

COAST GUARD

PAINT AND COLOR MANUAL



CG-263

1 December 1952

[Excerpts relating to the painting of cutters, craft, and aircraft from the 1952 *Paint and Color Manual*]:

SECTION 3-11

COLORS FOR VESSELS 65 FEET AND OVER IN LENGTH

The following paragraphs describe the color scheme to be employed on vessels over 65 ft. in length and on harbor tugs of any length. These instructions do not apply to barges which are covered in Section 3-12-1. An attempt has been made to specify the color for all major details. It is obviously impossible to foresee every circumstance which may arise in the future. Therefore when it is found that the instructions contained herein do not specify the color of a particular detail the general scheme shall be followed. Article 3-11-1 (L) lists those items which are not to be painted.

3-11-1, EXTERIOR COLORS FOR VESSELS 65 FEET AND OVER IN LENGTH

(A) HULL

Ship hulls from the top of the antifouling or underwater area paint up to the top of the hull, bulwark or sheer line, including all fittings, shall be painted in accordance with the accompanying schedule.

On steel, iron or plastic vessels the boot-topping area shall be defined as follows: the bottom edge of the boot-topping shall coincide with the normal light operating waterline of the vessel. For vessels 150 ft. and over in length the top edge of boot-topping shall, at amidships, be above the normal full load waterline a distance equal to 1/3 the freeboard measured to the full load waterline. For vessels less than 150 ft. in length the upper edge of the boot-topping shall, at amidships, be above the normal full load waterline, a distance equal to 1/6 the freeboard measured to the full load waterline. At the bow the distance from the upper edge of the boot-topping to the full load waterline shall be 1.33 times the distance amidships above the full load waterline, and at the stern the distance from the upper edge to the full load waterline shall be 0.66 times the amidships distance.

Class of Vessel Boot-topping Area Above Boot-topping

WAG: Black, White

WAGB: Black, White

WAYP: Black, White

WDE: Black, White

WIX: Black, White

WPC: Black, White

WPG: Black, White

WSC: Black, White

WPB: Black, White

WAGL: Red, Black

WAK: Red, Black

WARC: Red, Black

WAT: Red, Black

WYT: Black, Black

WD: Black, Black

WAL (except Lake Huron): Black, Red

Lake Huron: Black, Black

WAGR: Black, White

All measurements are to be taken in a vertical plane and projected on to the hull. The upper edge of the boot-topping shall be a fair curve drawn through the above three points.

On wooden vessels the bottom edge of the boot-topping shall coincide with the full load waterline of the vessel. The upper edge of the boot-topping shall be identical with that described above for steel, iron and plastic vessels. Where metal sheathing is installed in way of the boot-topping area the instruction for steel vessels shall be followed.

Limited Drafting Marks are marks designating the maximum draft to which a vessel may be loaded. If Headquarters has issued a limiting draft to the vessel, the mark will be applied. The marks will be applied only to those vessels specifically authorized by Headquarters to display them. The letter of authorization will locate the marks by stating the limiting draft and freeboard of the vessel as well as the frame number on which the mark will be centered. This is illustrated in:

FIGURE A [click here to access]

(B) SUPERSTRUCTURE

The superstructure and all attachments thereto shall be white. This includes the following:

Deck Houses

Aircastles

Breakwaters

Cabins

Pilot Houses **Engine Trunks** Gun Tubs **Gun Shields Bridge Wings** Canvas dodgers attached to superstructure, bulwarks or bridge wings. Bulwarks including bulwark supports and brackets. Except that bulwark and bulwark supports forming an extension of the hull shall be painted the hull color both inboard and outboard. Stanchions, lockers, electrical controllers, switch boxes, ventilation ducts, ladders or other details secured to the superstructure. Ventilation ducts, electrical conduits and pipelines bracketed to the superstructure or immediately adjacent to the superstructure. Overheads of exterior passageways and shelters and the inboard side of bulwarks and aircastles.

(C) DECKS

Wood decks shall be left unpainted. Steel decks shall be painted No. 32 Blue Gray. Where there is a coaming at the deck edge the deck paint shall be extended up the inboard surface of the coaming. Deck paint shall also be applied to bounding angles between decks and superstructure or hatch coamings. Where superstructure and hatch coamings are welded to the deck a dado shall not be used. Dadoes shall not be applied to miscellaneous deck fittings such as bitts, chocks, pedestals, stanchions, etc.

Waterways shall be painted No. 32 Blue Gray.

(D) TOPS OF CABINS, PILOTHOUSES, AND ENGINE TRUNKS

On vessels whose main decks are all wood or nearly all wood the tops of cabins,

pilothouses and engine trunks shall be No. 24 Spar except in way of aerial identification markings. Other vessels shall have these areas painted No. 32 Blue Gray.

FIGURE B [click here to access].

(E) STACKS

Stacks shall be painted No. 24 Spar with a broad black band around the top of the stack. The width of the band shall be equal to 1/2 the fore and aft diameter of the stack or % the height of the stack whichever dimension is the smaller. If the stack has a hood the hood shall also be painted black in addition to the above band and shall form an extension of the band [see Figure B].

(F) MAST AND SPARS

Masts (including ladders, crows nests, platforms, etc.), booms, cranes, davits, flagstaffs, jackstaffs, yardarms and their supports and foundations (other than rigging) shall be painted No. 24 Spar if metal, varnished if wood. Equipment secured to the masts such as radar antennas, radomes, searchlights, bull horn, etc. shall also be No. 24 Spar [see Figure B].

Mast areas directly in way of stack gases may be black. Such areas on masts as are painted black when the vessel is commissioned shall be kept painted black in service. The extension of these areas beyond that originally authorized, or the painting of additional areas black without specific authorization from Headquarters is prohibited.

(G) RUNNING LIGHT SCREENS

In order to contain the reflected light from running light screens within the limits allowed by Rules of the Road, light reflections from the forward part of the screen must be kept to a minimum. The geometry of light screens and the location of the light sources are such that only light emitted by specular reflection lies within the prescribed limits, whereas light emitted by diffuse reflection from the forward part of the screen exceeds the prescribed limits. Therefore, a paint providing high specular reflection and low diffuse reflection should be used. A high gloss black enamel performs this function best and shall therefore be used on running light screens.

(H) DECK MACHINERY

Deck winches, capstan, winch and capstan controllers, sounding machines, and other deck machinery shall be No. 24 Spar.

(I) GUNS AND ORDNANCE EQUIPMENT

Guns, ordnance equipment, and their foundations and mounts, with the exception of working parts and nameplates, shall be painted black. This includes gun barrels of 5-in., 40 mm guns, depth charge tracks, K-guns, roller loaders, depth charge arbor trays, rocket launchers, and interior of hedgehog projectors.

Depth charges need to be mentioned herein because of their stowage in an easily visible and exposed location. Depth charges fall in the category of ammunition. Therefore, units shall adhere to the painting and marking instructions contained in OP 2238, pertinent parts of which are quoted:

"All depth charge cases are painted ocean gray, distinguishing markings are usually not applied to the case. The stenciled lettering is one inch high and is yellow in color."

Gun mounts in totally enclosed gun shields, such as the 5"/38 shall be No. 30 Equipment Gray.

Fire control equipment including gun directors shall be No. 30 Equipment Gray.

Gun Shields, including 20mm Shields, exterior or hedgehog projectors, ready service lockers and pyrotechnic lockers shall be white. In addition, pyrotechnic lockers shall have the word PYROTECHNIC stenciled on the box in conspicuous location, using the largest practicable No. 13 Fire Red letters.

Detonator boxes shall be No. 13 Fire Red overall with the word DETONATORS stenciled in white on the box in conspicuous location." (Amendment No. 6)

FIGURE C [click here to access].

(J) BOAT DAVITS AND BOAT STOWAGE

Boat davits, boat chocks, blocks, gallows frames and other boat stowage appurtenances shall be No. 24 Spar.

(K) MISCELLANEOUS DETAILS AND FITTINGS

In general, miscellaneous objects whose color is not specifically prescribed elsewhere in these instructions, shall be painted white if attached or immediately adjacent to some part of the superstructure that is painted white. They shall be painted No. 24 Spar if attached or immediately adjacent to mast, spars, or other objects whose prescribed color is No. 24

Spar. Objects standing alone on the deck shall also be No. 24 Spar. Stumbling hazards such as deck padeyes, deck clips and other projections shall be painted white for better night visibility.

Refer to the accompanying list of miscellaneous objects most frequently encountered. While not all of these follow the general rules above, most do, and the general rules shall be applied to objects not listed.

MISCELLANEOUS PAINTING INSTRUCTIONS

Anchors stowed in the hawse--Hull color

Anchors stowed against superstructure--White

Anchors stowed on deck--Spar

Awning Ridgepoles--White

Awning Stanchions--White

Bitts (except those mounted on gunwales of tugs)--No. 24 Spar

Bitts, side, mounted on gunwales of tugs--Black

Blocks (except those in black areas on mast or stack)--No. 24 Spar

Boat Booms--No. 24 Spar

Boarding Ladders--No. 24 Spar

Chocks, bulwark--Bulwark color

Chocks (except bulwark type)--No. 24 Spar

Compass Stands (except binnacle and other parts required to be kept bright)--White

Davits (all types)--No. 24 Spar

Diaphones--No. 24 Spar

Direction Finder Stands and Loops--White

Deck Chests--White

Ensign Staffs--No. 24 Spar

Firemain Valves (except threaded and machined parts)--No. 13 Fire Red

Flag Lockers--White

Flag Staffs--No. 24 Spar

Gangplanks, metal--No. 24 Spar

Gasoline Drums--No. 14 Brilliant Yellow with GASOLINE in black letters

Gasoline Stowage Racks--No. 24 Spar

Hatch Coamings--No. 24 Spar

Hatch Covers--White

Hose Racks, Saddles and Reels (for fire hose)--No. 13 Fire Red

Jack Staffs--No. 24 Spar

K-Guns--Black

Ladders (except those on masts) including stringers and rails--White

Ladders (on masts)--No. 24 Spar

Liferails (pipe or canvas covered)--White

Life Rafts, Life Rings, Life Buoys and Life Floats--No. 18 International Orange

Pelorus Pedestals--White

Radio Direction Finder Stands and Loops--White

Radar Antenna--No. 24 Spar

Ready Service Lockers--White

Searchlights (except those on masts)--White

Searchlights (on masts)--No. 24 Spar

Tiller, Spare, stowed on deck--No. 24 Spar

Tiller, Spare, stowed against bulkhead--White

Rigging (where painted)--Black

Vegetable Lockers (on deck)--White

Ventilators (all types including gooseneck pipe vents not attached or immediately adjacent to superstructure)--No. 24 Spar

Ventilators attached or immediately adjacent to the superstructure--White

Wheelhouse Visors (underside)--No. 2 Medium Green

(L) ITEMS NOT TO BE PAINTED

In general paint shall not be applied to surfaces where it will cause interference with the functions for which the surfaces were designed, nor shall it be applied to those surfaces which are traditionally kept bright. Refer to the accompanying list of typical items not to be painted and the method of treatment for each.

ITEMS NOT TO BE PAINTED

Accommodation ladders, wood--Varnish

Applicator, nozzles--Polish

Boat booms, wood--Varnish

Boatswains' chairs--Oiled

Brightwork--Polish and coat with clear plastic or lacquer

Canvas covers (removable)--No coating

Oil cups--No coating

Chain, galvanized--No coating Deck treads, non-skid--No coating Deck wood--No coating Dogs--No coating Fire hose nozzles--Polish Gangplanks, wood--Oiled or varnished Gaskets, rubber for water-tight doors--Pulverized graphite Glass--No coating Gratings, wood--Oiled Grease cups--No coating Gypsy head whelps--No coating Hose--No coating, Insulators--No coating Knife edges on watertight doors and hatches--sandpapered Ladders, pilot--Oiled Leather coverings--Oiled with preservative Masts and spars, wood--Varnish Name plates--No coating, if brass, Polish Oars--No coating

Oil holes--No coating

Railing, wood--Varnish

Release mechanisms--Greased

Rigging, running--Greased

Rigging, standing--Apply preservative

Searchlight, shutters--No coating

Stages--Oiled

Strongbacks, wood--Varnish

Working or machined parts of valves, machinery, blocks, guns, or other equipment-Greased or no coating

Zincs--No coating

(M) DAMAGE CONTROL AND SAFETY MARKINGS

Hose racks, liquid foam containers, spanner wrenches, fire main valves, casualty power terminals, damage control shores and similar equipment used for damage control purposes shall be painted No. 13 Fire Red. Damage control equipment stored in lockers shall be identified by a suitable label painted on the locker door in No. 13 Fire Red. Covers of all sound power jack boxes and switch boxes shall also be No. 13 Fire Red.

Gasoline and other flammable liquid containers shall be painted No. 14 Brilliant Yellow with the name of the contents conspicuously indicated in large black letters. Stumbling hazards such as deck padeyes, deck clips and other small projections from the deck shall be painted white for better night visibility.

In painting the above markings do not paint those surfaces listed in paragraph (L) above:

(N) COMPRESSED GAS CYLINDER IDENTIFICATION

Vessels shall follow the color scheme set forth in Section 3-18, Compressed Gas Cylinder Identification.

(O) MARKINGS ON FLOATABLE EQUIPMENT

Ring Type Life Buoys. The vessel's name, or if not named, the vessel's number, shall be placed on the top semicircle of the ring. On the bottom semicircle the legend U.S. COAST GUARD shall appear. Black letters 2 in. high shall be used.

Life Rafts. Markings shall always be placed on the longer legs of the raft. The vessel's name or, if not name, the vessel's number, shall be placed on one leg and the legend U.S. COAST GUARD shall be placed on the other leg. The markings shall be so placed as to be readily seen, and when read in the normal manner of reading the vessel's name or number shall be read first.

Lifejackets. The vessel's name or, if not named, the vessel's number shall be placed across the middle of the back of the life-jacket in letters 3/4 in. in height.

Wood Articles. Deck chests, boat boxes, oars or other wood articles which may be washed overboard shall have the vessel's name preceded by USCGC, or designating number preceded by CG, burned into the article in 1/2 in. letters so as to leave a clear impression. Burning pencils item No. 3201 Class 37 of the Catalog of Navy Material may be used for this purpose.

(P) ANCHOR CHAIN MARKING

Anchor chain, with the exception of the below markings, is to be painted black. Light vessels shall paint only that part of the chain which is normally out of water when anchored on station. The detachable link between shots, excluding the detachable link for the 5-fathom connecting shot, shall be painted as follows starting from the anchor end and working inboard:

- 15-fathom detachable link, No. 13 Fire Red.
- 30-fathom detachable link, white.
- 45-fathom detachable link, No. 29 Bright Blue.
- 60-fathom detachable link, No. 13 Fire Red.

The same manner of marking detachable links shall be continued on to the end of the chain with the exception of the detachable links in the last and next to last shot.

Additional markings shall be as follows:

The first link on each side of the 15-fathom detachable link shall be painted white. Each of the white links shall be marked by one turn of wire around the stud.

The first two links on each side of the 30-fathom detachable link shall be painted white. The second link at each side of the detachable link shall be marked by two turns of wire around the stud.

The first three links on each side of the 45-fathom detachable link shall be painted white. The third link at each side of the detachable link shall be marked by three turns of wire around the stud.

The same manner of marking shall be continued on to the end of the chain with the exception of the last and next to the shot. All of the links in the next to the last inboard shot shall be painted No. 14 Brilliant Yellow, and all of the links in the last shot inboard shall be painted No. 13 Fire Red.

(Q) WAR SERVICE INSIGNIA

Display of war service insignia is optional. War service insignia when displayed shall consist of replicas of the area campaign medal ribbons and Navy Unit Commendation Ribbon together with operation and engagement stars to which the ship would be entitled under the same rules and regulations as prescribed for individuals. No painted replicas of the Presidential Unit Citation ribbon shall be worn. The following ribbons only are to be displayed:

- (a) Navy Unit Commendation.
- (b) American Area.
- (c) European-African-Middle East Area.
- (d) Asiatic-Pacific Area.

Replicas of Navy Unit Commendation Ribbons and area campaign medal ribbons shall be painted by ship's force. The sizes and locations designated in the accompanying table shall be adhered to for the ship types listed and shall be used as a general rule for ship types not listed. Where symmetrical arrangements permit, the painted replicas will be displayed on both sides of the vessel in corresponding locations, port and starboard. See tabulation on page 3-76.

Painted replicas of area campaign medal ribbons shall be arranged in the same order as ribbons worn by personnel, with a maximum of three replicas in a horizontal line.

The diameter of the operation and engagement stars shall be 3/8 the width of the ribbon, and the stars shall be painted on the replicas with the point down.

(R) IDENTIFICATION MARKINGS ON HULL

Named Vessels-

Named vessels, other than lightships, shall have their visual call numbers on each bow:

FIGURE D[click here to access; note table directly below as well].

Vessel Length Overall				
65 ft. and over up to 100 ft.	A	В	C	D
100 ft. and over up to 150 ft.	5 ft.	1 ft.	2 ft.	*
	8 ft.	1 ft - 6 in.	3 ft.	*
150 ft. and over up to 200 ft.	10 ft.	2 ft.	4 ft.	*
200 ft. and over up to 300 ft.	12 ft.	2 ft 6 in.	5 ft.	*
	18 ft.	3 ft.	6 ft.	*
300 ft. and over				

*D must be equal to or greater than B.

- A. Distance between foremost part of foremost character to stem at forecastle deck.
- B. Distance between top of aftermost lettering and hull at deck edge or in the case of vessels with bulwarks, the deck edge projected through the hull.
- C. Height of letters.
- D. Distance between bottom edge of lettering and boot-topping or waterline where boot-topping is not applied. **Note**: Distance A is measured in a fore and aft plane. The remainder of the distances are measured along the hull.

The size and location of the numerals shall be in accordance with the illustrations and table. Letters of the type described in Section 3-22, Letters and Numerals, shall be used.

Black letters shall be used on white hulls and white letters shall be used on black hulls. It should be noticed that where application of the rules results in distance B being greater than D, the vertical location of the lettering shall be adjusted upward so that B and D are equal. If such readjustment results in B and D being less than 1/4C, then C shall be decreased until B and D are approximately 1/4 C. Where, by application of the above rules the number lies in way of the anchor, air port or other interferences which would substantially reduce the legibility of the numeral, its position shall be adjusted the minimum amount necessary to be clear of all such interferences.

Named vessels, other than lightships, shall have their names painted across the stern or transom in 12-in, letters of the type specified in Section 3-22, Letters and Numerals. Black letters shall be used on white hulls and white letters on black hulls. The name shall be located 12 in. from the top of the hull. If in the case of vessels of extremely low freeboard this results in the name being closer to the boot-topping or waterline than to the top of the hull, it shall be centered between the top of the hull and the top of the boot topping or the waterline if there be no boot topping. Where a bulwark is fitted the name shall be placed on the bulwark so as to be equidistant from the top and bottom. The name shall be centered on the centerline of the vessel, or where this is impractical it shall be painted on either quarter located as far aft as practicable. Vessels authorized to display name boards are excepted from these rules.

FIGURE E [click here to access; note table directly below as well].

Vessel	A	В	С
165 ft Cutter.	6 ft.	1 ft.	2 ft.
269 ft. Cutter	20 ft.	2 ft.	3 ft.
290 ft. Cutter	28 ft.	2 ft.	3 ft.
327 ft. Cutter	13 ft.	2 ft.	3 ft.
250 ft. & 255 ft. Cutters	10 ft.	2 ft.	3 ft.
WAVPs	33 ft.	2 ft.	3 ft.
WDEs	6 ft.	2 ft.	3 ft.

Dimension A is measured in a fore and aft plane.

All other measurements are along the hull. Dimension B is measured from main deck downward.

In addition to the above markings, WAGBs, WAVPs, WDEs, WPGs and WPCs shall have their visual call numbers on each quarter in black letters. The location and size of the numbers shall be as shown in the illustration and table.

Numbered Vessels-

Numbered vessels shall have their designating number preceded by CG (such as CG 83400) on each bow. Buoy boats shall add the suffix D to the designating number- as an example CG 80004-D. The size and location of numerals shall be in accordance with the rules stated for visual call numbers on the bows of named vessels. Black numerals shall be used on white hulls and white numerals shall be used on black hulls.

Numbered vessels shall have their designating number as used on the bow painted across the stern or transom in 12-in, letters of the type specified in Section 3-22, Letters and Numerals. Black letters shall be used on white hulls and white letters shall be used on black hulls. The number shall be located 12 in. from the top of the hull. If in the case of vessels of extremely low freeboard this results in the name being closer to the boottopping or waterline than to the top of the hull it shall be centered between the top of the hull and the top of the boot-topping or the waterline if there be no boot-topping. Where a bulwark is fitted, the number shall be placed on the bulwark so as to be equidistant from the top and bottom. The number shall be centered on the centerline of the vessel, or where this is impractical it shall be painted on either quarter located as far aft as practicable.

Light Vessels-

Light vessels shall have the name of the station to which assigned or the word RELIEF as applicable, painted in white on both sides of the hull in the largest letters permitted by the freeboard (about 6 ft.-6 in.). The style and spacing of the letters shall be as specified in Section 3-22, Letters and Numerals.

(S) AERIAL IDENTIFICATION

All radio equipped vessels and boats shall have their international radio call letters in No. 18 International Orange against a black background area on the largest unobstructed and horizontal clear panel available, such as the superstructure deck, cabin trunk top, engine trunk top, housetop or compass platform. Those boats not equipped with radio and not assigned to floating units or shore stations shall have their designating numerals in this same relative position as far as practicable. The lettering shall be placed athwartships with the tops of the characters toward the vessel's bow and shall be as large as can be placed in

the space available with a minimum of 3 stroke widths between the end characters and the edge of the black background area. The fore and aft dimension of the black area shall extend beyond the top and bottom of the letters to a minimum distance of 1 1/2 the letter height. The style and spacing of the letters shall be as specified in Section 3-22, Letters and Numerals.

(T) DRAFT MARKS

Draft figures on metal hulls shall be made by running a bead of weld around the outline of draft figures projected on the hull. The figures shall be so located that the bottom of the figure is tangent with the draft it represents measured from the bottom of the keel line extended. Draft figures shall conform to those shown in Section 3-22, Letters and Numerals, and shall be used only on vessels having a full load draft in excess of 4 ft.

(U) CAMOUFLAGE INSTRUCTIONS

Camouflage of Coast Guard vessels, except when otherwise directed by competent authority, will consist of painting all horizontal surfaces to a gray color approximately Federal Color No. 1615 (Deck Gray Navy Formula 20). Vertical surfaces above boottopping shall be painted to a color approximating haze gray color Federal Color 2635 (Haze Gray Formula 5H).

Coast Guard vessels will not normally carry camouflage paints. The following class of vessels, WAVP, WPG, WDE, WAGB, WAG, WAGL, WPC, WSC, WPB are directed to carry tinting material so that stocks of white paint may be converted to gray for application of camouflage. Amount of tinting material shall not exceed 1 gallon for each 20 gallons of white paint carried on board except that a minimum of 1 gallon is authorized for all classes. One gallon of Deck Gray Navy Formula 20 and Haze Gray Navy Formula SH is authorized for matching.

PAINTED REPLICAS OF CAMPAIGN RIBBONS

Type Vessel Insignia Size

BIBB Class: 5 in. wide x 18 in. long Outboard end of Bridge on Bulwark 12 in. below top

WIND Class: Same For'd of Life Buoy on Bridge Bulwark 12 in. below top.

OWASCO Class: Same Outboard end of Bridge on Bulwark 6 in. below top.

CACTUS Class: Same, Same

IRONWOOD Class: Same, Same

IRIS Class: Same, Same

NAUGATUCK Class: 3/4 in. wide x 12 in. long Centered on Superstructure on Bulwark between Bridge and Break, frame 20-23, 6 in. below top.

165 ft. "A" Class: Same, On end of Bridge wing 12 in. below top.

165 ft. "B" Class: Same, Side of Chart House 2 ft. below top.

125 ft. Class: Same, Side of Chart House 2 ft. below top.

83 ft. Cutters: Same, On Bridge Wings center below top on Machine Gun Bulge 6 in. below top

(v) INDIVIDUAL SHIP EMBLEMS

Individual ship emblems shall not be painted on, nor affixed to, the exterior structure of ships; however, the display of an emblem which is in keeping with the dignity of the service at the quarterdeck or gangway is authorized. The following rules apply:

- a. Extreme cartoon portrayals are not acceptable.
- b. Heraldic designs shall follow the rules of heraldry. In such design, symbolism of a nautical or naval nature shall be accented.
- c. To ensure good visibility characteristics, the design should be single as opposed to cluttered, and emphasis should be placed on good color contrast.
- d. Identifiable naval vessels and aircraft shall not be used.
- e. Commercial, professional, industrial or copyrighted insignia shall not be used.
- f. Mottos and unit name or designation may be included in the design. Nicknames shall not be used.
- g. Badges of qualification, decorations, medals, campaign ribbons, national or state insignia, cap devices or other military devices shall not be used.
- h. Individual ship emblems shall fit entirely within a circle of fifteen inches diameter.

However, the design may be square, triangular or of any desired shape within this dimension.

i. Requests for approval of individual ship emblems shall be submitted to the District Commander together with a replica of the design in full color.

SECTION 3-12, COLORS FOR VESSELS LESS THAN 65 FEET IN LENGTH

The following paragraphs describe the color scheme to be employed in vessels less than 65 ft. in length and on barges of any length. These instructions do not apply to harbor tugs which are covered by Section 3-11. Due to the great variety of small boat types it is impractical to write painting instructions for every item. When situations arise which are not specifically provided for by the following instructions the general color scheme shall be followed.

3-12-1, EXTERIOR COLORS FOR VESSELS LESS THAN 65 FEET IN LENGTH

FIGURE F [click here to access].

FIGURE G [click here to access].

(A) HULL

Vessels of this class (shipboard boats, motor lifeboats, motor cargo boats, picket boats, utility boats, etc.) with the below exceptions shall have white hulls above the boot-topping -area.

On steel, iron or plastic vessels the boot-topping area shall be defined as follows: the bottom edge of the boot-topping shall coincide with the light load waterline of the vessel. The top edge of the boot-topping shall, at amidships, be above the full load waterline a distance equal to 1/4 the free board measured to the full load waterline. At the bow the height of the top edge of the boot-topping above the full load waterline shall be equal to twice that amidships. At the stern the height of the top edge of the boot-topping above the full load waterline shall be equal to that amidships. All measurements are to be taken in a vertical plane and projected on to the hull.

Where rubbing rails or spray rails located along the quarter of the vessel interfere with or lie close to the top edge of the boot-topping, the height of the boot-topping shall be adjusted the minimum amount to be either completely above or completely below the rubbing or spray rails and shall normally be parallel to these rails. In all cases the top edge of the boot-topping shall be a fair and optically pleasing curve from stem to stern.

No change in the top edge of the boot-topping is contemplated for 40-ft. Utility Boats previously painted in accordance with Painting Instruction Memorandum 2-52.

On wooden vessels the bottom edge of the boot-topping shall coincide with the full load waterline of the vessel. The upper edge of the boot-topping shall be identical with that for steel, iron and plastic vessels. Where metal sheathing is installed in way of the boot-topping area the instructions for steel vessels shall be followed. Exceptions to the above rule are as follows:

- (a) Barges, Buoy Boats, Fireboats and LCMs shall have black hulls above the upper edge of the antifouling paint. The upper edge of the antifouling paint shall coincide with the full load waterline.
- (b) Flood Relief Punts shall have No. 18 International Orange hulls, including the underwater area.
- (c) DUKWs shall have white hulls including the underwater area except that wheels and wheel wells shall be black.

(B) SUPERSTRUCTURE

Cabins, pilot houses, engine trunks extending appreciably above the sheer line, hatches and other superstructure shaft be painted white on the vertical surfaces. The horizontal surfaces shall be No. 32 Blue Gray if steel and No. 24 Spar if of wood or canvas, with the exception of utility boats which shall be No. 32 Blue Gray. Where there is no distinct demarcation between vertical and horizontal surfaces, such as in the canopies of gigs and the cabins of the 36" motor lifeboats the white color shall be used over the entire canopy or cabin. The entire superstructure of fireboats shall be No. 13 Fire Red.

(C) DECKS

Decks shall be No. 24 Spar with the exception of workboats such as buoy boats, motor cargo boats and utility boats which shall have No. 32 Blue Gray decks. LCMs, fire boats and barges shall have black decks.

(D) INSIDE OF OPEN HULLS, COCKPITS AND CARGO SPACES

The inside of open hulls and the cockpits and cargo spaces of decked hulls shall be white down to the side seats or risers, if any, or down to the cockpit deck, grating or floor boards if there be no side seats or risers. No. 24 Spar shall be applied below the white including seats, thwarts, inside of hull, cockpit decks, gratings, floorboards or open bilges. Engine trunks not extending appreciably above the sheer line shall be No. 24 Spar overall. This

color scheme shall apply to all boats except as noted below.

40-ft. Utility Boats shall have No. 32 Blue Gray cockpit decks.

LCMs, Barges and Buoy Boats shall have the entire interior of their cargo spaces black.

DUKWs and motor Cargo Boats shall have the entire interior of their cockpit and cargo space painted No. 24 Spar.

Flood Relief Punts shall have the entire interior, including hull, thwarts, floor boards, and bilges No. 18 International Orange.

(F) GUNS AND ORDNANCE EQUIPMENT

Guns, ordnance equipment and their foundations and mounts with the exception of working parts shall be painted black. Ready service lockers and pyrotechnic lockers shall be white. Pyrotechnic lockers shall in addition have the word PYROTECHNICS stenciled on the box in a conspicuous location using the largest practicable No. 13 Fire Red letters.

Detonator boxes shall be No. 13 Fire Red overall with the word DETONATORS stencilled in white on the box in a conspicuous location.

(G) RUNNING LIGHT SCREENS

Running light screens shall be painted a high gloss black enamel.

(H) MISCELLANEOUS DETAILS AND FITTINGS

In general miscellaneous metal fittings and equipment shall be painted white if attached or immediately adjacent to some part of the superstructure that is painted white and shall otherwise be painted No. 24 Spar. Wood fittings shall normally be varnished.

LCMs, fireboats and barges are exceptions to rule and shall have all miscellaneous objects painted black.

(I) ITEMS NOT TO BE PAINTED

In general paint shall not be applied to surfaces where it will cause interference with the functions for which the surfaces were designed nor shall it be applied to those surfaces which are traditionally kept bright. Refer to the accompanying typical items not to be painted and the method of treatment for each.

ITEMS NOT TO BE PAINTED

Anchor chains, galvanized--No coating Anchors, galvanized--No coating Boatswains' chairs--Oiled Brightwork--Polish and coat with clear plastic or lacquer Canvas covers (removable)--No coating Chain, galvanized--No coating Deck treads, non-skid--No coating Deck, wood--No coating Dogs--Grease moving parts Fire hose nozzles--Polish Gaskets, rubber for water-tight Doors--Pulverized graphite Glass--No coating Gratings, wood--Oiled Grease cups--No coating Gypsy head whelps--No coating Handrails and stanchions, cold drawn finished--Polish Hose--No coating Insulators--No coating

Knife edges on watertight doors and hatches--Sandpapered

Ladders, wood--Oiled

Leather coverings--Oiled with preservative

Masts and spars, wood--Varnish

Name plates--No coating, polish or lacquer, if brass

Oars--No coating

Oil cups--No coating

Oil holes--No coating

Railing, wood--Varnish

Release mechanisms--Greased

Rigging, running Chain, Gear and Wire Rope--Lubricating Grease

Rigging, standing--Thin Film Rust Preventive Grade I

Searchlight, shutters--No coating

Working or machined parts of valves, machinery, blocks, guns or other equipment-Greased

Zincs--No coating

(J) DAMAGE CONTROL AND SAFETY MARKINGS

Hose racks, spanner wrenches, fire-main valves, fire axes and similar fire fighting equipment shall be No. 13 Fire Red. Damage control equipment stored in lockers shall be identified by a suitable label painted on the locker door in No. 13 Fire Red. Covers of all sound power jack boxes and switch boxes shall also be No. 13 Fire Red.

Gasoline and other flammable liquid containers shall be painted No. 14 Brilliant Yellow with the name of the contents conspicuously indicated in large black letters.

Stumbling hazards such as deck padeyes, deck clips and other small projections from the deck shall be painted white for better night visibility.

In painting the above markings do not paint those surfaces listed in paragraph (I) above.

(K) COMPRESSED GAS CYLINDER IDENTIFICATION

The color schemes set forth in Section 3-18 shall be followed.

(L) MARKINGS ON FLOATABLE EQUIPMENT

Ring Type Life Buoys: the vessel's name, or if not named, the vessel's number, shall be placed on the top semicircle of the ring. On the bottom semicircle the legend U.S. COAST GUARD shall appear. Black letters 2 in. high shall be used.

Life Rafts: markings shall always be placed on the longer legs of the raft. The vessel's name or, if not named, the vessel's number, shall be placed on one leg and the legend U.S. COAST GUARD shall be placed on the other leg. The markings shall be so placed as to be readily seen and when read in the normal manner of reading the vessel's name or number shall be read first.

Lifejackets: the vessel's name or, if not named, the vessel's number shall be placed across the middle of the back of the life-jacket in letters 3/4 in. in height.

Wood articles: deck chests, boat boxes, oars or other wood articles which may be washed overboard shall have the vessel's name preceded by USCGC or designating number preceded by CG burned into the article in 1/2-in, letters so as to leave a clear impression. Burning pencils item No. 3201 Class 37 of the Catalog of Navy Material may be used for this purpose.

(M) IDENTIFICATION MARKINGS Boats 30 to 65 ft. In Length

(Excluding Tugs)- Boats 30 ft. and over and less than 65 ft. (excluding tugs) shall be identified by the legend U.S. COAST GUARD on each bow centered over the boat's official number including the prefix CG. In addition, the official number of the boat, including the prefix CG, shall be placed on the stern in letters of the same height as the numbers in the bow (double ended boats are not required to have the stern marking). Size and location of the letters shall be in accordance with the accompanying table and illustration.

FIGURE H. [click here to access].

All measurements are to be taken on the outer surface of the hull. Letters as shown in Section 3-22, Letters and Numerals, shall be used. Lettering shall be black on white hulls

and white on black hulls.

Where application of the above rules results in E being less than A, the location of the legend and designating number shall be adjusted so that A equals E and the remaining dimensions reduced proportionately to achieve a suitable appearance.

The legend and designating number may be adjusted both vertically and horizontally and letter size reduced as necessary to provide suitable clearance from all hull projections exceeding 1 in.

Boats Under 30 ft. In Length-

Boats less than 30 ft. in length (excluding barges, DUKWs, and ship's boats shall be identified by the legend U.S. COAST GUARD in 3-in, high letters. Lettering shall be black on white hulls and white on black hulls. Location of the lettering shall be as illustrated. If the lettering so located lies across a plank seam the lettering shall be raised or lowered as necessary so as to avoid the seam. All measurements shall be taken along the hull. For style of lettering, see Section 3-22, Letters and Numerals.

As an exception to the rule the below boats shall have their legend centered on their sheer plank and located so that the foremost part of the foremost character is 4 in. abaft the stern.

20-ft Dinghy 16-ft. Dinghy 19-ft. Dory 13-ft. Dinghy 10-ft. Dinghy

Barges-

Barges shall be identified in the same manner as boats 30 ft. to 65 ft. in length except that the prefix CGB shall be substituted for the prefix CG. Barges obtained from the Army or Navy on a loan basis shall retain their Navy or Army identification symbols unless otherwise directed by the Commandant. White letters shall be used on black hulls.

DUKWs

These amphibians are now classified as small boats and will be administered as such including identification markings and records.

Identification markings on DUKWS shall consist of the legend UNITED STATES COAST GUARD placed on each side in black letters. This legend shall be centered in the top panel which is outlined at the top and bottom respectively by the sheer half-round and chafing rail next below and shall extend fore and aft for a distance of approximately 24

feet.

The small boat number CG----- shall be centered directly on the next panel below in figures of the same size and style as the legend UNITED STATES COAST GUARD.

On the vertical surface at the stern the small boat number shall be applied to the two outboard panels on either side of the winch opening, reading from left to right across the stern. The figures shall be five inches high. Attach boat number plate in accordance with current "Operations Instructions". The marking USCG shall also be applied on the bow, one letter in each of the four panels, the size and style of letters being identical to those on the stern. For style of lettering see Section 3-22, letters and numerals

FIGURE I. [click here to access].

Boats Assigned To Named Vessels-

Identification markings on boats 20 ft. and over in length assigned to named vessels shall consist of an abbreviation of the name of the vessel to which the boat is assigned followed by a numeral.

The abbreviation of vessels' names to be used for identification markings shall, with the exception of those listed herewith, consist of the first three letters of the vessel's name. The first letter in the abbreviation shall be 6 in. high and the remaining two letters shall be 4 in. high. Following is a list of authorized abbreviations for vessels which do not fall under the general rule. Capital and lower case letters indicate 6-in, and 4-in. letters respectively.

The boat numbers which follow the abbreviations shall be 6 in. high and are determined by the location of the boat on the vessel. Starboard boats are assigned odd numbers starting forward and working aft. In cases where boats are stowed one above the other, the upper boat shall have the lower number. Numbers on the bows shall be omitted when only one boat is carried by a vessel.

Markings shall be located on both bows in accordance with the accompanying illustrations. All measurements shall be taken along the surface of the hull. The spacing between the letters and figures shall be such that they shall be legible at a reasonable distance and present a good appearance.

Letters and figures used for these markings shall be Navy standard stock beveled boat bow letters and beveled boat figures, both with a 1-in, bevel. Refer to Catalog of Navy Material, Class 12, Item Nos. 4341 to 4445 and 4661 to 4679.

When applying these markings to clinker built boats, the outside surface of the hull shall be built up to a smooth surface where necessary and the markings shall be parallel to the bottom edge of the plank on which they are secured instead of parallel to the bottom edge of the guard rail.

Identification markings on boats less than 20 ft. assigned to named vessels shall be the same as boats 20 ft. and over assigned to named vessels except that the markings shall be painted on both bows in 3-in, letters, all capitals. For style of lettering, see Section 3-22, Letters and Numerals.

ABBREVIATIONS FOR VESSEL IDENTIFICATION

Cutter Name:	Abbreviation:	Cutter Name:	Abbreviation:
ALERT	Alr	IRIS	Irs
APALACHEE	Apr	IRONWOOD	Irw
BERING STRAIT	B St	IROQUOIS	Irq
BLACKHAW	Blr	MACKINAW	Maw
BLACKROCK	Blr	OJIBWA	Ojb
BLACKTHORN	Blt	PAPAW	Paw
BLUEBELL	Blb	PLANETREE	Plt
CARTIGAN	Ctn	PRIMROSE	Prm
CASTLE ROCK	C Ro	ROCKAWAY	Rok
CLEMATIS	Clm	SEDGE	Seg
CHERRY	Chr	SWEETBRIER	Swb
CHILULA	Chl	SWEETGUM	Swg
CHINOOK	Chn	TAMPA	Tpa
COLUMBINE	Clb	VERBENA	Veb
COOK INLET	C In	WHITE ALDER	W Al
COOS BAY	C Ba	WHITE BUSH	W Bu
EVERGREEN	Evr	WHITE HEATHER	W He
EWING	Ewn	WHITE HOLLY	W Ho
FERN	Frn	WHITE LUPINE	W Lu
FIREBUSH	Fbu	WHITE PINE	W Pi
FORSYTHIA	Frs	WHITE SAGE	W Sa

FREDERICK LEE	F Le	WHITE SUMAC	W Su
GENERAL GREENE	G Gr	WINNEBAGO	Wib
GOLDENROD	Gld	WOODBINE	Wib
HALF MOON	Н Мо	WOODBRUSH	Wor
HICKORY	Hik		

Boats Assigned To Numbered Floating Units-

Boats assigned to numbered floating units including lightships and barges shall be identified by placing the designating number of the unit, such as CG 63005, on both bows in black 3-in, block letters. For style of lettering, see Section 3-22, Letters and Numerals.

FIGURE J. [click here to access].

Special Purpose Identification-

In addition to the identification markings above, the following types of vessels (and boats carried by those vessels) which are used for special purposes shall have additional markings as follows:

Fireboats and Firefighting Barges: a dash and the designator F shall follow the last digit of the boat or barge number. As an example, CG 40341-F.

Buoy Boats (WDs) a dash and the designator D shall follow the last digit of the boat number. As an example, CG 80004-D.

Boats attached to Mobile Boarding Teams-

Boats assigned to mobile boarding units (usually 16 foot plastic out-board motorboats). Shall be identified by placing the words "U.S. COAST GUARD" centered on both sides of the hull in black 8-inch block letters. For style of lettering, see Section 3-22, Letters and Numerals.

SECTION 3-15, AIRCRAFT COLORS

Coast Guard aircraft shall be painted in accordance with the current edition of the references listed below, and instructions in paragraphs 3-15-1 through 3-15-3. Additional references are contained in the general specifications listed under paragraph 2-6.

- (a) MIL-I-6142, "Identification of Escape Hatches; Design Requirements for"
- (b) ANA Bulletin No. 157, "Colors; List of Standard Aircraft Camouflage"
- (c) ANA Bulletin No. 166, "Colors; List of Standard Aircraft Glossy"
- (d) Federal Standard No. 595, "Colors"

3-15-1, GENERAL EXTERIOR PAINTING

The exterior finish of Coast Guard aircraft shall be as follows:

(A) FIXED WING

Landplanes-

Landplanes are to be aluminum-colored, usually with solar heat reflecting white (ANA 511, FS17875) over the cabin. The white top shall be edged with a two-inch jet black (ANA 622, FS17038) band. The aluminum-colored areas are bare aluminum except that when the aluminum surface indicates signs of minor corrosion, aluminum pigmented finish shall be applied.

Seaplanes-

Seaplanes shall have aluminum pigmented finish, with solar heat reflecting white over the cabin.

Amphibians-

Amphibians shall have a glossy white (ANA 511, FS17875) finish over all.

(B) ROTARY WING

Rotary wing aircraft shall be given a finish of glossy orange yellow (ANA 506, FS13538). Rotor heads shall be aluminum-colored. Rotor blades shall be finished on top in light gull gray (ANA 620 FS36440) and on bottom in non-specular black (ANA 604, FS37038). The tips of the blades shall be painted low gloss orange yellow (ANA 614 FS33538) with a band of identifying color if necessary, in accordance with paragraph 8.18.1 of Specification MIL-I-18464.

3-15-2, GENERAL EXTERIOR MARKING

Exterior markings of aircraft shall conform to Specification MIL-I-18464, except as modified by this publication and by pertinent Coast Guard Airplane and Helicopter Bulletins.

(A) FIXED WING AIRCRAFT

- (1) The National Insignia shall be applied to the topside of the left wing, to the under side of the right wing and on both sides of the fuselage in a conspicuous place. The sizes, orientation, colors and design of the insignia shall be in accordance with Specification MIL-I-6140.
- (2) The letters USCG shall be applied in jet black (ANA 622, FS17038) on the top side of the right wing and the under side of the left wing. The lettering shall read from inboard toward the wing tip. The height of the letters should be about one-third of the mean aerodynamic chord of the wing, and the letter style and spacing should follow MIL-1-18464.
- (3) U.S. COAST GUARD shall be applied in jet black (ANA 622, FS17038) on both sides of the fuselage or hull. The height of the letters shall be approximately one inch for each foot of fuselage depth in the vicinity of the letters. The letter style and spacing shall follow MIL-I-1 8464.
- (4) The Coast Guard insignia shall be applied to each side of the fuselage or hull. Decalcomanias for this purpose may be obtained by requisition from the Aircraft Repair and Supply Base, Elizabeth City, N.C. The stock number for the 15-inch size is 7690-L00-0003-ARSB, and for the 23-inch size is 7690-L00-0004-ARSB.
- (5) The Coast Guard airplane model designation and serial number shall be applied in four or six-inch high jet black (ANA 622, FS17038) letters at the after end of the fuselage.
- (6) The last four digits of the airplane serial number shall be applied in black numbers in a white box on both sides of the nose of the airplane. The size and style of the numerals shall be the same as those of the words U.S. COAST GUARD on the side of the fuselage.
- (7) The wing tips, above and below shall be painted fluorescent red orange No. 633, extending inboard to the inboard tip of the ailerons. A six-inch wide jet black (ANA 622, FS17038) trim band shall be applied to finish the inboard edge. Deicer boots and heated wing areas shall not be painted.
- (8) The vertical and horizontal tail surfaces shall be painted fluorescent red orange No. 633. The vertical tail surfaces shall have an insignia white (ANA 511, FS17875) band

about 30 inches wide located about halfway up. The white band shall be edged above and below with six-inch wide jet black (ANA 622, FS17038) lines. In the center of the white band, in jet black (ANA 622, FS 17038) letters six inches high, shall appear the name of the Coast Guard unit to which the airplane is assigned. Deicer boots or hot leading edges shall not be painted.

- (9) The front of the fuselage shall be painted fluorescent red orange No. 633. The color terminates aft in a vee, apex forward, legs touching the propeller plane warning stripe. The vee has six-inch jet black (ANA 622, FS17038) border. The apex angle should be 60 degrees to 65 degrees.
- (10) Walkways shall be painted with the appropriate color, type and class of MIL-W-5044. Exhaust areas shall be painted with the appropriate color of MIL-E-7729 or MIL-E-5557. Rescue arrows, propeller warning stripes and other miscellaneous markings shall be in accordance with MIL-L-18464.

(B) ROTARY WING AIRCRAFT

- (1) The National Insignia shall be applied to both sides of the fuselage. The size, colors and design of the insignia shall be in accordance with Specification MIL-I-6140.
- (2) The letters USCG shall be applied in large jet black letters (ANA 622, FS17038) to the underside of the fuselage. The top of the letters shall be to the port side. Style and spacing of the letters shall follow MIL-I- 18464.
- (3) The words U.S. COAST GUARD shall appear in large jet black letters (ANA 622, FS17038) on both sides of the fuselage or tail cone.
- (4) The Coast Guard insignia shall be applied on both sides of the fuselage. (See 3-15-2 (A) (4) above for decalcomania ordering information.)
- (5) The Coast Guard helicopter model designation and serial number shall be applied in jet black letters (ANA 622, FS17038) 2 inches or 4 inches high, on each side of the tail cone.
- (6) The last four digits of the helicopter serial number, and the words COAST GUARD shall appear on the nose of the helicopter in jet black letters (ANA 622, FS17038) 8 inches or 12 inches high, when practicable.
- (7) The helicopter tail cone in the vicinity of the tail rotors shall have an arrow and the words DANGER--KEEP AWAY, in general accordance with Figure 3 of MIL-L-18464, except that arrow and letters shall be bright red (ANA 619, FS31136).

(8) The tail rotor shall be striped in red and white, in accordance with paragraph 8.18.2 of Specification MIL-I-18464.

(C) SEARCH AND RESCUE MARKING

Fixed wing aircraft having search and rescue functions shall be marked by a wide band of fluorescent red orange No. 633 around the after part of the fuselage or hull. Time center of the band shall be at 66 or 70 of the length of the body from the nose, and its width shall be 8 or 9% of the length of the body. The forward and aft edges M the band shall be trimmed by a six-inch wide stripe of jet black (ANA 622, FS17068).

3-15-3, EQUIPMENT

(A) CRASH HELMETS

All Coast Guard crash helmets shall be furnished with reflective tape in accordance with Navy BUWEPS Aviation Clothing and Survival Equipment Bulletin No. 1-60 or supersedures.

(B) ELECTRIC FLOAT LIGHTS: MESSAGE BLOCKS

Float lights and message blocks shall be painted fluorescent red orange, No. 633.

FIGURE K: Grumman UF-2-G Coloring & Markings [click here to access].

FIGURE L: Douglas RFD-3 Coloring & Markings [click here to access].

FIGURE M: Lockheed SC-130B Coloring & Markings [click here to access].

FIGURE N: Martin RM-1Z Coloring & Markings [click here to access].

FIGURE O: Fairchild C-123B Coloring & Markings [click here to access].

FIGURE P: Sikorsky HO4S-3G Coloring & Markings [click here to access].

FIGURE Q: Coast Guard Paint Chips [click here to access].

[Historians' Office]

[USCG Home Page]

Added: November 2003