

INCH-POUND
MIL-D-85520(AS)
AMENDMENT 1
16 January 1991

MILITARY SPECIFICATION

DESIGN AND INSTALLATION OF ON BOARD OXYGEN GENERATING SYSTEMS IN AIRCRAFT, GENERAL SPECIFICATION FOR

This amendment forms a part of MIL-D-85520(AS), dated 10 March 1983, and is approved for use by all Departments and Agencies of the Department of Defense.

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2.1.1 Under "Specifications, Military" delete:

"MIL-C-81302 - Cleaning Compound, Solvent, Trichlorotrifluoroethane
MIL-T-81533 - 1,1,1 Trichloroethane (Methyl Chloroform), Inhibited,
Vapor Degreasing"

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2.1.1 Under "Standards, Military" add:

"MIL-STD-1359 - Cleaning Methods and Procedures for Breathing Oxygen
Equipment"

Add the following paragraph:

"2.2 Streamlining. This document has been streamlined. Appendix A to MIL-D-85520(AS) lists those documents required for MIL-D-85520(AS) acquisition and is a mandatory part of MIL-D-85520(AS). Those documents listed in Appendix A have the same status as those referenced directly in MIL-D-85520(AS) (first tier documents). All other documents, referenced through tiering, may be used as guidance and information to supplement MIL-D-85520(AS)."

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3.8.2 Delete and substitute: "3.8.2 Parts of the enriched air systems not covered by cleaning procedures shall be degreased in accordance with MIL-STD-1359 with the cleanliness test method for category 1. After completion of the cleaning and when assembled, a halogen or halide detector having a minimum sensitivity of not less than 3×10^{-4} standard cc/second shall be used to detect residues due to halogen."

AMSC/NA

FSC 1660

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Add the following paragraphs:

"6.4 Streamlining. For MIL-D-85520(AS) acquisitions, the required portions of all MIL-D-85520(AS) tier reference documents shall be limited to the portions described in the "Applicability" column of Table VI in Appendix A.

6.5 Tailoring. When MIL-D-85520(AS) is tailored in an acquisition, Appendix A must be tailored accordingly. In particular, when Appendix A is tailored, specific attention must be given to the chain of referencing. For example, if a first tier reference document in MIL-D-85520(AS) is tailored out, all of the reference documents which are tiered to that first tier reference document must also be tailored out."

Add Appendix A as follows:

APPENDIX A

STREAMLINING INFORMATION

10. SCOPE

10.1 Scope. This Appendix is a list of documents referenced in MIL-D-85520(AS) or tiered to documents referenced in MIL-D-85520(AS). These documents have the same status as those referenced directly in MIL-D-85520(AS) (first tier documents). This Appendix is a mandatory part of this specification. The information contained herein is intended for compliance.

10.2 Application. This Appendix identifies the applicability of the documents referenced in MIL-D-85520(AS) or tiered to documents referenced in MIL-D-85520(AS) through the third tier. Only that portion(s) of a document, listed in Table VI of this Appendix, and described in the "Applicability" column, is pertinent in the use of MIL-D-85520(AS). If MIL-D-85520(AS) is tailored in acquisition, this Appendix must also be tailored.

20. DOCUMENTS

20.1 Documents. The documents listed herein and corresponding applicability data have been identified as required. All other documents referenced through tiering are not considered required and may be used for guidance and information.

Preparing Activity:

Navy - AS

DOD Project No. 1660-N607

MIL-D-85520 (AS)
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DOCUMENT NUMBER:	DOCUMENT TITLE:	APPLICABILITY:	REFERENCED BY:
<u>First Tier (1 of 19 Documents)</u>			
BB-N-411	Nitrogen, Technical	Requirements and quality assurance. MIL-D-85520 Water pumped Type I, Class 1, Grade B, for testing and purging.	
<u>Second and Third Tiers</u>			
All second through third tier references, tiered to BB-N-411, are for information and guidance.			
<u>First Tier (2 of 19 Documents)</u>			
MIL-E-5007	Engine, Aircraft, Turbojet and Turbofan, General Specifications for	Limits for contaminants in air supply	MIL-D-85520
<u>Second and Third Tiers</u>			
All second through third tier references, tiered to MIL-E-5007, are for information and guidance.			
<u>First Tier (3 of 19 Documents)</u>			
MIL-V-9050	Valves, Oxygen Cylinder High Pressure	Type II Qualified Product List (QPL) pressure relief valve	MIL-D-85520
<u>Second and Third Tiers</u>			
All second through third tier references, tiered to MIL-V-9050, are for information and guidance.			
<u>First Tier (4 of 19 Documents)</u>			
MIL-E-18927	Environmental Control Systems, Aircraft, General Requirements for	Cabin pressurization schedule	MIL-D-85520
<u>Second and Third Tiers</u>			
All second through third tier references, tiered to MIL-E-18927, are for information and guidance.			

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TABLE VI. Required documents and corresponding applicability data (continued).

DOCUMENT NUMBER:	DOCUMENT TITLE:	APPLICABILITY:	REFERENCED BY:
<u>First Tier (5 of 19 Documents)</u>			
MIL-L-25567	Leak Detection Compound Oxygen Systems (Metric)	Requirements and quality assurance Type I and Type II leak detection compound	MIL-D-85520
<u>Second and Third Tiers</u>			
All second through third tiers references, tiered to MIL-L-25567, are for information and guidance.			
<u>First Tier (6 of 19 Documents)</u>			
MIL-G-27617	Grease, Aircraft and Instrument, Fuel and Oxidizer Resistant	Any QPL item	MIL-D-85520
<u>Second and Third Tiers</u>			
All second through third tier references, tiered to MIL-G-27617, are for information and guidance.			
<u>First Tier (7 of 19 Documents)</u>			
MIL-S-81018 1/	Survival Kit Container, Aircraft Seat, With Oxygen, General Specification for	Any QPL item	MIL-D-85520
<u>Second and Third Tiers</u>			
All second through third tier references, tiered to MIL-S-81018, are for information and guidance.			

1/ The applicable portions of either MIL-S-81018 or MIL-S-83427 may be used.

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TABLE VI. Required documents and corresponding applicability data (continued).

DOCUMENT NUMBER:	DOCUMENT TITLE:	APPLICABILITY:	REFERENCED BY:
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First Tier (8 of 19 Documents)

MIL-B-81365	Bleed Air Systems, General Specifications for	Requirements for burst pressure, proof pressure, pressure cycling and flow resonance test procedures	MIL-D-85520
		Requirements and quality assurance for heat exchanger, bleed air check valves, tubing and flexible connectors	

Second and Third Tiers

All second through third tier references, tiered to MIL-B-81365, are for information and guidance.

First Tier (9 of 19 Documents)

MIL-H-81581	Hose Assemblies, Breathing Oxygen and Air, General Specification for	Any QPL item	MIL-D-85520
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DOCUMENT NUMBER:	DOCUMENT TITLE:	APPLICABILITY:	REFERENCED BY:
<u>Second and Third Tiers</u>			
All second through third tier references, tiered to MIL-H-81581, are for information and guidance.			
<u>First Tier (10 of 19 Documents)</u>			
MIL-S-83427 1/	Survival Kit Containers, CNU-129(V)P and CNU-130/P	Design and construction requirements for drop-in oxygen supply	MIL-D-85520
<u>Second Tier</u>			
MIL-O-27335	Oxygen System, Survival Container-Oxygen Kit, General Specification for	Requirements and quality assurance for escape oxygen supply	MIL-S-83427
USS Chemical Div Drawing RP-784-00	Survival Kit Container CNU-129/P	Requirements for construction of escape oxygen system container	MIL-S-83427
USS Chemical Div Drawing RP-785-00	Survival Kit Container CNU-130/P	Requirements for construction of escape oxygen system container	MIL-S-83427
The remaining second tier references, tiered to MIL-S-83427, are for information and guidance.			
<u>Third Tier</u>			
All third tier references, tiered to MIL-S-83427, are for information and guidance.			
<u>First Tier (11 of 19 Documents)</u>			
MIL-C-85521	Concentrator, Oxygen GGU-7/A	Any Qualified Product List (QPL) item Requirements for sea level, pressure and voltage variation operational tests Electrical requirements	MIL-D-85520

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TABLE VI. Required documents and corresponding applicability data (continued).

DOCUMENT NUMBER:	DOCUMENT TITLE:	APPLICABILITY:	REFERENCED BY:
<u>Second and Third Tiers</u>			
All second through third tier references, tiered to MIL-C-85521, are for information and guidance.			
<u>First Tier (12 of 19 Documents)</u>			
MIL-M-85522	Monitor, Oxygen CRU-83/A	Any Qualified Product List (QPL) item Output signal requirements Requirements for sea level, pressure and voltage variation operational tests Electrical requirements	MIL-D-85520
<u>Second and Third Tiers</u>			
All second through third tier references, tiered to MIL-M-85522, are for information and guidance.			
<u>First Tier (13 of 19 Documents)</u>			
MIL-R-85523	Regulator, Chest Mounted Positive Pressure, CRU-82/P	Any Qualified Product List (QPL) item Requirements for outlet pressure and leakage tests	MIL-D-85520
<u>Second and Third Tiers</u>			
All second through third tier references, tiered to MIL-R-85523, are for information and guidance.			
<u>First Tier (14 of 19 Documents)</u>			
MIL-STD-411	Aircrew Station Signals	Requirements for location of concentrator air input line over-temperature visual indicator	MIL-D-85520

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TABLE VI. Required documents and corresponding applicability data (continued).

DOCUMENT NUMBER:	DOCUMENT TITLE:	APPLICABILITY:	REFERENCED BY:
<u>Second and Third Tiers</u>			
All second through third tier references, tiered to MIL-STD-411, are for information and guidance.			
<u>First Tier (15 of 19 Documents)</u>			
MIL-STD-704	Aircraft Electric Power Characteristics	Detail requirements: DC power characteristics 28 volts (nominal)	MIL-D-85520
<u>Second and Third Tiers</u>			
All second through third tier references, tiered to MIL-STD-704, are for information and guidance.			
<u>First Tier (16 of 19 Documents)</u>			
MIL-STD-810	Environmental Test Methods	Requirement environmental tests: High temperature - Method 501 Low temperature - Method 502 Humidity - Method 507 Altitude - Method 520 Salt spray - Method 509 Vibration - Method 514 Fungus resistance - Method 508 Sand and dust - Method 510 Acceleration - Method 513 Shock - Method 516 Acoustic susceptibility - Method 515	MIL-D-85520
<u>Second and Third Tiers</u>			
All second through third tier references, tiered to MIL-STD-810, are for information and guidance.			

TABLE VI. Required documents and corresponding applicability data (continued).

DOCUMENT NUMBER:	DOCUMENT TITLE:	APPLICABILITY:	REFERENCED BY:
<u>First Tier (17 of 19 Documents)</u>			
MIL-STD-889	Dissimilar Metals	Information and guidance	MIL-D-85520
<u>Second and Third Tiers</u>			
All second through third tier references, tiered to MIL-STD-889, are for information and guidance.			
<u>First Tier (18 of 19 Documents)</u>			
MIL-STD-1359	Cleaning Methods and Procedures for Breathing Oxygen Equipment	Category 1 Cleanliness Test Method	MIL-D-85520
<u>Second and Third Tiers</u>			
All second and third tier references, tiered to MIL-STD-1359, are for information and guidance.			
<u>First Tier (19 of 19 Documents)</u>			
01-1A-20	Aviation Hose and Tube Manual	Requirements for material, flaring and bending, mounting, marking and torquing of oxygen line tubing	MIL-D-85520
<u>Second and Third Tiers</u>			
All second through third tier references, tiered to 01-1A-20, are for guidance and information.			

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