

# **COAST GUARD**

## PAINT AND COLOR MANUAL



**CG-263 (Revised Edition)** 

1 October 1965

[Excerpts relating to the painting of cutters, craft, and aircraft from the 1965 *Paint and Color Manual*]:

### SECTION 3-13, 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 3-14-1. 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. Check against detail specification for vessel class. Article 3-13-1 (L) lists those items which are not to be

painted.

### 3-13-1, EXTERIOR COLORS FOR VESSELS 65 FEET AND OVER IN LENGTH

#### (A) HULL

Ship hulls below the boot-topping area shall be painted with the prescribed antifouling paint. See Article 2-3-2.

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 1/8 the freeboard measured to the full load waterline. For vessels less than 150 ft. in length this distance shall equal 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.

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.

Class of Vessel Boot-topping Area Above Boot-topping

WAG: Black, White

WAGB: Black, White

WAVP: Black, White

WAGO: Black, White

WIX: Black, White

WPC: Black, White

WPG: Black, White

WSC: Black, White

WPB: Black, White

WAK: Red, Black

WLB: Red, Black

WLM: Red, Black

WLI: Red, Black

WLIC: Red, Black

WLR: Red, Black

WAT: Black, White

WYTL: Red, Black

WLV (Except Black, Red LAKE HURON): Red, Black

WTR: Black, White

WATF: Black, White

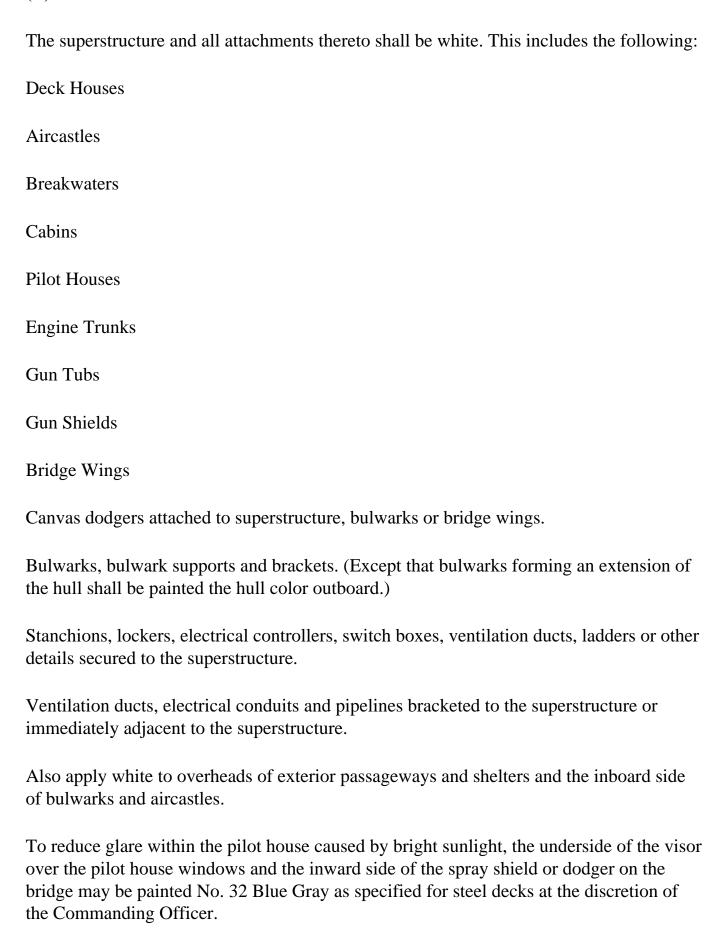
WYTM: Red, Black

WATA: Black, White

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 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:

FIGURE #1 [click here to access].

#### (B) SUPERSTRUCTURE



### FIGURE #2 (Bibb Class cutter illustration) [click here to access].

### **FIGURE #3 (210 Ft. Cutter illustration)** [click here to access].

#### (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 4-in. dado of No. 32 Blue Gray may be applied to the vertical surfaces. Dadoes shall not be applied to miscellaneous deck fittings such as bitts, chocks, pedestals, stanchions, etc.

Waterways shall be painted No. 32 Blue Gray.

Decks on which zinc silicate is applied can remain their normal gray color in the work area.

Buoy port deck area should be painted No. 14 Brilliant Yellow from the bulwark back 2 ft. Black stripes on the yellow will help to identify this hazardous area.

# (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.

### (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 1/5 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.

## (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.

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 a 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.

FIGURE #4 (180-Ft. Class C buoy tender illustration) [click here to access].

### (H) DECK MACHINERY

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

# (I) ORDNANCE EQUIPMENT

Gun and director foundations, with the exception of working parts and nameplates, shall be painted black. This includes 5-in, gun barrels and interior of hedgehog projectors. 50 cal. foundations shall be painted white.

Interior gun mount shields such as 5/38s shall be painted white. Exterior of gun shields, of hedgehog projectors, ready service boxes, and pyrotechnic lockers shall be painted white. In addition, pyrotechnic lockers shall have the word "PYROTECHNIC" stenciled on the box in a conspicuous location, using the largest practical No. 13 Fire Red letters.

81-mm guns and mounts shall be painted with No. 30 Equipment Gray. Fire Control equipment including gun directors shall be painted with No. 30 Equipment Gray.

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

Torpedo tubes shall be maintained in the delivered preservation color in accordance with NAVWEPS OP 2411.

Note: Gun deck and associated ordnance equipment shall be No. 30 Equipment Gray.

# (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

For Coast Guard Color Standards See Charts I and II

Anchors stowed in the hawse: Hull color

Anchors stowed against superstructure: White

Anchors stowed on deck: Spar

Antenna Hardware, Radio Receiving (except insulators): No. 29 Bright Blue

Antenna Hardware, Radio Transmitting (except insulators): No. 13 Fire Red

Awning Ridgepoles: White

Awning Stanchions: White

Bitts, side, mounted on gunwales of harbor tugs: Black

Bitts, side, mounted on gunwales of seagoing tugs: No. 24 Spar

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

Blocks, cargo handling, as per safety code: No. 14 Brilliant Yellow

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

Fire Pump Portable Covers: No. 13 Fire Red

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

Flag Lockers: White

Flag Staffs: No. 24 Spar

Gangplanks, metal (except aluminum): 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 Buoys and Life Floats: No. 18 International Orange

Life Rings: Fluorescent Orange

Pelorus Pedestals: White

Pilot House, visor, underside (optional with Commanding Officer): No. 32 Blue Gray

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

Spray shield (Inboard) on bridge (optional with Commanding Officer): No. 32 Blue Gray

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 the superstructure): No. 24 Spar

Ventilators attached or immediately adjacent to the superstructure: White

# (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 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

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 Gangplanks, aluminum, No coating Gaskets, inflatable, cargo hatches, Silicone oil 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, Clean with aluminum oxide abrasive cloth, grit #320 Ladders, pilot Oiled Leather coverings, Oiled with preservative (Neats Foot Oil) Masts and spars, wood Varnish Name plates, No coating, polish if brass Oars, No coating Oil cups, 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

Towing rail (corrosion resistant material), No coating

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 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, or practicable, 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.

### (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.

FIGURE #5 (various deck & anchor chain detail illustrations) [click here to access].

### (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 accompanying tabulation.

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 % the width of the ribbon, and the stars shall be painted on the replicas with the point down.

#### PAINTED REPLICAS OF CAMPAIGN RIBBONS

Type Vessel Insignia Size Location

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

WIND Class: Same, Forward of Life Buoy on Bridge Bulwark 12 in. below top.

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

CACTUS Class: Same, Same

IRONWOOD Class: Same, Same

IRIS Class: Same, Same

NAUGATUCK Class: 3 1/4 in. wide x 12 in. long Centered on Superstructure Bulwark between Bridge and Break, frame 20-23, 6 in. below top.

# (R) IDENTIFICATION MARKINGS ON HULL

#### Named Vessels-

Named vessels, other than lightships, shall have their hull numbers on each side of bow. 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 1/4 C, 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 100 ft. and over, 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. Named vessels under 100 ft. shall use 9-in, letters across the stern, and their designated number on each bow. 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 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 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.

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

**FIGURE** #6 [click here to access illustration; also note table directly below].

Vessel Length Overall				
65 ft. and over up to 100 ft.	A	В	C	D
100 ft. and over up to 150	5 ft.	1 ft.	2 ft.	*
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	12 ft.	2 ft 6 in.	5 ft.	*
ft.	22 ft.	2 ft 6 in.	5 ft.	*
210 ft. class	18 ft.	3 ft.	6 ft.	*
300 ft. and over	34 ft.	4 ft.	6 ft.	*
378 ft. class				

# \*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.

#### **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 40004-D. The size and location of numerals shall be in accordance with the rules stated for hull 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.

**FIGURE #7** [click here to access illustration; also note table directly below].

Vessel	A	В	C
165 ft Cutter	6 ft.	1 ft.	2 ft.
210 ft. Cutter	15 ft 6 in.	2 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.
378 ft. Cutter	13 ft.	2 ft.	3 ft.
WAVPs	33 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.

# **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.

# (5) AERIAL IDENTIFICATION

All radio equipped vessels over 82 ft. in length and buoy tenders over 100 ft. in length shall have their international radio call letters in No. 18 International Orange (Federal Color 12197) 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. Radio equipped boats and ships that do not have an international radio call sign shall have their designating numerals in this same relative position as far as practicable. The lettering shall be placed athwartships with the top 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 1/2 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) 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 simple 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. Mottoes 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 3-14, 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 3-13. 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, reference should be made to design specification and the general color scheme.

#### 3-14-1, EXTERIOR COLORS FOR VESSELS LESS THAN 65 FEET IN LENGTH

**FIGURE #8** (color illustrations of a 45-foot Motor Buoy Boat, a 44-foot Motor Life Boat, & a 40-foot Utility Boat) [click here to access].

FIGURE #9 (color illustrations of a 30-foot Utility Boat, a 25-foot 8-inch Motor Surf Boat, & a 19-foot Ticwan) [click here to access].

FIGURE #10 (color illustrations of a 16-foot Outboard Motorboat, a 24-foot Motor Cargo Ramp Boat, & a LARC) [Click here to access].

#### (A) HULL

Vessels of this class (motor lifeboats, utility boats, etc.) with the below exceptions shall have white hulls above the boot-topping area. For the painting of hulls below the boot-topping area refer to Article 2-3-2(E) and (F).

On steel 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 freeboard 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.

New construction boats may require some variation or exception to the above noted criteria. However, in all cases the top edge of the boot-topping shall be a fair and optically pleasing curve from stem to stern.

On wooden boats 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 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 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) LARCs shall have white hulls including the underwater area except that wheels and wheel wells shall be black.
- (d) TICWAN boats shall have black hulls including underwater area.
- (e) Hulls of shipboard boats, motor cargo boats and selected plastic boats shall be white including underwater area.

### (B) SUPERSTRUCTURE

Cabins, pilot houses, engine trunks extending appreciably above the sheer line, hatches and other superstructure shall 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, plastic or canvas. Utility boats shall be No. 24 Spar. Where there is no distinct demarcation between vertical and horizontal surfaces, such as in the canopies of gigs and the cabins of the 36 ft. motor lifeboat, the white color shall be used over the entire canopy or cabin.

# (C) DECKS

Decks shall be No. 24 Spar with exception of 44 ft. cargo boats and steel utility boats

which shall have No. 32 Blue Gray decks. LCMs 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, floor boards 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. Exception: work barge storerooms shall have a white overhead and bulkheads. A gray dado may be used. See Article 2-3-13, Spaces Subject to Heavy Sweating.

LARCs 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.

# (E) HULLS OF SHIPBOARD BOATS

Hulls of shipboard boats, motor cargo boats and selected plastic boats shall have white hulls, including underwater area.

# (F) GUNS AND ORDNANCE EQUIPMENT

For details see 3-13-1(I).

# (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 and barges are exceptions to the 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. Also see 3-13-1(L).

#### 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, Clean with aluminum oxide abrasive cloth, grit #320.

Ladders, wood, Oiled

Leather coverings, Oiled with preservative

Masts and spars, wood, Varnish, spar

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

Oars, No coating

Oil cups, No coating

Oil holes, No coating

Railing, wood, Varnish, spar

Release mechanisms, Greased

Rigging, Running Chain, Gear and Wire Rope, Lubricating Grease

Rigging, standing, Thin Film Rust Preventive Grade 1

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 or practicable, 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 or practicable, 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.

### (M) IDENTIFICATION MARKINGS

Boats 30 to 65 ft. In Length (Excluding Tugs)-

Figure K [click here to access].

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. 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.

### **FIGURE** #11 [click here to access] (and note table listed directly below).

Overall Length	A	В	C	D	E
30 ft. and over to 40 ft.	4 in.	2 in.	6 in.	18 in.	*
40 ft. and over to 50 ft.	6 in.	3 in.	9 in.	24 in.	*
54 ft. and over to 65 ft.	8 in.	4 in.	12 in.	30 in.	*

# \*E must be equal to or greater than A.

A = Distance from lower edge of rubbing rail, gunwale, or sheer line to top edge of legend.

B = Height of legend.

C = Height of designating number.

D = Distance from foremost edge of foremost number to stem along the outer surface of the hull.

E = Least distance between lower edge of designating number and top edge of boottopping or waterline if there be no boot-topping.

#### Boats Under 30 ft. In Length-

Boats under 30 ft. in length (excluding barges, LARCs, ship's boats and mobile boarding unit boats) shall be identified by the legend U.S. COAST GUARD in 3-in, high letters. Also see 3-12-1(E). Lettering shall be black on white hulls and white on black hulls. 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 boats below 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 stem.

20-ft. Dinghy

19-ft. Dory

16-ft. Dinghy

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.

#### LARCs-

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

Identification markings on LARCs shall consist of the legend U. S. COAST GUARD placed on each side in 6-in, black letters. This legend shall be centered on the after side panel and located 6 in. below the rub rail.

The small boat number CG-\*\*\*\* shall be placed on the bow in 6-in, numerals. These

numerals shall be located 24 in. forward of front wheel axle and 6 in. below the rub rail. The small boat number shall be placed on the vertical stern surface in 6-in, numerals. These numerals shall be centered on the stern panel and located 6 in. below the rub rail. For style of lettering and numerals, see Section 3-22.

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. All letters in the abbreviation shall be 6 in. high. Following is a list of authorized abbreviations for vessels which do not fall under the general rule.

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.

Except for plastic boats, the letters and numbers used for these markings shall be of corrosion resistant material and conform in style as nearly as possible to Section 3-22.

Printed or vinyl decal markings shall be used for plastic boats. 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.

FIGURE #12 [click here to access] (and note table listed directly below):

Cutter Name: Abbreviation: Cutter Name: Abbreviation:

APALACHEE APR IRIS IRS

BERING STRAIT	BST	IRONWOOD	IRW
BLACKHAW	BLH	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
CHILULA	CHL	SWEETBRIAR	<b>SWB</b>
CHINOOK	CHN	SWEETGUM	SWG
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
GENERAL GREENE	G GR	WHITE SUMAC	W SU
GOLDENROD	GLD	WINNEBAGO	WIB
HALF MOON	н мо	WOODBINE	WOB
HICKORY	HIK	WOODBRUSH	WOR

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.

Boats Assigned to Numbered Floating Units-

Boats assigned to numbered floating units including lightships and barges shall be identified by placing in 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.

Boats Attached to Mobile Boarding Teams-

Boats assigned to mobile boarding units (usually 16 ft. 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 3-2- 2, Letters and Numerals.

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:

Buoy Boats (BUs): a dash and the designator D shall follow the last digit of the boat number. As an example, CG 45301-D.

Boats Attached to Shore Stations-

Boats attached to Shore Stations up to and including 18 ft. in length, excluding those used exclusively as work boats, shall be identified by placing the words U S. COAST GUARD centered on both sides of the hull in black B in. block letters. The name of the station shall be placed on each side of the bow in 3 in. high letters. For style of lettering see Section 3-22, Letters and Numerals.

Reserve Small Craft-

Marking regulations as set forth in Section 3-12-1(M) (above) shall apply to U.S. Coast Guard Reserve Small Craft with the following exceptions:

- (a) Small boats between 20 and 56 feet in length shall be so regulated.
- (b) The accompanying table and illustration will regulate the size and placement of hull markings.
- (c) In all cases, the Reserve Small Craft's official number shall have the suffix RT appended, and its size and placement shall parallel that of the prefix CG as indicated on the accompanying table.

#### **FIGURE** #13 [click to access] (and note table listed directly below):

Overall Length	A	В	C	D	E	F	G
20 ft. and over to less than 30 ft.	2 in.	2 in.	4 in.	2 in.	12 in.	2 in.	*
30 ft. and over to less than 40 ft.	4 in.	2 in.	6 in.	4 in.	18 in.	4 in.	*
40 ft. and over to 56 ft. inclusive	4 in.	3 in.	9 in.	6 in.	24 in.	4 in.	*

\*G Distance must be greater than that designated for A. Where this provision cannot be met, Section 3-12-1(M) shall be consulted for directions. Character style and spacings shall be in accordance with Section 3-22 of the *Manual*.

A = Distance from lower edge of rubbing rail, gunwale, or sheer line to top of legend.

B = Height of legend: U.S. COAST GUARD.

C = Height of legend: RESERVE TRAINING

D = Height of designating number: CG (Assigned Number) RT.

E = Distance from foremost edge of foremost character to stem along the outer surface of the hull.

F = Distance between legends.

G= Least distance between lower edge of designating number and top edge of boottopping or waterline in the absence of boot-topping.

# **SECTION 3-15, AIRCRAFT COLORS**

### 3-15-1, GENERAL REMARKS

Applicable airplane and helicopter bulletins should be referred to for specific painting and marking information. This will assure accurate and up-to-date information concerning aircraft painting. The bulletins are subject to frequent and periodic revisions in order to

keep abreast of the latest aircraft finishes, processes and procedures. They can be requisitioned from Commandant (CHS) in accordance with CG-236, *DIRECTIVES*, *PUBLICATIONS*, *AND REPORTS INDEX*.

Illustrations on following pages show markings of four typical Coast Guard aircraft. Bear in mind that designs and markings may change.

FIGURE #14 (color illustrations of a Grumman VC-4A & a Lockheed HC-130B) [click here to access].

FIGURE #15 (color illustrations of a Grumman HU-16E & a Sikorsky HH-52A) [click here to access].

# [Historians' Office]

[USCG Home Page]

Added: November 2003