

Post WWII USN exterior Weather Decks were normally flat steel, painted dark gray, with much darker defined walkways, typically 36" wide, coated with a non-skid material. Colors include Dark Gray Deck type A, FORMULA NO. 20, and FS26008, which all seem fairly close to each other.

Since the 70's, non-skid coatings have been supplied in Dark Gray FS36076, and Black, among other colors.

In the 80's, main decks started being fully covered with non-skid. With most upper superstructure decks being fully covered by the end of the 90's. My observations indicate that FS36076 paint was/is commonly used around the edges of non-skid up to the deck edges and superstructure and also sometimes to 'freshen up' worn non-skid areas. I've also seen darker edging, which could have been FS26008.

In the 2010's Dark (black?) non-skid rectangles started appearing on upper superstructure decks. These look rolled or sprayed on and are approx. 4' x 3' (48"x 36") with an inch or two between each one. They can also be seen in a variety of shapes and sizes when they are put down around deck fittings and odd deck edges.

I have also observed that deep troweled non-skid FS36076 appears quite a different shade than when FS36076 is painted on a flat surface, even though it is the same color. Fading seems to happen quite quickly.

Reference Pics are at the end.

Manufacturers are responsible for meeting USN specs and getting their coating systems approved. A non-skid coating system has to have a primer and a non-skid topcoat. It could have other layers and color topping coatings.

Documents that reference deck colors,

NAVSHIPS 250-374 Ship Concealment Camouflage Instructions 1953

MEASURE US 27

- (1) Apply No. 27 Haze Gray (5-H) (Stock No. G52-P-961) to all external surfaces of the ship above the boot-topping.
- (2) Apply smooth Dark Gray Deck type A (Stock No. G52-P-1406-50) or non-skid Dark Gray Deck type B (Stock No. G52-P-1408-50) to steel decks and all other horizontal steel surfaces exposed to aerial observation.
- (3) Apply Glossy White (Stock No. G52-P-5305) or Base White (Stock No. G52-P-5335) to all overheads and to the undersides of all other external horizontal surfaces.

MIL-P-699B DECK, GRAY (FORMULA NO. 20) 1962 (I do not have a copy)

MIL-E-699C EXTERIOR, DECK, GRAY (FORMULA NO. 20) 1967 (regular deck paint) and FED-STD-141.

Section 6.2 states that Color Cards were issued by Norfolk Naval Shipyard and that, *"for other than actual color matching purposes, color 26081 of FED-STD-595 may be used for a rough approximation."*

MIL-D-24483A(SHIPS) DECK COVERING, SPRAY-ON, NONSLIP 1974

Lightweight deck covering for metal or wood decks.

Consisting of a Primer and a nonslip Topcoat.

Available in Type I – General purpose, or Type II – Aircraft carrier landing area.

Section 3.20 Color. Topcoats shall be available in yellow(FS33538), red(FS31136), olive drab(FS24087), haze gray(FS36270) or dark gray(FS36076), or dull black or white.

DOD-E-699D ENAMEL, EXTERIOR, DECK, GRAY (FORMULA NO. 20) 1978 (regular deck paint)

Section 3.7.5 The Color shall match color No. 26008 of FED-STD-595 when tested as specified.

MIL-D-23003A(SH) DECK COVERING COMPOUND, NONSLIP, ROLLABLE 1980

Lightweight deck covering for metal decks.

Consisting of a Primer and a nonslip Topcoat.

Available in,

Type III – General purpose exterior

Type IV – Aircraft carrier landing and run-out area.

Type V - General purpose interior or exterior (High flash point)

Section 3.19 Color. Topcoats shall be available in yellow(FS33538), red(FS31136), olive drab(FS24087), haze gray(FS36270) or dark gray(FS36076), black(FS37038) and white(FS37875)

DOD-C-24667(NAVY) COATING SYSTEM, NONSKID, FOR ROLL OR SPRAY APPLICATION 1986

1.1 This specification covers nonskid, coating systems for application to weather decks, flight decks, and hangar decks of air capable amphibious aviation and aviation ships. Coatings are applied by spraying, rolling, or troweling.

3.3.4 Color. The coating shall be supplied in haze gray, color 36270 from FED-STD-595.

6.1 Intended use. The coatings covered by this specification are intended for use on the flight and hangar decks of aircraft carriers and on the landing decks of air-capable amphibious aviation and aviation ships.

(NOTE I've only seen one example of Haze gray on a carrier, USS Intrepid 1968)

MIL-P-24441-11A, FS36270 - EXTERIOR TOPCOAT, HAZE GRAY 1986

COMSCINST 4750.2C PRESERVATION INSTRUCTIONS FOR MSC SHIPS 1989

6.6 Decks, general

c. All decks and horizontal surfaces visible to surface or air detection shall be Dark Gray (MSC #35 or Fed Std Color #26081). Those horizontal surfaces not visible to surface or air detection can be White (MSC #33 or Fed Std Color #27886) when this will increase the general light levels; otherwise, these surfaces are to be painted the same as surrounding bulkheads or supporting structures.

6.7 Decks, helo and hangar

a. All helo, VERTREP, and hangar decks certified by the Naval Air Engineering Center (NAEC) shall only be coated with a Class I Grade B rollable epoxy non-skid approved per QPL DOD-C-24667

6.8 Decks, non-skid

a. The following deck areas shall be coated with a commercial non-skid coating: focs'l and poop deck work zones around windlasses, capstans, and line-handling areas; lifeboat stations; UNREP and FAS stations; and non-certified helo or VERTREP decks. Additionally, a 6-foot wide non-skid "walkway" shall be established on tanker and fleet oiler decks that are exposed to seaways.

(NOTE: Non-skid color is not given, however, since it is not supplied in FS26081, it is assumed that FS36076 is used)

MIL-PRF-24667A(NAVY) COATING SYSTEM, NONSKID, FOR ROLL OR SPRAY APPLICATION 1992

3.7 Color. The non-skid topcoats and color toppings shall be supplied in the following colors from FED-STD-595.

red(FS31136), yellow(FS33538), olive drab(FS34088), dark gray(FS36076), haze gray(FS36270) ocean gray(FS36173), black(FS37038), green(FS14062) and white(FS37875).

6.1 Intended use. The coatings covered by this specification are intended for use on general (walking) deck areas, the flight and hangar decks of aircraft carriers, and on the landing decks of air-capable amphibious aviation and aviation ships.

MIL-PRF-24667B(SH) COATING SYSTEM, NONSKID, FOR ROLL OR SPRAY APPLICATION 2005 (Includes Trowelled)

3.14 Color. The non-skid topcoats and color toppings shall be supplied in the following colors from FED-STD-595.

red(FS31136), yellow(FS33538), olive drab(FS34088), dark gray(FS36076), haze gray(FS36270) ocean gray(FS36173), black(FS37038), green(FS14062) and white(FS37875).

6.1 Intended use. The coatings covered by this specification are intended for use on general (walking) deck areas, the flight and hangar decks of aircraft carriers, and on the landing decks of air-capable amphibious aviation and aviation ships.

(I've been unable to acquire a copy of R4 2009, Still restricted afaik)

Table 634-2-1. APPROVED DECK COVERING MATERIALS

EXTERIOR (SURFACE SHIPS - STEEL)

SPACE	MATERIAL
Flight deck (in the vicinity of metal deck and arresting wire terminal fitting)	Impact pads (polyurethane)
Flight deck (in the vicinity of wood deck and arresting wire terminal fitting)	Impact pads (butyl rubber or polyurethane)
Flight deck (metal and wood)	Slip-resistant covering
Helicopter landing deck (metal and wood)	Slip-resistant covering
Missile launcher area	Slip-resistant covering
Missile house top; sloping and flat surfaces	Slip-resistant covering
Traffic areas	Slip-resistant covering
Wood surfaced areas	Wood decking and polyurethane overlay
Working areas (areas outside or direct traffic routes surrounding topside equipment such as fire control stations, gun circles, lookout stations, director platforms, areas around deck machinery, boats, and replenishment-at-sea stations). Hazardous areas on mainmast, yardarms, antenna platforms, and other areas considered hazardous under wet conditions.	Slip-resistant covering

634-3.24 NONSKID DECK COVERINGS

634-3.24.1 Nonskid deck coverings are high performance, textured, organic materials which are applied to steel, aluminum and Glass Reinforced Plastic (GRP), as a slip-resistant surface for personnel, vehicles and aircraft. Depending on the required profile and the type of product being used, nonskid can be applied by spraying, rolling or troweling.

634-3.24.2 Nonskid systems consist of a primer, nonskid topcoat and color topping. Some nonskid systems have an intermediate coat (underlayment) (Type III only) which is applied after the primer and before the nonskid. The primer is applied to provide a base for the topcoat nonskid and to protect the substrate from corrosion. The nonskid topcoat provides slip resistance for personnel, vehicles and aircraft. Color topping is for Visual Landing Aid (VLA) and safety markings only (see paragraph 634-3.31).

634-3.29.1 GENERAL. Nonskid deck coverings are high performance, textured, organic materials which are applied to steel, aluminum, and GRP to provide safe footing for personnel and to act as a slip-resistant surface for vehicles and aircraft. This section covers nonskid products that can be applied to steel and aluminum surfaces. For information concerning and GRP decks, see paragraph 634-3.27.4 and paragraph 634-3.30. Nonskid shall be dark deck gray in color in accordance with FED-STD-595 color chip number 36076, except VLS launchers, which will be haze gray, Color No. 36270

Table 634-3-5. APPLICATION AREA/PRODUCT TYPES

Ship Type	Area	MIL-PRF-24667 Type
Carriers	Flight deck hook impact and cable runout areas	Type I, Comp. L
Carriers	Hangar deck, flight deck parking areas and aircraft elevators	Type I, Comp. G
Amphibious assault	Flight Deck/Hangar Deck/Well Deck	Type I, Comp. G
Air-capable	Hangar decks and helopads (excluding skid-configured landing zones and vehicle storage areas)	Type I, Comp. G
Air-capable	Helopads (skid-configured landing zones)	Type I, Comp. G,
Air-capable	Flight decks	Type I, Comp. G
All ships	All vertical replenishment areas, weather decks, exterior passageways, and interior decks (metal decks)	Type I or II, Comp G. or Type IV
All ships	All exterior passageways and interior decks (wooden decks, GRP, and metal)	Type III
VLS-configured	MK 41 Launcher top covers ships	Type I, Comp G

NAVAL SHIPS' TECHNICAL MANUAL CHAPTER 631 PRESERVATION OF SHIPS IN SERVICE S9086-VD-STM-010 R3 2008**Table 631-8-8 PAINT SYSTEMS FOR EXTERIOR SURFACES ABOVE WATERLINE**

Location(s)	Paint Systems and DFTs
Freeboard, Masts, and Superstructure: All exterior vertical and near vertical surfaces from the upper boot-topping limit, except other structural areas listed below; And Exterior Fittings and Piping	MIL-PRF-23236 Type IV, V or VI Class 5/MIL-PRF-24635 Grade B or C Haze Gray Topcoat: 2-3 mils DFT MIL-PRF-24635 Grade C, Haze Gray color 26270, or Topcoat: 2-3 mils DFT MIL-PRF-24635 Grade B, Haze Gray color 26270
Exterior horizontal surfaces and waterways not receiving non-skid coatings	MIL-PRF-23236 Type V or VI Class 5/MIL-PRF-24635 Grade B Deck Gray Topcoat: 2-3 mils DFT MIL-PRF-24635 Grade B, Deck Gray color 26008
Flight Decks, Hanger Decks, Vertical Replenishment Decks, Exterior Walkways	Refer to NSTM Chapter 634 for non-skid coating system requirements

Table 631-8-9 PAINT SYSTEMS FOR EXTERIOR WOOD SURFACES ON SURFACE SHIPS

Location(s)	Paint Systems and DFTs
From the upper boottopping limit to main deck and all vertical and near vertical surfaces Exterior piping and fittings	MIL-DTL-24441 Type IV/MIL-PRF-24635 Grade B 1, 2, 3 Topcoat: 2-3 mils DFT MIL-PRF-24635 Grade B, Haze Gray color 26270
Exterior horizontal surfaces and waterways; masts and spars	MIL-DTL-24441 Type IV/MIL-PRF-24635 Grade B 1 Topcoat: 2-3 mils DFT MIL-PRF-24635 Grade B, Deck Gray color 26008, or Topcoat: 2-3 mils DFT MIL-PRF-24635 Grade B, color 37038

MIL-PRF-24667C(SH) w/INT. AMENDMENT 1 COATING SYSTEM, NON-SKID 2018 (including deck marking colors)

1.2.1 Type. The types of non-skids are as follows:

- Type I - High durability, rollable deck coating.
- Type II - Standard durability rollable or trowel deck coating.
- Type III - Standard durability, rollable resilient deck coating for use on exterior wooden decks, GRP, or metal decks where flexibility is required and where increased weight is not a factor.
- Type IV - Standard durability, sprayable deck coating.

- Type V – Extended durability, rollable deck coating
- Type VI – High durability, fast cure, rollable deck coating
- Type VII – Fast cure, temporary repair, rollable deck coating
- Type VIII – Low temperature cure, rollable deck coating
- Type IX – High temperature resistance deck coating
- Type X – Submerged applications
- Type XI – Peel and stick, temporary repair, self adhering deck covering

1.2.2 Composition. The composition of non-skids are as follows:

Composition G – General use abrasive deck system (all types)

Composition L – Limited use aircraft carrier landing and run-out area deck system that is not abrasive to the steel arresting cable (composition L applies to Types I, V, VI, VII, VIII, and IX only, and does not apply to Types II, III, IV, and X)

Composition PS – Self adhering, non-skid deck covering (Type XI only)

Composition D – Density-controlled abrasive deck system (composition D applies to Types I, V, and VII only)

3.16 Color. The non-skid topcoats and color toppings shall be supplied in one of the following colors from SAE-AMS-STD-595, as specified (see 6.2): Red to match color 31136; yellow to match color 33538; olive drab to match color 34088; dark gray to match color 36076; haze gray to match color number 36270, ocean gray to match 36173; black to match color 37038; green to match 14062; and white to match color 37875. When tested as specified in 4.5.13, there shall be no discernable color difference between the non-skid or color topping and the color chip. Unless otherwise specified (see 6.2), the color of Type XI shall be black.

TABLE XII. Service life values.

	Composition G & D	Composition L (landings)	Composition PS
Types I, VI, VIII and IX	12 months	10,000	-----
Type II	6 months	-----	-----
Types III and IV	6 months	-----	-----
Type V	3 years	15,000	-----
Type VII	30 days	1,600	-----
Type X	12 months	-----	-----
Type XI	-----	-----	12 months

6.1 Intended use. The coatings covered by this specification are intended for use on:

general (walking) deck areas (Types I, II, III, IV, V, VI, VII, VIII, IX, X composition G, and XI)
the flight and hangar decks of aircraft carriers (Types I, II, V, VI, VII, VIII, and IX compositions G and L)
the landing decks of air-capable aviation ships (Types I, II, III, V, VI, VII, VIII, and IX composition G)
and the flight decks of air-capable amphibious aviation ships (Types I, V, and VII, composition D).

Type I provides longer durability than Type II,

Type III non-skid systems are intended for use where flexibility or thick smoothing capability is needed to correct drainage. Type III is not intended to be used on aircraft carriers if the underlayment is used due to compressibility of the materials under heavy aircraft.

Type IV can be used on walking surfaces, but is not intended for aircraft landing decks.

Type V provides longer durability than Type I,

Type VI is a fast curing non-skid material for use when application windows are limited.

Type VII is a temporary repair non-skid that is ready for service in 24 hours.

Type VIII is intended for application at low temperatures,

Type XI non-skid system is approved for use in well deck catwalk areas, airlocks, boatswain storerooms, elevator machinery rooms, boat gear repair station, chain locker sump, damage control maintenance shop, deck gear locker, drying rooms, machinery repair shops, mooring stations, nixie winch room, officer of the deck stations, replenishment-at-sea stations, rolling airframe missile handling equipment rooms, sideport door machinery spaces, signal shelter, stern gate machinery and operating gear rooms, and valve repair and test shops.

NAVEDTRA 14353A Aviation Boatswain's Mate training manual CHAPTER 2

AIRCRAFT HANDLING EQUIPMENT, NONSKID, AND MARKINGS

nonskid applications in accordance with Naval Ship's Technical Manual (NSTM), chapter 634.

Table 2-8 — Nonskid Material Application Area/Product Types

Area	Service Life	MIL-PRF-24667 Type & Composition
CVN flight deck landing areas	up to 15,000 landings	MIL-PRF-24667, TYPE V, COMP L
CVN flight deck landing areas	up to 10,000 landings	MIL-PRF-24667, TYPE I, VI, or VIII COMP L
Hangar decks, flight decks & vertical replenishment deck areas	up to 3 years	MIL-PRF-24667 TYPE V, COM G or L
Hangar decks, flight decks & vertical replenishment deck areas	up to 12 months	MIL-PRF-24667 TYPE I, VI, or VIII, COMP G or L
Hangar decks, flight decks & vertical replenishment deck areas	up to 6 months	MIL-PRF-24667 TYPE II, COMP G
Hangar decks, flight decks, vertical replenishment deck& areas and CVN flight deck landing areas, walk areas and all other deck areas	up to 30 days	MIL-PRF-24667, TYPE VII COMP G or L
Walk areas (all deck areas other than hangar decks, flight decks & vertical replenishment deck areas)		MIL-PRF-24667, TYPE I, V, VI, or VIII, COMP G or L or MIL-PRF-24667, TYPE II, III, IV, COMP G or L MIL-PRF-24667, TYPE XI, COMP PS

Table 2-10 — Minimum Service Life

Type	Composition G (Time)	Composition L (Landings)
I	12 months	10,000
II	6 months	5,000
III	6 months	N/A
IV	6 months	N/A
V	3 years	15,000
VI	12 months	10,000
VII	30 days	1,600
VIII	12 months	10,000
IX	12 months	10,000
X	12 months	N/A

	2 - SemiGloss	3 - Matte (Flat)	
FS26008 Exterior Deck Gray/Dark Gray			FS36076 Navy Gray #2/Dark Gray
FS26081 Sea plane Gray			FS36081 Deep Gray/Dark Gunship Gray
FS26118 Med Gunship Gray			FS36118 Med Gunship Gray
FS26173 Ocean Gray, NAVSEA			FS36173 Ocean Gray, NAVSEA/Neutral Gray
FS26176 Ocean Gray			FS36176 Ocean Gray/F-15 Dark Gray
FS26270 Interior Haze Gray/Neutral Gray			FS36270 Haze Gray/Medium Gray
			FS36320 Dark Compass Ghost Gray
FS26373 Light Gray #37			FS36373 Light Gray
			FS36375 Light Compass Ghost Gray/ Medium Gray

This image compares the colors to each other. A Federal Standard Color deck was photographed for these comparisons, showing how the semigloss appears darker than the Matt versions of the same color. The FS system did not have official names for each color, although later editions included commonly used names. Listed names are ones I could find in various publications. Not all colors are available in all 3 lusters, eg: the ghost grays are only listed in Matt.

Examples of USN Decks



I believe the non-skid FS36076 is the same color as the deck. Both are fairly fresh, so fading is negligent.



It's possible that the surrounding plates here are FS26008

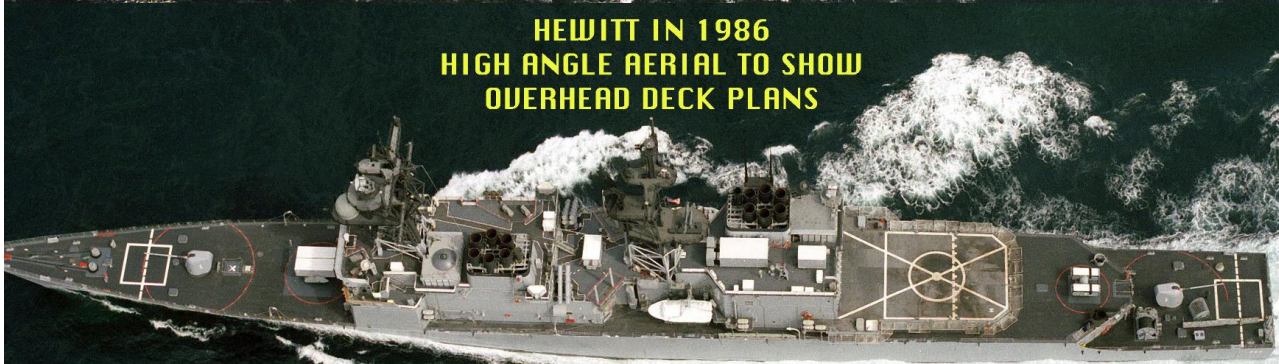


PAUL IGNATIUS DDG-117 2023

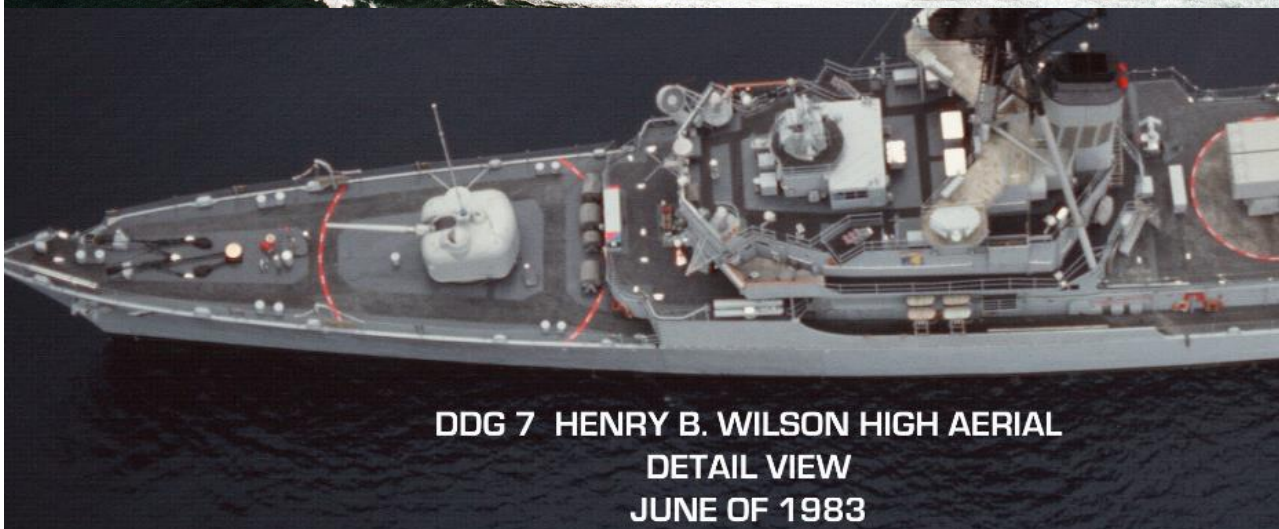
ENGLAND CG 22
superb aerial overview
1992



HEWITT IN 1986
HIGH ANGLE AERIAL TO SHOW
OVERHEAD DECK PLANS



DDG 7 HENRY B. WILSON HIGH AERIAL
DETAIL VIEW
JUNE OF 1983



HEAVILY CROPPED PORT MIDSHIPS VIEW OF DD 37
FARRAGUT IN 1982





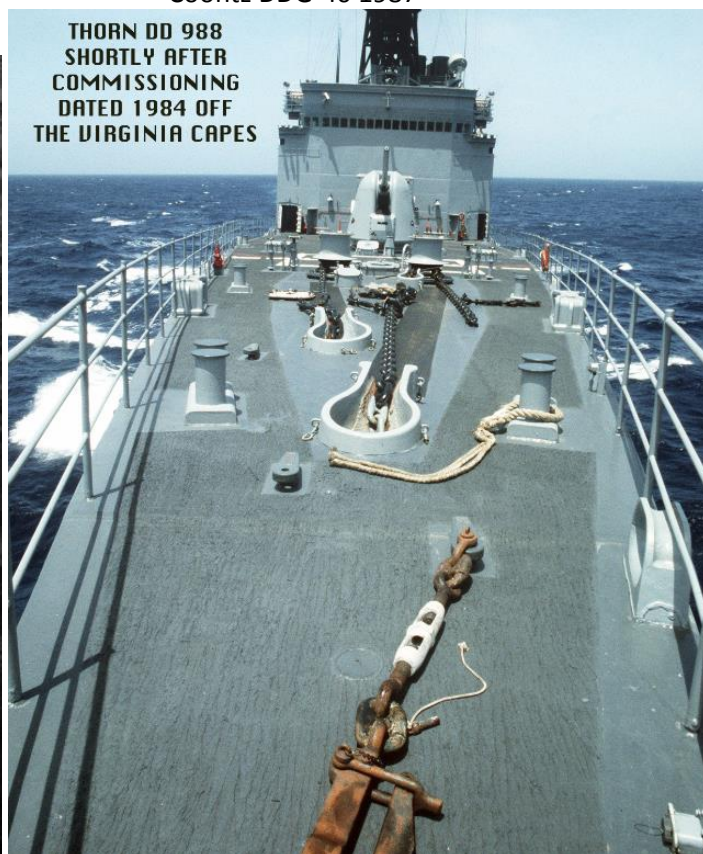
Coontz DDG-40 1970



Coontz DDG-40 1987



Coontz DDG-40 1989





Knox class 1977



Knox class 1981



STETHAM DDG-63 1995



Winston Churchill DDG-81 2001 It's possible that the edging here is FS26008.