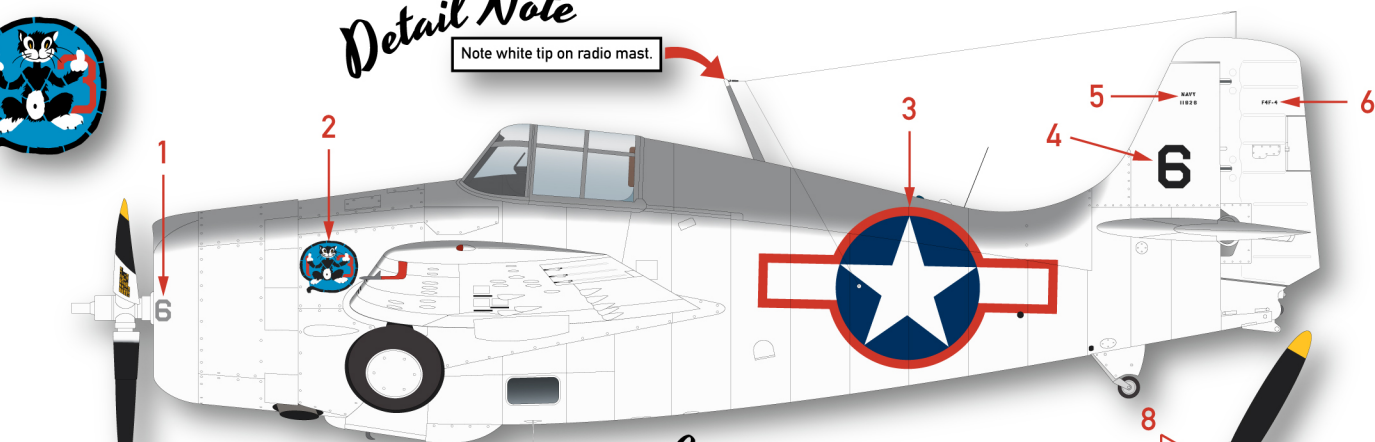




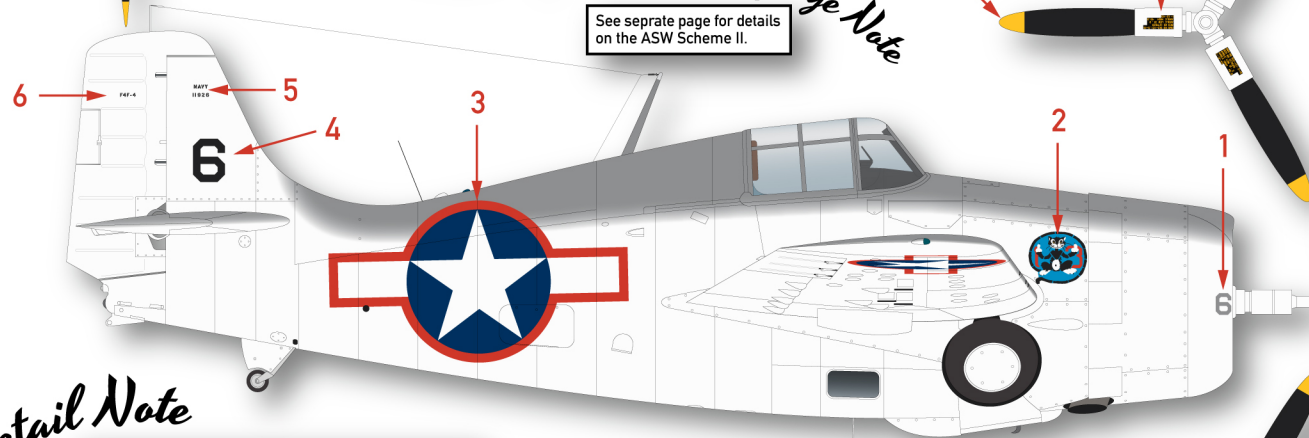
Detail Note

Note white tip on radio mast.



Camouflage Note

See separate page for details on the ASW Scheme II.



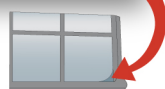
Later F4F propeller hubs had a squared off forward end.

Detail Note

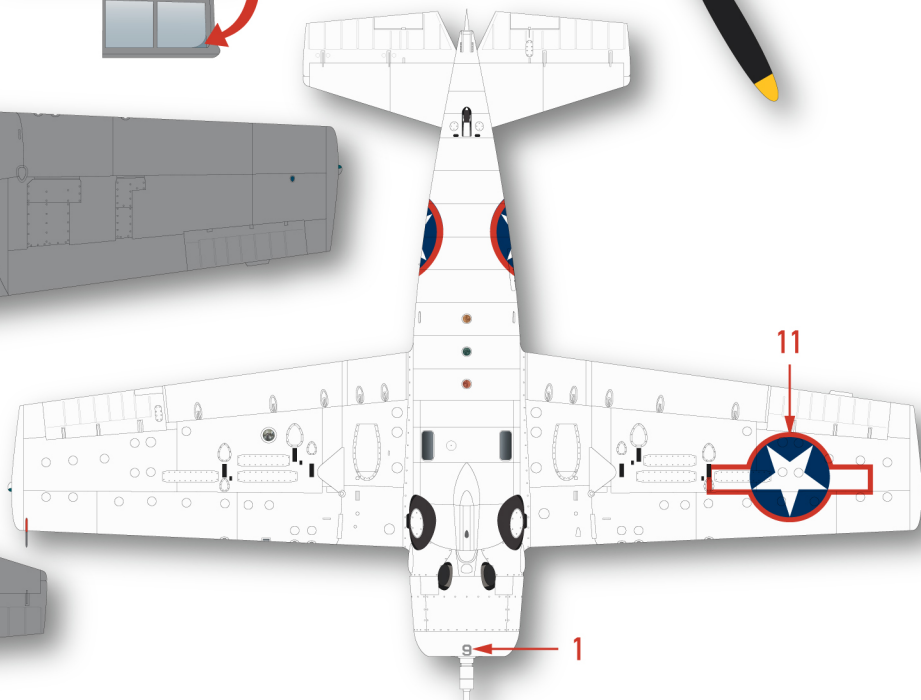
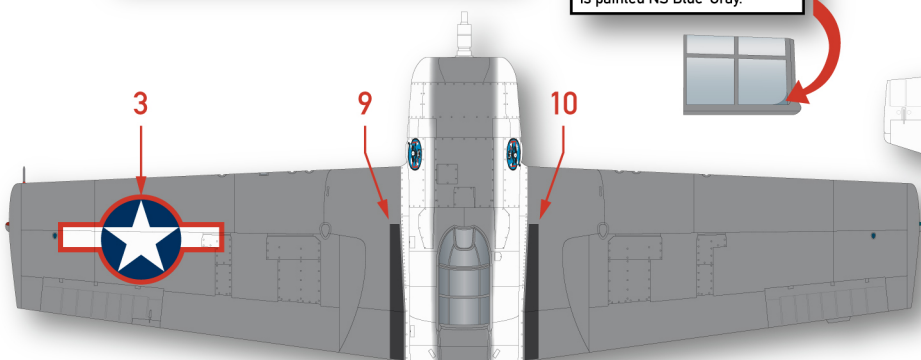
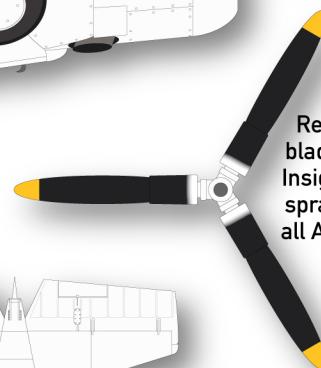
This aircraft was factory-finished in NS Blue-Gray over NS Light Gray. The ASW II scheme was applied by the Navy, probably at NAS Norfolk. All traces of the NSBG/NSLG scheme have disappeared except for the crescent of sheet metal visible inside the aft lower sliding canopy window.

Detail Note

Note the crescent of sheet metal inside aft-most canopy section is painted NS Blue-Gray.



Rear face of prop blades showing NS Insignia White overspray. Applicable to all ASW camouflage scheme a/c

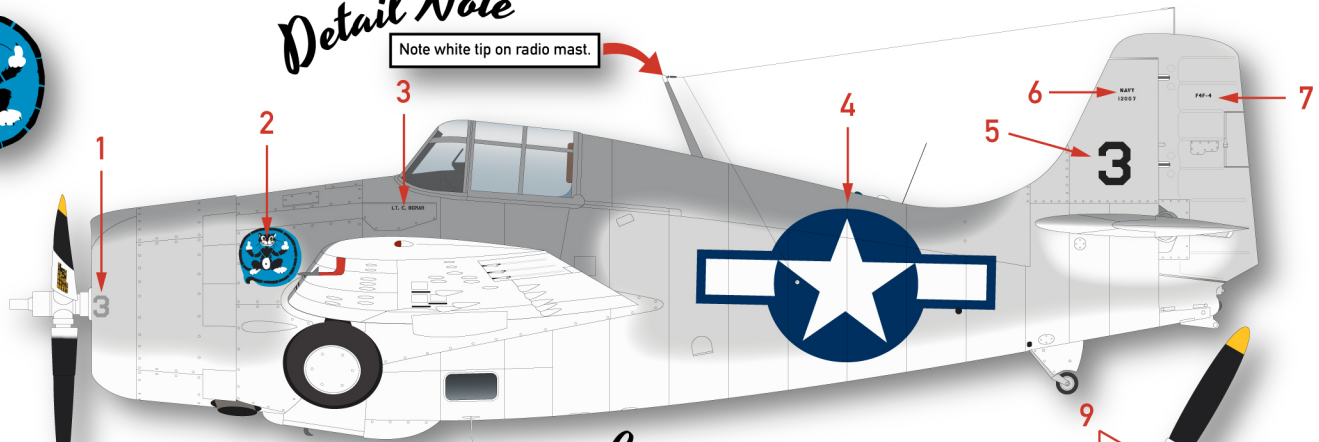


- ANA 621
Dark Gull Gray
- ANA 511/ANA 601
Insignia White



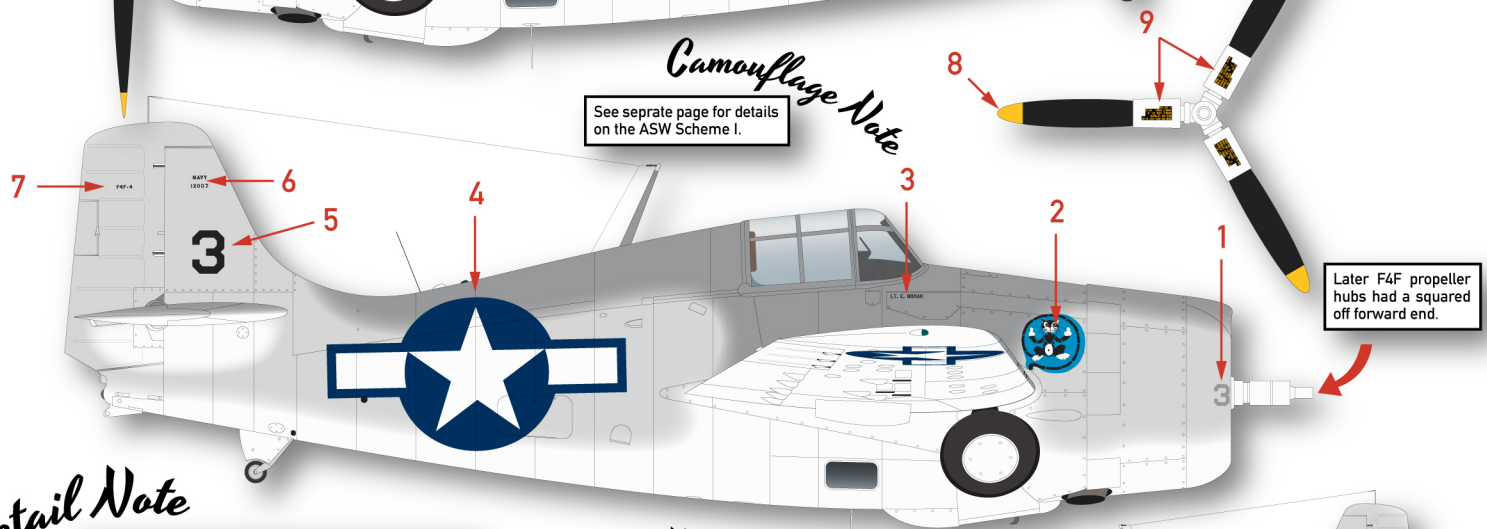
Detail Note

Note white tip on radio mast.



Camouflage Note

See separate page for details on the ASW Scheme I.



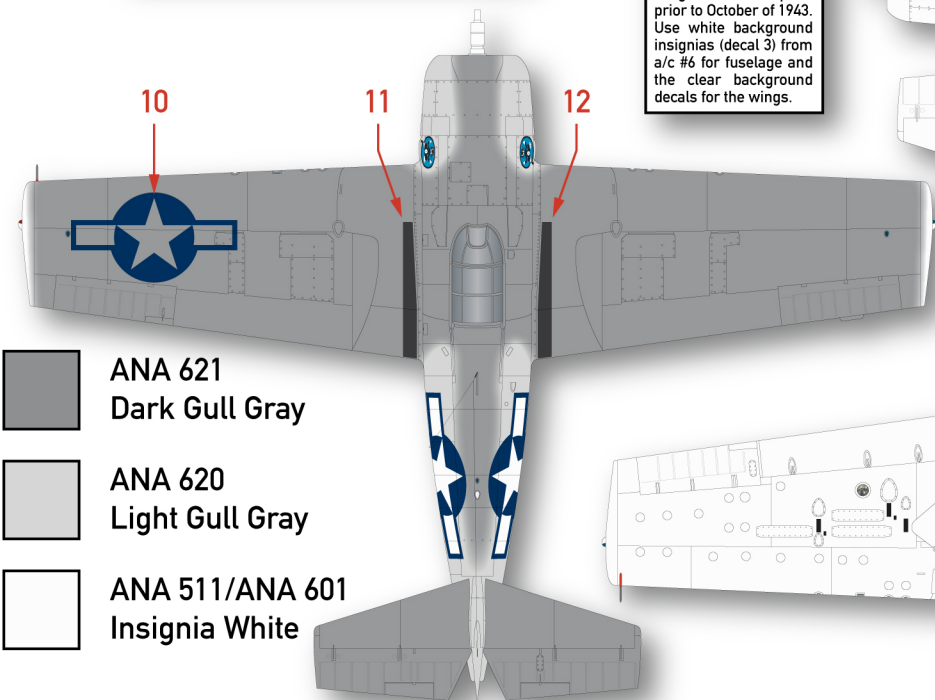
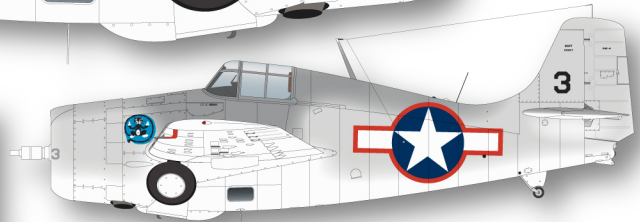
Later F4F propeller hubs had a squared off forward end.




Detail Note

This aircraft was factory-finished in NS Blue-Gray over NS Light Gray. The ASW II scheme was applied by the Navy, probably at NAS Norfolk. All traces of the NSBG/NSLG scheme have disappeared except for the crescent of sheet metal visible inside the aft lower sliding canopy window.

Markings Note

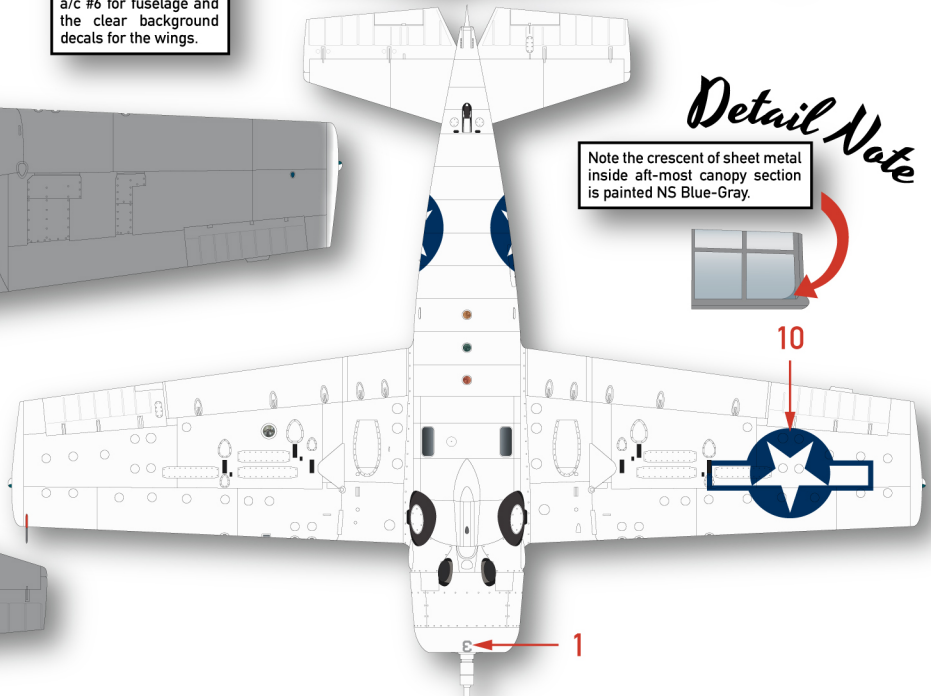
It is quite probable that this aircraft carried the red-bordered national insignias at some point prior to October of 1943. Use white background insignias (decal 3) from a/c #6 for fuselage and the clear background decals for the wings.



-  ANA 621
Dark Gull Gray
-  ANA 620
Light Gull Gray
-  ANA 511/ANA 601
Insignia White

Detail Note

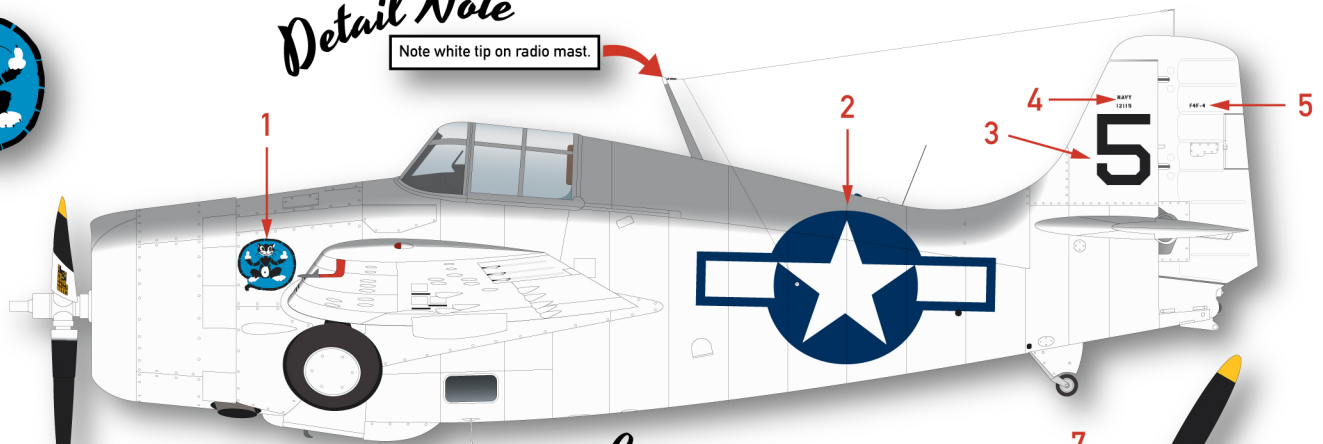
Note the crescent of sheet metal inside aft-most canopy section is painted NS Blue-Gray.





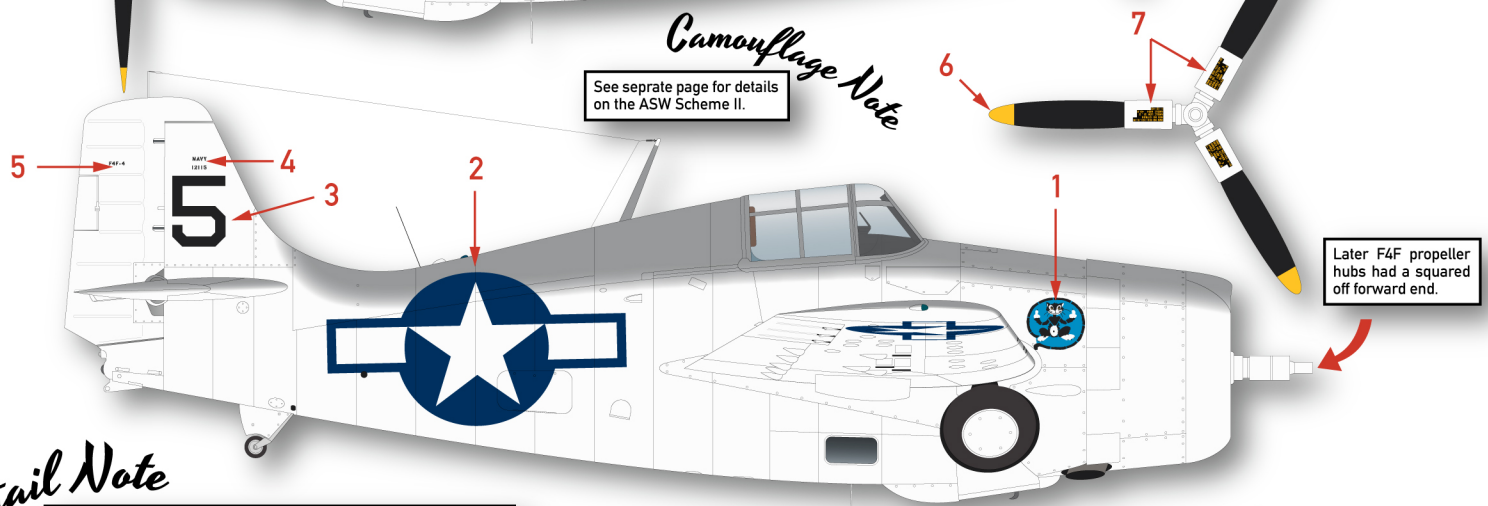
Detail Note

Note white tip on radio mast.



Camouflage Note

See separate page for details on the ASW Scheme II.

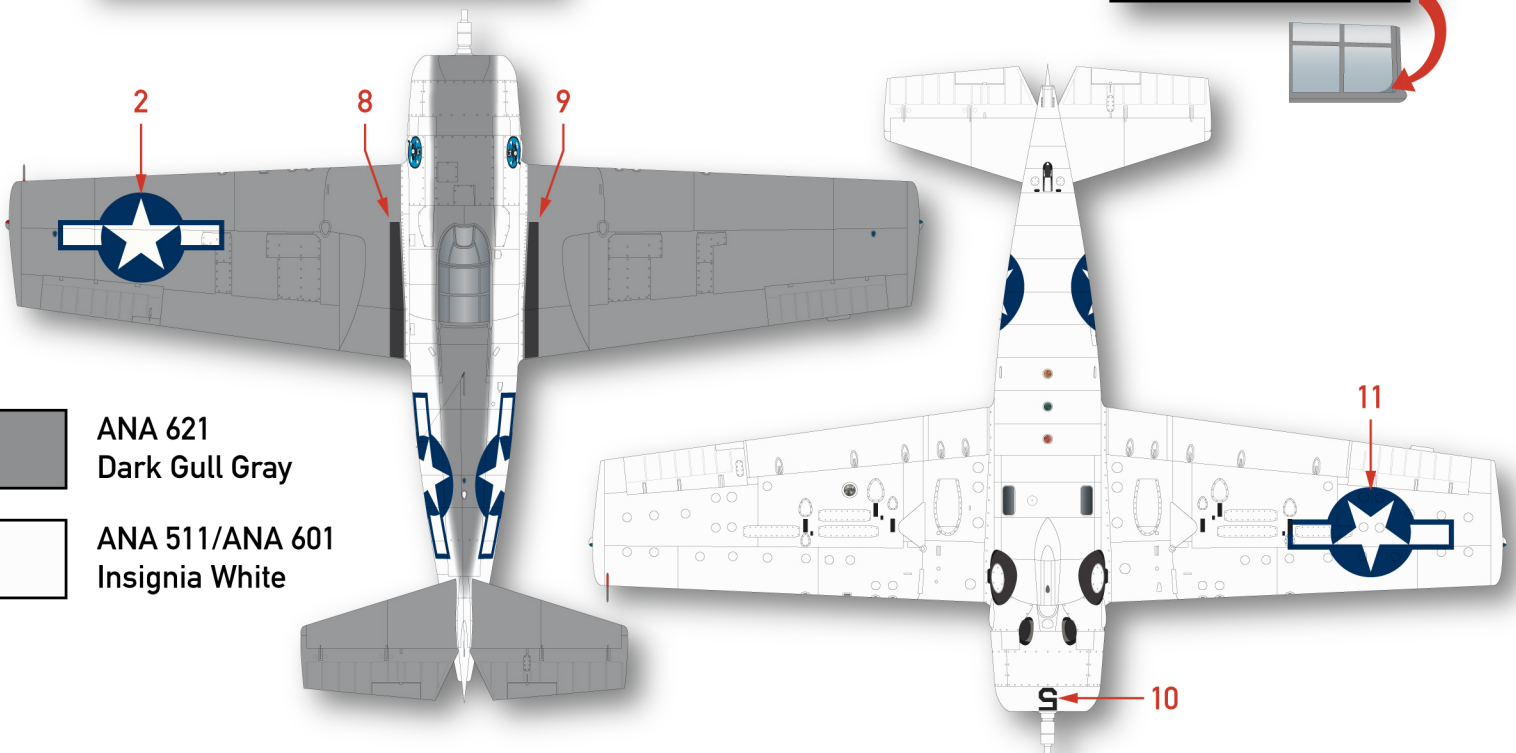


Detail Note

This aircraft was likely factory-finished in NS Blue-Gray over NS Light Gray, or possibly the newer tri-color blue/white scheme. The ASW II scheme was applied by the Navy, probably at NAS Norfolk. All traces of the factory color scheme have disappeared except for the crescent of sheet metal visible inside the aft lower sliding canopy window. Note the red pitot mast, in common with all F4F-4s.

Detail Note

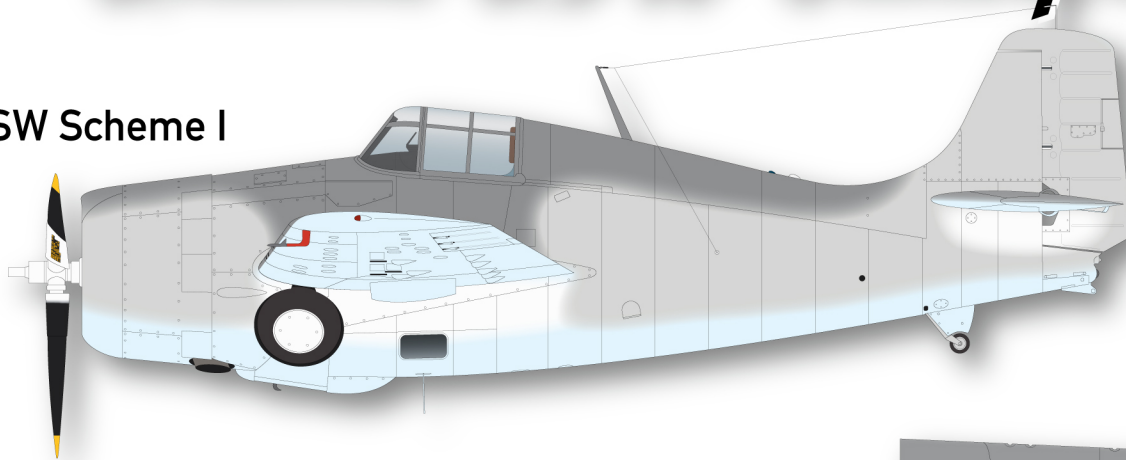
Note the crescent of sheet metal inside aft-most canopy section is painted NS Blue-Gray (or possibly NS Dark Sea Blue).



- ANA 621
Dark Gull Gray
- ANA 511/ANA 601
Insignia White

Atlantic ASW Camouflage

ASW Scheme I



Upper wing view of ASW Scheme I showing how the lower surface gloss Insignia White carried up across the wing tip and onto the upper surface.

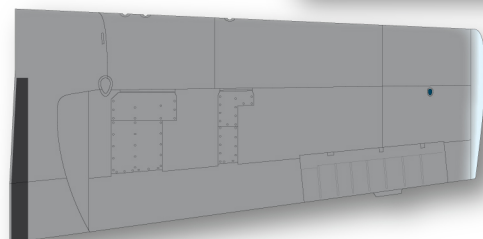
Anti-submarine Schemes I and II were implemented by the Commander Aircraft, Atlantic in July 1943 but were not covered by an official Navy specification until June 1944. They appear, however, to have been in use even before the unofficial order in 1943. USS Core's first cruise began on 27 June 1943, and her aircraft were finished in these schemes prior to that point.

ASW Scheme I: For use in areas where the prevailing weather was clear or clear with broken clouds (the southern United States seaboard, Gulf of Mexico, Caribbean, and South America). This was a top side of non-specular Dark Gull Gray (ANA 621), sides of non-specular Light Gull Gray (ANA 620), and bottom of Gloss Insignia White (ANA 511). The side surfaces in the shadow of the wings and horizontal tail were to be painted non-specular Insignia White (ANA 601). The gloss white was carried up over the wing tip onto the upper wing surface. In black & white photos, this scheme is often confused with the blue and white tri-color scheme.

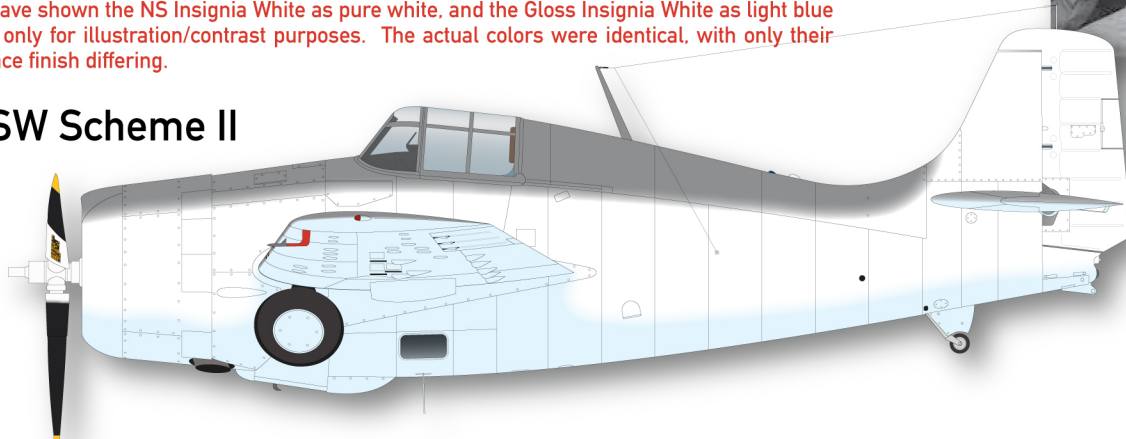
ASW Scheme II: For use in areas where the prevailing weather was overcast or heavily clouded (the middle and northern United States seaboard and the North Atlantic). This was a top side of non-specular Dark Gull Gray, sides of non-specular Insignia White, and bottom of Gloss Insignia White. The main difference between it and Scheme I was the use of Insignia White rather than Light Gull Gray on the sides of the fuselage.

In both Scheme I and II, the leading edge and inside of the cowlings, propeller domes, and propeller blades (out to the inner edge of the cowl opening) were to be painted non-specular Insignia White. Edges were softly sprayed, with approximately a 3-4" overspray between colors. Even the exposed parts of the engine were usually painted.





We have shown the NS Insignia White as pure white, and the Gloss Insignia White as light blue here only for illustration/contrast purposes. The actual colors were identical, with only their surface finish differing.



ASW Scheme II



Above: Front view of prop showing white area out to the edge of the cowling. Many times the blade data block on the cuff, and sometimes the blades above the cuff were masked off. Back sides of blades were not painted. In the photo, note how the white covered visible parts of the engine, including the reduction gear housing, magnetos, ignition harness, and even the cylinders themselves.

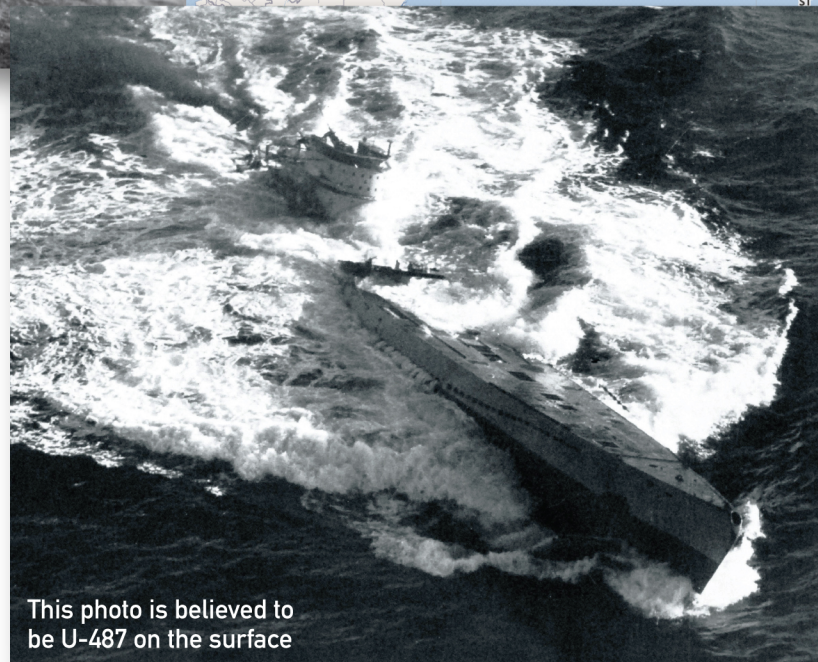
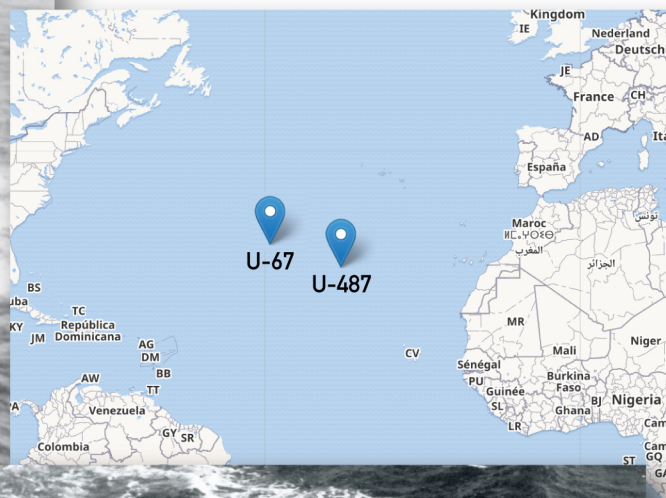
- | | | | |
|--|-------------------------------|---|---------------------------------|
|  | ANA 621
NS Dark Gull Gray |  | ANA 601
NS Insignia White |
|  | ANA 620
NS Light Gull Gray |  | ANA 511
Gloss Insignia White |

USS Core & VC-13



USS Core CVE-13

Photo: USN



This photo is believed to be U-487 on the surface

Bogue-class escort carrier USS Core (CVE-13) was constructed in Tacoma, Washington and commissioned on 10 December 1942. She was named for Core Sound, located between the mainland and the Outer Banks of North Carolina. USS Core worked up on the west coast off San Diego, but soon joined the Atlantic Fleet to participate in the bloody U-boat war. The diminutive "jeep carriers" carried a single mixed squadron of aircraft, in the Core's case, Composite Squadron 13 (VC-13), initially equipped with TBF-1C Avengers and F4F-4 Wildcats.

Core's first combat cruise in the Atlantic ran from 27 June to 31 July 1943, during which VC-13 claimed a pair of U-boats. The first success was against U-487, a Type XIV supply and replenishment U-boat ("Milchkuh" - "milk cow") under the command of Oblt.z.S. Helmut Metz. The action occurred almost exactly in the middle of the Atlantic at at 27°15N, 34°18W. Miraculously, there were 33 survivors rescued by USS Core's escorts out of U-487's crew of 64.

Three days later, the squadron struck again. Type IXc U-boat U-67, commanded by Korvettenkapitän Günther Müller-Stöckheim, was on her seventh combat patrol. On 16 July, U-67 was spotted by a TBF-1C piloted by Lt. Robert P. Williams, who attacked with four Mk.47 depth charges, sinking the boat. One of Core's escorts, USS McCormick (DD-223), was dispatched to the scene and picked up three survivors out of her crew of 51 at position 30°05N, 44°17W. USS Core and VC-13 went on to claim a total of four U-boat kills by the end of 1943, helping to end the "happy times" for the German U-boat fleet.

Many references call Core's 1943 and early 1944 Wildcats FM-1s across the board, but close examination of photos reveals they had six wing guns, making them F4F-4s. They carried an interesting mix of colors - the factory NS Blue-Gray over NS Light Gray, as well as both the then-new Atlantic ASW Schemes I and II. VC-13's Wildcats don't appear to have carried any bomb racks under the wings, so their job was simply to shoot up any hapless U-boat with their .50 caliber machine guns after the TBFs had forced it to the surface with their ordnance. Between her first and third combat cruises, Core's Wildcats underwent some minor changes in markings, including the ever-changing design of the US national insignia. Beginning with her fourth cruise, the F4F-4s were replaced with Eastern Aircraft FM-2s (which we hope someday, at long last, to see a decent kit of in 1/48 and/or 1/32!).

Events of 13 July 1943

Below is the text of the after-action report on VC-13 and USS Core's first U-boat victory in the mid-Atlantic on Tuesday, 13 July 1943.

Two sections, each consisting of one TBF-1 and one F4F-4, were launched at 1253 - July 13, 1943, to search ahead of Convoy GUS 9 to a distance of 200 miles. The weather was variable. Visibility ranged from 8 to 15 miles. The sea was smooth, with occasional white caps. Cloud cover varied from 0.3 to 0.7. Section #1 composed of Lieutenant R. P. Williams, USNR, in the TBF, and Lt.(jg) E. H. Steiger, USNR, in the fighter, started their return leg at an altitude of 7,000 feet. The TBF was using radar intermittently whenever local cloud conditions and visibility warranted. Toward the end of the leg the radar was secured, and the section dropped down to 5,500 feet to keep below a cloud layer.

About eight minutes later, at 1521, the TBF's turret gunner noticed a white wake about 10 miles distant on the plane's quarter. Both planes turned to port as soon as the TBF's pilot, Lieutenant Williams, saw the wake. Williams, using cloud cover during his approach, ascertained that a fully surfaced submarine was causing the wake. Its course was approximately 1300T, and speed between 12 and 14 knots. That particular area had about 0.3 cumulus cloud cover with the base around 2,500 feet. When beyond cloud cover, Williams signaled Steiger to commence a strafing run. Steiger broke off immediately and strafed the submarine, approaching on its starboard bow. Williams commenced a bombing run as soon as he had attained favorable position on the submarine's starboard quarter. During his approach he noticed a man running across the deck forward of the conning tower as if to man a gun. Williams released a stick of four Mark 47 depth bombs, set for a depth of 25 feet about 10 seconds after Steiger had completed his strafing run. Release was made at about a 250 foot altitude, while the plane was on a 250 glide. The intervalometer was set to space the bombs 70 feet apart at a speed of 220 knots. Williams radioman photographed the resulting explosions through the tail-gun aperture. (All TBF tail guns have been temporarily removed to facilitate photography from the radioman's station). The developed picture (Photo #1 enclosed) indicated that the explosions of the first and second bombs straddled the U-boat's bow about 35 feet forward of the conning tower.

Both planes pulled up to 3500 feet and circled to observe the results of their attack. The submarine immediately went into a tight right-hand circle and gradually slowed to a stand-still. Oil leaking from it completely covered the area bounded by the submarine's turning circle. Meanwhile the crew manned its guns and commenced "AA" fire. Williams observed that the bursts were consistently below and usually behind the aircraft circling at 3,500 feet. Radio contact was established with the ship and details of the attack were transmitted. Shortly thereafter, Williams indicated to Steiger that he wished to make another pass over the submarine for the purpose of taking additional photographs. Steiger made a second strafing run, closely followed by the TBF. It later developed that no pictures were obtained on that run.

As soon as word was received aboard the ship, the U.S.S. BARKER was immediately ordered to the scene of the attack and additional planes were launched. Four TBF's manned by Lt.(jg) J.F. Schoby, USNR., Lt.(jg) C.E. Lair, USNR., Lt.(jg) W.V.A. Wilson, USNR., and Lt(jg) H.W. Hayman, USNR, were catapulted. They were followed immediately by Lt. Comdr. C. W. Brewer, USN., in an F4F-4. While these planes were enroute Williams noticed white water aft of the submarine and asked Steiger by radio if he had sufficient ammunition for another run to investigate submarine's course of action. Steiger replied that he had "only one gun left, but would make the run". On this run, when only a few hundred feet from the U-boat's port quarter, Steiger's plane suddenly swerved to the left, its nose dropped, and it plunged into the water about 100 feet off the submarine's port bow. A thorough search of the area made later revealed no trace of the pilot or plane.

Brewer arrived in time to see the splash of Steiger's plane as Williams informed the ship that the submarine "had gotten one of our planes". Brewer passed the word by radio to the oncoming TBF's that he was starting his strafing run. Approaching the submarine's stern down-sun from cloud cover he expended around 1200 rounds of .50 caliber ammunition. Lt.(jg) J. R. Bronstein, USNR, the F4F-4 member of the #2 section on search, had just arrived in the vicinity and started a strafing run from the U-boat's starboard beam. He held his fire while Brewer passed over the submarine, and was interrupted a second time as Lt.(jg) Schoby, in the first TBF to arrive from the ship, approached from the submarine's starboard bow. Diving at a 200 angle, speed 245 knots, Schoby dropped four Mark 47 depth bombs from an altitude of 100 feet. All explosions were close aboard or under the submarine, from starboard bow to port quarter (Photograph # 3 enclosed). Depth and intervalometer setting were identical to those used by Williams. The water thrown by the explosions appeared to lift the U-boat vertically about 10 feet before completely enveloping it. When the U-boat could next be seen some 30 feet of its stern protruded from the water at a 450 angle. About five seconds later it slid under the surface.

Immediately after the sinking approximately 35 survivors, the majority clustered around two dark gray life rafts, were counted in the water. There was a minimum of debris. Visible were a few small irregular objects and two large life rafts, almost entirely submerged, in addition to those used by the survivors. About one hour later, an oil slick covered an area roughly a mile square. Brownish scum, apparently a result of the depth charge explosion, accumulated near the down-wind edge of the slick, and a small area near where the submarine sank was colored a light apple-green.

Brewer and Hayman remained in the area to guide the destroyer to the survivors and to give it air protection while it recovered them. All other planes were ordered back to the ship at 1635, Brewer and Hayman returning aboard at 1850.

USS Core & VC-13

Not the best photo, to be sure, but interesting none the less. Taken at the time of VC-13's first U-boat kill on 13 July 1943 (possibly flown by Lt. Julius Brownstein), it shows one of the few operational VF-13 Wildcats that carried the factory NS Blue-Gray over NS Light Gray scheme during their first antisubmarine cruise. Note the mid-1942 style national insignias in six locations.



A pair of shots taken aboard USS Core on 27 September 1943. The pilot very nearly came to grief - a not uncommon occurrence given the Wildcat's narrow track landing gear setup. Luckily he caught the barrier and escaped little worse for the experience. This is a great example of ASW Scheme I consisting of two colors of grey plus white. Note the taped-over gun ports (three per wing = F4F-4). We have no color photos, so your guess is as good as ours on their color. Also note the relatively soft edges to the camouflage, and how the white carries up across the wing tip. The blue-only national insignia is highly unusual. There appears to be a shadow from the Core's island across the left wing tip in the bottom photo.



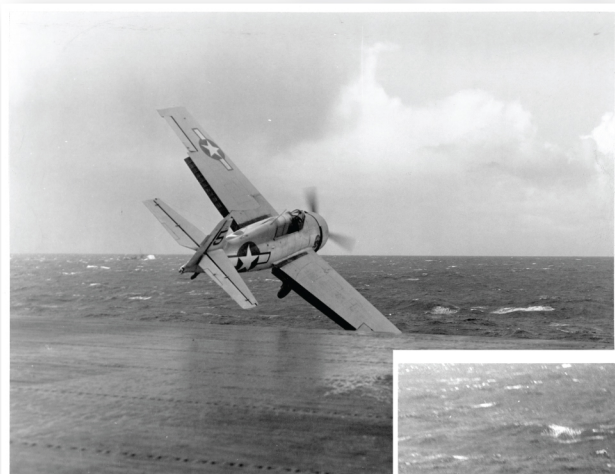
USS Core & VC-13



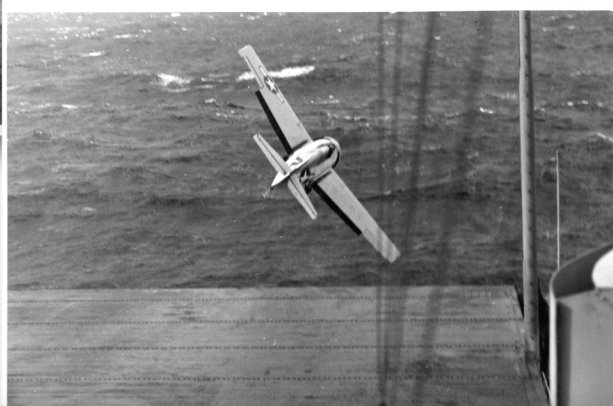
Aircraft #6, with its unique version of the squadron badge (note the red "13") appears to have been the favorite backdrop for VC-13 Wildcat pilot photos. Although all four show the same aircraft, each reveals details the others do not. Note how the white overspray extends onto the back side of the prop cuff above the hub, and how the reduction gear housing, magnetos, and all the plumbing visible have been painted NS Insignia White. There appears to be some sort of (red?) cover over the end of the prop hub that was removed before flight. Also note the white gear struts - probably painted over the factory gloss black when the aircraft was camouflaged. The prop blade data blocks have been neatly masked off. Clockwise from above left: Lt. Julius Brownstein, Lt. Brown, Lt. Bomar, and Lt. Brewer.



USS Core & VC-13



16 December 1943 was Lt. Julius Brownstein's lucky day! Wildcat #5 appears to have stalled on takeoff. Note the prop is still turning just before impact, indicating the engine was developing power. Some skillful seamanship by Core's skipper prevented Brownstein from being run over by the ship, and although soaked, he made good his escape from the sinking Wildcat. He was later picked up by the Clemson-class destroyer USS Greene DD-266. Not so lucky for #5 - she undoubtedly sits on the floor of the Atlantic in this exact spot today (who's up for an expedition?). The tiny size of the flight deck of the jeep carriers made for even more hazardous operations than was normal for fleet carriers of the day. In the third photo, just before the aircraft is about to hit the water, careful examination of the far upper right corner shows a TBF-1C flying crosswind across the carrier's bow at around 1000' above the water.

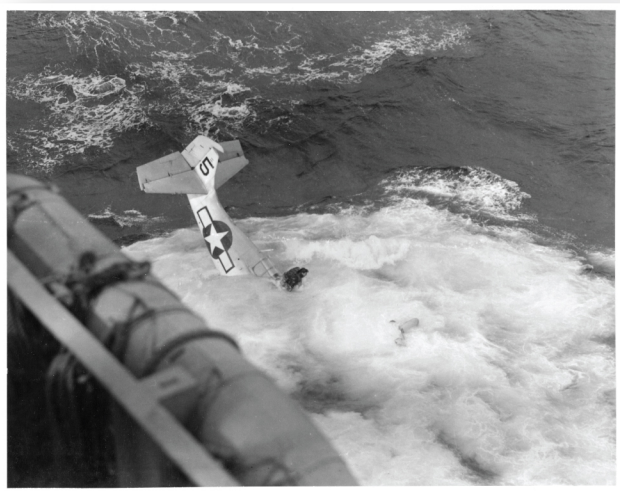


Note the changes to VC-13's markings on this third USS Core combat cruise. The aircraft number on the fin and below the cowling are now much larger. The ASW Scheme I seems to have disappeared in favor of exclusively the ASW II scheme. By the time of her next cruise in early 1944, the F4F-4s would be replaced by FM-2s.

12-16.

STEAMING AS BEFORE. 1307 - CHANGED COURSE AND SPEED TO VARIOUS FOR FLIGHT OPERATIONS. 1314 - CATAPULTED FIRST TBF. 1320 - CATAPULTED LAST TBF. (TOTAL FIVE TBF'S). 1321 - LAUNCHED FIRST OF FOUR F4F'S. 1323 - LAUNCHED SECOND F4F. CRASHED IN WATER OFF STARBOARD BOW. (PILOT LATER PICKED UP O.K. BY GREENE) 1327 - CATAPULTED THIRD F4F BREAKING CATAPULT. 1330 - LAUNCHED FOURTH F4F. 1338 - LANDED FIRST TBF FROM PATROL. 1339 - LANDED SECOND TBF FROM PATROL. 1340 - CHANGED COURSE TO 000^{OT}. 1422 - LT. COMDR. BREWER REPORTED ATTACKING SUB.

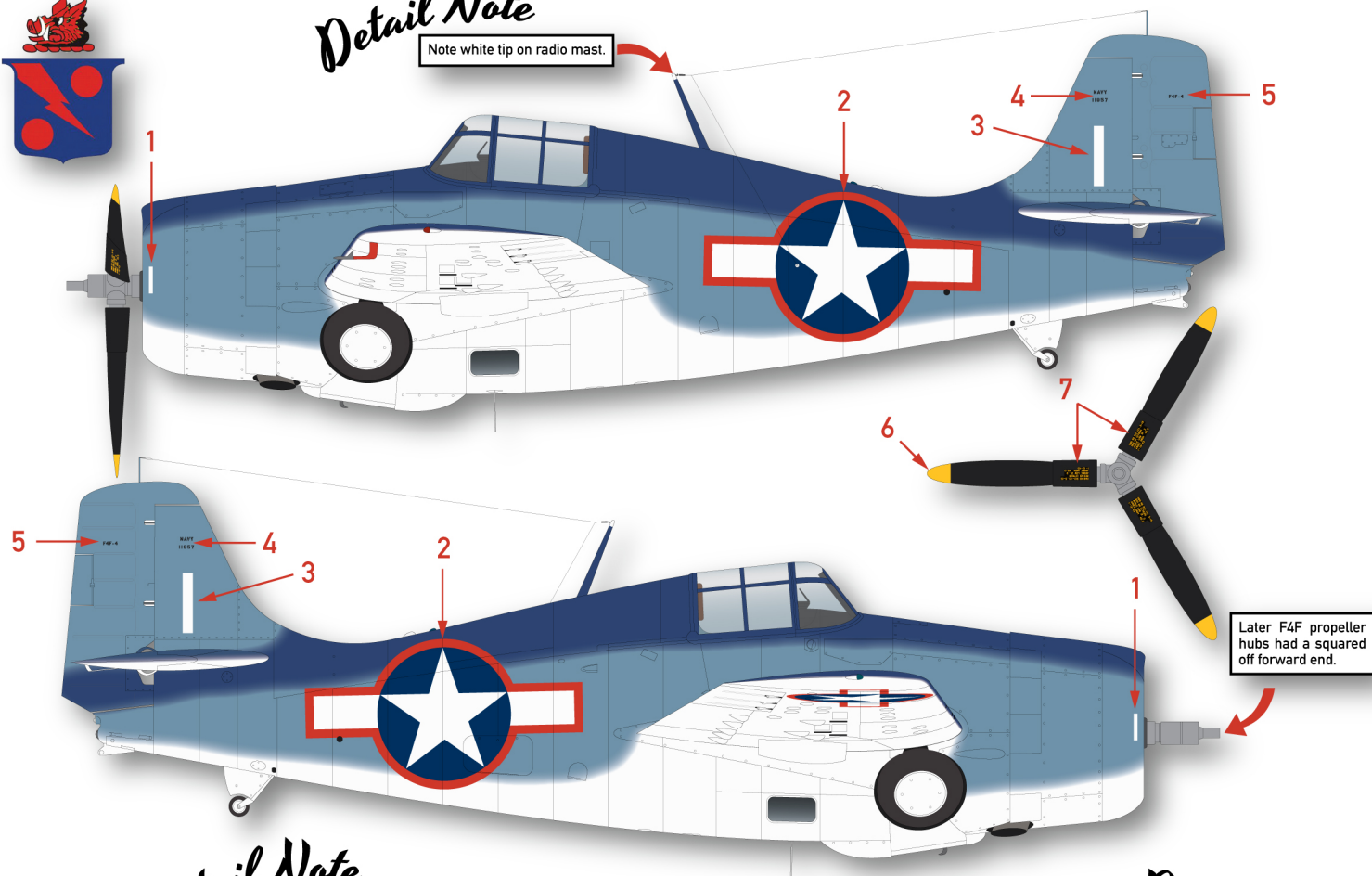
W. C. Wright
W. C. WRIGHT
LT., U.S.N.R.





Detail Note

Note white tip on radio mast.

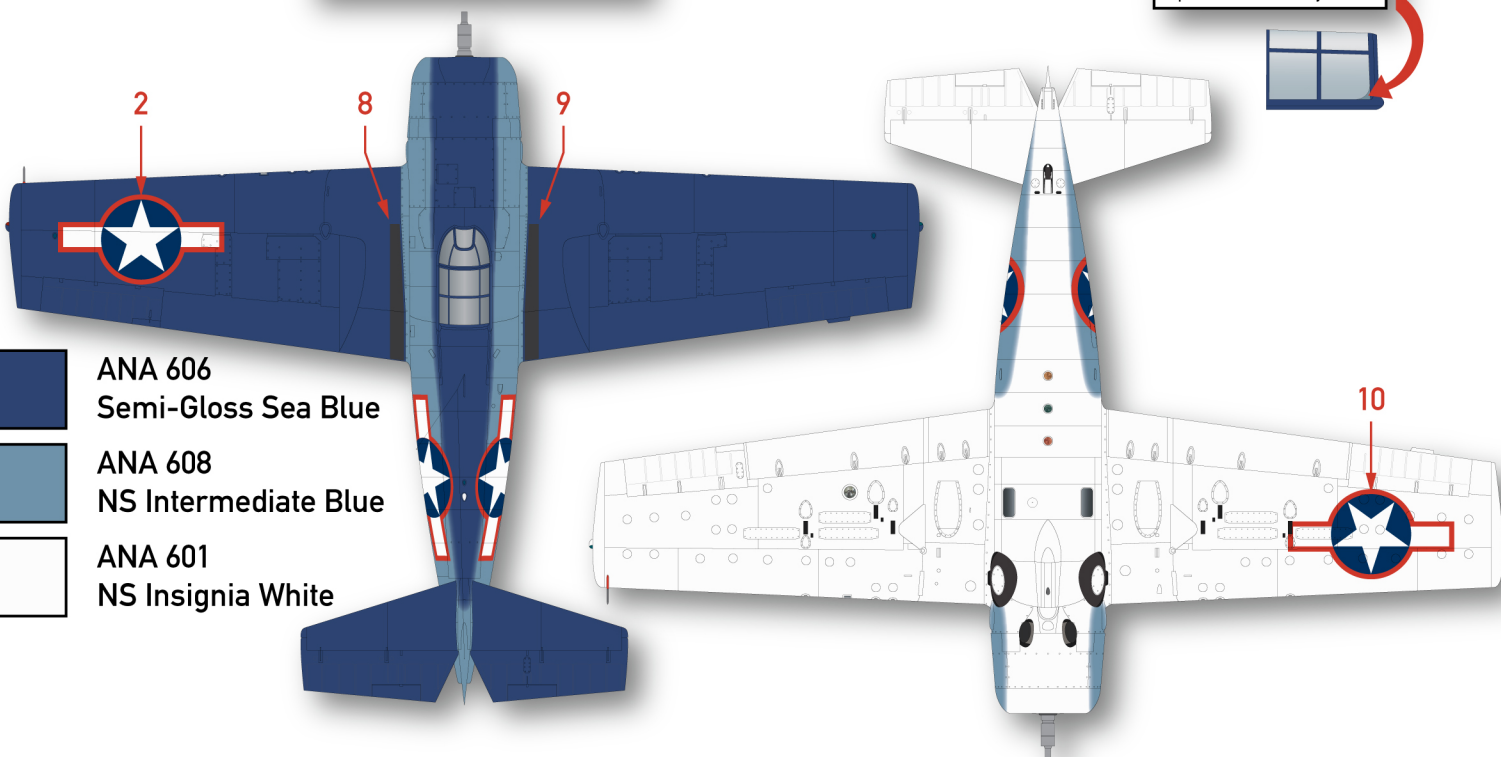


Detail Note

This aircraft was factory-finished in NS Blue-Gray over NS Light Gray. The new tri-color scheme was applied by the Navy, possibly at the NAS Norfolk or NAS Jacksonville depot.

Detail Note

Note the crescent of sheet metal inside aft-most canopy section is painted NS Blue-Gray.



- ANA 606
Semi-Gloss Sea Blue
- ANA 608
NS Intermediate Blue
- ANA 601
NS Insignia White