This document and process conversion measures necessary to comply with this revision shall be completed by 1 May 1999

INCH-POUND

MIL-DTL-25677D <u>11 DECEMBER 1998</u> SUPERSEDING MIL-N-25677C (ASG) 18 October 1968 MIL-PRF-25676E 5 May 1997

DETAIL SPECIFICATION

ADAPTER, CAP, AND NOZZLE, PRESSURE LUBRICATING OIL SERVICING, AIRCRAFT, GENERAL SPECIFICATION FOR

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 an adapter, cap and nozzle, pressure lubricating oil servicing, aircraft, for ground servicing of aircraft turbine engines.

2. APPLICABLE DOCUMENTS

2.1 <u>General</u>. The documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3 and 4 of this specification, whether or not they are listed.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commander, Defense Supply Center, Columbus, DSCC-VAI, 3990 East Broad Street, Columbus, OH 43216-5000, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A FSC 4730 DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

2.2 Government documents.

2.2.1 <u>Specifications, standards, and handbooks</u>. 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

QQ-P-416 - Plating, Cadmium Electrodeposited

DEPARTMENT OF DEFENSE

MIL-PRF-7808	-	Lubricating Oil, Aircraft Turbine Engine, Synthetic Base
MIL-C-8188	-	Corrosion Preventive Oil, Gas Turbine Engine, Aircraft,
		Synthetic Base
MIL-PRF-23699	-	Lubricating Oil, Aircraft Turbine Engine, Synthetic Base, NATO
		CODE NUMBER 0-156
MIL-DTL-25677/1	-	Adapter, Pressure Lubricating Oil Servicing, Aircraft
MIL-DTL-25677/2	-	Cap, Lubrication Fitting, Protective, Pressure Servicing Adapter
MIL-DTL-25677/3	-	Nozzle, Pressure Lubricating Oil Servicing, Locking

STANDARDS

DEPARTMENT OF DEFENSE

MIL-STD-130	-	Identification Marking of U.S. Military Property
MIL-STD-810	-	Environmental Test Methods and Engineering Guidelines
MIL-STD-889	-	Dissimilar Metals
MS29561	-	Packing, Preformed "O" Ring, Synthetic Lubricant Resistant

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

2.3 <u>Non-Government publications</u>. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents 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).

SOCIETY OF AUTOMOTIVE ENGINEERS (SAE)

SAE AMS 2472	-	Anodic Treatment of Aluminum Alloys Sulfuric Acid Process, Dyed
		Coating
SAE AS4273	-	Fire Testing of Fluid Handling Components For Aircraft Engines
		And Aircraft Engine Installations
SAE AS4396	-	Fitting End-Bulkhead Flared Tube, Connection, Design, Standard
		(DoD adopted)
SAE AS8879	-	Screw Threads-UNJ Profile, Inch

(Application for copies of SAE publications should be addressed to the Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, PA 15096-0001.)

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI/NCSL Z540-1	-	Calibration Laboratories and Measuring and Te	
		Equipment,	General Requirements.

(Application for copies should be addressed to the American National Standard Institute, 1430 Broadway New York 10018-3308.)

2.4 <u>Order of precedence</u>. In the event of a conflict between the text of this document and the references cited herein (except for related associated specifications or specification sheets), 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 <u>Specification sheets</u>. The individual item requirements shall be as specified herein and in accordance with the applicable specification sheet. In the event of any conflict between the requirements of this specification and the specification sheet, the latter shall govern (see 6.2).

3.2 <u>Qualification</u>. Adapters, caps, and nozzles furnished under this specification shall be products that are authorized by the qualifying activity for listing on the applicable qualified products list before contract award (see 4.2 and 6.3).

3.3 Design. The oil servicing components shall consist of an adapter incorporating a self-sealing shut-off device MIL-DTL-25677/1, a pressure cap MIL-DTL-25677/2, and a nozzle MIL-DTL-25677/3. The adapter shall be designed to mount on a section of aircraft structure or engine to connect to, and provide for a quick separation from, a pressure servicing lubricating oil nozzle. The adapter and nozzle, when uncoupled, each shall automatically seal its respective uncoupled end against spillage of fluid. The pressure cap shall mount on the adapter and provide seal redundancy as a secondary seal. The cap shall remain securely mounted to the adapter during the vibration test of 4.6.11 and fire proof test of 4.6.12. The cap shall have a chain as specified on MIL-DTL-25677/2 which can be attached to the adapter or surrounding aircraft structure.

3.3.1 <u>Interchangeability</u>. Parts having the same manufacturer's part number shall be functionally and physically interchangeable. All parts manufactured to the same military part number shall be functionally interchangeable.

3.3.2 <u>Interoperability</u>. Parts manufactured to MIL-DTL-25677/2 and MIL-DTL-25677/3 shall operate on any adapter manufactured to MIL-DTL-25677/1.

3.3.3 <u>Connections</u>. The adapter fitting end shall conform to AS4396.

3.3.4 <u>Screw threads</u>. Screw threads shall be in accordance with AS8879.

3.3.4.1 <u>Anti-seize compound</u>. An anti-seize compound shall be used on threaded aluminum or aluminum alloy parts.

3.4 <u>Construction</u>. The adapter shall be constructed to withstand the normal strains of jars, vibration, and such other conditions incident to shipping, storage, installation, and service. All loose parts such as gaskets and seals shall be securely attached to the adapter so that they will not become detached or damaged due to rough or inept handling while connecting and disconnecting the adapter to the nozzle. Connecting and disconnecting the adapter shall have no adverse effect on its leakage characteristics.

3.5 <u>Materials</u>. Materials used other than those specified herein require documented qualifying activity approval.

3.5.1 <u>Metals</u>. Metals that are not corrosion-resistant shall be protected to resist corrosion in MIL-PRF-7808 oil, salt spray, atmospheric conditions, storage, and normal service life. The use of materials which minimize the weight of these items is encouraged. Items made of passivated stainless steel and anodized aluminum are acceptable if they meet all the requirements of this specification. Cadmium plating shall be used only when other platings cannot meet performance requirements. Dissimilar metals, such as brass, copper, or steel in contact with aluminum or aluminum alloy shall be avoided, when practicable. Dissimilar metal combinations are defined in MIL-STD-889. Magnesium shall not be used.

3.6 Finish.

3.6.1 <u>Aluminum alloy parts</u>. Aluminum alloy parts shall be anodized in accordance with AMS 2472.

3.6.2 <u>Steel parts</u>. Steel parts using cadmium plating corrosion protection shall be plated externally in accordance with QQ-P-416 type II, class 2.

3.6.3 <u>Recycled, recovered, or environmentally preferable materials</u>. Recycled, recovered, or environmentally preferable materials should be used to the maximum extent possible provided that the material meets or exceeds the operational maintenance requirements, and promotes economically advantageous life cycle costs.

3.6.4 <u>Hazardous substances</u>. The use of hazardous substances, toxic chemicals, or ozone depleting compounds (ODC) shall be avoided, whenever feasible.

3.7 <u>Adapter connect and disconnect</u>. Connecting and disconnecting the nozzle to the adapter shall be accomplished manually throughout the operating temperature range. After the adapter and nozzle have been connected, positive flow of fluid shall be assured, and no possibility of fluid shut-off shall occur. A positive locking means shall be provided when the adapter is connected to the nozzle. The force required to engage the adapter and nozzle shall not exceed 20 pounds.

3.8 <u>Performance</u>. The adapter shall operate without failure under the following conditions. There shall be no leakage except for entrapped fluid within the adapter which would be lost at disconnection.

3.8.1 <u>Temperature range</u>. The adapter and cap shall function over a temperature range of -65 °F to +275 °F. The nozzle shall function over a temperature range of -65 °F to 160 °F.

3.8.2 <u>Operation and leakage</u>. The adapter shall operate when subjected to the operating pressures encountered in turbine engine oil systems. The nozzle self-sealing shutoff device shall be capable of sealing against a 2 foot head of MIL-PRF-7808 oil when not engaged. There shall be no visible signs of leakage during the operation and leakage test specified in 4.6.4.

3.8.3 Low temperature and leakage. The adapter shall not crack nor show other imperfections when subjected to an ambient temperature of -65°F for 24 hours. Following this cold soak, connection and disconnection of the adapter and nozzle shall be accomplished with relative ease and rapidity. There shall be no visible signs of leakage during the leakage tests specified in 4.6.5.

3.8.4 <u>High temperature and leakage</u>. The adapter shall show no imperfections as a result of the high temperature test specified in 4.6.6. There shall be no leakage during this test.

3.8.5 <u>Pressure drop</u>. The pressure drop of the adapter and nozzle assembly, when tested as specified in 4.6.7, shall not exceed that specified on MIL-DTL-25677/1.

3.8.6 <u>Corrosion</u>. The adapter assembly shall show no evidence of corrosion which will affect the performance of any part, when tested as specified in 4.6.8. Material discoloration which does not affect performance is acceptable.

3.8.7 <u>Side load</u>. The adapter and nozzle assembly shall not leak nor be distorted or damaged in any way when subjected to the side load test specified in 4.6.9.

3.8.8 <u>Poppet spring</u>. The poppet spring force of the adapter shall be such as to permit relatively easy coupling or uncoupling of the nozzle and to provide adequate pressure on the poppet while uncoupled. The spring force shall not exceed 15 pounds when tested as specified in 4.6.10.

3.8.9 <u>Vibration and leakage</u>. The adapter shall remain firmly fixed to the mounting structure, the cap shall not become loosened or unattached during that portion of the test in which it is installed on the adapter, and there shall be no leakage during the vibration test specified in 4.6.11.

3.8.10 <u>Fire proof</u>. The adapter with the cap installed shall be capable of withstanding a flame test of 2000 °F for 15 minutes, and shall show no leakage during and 5 minutes after the test of 4.6.12.

3.9 <u>Packing</u>. O-ring oil seals shall conform to MS29561 or other seals compatible with oil conforming to MIL-PRF-7808, MIL-C-8188, and MIL-PRF-23699.

3.10 <u>Dimensions and tolerances</u>. All pertinent dimensions and tolerances which may affect interchangeability, operation, or performance of the adapter assembly shall be as specified on the manufacturer's drawings (see 4.2.1.1).

3.11 <u>Identification</u>. The military part number (MS), manufacturer's name, and cage code shall be legibly and permanently marked on the adapter, cap, and nozzle in accordance with MIL-STD-130.

3.12 <u>Workmanship</u>. Fittings shall be free from burrs and tool marks. All sealing surfaces shall be smooth.

4. VERIFICATION

4.1 <u>Test equipment and inspection facilities</u>. Test and measuring equipment and inspection facilities of sufficient accuracy, quality, and quantity to permit performance of the required inspection shall be established and maintained or identified by the contractor. The establishment and maintenance of a calibration system to control the accuracy of the measuring and test equipment (i.e. Industry Standard, Military Standard, etc.) shall be in accordance with ANSI/NCSL Z540 -1 or equivalent.

4.2 <u>Classifications of inspection</u>. The inspection requirements specified herein are classified as follows:

- a. Qualification inspection (see 4.4).
- b. Screening (see 4.5.1)
- c. Quality conformance inspection (see 4.5.2).
 - 1. Group A lot acceptance inspection (see 4.5.2.1)

4.3 <u>Inspection conditions</u>. Unless otherwise specified, all testing shall be conducted at 70 \pm 10 °F. Before testing, all oil and grease or other corrosion-resistant compounds shall be removed from the interior and exterior parts of the adapter, cap and nozzle. Tests requiring a test adapter, cap, or nozzle shall be conducted with an adapter, cap, or nozzle that has been qualified to MIL-DTL-25677/1, MIL-DTL-25677/2, and MIL-DTL-25677/3 respectively and this specification.

4.4 <u>Qualification inspection</u>. Qualification inspection shall be performed at a laboratory acceptable to the qualifying activity on sample units produced with equipment and procedures used in production.

4.4.1 <u>Samples for qualification</u>. Samples for qualification shall be representative of the products proposed to be furnished to the Government. Test samples, consisting of five sets of each item to be qualified shall be examined and tested by the contractor in accordance with this specification, and submitted to the qualifying activity.

4.4.2 <u>Inspection routine</u>. Qualification inspection shall consist of the tests listed in table I, in the order shown. The tests that apply to each of the three components, adapter, cap, and nozzle shall be as indicated in table I. Each component shall be tested for qualification individually. Tests requiring a test adapter, cap, or nozzle shall be conducted with an adapter, cap, or nozzle that has been qualified to MIL-DTL-25677/1, MIL-DTL-25677/2, and MIL-DTL-25677/3 respectively and this specification.

4.4.3 <u>Failures</u>. One or more failures shall be cause for refusal to grant qualification approval.

4.4.4 <u>Retention of qualification</u>. To retain qualification, the contractor shall verify in coordination with the qualifying activity the capability of manufacturing products which meet the performance requirements of this specification. Refer to the qualifying activity for the guidelines necessary to retain qualification to this specification. The contractor shall immediately notify the qualifying activity at any time the inspection data indicates failure of the qualified product to meet the performance requirements of this specification.

	Req.	Insp	Applies to		
Inspection	Para.	Para.	Adapter	Сар	Nozzle
			MIL-DTL-	MIL-DTL-	MIL-DTL-
			25677 /1	25677/2	25677/3
Examination of product	3.3, 3.11, 3.12	4.6.1	Х	Х	Х
Connect and disconnect	3.7	4.6.2	Х		Х
Pressure	3.8.2	4.6.3	Х		X <u>2</u> /
Operation and leakage	3.8.2	4.6.4	Х		X <u>2</u> /
Low temp and leakage	3.8.3	4.6.5	Х		X <u>2</u> /
High temp and leakage	3.8.4	4.6.6	Х		
Pressure drop	3.8.5	4.6.7	Х		X <u>2</u> /
Corrosion	3.8.6	4.6.8	Х	Х	Х
Side load	3.8.7	4.6.9	Х		X <u>2</u> /
Poppet spring	3.8.8	4.6.10	Х		
Vibration and leakage	3.8.9	4.6.11	Х	X <u>1</u> /	
Fire proof	3.8.10	4.6.12	Х	X <u>1</u> /	
Disassembly and insp		4.6.13	X		

TABLE I. Qualification inspection.

1/ Conducted installed on the adapter when testing the adapter/cap assembly

2/ Conducted coupled to the adapter when testing the adapter

4.5 <u>Inspection of product for delivery</u>. Inspection of product for delivery shall consist of screening and group A.

4.5.1 <u>Screening</u>. Each adapter, cap and nozzle shall be subjected to examination of product specified in 4.6.1. Any adapter, cap and nozzle which fails any test criteria in the screening sequence shall be removed from the lot at the time of observation or immediately at the conclusion of the test in which the failure was observed.

4.5.2 Conformance inspection.

4.5.2.1 <u>Group A inspection</u>. Group A inspection shall consist of the connect and disconnect test (see 4.6.2) and the pressure test (see 4.6.3).

4.5.2.1.1 <u>Group A sampling plan</u>. Group A tests shall be performed on a production lot basis. Random samples shall be selected to form an inspection lot. If one or more defects are found in the inspection lot, then the production lot shall be screened for that particular defect and defects removed. An inspection lot shall be selected from the production lot and all group A tests again performed. If one or more defects are found in the second inspection lot, the production lot shall be rejected and shall not be supplied to this specification.

4.5.2.1.2 <u>Production lot</u>. A production lot shall consist of all adapters, caps or nozzles of the same part number which have been manufactured under the same conditions and on the same continuous run.

4.5.2.1.3 <u>Inspection lot</u>. The inspection lot shall be product selected at random from the production lot without regard to quality and shall be the size specified in table II.

Production	Accept on
lot size	zero
	sample size
2 to 50	5
51 to 90	7
91 to 150	11
151 to 280	13
281 to 500	16
501 to 1,200	19
1,201 to 3,200	23
3,201 to 10,000	29
10,001 to 35,000	35
35,001 and over	40

TABLE II.	Group /	<u>A ins</u>	<u>pection</u> .

4.6 <u>Methods of inspection</u>. The following identified tests and test methods assure integrity within typical operating conditions and applications. Alternate commercial industry standard test methods are allowed; however when an alternate method is used, documented approval must be obtained from the qualifying activity prior to the performance of the test. The test methods described herein are proven methods and shall be the referee method in case of dispute.

4.6.1 <u>Examination of product</u>. Each adapter, cap and nozzle shall be carefully examined to determine conformance to this specification and the applicable specification sheet with respect to dimensions, tolerance, material, finish, identification of product, and workmanship.

4.6.2 <u>Connect and disconnect test</u>. Each sample adapter or nozzle shall be connected to and disconnected from a test adapter or nozzle, as applicable, 10 times while dry. Each connection and disconnection shall be accomplished with relative ease and rapidity and without the use of tools. There shall be no binding, sticking, or scoring of parts.

4.6.3 <u>Pressure test</u>. Each sample adapter or nozzle shall be connected to an adapter or nozzle as applicable and shall be hydrostatically tested at the pressures specified in 4.6.4. The adapter and nozzle shall withstand the applied pressure for 1 minute minimum, without any visible signs of leakage.

4.6.4 <u>Operation and leakage test</u>. This test shall be conducted on the adapter while connected to a test nozzle, as specified below. The requirement shall be as specified in 3.8.2.

- a. An adapter and nozzle shall be connected and disconnected 2,000 times consecutively while dry. The assembly shall then be pressure checked at a hydrostatic pressure of 500 pounds per square inch (psi) minimum, with MIL-PRF-7808 oil for 1 minute. There shall be no visible signs of leakage from the adapter portion. The adapter and nozzle shall be disconnected and the following pressure tests conducted on the adapter.
- b. Using MIL-PRF-7808 oil, a hydraulic pressure of 500 psi minimum, shall be applied to the outlet end of the adapter for 5 minutes minimum.
- c. A hydraulic back pressure of a 2-foot head minimum, of MIL-PRF-7808 oil shall be applied to the adapter for 1/2 hour minimum.
- d. A hydraulic back pressure of oil equivalent to 5 psi minimum, shall be applied to the adapter for 1/2 hour minimum.
- e. The adapter shall be drained and an air back pressure of 4.5 psi minimum, shall be applied to the adapter for 1/2 hour minimum.

4.6.5 <u>Low temperature and leakage test</u>. An adapter and nozzle, while disconnected, shall be filled with oil conforming to MIL-PRF-7808 and cold-soaked at a temperature of -65 °F for 24 hours minimum. The following tests shall then be conducted at an ambient temperature of -65 °F:

- a. The adapter and nozzle shall be connected and disconnected. This shall be accomplished with relative ease and rapidity. Any binding, locking, or scoring of parts shall be cause for rejection.
- b. The adapter and nozzle shall then be connected, and a hydrostatic pressure of 500 psi minimum, of MIL-PRF-7808 oil shall be applied at the adapter inlet for 1 minute minimum.
- c. The adapter shall be subjected to the pressure tests of 4.6.4b, c, d, and e.

4.6.6 <u>High temperature and leakage test</u>. A high temperature test shall be conducted at an ambient temperature of 250 °F minimum. The adapter shall be heat-soaked for 2 hours minimum, and while maintained at 250 °F, the pressure tests of 4.6.4b, c, d, and e shall be repeated. There shall be no visible signs of leakage.

4.6.7 <u>Pressure drop test</u>. With the adapter connected to a nozzle, the assembly shall be filled with oil and cold-soaked at -65 °F for 24 hours. While maintained at this temperature, the following procedure shall be conducted:

a. Oil conforming to MIL-PRF-7808 at -65 °F shall be flowed through the assembly at the rate of 1 gpm. The maximum pressure drop across the assembly required to establish rated flow shall be determined. Pressure measurements shall be taken at least 10 diameters upstream and 10 diameters downstream from the assembly. Temperature measurements shall be taken 10 diameters upstream of the assembly.

b. The maximum pressure drop shall then be determined with the oil entering the assembly at – 45 °F and at a flow rate of 1 gpm. The pressure drop with –45 °F oil shall not exceed that shown on MIL-DTL-25677/3. Pressure measurements shall be taken at least 10 diameters upstream and 10 diameters downstream from the assembly. Temperature measurements shall be taken 10 diameters upstream of the assembly.

4.6.8 <u>Corrosion test</u>. The adapter assembly components shall be immersed in a solution consisting of 2.5%, by weight, of sodium chloride in distilled water. After immersion, the solution shall be drained and the components heated in an oven to a temperature of 130 ± 5 °F for a period of not less than 1 hour. The immersion and heating cycle shall be repeated 50 times. The components shall not be operated at any time during these cycles. Immediately after completing the immersion and heating cycles, the components shall be thoroughly washed with warm water to remove all salt accumulations. The components shall then be dried, wetted with oil, and connected and disconnected for three complete cycles. There shall be no evidence of corrosion or impairment of operation of the components.

4.6.9 <u>Side load test</u>. The adapter shall be mounted to a test fixture simulating a typical installation. The adapter shall be connected to the nozzle and a 2-pound weight simulating the weight of the hose shall be applied to the hose end of the assembly perpendicular to the center axis, for a period of 10 minutes minimum. During this time, MIL-PRF-7808 oil shall be flowed through the assembly at the rate of 2 gpm with a back pressure of 25 psi minimum. At the completion of this test, the adapter shall be visually inspected for cracks, distortion, or failure, and subjected to the tests of 4.6.2, 4.6.4a, and 4.6.4c.

4.6.10 <u>Poppet spring test</u>. The force required to open the poppet valve its full travel shall be measured and shall meet the requirement of 3.8.8.

4.6.11 <u>Vibration and leakage test</u>. The adapter shall be mounted to a representative section of aircraft structure and tested in accordance with MIL-STD-810, Procedure XII. Using MIL-PRF-7808 oil, hydraulic back pressure equivalent to a 2-foot head of oil shall be maintained in the adapter during the test period. The protective cap shall be installed on the adapter during one-half of the total test period. Following the vibration period, the leakage tests of 4.6.4 shall be repeated. At no time during the test shall the protective cap become loosened or unattached, nor shall there be any visible signs of leakage.

4.6.12 <u>Fire proof test</u>. The adapter with the cap installed shall be tested in accordance with AS4273 fire proof test, 15 minutes duration. No leakage of oil shall occur during and 5 minutes after the test.

4.6.13 <u>Disassembly and inspection</u>. After completion of the tests, the adapter shall be disassembled and inspected. If corrosion, deterioration, or undue wear exists to a degree which could adversely affect performance, the adapter shall be rejected.

5. PACKAGING

5.1 <u>Packaging</u>. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When actual packaging of material is to be performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Department or Defense Agency, or within the Military Department's System Command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

6. NOTES

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

6.1 Intended use. These items are used in ground servicing of aircraft turbine engine lubricating oil systems. The adapter provides a connection for ground servicing equipment, using pressure synthetic lubricating and preservative oil. The adapter, is an integral part of the engine and must withstand a 2000 °F fire proof requirement. The nozzle is coupled to the adapter during servicing. The cap acts as a secondary pressure seal and protects against foreign matter entering the adapter when not undergoing servicing. These military unique parts are critical to the servicing of aircraft turbine engines. The qualification process ensures these adapters meet this fire proof and operational requirements. A previously qualified adapter, cap, or nozzle with the dimensions and tolerances specified in MIL-DTL-25677/1, MIL-DTL-25677/2, and MIL-DTL-25677/3 respectively is used to qualify the connectable component.

6.2 <u>Acquisition requirements</u>. Acquisition documents must specify the following:

- a. Title, number, and date of this specification and applicable specification sheet.
- b. Issue of DoDISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.2.1 and 2.3).
- c. Packaging requirements (see 5.1).

6.3 <u>Qualification</u>. 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-25677, 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. Information pertaining to qualification of products may be obtained from the Commander, Defense Supply Center, Columbus, DSCC-VQP, 3990 East Broad Street, Columbus, OH 43216-5000.

6.4 <u>Cross referencing</u>. The former military standard (MS) document numbers cross referenced to MIL-DTL-25677 specification sheet numbers are as follows:

MIL-DTL-25677/1	MS24476
MIL-DTL-25677/2	MS24480
MIL-DTL-25677/3	MS24475

The military standard (MS) part numbers have been retained in the specification sheets.

6.5 <u>References to superseded specifications</u>. All the requirements of MIL-DTL-25677D are interchangeable with those of MIL-N-25677C and MIL-PRF-25676E, therefore, previously existing documents (OEM drawings, etc.) referencing MIL-N-25677C and MIL-PRF-25676E need not be changed.

6.6 Subject term (key word) listing.

Poppet spring Self-sealing shut-off

6.7 <u>International standardization</u>. Certain provisions of this specification are the subject of international standardization agreements provisions of ASCC AIR STANDARD 11/12. When amendment, revision, or cancellation of this specification is proposed which will modify the international agreement concerned, the preparing activity will take appropriate action through international standardization channels including departmental standardization offices to change the agreement or make other appropriate accommodations.

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

CONCLUDING MATERIAL

Custodians: Air Force - 99 Navy - AS Preparing activity: DLA - CC

(Project 4730-0959)

Review activity: Air Force – 82

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.

I RECOMMEND A CHANGE:	1. DOCUMENT NUMBER MIL-DTL-25677D	<pre>2. DOCUMENT DATE (YYMMDD) 11 DECEMBER 1998</pre>				
3. DOCUMENT TITLE ADAPTER, CAP, AND NOZZLE, PRESSURE LUBRICATING OIL SERVICING, AIRCRAFT, GENERAL SPECIFICATION FOR						
4. NATURE OF CHANGE (Identify paragraph	n number and include proposed rewrite, if possib	le. Attach extra sheets as needed.)				
5. REASON FOR RECOMMENDATION						
6. SUBMITTER						
a. NAME (Last, First, Middle initial)	b. ORGANIZATION					
c. ADDRESS (Include Zip Code)	d. TELEPHONE (Include Area Code)	7. DATE SUBMITTED				
	(1) Commercial					
	(2) DSN (If applicable)					
8. PREPARING ACTIVITY						
a. NAME Defense Supply Center Columbus	b. TELEPHONE (Include Area Code) (1) Commercial 614-692-1568 (2) DSN 850-1568 (3) Fax 614-692-6939					
c. ADDRESS (Include Zip Code) DSCC-VAI 3990 East Broad Street Columbus, Ohio 43216-5000	IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT: Defense Standardization Program Office, Attn: DLSC-LM 8725 John J. Kingman Road, Suite 1655, Fort Belvoir, Virginia 22060-6221 Telephone (703) 767-6888 DSN 427-6888					
DD Form 1426, OCT 89 Previous editions are obsolete 198/290						