

INCH-POUNDMIL-P-85089A(AS)
22 October 1990SUPERSEDING
MIL-P-85089(AS)
13 December 1977**MILITARY SPECIFICATION****PAINTING OF AIRCREW ESCAPE PROPULSION SYSTEMS (AEPS)**

This specification is approved for use by the Naval Air Systems Command, Department of the Navy, and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification describes a method for painting Aircrew Escape Propulsion Systems (AEPS).

2. APPLICABLE DOCUMENTS**2.1 Government documents.**

2.1.1 Specifications. The following specifications form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents shall be 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**MILITARY**

MIL-E-7125	Ethylene Glycol Monoethyl Ether Acetate, Technical
MIL-T-19588	Toluene-Methyl Isobutyl Ketone Mixture
MIL-P-23377	Primer Coatings: Epoxy, Chemical and Solvent Resistant
MIL-L-81352	Lacquer, Acrylic (For Naval Weapons Systems)
MIL-T-81772	Thinner, Aircraft Coating

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

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commanding Officer, Naval Air Engineering Center, Systems Engineering and Standardization Department (SESD) Code 53, Lakewood, NJ 08733-5100, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A

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MIL-P-85089A(AS)

2.2 Order of precedence. In the event of a 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 Materials. Materials for painting AEPS shall conform to table I.

TABLE I. *Materials.*

Material	Specification
Primer	MIL-P-23377
Toluene-MIBK	MIL-T-19588
Lacquer	MIL-L-81352 Composition L
Thinner	MIL-T-81772 Type II and Type III

3.2 Equipment. Equipment for painting AEPS shall consist of the following:

- a. Paint carts
- b. Paint stirrers
- c. Metal or paper mixing containers
- d. Paint booth with ventilator
- e. Spray paint equipment
- f. No. 400 sandpaper.

3.3 Painting operation. The following procedure shall be followed when painting AEPS:

- a. Place AEPS on paint cart.
- b. Obtain primer ingredients:
 1. Component I Primer Coating Epoxy, Polyamide (MIL-P-23377)
 2. Component II Catalyst Components (MIL-P-23377)
 3. Component III Thinner (MIL-T-19588)
Optional Thinner (MIL-T-81772 Type II).
- c. Ensure that the ambient temperature is between 65 and 95 °F. Stir each component thoroughly.
- d. Measure out equal volumes of primer components I, II, and III into separate clean metal or paper containers. Mix only what will be required during the shift.
- e. Stir components I and II thoroughly.
- f. Add component II to component I stirring the mixture while adding.

MIL-P-85089A(AS)

- g. Add component III to the mixture of components I and II and stir thoroughly.
- h. Allow the primer mixture to stand for 1 hour before use.
- i. Clean each AEPS with cloth dampened with thinner (component III).
- j. Move a cart of AEPS to paint booth equipped with an exhaust fan. Ground cart to building ground.
- k. Turn on paint booth exhaust system. Adjust spray gun for heavy spraying. Spray all exposed surfaces of motor with one coat of primer in a continuous film, free from runs, sags, or blisters. The underlying metallic surface is to be just visible through the coating.
- l. Allow primer coat to dry 1 hour minimum before application of paint.
- m. Dry scuff the dried primer with No. 400 or finer sandpaper, to remove visible surface irregularities if necessary.
- n. Mix one part by volume of acrylic lacquer per MIL-L-81352 Composition L (the color is to be determined by the appropriate AEPS top assembly drawing) with one and one-half parts by volume of thinner per MIL-T-81772 Type III. If paint is too thick, add up to another one-half part of thinner. For improved leveling, one pint of ethylene glycol monoethyl ether acetate, MIL-E-7125, may be added to each gallon of thinner.
- o. Apply masking tape to the areas not to be painted as shown on the appropriate AEPS top assembly drawing.
- p. Spray one coat of paint on all exposed areas of AEPS.
- q. Allow the first coat of paint to dry for one half hour before applying second coat.
- r. Apply second coat of paint and allow to dry 2 hours (minimum) before further processing. Six hours dry is required before application of insignia markings using lacquers or acrylic colors.
- s. Remove masking tape from the AEPS.
- t. At the completion of the paint process thoroughly clean the paint spray equipment with paint thinner.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements (examinations and tests) as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use

MIL-P-85089A(AS)

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 (see 6.2).

4.1.1 Responsibility for compliance. All items must 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 assuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements; however, this does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to accept defective material.

4.2 Sampling. Sampling procedures, when used, shall be as specified by the contracting activity.

4.3 Tests. Tests, when required, shall be as specified by the contracting activity.

5. PACKAGING

(This section is not applicable to this specification.)

6. NOTES

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

6.1 Intended use. This specification describes a method of painting Aircrew Escape Propulsion Systems as performed at the Naval Ordnance Station, Indian Head, Md.

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. Sample size, if required
- d. Test procedures, as necessary
- e. That the safety precaution requirements of the "Contractors' Safety Manual for Ammunition, Explosives, and Related Dangerous Material," DOD 4145.26M are applicable. NOTE: When this specification is used as part of the description of work to be accomplished by a Government activity, the safety precaution requirements of "Ammunition and Explosives Ashore," OP 5, are applicable.

MIL-P-85089A(AS)

6.3 Additional safety precautions. The following safety precautions are observed at Indian Head

- a. Organic vapor respirator, impervious gloves, and chemical goggles are worn when mixing and applying primer. Operations are performed in a well-ventilated area or paint spray booth with exhaust operating.
- b. Spray gun nozzles and the AEPS being painted are grounded during paint spray operations.
- c. Operators wear rubber gloves, goggles or face shield, and organic vapor respirators when using cleaning solvents, and adequate ventilation is provided.
- d. Contaminated cloths are disposed of immediately in properly covered container.
- e. Cleaning solvents and other flammable liquids are kept to a minimum within the immediate working area (must not exceed 1 gallon). Bulk storage of solvents is in a remotely located grounded storage locker.
- f. Paint spray respirator is worn when spraying paint.

6.4 Subject term (key word) listing.

Lacquer
Catalyst components
Primer
Thinner
Toluene

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

Preparing activity:
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