## MILITARY STANDARD

# STANDARD GENERAL REQUIREMENTS FOR COLOR AND MARKING OF ARMY MATERIEL

TO ALL HOLDERS OF MIL-STD-1473A(MI):

1. The following pages of MIL-STD-1473A(MI) have been revised and supersede the pages listed:

the pages i	iscea.		
NEW PAGES	DATE	SUPERSEDED PAGE	DATE
1	29 July 83	1	10 Feb 76
2	29 July 83	2	10 Feb 76
3	29 July 83	3	10 Feb 76
4	29 July 83	4	10 Feb 76
4 5	29 July 83	5	10 Feb 76
	29 July 83	6 .	10 Feb 76
6 9	29 July 76	9 .	10 Feb 76
10	29 July 83	10	10 Feb 76
15	29 July 83	15	10 Feb 76
16	29 July 83	16	10 Feb 76
16A	29 July 83	- (New Page)	
16B	29 July 83	(New Page)	
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2. Make th	e following pen	and ink changes:	
a. Page ii	, paragraph 2:	•	
	* E=: = 2: = E::		

- (1) line 2, change "AMSMI-RCS" to "DRSMI-RSDS."
- (2) line 3, change "35809" to "35898."
- b. Page iii: Delete second paragraph.
- c. Page iv:

	(1)	add "4.4 Bar coding
	(2)	add "5.1.2.5 Pictorial Symbols
d.	Page	v: Delete paragraph "5.3.2.3.3 Piping 11."
e.	Page	vi:
	(1)	add new paragraph "5.5.6.5 Tactical Lasers 16."
	(2)	delete paragraph "5.7.4 Gas Mask Canisters

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- (3) change "5.7.5" to "5.7.4."
- (4) delete paragraph "5.7.6 Radioactive Material . . . . . . . . . . . 18."

## f. Page 7:

- (1) Table I: AMBULANCE, add after Semi-Gloss Green "or Gloss White 17875."
- (2) Table I: CALIBRATION VEHICLES, add at bottom "Wall, Ceiling, Doors, Fittings and Mounted Equipment, Semi-Gloss Green, 24533."

## g. Page 8:

Table I: FIREFIGHTING VEHICLES, add below Gloss Red "Gloss Yellow (when in non-tactical use) 13538."

- h. Page 11: delete paragraph 5.3.2.3.3.
- i. Page 14:
  - (1) Table II: In second row after "Ceilings" add "and walls."
  - (2) Table II: Control/Display Panels, change "24692" to "26492."
  - (3) Table II: Panel Lettering, Change "Lettering" to "Labeling,"
- j. Page 17: paragraph 5.5.10, line 2, change "1968" to "1975."

## k. Page 18:

- (1) delete paragraph 5.7.4.
- (2) change "5.7.5" to "5.7.4."
- (3) delete paragraph 5.7.6.
- 1. Page 24, Figure 1, delete "DANGER--" in front of "2300 VOLTS."
- m. Page 28, USER ACTIVITIES, change "EL" to "CR, ER."
- n. Page 29, paragraph 20.1. line 5: change "AR 750-X" to "AR 750-58."
- o. Page 30, paragraph 20.3, add:
  - "TB MED 523 Control of Hazards to Health from Microwave and Radio Frequency and Ultrasound."

- p. Page 31:
  - (1) add to B, "Bar Coding----- 4.4 6"
  - (2) delete from C, "Canister, Gas Mask----- 5.7.4 18"
- q. Page 32:
  - (1) add to N, "Nuclear Weapons----- 5.4.4.5 15."
  - (2) Nuclear Reactor System, change "5.7.5" to "5.7.4."
- r. Page 33:
  - (1) add to P, "Pictorial Symbols----- 5.1.2.5 10."
  - (2) delete from R, "Radioactive Material----- 5.7.6 18."
  - (3) add to T, "Tactical Lasers----- 5.5.6.5 16."
- RETAIN THIS NOTICE AND INSERT BEFORE THE TABLE OF CONTENTS.
- 4. Holders of MIL-STD-1473A will verify that page changes and additions indicated above have been entered. The notice pages will be retained as a check sheet. This issuance, together with appended pages, is a separate publication. Each notice is to be retained by stocking points until the Military Standard is completely revised or cancelled.

Custodians:

Army: MI

Review Activities:

Army: AV, CE, GL, MD, MR, TM, HEL

User Activities:

Army: AT, ME

Preparing Activity: Army: MI

Project No. HFAC-A009

# STANDARD GENERAL REQUIREMENTS FOR COLOR AND MARKING OF ARMY MATERIEL

#### SCOPE

- 1.1 Scope and Purpose. This standard prescribes general requirements for color and marking of Army material. This standard does not prescribe the many special color and marking requirements specified by Army design activities; nor is it intended to prescribe their finishes, surface preparations or related treatments for preservation and coating. Similarly, it is not intended that this standard apply to exterior colors of Army equipment under tactical conditions in active combat theaters of operation where such equipment may be painted Lusterless White No. 37875 in snow areas, or other colors or patterns deemed necessary for camouflage or for compliance with host country requirements.
- 1.2 <u>Application</u>. Unless otherwise specified by the procuring activity general color and marking of Army material shall be as prescribed herein.
- REFERENCED DOCUMENTS
- 2.1 <u>Issues of Documents</u>. The following documents of the issue in effect on the date of invitation for bids or request for proposal form a part of this standard to the extent specified herein.

## Specifications

## Federal

FED SPEC L-S-300	Sheeting	and	Tape,	Reflective:	Non-exposed	Lens
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## Military

MIL-P-3320	Painting,	Freight	and Ma	intena	nçe (	Cars	
MIL-P-3321	Painting,	Railway	Motive	Power	and	Work	Equipment

MIL-C-3702	Cable, Power, Electrical, Ignition, High Tension
MIL-W-4088	Webbing, Textile, Woven Nylon
MIL-M-8555	Missiles, Guided: Design and Construction, General Specification for
MIL-M-11745	Marking and Labeling of US Army Marine Craft
MIL-M-13231	Marking of Electronic Items
MIL-C-13486	Cable, Special Purpose, Elecrical, Low-Tension, Heavy Duty Multiple Conductor
MIL-W-13855	Weapons, Small Arms, General Specification for
MIL-M-18012	Marking for Aircrew Station Displays, Design and Configuration of
MIL-T-23991	Training Devices, Military; General Specification for
MIL-C-46168	Coating, Aliphatic Polyurethane, Chemical Resistant
MIL-E-52798	Enamel, Alkyd, Camouflage
MIL-E-52835	Enamel, Modified Alkyd, Camouflage, Lusterless

# Standards

# <u>Fe</u>deral

FED-STD-186	Marking of Valves, Fittings, Flanges, and Unions Used in Nuclear Reactor Systems
FED-STD-595	Colors

# <u>Military</u>

MIL-STD-101	Color Code for Pipelines and Compressed Gas Cylinders
MIL-STD-129	Marking for Shipment and Storage

MIL-STD-130	Identification Markings of U.S. Military Property
MIL-STD-161	Identification Methods for Bulk Petroleum Products Systems Including Hydrocarbon Missile Fuels
MIL-STD-172	Color Code for Containers of Liquid Propellants
MIL-STD-190	Identification Marking of Rubber Products
MIL-STD-193	Painting Procedures, Tactical Vehicles (Tracked and Wheeled)
MIL-STD-194	Systems for Painting and Finishing Fire Control Materiel
MIL-STD-195	Marking of Connections for Electric Assemblies
MIL-STD-290	Packaging, Packing and Marking of Petroleum and Related Products
MIL-STD-411	Aircrew Station Signals
MIL-STD-450	Signs for Contaminated or Dangerous Areas
MIL-STD-454	Standard General Requirements for Electronic Equipment
MIL-STD-642	Identification Marking of Combat and Tactical Transport Vehicles
MIL-STD-681	Identification Coding and Application of Hookup and Lead Wire
MIL-STD-685	Identification of Cable Used for Transmission of Telephone, Telegraph, and Teletype Signals
MIL-STD-686	Cable and Cord, Electrical; Identification Marking and Color Coding of
MIL-STD-687	Wire, Thermocouple, Identification Marking and Color Code of
MIL-STD-709	Ammunition Color Coding
MIL-STD-783	Nomenclature and Abbreviations in Aircrew Stations

MIL-STD-1189	Standard Symbology for Marking Unit Packs, Outer Containers, and Selected Documents
MIL-STD-1223	Administrative Wheeled Vehicles Treatment, Painting Undercoating, Identification Marking, Data Plates and Warranty Notice Standards
MIL-STD-1247	Markings, Functions and Hazard Designations of Hose, Pipe, and Tube Lines for Aircraft, Missile and Space Systems
MIL-STD-1271	Symbols to Supplement the Text of Instruction Plates for Military Vehicles
MIL-STD-1285	Marking of Electrical and Electronic Parts
MIL-STD-1472	Human Engineering Design Criteria for Military Systems, Equipment, and Facilities
MIL-STD-1480	Color Codes for Webbing, Textile; Manufacturer's Identification

# Drawings

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Army Medical Department Insignia

2.2 Other Publications - The following documents form a part of this standard to the extent specified herein. Unless otherwise indicated, the issue in effect on the date of invitation for bids or request for proposal shall apply.

ANA Bulletin 438

Age Control of Sensitive Elastomeric Items

TSO N26

FAA Technical Standard Order

## ANSI

C95.2-1966 Radio Frequency Radiation Hazard Warning Sy	rodmy
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N2.1-1969 Radiation Symbol

Y32.16-1975 Reference Designations for Electrical and Electronic

Parts and Equipment

Z35.1-1972 Specifications for Accident Prevention Signs

Z35.1-1971 Safety Color Code for Marking Physical Hazards

Z136.1-1980 Safe Use of Lasers

(Applications for copies of ANSI publications should be addressed to the American National Standards Institute, Inc., 1430 Broadway, New York, New York 10018)

(Copies of specifications, standards, and other publications 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

Forest Green - Forest Green shall be in accordance with MIL-C-46168, MIL-E-52798 or MIL-E-52835, as applicable. (Forest Green has not been assigned a chip number in Federal Standard 595 at this time.)

## 4. GENERAL REQUIREMENTS

# 4.1 Colors

- 4.1.1 <u>Numerical Designation</u> The numerical designations of colors herein refer to FED-STD-595 and the colors so designated shall conform to that standard.
- 4.1.2 <u>Controls and Displays</u> Except where specified to the contrary herein, color coding of controls and displays shall be in accordance with MIL-STD-1472.
- 4.1.3 Off-the-Shelf Equipment Repainting of off-the-shelf equipment, subject by law to competitive procurement, will not be required in order to meet the criteria herein. However, a criterion for selecting off-the-shelf commercial or Government equipment shall be the degree to which the equipment conforms to this standard. Where off-the-shelf equipment requires modification in order to interface with other equipment, the modification, if it affects painted surfaces, shall comply with the criteria herein.

# 4.2 Marking

- 4.2.1 <u>Identification</u>, <u>General</u> Identification marking of all items of Army materiel shall conform to MIL-STD-130, as applicable.
- 4.2.2 <u>Shipment and Storage</u> Army materiel shall be marked for shipment and storage in accordance with MIL-STD-129, as applicable. The labeling of lifting and tiedown points shall conform to MIL-STD-1472.

- 4.2.3 <u>Controls and Displays</u> Except where specified to the contrary herein, controls, displays, and other items of equipment that must be located, identified, read or manipulated, shall be appropriately and clearly labeled to permit rapid and accurate human performance; however, labels are not required on equipment or controls where use is obvious to user (e.g., functional label on aircraft control stick).
- 4.2.4 <u>Labeling</u>, <u>Lettering</u>, and <u>Numeral Design</u> Where not specified to the contrary herein, labeling, lettering, and numeral design shall conform as applicable, to the requirements of MIL-STD-1472.
- 4.3 <u>Suplementary Data and Color/Marking for Specific Items</u> The publications listed in the Appendix should be consulted for color and marking information supplementary to the requirements herein and for specific systems and equipment.
- 4.4 <u>Bar Coding</u> Bar coding of unit packs, outer contrainers and selected documents shall conform to MIL-STD-1189.
- 5. DETAIL REQUIREMENTS
- 5.1 Vehicles, Construction Equipment, and Materials Handling Equipment
- 5.1.1 Color The standard color for applicable exterior and interior surfaces of vehicles, construction equipment, and materials handling equipment is Lusterless Forest Green. All such equipment shall be painted this color, except as indicated in Table I. Colors applicable to personnel stepping areas do not preclude use of grit or similar antislip material. If commercial vehicles are to be used in tactical situations, the interior of the vehicle cab should be a dark color (i.e., brown, black, or dark green).

# 5.1.2 Marking

- 5.1.2.1 Administrative Wheeled Vehicles Administrative wheeled vehicles shall be marked as specified in MIL-STD-1223. (Also see 4.3)
- 5.1.2.2 Combat and Tactical Vehicles Combat and tactical vehicles shall be marked as specified in MIL-STD-642. Tactical bulk fuel transporters and fuel servicing vehicles shall have required safety exterior markings per Department of Transportation (DOT) regulations governing the transportation of hazardous materials in tank motor vehicles. (Also see 4.3)

# TABLE I (Continued)

VEHICLES, EQUIPMENT, SURFACE	COLOR	FED-STD-595
MOBILE ELECTRONIC/COMMUNICATION EQUIPMENT ENCLOSURES	See Table II	
FACILITIES ENGINEERING VEHICLES NOT ASSIGNED TO TACTICAL UNITS (Including attachments used for highway construction or maintenance)		
Exterior and Interior Surfaces	Gloss Yellow	13538
RESEARCH AND DEVELOPMENT TEST PROJECT VEHICLES	·	
Exterior and Interior Surfaces	As specified by the procuring activity	
VAN TYPE VEHICLES	See Table II	

- 5.1.2.3 Construction Equipment and Material Handling Equipment See 4.3.
- 5.1.2.4 Other Vehicles such as military design ambulances shall be marked as specified in MIL-STD-642. (Also see 4.3)
- 5.1.2.5 <u>Pictorial Symbols</u> Symbols to be shown on military vehicle instruction plates in addition to the text shall conform to MIL-STD-1271. (Also see 4.3)

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- 5.2 Vessels
- 5.2.1 Color See 4.3.
- 5.2.2 <u>Marking</u> Marking and labeling of U.S. Army marine craft shall be in accordance with MIL-M-11745.
- 5.3 Railroad Equipment
- 5.3.1 Color Railroad equipment shall be painted as follows:
  - a. Railway motive power and Semi-Gloss Black No. 27038 work equipment
  - b. Gondola, hopper and tank Gloss Black No. 17038 cars
  - c. Hospital, kitchen car, Gloss Olive Green No. 14064 passenger, freight and caboose exteriors

#### 5.3.2 Marking

5.3.2.1 Agency Identification - The agency identification "US ARMY" shall be applied on both sides of all railroad equipment in Gloss White No. 17875; however, in theaters of operation, it will not be applied to freight cars or cabooses.

## 5.3.2.2 Identification Numbers

5.3.2.2.1 <u>Location</u> - Identification numbers, prescribed by the procuring activity, shall be marked on both sides and on each end of all locomotives, locomotive tender units, work equipment, and rolling stock.

- 5.4.4.2 Pipe, Hose, and Tube Lines. The function, content and, if applicable, the hazard and direction of flow, of pipe, hose, and tube lines used in missile systems and systems-peculiar equipment that is required exclusively for test, maintenance, servicing and/or operation as an integral part of the functional system, shall be color coded (and marked) in accordance with MIL-STD-1247. All lines external to these systems shall be color coded in accordance with MIL-STD-101.
- 5.4.4.3 <u>Training Aids</u>. Color coding primarily for graphic and demonstrator-type training aids utilized in operational and maintenance guided missile training shall be in accordance with MIL-STD-709.
- 5.4.4.4 Other. Items of other categories utilized in missile systems shall be marked in accordance with applicable requirements herein.
- 5.4.4.5 <u>War Reserve and Training Nuclear Weapons and Containers.</u> Required markings for these items are contained in appropriate Joint Atomic Weapons publications.
- 5.5.1 Communications-Electronic Shelters
- 5.5.1.1 <u>Color</u>. Communications-electronic shelters shall be painted as follows:
- 5.5.1.1.1 <u>Exteriors</u>. Exterior painted surfaces shall be lusterless forest green solar heat reflecting paint produced in accordance with MIL-C-46168, MIL-E-52798 or MIL-E-52835. (Also see Table II.)
- 5.5.1.1.2 <u>Interiors</u>. Interior colors of mobile communication-electronic equipment enclosures, occupied by personnel during operation, maintenance, or control, shall conform to Table II.
- 5.5.1.2 Marking. Marking shall conform to Table II and other applicable requirements of this standard.
- 5.5.2 Cables
- 5.5.2.1 Electrical Cable and Cord. Color coding and identification marking of electrical cable and cord shall conform to MIL-STD-686.
- 5.5.2.2 Cable for Transmission of Telephone, Telegraph, and Teletype Signals. Color coding and marking of cables for transmission of telephone, telegraph, and teletype signals (including singles, pairs, multiples and quads used in other applications such as intercommunication, loudspeaker and microphone cables) shall be in accordance with MIL-STD-685.

- 5.5.2.3 <u>Vehicular Use</u> Color and marking of high-tension and low-tension cables for vehicular use shall conform to MIL-C-3702 and MIL-C-13486, respectively.
- 5.5.2.4 <u>Thermocouples</u> Color and identification coding for all single and duplex thermocouple wires and all thermocouple extension wires shall conform to MIL-STD-687.
- 5.5.3 <u>Electronic Items</u> Marking of electronic items, except marking for shipment and as otherwise specified by an applicable Government document covering the item on which the marking appears, shall conform to MIL-M-13231.
- 5.5.4 <u>Electronic Parts</u> Electronic parts shall be color coded in accordance with MIL-STD-1285.
- 5.5.5 Resistors Resistor color code shall conform to MIL-STD-1285.
- 5.5.6 Warning Markings
- 5.5.6.1 <u>Electronic Equipment</u> Warning labels, signs and markings on electronic equipment shall be in accordance with MIL-STD-454, Req. 1. Size and format shall conform to Figures 1 and 2 herein.
- 5.5.6.2 Radio Frequency Hazard The Radio Frequency Radiation Hazard Warning Symbol shall be in accordance with ANSI C95.2 1975.
- 5.5.6.3 <u>Laser Hazard</u> Permanently affixed labels should be in accordance with ANSI Z136.1-1980.
- 5.5.6.4 Safety. See Paragraph 5.9.
- 5.5.6.5 <u>Tactical Lasers</u> Tactical lasers may be exempted from FDA requirements provided the lasers are clearly identified by the label shown below, or by other means.

#### CAUTION

THIS ELECTRONIC PRODUCT HAS BEEN EXEMPTED FROM FDA RADIATION SAFETY PERFORMANCE STANDARDS PRESCRIBED IN THE CODE OF FEDERAL REGULATIONS, TITLE 21, CHAPTER I, 76EL-01DOD ISSUED ON 26 JULY 1976. THIS PRODUCT SHOULD NOT BE USED WITHOUT ADEQUATE PROTECTIVE DEVICES OR PROCEDURES.

# 5.5.7 Test Equipment

- 5.5.7.1 Bench Use Test equipment for bench use shall be smooth, Semi-Gloss Gray No. 26037.
- 5.5.7.2 Field Equipment Test equipment for field testing shall be a smooth Lusterless Forest Green.
- 5.5.7.3 Flight Line Equipment Test equipment for flight line use shall be smooth, Gloss Yellow No. 13538.
- 5.5.8 <u>Hookup Wire</u> Identification coding of hookup wire shall conform to MIL-STD-681.
- 5.5.9 <u>Connections</u> Connections for electric assemblies shall be marked in accordance with MIL-STD-195.

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