied to the coupling nuts of the hose assemblies in connecting assemblies for a test, shall be in accordance with MS21344.
- 4.6.3 <u>Leakage detection.</u> Unless otherwise specified, leakage tests shall be performed by submersion of the hose assembly in water. One bubble per 30 seconds from a localized area shall constitute leakage after 5 minutes of stabilization.
- 4.6.4 Oxygen. Unless otherwise specified, all pressurization of the hose during test shall be accomplished with oxygen conforming to MIL-O-27210.
  - 4.7 <u>Inspection methods</u>.

## 4.7.1 Examinations.

- 4.7.1.1 <u>Visual</u>. The hose shall be examined for defects listed in Table II and any other nonconformance to this specification and MS24548.
- 4.7.1.2 <u>Dimensions.</u> The hose shall be checked to determine that all dimensions are as specified on MS24548.
- 4.7.1.3 <u>Examination of packaging</u>. Sample shipping containers specified in 4.5.1.1.2 shall be examined to determine if preservation, packaging, packing, and marking conform to the level specified in the contract or order and the existence of defects listed in Table III.

## 4.7.2 Tests.

- 4.7.2.1 <u>Proof pressure.</u> With one end plugged the hose assembly shall be pressurized, to 1,000 psig and checked for leakage. There shall be no leakage from the hose or from the fitting. Leakage shall be determined under the conditions specified in 4.6.3 (see 3.6.1).
- 4.7.2.2 <u>Burst pressure</u>. With one end plugged, the hose assembly shall be hydrostatically tested to 2,200 psig. As a result of this test, there shall be no evidence of leakage from the hose, nor loosening of the coupling nuts (see 3.6.2).
- 4.7.2.3 <u>Tensile strength</u>. The hose assemble shall be attached by the coupling nuts to the jaws of a tensile testing machine and pulled at a rate of approximately 1 inch per minute until failure occurs. There shall be no visible failure of the hose or of the coupling nut connections at a force of at least 300 pounds (see 3.6.3).
- 4.7.2.4 <u>High temperature</u>. Eight hose assemblies shall be coupled together end-to-end with a pressure gage connected to one end and a valve connected to the other end. The coupled assemblies shall then be filled with gas to 500 psig at room temperature and the valve closed. The coupled assemblies shall then be exposed to a temperature of +260°F +5°F for 48 hours. After this exposure, the coupled assembly shall be allowed to cool to the original filling temperature. The pressure remaining in the coupled assemblies shall not be less than 100 psig. The coupled assemblies shall then be subjected to the proof pressure test (see 3.6.1).
- 4.7.2.5 Low temperature. Eight hose assemblies shall coupled together end-to-end with a pressure gage connected to one end and a valve connected to the other end. The coupled assemblies shall then be filled with gas to 500 psig at room temperature and the valve closed. The coupled assemblies shall then be exposed to a temperature of -65° ±2°F for 48 hours. After this exposure, the coupled assemblies shall be allowed to warm to the original filling temperature. The pressure remaining in the coupled assemblies shall be not less than 100 psig. At the conclusion of this test, a flow of liquid oxygen shall be passed through the coupled assemblies (after removal of the pressure gage) at a pressure of 25±5 psig for a period of not less than 5 minutes. Under this condition, there shall be no appearance of leakage from the hose of from the fittings. Upon conclusion of the above tests, the coupled assemblies shall be subjected to the proof pressure test specified in 4.7.2.1 (see 3.6.5).

TABLE I. Quality Conformance Inspection

Inspection	Inspection method para. No.	Sample size	Acceptance Criteria
Examination-Visual	4.7.1.1	Every hose	Reject all hoses with any critical defect.
			An acceptable quality level 2.5 defects per one hundred units for minor defects.
Examination- dimensions	4.7.1.2	Inspection 1/ level S-2	Acceptance number zero. Rejection number one.
Examination of preparation for delivery	4.7.1.3	Inspection 1/ level S-2	Acceptance quality level of 4.0 percent defective.
Proof pressure	4.7.2.1	Every hose	Reject all defective hose.
Low temperature bending	4.7.2.6	Inspection 1/ level S-1	Acceptance number zero. Rejection number one.
Odor	4.7.2.8	Inspection 1/ level S-1	Acceptance number zero. Rejection number one.

<sup>1/</sup> The sample size shall be cased only on the applicable sample size code letter corresponding to the specified inspection level of MIL-STD-105.

4.7.2.6 Low temperature bending. The hose assembly shall be subjected to a temperature of -297° ±10°F, for not less than 15 minutes. After this exposure, the hose and a mandrel having a diameter as defined below shall be subjected to a temperature of -65°±2F for not less than 30 minutes. After this exposure and within 30 seconds after removing the hose and mandrel from the chamber, the hose shall be bent 180 degrees around the mandrel. The hose shall then be bent 180 degrees in the opposite direction around the mandrel and returned to a straight position. This cycle of bending the hose twice around the mandrel and returning to a straight position shall be repeated for a total of 5 cycles allowing 4 seconds per cycle. After this test, the hose shall pass the low temperature bending requirements specified in 3.6.6.

MS26548 <u>Hose dash number</u>	Diameter of mandrel (inches)
-5	-6 -8

- 4.7.2.7 Low temperature vibration. The hose assembly shall be installed in a vibration machine with a bend in the hose having a radius dimensionally equal to the diameter specified in 4.7.2.6. The bend shall be in the plane of vibration. One end of the hose shall be fixed and the other end vibrated with a double amplitude of 0.060 inch and a frequency varying regularly from 10 to 50 cycles per second (cps) and back to 10 cps. The rate of change in the frequency shall be constant. The hose assembly shall be vibrated for at least 3 hours. Liquid oxygen shall be maintained in the hose assembly during the entire test. After this test, the hose assembly shall be subjected to and pass the test specified in 4.7.2.1 (see 3.6.7).
- 4.7.2.8 Odor. One end of the hose assembly shall be attached to a mask or other similar device and the other end of the hose assembly shall be open to the atmosphere. Six subjects shall smell the inner

section of the hose in a manner that will prevent exterior odors from influencing the test. The hose shall pass the requirements specified in 3.6.8.

- 4.7.2.9 <u>Contamination</u>. The hose assemblies shall be connected to an outlet which is capable of providing 100 cubic feet per minute of air. The hose assembly outlet shall be monitored by any method that will detect particles as small as 0.02 inch maximum dimension. The test shall be performed for one(1) hour on each size hose assembly being produced. Particles of any type, as described, coming from the hose assembly shall be cause for rejection (see 3.6.9).
- 4.7.2.10 <u>Inspection of packaging.</u> Unless otherwise specified in the purchase order or contract, the supplier is responsible for the performance of all inspections requirements as listed in Table III, MIL-P-116 for the method of preservation, being accomplished.
- 4.8 <u>Toxicological formulations</u>. The contractor shall have the toxicological formulations and associated information available for review by the contracting activity to evaluate the safety of the material for the intended use (see 3.4.6).
- 4.9 Inspection of packaging. Except when commercial packaging is specified, the sampling and inspection of the preservation and interior package marking shall be in accordance with groups A and B quality-conformance inspection requirements of MIL-P-116. The sampling and inspection of the packing for shipment and storage shall be in accordance with the quality assurance provisions of the applicable container specification shown in section 5. The inspection of marking for shipment and storage shall be in accordance with MIL-STD-129. The inspection of commercial packaging shall be as specified in the contract (see 6.2).

## 5. PACKAGING

- 5.1 <u>Preservation</u>. Preservation-packaging shall be in accordance with (IAW) MIL-STD-2073-1, level "A" only as specified (see 6.2.).
- 5.1.1 <u>Preservation-packaging</u>. Unless otherwise specified by the contracting activity, item shall be packaged in Quantity Unit Pack (QUP) of one each. Each items will be provided a preservation method IA-8- IAW MIL-P-116 and U.S. Air Force Drawing 8148650.

TABLE II. Classification of defects for visual examination.

Critical	Minor
<ol> <li>Material imperfections, foreign matter embedded</li> <li>Design or construction not as specified.</li> <li>Broken thread of reinforcement braid.</li> <li>Imperfect screw thread.</li> <li>Flaked or chipped plating or finish.</li> <li>Does not swivel freely.</li> <li>Hose assembly is not clean</li> <li>Any component missing, malformed, fractured, or otherwise damaged.</li> <li>Any component loose or otherwise not securely retained.</li> <li>Incorrect assembling or improper positioning of components.</li> </ol>	<ul><li>201. Marking missing, insufficient, incorrect, illegible, or not permanent.</li><li>202. Openings not plugged.</li></ul>

- 5.1.2 Cleaning. Item shall be cleaned IAW MIL-P-116, and U.S. Air Force Drawing 8148650.
- 5.1.3 <u>Drying</u>. Immediately after cleaning, the item shall be dried following any one or combination of the drying procedures listed in MIL-P-116, and U.S. Air Force Drawing 8148650. The drying procedures employed shall not be injurious to the item. Item shall be capped and plugged after the drying process IAW MIL-C-5501.
- 5.1.4 <u>Level A</u>. Item shall be preserved IAW MIL-P-116, U.S. Air Force Drawing 8148650, and MIL-STD-2073-1 to provide a method IA-8.
  - 5.2 Packing. Packing shall be level "A", "B", or "C" as specified (see 6.2).
- 5.2.1 Container-cushioning. Unit container requirements shall conform to MIL-B-131, barrier material, unless otherwise specified by the contracting activity. Unit containers shall be large enough to allow for application of sufficient wrap MIL-B-121 material and cushioning PPP-C-1797 material, between the item and unit container to provide sufficient density and thickness to protect the unit container from punctures. Intermediate and/or shipping container requirements

TABLE III. List of defects for preparation for delivery.

Item		Defect
Exterior and interior marking	Missing incorrect, incomplete, illegible, or improper size, location, sequence or method of application; markings not the same on the interior and exterior containers.	;
Packaging and packing	Any nonconforming component; any materials component missing, damaged, or otherwise defective.	
Workmanship	Inadequate application of the components such as incomplete closures of the unit package, intermediate package, container flaps, loose stripling, etc.; bulging or distortion of the containers.	
Exterior and interior weight of contents	Number per container is more or less than required; gross or net weight exceeds the requirements.	

shall conform to ASTM D 5118 Para 6.2.1.2 Regular Slotted (RSC/0201) specified by the contracting activity. Cushioning material shall be of sufficient density and thickness to insure shock transmission does not exceed peak values which have been established for the item.

- 5.2.2 Level A. Fiberboard containers do not meet Level "A" container criteria.
- 5.2.3 <u>Level B</u>. Item will be preserved as specified in 5.1 and shall be packed in exterior containers conforming to ASTM D 5118 para 6.4.1. Type Weather-resistant unless otherwise specified by the contacting activity. Exterior container shall be uniform shape, size and minimum tare and cube, consistent with the protection required. Closure shall be in accordance with appropriate ASTM D 1974-91, para 7.1.1 Sealing Method A procedures, or as specified by contracting activity.

- 5.2.4 <u>Level C</u>. Item will be packed in such a manner that will afford adequate protection against physical/mechanical damage during direct domestic shipment from the supply source to the first receiving activity. These packs shall conform to MIL-STD-2073-1.
- 5.3 Marking. Unit, intermediate, and exterior containers shall be marked IAW special markings required by the contracting activity, U.S. Air Force Drawing 8148650 and MIL-STD-129.

## 6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

- 6.1 <u>Intended use.</u> The hose assembly covered by this specification is intended to use for gaseous or liquid.
  - 6.2 Acquisition requirements. Acquisition documents must specify the following;
    - a. Title, number, and date of this specification.
    - b. MS part No. (MS24548 and applicable dash number).
    - c. Levels of packaging and packing.
    - d. Data requirements (see 6.2.1).
- e. Issue of DODISS to be cited the solicitation, and if required, the specific issues of individual documents referenced (see 2.1).
- 6.2.1 <u>Data</u>. For the information of contractors and contracting officers, any of the data specified in applicable documents listed in section 2 of this specification or referenced in lower-tier documents need not be prepared for the Government and should not be furnished to the Government unless specified in the contract or order. The data to be furnished should be listed on DD Form 1423 (Contractor Data Requirements List), which should be attached to and made a part of the contract or order. NavWeps Form 4200/15 (Drawings, Lists, and Specifications Required) should be attached where applicable.
- 6.3 Qualification. With respect to products requiring qualification, awards will be made only for such products as have, prior to the time set for the opening of bids, been tested and approved for inclusion in the applicable Qualified Products List, whether or not such products have actually been so listed by that date. The attention of the suppliers is called to this requirement and manufacturers are urges to arrange to have the products that they propose to offer to the Federal Government tested for qualification in order that they may be eligible to be awarded contracts or orders for the products covered that they may be eligible to be awarded contracts or orders for the products covered by this specification. The activity responsible for the Qualified Products List is Oklahoma City ALC/TICLA, Tinker AFB, Oklahoma 73145-5990, and information pertaining to qualification of products may be obtained from that activity.
  - 6.4 Subject term (key word) listing.

Breathing Oxygen Hose

# Liquid Oxygen Systems

6.5 <u>Changes from previous issue.</u> Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

Custodians:

Preparing Activity:

Air Force - 99

Air Force - 71

Army - AV

**Reviewer Activities:** 

Navy- AS

Project number:

Air Force - 11

4720-0040

# STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

# **INSTRUCTIONS**

- The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
- 2. The submitter of this form must complete blocks 4, 5, 6, and 7.
- 3. The preparing activity must provide a reply within 30 days from receipt of the form.

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I RECOMMEND A CHANGE:	1. DOCUMENT NUMBER MIL-H-266626D	2. DOCUMENT DATE (YYMMDD) 01 November 1994
3. DOCUMENT TITLE HOSE ASSEMBLY, TETRAFLUOROETH	YLENE. OXYGEN	
4. NATURE OF CHANGE (Identify paragraph i	number and include proposed rewrite, if	possible. Attach extra sheets as needed.)
6. SUBMITTER a. NAME (Last, First, Middle Initial). c. ADDRESS (Include Zip Code)	b. ORGANIZATI d TELEPHONE (1) Commercial	ON  (Include Area Code)  7. DATE SUBMITTED (YYMMDD)
	(2) AUTOVON (If applicable	)
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a. NAME	b. TELEPHONE (1) Commercial	(Include Area Code) (2) AUTOVON

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