MIL-L-81329C
8 August 1984
SUPERSEDING
MIL-L-81329B
8 March 1977

MILITARY SPECIFICATION

LUBRICANT, SOLID FILM, EXTREME ENVIRONMENT, NATO CODE NUMBER S-1737, METRIC

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

1. SCOPE

1.1 Scope. This specification covers the requirements for one grade of a solid film lubricant for use at temperatures ranging from -185°C to 400°C. This solid film lubricant is identified by NATO symbol S-1737.

2. APPLICABLE DOCUMENTS

2.1 Government documents.

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

SPECIFICATIONS

FEDERAL

QQ-A-250/5	-	Aluminum Alloy Alclad 2024, Plate and Sheet
PPP-C-96	-	Cans, Metal, 28 Gage and Lighter.

MILITARY

MIL-M-3070	-	Mixer, Liquid, Revolving-Shaft and Agitator Types.
MIL-S-5059	-	Steel, Corrosion-Resistant (18-8), Plate, Sheet and Strip.
MIL-A-8625	-	Anodic Coatings, for Aluminum and Aluminum Alloys.
MIL-T-81533	-	1, 1, 1 Trichloroethane (Methyl Chloroform), Inhibited, Vapor Degreasing.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Engineering Specifications and Standards Department (Code 93), Naval Air Engineering Center, Lakehurst, NJ 08733, by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

STANDARDS

FEDERAL

FED-STD-313 - Material Safety Data Sheets Preparation and Submission of.

MILITARY

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes.
MIL-STD-290 - Packaging of Petroleum and Related Products.

2 1 2 Other Government documents, drawings, and publications The following other Government documents, drawings, and publications form a part of this specification to the extent specified herein.

PUBLICATIONS

CODE OF FEDERAL REGULATIONS

49 CFR - Transportation - Hazardous Materials.

(Application for copies should be addressed to the Superintendent of Documents, Government Printing Office, Washington, DC 20402.)

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

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

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 2510 - Adhesion of Solid Film Lubricants.
ASTM D 2511 - Thermal Shock Sensitivity of Solid Film Lubricants.
ASTM D 2625 - Endurance (Wear) Life and Load-Carrying Capacity of Solid Film Lubricants (Falex Method).
ASTM D 4057 - Manual Sampling of Petroleum and Petroleum Products.
ASTM D 4177 - Automatic Sampling of Petroleum and Petroleum Products

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

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI Z129.1 - American National Standard for the Precautionary Labeling of Hazardous Industrial Chemicals.

(Application for copies should be addressed to the American National Standards Institute, 1430 Broadway, New York, NY 10018)

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

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

3 REQUIREMENTS

3.1 First article. When specified, a sample shall be subjected to first article inspection (see 4.4 and 6.3).

3.2 Materials Component materials used in the manufacture of this lubricant shall consist essentially of lubricating solids in a suitable binder, at spraying consistency. Lubricant compositions furnished under this specification shall contain no organic solvents or binders so as to be compatible with liquid oxygen and radiation (see 4.6 4). The applied film shall be capable of being cured under conditions of the following heating schedule:

a. Air dry for 1/2 hour at 25° ± 3°C;

b. 80° ± 1°C for 2 hours followed by;

c. 150° ± 3°C for 2 hours.

3.2.1 Preparation. Appendix A covers a suitable formulation for preparation of bonded solid film lubricant (see 6.4).

3.3 Physical properties Physical properties of the lubricant shall be in accordance with Table I.

3 4 Material safety data sheets. Material safety data sheets shall be prepared and submitted in accordance with FED-STD-313. Material safety data sheets shall also be forwarded as specified in 4.4.2. The lubricant shall have no adverse effect on the health of personnel when used for its intended purpose. Questions pertinent to this effect shall be referred by the contracting activity to the appropriate departmental medical service who will act as an advisor to the contracting agency (see 4.4.2 and 6.2.1g).

3.5 Additional unit pack markings. In addition to those markings required in Section 5, unit pack markings shall contain use, mixing, handling and precautionary markings as well as noting any protective clothing and equipment required.

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

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

a. First article inspection (see 4.4).

b. Quality conformance inspection (see 4.5).

4.3 Inspection conditions.

4.3.1 Atmospheric conditions. Unless otherwise specified, all examinations and tests shall be performed at a temperature of 25° ± 3°C. The physical and chemical values specified in Table I apply to the average of the determinations made on the sample.

4.4 First article inspection. The first article inspection shall consist of review and approval of the test report (see 4.4.2) and performance of any test or examination deemed necessary to determine that the first article sample (see 4.4.1) complies with all the requirements of this specification (see Table I) when tested in accordance with the inspection methods specified in Table II and 4.6.3.

4.4.1 First article samples. The first article samples shall consist of three litres selected at random from the first lot of lubricant processed under a contract or order. The first article samples shall be forwarded to the Aircraft and Crew Systems Technology Directorate, Code 60612, Naval Air Development Center, Warminster, PA 18974 The samples shall be plainly identified by securely attached durable tags or labels marked with the following information:

Sample for first article inspection.
LUBRICANT, SOLID FILM, EXTREME ENVIRONMENT,
NATO CODE NUMBER S-1737, METRIC
MIL-L-81329C
Name of manufacturer.
Product code number.
Batch number.
Date of manufacture
Contract or order number.

4.4.2 Certification and test report. Certification by the manufacturer, accompanied by test reports, shall be as follows, by either a or b, plus c:

a. The manufacturer shall certify that his formulation is in accordance with Appendix A Under these conditions, the Government agrees that the lubricant meets the requirements as specified in Section 3. A certified test report, containing complete test data showing that the material submitted for first article inspection conforms to the requirements of this specification, Table II and 4.6.3, shall be submitted and accompany the first article samples

b. If some other formulation and means of application is used, the manufacturer shall supply a certified test report, containing complete test data showing that the lubricant submitted for first article inspection conforms to the requirements of this specification. Delivery of the lubricant will be deferred pending completion of the first article inspection. If the results of the first article inspection are in accordance with the requirements of this specification, the

consistency of production quality will be thereby verified. Failure of the lubricant to pass the first article inspection shall require that the acceptance and further shipment be withheld until the contractor has corrected the condition which led to the failure.

c. Material safety data sheets on toxicity shall be prepared in accordance with FED-STD-313 and submitted to the first article inspection laboratory (see 3.4 and 4.4.1).

4.5 Quality conformance inspection. The quality conformance inspection of the lubricant shall consist of tests of samples from 4.5.2.2 in accordance with Table III and an examination of samples from 4.5.2.1 for conformance with 4.6.1. Samples shall be labeled completely with information identifying the purpose of the sample, name of manufacturer, name of product, specification number, lot and batch number, date of sampling and contract number. Individual samples shall not be mixed, but shall be placed in separate air-tight and water-tight containers, which shall be nearly filled, then covered and sealed to prevent atmospheric effects.

4.5.1 Lot formation.

4.5.1.1 Inspection lot. A lot shall consist of the material produced by one manufacturer under essentially the same manufacturing conditions. Each batch shall constitute a lot.

4.5.1.2 Bulk lot. An indefinite quantity of a homogeneous mixture of material offered for acceptance in a single isolated container; or manufactured in a single plant run (not exceeding 24 hours) through the same processing equipment, with no change in ingredient material, is a "bulk lot".

4.5.2 Sampling.

4.5.2.1 For examination of filled containers. A random sample of filled containers and a sample of shipping containers, fully prepared for delivery, shall be selected from each lot of lubricant in accordance with MIL-STD-105, Inspection Level I with an Acceptable Quality Level (AQL) of 2.5 percent defective. The sample unit for the packaging, packing and marking examination shall be one shipping container fully prepared for delivery except that it shall not be palletized and need not be sealed. Shipping containers fully prepared for delivery that have not been palletized shall be examined for defects of closure. The lot size for shipping containers shall be the number of shipping containers in the end item inspection lot

4.5.2.2 For tests. The sample for tests shall consist of one can of lubricant taken at random from each lot of packaged lubricant or, if obtained from a bulk tank, in accordance with ASTM D 4057 or ASTM D 4177. The lot shall be unacceptable if the sample fails to comply with any of the tests specified in 4.6.2.

4.6 Methods of examinations and tests.

4.6.1 Examinations. Each of the filled containers, selected in accordance with 4.5.2.1, shall be examined for defects of the container and closure, for evidence of leakage and to determine that the packaging, packing and marking conform with 3.5, 5.1 and 5.1.1. Each sample of filled containers shall also be weighed to determine the amount of contents. Packaging, packing and marking defects shall be scored in accordance with Table IV If the number of defective containers exceeds the acceptance number of the sampling plan specified in 4.5.2.1, the lot shall be rejected.

4.6.2 Tests. Tests shall be performed in accordance with Table II and 4.6.3 to determine conformance with the requirements specified in 3.3.

4.6.2.1 Preparation of test panels. Samples of the lubricant in sprayable form shall be used to prepare bonded film lubricant specimens on test panels in accordance with the following application procedure:

a. The panels shall be made from:

(1) Aluminum alloy conforming to QQ-A-250/5 and anodized to conform to MIL-A-8625, Type I, measuring approximately 0.4 by 76.2 by 152.4 mm.

(2) Corrosion resistant steel conforming to MIL-S-5059, composition 321, condition annealed, finish no. 2 dull, measuring approximately 0.9 by 76.2 by 152.4 mm.

b. The panels shall be precleaned using trichloroethane conforming to MIL-T-81533. The stainless steel panels shall be sandblasted with 120 grit steel. The surface of the panel shall be held at a distance of 63.5 mm from the discharge nozzle (orifice opening of 6.35 mm diameter) delivering grit at an air pressure of 550 - 620 kPa. After the panels have been sandblasted, the panels shall be cleaned with a trichloroethane rinse and dried with a stream of dry air that is free of oil. A spray application technique shall be used to coat the panels for the tests of this specification. Two or three coats may be required to reach the desired dry film thickness of 0.025 to 0.035 mm (see 6.5). Air drying, at a temperature of 25° ± 3°C for ten minutes, shall be allowed between coats. After the final coat has been applied, the coated panels shall be allowed to air dry for 30 - 35 minutes. The coated panels shall then be placed in an oven at 80° ± 1°C for 120 - 125 minutes followed by 120 - 125 minutes in an oven at 150° ± 3°C. The coated panels shall be removed from the oven and allowed to cool to room temperature. At least two coated panels shall be used in each test method requiring test panel specimens.

4.6.3 Film appearance and thickness. The bonded solid film lubricant specimens shall be examined visually and microscopically at a magnification of 12X for surface imperfections (see Table I). Film thickness shall be determined by a magnagauge or by the difference in thickness as measured between an unlubricated anodized aluminum panel and the same panel coated with the dry film lubricant. To insure measurements in the same portion of the panel, a template shall be made the same size as the panel with four 9.5 mm holes, centered 38 mm in from each 76.2 mm end and 15.9 mm in from each 152.4 mm end. Using a precision micrometer with a .0025 mm graduation, the thickness shall be measured at each opening in the template with the template in position on the uncoated panel. After the dry film has been applied to the panel and cured, the thickness shall be remeasured at the same positions. The difference in the readings represents the film thickness of the lubricant. It is important for the film thickness to be between 0.025 to 0.035 mm.

4.6.4 Organic material. The contractor shall submit a notarized certification signed by a responsible official of its management, attesting that no organic materials are present in the product furnished under this specification.

5. PACKAGING

5.1 Packaging. Unless otherwise specified (see 6.2.1), the lubricant shall be packaged, packed and marked in accordance with MIL-STD-290. The lubricant shall be packaged in polyethylene bottles or in Type IX, Class 3 can, conforming to PPP-C-96. The levels of packaging and packing shall be as specified by the acquiring activity (see 6.2.1).

5.1.1 Marking. All unit, intermediate and shipping containers shall be marked in accordance with MIL-STD-290 and Title 49 of the Code of Federal Regulations and any other additional special markings specified by the acquiring activity (see 6.2.1g). All unit and intermediate packs of toxic and hazardous chemicals and materials shall also be labeled in accordance with the applicable laws, statutes, regulations or ordnances, including Federal, State, and Municipal requirements In addition unit and intermediate containers, including unit containers that serve as shipping containers, such as pails and drums, shall be marked with the applicable precautionary information detailed in ANSI Z129.1

5.1.2 Special marking. The following special marking shall appear on each container of lubricant.

USE THIS LUBRICANT WITHIN 12 MONTHS FROM THE DATE OF MANUFACTURE

CURE SCHEDULE

a. Air dry for 1/2 hour at 25° ± 3°C;

b. 80° ± 1°C for 2 hours followed by;

c. 150° ± 3°C for 2 hours.

6. NOTES

6.1 Intended use. The lubricant covered by this specification is intended for use in liquid oxygen systems, space vehicles, bearing assemblies and other equipment where the environments of temperature and nuclear radiation preclude the use of conventional lubricants and organic solid film lubricant. It is intended to reduce wear and prevent galling and seizing of metal surfaces. Do not use the lubricant on materials that may be adversely affected by exposure to the specific cure temperature of 150°C. It should not be used with oils or greases, unless field use indicates otherwise.

6.2 Ordering data.

6.2.1 Acquisition requirements. Acquisition documents should specify the following:

a. Title, number and date of this specification.

b Quantity desired

c. Whether first article is required (see 3.1 and 6.3).

d. Where first article samples shall be forwarded (see 4.4 and 6.3).

e. Size and type of container in which lubricant is to be furnished (see 5.1).

f. Level of preservation and packing required (see 5.1).

g. Special marking, if required (see 5.1.1).

h. Specify DAR Clauses 7-104.98 and 1-323.2.

6.2.2 Age limitation. The lubricant should not be ordered for use beyond 12 months from the date of manufacture.

6.3 First article. When a first article inspection is required, the lubricant will be tested and should be a sample selected from the first production lot. The first article should consist of three litres of lubricant. The contracting officer should include specific instructions regarding examinations, test and approval of the first article. When a contractor is in continuous production of the lubricant from contract to contract, consideration should be given to waive the first article inspection. If inspection is required, indicate the following:

a. If first article inspections are conducted at the contractor's plant or a Government approved laboratory, an inspection report shall be forwarded to the acquiring activity for verification (see 4.4).

b. That the approval of first article samples or the waiving of the first article inspection shall not relieve the contractor of his obligation to fulfill all other requirements of the specification and contract.

6.4 Formulation and application. The formulation and application of the lubricant under this specification shall be optional with the manufacturer, but shall be restricted by the requirements of this specification. However, formulations and application instructions which have proven suitable are described in Appendix A. Declaration by the contractor that the lubricant has been processed in accordance with Appendix A will facilitate first article inspection.

6.5 Film thickness by spray application. Spray application (two coats) produces a film thickness in the range of 0.025 - 0.035 mm This thickness may be reduced by burnishing the cured film. A suitable burnishing technique is as follows:

a. Vapor degrease "grade 0" steel wool.

b. Don clean, white, lint-free cotton gloves, and rub the solid film lubricant surface gently and uniformly with the steel wool. A micrometer or other suitable measuring techinque should be used to determine film thickness.

c. Remove loose film particles and steel wool with a jet of air which is oil and water-free.

d. Continue the burnishing technique until the desired film thickness is achieved.

6.6 International standardization agreement. Certain provisions of this specification (see 1 1) are the subject of international standardization agreement Air Standard 15/1, Stanag NATO-STD-1135. 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 accomodations.

6.7 Changes from previous issue. Asterisks are not used in this revision to identify changes with respect to the previous issue, due to the extensiveness of the changes.

Custodians
Army - ME
Navy - AS
Air Force - 20

Review activities:
Army - AV
Air Force - 68

Preparing activity:
Navy - AS

(Project 9150-0610)

TABLE I. Physical properties.

Characteristic	Limits
Film appearance and thickness	1/
Film adhesion	Shall not be lifted to expose any bare metal surface. 2/
Thermal stability	Shall not flake, crack, or soften and shall conform to the requirements for film adhesion.
Endurance life, average, at 454 kg load	60 minutes
Storage stability	Shall show no evidence of gelling and shall conform to the requirements for film adhesion, and endurance life. 3/

1/ Shall be uniform in color, smoothness and thickness; free of cracks, scratches, pinholes, blisters, bubbles, runs, sags, foreign matter, grit, rough particles, separation of ingredients, or any other surface imperfections; and unless otherwise specified, the thickness of the finished film shall be between 0.025 - 0 035 mm.

2/ A uniform deposit of powdery material clinging to the tape shall not be objectionable.

3/ Material may settle out. It should be mixed before use (see footnote 4/ to Table II)

TABLE II. Inspection methods.

Tests	Method
Film adhesion	ASTM D 2510 1/
Thermal stability	ASTM D 2511 2/
Endurance life	ASTM D 2625 3/
Storage stability	4/

1/ Four bonded anodized aluminum panels (see 4.6.2.1) shall be tested

2/ Test to be run over temperature range of -185°C to 400°C in accordance with ASTM D 2511

3/ The cure schedule shall conform to Appendix A. The test pin shall be uncoated and fabricated from a molybdenum alloy (0.5Ti 0.08Zr) having a Rockwell hardness B95 to B99 and a surface finish of 8 to 12 rms. The V-blocks may be phosphated or grit blasted with 120 grit steel to produce a surface roughness of 50 - 60 rms.

4/ A full 1 litre container shall be stored for 12 months at 25° ± 3°C. At the conclusion of the storage period, the container of lubricant shall be subjected to mechanical agitation using an apparatus similar to MIL-M-3070, Type II, size as required, or equal, for 5 minutes. The lubricant shall then be applied as specified in 4.6.2 1 and tested for film adhesion, thermal stability and endurance life. The lubricant shall also be observed for condition (see Table I).

TABLE III. Quality conformance tests.

Inspection	Requirement	Test method
Film appearance and thickness	Table I	4.6 3
Film adhesion	Table I	Table II
Endurance life	Table I	Table II

TABLE IV. List of packaging defects.

Examine	Defect
Packaging	Container not as specified, closures not accomplished by specified or required methods or materials. Leakage or seepage of contents. Non-conforming component, component missing, damaged or otherwise defective. Bulged or distorted container.
Markings	Data, including directions for use, omitted, illegible, incorrect, in complete, or not in accordance with contract requirements.

APPENDIX A

FORMULATION, PREPARATION, AND APPLICATION OF MOLYBDENUM DISULFIDE GRAPHITE-SODIUM SILICATE SOLID FILM LUBRICANT (SPRAY CONSISTENCY)

10 SCOPE

10.1 This appendix covers the formulation and preparation of a molybdenum disulfide-graphite-sodium silicate bonded solid film lubricant that has proved suitable for meeting the requirements of the basic specification. This appendix is not mandatory.

20 APPLICABLE DOCUMENTS

20 1 Government documents.

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

SPECIFICATIONS

FEDERAL

SS-G-659 - Graphite, Dry (Lubricating).

MILITARY

MIL-M-7866 - Molybdenum Disulfide, Technical, Lubrication Grade

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

30. MATERIALS

30 1 Molybdenum disulfide. The molybdenum disulfide specified in this appendix shall conform to MIL-M-7866

30.2 Graphite. The graphite specified in this appendix shall conform to SS-G-659, utilizing only that portion passing through a 325 mesh screen

30 3 Sodium silicate. The sodium silicate solution specified in this appendix shall have a sodium oxide to silicon dioxide ratio of 1 to 2.9 by weight; shall be approximately 43 percent solids by weight; and have a viscosity of 0 96 Pa.s.

30.4 Ratio of ingredients. The following ratio of ingredients shall be maintained.

Molybdenum disulfide powder	70 grams
Graphite powder	7 grams
Sodium silicate solution	50 grams
Water	60 grams

40. PREPARATION

40.1 Formulation The molybdenum disulfide powder (70 grams) and the graphite (7 grams) powder shall be mixed in a beaker. Water shall be added slowly while stirring the mixture thoroughly. Addition of water shall be continued with stirring to insure complete wetting of the powder mixture until a pourable slurry is obtained. The quantity of water shall be approximately 60 grams. (Note: An excess of water will result in separation If separation is observed, the mixture should be discarded and a second preparation using fresh ingredients initiated.) The pourable slurry shall be added to the sodium silicate solution (50 grams) with stirring to obtain a uniform sprayable mixture. The sodium silicate solution should be used within date specified on the container.

50. APPLICATION

50 1 Spraying information. The mixture shall be placed in 240 milliliter capacity spray bottle and the spray bottle attached to a spray gun. The molybdenum disulfide mixture shall be agitated immediately before spraying. The spray pressure shall be approximately 40 kPa The lubricant film shall be allowed to air dry prior to applying subsequent coats.

50 2 Curing schedule. The curing schedule shall be as follows

a. Air dry for 1/2 hour at room temperature.

b. Heat in oven for 2 hours at 80° ± 1°C

c. Heat in oven for 2 hours at 150° ± 3°C.

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

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

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STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

(See Instructions - Reverse Side)

1 DOCUMENT NUMBER	2 DOCUMENT TITLE
MIL-L-81329C	LUBRICANT, SOLID FILM, EXTREME ENVIRONMENT, NATO CODE NUMBER S-1737, METRIC

3a. NAME OF SUBMITTING ORGANIZATION	4 TYPE OF ORGANIZATION *(Mark one)*
	☐ VENDOR
b ADDRESS *(Street City, State ZIP Code)*	☐ USER
	☐ MANUFACTURER
	☐ OTHER *(Specify)* _____

5 PROBLEM AREAS

a. Paragraph Number and Wording

b. Recommended Wording

c. Reason/Rationale for Recommendation

6 REMARKS

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

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