

MIL-STD-841B(USAF)

1 July 1971
SUPERSEDING
MIL-STD-841A(USAF)
1 JULY 1969

MILITARY STANDARD

MARKING OF AIRCRAFT AND MISSILE PROPULSION SYSTEM PARTS
FABRICATED FROM CRITICAL HIGH TEMPERATURE ALLOYS

FSC MISC

MIL-STD-841B(USAF)
1 July 1971

DEPARTMENT OF DEFENSE
WASHINGTON, D.C. 20330

Marking of Aircraft and Missile
Propulsion System Parts Fabricated from
Critical High Temperature Alloys

MIL-STD-841B(USAF)

1. This Military Standard is mandatory for use by all Departments and Agencies of the Department of Defense.
2. Recommended corrections, additions or deletions should be addressed to Headquarters AFLC, Attention: MMOPD, Wright-Patterson Air Force Base, Ohio 45433.

MIL-STD-841B(USAF)
1 July 1971

CONTENTS

	PAGE
1. SCOPE	1
2. REFERENCED DOCUMENTS	1
3. DEFINITIONS	1
3.1 CRITICAL ALLOYS	1
4. GENERAL REQUIREMENTS	1
4.1 AIRCRAFT AND MISSILE PROPULSION SYSTEM PARTS TO BE MARKED	1
4.2 MARKING METHODS	2
5. DETAIL REQUIREMENTS	2
5.1 PARTS	2
5.2 INSEPARABLE ASSEMBLIES	2
6. INTENDED USE	2

MIL-STD-841B(USAF)

1 July 1971

MARKING OF AIRCRAFT AND MISSILE PROPULSION
SYSTEM PARTS FABRICATED FROM CRITICAL HIGH
TEMPERATURE ALLOYS

1. SCOPE.

1.1 This document establishes physical item marking requirements for aircraft and missile propulsion system parts and assemblies fabricated from critical high temperature alloys. The requirements of this standard are in addition to the identification marking required by MIL-STD-130.

2. REFERENCED DOCUMENTS.

2.1 The following document in effect on the date of invitation for bid forms a part of this document:

STANDARD

Military

MIL-STD-130 Identification Marking of U.S.
Military Property

(Copies of standards required by contractors in connection with specific procurement functions should be obtained from the procuring agency or as directed by the contracting officer.)

3. DEFINITIONS.

3.1 Critical Alloys. For the purpose of this standard, Critical Alloys shall be interpreted to mean high temperature alloy specifications containing at least one of the following ratios of critical materials:

20% or more nickel (e.g. AISI Type 310)

25% or more chromium (e.g. AISI Type 446)

10% or more cobalt

80% or more titanium

4. GENERAL REQUIREMENTS.

4.1 Aircraft and Missile Propulsion System parts to be marked.

4.1.1 All compressor and turbine blades or vanes.

4.1.2 All parts and assemblies which contain at least 50% of an alloy described in paragraph 3.1 or a combination of such alloys.

MIL-STD-841B(USAF)

1 July 1971

4.1.3 Parts currently being produced. Items already in stock by contractor, government or supplier need not be marked.

4.2 Marking Methods. The marking methods shall meet all the requirements of MIL-STD-130 except as stated in paragraphs 4.2.1, 4.2.2, and 4.2.3 below.

4.2.1 Marking must be permanent and legible after use. On items which cannot be permanently marked, the material designator will be (a) stamped or stencilled on the part or (b) marked on a tag, attached to each part or assembly or on the package for the item.

4.2.2 The permanent marking of item shall not affect the performance or have deleterious effect on the item. If the item cannot be marked without deleterious effect on the item, the marking shall be (a) stamped or stencilled on the part or (b) marked on a tag or on the package as specified in paragraph 4.2.1.

4.2.3 Inseparable assemblies shall be marked as parts. Component parts of inseparable assemblies need not be marked.

5. DETAIL REQUIREMENTS.

5.1 Parts. Parts shall be marked with the material designation of the critical alloy contained in the part (e.g. AISI 310).

5.2 Inseparable Assemblies. Inseparable assemblies shall be marked with the alloy or combination of critical alloys contained in the assembly (e.g. AISI 310/HS25).

6. INTENDED USE. Permanent identification of the critical high temperature alloys contained in parts and assemblies of propulsion systems for aircraft and missiles provides a positive tool for true and accurate segregation of valuable and strategic materials during disposal processes. This document shall be applied to all contracts or orders covering propulsion systems (engines) for aircraft and missiles.

NOTICE: Copies of this standard for military use may be obtained as indicated in the foreword to the Index of Military Specifications and Standards.

Copies of this standard may be obtained for other than official use by individuals, firms, and contractors from the Superintendent of Documents, U.S. Government Printing Office,

MIL-STD-841B(USAF)
1 July 1971

Washington, D.C. Both the title and identifying symbol number should be stipulated when requesting copies of military standards.

Custodians

Air Force - 26

Preparing Activity:

Air Force - 26

Project Number

MISC-F773

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.

(Fold along this line)

(Fold along this line)

DEPARTMENT OF THE AIR FORCE



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

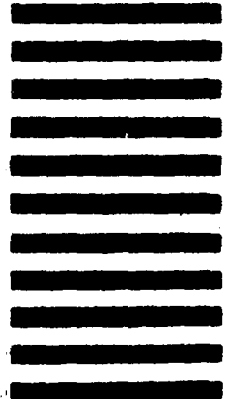
OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 73236 WASHINGTON D. C.

POSTAGE WILL BE PAID BY THE DEPARTMENT OF THE AIR FORCE

AFLC/LOLCP
Wright-Patterson AFB, OH 45433



STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

(See Instructions - Reverse Side)

1. DOCUMENT NUMBER	2. DOCUMENT TITLE		
3a. NAME OF SUBMITTING ORGANIZATION		4. TYPE OF ORGANIZATION (Mark one)	
A. ADDRESS (Street, City, State, ZIP Code)		<input type="checkbox"/> VENDOR	
		<input type="checkbox"/> USER	
		<input type="checkbox"/> MANUFACTURER	
		<input type="checkbox"/> 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		7b. WORK TELEPHONE NUMBER (Include Area Code) - Optional	
8. MAILING ADDRESS (Street, City, State, ZIP Code) - Optional		8. DATE OF SUBMISSION (YYMMDD)	