INCH-POUND
MIL-C-83867B (USAF)
22 November 1994

SUPERSEDING MIL-C-83867A (USAF) 3 JUNE 1987

#### MILITARY SPECIFICATION

# CONNECTOR, OXYGEN MASK HOSE NON-EJECTION TYPE

- \* This specification is approved for use within the Department of the Air Force, and is available for use by all Departments and Agencies of the Department of Defense.
  - 1. SCOPE
- 1.1 <u>Scope</u>. This specification covers the connector assembly used in conjunction with the aviator oxygen mask or aircraft fire fighter's mask.
  - 2. APPLICABLE DOCUMENTS
- \* 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.

# **SPECIFICATIONS**

#### **FEDERAL**

BB-A-1034	Compressed Air, Breathing
BB-N-411	Nitrogen, Technical
PPP-B-601	Box, Wood, Cleated-Plywood
BB-A-1034	Air, Compressed, Breathing

#### **MILITARY**

MIL-S-5002	Surface Treatments and Inorganic Coatings For Metal Surface	es of Weapon
	Systems	_
MIL-A-8625	Anodic Coatings, for Aluminum and Aluminum Alloys	
MIL-O-27210	Oxygen, Aviator's Breathing, Liquid and Gas	

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Logistics Services Division, SA-ALC/TILDD, Bldg 171, Post C-12, 485 Quentin Roosevelt Rd, Kelly AFB, TX 78241 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A FSC 1660 DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

## **STANDARDS**

#### **FEDERAL**

FED-STD-595 Colors

#### **MILITARY**

MIL-STD-100	Engineering Drawing Practices
MIL-STD-130	Identification Marking of U.S. Military Property
MIL-STD-147	Palletized Unit Loads
MIL-STD-756	Reliability Modeling and Prediction
MIL-STD-781	Reliability Testing For Engineering Development, Qualification, and
	Production
MIL-STD-889	Dissimilar Metals
MIL-STD-970	Standards and Specifications Order of Precedence for the Selection of
MIL-STD-2073-1	DOD Materiel Procedures For Development and Application Of Packaging
	Requirements
MS22058	Connector Oxygen Hose to Regulator
MS27796	Connector Bayonet, Three Pin, Oxygen Mask

(Unless otherwise indicated, copies of the federal and military specifications and standards are available from the Defense Printing Service, Detachment Office, 700 Robbins Ave., Bldg 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 shall be those in effect on the date of the solicitation.

## **DRAWINGS**

## Air Force

56A3696	Gasket - Connector, Oxygen Mask to Regulator
57B3623	Ring - Retaining, Demand Mask to Regulator Tube, Internal

- \* (Copies of specifications, standards, and other Governments documents required by contractors in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting officer.)
- CLEANING AND MARKING INSTRUCTIONS

794-0858 For Life Support Oxygen Breathing Devices And Component Parts

- \* (Request for copies of Special Packaging Instructions should be addressed to 651st/LGTPL, Kelly AFB, Texas 78241.)
- \* 2.2 Non-Government publications. The following document forms a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DOD adopted shall be those listed in the issue of the DODISS specified in the solicitation. Unless otherwise specified, the issues of documents not listed in the DODISS are the issue of the documents cited in the solicitation.

## SOCIETY OF AUTOMOTIVE ENGINEERS (AMS)

AMS 2417E Plating, Nickel-Zinc Alloy

(Application for copies should be addressed to the Society of Automotive Engineers, Inc., SAE International, 400 Commonwealth Drive, Warrendale, PA 15096.)

## AMERICAN SOCIETY FOR TESTING AND MATERIAL (ASTM)

\* ASTM B633 Zinc On Iron and Steel, Electrodeposited Coatings Of ASTM D3951 Standard Practice for Commercial Packaging

- \* (Application for copies of ASTM publications should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.)
- \* 2.3 Order of precedence. In the event of conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

## 3. REQUIREMENTS

- \* 3.1 Qualification. The oxygen mask connector furnished under this specification shall be products which are authorized by the qualifying activity for listing on the applicable Qualified Products List at the time of award of contract (see 4.3 and 6.4).
- 3.1.1 <u>Drawings for acceptance</u>. Drawings of the individual manufacturer's oxygen connectors shall be furnished to the approving activity for original acceptance. Any revisions to the original oxygen connector, which has previously been accepted for the Qualified Products List, shall be submitted to the approving activity for acceptance. Necessary information and drawings on the revision or modification shall be submitted to the approving activity for evaluation. At the discretion of the approving activity, the revised or modified oxygen connector shall be listed on the Qualified Products List.
- \* 3.2 <u>Selection of specification and standards</u>. Specifications and standards for necessary commodities and services not specified herein shall be selected in accordance with MIL-STD-970.
- 3.3 <u>Materials</u>. Materials shall conform to applicable specifications and shall be as specified herein and on applicable drawings. Materials which are not covered by specifications, or which are not specifically described herein, shall be of the best quality, of the lightest practicable weight, and suitable for the purpose intended.
- 3.3.1 Nonmetallic materials. Any nonmetallic material that is easily deteriorated or otherwise affected adversely by continued use with oxygen shall not be used. Plastics which crack, chip, or permanently set under a compressive load of 200 psi during a ten year service period shall not be used. Any nonmetallic material which has any objectionable odor shall not be used (see 3.6.6).
- 3.3.2 Metals. Metals shall be of the corrosion-resistant type or suitably treated to resist corrosion due to fuels, salt spray, or atmospheric conditions likely to occur in storage or normal service. Metals shall be protected against such corrosion in a manner that will in no way prevent compliance with the performance requirements of this specification. The use of any protective treatment that will crack, chip, or scale with age or extremes of atmospheric conditions shall be avoided.
- 3.3.3 <u>Dissimilar metals</u>. Unless suitably protected against electrolytic corrosion, dissimilar metals shall not be used in intimate contact with each other. Dissimilar metals are defined in MIL-STD-889.
  - 3.3.4 Non magnetic materials Non magnetic materials shall be used for all components.

- 3.3.5 <u>Anodizing</u>. All aluminum parts shall be anodized in accordance with MIL-A-8625, Type II, Class 2, Color black. All exposed parts shall be processed after anodizing with a potassium dichromate seal.
- 3.3.6 Zinc plating. Unless made of corrosion-resisting steel or otherwise protected in accordance with MIL-S-5002, all steel parts shall be zinc plated in accordance with AMS 2417 and ASTM B633.
- 3.4 <u>Design</u>. The oxygen mask connector shall consist of one aircraft supply port with a disconnect antisuffocation valve, and hose connection with restraint pin as in figure 1. The assembly shall be complete when all elements, mentioned above, are contained within or attached to the main housing. The connector shall meet the desired envelope dimensions and pass the required performance characteristics as specified herein.
- 3.4.1 <u>Aircraft supply port</u>. The aircraft supply port of the connector as in figure I, shall have a restrictor valve, which has disconnect anti-suffocation capabilities, that will permit the user to breathe normally when the valve is inserted into a connector conforming to MS22058. The restrictor valve shall be guided internally to prevent tilting or jamming of the valve mechanism. The valve actuator shall be positively locked to the restrictor valve. When disconnected, the valve shall permit inhalation, but a noticeable resistance shall be introduced to indicate that disconnection has occurred.
- 3.4.2 <u>Restraint pin</u>. A restraint pin shall be attached to the hose connection part of the oxygen connector to provide an attachment point for the oxygen mask hose restraint cord, as in figure 1.
- 3.5 <u>Construction</u>. The connector shall be constructed so that no parts will become loose in service. The alignment of fitting and mating surfaces shall be accurate to a degree that will permit the proper functioning of the unit in expected normal service conditions. The connector shall be built to withstand the strains, jars, vibrations, and any other conditions incident to shipment, storage, installation and service.
- 3.5.1 <u>Screw assemblies</u> Assembly screws and bolts shall be tight. Tight shall be defined to mean that the screw or bolt cannot be appreciably tightened further without damage or injury to the screw, bolt, nut, or the component parts retained by the screw or bolt.
- 3.5.2 <u>Installation of threaded parts</u>. All threaded parts shall be positively installed by self-locking nuts, sealants, or any other approved methods so that the threaded parts will not work loose in service.
- 3.5.3 <u>Lubrication</u>. The connector assembly shall be free from oil, grease, or any other combustible material. Lubrication used in the components of the connector that might be subject to exposure to oxygen shall be of the type approved by the procuring activity.
  - 3.6 Performance.
  - 3.6.1 Leakage. Total leakage of the connector shall not exceed 0.01 Liters Per Minute (LPM) (see 4.6.2).
- 3.6.2 <u>Pressure drop through connector with jig</u>. The pressure drop through the assembly shall not exceed the values specified in table I, when the connector is connected to a jig (see 4.6.3).
- 3.6.3 <u>Disconnection force</u>. The connector shall disconnect from the aircraft port at loads of 12 to 20 pounds (see 4.6.4).
- 3.6.4 <u>Pressure drop through connector</u>. The pressure drop through the connector shall be within the range of 4 to 6 inches of water (see 4.6.5).
- 3.6.5 <u>Reliability</u>. The connector shall have a minimum Mean-Time-Between-Failure (MTBF) of 600 hours (see 4.6.7). Accept-reject criteria shall be in accordance with MIL-STD-781, Test Plan III.

- 3.6.5.1 <u>Longevity</u>. The connector shall have a minimum life span (equipment longevity as defined in MIL-STD-756) of not less than 2,000 hours before wearout failures occur or the equipment consistently fails to meet the specified MTBF index (see 4.6.8).
  - 3.6.6 Odor. The connector shall have no objectionable odor (see 4.6.9).
- 3.6.7 <u>Restraint pin</u>. The restraint pin shall not separate from the connector at a force of less than 110 pounds (see 4.6.10).
- 3.7 <u>Color</u>. The color of the connector shall be black approximately matching color No 37038 of FED-STD-595.
- 3.8 Part numbering of interchangeable parts. All parts having the same manufacturer's part number shall be functionally and dimensionally interchangeable. The item identification and part number requirements of MIL-STD-100 shall govern the manufacturer's part numbers and changes thereto.
- 3.9 <u>Identification of product</u>. The following information shall be stamped or permanently affixed to the connector assembly in accordance with MIL-STD-130.

Connector
Part Number\*
Contract Number\*
Manufacturer's Name or Code\*
MIL-C-83867A(USAF)

- \*Manufacturer shall supply the necessary information.
- 3.10 <u>Cleaning</u>. This will be in accordance with CLEANING AND MARKING INSTRUCTIONS 794-0858 For Life Support Oxygen Breathing Devices and Component Parts.
- 3.11 Workmanship. The oxygen mask hose connector shall be uniform in quality and shall be free from irregularities, defects or foreign matter which could adversely affect safety, performance, reliability or durability.
  - 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 Responsibility for compliance. All items shall meet all requirements of sections 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 in quality conformance does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to acceptance of defective material.
  - 4.2 <u>Classification of inspections</u>. The inspection requirements specified herein are classified as follows:
  - a. Qualification inspection (see 4.3)
  - b. Quality conformance inspection (see 4.4).

- 4.3 Qualification inspection. Qualification inspection shall consist of all the examinations and tests of this specification. (see 6.4).
- 4.3.1 Qualification samples. The qualification samples shall consist of three connector assemblies prepared in accordance with this specification and representative of production. The test samples that were tested shall be furnished to the qualifying activity at the same time as the test reports. The samples shall be identified with such information as required in this specification and the procuring activity.
- 4.3.2 <u>Test report</u>. Three copies of a test shall be furnished to the qualifying activity. The test report shall include the results of all tests and a detailed statement of compliance or noncompliance with each requirement of this specification, identified by the applicable paragraph number. (see 6.3).
- 4.4 <u>Quality conformance inspection</u>. Quality conformance inspection shall consist of the following examinations and tests.
  - 4.4.1 <u>Individual tests</u>. The tests specified (see 4.6.1 and 4.6.4) shall constitute individual tests.
- 4.4.2 <u>Sampling tests</u>. Three connector assemblies, selected at random from each lot of 100 or less, shall be subjected to the following tests as specified (see 4.6).
  - a. Leakage (see 4.6.2, room temperature).
  - b. Pressure Drop Through Connector (see 4.6.5).
  - c. Odor (see 4.6.9).
- 4.4.2.1 <u>Rejection and retest</u>. When one or more items from a lot fail to meet the specification, acceptance of all items in the lot shall be withheld until the extent and cause of failure have been determined. The contractor shall explain fully to the Government representative the cause of failure and the action taken to preclude recurrence. After correction, all of the sampling tests shall be repeated.
- 4.4.2.2 <u>Individual tests may continue</u>. For production reasons, individual tests of other sampling plans may be continued pending the investigation of a sampling test failure. But final acceptance of the entire lot or lots produced later shall not be made until it is determined that all items meet all the requirements of the specification.
- 4.4.3 <u>Defects in items already accepted</u>. The investigation of a test failure could indicate that defects may exist in items already accepted. If so, the contractor shall fully advise the procuring activity of all the defects likely to be found and the method of correcting them.
- 4.5 Test conditions. The connector shall be tested in the normal operating attitude.
- 4.5.1 <u>Atmospheric conditions</u>. Unless otherwise specified, all tests required by this specification shall be made at an atmospheric pressure of 28 to 32 inches of mercury, at a temperature of 77°F ±18°F, and at a relative humidity of 80% or less. When tests are made with atmospheric pressure or temperature substantially different from these values, proper allowance shall be made for the change in instrument reading.
- 4.5.2 Gas. The gas used in testing the connectors shall be oxygen conforming to MIL-O-27210, Type I, water-pumped nitrogen conforming to BB-N-411, Type I, Class 1, Grade B, or compressed air conforming to BB-A-1034, Grade A. If either nitrogen or air is used, appropriate density correction factors shall be applied to the flow meter and to the performance of the connector.

## 4.6 Test methods.

- 4.6.1 <u>Visual examination</u>. The connector shall be visually inspected for defects according to table II. One major defect or two minor defects constitute rejection of the assembly.
- 4.6.2 <u>Leakage</u>. A jig that is acceptable to the procuring activity and conforming to the internal dimensions of the connector specified in MS 22058, shall be used for this test. An internal pressure of 1 PSI shall be applied at  $160^{\circ}$ F, room temperature ( $77^{\circ}$ F  $\pm 18^{\circ}$ F), and  $-65^{\circ}$ F. The mask connection port shall be blocked by the insertion of a blanked off bayonet connector externally conforming to MS27796. Total leakage shall not exceed the value specified (see 3.6.1).
- 4.6.3 Pressure drop through connector with jig. The connector shall be connected to a jig having the internal dimensions shown on MS22058. With the valve open, pressure shall be applied to the jig to obtain flows in the range of 0 to 135 LPM from the regulator end to the mask end. The pressure drop through the assembly shall be measured by a piezometer ring located 2 inches from the applicable end of the connector. For use of the piezometer ring (see 4.6.5). Pressure drops through the assembly in excess of the values specified (see 3.6.2) shall be cause for rejection.
- 4.6.4 <u>Disconnection force</u>. A jig that is acceptable to the procuring activity and that has the internal dimensions of the connector specified in MS22058 shall be used for this test. A sufficient force applied along the longitudinal axis of the aircraft supply port to cause disconnect of the port from the jig shall be measured. The test shall be performed three times. The connector shall meet the requirements specified (see 3.6.3).
- 4.6.5 Pressure drop through connector. With the valve closed, pressure or suction shall be applied to the connector to obtain a flow of 15 LPM from the regulator end to the mask end. The pressure tap shall be a piezometer ring located approximately 2 inches from the end of the connector. The tap shall be located on the mask side if suction is used and on the regulator side if pressure is used. The flow duct shall be constructed to assure a straight flow for at least 6 inches immediately after leaving the connector if suction is used or for at least 6 inches immediately before entering the connector if pressure is used. The connector housing shall be mounted in a vertical position and its location shall permit free flow into the connector if suction is used and free flow out of the connector if pressure is used. The pressure drop through the connector shall be as specified (see 3.6.4).
- 4.6.6 <u>Disconnection reliability and longevity</u>. The jig specified (see 4.6.4) shall be used for this test. The mating connector shall be inserted and disconnected from the aircraft supply port for 2O cycles each 24-hour period. The average force for disconnect of the three initial and three final cycles of each 20-cycle run shall be measured and reported. The restrictor valve shall fully close during each disconnection. During the cycles involved in the test, failure to meet required force specified (see 3.6.3) or failure of any component within the connector shall be cause for rejection.
- 4.6.7 Reliability test. At room temperature, two connectors shall be subjected to simulated breathing cycles at a rate of between 10 and 20 breathing cycles per minute. Cyclic breathing of the connectors shall be accomplished with peak flow rates of 30 LPM, inhalation and exhalation, with the restrictor valve in the open position. During 20 percent of the time the connectors are subjected to breathing cycles, they shall be vibrated at a frequency ranging from 500 to 2,500 cycles per minute, at a double amplitude of not less than 0.018 inch nor more than 0.020 inch. The connector shall be vibrated alternately on each of the three axis for 6 hours on each axis. At least once every 24 hours of the breathing cycle test, each connector shall be subjected to and shall meet the tests specified (see 4.6.4 (room temperature), 4.6.5 and 4.6.6). No parts shall be replaced as preventive maintenance during reliability testing. Two connectors shall be tested by the contractor for reliability in accordance with MIL-STD-781 and one of the connectors shall be continued through a longevity test in accordance with MIL-STD-781 (see 4.6.5). A failure is defined as the occurrence of any condition which will interfere with meeting the performance levels specified herein. Recording, data handling, and reporting procedures shall be in accordance with MIL-STD-756. The connector shall meet or exceed the requirements specified (see 3.6.5).

- 4.6.8 Longevity verification. Verification of the longevity requirements of the connector shall be in accordance with MIL-STD-756. In accordance with the concepts projected in MIL-STD-756, if more than four failures occur during the last half (four MTBF's equivalent) of the reliability test, all failure data will be submitted to the procuring agency for evaluation for possible wearout failures. Evidence of wearout failures shall be the criteria for rejection of the sample. Recording, data handling and reporting procedures shall be in accordance with MIL-STD-756.
- 4.6.9 Odor. Gaseous oxygen shall be allowed to pass through the assembled connector at a rate not greater than 10 LPM for one minute. A test of smell shall be conducted in a manner that shall prevent exterior odors from influencing the test. If two out of six persons judge the connector to have an objectionable odor, the connector will be unacceptable.
- 4.6.10 <u>Restraint pin shear</u>. The restraint pin shall be pulled at its midpoint while installed in the hose connector until the pin breaks or deforms to such an extent as to become dislodged from its position. The force required to cause this failure or deformation shall not be less than specified (see 3.6.7).

#### 5 PACKAGING

- 5.1 <u>Preservation</u>. Preservation shall be Level A, C, or Commercial as specified (see 6.2).
- 5.1.1 <u>Level A</u>. Connector, Oxygen Mask Hose Non-Ejection Type shall be preserved to the MIL-STD-2073-1 requirements for this level.
- 5.1.2 <u>Level C</u>. Connector, Oxygen Mask Hose Non-Ejection Type shall be preserved to the MIL-STD-2073-1 requirements for this level.
- 5.1.3 <u>Commercial</u>. Connector, Oxygen Mask Hose Non-Ejection Type shall be preserved in accordance with the applicable requirements of ASTM D3951.
  - 5.2 Packing. Packing shall be level A, B, C or Commercial as specified (see 6.2).
- 5.2.1 <u>Level A</u>. Connector, Oxygen Mask Hose Non-Ejection Type that have been preserved and packaged as specified (see 5.1) shall be packed in exterior-type shipping containers that conform to PPP-B-601, overseas type. The closure of the shipping container shall be in accordance with the appendix of the applicable shipping container specification.
- 5.2.2 <u>Level B.</u> Connector, Oxygen Mask Hose Non-Ejection Type that have been preserved and packaged as specified (see 5.1) shall be packed in exterior-type shipping containers that conform to PPP-B-636, class weather resistant. The closure of the shipping container shall be in accordance with the appendix of the applicable shipping container specification.
- 5.2.3 <u>Level C</u>. Connector, Oxygen Mask Hose Non-Ejection Type that have been preserved and packaged as specified (see 5.1) shall be packed in accordance with the requirements of MIL-STD-2073-1.
- 5.2.4 <u>Commercial</u>. Connector, Oxygen Mask Hose Non-Ejection Type that have been preserved and packaged as specified (see 5.1) shall be packed in accordance with the requirements of ASTM D3951.

## 5.3 Cleaning/Marking.

5.3.1 <u>Level A, B, and C</u>. In addition to any special or other identification markings required by the contract (see 6.2), Connector, Oxygen Mask Hose Non-Ejection Type shall be cleaned and marked in accordance with Cleaning And Marking Instructions No. 794-0858, For Life Support Oxygen Breathing Devices and Component Parts.

- 5.3.2 <u>Commercial</u>. Connector, Oxygen Mask Hose Non-Ejection Type shall be marked in accordance with the requirements of ASTM D3951.
- 5.4 <u>Palletization</u>. Unitized loads, commensurate with the level of packing specified in the contract or order shall be palletized in accordance with MIL-STD-147. Palletized loads shall be uniform in size and quantities to the greatest extent possible. If the container is of size which does not conform to any of the pallet patterns specified in MIL-STD-147, the pallet pattern shall first be approved by the contracting officer.

#### 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 oxygen connector shall be used on non-ejection aircraft for use in conjunction with the full face fire fighter's mask or other oxygen masks as necessary.
- \* 6.2. Acquisition requirements. Acquisition documents should specify the following:
  - a. Title, number, and date of this specification
  - b. Issue of DODISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.1)
  - c. Level of packing (see 5.1)
  - d. Manufacturer's qualification test report (see 4.3.2)
- 6.3 <u>Consideration of data requirements</u>. The following data requirements should be considered when this specification is applied on a contract. The applicable Data Item Descriptions (DID's) should be reviewed in conjunction with the specific acquisition to ensure that only essential data are requested/provided and that the DID's are tailored to reflect the requirements of the specific acquisition. To ensure correct contractual application of the data requirements, a Contract Data Requirements List (DD Form 1423) must be prepared to obtain the data, except where DOD FAR Supplement 27.475-1 exempts the requirement for a DD Form 1423.

Reference Paragraph	DID Number	DID Title
3.1.1	DI-DRPR-80651	Engineering Drawings
4.3.2	DI-NDTI-80809A	Tests/Inspection Report

The above DID's were those cleared as of the date of this specification. The current issue of DOD 5010.12-L, Acquisition Management Systems and Data Requirements Control List (AMSDL), must be researched to ensure that only current, cleared DID's are cited on the DD Form 1423.

\* 6.4 Qualification. With respect to products requiring qualification, awards will be made only for products which are, at the time of award of contract, qualified for inclusion in Qualified Products List QPL-83867 whether or not such products have actually been so listed by that date. The attention of the contractors is called to these requirements, and manufacturers are urged 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 purchase orders for the products covered by this specification. The activity responsible for the Qualified Products List is San Antonio ALC/LDCQ, Kelly AFB, Texas 78241 and information pertaining to qualification of products may be obtained from that activity.

# 6.5 Subject term (key word) listing.

Classification of defects
Disconnection force
Flow of oxygen
Leakage
Longevity
Odor
Pressure drop
Reliability
Test report

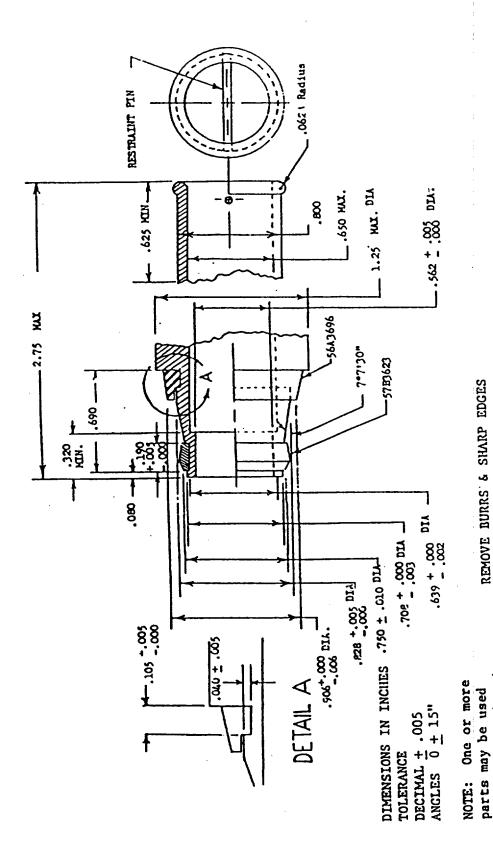
\* 6.6 Changes from previous issue. The margins of this specification are marked with asterisks (or vertical lines) to indicate where changes (additions, modifications, corrections, deletions) from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

TABLE I - Pressure Drop In Assembly

Flow of oxygen(LPM)	Pressure drop (inches of water)
135	1.4
90	0.60
70	0.36
50	0.18
30	0.06
0	0

TABLE II. Classification of Defects For Visual Examination

Major	Minor
<ol> <li>Dimensions not within tolerance</li> <li>Grease, oil, or other impurities on connector</li> <li>Any impairment which hinders use of connector</li> <li>Materials not meeting specifications requirements</li> <li>Finish or protective coating chipped or incomplete.</li> <li>Identification missing or workmanship faulty</li> <li>Screws, bolts, or nuts not properly sealed or locked</li> </ol>	101. Identification in complete or illegible 102. Colors not conforming to specification.



REMOVE BURRS' & SHARP EDGES ALL DIAMETERS MUST BE CONCENTRIC

for connector housing.

WITHIN .002 T.I.R.

Custodian: Air Force - 99 Preparing Activity: Air Force - 82

(Project Number: 1660-F657)

# STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

# **INSTRUCTIONS**

- 1. 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.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of 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.

	OCUMENT NUMBER (IL-C-83867B (USAF)	2. DOCUMENT 17 JULY	<b>DATE</b> ( <i>YYMMDD</i> ) 1994
3. DOCUMENT TITLE CONNECTOR, OXYGEN MASK HOSE NON-	EJECTION TYPE		
4. NATURE OF CHANGE (Identify paragraph numbe	er and include proposed rewrite, if po	ossible. Attach extra she	ets as needed.)
			<u></u>
5. REASON FOR RECOMMENDATION			
5. SUBMITTER 1. NAME (Last, First, Middle Initial)	b. ORGANIZATIO	N.	
	d TELEPHONE (	N nclude Area Code)	7. DATE SUBMITTED
a. NAME (Last, First, Middle Initial)	d TELEPHONE (/		7. DATE SUBMITTED (YYMMDD)
n. NAME (Last, First, Middle Initial)	d TELEPHONE (		
n. NAME (Last, First, Middle initial)  ADDRESS (include Zip Code)  PREPARING ACTIVITY	d TELEPHONE (i (1) Commercial (2) AUTOVON (if applicable)	nclude Area Code)	
ADDRESS (Include Zip Code)  PREPARING ACTIVITY  NAME	d TELEPHONE (i (1) Commercial (2) AUTOVON (if applicable)		
ADDRESS (Include Zip Code)  B. PREPARING ACTIVITY  I. NAME  SA-ALC/TILDD	d TELEPHONE () (1) Commercial (2) AUTOVON (If applicable)  b. TELEPHONE () (1) Commercial	nclude Area Code) nclude Area Code)	(YYMMDD)
ADDRESS (Include Zip Code)  B. PREPARING ACTIVITY  I. NAME	d TELEPHONE () (1) Commercial (2) AUTOVON (If applicable)  b. TELEPHONE () (1) Commercial	nclude Area Code)	(YYMMDD)  (2) AUTOVON  N 45 DAYS, CONTACT: