

H-Gram 064: Close Quarters Antisubmarine Warfare

29 July 2021

This H-Gram covers several epic battles between U.S. surface ships and U-boats involving ramming and hand-to-hand combat, including the use of Coca Cola bottles, coffee mugs and pots, sheath knives, spent shell casings, flare pistols, hand grenades, shotguns, and tommy guns as antisubmarine warfare (ASW) weapons. If you only have time to read one, USS Borie (DD-215) vs. U-405 is the Cox choice for most epic ASW fight of all time.

Overview

I'm taking a break from "Battles You've Never Heard of" series because frankly they are really time-consuming to research. I meant to write about these Battle of the Atlantic submarine actions during the 75th anniversary of WWII series and again when the Tom Hanks' movie, Greyhound, came out (which, by the way, is really good, albeit historical fiction,) but my day job kept interfering.

U.S. Navy PBY Catalina and HMCS Oakville vs. U-94–27 August 1942

A Guantanamo-based VP-92 PBY Catalina flown by Lieutenant Gordon Fiss caught U-94 in the moonlight just as the U-boat was about to torpedo the destroyer USS Lea (DD-118,) with the convoy



4 June 1944 Crew members of USS *Pillsbury* (DE-133), who made up the the first party to board *U-505* after she had been abandoned by her German crew. They are (from left to right): GM1/c Chester Mocarski; EM2/c William Riendeau; CMM George Jacobson; MOMM1/c Zenon Lukosivs; SM2/c Gordon Hohne; BM2/c Wayne Pickles, Jr.; RM2/c Stanley E. Wdowiak; and TM2/c Arthur W. Knispel. Official U.S. Navy Photograph, now in the collections of the National Archives. (80-G-49179)

escort commander embarked, as the 15-tanker convoy TAW-15 transited the Windward Passage. Depth charges from the Catalina blew off U-94's bow hydroplanes, rendering U-94 unable to submerge. The Canadian corvette HMCS Oakville was the first convoy escort to respond. U-94 avoided Oakville's first attempt to ram. The second ram attempt was a glancing blow. With most guns unable to depress far enough, Oakville crewmen showered U-94's conning tower with empty Coca Cola bottles. Oakville's third attempt to ram was a solid hit, with German resistance suppressed by machine gun fire.

Oakville's skipper called away the boarding team in an attempt to capture the U-boat, however an untimely blast from one of Oakville's 4-inch guns incapacitated most of the team, just as Oakville lost power due to engine room flooding. Only Sub-Lieutenant Harold Lawrence and Petty Officer Art Powell managed to make the leap on to U-94 before Oakville drifted away. Pushing two Germans over the side, the pair then shot and killed two more Germans who rushed them from the conning tower hatch. With the sub rapidly sinking, the pair was able to get the rest of the German crew to come topside at gunpoint, while Lawrence went below in a vain attempt to gather codebooks or other documents (the Germans had already deep-sixed them.) Lawrence had to swim through the control room, barely making it out the conning tower before U-94 went down. Lawrence, Powell, and 26 Germans were rescued by Lea and Oakville before the rescue was cut short as U-511 attacked the convoy from a different direction; 19 Germans were lost. Oakville's only casualty was Lawrence, cut by a Coca Cola bottle. For this action, Oakville's skipper, Lieutenant Commander Clarence King, was the first Canadian awarded a U.S. Legion of Merit during the war. (Please see H-064-1 for more detail.)

USS Campbell (WPG-32) vs. U-606–22 February 1943

The battle for westbound North Atlantic convoy ON-166 was one of the most vicious of the war; 14 Allied ships and 263 men would be lost. Battered and scattered by days of gales, the 63-ship convoy was set upon by as many as 14 German U-boats from two wolfpacks as it transited the four-day gap in air cover in the mid-Atlantic. Based on Intelligence, the convoy escort commander knew what they were in for.

One of the convoy escorts was USS Campbell (WPG-32,) a Coast Guard cutter under U.S. Navy wartime control, commanded by Commander James A. Hirshfield, USCG. Campbell was nearly hit by a torpedo from U-753 as she rescued 40 Norwegian crewmen from a torpedoed ship. While



USCGC Campbell (WPG-32). Crewmen signal with a blinker lamp, 1943. (NH 100093-KN)

trying to catch up to the convoy, Campbell engaged multiple U-boats that were trailing the convoy. In the meantime, U-606 penetrated through the convoy escorts and sank two freighters and crippled a third, before a sustained depth charge counter-attack by Polish destroyer Burza forced U-606 down to 780 feet (30 feet below test depth) in order to escape. Determining that the damage to U-606 was fatal, the skipper chose to emergency surface to give his crew a chance.

In the poor visibility, Campbell first sighted U-606 at a range of 40 yards. In the short—but vicious—gun battle that followed, the German skipper was killed on the bridge while Hirshfield was wounded on his. Much of the German crew had already assembled to abandon ship, but jumped into the frigid Atlantic before rafts could be launched and perished. Simultaneously with the gun battle, the two vessels collided and U-606's bow planes ripped open Campbell's hull, causing flooding and loss of power and propulsion.

With both vessels drifting, Hirshfield called away the boarding team in an attempt to capture the sinking submarine, but a line tending mishap dumped the boat and the entire boarding team into the water. As the sub sank, Burza arrived on scene and rescued the boarding team and twelve of U-606's 48-man crew. Refusing recommendations to scuttle his ship, Hirshfield had most of Campbell's crew and the 40 Norwegians transferred to Burza. Campbell's famous mascot dog, K9C Sinbad, remained aboard due to the captain and crews' belief that nothing bad would happen to Campbell as long as Sinbad was aboard. Campbell drifted for three days before a tug towed her to Newfoundland. The all-Black crew of one of the 20mm guns performed with great effectiveness, and Chief Steward Louis C. Etheridge, Jr., became the first Black Sailor in the Coast Guard awarded a Bronze Star. For this action, Commander Hirshfield was one of six Coastguardsmen awarded a Navy Cross during the war. (Please see attachment H-064-1 for more detail.)

USS Borie (DD-215) vs. U-405-1 Nov 1943

In the early morning darkness of 1 November 1943, one of the oldest destroyers in the U.S. Navy, commanded by the youngest destroyer skipper in the Navy, was locked in seventy minutes of close-quarters mortal combat in heavy seas with a tenacious U-boat and her savvy commander. Detached from USS Card (CVE-11) Hunter-Killer group to pursue a submarine that escaped an earlier attack by Card aircraft, USS Borie instead engaged and damaged a different U-boat, the Uflak 2 (ex-U-262). While returning to the group, Borie encountered U-405. As Borie was in her first depth charge run, a malfunction caused every depth charge on the stern to roll in the water at once resulting in a massive explosion that lifted Borie's stern out of the water and brought a damaged U-405 to the surface.

Unable to submerge, U-405 crewmen manned their guns and hit Borie with several 20mm rounds before a fusillade of fire from Borie killed most of the Germans on deck. Lieutenant Charles Hutchins of Borie had a speed and firepower advantage, but Lieutenant Commander Rolf-Heinrich Hopman of U-405 had a maneuverability advantage and dangerous torpedoes. Both commanding officers used their relative advantages to maximum effect during the battle.

After ten minutes of trying to match U-405's evasive maneuvers, which kept going despite repeated gunfire hits, Hutchins gave the order to ram. Instead of a killing perpendicular blow, a last moment avoidance turn-away by Hopman and a big wave resulted in Borie sitting atop the U-boat's foredeck at a 20-30 degree angle. Locked together for the next 10 minutes in mounting 20foot seas, hull plating and seams in Borie began to part. With Borie's guns unable to depress far enough, the Germans saw their chance to man their machine guns and fill Borie's underhull full of holes. But Borie's crew was drilled and ready for this scenario. Lining the lifelines, Borie's crew was armed with tommy guns, rifles, shotguns, pistols, flare guns, and anything that could be thrown. Displaying extraordinary courage, Germans continued to pour from the conning tower in an attempt to reach their guns, only to be cut down one after the other, including one by a thrown knife to the stomach and another hit in the head by a thrown spent 4-inch shell casing. Borie's XO fired a submachine gun from the bridge. Around 35 of U-405's crew of 49 were killed in the initial exchange of fire and in the close-quarters battle.

Still, U-405 wouldn't quit, and finally the U-boat managed to back out from under Borie, still trying to escape. Borie's forward engine room flooded due to damage from the ram, but the engineer and "black gang" stayed at their posts in frigid neck-deep water to keep both engines operating during the battle. The next minutes were a battle of turn radius that Borie was losing. Just as U-405 was lined up for a stern tube shot, Hutchins doused the searchlight, and in the darkness U-405 opened the range to escape. Borie maneuvered for a second ram attempt, only this time U-405 turned to ram Borie. With extraordinary shiphandling, Hutchins was able to twist his ship away and fire depth charges from his K-guns that straddled U-405's conning tower, bringing the sub to a halt six-feet short of Borie.

Again U-405 backed away and made another attempt to escape until finally gunfire from Borie blew Hopman off the bridge and brought the Uboat to a halt. As about 15 German survivors abandoned the sinking U-405, they fired flares. As Borie moved to rescue the Germans, the flares were answered by another U-boat. In avoiding an incoming torpedo, Borie plowed through the German rafts and none of U-405's crew survived.

For the next 14 hours, with her hull severely battered, Borie's crew fought to keep her afloat in mounting seas reaching 40-feet, jettisoning torpedoes, ammunition, 20mm guns, and as much topside weight as possible. Attempts by other Card escorts to assist were thwarted by the seas and pouring rain. Hutchins finally had to make the difficult decision to abandon ship before darkness set in. Borie lost no crewmen in the battle with U-405, but 27 were lost to the raging sea. Lieutenant Hutchins and Petty Officer Saum were awarded the Navy Cross. Engineer Lieutenant Morrison Brown was awarded a posthumous Navy Cross. (Please see H-064-2 for more detail.)

USS Buckley (DE-51) vs. U-66-6 May 1944

Harried for four days by ships and aircraft of the USS Block Island (CVE-21) Hunter-Killer group, U-66 was low on fuel and batteries. Taking a chance in the predawn hours, U-66 remained on the surface even as a Block Island Avenger torpedo bomber tracked U-66 at a respectful distance. For 45 minutes, guided by the Avenger, destroyer escort USS Buckley (DE-51) steamed at flank speed to catch U-66, in the end holding fire hoping the U-boat would mistake Buckley in the darkness for the "Milchkuh" refueling submarine U-66 desperately needed. It worked for a while until U-66 fired a recognition flare signal. Not getting the desired response, U-66 fired a torpedo at Buckley that narrowly missed. What followed was 16 minutes of life-or-death action between Lieutenant Commander Brent Abel's crew on Buckley and Oberleutnant zur See (Lieutenant (junior grade)) Gerhard Seehausen's U-66.

U-66 opened fire first, putting a 4.1-inch round through Buckley's funnel as most of the U-boat's fire went high and long. Buckley returned fire, blasting the sub's 4.1-deck gun over the side with the first directed salvo from Buckley's 3-inch guns. U-66 fired another torpedo that missed by ten feet. In moments the two vessels were side-by-side at 20-feet apart. Although the sub's conning tower was riddled by 40mm and 20mm gunfire, U-66 kept going. Abel gave the order to ram, and Buckley crunched up on U-66's foredeck and stuck. Germans poured out of hatches, some seemingly intent on surrendering, most intent on fighting. With Buckley's main guns unable to depress enough, Germans attempted to reach their machine guns. About ten armed Germans clambered up on Buckley's forecastle to create a diversion so U-66 could back out from under Buckley; one made it as far as the wardroom where he was beaten down by a Black steward's mate with a coffee pot. Other Germans tried to board elsewhere and were fought off with fists, coffee mugs, empty shell casings, pistols, rifles, and a tommy gun from the bridge wing.

The hand-to-hand and close quarters combat lasted only about two minutes before U-66 was able to extricate herself from under Buckley and tried to get away. Just as enough distance had opened for Buckley to fire her K-gun depth charges, U-66 turned into Buckley and rammed. As the U-boat scraped down Buckley's hull, a Buckley crewman dropped a grenade down the conning tower hatch into the control room where fires could be seen raging. As U-66 passed aft of Buckley, the U-boat was still underway but out of control. Germans abandoned the sub as she drove herself under and then exploded from scuttling charges. Ten Germans were captured aboard Buckley and 26 more were pulled out of the water by Buckley the next day; 24 Germans perished. Astonishingly given the volume of fire, Buckley's only casualty was a bruised fist from knocking a German over the side. Lieutenant Commander Abel was awarded the Navy Cross.

The Germans got a measure of revenge on 29 May when U-549 torpedoed and sank escort carrier Block Island and blew the stern off destroyer escort Barr (DE-567) only to be sunk herself by Block Island's escorts. Block Island was the only U.S. carrier lost in the Atlantic. (Please see H-064-2 for more detail.)



USS Chatelain (DE-149) with survivors of the captured German submarine U-505 on her forecastle, 4 June 1944. Photographed from USS Guadalcanal (CVE-60). Official U.S. Navy Photograph, now in the collections of the National Archives. (80-G-324344)

USS Guadalcanal (CVE-60,) Hunter-Killer Group vs. U-505–4 June 1944

The Submarine Tracking Room (F-21) of U.S. TENTH Fleet was aware of the general movements of U-505 throughout her patrol due to Ultra Intelligence derived from intercepted and decrypted German communications and highfrequency direction finding (HF/DF.) U-505's fruitless patrol off West Africa was plagued by equipment breakdowns and poor morale. Based on Intelligence from F-21, TENTH Fleet knew when U-505 started home and vectored the USS Guadalcanal (CVE-60) Hunter-Killer group to intercept. After several days of fruitless searching, Guadalcanal broke off the search to head to Casablanca for refueling. Ten minutes later, destroyer escort Chatelain (DE-149,) commanded by Lieutenant Commander Dudley S. Knox, gained sonar contact on U-505, between Guadalcanal and the escorts.

Chatelain conducted an immediate Hedgehog attack with no result. U-505's skipper, Oberleutnant zur See (Lieutenant (junior grade)) Harald Lange, put up his periscope and was dismayed to see the array of ships and aircraft around him. U-505 got off an acoustic homing torpedo that missed, just as Chatelain rolled in for a devastating depth charge attack.

When the crippled U-505 came to the surface, Chatelain, Pillsbury (DE-133,) Jenks (DE-665) and two Wildcat fighters hit the U-boat with a deluge of gunfire. Lange was badly wounded on the conning tower, two others were wounded and one killed. Realizing the situation was hopeless, Lange ordered the sub abandoned and scuttled. However, in the haste to abandon, the crew neglected to set the charges. Two Avengers airborne were under orders not to drop depth charges if the submarine surfaced, as the Task Group Commander Captain Daniel V. Gallery, had a plan to try to capture a U-boat.

In accordance with Gallery's plan, the screen commander ordered boarding teams away. The team from Pillsbury was underway first and those from Chatelain and Jenks were diverted to rescue the 58 German survivors. Although abandoned and settling by the stern, U-505 was still churning in circles at 6-7 knots. The leader of the boarding team, "Mustang" Lieutenant (junior grade) Albert David made the first leap from the whaleboat, followed by two pretty officers. Knowing that the scuttling charges could go off at any moment and that the sub could sink at any minute, and not knowing if any armed Germans were still below and willing to fight, David plunged down the conning tower ladder without hesitation into the dark U-boat, followed by Petty Officers Knispel and Wdowiak. The petty officers set about rounding up codebooks and valuable papers, while David worked valves to keep the U-boat from sinking. As more of the team came down the hatch, another petty officer found and closed a bilge strainer that was flooding the boat.

Another boat arrived with Guadalcanal's engineer, Commander Earl Trosino, and a salvage party. Another petty officer found and disarmed 13 of the 14 scuttling charges known to be in the U-boat (based on Intelligence). An attempt to tow U-505 by Pillsbury resulted in two flooded compartments when U-505's bow planes sliced into Pillsbury's hull. Finally, Guadalcanal was able to take U-505 in tow. The transit to Bermuda would feature the unique event of a carrier conducting alongside underway refueling and flight operations and towing a submarine, all at the same time.

After the capture of U-505, great lengths had to be taken to ensure the Germans didn't find out, otherwise they would have to assumed the Enigma coding machine was compromised, which would result in the loss of probably the most valuable source of Intelligence in the war. Among other measures, U-505's crew was sequestered from other POWs and denied any contact with the outside world; it wasn't until 1946 that their families learned they were alive, and the crew was not returned to Germany until December 1947. Lieutenant (junior grade) David was awarded the Medal of Honor (the only one awarded in the Atlantic Fleet during the war,) but died of a heart attack before receiving it. Knispel and Wdowiak were each awarded the Navy Cross. Numerous awards went to others in the Guadalcanal Hunter-Killer group. U-505 is now an exhibit at the

Chicago Museum of Science and Industry. (Please see H-064-3 for more detail.)

As a final note, Intelligence played a critical factor in each of these incidents. The Convoy Escort Commander of TAW-15 was warned that U-boats were waiting in the Windward Passage, and the convoy escort commander of ON-166 was warned of the large number of U-boats in his path, both due to intercepted German communications. Each took action as result and did the best they could with the resources available. Card and Block Island Hunter-Killer groups were where they were because Allied Intelligence knew the location and timing of the Milchkuh refueling rendezvous points. The boarding teams were armed with information on the workings of U-boats, derived from the capture of U-570 by the British in 1941 and from interrogations of captured U-boat crews by Naval Intelligence Special Activities Branch, which treated the Germans humanely and were rewarded with a bonanza of useful Intelligence.

For more detail on these Close-Quarters ASW events please see H-064-1 (for Oakville /U-94 and Campbell/U-606,) H-064-2 (for Borie/U-405 and Buckley/U-66), and H-064-3 (for Guadalcanal/U-505.)

As always, you are welcome to share these stories of U.S. Navy valor widely. Back issues of H-Grams can be found in Director's Corner along with a wealth of other great U.S. Navy history on the Naval History and Heritage Command's website.

H-Gram 064-1: Close Quarters Antisubmarine Warfare (Part 1)

H-Gram 064, Attachment 1 Samuel J. Cox, Director NHHC July 2021

U.S. Navy PBY Catalina and HMCS Oakville vs. U-94–27 August 1942

(Although this item is mostly about our Allies the Canadians, it was the quick reaction of a U.S. Navy PBY-5 Catalina flying boat that enabled the action. It's also too good a story to pass up).

U-94, under the command of Oberleutnant zur See (Lieutenant Junior Grade) Otto Ites, departed the German submarine base at St. Nazaire, France, on 2 August 1942, on her tenth war patrol. The U-boat was under orders to proceed to the Caribbean to attack Allied shipping. Despite his youth-24 years old-Ites was already an experienced and effective U-boat commander. He made nine war patrols on U-48, before assuming command of U-146 and then U-94. He was awarded the Knight's Cross of the Iron Cross after his third war patrol in command, by which time he had sunk 11 ships. The U-boat commander would finish with 15 ships in seven war patrols. He was the second commanding officer of U-94, assuming command on 29 August 1941. He had already made four war patrols on U-94; this would be his fifth.

U-94 was a Type VIIC U-boat commissioned on 10 August 1940. It was the most widely produced Uboat by far, with 568 built during the war. Type VIIC U-boats were about 769 tons surfaced (871 submerged) and 210 feet long. They had twin shafts with two diesel engines and two electric motors, capable of a maximum surface speed of 17.7 knots and submerged speed of 7.6 knots.



Blue Jackets Loading A Depth Charge Rack. Painting, Oil on Canvas; by McClelland Barclay; 1940-42; Framed Dimensions 47H X 25W. (48-031-L)

Endurance was 8,500 nautical miles on the surface at 10 knots and 80 nautical miles at 5 knots submerged. Test depth was 750 feet, with crush depth between 820-968 feet. Type VIICs were armed with four bow torpedo tubes and one stern tube, with a total of 14 21-inch torpedoes. For surface action, *U-94* had one 88mm (3.4-inch) deck gun (with 220 rounds) and one 20mm C/30 anti-aircraft gun. On her 10th war patrol, *U-94* had a crew of 45, including the commanding officer, two other officers (executive officer and engineer), and a senior midshipman. In her nine previous war patrols, *U-94* had sunk 26 merchant ships for a total of 141,852 gross registered tons.

After an unusually uneventful transit, *U-94* arrived in the Windward Passage between Haiti and Cuba on 20 August 1942 and awaited a convoy. Between May and July 1942, U-boats had sunk 48 merchant ships in the Caribbean and 21 more on the Gulf of Mexico. Greatly increased patrol activity by aircraft on 27 August indicated to Ites that a convoy transit of the Windward Passage was imminent. *U-94* spent most of the day successfully dodging U.S. aircraft and was not sighted.

On 27 August, convoy TAW-1 was approaching the Windward Passage, bound from Trinidad and Aruba to Key West. Commander J. F. Walsh, USN, embarked on destroyer USS *Lea* (DD-118), was in the command of TAW-15. The convoy included 15 ships (mostly tankers) in seven columns. Besides the *Lea*, an elderly *Wickes*-class destroyer, the convoy's escorts included the Royal Dutch Navy's armed minelayer, HNMS *Jan van Brakel*, three Canadian corvettes, HMCS *Oakville* (K178), HMCS *Halifax* (K237), and HMCS *Snowberry* (K166). TAW-15 also included U.S. patrol boat *PC-38*, and three U.S. sub-chasers of the U.S. "Donald Duck Navy."

The tankers in TAW-15 included several Canadian ships. The safe passage of the tankers was critical as fuel stocks in Canada were down to a 15-day supply–which was why Canada had sent four corvettes and two British destroyers (under Canadian control) to the Caribbean. Ships joining up with TAW-15 had already been attacked by *U*-558 on 25 August in the Jamaica Channel and one British cargo ship sunk. The same day *U-164* sank a Dutch merchant ship. Neither U-boat was aware of the close proximity of the much larger TAW-15 convoy. In both cases, the U.S. Navy's PBY Catalina flying boats prevented greater losses.

HMCS *Oakville*, commanded by Lieutenant Commander Clarence Aubrey King, RCNR, was a *Flower*-class corvette, commissioned on 18 November 1941. *Oakville* was 205-feet long and 940-tons, not much bigger than *U-94*, with a single shaft, and a crew of 85. *Oakville* was armed with one BL 4-inch Mk IX naval gun, two .50 caliber machine guns, one twin Lewis .303 caliber machine gun, two Mk II depth charge throwers, and two depth charge stern rails with 40 depth charges. The account of one of the officers on Oakville referenced an "Oerlikon" suggesting an Oerlikon 20mm anti-aircraft gun had been added to Oakville's armament. King had earned a Distinguished Service Cross in World War I for sinking a U-boat while in command of a British Qship. He was also credited for two more "probables." He came out of retirement as a fruit farmer when World War II broke out.

U-94 first sighted TAW-15 about noon on 27 August 1942. The submarine radioed the position, course, and speed to headquarters, which was passed to other U-boats in the vicinity. The Type IXC *U-511* reacted to the report and closed with the convoy. This report was intercepted by Allied intelligence personnel and relayed to Commander Walsh on *Lea*, who took action to array his escorts for most effective defense in anticipation of attack.

After sunset on 27 August, on a clear night with bright full moonlight, *U-94* carefully worked her way through the outer convoy screen between *Oakville* and *Snowberry* without being seen. *U-511* was approaching from a different direction. At 2200, just as *U-94* was about to fire a torpedo at one of the convoy escorts, a U.S. PBY-5 Catalina flying boat of Patrol Squadron 92 (VP-92) from Guantanamo Bay sighted the submarine running on the surface and attacked from behind, catching *U-94* by surprise. The U-boat attempted to crash dive, but was too late.

The PBY, piloted by Lieutenant Gordon R. Fiss, dropped four 650-pound depth charges from 50feet, which straddled the U-boat and detonated when the submarine was about 30-60 feet below the surface. This action forced the U-boat's bow back to the surface. The PBY also dropped a flare on the datum. *Oakville*, the closest escort, observed the explosions and the PBY's signal lamp flashing "S." *Oakville* was the first escort to commence an attack. After sunset on 27 August, on a clear night with bright full moonlight, *U-94* carefully worked her way through the outer convoy screen between *Oakville* and *Snowberry* without being seen. *U-511* was approaching from a different direction. At 2200, just as *U-94* was about to fire a torpedo at one of the convoy escorts, a U.S. PBY-5 Catalina flying boat of Patrol Squadron 92 (VP-92) from Guantanamo Bay sighted the submarine running on the surface and attacked from behind, catching *U-94* by surprise. The U-boat attempted to crash dive, but was too late.

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U-94 tried again to fully submerge but couldn't because the PBY's depth charges had blown off her bow hydroplanes. At full speed *Oakville* reached the flare and dropped five depth charges set for 100 feet, with no apparent result. *Oakville* then gained an asdic (sonar) contact. About 30 seconds later, a lookout sighted the bow of a submarine only 100 yards distant–too close for gunfire, so *Oakville* changed course to ram.

In the first ram attempt, the U-boat passed under *Oakville*'s bow and scraped along the corvette's port side. *Oakville* came about and attempted to ram again. With more room, her 4-inch gun hit *U*-94's conning tower and another round blew *U*-94's deck gun overboard. *U*-94 tried to speed out of the way, but was unable to make more than 12 knots, possibly due to a damaged coupling or propellers, as the diesels were still functioning normally for emergency speed.

On her second attempt to ram, *Oakville* struck another glancing blow on the U-boat's starboard side. At the point where *Oakville*'s guns could not depress enough to hit the U-boat, German crew members attempted to come on the sub's conning tower. Six stokers were on *Oakville*'s deck with the job of loading the depth charge throwers. As the throwers were already loaded, they showered *U-94*'s conning tower with Coca Cola bottles from a range of 20 feet. More effectively, as *Oakville* opened the range, she threw depth charges, one of which exploded directly under the submarine.

As the U-boat lost forward momentum, *Oakville* came about again and rammed *U-94* a third time, a solid hit just aft of the conning tower. *Oakville's* bow rode up and over the U-boat, shearing off the asdic dome, and the single propeller dragged over the submarine's hull. (The British would later discourage ramming submarines as the steel in the submarine's pressure hull was stronger than the steel in a corvette's bow).

At this point, Ites gave the order to abandon ship. He was hit in the leg by machine gun fire as soon as he reached the deck and was brought back below. Another crewman was also hit and wounded in the stomach. The senior midshipman was pinned down in shattered Coke glass on the conning tower by machine gun fire. By this time, *Oakville* was right alongside the still-surfaced *U*-94. With no sign of further resistance, King ordered a 12-man boarding team away in an attempt to capture the submarine.

Led by *Oakville*'s gunnery/asdic officer, Sub-Lieutenant Harold "Hal" Lawrence, RCNVR, the boarding team was forming up 15-feet from the 4inch gun when the gun crew fired a round after clearing a misfire. The untimely gun blast blew Lawrence and the team off the forecastle onto the deck below. Stoker Petty Officer Art J. Powell, RCN, slapped Lawrence back to consciousness, and the two made the leap onto *U-94*'s foredeck 8-10 feet below.

Oakville lost power as a result of damage to bottom plates from the ramming, which flooded the aft boiler room and asdic compartment. The corvette drifted away from U-94 before the rest of the boarding team could get over the side, leaving Lawrence and Powell alone on the U-boat. Lawrence had gone to battle stations while in his skivvies. The landing on the submarine snapped the band and he lost them, leaving him naked except for a pistol, two hand-grenades, gas mask, flashlight hanging from lanyards on his neck, a length of chain, and a lifebelt. The purpose of the chain was to throw a length down a hatch to keep the Germans from closing the hatch and submerging the boat. Lawrence's nose and ears were also bleeding from the concussion of the qun.

As the two Canadians rushed for the conning tower, Lawrence was swept overboard by a wave, but Powell dragged him back aboard, minus the chain. Oakville fired more machine gun rounds into the conning tower to cover their approach. Lawrence found a German near the mangled remains of the deck gun and pushed him over the side. The first two Germans coming out of the conning tower were possibly Ites and another officer. Lawrence ordered the two to proceed aft, whereupon both jumped over the side. Powell encountered another German and pushed him overboard. Two more Germans came out the conning tower hatch. One was engineering officer Muller. This time Lawrence ordered them to stop and return inside, but they kept coming and Lawrence shot and killed one (probably Muller). The other then lunged at Powell and was shot too. Both Germans fell into the sea.

The rest of the Germans remained below at Powell's gunpoint, while Lawrence went aft, opened another hatch, and saw the compartment flooded. By forcing the Germans to remain below, Lawrence hoped that would prevent them from scuttling the boat. Assured that they would not be surprised by Germans coming out of the aft hatch, Lawrence finally ordered Powell to allow the Germans to come up through the conning tower. After what happened to the engineering officer and other crewman, the Germans initially refused to come up. Lawrence then came to the hatch, aimed the flashlight at his own smiling face, and coaxed them up. At this point the German crew essentially stampeded out the hatch and proceeded aft under Powell's guard.

After the Germans had been brought on deck, Lawrence went below to search for the Enigma coding machine or other valuable publications. The lights were out and he saw nothing of value in the conning tower-code books, signal books, and logs had apparently already been thrown over the side earlier in the action. He then went down into the control room, which already had four feet of water on the deck and rising. He attempted to find valves to close in order to prevent the submarine from sinking. Lawrence actually knew what he was looking for based on intelligence reports derived from a previously captured German submarine (U-570). There appeared to be gas in the air as the batteries flooded. Lawrence's flashlight grew dim and he heard the sound of collapsing bulkheads. The U-boat lurched and began to settle by the stern. Powell shouted down the hatch that the submarine was going under. Lawrence shouted back for everyone to go into the water; Powell and the Germans expeditiously complied. Lawrence had to swim to the ladder to the conning tower to get out.

Once back topside on the conning tower, Lawrence could hear the sound of torpedo explosions. *U-511* had not been sighted and was making her attack on the convoy, sinking two ships–a British and a Dutch tanker–and badly damaging a U.S. tanker. Before going overboard, Lawrence noted the broken glass from the Coca Cola bottles on the conning tower deck. Lawrence swam on his back, cupping his privates, out of fear of shark or barracuda attack. He later stated that he "longed for the confidence–if not the protection–a pair of shorts would have given me." By this time U.S. destroyer Lea arrived to render assistance. Although Oakville stated no assistance was needed, Lea put a boat in the water with a boarding team. By the time Lea's team reached the U-boat only the conning tower was still above the surface. There was no attempt to board. The boat hustled back to *Lea* as it became apparent that the convoy was still under attack from another U-boat. Lea's boat did rescue Lawrence, Powell, and 21 German crew members. All but five others (including Ites) picked up by Oakville were lost. U-94 finally went down about midnight on 27-28 August 1942. Initially mistaken for a German, Lawrence's effective use of English cuss words convinced the Americans on *Lea* that he was Canadian.

Of U-94's crew of 45, 19 were lost and 26 survived. All but the two dead crew members made it into the water, but the rescue effort was curtailed due to the ongoing U-boat attack. Of the crew, Ites and the senior midshipman survived, but the executive officer and engineer were lost. Nine petty officers and 15 enlisted men survived. Ites and a machinist were wounded and several others were burned when bullets hit their escape lungs, causing a chemical reaction. The survivors believed that the engineering officer was attempting to surrender when he was shot and may have misunderstood Lawrence's English commands. Lawrence later stated that a pistol pointed at someone's face from three feet away should suffice as an international order to stop. The German survivors were taken to Guantanamo for interrogation. Treated decently, they provided a wealth of valuable intelligence.

Oakville regained power but was too badly damaged to continue with the convoy, and proceeded independently to Guantanamo for repair.

Sub-Lieutenant Harold Ernest Thomas Lawrence and Stoker Petty Officer Arthur Powell became national heroes in Canada as a result of their action, which was made into a famous propaganda/recruiting poster. Lawrence was awarded the Distinguished Service Cross, a 3rd level decoration. At the time, the second-level required higher rank, which made him ineligible for the Distinguished Service Order. This was remedied by the Canadians in the 1970s when awards for valor were made independent of rank. Powell was awarded a Distinguished Service Medal. Commander Clarence Aubrey King was awarded the Distinguished Service Order and a U.S. Legion of Merit—the first Canadian recognized with a Legion of Merit during the war. The pilot of the PBY, Lieutenant Gordon R. Fiss, was awarded a Distinguished Flying Cross.

Oakville continued to escort convoys during the war. After the war, Oakville was sold to the Venezuelan navy and served as Patria until 1962. King was given command of a frigate in 1943 and assisted in sinking two more U-boats. He retired at the rank of captain after the war. One of his three sons was killed in action in the Sicily Campaign. Destroyer Lea later was awarded a Presidential Unit Citation for actions as part of the USS Bogue (CVE-9), Hunter-Killer Group in 1943. Otto Ites remained a prisoner of war in Tennessee until 1 May 1946. He went on to serve in the Bundesmarine (West German navy). From 1960-62, Ites commanded the destroyer Zerstorer 2 (D171), former USS Ringgold (DD-500), and achieved the rank of Kontreadmiral (two star) in 1975. Otto Ites's twin brother Rudolf was lost in command of U-709, sunk by three U.S. destroyer escorts near the Azores on 1 March 1944. U-511, on her 4th war patrol, transited all the way to Japan and was sold to Japan in September 1943. The U-boat served in the Imperial Japanese Navy as RO-500 until surrendered in August 1945. The submarine was scuttled in May 1946. For more on RO-500 and Yanagi Missions, please see H-033-1.

Sources include: History of U.S. Naval Operations in World War II, Vol I, The Battle of the Atlantic: September 1939-May 1943, by Samuel Eliot Morison: Little, Brown and Co., Boston, 1959. "Over-the-Side: The Courageous Boarding of U- 94" by Marc Milner, Legion, 15 Jan 2015. "U-94 Sunk by USN PBY Plane and HMCS Oakville 8-27-42–Post Mortems on Enemy Submarines"–Serial No. 5, Division of Naval Intelligence, ONI 250 series, 25 Oct 42. "The Storming of U-94–How Two Allied Sailors Took on the Crew of a U-boat in the Caribbean," by James Brun at militaryhistory now.com, 14 October 2020. "The Craziest Kill of the U-boat War" by Harold Lawrence, at archive. macleans.cas, originally 19 October 1963. U-boat.net for information on German submarines and NHHC's online Dictionary of American Fighting Ships (DANFS) for information on U.S. ships.



U.S. Navy Captain Paul R. Heineman, (left) chats with Commander Harold S. Berdine (right), commanding officer of the U.S. Coast Guard Cutter USS *Spencer* after blasting a U-boat from beneath the surface of the Atlantic then battering it with deck guns until it was ready to sink. (NH 120144)

USS Campbell (WPG-32) vs. U-606–22 February 1943

(During World War II, the U.S. Coast Guard was subordinated to the U.S. Navy).

In February 1943, the Battle of the Atlantic was still very much in doubt, with the Allies losing an average of one merchant ship every day to German U-boat attack between November 1942 and March 1943. March would be the worst, with 120 Allied cargo ships and tankers sunk. The belated implementation of convoys along the eastern U.S. seaboard, Caribbean, and Gulf of Mexico, along with increased and improved air cover in the same areas, had effectively brought about the end of what the German U-boat crews called "the Second Happy Time" (see H-gram 019). As the Germans began to pay an increasingly high cost for every kill, the commander of the German submarine force, Admiral Karl Doenitz, ordered a shift in operations to the mid-Atlantic, specifically to an area south of Greenland and Iceland, where long-range Allied air cover still could not reach. This gap in air cover made the convoys especially vulnerable for about four days that it took to cross the gap.

The intelligence war between the Allies and the Germans also continued unabated. The Allies, principally the British, were having significant success intercepting and decrypting German Enigma coded message traffic. Proliferation of High Frequency Direction Finding (HF/DF) capability was also a significant factor in the Allies' favor. These interception and code-breaking efforts were considerably aided by the German naval high command's propensity to micromanage U-boat operations by excessive radio traffic, and by a high volume of radio reporting from the U-boats, which gave codebreakers much to work with. This was coupled with the Germans' stubborn belief that Enigma remained unbreakable.

In order to protect the fact that *Enigma* had been substantially broken, the Allied strategy was to route convoys away from concentrations of Uboats-rather than using the Ultra intelligence derived from *Enigma* decrypts in an offensive tactical manner. However, during this period, German Naval Intelligence (*B-Dienst*) was successfully intercepting and decrypting British Naval Cypher Number 3 which covered Allied radio and convoy coordination in the Atlantic. Fortunately, although *B-Dienst* was intercepting and reading 80 percent of Allied convoy coordination radio traffic, the Germans could only decrypt about 10 percent fast enough to make tactical use of it. Like the Germans, the British were slow to believe their encryption systems could be compromised. The United States refused to share the ECM Mark 1 encryption devices even with the British for fear of compromise.

In addition to the U-boat threat, the weather provided its own risk to the Allied convoys. The winter of 1942-43 was one of the worst ever recorded in the North Atlantic. High winds, heavy seas, and poor visibility played havoc with convoy integrity. Convoys frequently became scattered, which worked to the U-boat's advantage in that it was easier to pick off stragglers and isolated ships than to directly attack a defended convoy. A few ships even broke apart and sank as a result of the pounding they were taking from the weather. Survival for any crew members who ended up immersed in the frigid water was a very low probability. Nevertheless, the U-boats took a beating from the weather as well. The combination of abysmal weather and mounting losses resulted in a significant decrease in morale amongst U-boat crews.

U-606 departed the German submarine base at Brest, France, on 4 January 1943, under the command of Oberleutnant zur See (Lieutenant Junior Grade) Hans-Heinrich Dohler, en route to wolf pack operations in the mid-North Atlantic. This was the third war patrol for U-606-the second with Dohler in command. Dohler had assumed command of U-606 since October 1942. He commanded U-606 on her second war patrol, operating from German-occupied Bergen, Norway, attacking Halifax-to-Liverpool convoy HX 212 on 27-28 October 1942. During this attack, U-606 sank the abandoned U.S. cargo ship *Gurney* E. Newlin. The cargo ship was damaged the previous day by U-436, and lost three of her 59 crew members. The same day, U-606 damaged the Norwegian factory ship Kosmos II, which was subsequently sunk by U-624 the next day. The factory ship lost 33 of 133 aboard. Dohler was

awarded the Iron Cross First Class for *U-606*'s second patrol.

U-606 was a Type VIIC submarine, the most ubiquitous class in the German navy. (See *Oakville* vs. *U-94* above for Type VIIC characteristics). *U-606* had been commissioned on 22 January 1942, and for her third war patrol carried a crew of 48, including Dohler and three other officers. Morale on *U-606* was particularly poor, with the crew viewing Dohler as weak and uncaring of their welfare. The crew was bullied by the executive officer who had a very vindictive personality with a cruel streak.

During U-606's transit to her operating area in the mid-Atlantic, she had two close encounters with Allied destroyers but was not seen. U-606 was sighted and attacked by an Allied aircraft, but three bombs missed and the U-boat suffered no damage. On 14 February, U-606 refueled and resupplied from another submarine and continued her patrol.

On 11 February 1943, convoy ON-166 departed Liverpool, England, en route to North America with 63 freighters, mostly in ballast. The next day, ON-166 was met by Ocean Escort Unit A-3, commanded by U.S. Navy Captain Paul R. Heineman, embarked on the U.S. Coast Guard cutter USS Spencer (WPG-36). The U.S. Coast Guard had subordinated to the U.S. Navy in November 1941, so the ships were "USS" but continued to be manned by Coast Guard crews. The other escorts included Spencer's sister cutter, USS Campbell (WPG-32), the British Flower-class corvette HMS Dianthus, and four Canadian Flower-class corvettes: HMCS Chilliwack, HMCS Rosthern, HMCS Trillium and HMCS Dauphin. Before entering the air coverage gap, the Polish destroyer Orp Burza was ordered forward from trailing convoy ONS-167 in order to bolster the defense of ON-166. The HF/DF was indicating a large concentration of U-boats was lying in wait in the gap.

German naval intelligence was able to determine the route of ON-166 and a 10-boat wolf pack was formed. Based on Ultra intelligence from decrypted *Enigma* traffic, the convoy was rerouted further south to avoid the wolf pack. The Germans detected the reroute and formed another four-boat wolf pack to intercept. An additional five boats proceeded independently to intercept. All told, 14 U-boats would fire torpedoes or deck guns against ships of ON-166.

ON-166 was not far into the Atlantic when it began battling northwesterly gales with 50-knot winds. These conditions lasted for eight days, resulting in scattering and straggling amongst ships of the convoy. This scattering of ON-166 resulted in differing numbers in different accounts for how many ships were in the convoy when it came under attack. Commencing the evening of 21 February 1943, when ON-166 passed out of air cover range, and continuing for three days until air cover was regained on 24 February, the convoy was subjected to six separate major attacks by at least 14 U-boats.

At this point it may be fair to ask why the Germans would make such effort against a convoy when most of the ships were in ballast returning to North America after delivering their critical cargo to Great Britain. One reason was because returning convoys were slightly less heavily defended. However, the primary reason was that Doenitz' strategy at that time of the war was to sink Allied ships faster than the Allies could build them, and it didn't matter what ships or where–his metric was the number of ships and tonnage sunk, not cargo. (And like a cat trying to drink the water in the fishbowl to get at the fish, this proved to be a losing strategy).

On 20 February 1943, *U-604* sighted ships of the scattered convoy and reported the location by radio. *U-332* torpedoed and sank a straggler, the Norwegian-flag tanker *Stigstad* (three of 37 crew members lost). In turn, *U-623* was caught on the surface rushing to join the attack on ON-166 and

was sunk by depth charges from a B-24 Liberator of the Royal Air Force's 120 Squadron. The submarine lost all 46 crew members.

After sunset on 20 February, *Campbell* attacked a submarine. Analysis after the war gave *Campbell* credit for sinking *U-225;* however, it may actually have been *U-529*. It may also be that neither was sunk. Other newer accounts (uboat.net), indicate *Campbell* attacked *U-604*, which escaped, and ON-166's escort corvette HMS *Dianthus* actually sank *U-225* on 22 February with the loss of all 46 hands.

Campbell was one of seven *Secretary*-class (also known as *Treasury*-class) large U.S. Coast Guard ocean cutters, commissioned on 16 June 1936. She was named after George Washington Campbell, who served as Secretary of the Treasury for eight months during the War of 1812 (which was a financial disaster for the U.S. government). On 1 July 1941, *Campbell* was the first Coast Guard cutter to become subordinate to the U.S. Navy (hence the "USS") under Presidential directive, although she retained her Coast Guard crew. (The subordination of the entire U.S. Coast Guard to the U.S. Navy occurred on 1 November 1941).

The Campbell was 2,350 tons and 327-feet long and capable of 21-23 knots. Due to their size, the Secretary cutters could maintain speeds in heavy seas that would slow destroyers, making them ideally suited as convoy escorts. Campbell was originally designed to carry a Grumman JF Duck single-engine biplane seaplane, but did not do so during the war. Her armament varied widely during the course of the war and her service life, but in February 1943 she was armed with two 5"/51 and four 3"/50 guns and two 20mm Oerlikon anti-aircraft guns. She also had two Kgun side-throwing depth charge projectors and two depth charge racks on the stern. She was fitted with a Hedgehog antisubmarine mortar sometime in 1943, but does not appear to have had it yet for ON-166.

Along with Spencer, Campbell was the first U.S. Navy ship to be equipped with a HF/DF system. The HF/DF gear was received from the British during a short refit period in the American shipyard in Londonderry, Northern Ireland, in October 1942. Heineman, who commanded the escort group for multiple convoys, alternated between embarking on Spencer and Campbell. He had long been an early vocal advocate of HF/DF in the U.S. Navy. In July 1943, Heinemanby then known as The U-boat Killer–became commander of the Atlantic Fleet Antisubmarine Warfare (ASW) training unit, significantly responsible for the U.S. Navy's ASW successes later in the war. He was awarded two Legion of Merits as convoy escort commander. He retired in 1949 as a rear admiral.

The commanding officer of Campbell was Commander James A. Hirshfield, USCG, a 1924 graduate of the U.S. Coast Guard Academy. He had extensive sea time in the 1920s in the Coast Guard Destroyer Force out of New London, Connecticut. The Coast Guard Destroyer Force consisted of WWI-vintage U.S. Navy destroyers seconded to the Coast Guard principally for "Rum Patrol" duties during prohibition (1920-33). He also served on board cutters and as an instructor at the Coast Guard Academy, where during summer class breaks he earned a law degree from George Washington University. He was subsequently admitted to the District of Columbia bar. He had previously commanded the cutter Onondaga and the maritime training ship, City Of Chattanooga.

A noteworthy crewmember on *Campbell* was K9C Sinbad (Chief Dog) a mostly black mixed breed dog who served aboard *Campbell* for 11 years from 1937-48. Sinbad was given enlistment papers, a service number, Red Cross number, and may have been one of the most photographed mascots of the war. He was apparently responsible for at least two "international incidents" during port calls and was taken to captain's mast and busted twice. He also had a battle station; although photographs show him manning (dogging?) guns, he was actually assigned to "damage control" below decks, as far from the sound of gunfire as possible (now, there's a joke).

Polish destroyer *Orp Burza* (storm or squall) joined up with ON-166 on 21 February. Described by *Campbell*'s crew as "the fightin'ist ship they ever saw," *Burza* was one of four destroyers built in France for the Polish navy. Commissioned in July 1932, *Burza* was armed with four 5.1-inch guns, two triple torpedo tube mounts, and displaced about 1,400 tons.

Recognizing the likelihood that the small Polish navy would be no match from the German navy, the Poles executed a preplanned response. This planned response, called the "Peking Plan," necessitated that *Burza* and two slightly newer destroyers depart the Baltic in advance of a German attack, which they did on 30 August 1939-just barely ahead of the German invasion of Poland on 1 September 1939. Although this action was controversial in the Polish navy at the time, (i.e., running before the fight), the rest of the Polish navy was, as anticipated, quickly destroyed or captured. Burza's sister ship, Wicher, the flagship of the Polish navy, was bombed and sunk by the Germans in the Baltic on 3 September 1939. Nevertheless, the three destroyers provided valuable service to the Allied war effort, although Grom was sunk by a German bomber in 1940 while operating with the British navy during the unsuccessful Allied attempt to hold the Germans from capturing northern Norway.

During the war, the Polish destroyers received weapons upgrades from the British including 40mm "pom pom" anti-aircraft guns and Thorneycroft 240mm depth charge launchers. Later in the war, a number of British ships and submarines were turned over to the Free Polish navy, manned by Polish crews who had escaped the Nazi invasion. Effective patrolling by convoy escorts on 21 February drove off three U-boats and prevented any daylight attacks. *U-91* was damaged by a "rain of bombs" from a PBY Catalina flying boat and forced to withdraw; this was the last of the air cover for ON-166 until 24 February. At 2032 on the night of 21-22 February, *U-92* torpedoed and damaged the British cargo ship *Empire Trader*. The damaged vessel was being escorted toward the Azores by HMCS *Dauphin*, but orders came from the British Admiralty to scuttle her, so *Dauphin* sank her. Convoy rescue ship *Stockport* took aboard all 106 crew members.

During the day on 21 February, *Campbell* intercepted several U-boat radio transmissions with her HF/DF gear and conducted multiple depth charge attacks against possible contacts. She dropped 21 depth charges on a contact at 1331 with no visible result. She dropped 18 more depth charges on another contact in the evening at 1917, again with no visible result.

At 0153 on 22 February, *U-92* hit the straggling Norwegian factory ship, *N.T. Nielsen Alonso*, with one torpedo, flooding the boiler room and leaving the ship dead in the water. As the convoy rescue ship *Stockport* was engaged elsewhere, Captain Heineman ordered *Campbell* to go to the rescue. Arriving on scene, *Campbell* found the *N.T. Nielsen Alonso* abandoned, but still afloat, and not apparently in imminent danger of sinking. *Campbell* rescued 50 survivors from their lifeboats, and proceeded on course to catch up with the convoy.

After about 30 minutes, Commander Hirshfield was informed that the Norwegian crew had not destroyed their sensitive documents, which were still aboard the drifting ship. *Campbell* reversed course and returned to *N. T. Nielsen Alonso* just in time to witness her being hit by a torpedo from *U-*753. *Campbell* then narrowly avoided a torpedo aimed at her. A lookout sighted a surfaced Uboat, which crash dived as she was illuminated by *Campbell*'s searchlight. *Campbell* gained sonar contact and made a depth-charge attack bringing oil and debris to the surface (likely a ruse by the U-boat, as *U-753* joined in the attack on the convoy the next night).

Campbell then opened fire on N.T. Nielsen Alonso's bridge in an attempt to destroy any documents. The gunfire set fire to the bridge, but urgent calls from the convoy commander for assistance–as numerous U-boats were being detected all around–caused Campbell to break off and hasten back toward the convoy, which by then was 40 nautical miles ahead. (N.T. Nielsen Alonso would ultimately by put down by Burza). For a time, Campbell's search radar was inoperative due to vibrations from the depth charge concussions, but radar technicians were able to bring it back on line.

As Campbell was pursuing the convoy, a periscope popped up only 20 yards away passing down the port side. The quick-thinking conning officer ordered a depth-charge attack and five charges straddled the submarine, which appeared to go right into the pattern, but no visible damage was discerned. Ten minutes later, *Campbell* dropped 14 depth charges on the contact and sometime later two more, all without visible result. Having unsuccessfully pursued the contact for several hours, *Campbell* resumed trying to catch up to the convoy. Continuing numerous HF/DF intercepts led Commander Hirschfield to note in his action report that the convoy was in for "a big party."

At 1220 on 22 February, *Campbell* made two attacks on a submarine contact with four depth charges each, again with no result. At 1402, *Campbell* sighted another U-boat, which crash dived, resulting in a fruitless 45-minute attempt to gain sonar contact.

U-606 sighted convoy ON-166 on the morning of 22 February 1943 and commenced trailing the convoy. Of note, U-boats on the surface were faster than *Flower*-class corvettes. *U-606*, *U-603*,

and U-628 remained in contact with the convoy during the day as five other U-boats, including U-753, closed with the convoy to attack that night. U-606 and U-753 were the first in amongst the convoy. U-753 was driven off by Canadian corvettes Trillium and Rosthern, but U-606 got through.

U-606 fired her first torpedo at a range of 600 yards and scored a hit. Her second torpedo was a miss, but the third and fourth were believed to be hits. The U-boat's officers believed they had sunk two ships and possibly sank a third, totaling 16,000 gross registered tons. The assessment was pretty close as U-606 sank the 5,700-ton British cargo ship Empire Redshank (6,600 tons, all 47 crew members rescued) and the U.S. cargo ship Chattanooga City (5,700 tons, all 58 crew members rescued). U-606 hit 5,000-ton U.S. cargo vessel Expositor with a torpedo, causing a boiler explosion. HMCS Trillium rescued 55 survivors of Expositor's crew, including 21 U.S. Navy armed guards; however, one ship's officer and an engineer subsequently died of their wounds. Despite being abandoned, the Expositor remained afloat. After three hours, Trillium blew off her stern with a depth charge, but the ship still refused to go down until she was finally torpedoed by U-303.

After the successful torpedo attacks, *U-606* came under counterattack by *Burza* and *Chilliwack*. *Burza* concentrated on *U-606* as *Chilliwack* resumed escorting the convoy. *U-606* endured a severe pounding by *Burza*, with so many depth charges the U-boat crew lost count, with subsequent accounts claiming 18 to 50 depth charges. Many were near misses. One depth charge exploded above the bridge damaging the railing, conning tower housing, and bending the 20mm gun.

To escape from *Burza*'s relentless attack, Dohler took *U-606* all the way down to 780-feet (past the test depth of 750-feet). As described by the crew, the great pressure caused the U-boat to "creak

and groan in a terrifying manner." In an inspection of the boat's condition the engineer and warrant machinist saw the beginning of a crack in the pressure hull. The engineer advised Dohler that the U-boat probably had less than 30 minutes before the damage would prove fatal. Dohler chose not to wait that long to find out but ordered an emergency ascent using all the air in the high pressure tanks. The U-boat shot to the surface at a high angle, during which the engineer lost his composure and had to be restrained.

Once on the surface, an inspection revealed that the diesels and electric motors were functioning correctly and the lights were on. The engineer calmed down and revised his estimate of how long the sub could remain afloat to two hours. However, the hydrophones were inoperative and the conning tower hatch was jammed shut, so *U*-606 was essentially running blind on the surface. The skipper of *U*-606, Dohler, was able to reach the main deck via the forward torpedo hatch, and with help from those inside, was able to muscle open the jammed conning tower hatch. Most of the crew then joined Dohler on deck, but a heavy starboard list prevented launching the life raft.

At 1926, Campbell lookouts sighted starshells and gunfire flashes about 10 miles away, indicating the convoy was under attack, but also giving Campbell a good steer toward the convoy. At 2015, Campbell gained a radar contact on a possible submarine at a range of 4,600 yards, and closed at 18 knots, sounding the general alarm. Sonar contact was gained at 1,200 yards but lost at 800 yards. Visibility was very poor. When the submarine was finally sighted, she was only 40 yards off the starboard beam, too close for the Campbell's 5-inch guns to depress, but she opened up with her 3-inch, 20mm guns, and even Thompson submachine guns chewing up the conning tower of U-606. Campbell fired for ten minutes, expending 32 3-inch rounds and 20 drums of 20mm.

U-606's commanding officer was killed in the barrage. Much of *U-606*'s crew had already assembled on deck in preparation to abandon the already heavily damaged sub and none made an attempt to man the deck gun. German flashlights only drew more fire. With the other officers still below and the commander apparently blown off the sub, the senior on deck, the warrant quartermaster, panicked–for good reason given the likelihood of being slaughtered by the incoming fire. He then ordered all of the Germans topside into the frigid water. None of those who went in the water survived.

During the firing, Commander Hirshfield was hit by shell fragments. Despite painful wounds, he remained in command throughout the engagement and subsequent efforts to save his ship from sinking.

At the time of the sighting, *Campbell* was coming hard right. The submarine passed so close down *Campbell's* starboard side that the U-boat's bow plane sliced through *Campbell's* hull, just below the starboard bridge wing, flooding the engine room, and resulting in a complete loss of power. The searchlight illuminating the U-boat went out when the power failed, but tracer rounds from the 20mm provided enough light to continue the action.

Campbell's action report described the collision with *U-606* as a severe jolt; however, surviving members of the U-boat crew said they didn't feel it, leading to speculation that *Campbell* actually collided with a different U-boat. More likely, after being hammered by numerous depth charge near misses from *Burza*, a scrape along the hull of a ship just didn't register with the U-boat crew. Before losing power, *Campbell* fired two depth charges which exploded directly under the submarine, which no doubt did the Germans who had gone into the water no good– killing many before the hypothermia did. Although his own ship was now adrift, Commander Hirschfield guickly realized that that U-606 was also helpless. Hirschfield ordered a cease-fire. The officers and crew of U-606 who were below when the shooting started were still alive. After about ten minutes with no gunfire, some ventured topside and used a flashlight to send a distress signal. Hirschfield then ordered a boat to be put in the water in attempt to capture prisoners. U-606's engineer opted not to set the scuttling charges but did open the vents to the ballast tanks. One member of the crew remained below to open the main flood vent when rescue was assured. The survivors then waited on the deck of U-606, eating sausages and drinking bottles of rum and champagne.

One of *Campbell*'s 3-inch guns was manned by an all-Black gun crew, which distinguished themselves with volume and accuracy of fire. For this action, the gun captain, Chief Steward Louis C. Etheridge, Jr., would later be awarded a Bronze Star (although not until 1952). He was the first African-American in the U.S. Coast Guard to receive the Bronze Star.

Campbell's pulling boat was launched under the command of Lieutenant Arthur Pfieffer, which approached the U-boat at 2100 and took aboard five Germans. Hirshfield ordered the motor launch to be put in the water in an attempt to capture the submarine, or at least more prisoners. *Campbell's* boarding team had been specially trained by the Royal Navy while in Londonderry for just such a possibility. However, as the motor launch was being lowered, one of the line tenders lost his grip and one end of the boat fell, dropping the entire boarding team into the ocean. The other fall let go as well and the boat filled with water and capsized, drifting away with the boarding team clinging to the keel. Luckily, the entire boarding team was subsequently rescued.

Burza, which had previously forced *U-606* to the surface, but had lost contact in the drizzle, arrived

back on the scene. *Burza's* boats took aboard eight Germans, one of whom subsequently died, as well as *Campbell's* boarding team. *U-606* continued to slowly sink, and the conning tower was still above water at midnight, but with the mishap to the trained boarding team, any further attempt to capture the submarine was considered too risky.

Burza was initially ordered to take Campbell in tow, but that was rescinded as Campbell was at risk of sinking. The next morning Burza took on board 120 of Campbell's crew, along with the 50 survivors of N.T. Nielsen Alonso, leaving essential damage control personnel on Campbell. Commander Hirshfield shared the opinion of his crew that as long as Sinbad the dog was aboard, no harm would come to the ship, so Sinbad remained aboard as an "essential" crewman. Burza provided protection for Campbell until the British tug Tenacity arrived on 26 February with two British escorts, and Campbell was towed to St. Johns, Newfoundland, arriving on 3 March 1943.

Of *U-606*'s 48 men, the commanding officer was lost, but the other three officers survived. Only nine of 44 petty officers and sailors survived. The 12 German survivors were taken first to St. Johns, Newfoundland, and then to the United States. The Germans were treated humanely and provided extensive valuable intelligence during interrogation.

While *Campbell* was drifting, 23 February 1943 proved to be the worst day for ON-166, with seven vessels sunk. The last ship sunk was the British-owned *Manchester Merchant*. It was sunk by *U-628* on 25 February. The final loss tally for convoy ON-166 was 14 of its 63 ships sunk (a total of 87,994 gross registered tonnage) and 263 Allied crew members or passengers killed, or drowned. The cost to the Germans was three submarines sunk, 128 crew members lost, and 12 captured.

On 23 February, U-604 (which had escaped from Campbell on 21 February) torpedoed and sank the British convoy rescue ship Stockport. During 16 convoys, Stockport had rescued 322 survivors of torpedoed ships, plus another 92 from various ships sunk in convoy ON-166. Stockport had rescued the crew of Empire Trader and transferred the 106 survivors to HMCS Dauphin. The rescue ship was attempting to catch up with convoy ON-166 when U-604 caught her alone, firing a spread of four torpedoes. Two torpedoes hit Stockport, sinking the ship in under three minutes. All 64 crew members aboard were lost. An account by the Royal Fleet Auxiliary Society states 164 were lost, which would indicate other rescued crew members went down with the ship. (Another account says 91 rescued sailors were lost with the ship, but all other accounts I can find list 64 crew members).

Anton Otto Fischer, an illustrator for *Life* magazine, depicted the battle in a series of oil paintings while serving as a lieutenant commander aboard *Campbell*. His illustrations appeared in the 5 July 1943 edition of *Life*.

For his actions in command of *Campbell* against *U-606*, Commander Hirshfield became one of six Coast Guard personnel during World War II to be awarded the Navy Cross.

"The President of the United States takes pleasure in presenting the Navy Cross to James A. Hirshfield, Commander, U.S. Coast Guard, for extraordinary heroism and distinguished service in the line of his profession as commanding officer of the USS *Campbell* (WPG-32) during action against enemy submarines in the Atlantic War Area on 22 February 1943. Surprising the hostile undersea craft on the surface during escort operations, Commander Hirshfield, in a quick attempt to ram, collided with the vessel and destroyed it in a fierce attack by depth charges and point-blank fire. Although painfully wounded by flying shell splinters, he gallantly remained in command throughout the action and during the subsequent period while the *Campbell* was towed to safety into port with several prisoners from the enemy submarine. Commander Hirshfield's inspiring leadership and valiant devotion to duty of his command contributed in large measure to the outstanding success of this vital mission and reflects great credit upon the United States Naval Service." Hirschfield was also awarded the Purple Heart.

Commander Hirshfield relinquished command of *Campbell* in May 1943. He was appointed a rear admiral in 1951 and in 1954 became assistant commandant of the Coast Guard. He was appointed a vice admiral in 1957. Hirshfield served another four years as assistant commandant before retiring in February 1962.

Campbell served even longer than Hirshfield. In May 1944, Campbell was leading the escort screen for convoy UGS-40 through Gibraltar to Bizerte, Tunisia, when the convoy came under concerted German air attack. Thanks to improved training, tactics, weapons, and sensors, 17 German bombers were shot down and the rest driven off with the convoy unscathed. Campbell was then converted to an amphibious command ship, arriving in the Western Pacific just as the war ended. She was returned to U.S. Coast Guard control, reconfigured as a cutter, and participated in a number of noteworthy search and rescue operations. Campbell served in Vietnam from January to July 1968. She participated in Operation Market Time and on the gunline, destroying or damaging 105 Viet Cong structures. When she was decommissioned in 1982, she was the oldest active continually commissioned vessel in the U.S. Coast Guard, known as "Queen of the Seas." Her final mission was to serve as an exercise target. She was sunk by a U.S. Navy harpoon antiship missile northwest of Hawaii on 29 November 1984.

Of note, there is a statue of K9C Sinbad aboard the current U.S. Coast Guard cutter *Campbell* (WMEC-909) commissioned in 1984 and still in service. It is considered bad luck for anyone below the rank of Chief to touch Sinbad or his bone. The cutter's motto is "Sinbad Lives!"

Sources include: History of U.S. Naval Operations in World War II, Vol I, "The Battle of the Atlantic: September 1939-May 1943. by Samuel Eliot Morison: Little, Brown and Co., Boston, 1959. "Report on the Interrogation of Survivors from U-606 Sunk on February 22, 1943," ONI 250 Series, Post Mortems on Submarines, Serial No. 10. "The Long Blue Line: Coast Guard's "Queen of the Fleet" and the Battle of Convoy ON-166, part I," at Coast Guard Compass, the official blog of the U.S. Coast Guard, July 2017 at coastguardblogcom. wpcomstaging.com. "Campbell, 1936," and "Vice Admiral James A. Hirshfield," United States Coast Guard Historian's Office, 19 Jan 2020, at history. uscg.mil. "Sinbad–The Dog Behind the Legend," by Michael G. Walling at U.S. Naval Institute Naval History Blog, 21 March 2019 at navalhistory.org. Uboat.net for information on German submarines and NHHC's online Dictionary of American Fighting Ships (DANFS) for information on U.S. ships.



Sinking of German submarine *U-175* by USCGC Spencer 17 April 1943. (NH 26-G-1517)



Painting of action between Borie (DD-215) and German submarine U-405 in the Atlantic on 1 November 1943 by U.S. Coast Guard artist Hunter Wood, 1943. (NA 80-G-43655).

H-Gram 064-2: Close Quarters Antisubmarine Warfare (Part 2)

H-Gram 064, Attachment 2 Samuel J. Cox, Director NHHC July 2021

USS Borie (DD-215) vs. U-405–1 November 1943

(Someone should make a movie of this one.)

The tide of war in the Atlantic turned against the Germans with surprising rapidity in May 1943 (see H-Gram 019 "Black May") as the Allies became more effective at using decrypted German Enigma communications in a tactically effective

manner without compromising the fact that they were reading many German messages. (This was a difficult feat-although the Germans did not know Enigma was compromised, they still took extensive communications security precautions that led to a constant seesaw battle with the Allied code breakers.) The Allies' ability to use highfrequency direction finding (HF/DF) in a tactically useful manner, taking advantage of the Germans' excessive communications to and from the Uboats, was another key factor. There were other technological, intelligence, and operational analysis factors as well, and in particular the extension of air cover ever further out to sea. Although the tide actually turned before the Allies started sending hunter-killer groups to sea (each centered on an escort carrier), the hunter-killer groups had the German U-boats on the defensive for the rest of the war. For the U-boat crews, the

object became survival, even more than how many ships they could sink.

The hunter-killer groups consisted of a small escort carrier with about six to nine F4F Wildcat fighters and twelve TBF Avenger torpedo bombers (older models of Wildcats and Avengers that would have been at a disadvantage in the Pacific War with the Japanese). The groups were screened by three to five surface ships, initially World War I-era destroyers, which were eventually supplanted by new, mass-produced destroyer escorts optimized for antisubmarine warfare and convoy escort. Initially, the hunterkiller groups operated in loose company with convoys, but later they operated completely independently. In response to decrypted German communications, the convoys would be routed away from U-boat concentrations (known as wolfpacks) while the Hunter-Killer groups would go after such concentrations with the primary objective to destroy the *Milchkuh* (milk cow) submarines. These milk cow submarines were larger submarines used to refuel and reprovision other U-boats at sea to minimize the number of times U-boats ran the gauntlet of Allied aircraft and ships in the Bay of Biscay while traveling to and from the U-boat bases in German-occupied France. The trick was for the Hunter-Killer groups to show up at Milchkuh rendezvous points without the Germans catching on that their communications were compromised.

The first U.S. Hunter-Killer group went to sea in the Atlantic in March 1943 and was centered on escort carrier *Bogue* (CVE-9). Groups centered on *Core* (CVE-13) and *Santee* (CVE-29) deployed in June 1943. *Santee* was then sent to the Pacific. In July 1943, *Bogue* deployed a second time and *Card* (CVE-11) deployed for her first Hunter Killer operation that same month.

The escort carrier *Card* departed Hampton Roads on 27 July 1943 under the command of Captain Arnold J. "Buster" Isbell. Isbell was dual-hatted as the commander of Task Group 21.14, centered on *Card,* with three elderly destroyers as the screen. *Card* initially embarked Composite Squadron 1 (VC-1), commanded by Lieutenant Commander Carl E. Jones and composed of six F4F-4 Wildcat fighter-bombers and 11 TBF-1 Avenger torpedo bombers (which also carried bombs and depth bombs).

The three destroyers of Task Group 21.14 were Borie (DD-215), Goff (DD-246), and Barry (DD-248), all Clemson-class destroyers (known as fourpipers or flush-deckers) ordered during World War I but not commissioned until 1920/21. The Clemsons were the most numerous class of destroyer (156) prior to the Fletcher-class in World War II. The screen commander was Lieutenant Commander J. E. Flynn.

Borie was named after President Ulysses S. Grant's Secretary of the Navy, Adolph E. Borie, and was commissioned on 24 March 1920. The next month, she joined the U.S. Navy detachment operating in the Black Sea in response to the Russian revolution and civil war. In the years that followed, she twice served in the Asiatic Fleet and operated primarily in the Pacific. She joined the North Atlantic Neutrality Patrol (see H-gram 001) in 1939. After Germany and the United States went to war in December 1941, *Borie* served in the Caribbean and then in the South Atlantic.

The *Clemson*-class destroyers displaced about 1,200 tons and were 314 feet long. They had two screws and geared turbines, capable of a very respectable 35 knots, and an original crew complement of about 122. In November 1942, *Borie* underwent a major overhaul (similar to those undergone by other *Clemson*-class destroyers) in which her stacks were cut down to lower her silhouette. An SL surface search radar was added. She retained her four 4-inch guns and one 3-inch antiaircraft gun but had her Browning .50-caliber machine guns replaced by six Oerlikon 20mm anti-aircraft guns. She also had two of her four triple 21-inch torpedo tube mounts removed and replaced by six K-gun side-throwing depth charge projectors. She retained her depth charge rails on the stern.

Borie was commanded by 30-year-old Lieutenant Charles H. "Hutch" Hutchins, USNR, reportedly the youngest destroyer skipper in the U.S. Navy. A 1936 graduate of the U.S. Naval Academy, he had resigned his commission after two years. After the attack on Pearl Harbor, he was commissioned a lieutenant (junior grade) in the U.S. Naval Reserve. He became executive officer on *Borie* in October 1942 and assumed command in June 1943. Although *Borie*'s crew was almost all reservists, they had served together for three years. The ship may have needed some spit and polish but was considered very well run, with a particularly effective executive officer, Lieutenant Philip Brown.

At the beginning of August 1943, Card left the proximity of Convoy UGS-13 (Chesapeake Bay to Gibraltar to Mediterranean) 450 nautical miles west-southwest of the Azores. At 1628 on 3 August, a Wildcat/Avenger patrol from Card caught U-66 on the surface returning from a 14week patrol with two kills off the U.S. East Coast. The Wildcat strafed the U-boat, mortally wounding the officer of the deck. The skipper of U-66, Kapitanleutnant (Lieutenant) Friedrich Markworth countermanded a crash dive order, intending to fight on the surface. (For a period of time the Germans changed their tactics to engage aircraft rather than dive, and many submarines had received enhanced antiaircraft weaponry. The theory was that submarines were most vulnerable just as they were submerging-and couldn't defend themselves-and they would be better off engaging what was usually only one or two aircraft. The tactic was not successful and by late 1943 had been rescinded by the Grosseadmiral [five-star] Doenitz, the commander of German submarines, who had been elevated to supreme command of the German Navy in January 1943.)

An Avenger flown by Lieutenant (junior grade) Richard L. "Zeke" Cormier dropped two depth bombs and a Fido acoustic homing torpedo on *U*-66. The Fido missed but the depth bombs were close enough to seriously wound Markworth. *U*-66 then submerged and got away. (Of note, Cormier later transitioned to F6F Hellcat fighters and became an ace in the Pacific with eight kills and two probables, earning a Silver Star and five Distinguished Flying Crosses. In 1954–1956, he led the Navy Blue Angels flight demonstration team.)

On 7 August, U-66 rendezvoused with Milchkuh refueling submarine U-117 (a large Type XB longrange cargo submarine configured as a submarine tanker). A Card Avenger flown by Lieutenant (junior grade) Asbury H. Sallenger spotted U-66 and U-117 close to each other on the surface. U-117 had transferred a doctor and an officer to relieve the wounded Markworth as skipper of U-66. Despite having no fighter cover, Sallenger immediately attacked, straddling U-66 with depth bombs and strafing U-117, which had the enhanced antiaircraft armament. After radioing for help, Sallenger waited 25 minutes for three more Card aircraft to arrive, but when U-66 began to submerge he attacked again. U-66 got away, again, but a depth bomb intended for U-66 instead holed U-117's afterdeck (there is a famous photo of this). Unable to submerge, U-117 was quickly sunk by depth bombs and Fidos from two Avengers, going down with all hands (about 52).

On the morning of 8 August 1943, Sallenger's Avenger and an accompanying Wildcat flown by Ensign John F. Sprague found *U-664* and *U-262* on the surface. Again, Sallenger immediately attacked, straddling *U-664* with two bombs, but was shot down by *U-664*. The Wildcat boldly strafed *U-262* but was shot down too. Sallenger and his gunner were later rescued by *Barry*, but Sallenger's radioman and Ensign Sprague were killed, and both U-boats escaped. Lieutenant (j.g.) Sallenger was awarded a Navy Cross for the attack on 7 August and a Silver Star for the attack on 8 August. Ensign Sprague was awarded a posthumous Silver Star that states, "When his crippled and blazing bomber had been forced to land on the sea, he continued his daring attacks on the U-boats." (With his pistol? There's a story here but I haven't been able to find it.)

At 2000 on the night of 8 August, *U-664* fired three torpedoes at what the Germans identified as a large tanker. The target was actually *Card*, but all three torpedoes missed and none were seen by *Card* lookouts.

At 1216 on 9 August, a Card patrol team caught U-664 on the surface again when an Avenger flown by Lieutenant (junior grade) Gerald G. Hogan sighted the U-boat. After the shoot-downs the previous day, Card's squadron quickly modified tactics. Instead of two aircraft, each team included a Wildcat and two Avengers, one armed with two depth bombs and a Fido, the other with two instantaneous-fuse 500-pound bombs. Hogan's Avenger dropped 500-pound bombs, which sprayed the U-boat's deck and gunners with shrapnel. The Wildcat strafed 10 seconds later. Then, just as the U-boat dove, the second Avenger dropped two depth bombs that blew the U-boat back to the surface. The U-boat submerged again but was forced to come back up after 15 minutes and was bombed and strafed some more. The U-boat crew abandoned the boat and at 1420 U-664 sank. The U.S. planes then dropped rafts and lifejackets. Borie arrived on scene and rescued 44 Germans, including the commanding officer, Kapitanleutnant Adolph Graef. The rescue was cut short when another Uboat fired five torpedoes at Borie, which all missed.

On the afternoon of 11 August, a *Card* Wildcat/Avenger team spotted *U-525*, forced her under by strafing, then deployed depth charges and finished her off with a Fido, with the loss of all 54 hands. On 16 August, *Card* and her escorts pulled into Casablanca having sunk three U-boats.

Card was back in the Azores area by 27 August operating independent of any convoy. On that

day, Lieutenant (j.g.) Hogan once again sighted a U-boat. Attacking in the face of heavy antiaircraft fire, Hogan dropped a 500-pound bomb, which was a near miss as the submarine maneuvered to avoid it. U-508 then dove and Hogan dropped a Fido (VC-1 had adapted their load plan yet again), but the U-boat went so deep the Fido couldn't reach it. Hogan was initially credited with sinking U-508, but the U-boat escaped. Hogan would receive a second Distinguished Flying Cross for attacking his second U-boat. Shortly afterwards, an Avenger flown by Lieutenant Ralph W. Long sighted Milchkuh U-847, which had already fueled and provisioned five U-boats. Two Wildcats strafed and forced U-847 under, and Lieutenant (j.g.) Long's Fido found its mark. U-847 went down with all 63 hands.

Card and her hunter-killer group then pulled into Norfolk for two weeks of upkeep and upgrades. VC-1 was relieved by Composite Squadron 9 (VC-9), cross-decked from *Bogue* and commanded by Lieutenant Commander Howard M. Avery. VC-9 had the same aircraft composition as VC-1 except for one more TBF-1 Avenger (for a total of 12). The three escorts were among the very first fitted with the new FXR "Foxer" system, a towed decoy noisemaker to counter the new German G7es acoustic homing torpedoes. The drawback of the Foxer was that if the towing ship was doing more than 10 knots, the combined noise drowned out sonar returns. Nevertheless, the Foxers were effective-of over 700 German acoustic torpedoes fired during the war only 77 hit.

On 10 October 1943, *U-405* departed St. Nazaire in German-occupied France on her eighth war patrol. *U-405* was a Type VIIC U-boat commissioned on 17 September 1941. (See HMCS Oakville vs. *U-94* for Type VIIC characteristics.) *Korvettenkapitan* (Lieutenant Commander) Rolf-Heinrich Hopman had been in command of *U-405* for all eight of her mostly frustrating patrols. Despite his lack of success, Hopman was a very capable U-boat commander, well respected and liked by his crew. He had previously been awarded the Iron Cross Second Class and Iron Cross First Class.

U-405 sank no ships until her sixth war patrol as part of Wolfpack Neptun when she torpedoed American liberty ship *Wade Hampton* (7,176 tons) east of the southern tip of Greenland on 28 February 1943. *Wade Hampton* had straggled behind the large 71-ship Halifax-to-Liverpool Convoy HX-227; she went down with two 78-foot Higgins PT boats destined for the Soviet Union (RPT-1 and RPT-3) and lost nine of her 52 crew.

Several days later on 9 March 1943 as part of Wolfpack Westmark, U-405 engaged the 69-ship Sydney, Cape Breton (Nova Scotia)-to-Liverpool Convoy SC-121, which had been scattered by nine days of force 10 gales. U-405 was the first to sight the convoy, and multiple U-boats overwhelmed the convoy escort. (The escort commander was Captain Paul Heineman, embarked on Coast Guard cutter Spencer, and the escort group was much the same as Convoy ON-166, minus the damaged Campbell-see Campbell vs. U-606) U-405 torpedoed and sank the Norwegian cargo ship Bonneville (4,665 tons). Bonneville went down with 37 people, including the master, the convoy commander and his staff, and the Royal Navy landing craft tank HMS LCT-2341, which was being carried as deck cargo. (The convoy commander, Captain Harry C. Birnie, RN, had been awarded the Distinguished Service Order in World War I while in command of patrol boat HMS P-57 for ramming, depth charging, and sinking UC-46 off Flamborough Head, England, in 1917.) All told, Convoy SC-121 lost 12 freighters and 270 crewmen. Only 75 crewmen from the sunken ships were rescued.

U-405 was nearly sunk on her seventh war patrol. Two days after departing St. Nazaire, *U-405* was bombed by a British Halifax four-engine bomber on 4 May 1943; three near misses caused an oil leak that could not be fixed, ultimately causing Hopman to abort the mission on 12 May 1943. *U-405* was bombed again approaching the Bay of Biscay on 18 May, this time by an Australian fourengine Sunderland patrol bomber flying boat.

Meanwhile, by 25 September 1943, the Card Hunter-Killer Group was underway again in loose company with Convoy UGS-19. At 0901 on 4 October, an Avenger flown by Lieutenant R. L. Stearns hit the jackpot, sighting four U-boats on the surface within 500 yards of each other. Milchkuh U-460 had just finished refueling U-264 and was alongside U-422, while U-455 was waiting her turn. Card launched a three-plane team, but Stearns' Avenger immediately attacked through heavy antiaircraft fire; his 500-pound bomb hit right between U-460 and U-422. By this time the Milchkuhe (plural) were under orders to submerge immediately if attacked (eight of the large submarines had been lost in the preceding three months), but the commander of U-460 and the commander of U-264 apparently had some sort of disagreement as to who should dive first. As a result, only U-455 had gone under when the three aircraft from Card arrived. The Wildcats and Avenger strafed while Stearns reattacked, this time planting a 500-pound bomb on U-460 seconds after the U-boat went below the surface with catastrophic effect; amazingly, two of U-460's 64-man crew survived. Stearns would be awarded his second Navy Cross for this action, but he would go missing (and not found) in the Pacific before he received it.

By 1038 on 4 October, *Card* had launched five more Avengers and three more Wildcats, joining in the hunt for the three U-boats that had submerged as *U-460* was sunk. Four aircraft found *U-264*, but antiaircraft fire was so intense the attack was ineffective. However *U-422*, damaged in Stearns' first attack, had to surface. A *Card* Avenger/Wildcat team immediately pounced, hitting the U-boat with a 500-pound bomb, sending her to the bottom with all 49 hands.

On 12 October, *Card* aircraft attacked and damaged *Milchkuh U-488*, which was ordered home. The next day, *U-402* was probably looking

to refuel from U-488 when she was forced to dive by a Card Avenger and sunk by a 500-pound bomb from a Wildcat flown by VC-9 skipper Howard M. Avery. Avery was awarded a Distinguished Flying Cross for this action (to go with a previous Navy Cross), although more recent accounts state it was a Fido from one of the Avengers that killed U-402; either way all 50 hands were lost. U-378 was also attacked by Card aircraft nearby, but escaped. An Avenger was damaged by antiaircraft fire and attempted to recover on Card as the weather deteriorated to a force 10 gale. The plane missed the arresting wire, crashed through the barrier net, bounced off the island, and knocked another Avenger over the side; everyone apparently survived. Card pulled into Casablanca on 18 October 1943.

By 30 October 1943, the Card Hunter-Killer Group was back underway in the Azores area providing cover for westbound Convoy GUS-18. A very large U-boat wolfpack (Siegfried, 18 boats) was operating in the area, and included U-405. That afternoon, a Card Avenger sighted a U-boat, which dove immediately and escaped, obeying Admiral Doenitz' new directive for all U-boats to dive immediately rather than try to fight off aircraft on the surface. The next day, U-91 and U-584 were sighted on the surface together. The submarines chose to fight on the surface and U-584 was hit by two 500-pound bombs from two different aircraft and went down with all 53 hands. More recent analysis gives credit to a Fido for the kill. U-91 escaped.

Mistakenly believing that U-91 was a Milchkuh, Captain Isbell on Card ordered Borie to detach and search the last contact area for the sub. Although the junior skipper of the screen, Lieutenant Hutchins had so impressed Isbell that he was given this mission. Borie arrived near the U-488 datum after dark on 31 October. In worsening sea conditions, Borie gained radar contact at 2010 and illuminated the contact with star shells when the range closed to 1,700 yards. The U-boat dove and Borie delivered a depth charge attack. An underwater explosion temporarily disabled *Borie*'s sonar gear. After regaining sonar contact, *Borie* delivered a second pattern of depth charges, forcing the submarine to the surface. Before *Borie* could bring guns to bear, the sub went under again, and *Borie* delivered a third depth charge attack. Sighting and smelling a large oil slick, Lieutenant Hutchins reported sinking the submarine. However, the submarine was only damaged and made it back to France.

The submarine damaged by *Borie* was actually *U*flak 2 (formerly *U*-256, recommissioned as *U*-flak 2 in August 1943), one of only four U-boats converted to the so-called Flakboot configuration. Flakboots were equipped with two quad 20mm Flakvierling 38 anti-aircraft guns and one 37mm Flak M42 antiaircraft gun, as well as additional machine guns. *U*-flak 2's mission had been to provide antiaircraft protection to *Milchkuh U-488*, which obviously was unsuccessful. The U-flak boats were not considered successful, and *U*-flak 2 was converted back to standard U-boat configuration and reverted to her original *U-256* name.

At 0145 on 1 November 1943, *Borie* gained radar contact on a surfaced submarine at 8,000 yards. The submarine was *U-405*. Since departing St. Nazaire on 10 October, *U-405* had participated in the large Wolfpack Siegfried and then the smaller (six boat) Wolfpack Siegfried 1 with nothing to show for it. Using Enigma decrypts, the Allies had routed convoys away from U-boat concentrations, and German submarines had sunk practically nothing in the Atlantic in September-October 1943 (which would result in U-boats ranging farther afield to the South Atlantic and even the Indian Ocean in search of targets).

Borie rang up 27 knots and charged the contact, which dove at 2,800 yards. Borie slowed to 15 knots and at 2,200 yards gained sonar contact. At 500 yards Borie commenced a depth charge run. A mechanical malfunction caused every depth

charge on the stern racks to go into the water at once, resulting in a massive explosion that lifted Borie's stern out of the water. The huge explosion also apparently damaged U-405 because she came to the surface and didn't try to submerge again. Borie's 24-inch searchlight locked on to U-405, revealing the polar bear insignia of the 11th U-boat Flotilla, as well as Germans racing to man their guns as Borie opened fire. The Germans got off several 20mm rounds that hit Borie near the bridge and in the forward engine room before most of them were cut down by the withering fire. U-405's 88mm deck gun never got off a shot before it was blown off the deck by a direct hit from Borie's first director-controlled 4-inch gun salvo.

Although trapped on the surface and taking topside hits, *U-405* had a maneuverability advantage over *Borie* (a tighter turn radius), which Hopman used skillfully in an attempt to disengage. One account ("Mid-Atlantic Brawl," by David Sears) states that *U-405* fired a torpedo from her stern tube that went wide. *U-405* may have attempted to surrender when a Very pistol flare went up from the sub and a German appeared on the conning tower waving his arms. Lieutenant Hutchins ordered a cease-fire, but the gun captain of one of the 4-inch guns didn't hear it, and a round blew the German's head off. There was no quarter after that. *U-405* recommenced escape maneuvers.

Borie managed to steer parallel to U-405's erratic course for several minutes. Concerned that the Uboat might actually squirm free, Hutchins gave the order to ram. As Borie approached from the Uboat's starboard quarter, Hutchins ordered the destroyer's helm hard left, just as Hopman tried to avoid Borie by turning left. As a result of U-405's turn and a big wave, Borie rode up on U-405 at a 20-30 degree angle from behind, coming to rest on top of U-405's foredeck, where the two vessels locked together for the next 10 minutes.

Sitting on top of U-405, Borie was in a vulnerable position as her main guns could not depress to hit the U-boat, while the submarine's guns had a clear shot. More Germans poured out of the conning tower in an attempt to man their machine guns. Borie's 20mm guns, including one manned by an all-Black mess attendant crew, fired right through the metal weather screens while trying to keep the Germans at bay. In addition, Borie was ready, as the executive officer had led repeated drills for just such an eventuality. Practically every Sailor on Borie that was not in the engineering spaces was on deck armed with everything-Thompson submachine guns, rifles, shotguns, flare guns, pistols, and even knives. One German after another was shot down and killed as they kept trying to get to their machine guns. One Borie petty officer hit a German in the stomach with a sheath knife at a range of 10 yards, killing him. The chief boatswain's mate hit a German in the head with a spent 4-inch shell casing, knocking him into the 40°F water. The executive officer fired a tommy gun from the bridge. About 35 of U-405's 49-man crew died in this closequarters engagement. The Germans were brave, but didn't really have a chance. None made it to their machine guns to return fire.

The situation in *Borie*'s engineering spaces was much more dire. The grinding of Borie's 23-yearold hull against the U-boat's hard steel in waves that were now 20 feet high was resulting in ruptures and flooding. Much of Borie's port side below the waterline was crushed. When the Uboat finally pulled free from under Borie, Borie's forward engine room flooded chest and then neck deep. Led by Engineer Officer Lieutenant Morrison Brown, who remained at the throttles in shoulder-high water, engine room and fireroom crews remained at their posts even in the frigid water and kept both engine rooms running for the remainder of the battle. Salt water threatened to reach the boilers. Motor Machinist's Mate Irving R. Saum dove into oil-covered water to close a drain fitting in the forward engine room so that all

available pumps could get suction and keep the fireroom and after engineering from flooding. Once free of Borie, Hopman made a break for it with a series of evasive maneuvers, opening the range to 400 yards. This, however, enabled Borie's 4-inch guns to get back in the action. U-405 took a hit in the starboard diesel exhaust, which may have penetrated into the aft torpedo room (I'm not so sure as some accounts, as Hopman's next actions appear to be an attempt to bring his stern torpedo tube to bear). Borie fired a torpedo at U-405 that missed in the heavy seas. As U-405 went into a tight turn, which Borie tried to but could not match. Hutchins saw that U-405's stern tube pointed right at him and ordered the searchlight off. As Hutchins anticipated, Hopman took that period of darkness as an opportunity to try to escape.

With his speed advantage, Hutchins maneuvered into a safer position, poured on 27 knots, and closed with *U-405* to ram again, reilluminating the sub. This time *U-405* turned and tried to ram *Borie's* starboard side. Displaying great ship handling, Hutchins ordered the helm hard left while backing full on the port engine with the starboard engine stopped. As *Borie's* stern swung toward the sub, she fired her starboard K-gun depth charge projector battery. Three charges set for shallow straddled *U-405's* conning tower, one just over and two just short, bringing *U-405* to a halt six feet from hitting *Borie* (crewmembers claimed a "paint coat" distance).

With astonishing tenacity, *U-405* backed away and tried to get away again, but her speed was greatly reduced. *Borie* fired another torpedo that missed 10 feet ahead of the U-boat's bow. When the range opened to 700 yards, an intense barrage from *Borie*'s 4-inch guns blew Hopman and several others off the bridge and into the water and hit the sub's starboard diesel exhaust again, finally bringing *U-405* to a stop.

Accounts differ on what exactly happened afterward. According to Morison, the Germans

fired white Very flares in lieu of a white flag of surrender and began coming on deck with their hands raised. However some appeared to run toward the guns and *Borie* kept shooting until cries of *"Kamerade!"* could plainly be heard aboard *Borie*. Hutchins ordered cease-fire as about 15 surviving Germans launched and got into two-man yellow life rafts, the last wearing an officer's cap. At 0257, *U-405* went down and exploded underwater (probably because of scuttling charges), accompanied by a cheer from *Borie*'s crew that Hutchins said "could be heard to Berlin."

Hutchins maneuvered *Borie* to pick up German survivors and was within 60 feet when, according to Morison, the Germans fired multicolored flares that were answered by colored flares from a distance, clearly indicating another U-boat nearby. Other accounts suggest the Germans fired multicolored flares beginning when they first "surrendered" or that the other U-boat answered with white flares. Regardless, *Borie* had no choice but to abort the rescue as a torpedo was heard and then sighted inbound 30 yards to port. In avoiding the torpedo *Borie* plowed right through the survivors' rafts. In the end, none of *U-405*'s crew survived. None of *Borie*'s crew had been seriously wounded.

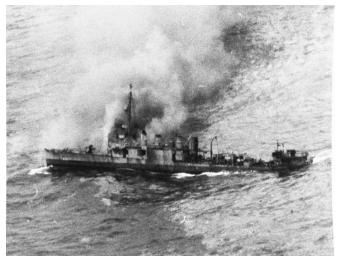
In some respects, now the real battle began. The battered *Borie* struggled to survive as the cold seas mounted to 40 feet, with high winds, dense fog, and pouring rain. The flooded forward engine room finally had to be abandoned, but intense damage control efforts kept the fireroom and rear engine room operational, so the ship could still make some way. However, soon after *Borie* lost the generators and electrical power. With the ship still taking on water, Hutchins ordered that everything that could be jettisoned be jettisoned. All the torpedoes were launched. All ammunition except 10 rounds for each 4-inch gun went overboard. Even the 20mm guns went over the side. Even the anchors were let go. Despite everything, *Borie's* feed and fuel tanks became contaminated with salt water, and finally salt caused the blades on the remaining engine turbine to lock. At 0900, *Borie* went dead in the water in the heavy seas. *Borie's* radiomen used an innovative combination of lighter fluid, kerosene, and rubbing alcohol to keep the radio's auxiliary generator running. At 1100, the structural integrity of *Borie* continued to worsen, and Hutchins was forced to send a radio message to Captain Isbell: "Commenced sinking."

Card's planes had been unable to find Borie in the foul weather, but Card got an HF/DF bearing on Hutchins' 1100 message. Finally, an aircraft sighted Borie at 1129, 14 nautical miles from the carrier. Borie was observed down by the stern and wallowing heavily. Isbell ordered Goff down the line of bearing. Goff arrived just before noon intending to use handy-billies and hose to pump fresh water for Borie's boilers, but the rough seas with 40-foot swells prevented Goff from going alongside. As the afternoon went on with darkness approaching, Hutchins faced a difficult decision. Borie was unlikely to last another night, but having the crew go into the water, even in rafts, would result in deaths. Deciding that abandoning the ship after dark would be even worse. Hutchins made the decision to do so while there was still light. Isbell sent Barry to aid Goff in rescuing survivors, leaving Card with no screen at all, but reasoning that no U-boat would want to be on or near the surface in such conditions either. One U-boat tried without success, getting to within 2,800 yards of Card.

The abandon ship commenced at 1644 in an orderly fashion. But the heavy seas, cold, and pouring rain took their toll. Many of the men were already in an exhausted state from the battle with the U-boat and the seas. Some men were killed when they were crushed by a plunging propeller guard. As some rafts began to drift away, men jumped from the rafts into the 44°F water and tried to swim for the rescue ships; none of those who swam made it. Others were simply too exhausted to make the climb from the rafts to the rescue ships' decks, even with help, and fell back into the sea and drowned.

Goff and Barry continued to search for survivors through the night and into the next morning, ultimately rescuing seven officers and 120 men. (One account says four officers and 125 men were rescued. Another account says eight officers and 121 men.) Of Borie's crew, three officers and 24 men were lost to the sea. (Another account says 22 were lost. This is why I take casualty counts as a close approximation and not hard fact, but a source with names lists three officers and 24 men, as does Captain Isbell's endorsement to Borie's after action report.) One of those who didn't make it was the engineer officer Lieutenant Morrison Brown.

During the night, Isbell received a message from Commander in Chief, U.S. Fleet (COMINCH), that there were 50 German submarines operating within 300 nautical miles of *Card*. Actually, this was an exaggeration; it was more like 25. Regardless, with the onset of daylight, the risk to the carrier increased and Isbell made the tough decision to call off the search and depart the area. Even without a crew, *Borie* had somehow managed to stay afloat overnight. *Barry* was ordered to scuttle *Borie* with torpedoes. Three torpedoes were fired and three missed, thanks to the large swells. Finally an Avenger dropped four depth bombs around *Borie*, and the gallant ship went down at 0954 on 2 November 1943.



Borie abandoned and sinking on 2 November 1943 (NA 80-G-85280).

Card, Barry, and *Goff* returned to Norfolk on 9 November. Between aircraft and ship, the *Card* hunter-killer group sank nine German U-boats between July and November 1943. The entire group, including *Borie,* was awarded a Presidential Unit Citation, the first hunter-killer group to be so recognized. Captain Arnold J. Isbell was recognized with the unusually high award of the Distinguished Service Medal. Isbell was the prospective commanding officer of *Franklin* (CV-13) when she was hit by bombs and severely damaged off the coast of Japan on 19 March 1945; Isbell was one of the over 800 killed.

The commanding officer of *Borie*, Lieutenant Charles H. Hutchins, was awarded a Navy Cross with perhaps the most truncated citation ever:

The President of the United States of America takes pleasure in presenting the Navy Cross to Lieutenant Charles Harris Hutchins, United States Naval Reserve, for extraordinary heroism and distinguished service in the line of his profession as Commanding Officer of Destroyer USS Borie (DD-215), when that vessel attacked and sank an enemy submarine in the waters of the Caribbean Sea on the morning of 1 November 1943. His conduct throughout was in keeping with the highest traditions of the Navy of the United States. (The action actually didn't take place anywhere near the Caribbean Sea, so this was either operational security–or a fat-finger in transcribing the citation somewhere along the line.)

The engineer of *Borie*, Lieutenant Morrison R. Brown, was awarded a posthumous Navy Cross.

The President of the United States of America takes pride in presenting the Navy Cross (Posthumously) to Lieutenant Morrison Ropes Brown, United States Naval Reserve, for extraordinary heroism and distinguished service in the line of his profession as Engineering Officer aboard the destroyer USS Borie (DD-215), when that vessel attacked and sank an enemy submarine in the waters of the Caribbean Sea [?] on the morning of 1 November 1943. To keep the engines of Borie operative in order to complete her mission, despite serious damage sustained during the prolonged battle, Lieutenant Brown remained steadfastly at his post, buffeted by debris in the heavy rolling of the vessel and with water pouring into the forward engine room. As the flooding increased and the compartment became untenable, he calmly ordered his men to safety while he remained below, standing neckdeep in water at the throttle until Borie had completely destroyed the submarine. The conduct of Lieutenant Brown throughout this action reflects great credit upon himself, and was in keeping with the highest traditions of the United States Naval Service.

Machinist's Mate Second Class Irving R. Saum of *Borie* was also awarded a Navy Cross.

The President of the United States of America takes pleasure in presenting the Navy Cross to Machinist's Mate Second Class Irving Randolph Saum, Jr., United States Naval Reserve, for extraordinary heroism and devotion to duty while serving aboard the Destroyer Borie (DD-215), in action against the enemy when that vessel attacked and sank an enemy submarine in the waters of the Caribbean Sea on the morning of 1 November 1943. When the forward engine room was severely holed by enemy action, resulting in rapid flooding to the vessel's waterline, Machinist's Mate Second Class Saum unhesitatingly volunteered to enter the damaged compartment in order to close the secondary drain suction, enabling all available pumps to be placed on the suction of the after engine room and prevent its flooding. At great risk to his own life, he courageously descended ten feet below the surface of the debris-filled water and, despite heavy rolling of the ship, succeeded in accomplishing the hazardous task. The conduct of Machinist's Mate Second Class Saum throughout this action reflects great credit upon himself, and was in keeping with the highest traditions of the United States Naval Service.

The executive officer of *Borie*, Lieutenant Philip B. Brown, was recognized with the unusually high award for a lieutenant of the Legion of Merit.

The President of the United States of America takes pleasure in presenting the Legion of Merit to Lieutenant Philip Bausche Brown, United States Naval Reserve, for exceptionally meritorious conduct in the performance of outstanding services to the government of the United States as Executive Officer of the USS Borie from June until 15 November 1943. During his five months as Executive Officer of the USS Borie, Lieutenant Brown, by constant drills and carefully supervised, foresighted training, brought his crew to a state of maximum efficiency as an effective fighting unit. With rare foresight, he trained the crew and modified the ship's lifelines so that effective gunfire could be brought to bear on an enemy in an area which previously had been a blanked sector. His careful training culminated in a virtual hand-to-hand action with an enemy submarine in the early morning of 1 November. By virtue of its previous schooling and indoctrination, the entire crew functioned in the most meritorious manner, performing all duties instinctively and with minimum orders from the bridge. During the long drawn-out action, he furnished the Commanding Officer with all information and assistance required to press the action. In addition, at

intervals when the ships were in close contact, he manned a sub-machine gun, and despite enemy counter-fire directed at the bridge, his accurate fire assisted in clearing exposed personnel from the deck of the submarine. Lieutenant Brown's efficient conduct and inspiring example in operational and administrative capacities aided materially in the victory of his ship over a determined, skillful enemy, and in the efficient manner in which the entire Task Force carried out its difficult missions.

Korvettenkapitan Rolf-Heinrich Hopman was posthumously promoted to *fregattenkapitan* (commander) and awarded the German Cross in Gold.

The *Card* Hunter-Killer Group returned to sea on 23 November 1943, with three different destroyers in the screen: *Clemson*-class destroyer *Decatur* (DD-341) and the even older *Wickes*-class destroyers *Leary* (DD-158) and *Schenck* (DD-159). *Card* went after Wolfpack Borkum (17 U-boats), which almost turned the tables as *Card* was nearly overwhelmed by 12 contacts in five hours. After dark on 23 December 1943, *U*-415 attacked *Card*, firing three torpedoes that missed, which *Card* did not see (the next day *U*-415 severely damaged British destroyer HMS *Hurricane*, which was subsequently scuttled).

As another U-boat dogged *Card*, *Leary* and *Schenck* teamed up to sink *U-645*, with *Schenck* delivering the fatal nine-charge pattern at 0227 on 24 December. However at 0210, *U-275* had hit *Leary* (the destroyer had inadvertently illuminated herself) with two G7es Zaunkonig acoustic homing torpedoes in the after engine room and after hold. As *Leary* began to sink, *U-382* hit her with a third torpedo, which detonated in the forward engine space. *Leary*'s commanding officer, Commander James E. Kyes, was the last to abandon ship, giving his life jacket to a Black mess attendant who didn't have one. Kyes was never seen again and was awarded a posthumous Navy Cross. *Leary* lost 98 crewmen; 59 were saved by *Schenck*. (In some accounts, *U-382* missed and all hits were by *U-275*.)

By the end of the war, Card and her aircraft had destroyed a total of 11 U-boats, the second highest tally after Bogue with 11 U-boats and two Japanese submarines (sunk in the Atlantic-see Hgram 033 "Yanagi Missions"). Card was decommissioned in May 1946. She was reactivated in 1958 as an aircraft transport under Military Sea Transportation Service (MSTS) control, designated T-CVU-11 and then T-AKV-40. She ferried helicopters to Vietnam. On 2 May 1964, a Viet Cong swimmer planted a limpet mine on Card while she was alongside a dock in Saigon, South Vietnam. The explosion killed five men and sank the ship in 20 feet of water. Card was raised, repaired, and returned to service in December 1964, ferrying helicopters to Vietnam (and assembling them on arrival to be flown off) in 1967 and 1968. Card was sold for scrapping in 1971.

After the loss of Borie, her name was given to the 13th of a class of 58 Allen M. Sumner-class destroyers. DD-704 was laid down on 29 February 1944 and commissioned on 21 September 1944. Borie served at Iwo Jima and Okinawa and in carrier raids on Japan until 9 August, when she was hit by a kamikaze that killed 48 men and wounded 66. Borie was the last destroyer on radar picket duty to be hit by a kamikaze (see H-gram 051 "The Last Sacrifices"). After repairs, Borie made a Korean War deployment, helped force a Soviet submarine to the surface during the Cuban Missile Crisis of October 1962, and made a Vietnam War deployment before she was decommissioned in 1972. She served in the Argentine Navy as *Hipolito Bouchard*. During the Falklands War in 1982, she was in company with the Argentine cruiser General Belgrano, formerly USS Phoenix (CL-46), when Belgrano was torpedoed and sunk by British nuclear submarine HMS Conqueror. Bouchard was damaged by either a dud British torpedo or a near-miss explosion. She was scrapped in 1984.

Sources include: "The Borie's Duel to the Death," by Howard R. Simkin, in U.S. Naval Institute Naval History Magazine, February 2019; History of United States Naval Operations in World War II, vol. 10, The Atlantic Battle Won, by Rear Admiral Samuel Eliot Morison: Little, Brown, Boston, 1956; "Mid-Atlantic Brawl," by David Sears, at historynet.com, originally published in Military History Quarterly, April 2014; "USS Borie, Destroyer No. 215/DD-215," at destroyer history.org; "A Fight to the Death: The USS Borie, 31 October to 2 November 1943," at ussever glades.org; "USS Borie's Last Battle," by John Hersey, at saltofamerica.com, 2015, originally from The United States Navy in World War II: Articles Compiled and Edited by S. E. Smith, 1966; NHHC Dictionary of American Naval Fighting Ships (DANFS) for U.S. ships and uboat.net for German submarines.

USS Buckley (DE-51) vs. U-66-6 May 1944

U-66 departed the submarine base at Lorient in German-occupied France on 16 January 1944 under the command of *Oberleutnant zur See* (Lieutenant (junior grade)) Gerhard Seehausen, en route to an operating area between West Africa and Brazil. This was Seehausen's second U-boat command but his first war patrol in command. He had distinguished himself on previous war patrols, earning the Iron Cross Second Class and Iron Cross First Class. This was the ninth war patrol for *U-66* (some accounts say tenth but count an aborted seventh war patrol). *U-66* had 29 ships sunk and three damaged to her credit on her eight previous patrols and would add four more sunk on her ninth.

On her fourth war patrol *U-66* sank the Canadian passenger liner RMS *Lady Hawkins* on 16 January 1942; 246 passengers (55 civilians and 53 Royal Navy) and crew died in the sinking and in the two lifeboats that were never found–five more died in the one lifeboat that was found with 71 survivors. The damaged vessels included two severely compromised British motor torpedo boats in a minefield off St. Lucia in the Caribbean, laid by *U*-66 on her sixth war patrol. *U*-66 would ultimately sink 33 ships totaling 200,021 in gross register tonnage (GRT), making her the seventh most successful U-boat of the war.

U-66 also had several close calls on previous patrols, including on 7 August 1943 during her eighth war patrol when she was caught on the surface replenishing from *U-117* by five Avenger aircraft from escort carrier *Card* (CVE-11). There is a famous photo of this showing the two U-boats alongside and *U-117* being hit. *U-117* was sunk by depth charges and at least one Fido acoustic homing torpedo and lost with all hands, while *U-66* managed to escape. (See *Borie* vs. *U-405*). *U-66* had gained some notoriety in the German Navy because other submarines tasked with replenishing her usually had bad luck and several were sunk.



U-66 (left) and *U-117* (right) under attack by a *Card* TBF Avenger, 7 August 1943 (NA 80-G-221767)

Commissioned on 2 January 1942, *U*-66 was the lead boat of 54 Type IXC U-boats produced during the war. The Type IX submarines were designed as large ocean-going submarines for sustained operations at great distances. Including all subtypes, 193 Type IX boats were produced (the second most numerous type during World War II) with the Type IXC/40 being the most numerous IX subtype at 87 boats. The Type IXC was a bit larger than the IXA and IXB boats with room for an additional 43 tons of fuel. The Type IXC displaced 1,120 tons surfaced and 1,232 tons submerged and was 251 feet long with a test depth of 750 feet. The IXC had twin shafts with two diesel engines and two electric motors, a range of 13,450 nautical miles surfaced (at 10 knots) and 63 nautical miles submerged (at 4 knots), a maximum surfaced speed of 18.2 knots, and a maximum submerged speed of 7.7 knots.

The Type IXC had four torpedo tubes in the bow and two in the stern and carried twenty-two 21inch torpedoes (including five in external torpedo containers). The Type IXC also carried a 105mm (4.1-inch) C/32 deck gun with 180 rounds, a bigger deck gun than that of the more ubiquitous Type VIIC. Antiaircraft armament varied during the war. *U-66* carried one 37mm SK C/30 antiaircraft gun and one twin 20mm FlaK 30 antiaircraft gun.

After departing Lorient, U-66 first transited to the coast of West Africa. On 27 February 1944, U-66 picked off the 5,313-ton British cargo ship Silvermaple from Convoy ST-12 (Sierra Leone to Ghana), sinking her with one torpedo (seven of 61 crewmembers were lost). On 1 March, U-66 sank the Free French cargo ship St. Louis (5,202 tons) with two torpedoes off Accra, Ghana; St. Louis went down in less than 50 seconds with the loss of 85 of 134 aboard. On 5 March, U-66 sank the British cargo ship John Holt (4,964 tons) with two torpedoes in the Gulf of Guinea, taking John Holt's captain and a British passenger prisoner; the other 93 aboard were rescued by a British merchant. On 21 March, U-66 sank her last ship, the British cargo ship Matadian (4,275 tons) off Nigeria; all 47 aboard were rescued. After sinking Matadian, British patrol craft attacked and U-66 was forced to bottom out in mud to elude the British. The Milchkuh (milk cow) submarine that was supposed to replenish U-66, U-488, was sunk with all 64 hands west of Cape Verde on 26 April by depth charges from four U.S. destroyer escorts of Croatan (CVE-25) Hunter-Killer Group.

On 22 April 1944, Task Group 21.11 departed Norfolk, Virginia, en route to the German midocean refueling area (known to the Allies because of decryption of German Enigma coded communications). Centered on the escort carrier Block Island (CVE-21), the task group was a Hunter-Killer Group. It was not associated with any specific convoy; its mission was to use the intelligence provided by HF/DF and Enigma decryption to find and destroy German U-boats. The commanding officer of Block Island, Captain Francis M. Hughes III, was dual-hatted as the task group commander. Block Island embarked Composite Squadron 58 (VC-58), with nine FM-1 Wildcat fighter-bombers and 12 TBF-1 Avenger torpedo bombers (which also carried depth bombs). Several of the Avengers were configured as "night owls," with armament removed and extra gas added to remain airborne as long as 14 hours, providing continuous coverage at night.

The screen commander of Task Group 21.11 was Commander Henry Mullins (Escort Division 60). The screen consisted of four destroyer escorts: *Rudderow*-class *Eugene E. Elmore* (DE-686) and three *Buckley*-class, *Ahrens* (DE-575), *Barr* (DE-576), and *Buckley* (DE-51). *Buckley* was commanded by Lieutenant Commander Brent Maxwell Abel, USNR.

Buckley (DE-51) was the lead ship of the second class of destroyer escorts built in the United States. A total of 154 were ordered; six were completed as high-speed transports (APD) and 46 were provided to the British Royal Navy under the Lend-Lease agreement. Because of the acute shortage of destroyers at the start of the war, the destroyer escorts were intended to be built fast and cheap with the primary mission of convoy escort and antisubmarine warfare. The first *Evarts*class destroyer escorts were laid down in December 1942 and commissioned in April 1943. There were 62 *Evarts*-class commissioned in the U.S. Navy and 32 in the Royal Navy. The *Buckley*class had a longer and improved hull form, which was used for all succeeding destroyer escort classes.

Named for Aviation Ordnanceman John D. Buckley, who was killed at Pearl Harbor on 7 December 1941, Buckley was laid down on 29 June 1942 (actually before Evarts) and commissioned on 30 April 1943. Buckley displaced 1,700 tons, was 306 feet long, and had a two-shaft turboelectric drive capable of 26 to 27 knots. With a complement of about 186, she was armed with three 3-inch/50-caliber guns, one guad 1.1-inch antiaircraft gun (later replaced by a twin Bofors 40mm), eight single Oerlikon 20mm antiaircraft guns, one triple-tube 21-inch torpedo launcher, one Hedgehog antisubmarine warfare (ASW) mortar (which could launch 24 depth bombs in a pattern ahead of the ship), eight Kgun depth charge projectors (five charges each), and two depth charge rails on the stern (24 charges each), as well as a total capacity of 200 depth charges. Buckley had a Type 128D sonar in a retractable dome, a Type FH 4 High Frequency Direction Finding (HF/DF) antenna on top of the mast, and Type SL surface search radar.

On 1 May 1944, the Tenth Fleet reported an HF/DF intercept to Captain Hughes of a German submarine located 550 nautical miles west of Santo Antao, Cape Verde Islands. This was *U-66*, now very short on fuel and provisions after the sinking of *U-488*, looking to rendezvous with her next *Milchkuh*, *U-188*.

The task group wasted no time and just before midnight on 1 May an aircraft from *Block Island* found *U-66* by radar about 60 nautical miles ahead of *Block Island*. *U-66* submerged before the plane could attack, but the plane tracked the sub via sonobouys and dropped a Fido acoustic homing a torpedo (called a "mine" in some accounts, as that was the cover term for the secret Fido weapon). In reaction, Captain Hughes sent *Ahrens* and *Eugene E. Elmore* racing ahead to locate the submarine, retaining *Barr* and *Buckley* to protect the carrier. The two destroyer escorts were unable to regain contact, but after dawn two Avengers located the submarine and dropped two Fidos, which broached and then attacked each other, ignoring the submarine.

For the next four days, *Ahrens* and *Eugene E*. *Elmore* stalked *U-66*, which was forced to remain submerged because of the constant air patrols. Before dawn on 3 May, an Avenger detected the submarine on radar, but it had submerged by the time the Avenger gained visual of the disturbed water. The U-boat surfaced again, right in the middle of the sonobouy pattern, but *U-66* avoided the following depth bomb attack. *U-66* attempted to surface again on 5 May but again was driven back under.

Finally, after nightfall at about 2100 on 5 May, U-66 had reached the end of her submerged endurance and popped to the surface only three nautical miles ahead of Block Island. Seehausen shot off a radio message to Admiral Doenitz reporting that refueling was impossible under the current conditions, which were "worse than the Bay of Biscay" (a particularly dangerous area for U-boats). Almost simultaneously, Block Island's HF/DF detected the radio transmission, radar detected U-66 at a range of 5,000 yards, and the U-boat detected the carrier. Block Island immediately came about and hightailed it out of the area while Buckley ran down the radar bearing. (Ironically, when U-66 mined St. Lucia, Lieutenant Commander Abel was in command of patrol craft PC-490, which tried to catch U-66, and now he was chasing the same U-boat again.)

Although the sea was calm and the moon almost full, *U-66* remained elusive. *Buckley* searched fruitlessly for several hours but was unable to gain any contact. At 0216 on 6 May, an Avenger night owl T21 flown by Lieutenant (junior grade) Jimmie J. Sellars detected *U-66* on the surface about 20 nautical miles due north of *Buckley* and 66 nautical miles north of *Block Island*. *U-66* detected the Avenger at about the same time. Desiring to get more charge on his batteries and still looking for *U-188*, Seehausen opted to remain on the surface. Based on past experience, he expected the Avenger would wait to attack until the submarine was submerging, thereby avoiding antiaircraft fire and hitting the sub when it was most vulnerable. Seehausen did not know the Avenger was armed with nothing more than the pilot's pistol, nor did he know that the Avenger was vectoring in a surface ship for the attack. Occasional bursts of antiaircraft fire from the sub kept Sellars at a distance, but that wasn't the point.

For 45 minutes the circling Avenger directed Buckley toward the sub while also keeping Captain Hughes on Block Island informed. Based on Sellars' description of the U-boat's actions, Abel assessed that the submarine was either a refueler or an operating sub awaiting rendezvous with a refueler, which dovetailed with previous intelligence regarding the location. Transiting at flank speed (23.5 knots), Buckley obtained radar contact on U-66 at a range of less than seven miles at 0246. The submarine's irregular course and speed ruled out a torpedo attack. Buckley's crew went to general guarters, securing the sonar (and retracting the dome) so as to not alert the sub, and setting depth charges on shallow burst. The Foxer acoustic torpedo countermeasure device was streamed at 0300. Abel maneuvered the onrushing *Buckley* so the U-boat would be silhouetted by the moonlight on the water. Abel also held fire, hoping the U-boat might mistake the contact for the *Milchkuh* U-boat she was expecting.

At 0308, *U-66* fired three red flares, probably for recognition purposes for *U-188*. Not getting the appropriate response from *Buckley*, *U-66* fired a torpedo at *Buckley*. At 0317, *U-66* was in plain sight and *Buckley* turned to unmask the main battery and the Foxer to jam any incoming acoustic torpedo. Just after the turn, lookouts aft reported a torpedo wake passing down the starboard side. *U-66* opened fire first with machine guns at 0319.

At 0320 and a range of 2,100 yards, Buckley opened rapid fire with all weapons. The first 3inch salvo scored a direct hit on U-66 a bit forward of the conning tower, knocking the 4.1-inch deck gun out of action temporarily and probably preventing the submarine from submerging. U-66 returned fire, but most rounds were high and went overhead *Buckley*. Sellars in the Avenger provided spotting services to Buckley, and U-66 was hit multiple times. At 0322, U-66's deck gun resumed firing, but like the machine guns its rounds passed overhead; one deck gun round scored on Buckley's stack. At 0323 Buckley's 40mm and 20mm guns were hitting the sub's conning tower. At 0324, return fire from the submarine ceased, except for intermittent short bursts. The sub increased its speed to 19 knots and maneuvered to bring her stern torpedo tubes to bear.

At 0324, another torpedo was sighted on the starboard bow. *Buckley* maneuvered to avoid it and the torpedo crossed ahead of her bow. A fire ignited on the bridge of *U*-66 until it was extinguished by a direct hit from a 3-inch round. *Buckley* kept charging, following the evasive maneuvers of *U*-66 until the distance closed to 20 yards, with the sub to starboard on a parallel course. *Buckley* raked the sub with point-blank fire. By this time several other *Block Island* aircraft were overhead, but none could strafe or drop any ordnance because of the close proximity of *Buckley* and *U*-66; however, at some point in the battle, Sellars reportedly emptied his .45 pistol into the sub's conning tower.

At 0329, with the U-boat too close to bring most of his weapons to bear, Abel ordered the helm hard over to ram U-66. As Buckley's bow crunched over the U-boat's foredeck, Seehausen ordered abandon ship. Germans poured out of the conning tower, some with small arms they were brandishing and some with their hands up. In the next two minutes of chaos it didn't matter much either way for the Germans.

A party of armed Germans led by First Officer Klaus Herbig managed to scramble onto Buckley's forecastle in an attempt to create a diversion so Seehausen could extricate U-66 from under Buckley. It only took a minute for these Germans to realize the futility of their action. Taking cover behind the anchor windlass, they shouted for surrender. Other Germans tried to board the ship, but were beaten off by fists, coffee cups, and 3inch shell casings. One German made it inside the ship to the wardroom, where he was beaten off by a steward's mate with a coffee pot. Rifle fire from the repair party and Thompson submachine gunfire from the chief fire controlman on the bridgewing cut down many Germans on the deck of the submarine, preventing anyone from manning the submarine's guns.

The close quarters battle only lasted about two minutes. According to the June 1944 U.S. Fleet A/S Bulletin (and Buckley's action report),

Ammunition expended at this time included several general mess coffee cups which were on hand at ready gun station. Two of the enemy were hit in the head with these. Empty shell casings were also used by the crew of 3-inch gun No. 2, to repel borders. Three-inch guns could not bear. Buckley suffered its only casualty of the engagement when a man bruised his fist knocking one of the enemy over the side. Several men, apparently dead, could be seen hanging over the side of the sub's bridge at this time. One German attempting to board was killed with a .45 pistol by the boatswain's mate in charge of the forward ammunition party. Man fell back over the side. Midships repair party equipped with rifles manned the lifelines on the starboard side abaft light lock, and picked off several men on the deck of the submarine. Chief Fire Controlman used a tommy gun from the bridge with excellent results.

Apparently not all the Germans had abandoned the submarine, as the engines were still running appearing undamaged. As *Buckley* backed off *U*-66 at 0330, the U-boat broke free and started to pull ahead. Afraid the U-boat might still escape, Abel ordered up flank speed. Just as *Buckley* was about to launch depth charges from the K-guns, *U-66* suddenly veered back toward *Buckley* and at 0335 struck a glancing blow on the starboard side. As *U-66* scraped down *Buckley*'s side, the submarine heeled over 60 degrees. Crewmen on *Buckley* could see down into *U-66* via the riddled conning tower, revealing flames raging below. One German attempting to man a gun disintegrated when hit by 40mm shells. *Buckley* torpedomen tossed hand grenades, one of which went down the conning tower hatch.

As U-66 broke free aft of Buckley, her engines were still running at high speed although the submarine was out of control. Buckley's No. 3 three-inch gun scored another direct hit on the conning tower. At some point Seehausan ordered the scuttling charges set, and the remainder of the crew went overboard as U-66 literally drove herself under at 15 knots, flames pouring from all hatches, turning water to steam. Three minutes later a heavy explosion and breaking up noises were heard, marking the end of U-66. The entire action had lasted only 16 minutes, during which Buckley expended 105 rounds of 3-inch ammunition, 418 rounds of 40mm, 2,700 rounds of 20mm, 300 .45 pistol bullets, 60 rounds of .30 caliber, 30 rounds of 00 buckshot, and two fragmentation grenades.

Ten Germans who made it aboard *Buckley* were captured. *Buckley* searched for German survivors until after the sun came up, ultimately rescuing 26 more Germans, most of whom were wounded from the battle. *Oberleutnant* Seehausen and the two British prisoners were not among the survivors. Twenty-four Germans were lost. Seehausen was posthumously promoted to *kapitanleutnant* and awarded the German Cross in Gold. *U-188* was close enough to see the gun flashes and hear the reports of the guns but chose to remain clear and made it safely back to Bordeaux, France.

Buckley rejoined the task group later on 6 May to rousing cheers. *Buckley*'s bow was bent askew, and she was holed in the after engine room. Her starboard propeller shaft had been sheared and her stern twisted. Somewhat miraculously, given the volume of fire from both sides, Buckley suffered no deaths or serious injuries. Buckley's crew was able to make temporary repairs, and she returned to the United States via Bermuda under her own power for repair in Boston. The Buckleyclass destroyer escort Robert I. Paine (DE-578) took Buckley's place in Task Force 21.11 on 15 May. After repairs, Buckley was assigned to convoy escort duty. On 19 April 1945, Buckley teamed with Reuben James (DE-153) to sink U-879 (or possibly U-548), one of the last U-boats lost in the war (see H-gram 047/H-047.1). Buckley was decommissioned in 1946 and sold for scrap in 1969.

In *Buckley*'s action report, Lieutenant Commander Abel stated, "The Commanding Officer is proud of the fighting spirit, coolness in action, and thoroughgoing teamwork by all hands. It was these characteristics, more than the individual brilliance or heroism of any one officer or man, which concluded the action successfully." *Buckley* was awarded a Navy Unit Commendation, and Lieutenant Commander Brent Abel was awarded a Navy Cross for the action on 6 May 1944.

The President of the United States takes pleasure in presenting the Navy Cross to Lieutenant Commander Brent Maxwell Abel, United States Navy, for extraordinary heroism and distinguished service in the line of his profession as Commanding Officer of the Destroyer Escort USS Buckley (DE-51), in offensive action against a German submarine while patrolling the Atlantic Coast on the early morning of 6 May 1944. Directed by an unarmed search plane to the position of a surfaced enemy submarine, Lieutenant Commander Abel immediately proceeded to the scene of contact, preparing his ship, while en route, for any form of antisubmarine combat. The approach of USS Buckley,

conducted at high speed and in very bright moonlight was undetected by the enemy until just before the Buckley reached effective gun range, at which point the enemy made a recognition signal and fired torpedoes. After avoiding the torpedoes, despite the threat of other attacks and in the face of a heavy barrage of automatic weapons fire, the Buckley closed to a short range where an effective blanket of fire from all guns succeeded in silencing the enemy's fire within four minutes of the start of the beginning of the gun action. Avoiding another torpedo, the Buckley closed the wildly maneuvering submarine, raked it at close range with all available gun power, and rammed. The enemy countered with an attempted boarding while the vessels were in contact and then attempted to ram after the combatants became disengaged. Following defeat of these efforts the doomed submarine, with conning tower shattered and burning fiercely, with all hatches open, abandoned by its crew and completely out of control, disappeared under the surface of the water. Three minutes after the enemy had taken its final lunge under diesel power, the U-boat blew up with accompanying heavy underwater explosions. Lieutenant Commander Abel's skill and inspiring leadership and courageous, aggressive spirit of his command in offensive action against the enemy were in keeping with the highest traditions of United States Naval Service.

After the war, Brent Abel resumed a career in law (he was a graduate of Harvard College and Harvard Law School when he entered the U.S. Naval Reserve before the war). He remained in the U.S. Naval Reserve after the war, retiring as a captain in 1960. Years after the war, at the request of a German survivor of *U-66*, Abel organized a reunion of the two ships in Germany in 1987, where the survivors of *U-66* offered thanks for the fair treatment they received aboard *Buckley*, and for saving their lives. Abel stated he wished he could have saved more.

Although by mid-1944 the tide of the Battle of the Atlantic had clearly turned, German U-boats

continued to fight with great skill and valor. On 23 May 1944, the *Block Island* hunter-killer group (minus *Buckley*) departed Casablanca, Morocco, to relieve the *Bogue* hunter-killer group operating in the vicinity of the Cape Verde and Madeira islands in the eastern Atlantic off West Africa. The Type IXC/40 *U-549*, commanded by *Kapitantleutnant* (Lieutenant) Detlev Krankenhagen was in the same area on her second war patrol. On 28 May 1944, *U-549* escaped being bombed when an armed Avenger's radar blanked out and the sub avoided detection by a relieving Avenger. At 0255 on 29 May, overcast thwarted another attempt to sink the submarine.

On 29 May, Captain Hughes and Block Island were tracking down the contact with four destroyer escorts in very poor visibility. At 1705, Block Island launched six Wildcats to fly sector searches. At 2015, without any warning, Block Island was hit in the bow by a G7e(TIII) electric torpedo fired by U-549, which had slipped past the escorts undetected. Four seconds later, *Block* Island was hit near the stern by a second torpedo, which detonated in the oil tank. Block Island lost all propulsion and the rudder jammed. The six Wildcats aloft were vectored toward Los Palmas, Canary Islands. With the carrier settling rapidly by the stern, Captain Hughes ordered all crewmen topside except for essential damage control personnel. Over 75 men had been brought up from the hangar deck when a large explosion tore through the hangar. At 2023, Block Island was hit by a third torpedo from U-549, which broke the ship's back and led to uncontrollable flooding in the engineering spaces.

As *Block Island*'s crew was fighting to save their ship, *Eugene E. Elmore* sighted a periscope and attacked with a negative result. *Barr* joined in the search. Shortly afterward a G7e(T5) Zaunkonig passive acoustic homing torpedo from a salvo fired by *U-549* missed *Eugene E. Elmore*, but one struck *Barr* in the stern at 2030 causing serious damage. *Barr* went dead in the water with four dead, 12 missing, and 14 wounded (five dead, 12 missing, 11 wounded by another account, and 28 lost by yet another account), but great damage control by her crew saved the ship.



Barr after a torpedo hit to her stern. (NH 86682)

At 2040, Captain Hughes ordered abandon ship. As the men were going over the side, another torpedo missed Eugene E. Elmore. The screen commander, Commander Henry Mullins, embarked on Ahrens, assumed tactical command and ordered Eugene E. Elmore and Robert I. Paine to search for the submarine while Ahrens approached the carrier to rescue survivors. Arriving near the carrier, Ahrens went to all stop, at which time Ahrens made sonar contact on a submarine at 1,800 yards. Commander Mullins ordered Eugene E. Elmore to attack, which she did with three Hedgehog patterns. At 2120, two short explosions were heard (Hedgehog depth bombs were designed to explode on contact). This was followed by a large explosion and then imploding sounds as U-549 made her final dive with the loss of all 54 hands.

Following an orderly abandon ship, *Ahrens* and *Robert I. Paine* rescued 951 survivors of *Block Island*. Captain Hughes and several others made a last sweep and were the last ones off at 2140. *Ahrens* had 674 survivors aboard when a deep underwater explosion from the carrier lifted the

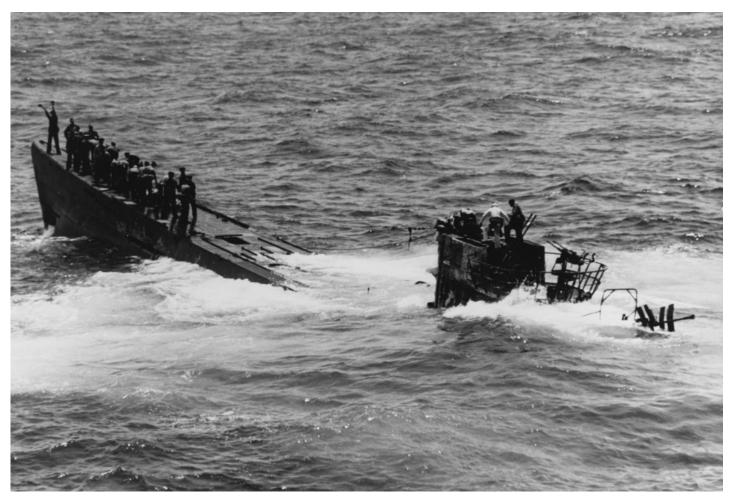
ship, and was at first mistaken for a torpedo hit. *Robert I. Paine* rescued 277 men. Only seven of *Block Island*'s crew were lost, although four of the six pilots airborne at the time were not recovered in their failed attempt to reach Las Palmas. *Block Island*'s stern went under first until finally the carrier was perpendicular to the surface before slowly disappearing at 2155, becoming the only U.S. aircraft carrier sunk in the Atlantic during the war. After sinking *U-549, Eugene E. Elmore* took on about half *Barr*'s crew and the wounded as *Robert I. Paine* provided cover. *Eugene E. Elmore* then towed *Barr* to Casablanca. The skipper of *Eugene E. Elmore*, Lieutenant Commander George L. Conkey, was awarded a Navy Cross.

Captain Hughes was awarded a Legion of Merit with Combat "V":

The President of the United States of America takes pleasure in presenting the Legion of Merit with Combat "V" to Captain Francis M. Hughes, United States Navy, for exceptionally meritorious conduct in the performing of outstanding services to the Government of the United States as the Commanding Officer of the USS BLOCK ISLAND (CVE-21) from 10 March 1944 until 29 May 1944. As Commanding Officer of USS BLOCK ISLAND and Commanding Officer of an Atlantic Fleet antisubmarine task group, Captain Hughes achieved outstanding success in combined air and surface operations against enemy submarines. Searching out and attacking the enemy at every opportunity, the task group under Captain Hughes' command repeatedly exposed itself to certain danger in its determined action against the enemy. Throughout the entire series of operations, which resulted in the sinking and damaging of a large number of Uboats, the aggressive and determined spirit of the attacking units and the close cooperation between all units of the task group resulted in achieving a record of destruction of enemy submarines which was un-excelled by any other similarly engaged task group during the same period. When, in search of an enemy submarine, the USS BLOCK ISLAND was torpedoed and sunk, Captain Hughes displayed the same high standard of courage, leadership and judgment in conducting the abandonment of his sinking ship without injury of additional loss of life to the exceptionally high percentage of the crew which had survived three torpedo blasts. Captain Hughes' outstanding achievement in battle against enemy submarines reflect great credit upon the United States Naval Service.

Of note, the 1957 movie *The Enemy Below*, starring Robert Mitchum and Curt Jurgens, depicts a battle of wits between the destroyer escort commander and the U-boat commander. The *Buckley*-class *Whitehurst* (DE-634) starred as the fictitious *Haynes*. This is one of the better Navy war movies and won an academy award for special effects.

Sources include: History of U.S. Naval Operations in World War II, vol. 10, The Atlantic Battle Won, by Rear Admiral Samuel Eliot Morison: Little, Brown, Boston, 1956; NHHC Dictionary of American Naval Fighting Ships (DANFS) for U.S. ships and uboat.net for German submarines; "CVE 21 USS Block Island," by Jack Greer, updated by Jack Sprague, Fall 2009, at ussblockisland.us; "Forgotten Fights: USS Buckley Duels U-66," 27 July 2020, at nationalww2museum.org; "Action Report of Engagement with German Submarine, 6 May 1944," from Commanding Officer USS Buckley to Commander in Chief, United States Fleet, dated 8 May 1944, at uboatarchive.net.



4 June 1944. U.S. Navy salvage crew working to save U-505, shortly after she was abandoned by her German crew. Photographed from USS Guadalcanal (CVE-60). (80-G-324313)

H-Gram 064-3: Close Quarters Antisubmarine Warfare (Part 3)

H-Gram 064, Attachment 3 Samuel J. Cox, Director NHHC July 2021

USS Guadalcanal (CVE-60), USS Chatelain (DE-149), and USS Pillsbury (DE-133) vs. U-505–4 June 1944

U-505 was an ill-starred boat, although others might consider her very lucky, compared to 632 other U-boats lost at sea, most with all hands. *U-505* suffered the worst damage of any U-boat that survived, and she was the only U-boat where the commanding officer committed suicide on board in the middle of a depth charge attack. In 12 war patrols, *U-505* only sank eight ships totaling 44,962 GRT.

Commissioned on 26 August 1941, *U-505* was a Type IXC long range U-boat (see *Buckley* vs. *U-66* for Type IXC characteristics). Her first war patrol was a transit from Kiel, Germany, in January 1942 to Lorient in German-occupied France in February 1942 during which she attacked no ships, nor was she attacked, and was cut short by the commanding officer's appendicitis. Her second war patrol, starting in February 1942, was her most successful, sinking four cargo ships off West Africa and suffering only minor damage from an Allied aircraft attack in the mid-Atlantic. On her third war patrol, beginning in June 1942, *U-505* sank three ships in the Caribbean, one of which was a sailing ship belonging to a Colombian diplomat, which gave Colombia the excuse they were looking for to declare war on Germany.

Under new skipper *Kapitanleutnant* (Lieutenant) Peter Zschech, U-505 commenced her fourth war patrol in October 1942. After sinking one British vessel off the coast of Venezuela, U-505 was caught by surprise on the surface on 7 November by a low-level attack by a British Royal Air Force Lockheed Hudson twin-engine bomber, which dropped four depth charges and scored one direct hit on U-505. One German watch officer on the conning tower was killed and another wounded, but the Hudson was hit by fragments from the explosion and crashed, killing all five aboard. Damage to the submarine was so severe that Zschech ordered abandon ship, but the engineers believed she could be saved, and they did save the ship. It took two weeks to make the submarine watertight again, but U-505 eventually limped back to Lorient under her own (reduced) power.

Following six months of repair, U-505 commenced her fifth war patrol in July 1943, but she was so hounded by three British destroyers (aided by leaking oil from U-505) that she returned with minor damage after only 13 days. Four more patrols were aborted after only a few days, due to mechanical failure and repeated sabotage by French dockyard workers. Other Uboat commanders began to make jokes insinuating that Zschech was a coward. U-505 commenced her tenth war patrol in October 1943. The sub barely made it out of the Bay of Biscay before being subjected to a prolonged depth charge attack, during which Zschech shot himself in the head with his own pistol in the control room in front of the crew. The first watch officer brought the boat back with only minor damage after Zschech's suicide. Under a new commanding officer, Oberleutnant zur See (Lieutenant (junior grade)) Harald Lange, U-505 commenced her eleventh war patrol on Christmas Day 1943, returning early again after a few days, although this time because she rescued 33 survivors of German torpedo boat *T-25*, sunk in the Bay of Biscay by British cruisers.

U-505 departed Brest, France, on 16 March 1944 for her 12th war patrol. Under the command of *Oberleutnant zur See* Harald Lange, *U-505* had a crew of 59: five officers, four chief petty officers, thirteen petty officers, and 37 non-rated enlisted men. *U-505*'s intended operating area was off the west coast of Africa between Freetown, Sierra Leone (then a British Crown Colony) and Monrovia, Liberia.

Harald Lange was 40 years old, which made him the oldest commander of a front-line U-boat during the war. He was chosen by Admiral Doenitz to act as a "father figure" to restore the morale of the crew after the series of failed patrols and the suicide of Zschech; in that he was successful, as well as instilling a more professional fighting spirit in the crew.

Before the war, Lange was captain of a Hamburg-American line ship and had visited the U.S. multiple times, where he met his wife, a nurse who had emigrated from Germany to the U.S. He joined the Nazi Party in 1934, but was not active, and very few people ever knew he was a member. He became a naval reservist in 1935 but continued in the merchant marine. He was called to active duty in 1939, initially serving in command of a minesweeper and then a patrol boat in the Baltic, when he depth-charged and damaged a British submarine in the Kattegat off Denmark in November 1940.

Lange joined the Unterseebootswaffe in 1941, first serving aboard U-180, a unique Type ID-D1 boat with experimental propulsion. He was aboard U-180 when she went into the Indian Ocean to rendezvous with Japanese submarine I-29 on 23 April 1943 to transfer two Indian allies of the Axis powers who wanted to lead a rebellion in British India. U-180 also took aboard two Japanese naval officers, military equipment, and gold as part of the "Yanagi" technology exchange (see H-Gram 033). Lange temporarily assumed command of *U*-*180* after her return to France before replacing Zschech. He assumed command of *U*-*505* on 30 November 1943.

For U-505's 12th patrol, her torpedo load included five T-5 Zaunkonig ("Wren") passive acoustic homing torpedoes, nicknamed by the Germans "destroyer killers" as that was their primary purpose. The weapons were very technologically advanced for the time, but were also extremely maintenance intensive, requiring hours of work every day to keep them operational. They were not to be wasted against merchant ships if at all possible.

It took *U-505* twelve days to get out of the Bay of Biscay, as she had to crash dive five times to avoid air attack and was forced to run submerged for 228 hours and surfaced for only 60 hours due to constant Allied air and surface threat.

U-505 rendezvoused with *U-154* on 23 March 1944 to transfer radio codes and share intelligence, including learning for the first time about the Allied Hunter-Killer groups. When *U-505* entered her assigned operating area, she found it devoid of targets. Morale aboard the crew began to plummet out of boredom and the intense tropic heat. Multiple mechanical systems broke down. The new FuMO radar didn't work, and torpedo tube II had a jammed bow cap. *U-505* had to put divers down on artificial lungs to repair the cap, which took 30 hours. The result of these deficiencies limited *U-505* to diving no deeper than 65 feet.

On 27 May, *U-505* commenced a return to port, having attacked nothing and sunk nothing. Between 30 May and 2 June 1944, *U-505* had to crash dive eight times. The Naxos radar warning system was malfunctioning, giving *U-505* less time to detect and react to intense Allied aircraft searches between the Cape Verde Islands and the west coast of Africa, which had become the preferred U-boat transit area.

U-505's movements had been tracked and analyzed by the U.S. TENTH Fleet since her departure in March 1944. TENTH Fleet was a shore-based organization that never consisted of more than 50 people. It was established on 20 May 1943 by direction of Admiral Earnest J. King, Chief of Naval Operations and Commander-in-Chief U.S. Fleet (CNO/COMINCH), who retained command of TENTH Fleet himself. King's assistant chief of staff for Antisubmarine Warfare (ASW), Rear Admiral Francis S. "Frog" Low, ran the dayto-day operations. RADM Low was a submarine officer (who had also originated the idea for what became the Doolittle Raid on Japan).

The mission of TENTH Fleet was to serve as a central point for all Intelligence regarding German submarines (with unrestricted access to the British Admiralty's Submarine Tracking Room) and to conduct operational analysis with the Intelligence for the purpose of tracking and destroying U-boats. TENTH Fleet was given authority to direct U.S. Navy ships in the prosecution of submarines. TENTH Fleet was composed of five major sections: Operations (which included Intelligence,) Anti-submarine Measures, Convoy and Routing, the Civilian Scientific Council, and the Air Anti-submarine Development Unit. In short, TENTH Fleet was responsible for all aspects of ASW weapons and systems development, training, and operations for the purpose of winning the Battle of the Atlantic.

The TENTH Fleet Operations section, headed by Captain Haines, was an Intelligence-driven organization, formed around the nucleus of the Atlantic section of the COMINCH Combat Intelligence Division, led by Commander Kenneth Knowles. Knowles and his team collected, analyzed, and correlated all sources of Intelligence to provide estimates and projections of U-boat activity, and disseminating specific locating information in a timely and tactically useful manner, without compromising the sources of Intelligence. These sources included intercepted and decrypted German communications provided by OP-20-G (the forerunner of Naval Security Group and today's Fleet Cyber Command/TENTH Fleet) and interrogations of captured U-boat crews by OP-16-Z, the Naval Intelligence Special Activities Branch, among others.

In March 1944, Commander Knowles and his team began tracking what at first appeared to be two submarines transiting the Bay of Biscay, but Knowles guickly concluded it was one submarine. A series of high-frequency direction finding (HF/DF) fixes tracked the submarine down the African coast to Freetown, Sierra Leone. Although the exact identity of the submarine remained unknown, Knowles had enough data to assess it was an older boat with about 90-days mission duration and would turn north to return home near the end of May. U-505 began moving north within its operating area on 24 May, consistent with Knowles' estimate. On 27 May, a series if HF/DF intercepts fixed the U-boat 750 NM north of its 24 May position, and on 28 May HF/DF fixed the U-boat west of Dakar.

On 30 May, TENTH Fleet tracked the U-boat's turn to the east to get closer to the African coast trying to avoid the persistent air patrols. TENTH Fleet passed the locating information to Admiral Royal Ingersoll, commander-in-chief of the U.S. Atlantic Fleet, who directed Task Group 22.3, USS *Guadalcanal* (CVE-60), and escorts, to pursue the contact. At the time *Guadalcanal* was 300 NM south of the U-boat. On 31 May, HF/DF detected the U-boat resuming its northerly course, with *Guadalcanal* gaining and with contact estimated to occur on 2 June 1944.

Guadalcanal (CVE-60) was a *Casablanca*-class escort carrier of 7,800 tons displacement and 512 feet in length capable of operating about 27 aircraft, with one catapult and two elevators.

Commissioned on 25 September 1943, Guadalcanal had a crew of about 910-916 (860 ship's company and 50-56 in the embarked air squadron). Guadalcanal was the sixth of the 50 Casablanca-class escort carriers commissioned in less than two years (the most numerous class of aircraft carrier ever produced). Unlike previous escort carriers like Bogue (CVE-9), Card (CVE-11), and Block Island (CVE-21), which were converted merchant ships, the Casablanca-class were built from the keel up as escort carriers, although the hull was still a modified merchant hull, with the speed of a merchant, only 19 knots at best. For defense, the ships carried one 5-inch/38 caliber gun on the stern, as well as between eight and 16 Bofors 40mm and 12-20 Oerlikon 20mm antiaircraft guns (numbers increased during the war).



Captain Daniel V. Gallery, Jr., USN, and Lieutenant Junior Grade Albert L. David, USN. Photographed on board USS *Guadalcanal* (CVE-60) in June 1944. (80-G-49177)

Guadalcanal's first commanding officer was Captain Daniel Vincent Gallery, Jr. Gallery entered the U.S. Naval Academy in 1917 at the age of 16, and graduated in 1920 with the wartimeaccelerated class of 1921. An early naval aviator, he flew seaplanes, torpedo bombers, and amphibians. In 1941, before the U.S. entry in the war, he was assigned as the naval attaché at the U.S. Embassy in Great Britain. He ferried Spitfire fighters from the factory to Royal Air Force airfields; although the planes were unarmed, it gave him technical claim to be the only U.S. naval aviator to fly Spitfires during the Battle of Britain. In 1942, Gallery assumed command of the Fleet Air Base at Reykjavik, Iceland, where he was awarded a Bronze Star for operations against German submarines, and first began to formulate his ideas for how to capture a U-boat.

Guadalcanal's first Hunter-Killer mission commenced in January 1944, with Captain Gallery dual-hatted as commanding officer of *Guadalcanal* and Task Group 21.12. *Guadalcanal* embarked Composite Squadron VC-13, composed of nine FM-1 Wildcat fighters and 12 TBF-1C Avenger torpedo-bombers. The screen consisted of four vintage "four piper" destroyers, all survivors of the debacle in the Java Sea in February 1942 (see H-Gram 003). These ships were *Alden* (DD-211), formerly commanded by Lieutenant Commander Ernest Evans, the *John D. Edwards* (DD-216), *John D. Ford* (DD-228), and *Whipple* (DD-217).

The Guadalcanal Hunter-Killer group got its first kill on 16 January 1944. Ultra Intelligence (derived from decrypted German Enigma communications) indicated the Germans would conduct a refueling operation just before sunset 500 NM west of the Azores. Guadalcanal and escorts remained clear of the area so as to not alert the Germans, but just before sunset launched eight Avengers. Two Avengers caught three submarines on the surface, U-544 in the act of refueling U-516, and one awaiting its turn. All three immediately began to submerge, but an Avenger fired rockets and dropped two Mk.47 depth charges that landed between U-544 and U-516. U-516 appeared to sink by the stern, but actually survived. About 40 crewmen were abandoning U-544 when the second Avenger hit it with rockets and depth charges blowing the men off the deck. Although about 32 Germans survived the sinking, none were rescued and all 57 hands were lost. U-544 was on her first war patrol with no sinkings to her credit.

The Avengers returned to the carrier very low on fuel as dusk was fading fast. The first five got aboard safely, but the sixth fell into the starboard gallery walkway, fouling the starboard side of the flight deck. Gallery ordered the flight deck lights on despite the risk of submarine attack. As crewmen cut the tail off the Avenger in the catwalk trying to clear the deck, a seventh Avenger tried to hug the port side, but bounced through the barriers and crashed inverted in the water. The last Avenger was then instructed to ditch. Fortunately, all six pilots and aircrewmen from the two planes in the water were rescued. However, VC-13 would lose six Avengers, two pilots, and three aircrewmen to mishap during this line period.

The Guadalcanal Hunter-Killer group was underway again from Norfolk on 7 March 1944 with a different air squadron and escorts. Composite Squadron VC-58 was composed of nine FM-2 Wildcat fighters, three TBF-1C, and nine TBM-1C Avenger torpedo bombers. The screen consisted of the *Gleaves*-class destroyer *Forrest* (DD-461), and four new *Edsall*-class destroyer escorts *Pillsbury* (DE-133), *Pope* (DE-134), *Flaherty* (DE-135), and *Chatelain* (DE-145), with Commander Frederick S. Hall embarked a screen commander.

The Edsall-class was a follow-on to the Evarts-, Buckley-, and Cannon-class destroyer escorts. Designed to be mass produced ships optimized for convoy escort and antisubmarine warfare, the Edsall class had armament similar to the first three classes, consisting of three single 3-inch/50 caliber guns, one twin Bofors 40mm AA gun, eight single 20mm AA guns, one triple 21-inch torpedo tube mount, one Hedgehog forward firing depth charge projector, eight K-gun sidethrowing depth charge projectors, and two depth charge racks on the stern. What made the Edsalls different from previous classes was their dieselelectric power plant similar to that on submarines. A total of 85 Edsall-class destroyer escorts were completed.

After an uneventful crossing of the Atlantic to Casablanca, TG 21.12 was underway again on 30 March 1944 from Casablanca. *Guadalcanal* supported westbound convoy GUS-37, but found no submarines during daylight flight operations. *Guadalcanal* proceeded independently on 8 April toward an HF/DF intercept position of a U-boat, attempting night flying operations again under a full moon. Four Avengers were launched just before sunset. One of them found *U-515* on the surface recharging batteries and forced the Uboat to submerge with a depth bomb attack. *Guadalcanal* kept four Avengers in the air all night. Every time *U-515* tried to surface to recharge, she was forced back under.



Submarine Record Plaque from USS Guadalcanal (NHHC 1959-5-AL)

U-515 was a Type IXC U-boat on her seventh war patrol, all under the command of the particularly effective *Kapitanleutnant* Werner Henke (he already been awarded an Iron Cross Second Class, Iron Cross First Class, and the highest

Knights Cross of the Iron Cross with Oak Leaves). U-515 had sunk 23 ships, plus two were damaged that later sank, for a total of about 160,000 tons. On the night of 6-7 December 1942, U-515 attacked convoy ON-149 and torpedoed the 18,700 ton British armed passenger liner Ceramic. Ceramic was hit by one torpedo, and then a couple minutes later by two more in the engine room. Ceramic had 264 crewmembers, 14 gunners, 244 military and naval passengers, including 30 nurses, and 133 civilian passengers including 12 children. Henke waited until eight fully laden lifeboats with crew and passengers were launched before putting two more torpedoes into the ship, which broke her back and sank her immediately.

Henke reported the sinking, but was directed to return to the site and take aboard Ceramic's master for interrogation. By the time U-515 returned, a severe storm had swamped or capsized the lifeboats. In the gale, U-515 was only able to take aboard one survivor, a sapper of the Royal Engineers. The other 656 people aboard Ceramic perished in the storm. British propaganda would claim U-515 machine-gunned passengers and branded Henke as a wanted war criminal. U-515 had also earlier sunk the destroyer-tender HMS Hecla on 12 November 1942, which sank with the loss of 283 of 846 aboard. In the same convoy and same day, a torpedo from U-515 blew the stern off British destroyer HMS Marne.

Guadalcanal aircraft dogged *U-515* throughout the night. By morning *U-515* was trailing oil, and being tracked by sonobuoys, when she was attacked again at 0645 by a Wildcat fighter. Throughout the morning the four destroyer escorts closed in on *U-515*. At 1030, *Pope* gained sonar contact and delivered several Hedgehog and depth-charge attacks that damaged *U-515*'s pressure hull. By 1300, large oil bubbles began to break the surface. Having sunk to 600 feet and with his batteries depleted, Henke blew all his air tanks to surface. *Chatelain* delivered two depth charge attacks, the second just as *U-515* broke the surface at 1402 only 75 yards from *Chatelain's* starboard beam and within sight of *Guadalcanal*. *Chatelain* and *Flaherty* opened fire on *U-515* at point-blank range as *Pillsbury* raced to get in the action. An Avenger fired rockets and two Wildcats strafed the boat and exploded an acoustic torpedo tracking on *Pillsbury*, apparently Henke's last gasp before he ordered abandon ship.

U-515 finally went under at 1512. U-515 suffered 16 dead before U.S. ships ceased fire, but 44 crewmen were rescued, including Henke. Given the amount of time between when U-515 surfaced and when she finally went under, Gallery came to the conclusion it might have been possible to capture the sub, had it not been for the massive amount of firepower directed at the sub when it came up. Henke was taken to the POW interrogation center at Fort Hunt, Virginia. In an attempt to get more valuable information from him, interrogators applied more than the usual psychological pressure, threatening to turn him over to the British to be executed as a war criminal for the Ceramic sinking. In June 1944, Henke was shot and killed as he attempted to escape from the compound; some accounts state this was actually a "suicide-by-guard" action rather than a real escape attempt. Henke was posthumously promoted to Korvettenkapitan (lieutenant commander). His grave is on the post at Fort Meade.

On 9 April 1944, *U-214* evaded a depth-bomb attack by *Guadalcanal* aircraft. *U-214* was a Type VIID minelaying submarine and may have been responsible for the loss of U.S. submarine *Dorado* (SS-248) on 14 October 1943 in a minefield laid by U-214 off Colon, Panama, on 8 October 1943. *Dorado's* loss was initially blamed on a "friendlyfire" attack by a PBM Mariner flying boat of Patrol Squadron VP-210, however there is substantial evidence that the Mariner was not at fault. If *Dorado* was sunk by a mine, it would be the only U.S. submarine sunk in the Atlantic as a result of enemy action.

On 10 April 1944, three Guadalcanal Avengers and a Wildcat caught U-68 on the surface in the moonlight. This time there was no escape. It took until dawn, and U-68 put up heavy anti-aircraft fire, but the U-boat was sunk by depth bombs, rockets, and strafing by two Avengers and a Wildcat, going down with 56 of her crew including her skipper, Oberleutnant zur See Albert Lauzemis. A lookout who was left topside when the sub crash dived was the only survivor and was rescued by one of Guadalcanal's escorts. The Type IXC U-68 had been a very successful Uboat with 32 ships and one auxiliary warship (a naval trawler) sunk for a total of 201,430 tons. Gallery noted in his action report that 2,100 hours of daylight operations accomplished nothing, whereas 200 hours of night flying resulted in two kills.

Guadalcanal returned to Hampton Roads on 17 April 1944 for upkeep and a change out of air squadrons, with Composite Squadron VC-8 relieving VC-58. VC-8, commanded by Lieutenant Norman D. Hodson, was composed of nine FM-2 Wildcat fighters and twelve TBM-1C Avenger torpedo bombers. The screen commander remained Commander Hall, embarked in *Pillsbury*. The destroyer *Forrest* was replaced by *Buckley*-class destroyer escort *Jenks* (DE-665). The four *Edsall*-class (*Chatelain*, *Pillsbury*, *Pope*, and *Flaherty*) remained part of the *Guadalcanal* Hunter-Killer group, now redesignated as Task Group 22.3.

At the departure conference in Norfolk, Captain Gallery laid out his plan to capture a U-boat to his senior task group officers and representatives from Admiral Ingersoll's (CINCLANTFLT) and Vice Admiral Bellinger's (Commander Naval Air Forces Atlantic) staffs. According to Morison, the plan was well received. According to other accounts, no one present raised an objection. Regardless, Gallery instructed each of his ships to organize a boarding party. TG 22.3 departed Hampton Roads on 15 May 1944 and crossed the Atlantic. For two weeks, the *Guadalcanal* Hunter-Killer group found nothing. On 30 May, orders were received from Admiral Ingersoll to pursue the unknown German U-boat (*U-505*) reported by TENTH Fleet Intelligence. Told to expect contact on 2 June, *Guadalcanal*'s shipboard HF/DF system gained a bearing on the U-boat on 2 June. Approaching from the south, *Guadalcanal* aircraft commenced around-the-clock flights, gaining fleeting nighttime radar contacts. Sonobouys dropped from aircraft detected submarine propeller noises but were not able to localize the contact.

On 3 June, *Guadalcanal* and escorts turned back south and searched the area they had just been through again, flying aircraft all night, this time with no result. Aboard *U-505*, Lange recorded hearing aircraft depth charges at a great distance; at the time *Guadalcanal* planes were bombing a "noisy sonobuoy" 60 NM away. Based on radar warning and other acoustic information, Lange actually deduced that he was being pursued by an aircraft carrier. By this time, the Task Group was getting very low on fuel and after sunrise on 4 June, *Guadalcanal* turned back north to head for Casablanca to refuel.

At 1110, Chatelain radioed possible sound contact. At 1112, the skipper of Chatelain, Lieutenant Commander Dudley S. Knox (only son of Captain Dudley W. Knox, the first and long-time director of the predecessor of the Naval History and Heritage Command), evaluated and reported the contact as a submarine and that he was commencing attack. The Task Group had driven right over the sub, which was between Guadalcanal and the starboard escorts, running just below the surface. Captain Gallery ordered the screen commander, Commander Hall, to send two destroyer escorts to assist *Chatelain*. *Pillsbury* and Jenks responded, while Guadalcanal turned to port (west) to clear the area, retaining Pope and Flaherty as escorts. Guadalcanal launched two Avengers to join two Wildcats already airborne.

The Avengers were given orders not to drop depth charges if the submarine surfaced.

Chatelain fired a pattern of 20 Hedgehog projectiles at the contact, but no explosions were heard within ten seconds, indicating a miss. *Chatelain* was circling for another attack, when her sonarmen realized they were heading opposite of the contacts movement. At almost the same time, the Wildcats sighted the submarine below the surface and strafed the water to mark the spot. *Chatelain* was already moving in the correct direction when Lange put up his periscope for a quick look and was "dismayed by the array of enemies," and promptly went down scope. *U-505* fired a G7es *Zaunkonig* acoustic homing torpedo at *Chatelain*, which missed.

Chatelain then fired a pattern of 14 600-pound depth charges set on shallow as she drove over the datum, with devastating effect on *U-505*. The action had interrupted the lunch serving. The force of the explosions rolled *U-505* on her beam ends, throwing crockery, food and sailors into the bilges. Worse, the outer hull was holed, lights and machinery went out, the rudder jammed hard starboard and water began to leak into the boat. Crewmembers from below rushed the conning tower shouting that the boat was sinking. Lange took their word for it, blew his tanks and came to the surface.

At 1122.30, *U-505* broached 700 yards from *Chatelain*. The three destroyer escorts immediately opened fire and the Wildcats strafed the sub. Lange was the first to come up to the bridge and was immediately badly wounded in his legs and face by shell splinters. Next up was the second officer, who was wounded and knocked unconscious. Other sailors attempted to man machine guns and got off a few rounds, before the still conscious Lange looked around and realized the situation was hopeless and gave the order to abandon and scuttle the U-boat. As he was moving to the anti-aircraft deck abaft the bridge another blast blew him onto the main deck below, where crewmen put him in a raft. One German crewman was killed in the fusillade. The crew abandoned with such haste that full scuttling measures were not implemented.

The U-boat was still making way as the crew began to abandon it. Concerned that U-505 was maneuvering to take a torpedo shot, *Chatelain* fired a torpedo at U-505, which missed. At 1127, it was clear that the Germans had their hands up and were getting into rafts. Commander Hall ordered a ceasefire. *Chatelain* and *Jenks* began rescuing the 58 survivors of U-505, three of them wounded, including Lange.



TBM Avenger landing on USS *Guadalcanal* (CVE-60), while she was towing U-505 on 4 June 1944. The escort carrier kept up flight operations for days while the captured submarine was being toward Bermuda. (80-G-49174)

Even though apparently abandoned, *U-505* was churning in a tight right turn at 6 knots, slowly settling by the stern. At 1138, Commander Hall ordered "Away boarding parties." Lieutenant (junior grade) Albert L. David (a "Mustang" with 20 years of enlisted time) was the *Pillsbury*'s boarding team commander. He set off in a whaleboat with an eight-person team, plus two operating the boat, and salvage gear stowed and ready. Nearby destroyer escorts used .50 caliber machine gun fire to persuade lingering Germans to get off the sub's deck. Unable to match the submarine's speed in a stern chase, the coxswain steered the boat across the circle to essentially ram the submarine from the side.

As Lieutenant (j.g.) David led the boarding team in leaping on to the U-boat, the submarine had settled even further in the ocean with swells washing over the entire afterdeck and around the conning tower. Without hesitation, David climbed the conning tower and plunged into the dark interior of the submarine down the conning tower hatch, knowing that any moment the sub might sink, or at any instant they all might be blown to smithereens by scuttling charges, and not knowing if there were any armed Germans below willing to fight. David was followed down by two petty officers, Arthur W. Knispel and Stanley E. Wdowiak. All three were armed with Thompson submachine guns and hand grenades. The boat was dark except for some dim emergency lighting, and they could hear water gurgling. After determining that there were no Germans on board, David called for more of the team to come down.

Knispel and Wdowiak collected the codebooks from the radio room. The code books, charts, and important looking papers were quickly sent topside and into the whaleboat to be sure they weren't lost. Petty Officer Zenon B. Lukosius found the source of the water entering the interior of the sub. Fortunately the cover of the six-inch (or eightinch, depending on account) bilge strainer was still lying nearby and Lukosius put it back and dogged it down. By this time, the submarine was almost at neutral buoyancy and water was sloshing down the conning tower hatch; David ordered those topside to close it.



4 June 1944 Members of the salvage party from USS *Guadalcanal* (CVE-60) use a small handy-billy pump to dewater the partially scuttled *U-505*. (80-G-49167)

At 1230, a whaleboat from Guadalcanal arrived at U-505 with a salvage party led by Guadalcanal's engineering officer, Commander Earl Trosino. Trosino assumed command and began tracing U-505's plumbing to determine how to keep her from sinking. Other members of the Guadalcanal party rigged handy-billy pumps to pump water out of the sub. Although the sub was dark, the boarding teams were not blind as they were armed (in their training) with details of U-boat mechanics and operations, derived from the British capture of U-570 in the North Atlantic in August 1941 (in that case, the Germans had time to smash the Enigma machine and throw the pieces over the side, along with codebooks and other papers, but it was still an Intelligence bonanza). For example, the salvage team knew that U-boats had 14 five-pound scuttling charges that could be on timers set at locations around the boat, but the locations varied from boat-to-boat. Gunner Burr from the Guadalcanal found and disarmed 13 of the charges. The 14th wasn't found until weeks later, a known danger that hung over the heads of salvage parties over the next week.

CDR Trosino quickly discovered that when he slowed the boat, the stern would sink further as lift from the stern planes was lost. To keep the sub afloat it would need to be towed at a high enough speed. *Pillsbury* attempted to take *U-505* in tow but collided and the sub's bow planes ripped through *Pillsbury*'s hull, flooding two main compartments. *Guadalcanal* then backed down on the sub and a tow line was put across. As *Guadalcanal* took up the strain and increased speed, *U-505*'s stern came up, but the jammed rudder caused the sub to shear off to the starboard (although in the photo it looks like port to me). With the four aircraft airborne low on fuel, *Guadalcanal* turned into the wind and recovered the planes with *U-505* in tow. The efforts to keep *U-505* from sinking over the next days were an epic in themselves.



Boarding party from USS *Pillsbury* (DE-133) working to secure a towline to U-505's bow. Note the large U.S. flag flying from the submarine's periscope.

On orders of Admiral Ingersoll, Captain Gallery was directed to take the Task Group and *U-505* to Bermuda. As the group was very low on fuel, the risk was accepted to bring the tanker *Kennebec* (AO-36) out of the safety of Casablanca, which led to a unique situation in the history of the U.S. Navy of a carrier conducting flight operations and alongside underway replenishment from an oiler while towing a submarine. Finally, on 9 June, the tug *Abnaki* (ATF-96) took over the tow, and the Task Group formed a protective screen around the tug and tow. An experienced submarine officer, Commander C. G. Rucker, was put aboard for the final leg to Bermuda, arriving on 19 June.

Reportedly, Fleet Admiral King was torn between decorating and court-martialing Captain Gallery for capturing the sub, rather than sinking it after taking all code materials off. In the case of U-570, the Germans were able to radio to the German high command that they had successfully deepsixed the Enigma machine and all code material so the Germans were not worried about compromise (although they should have been). If the Germans were to find out that U-505 had been captured and not sunk, they would have no choice but to assume the Enigma machine had been compromised, which would put at risk an enormously valuable source of Allied Intelligence (which even Morison didn't know about when he wrote the "History of U.S. Naval Operations in World War 2" in the 1950s). As a result, a very extensive effort was undertaken to keep the Germans from learning of U-505's capture.



U-505 crewmen climb a jacob's ladder to come aboard USS *Guadalcanal* (CVE-60), after their rescue from the Atlantic. With them is the body of *U*-505's only casualty, killed by strafing when he attempted to man a gun on the U-boat before it was abandoned.

Upon arrival in Bermuda, 3,000 witnesses to the capture were sworn to secrecy, and any "souvenirs" were collected. *U-505* remained at the U.S. Navy operating base at Bermuda. It was

painted as a U.S. submarine and named USS *Nemo*. It was studied intensely, including underway operations, as was the sensitive acoustic torpedo technology. The cipher machines and code books also resulted in valuable Intelligence. The two *Enigma* machines saved Navy codebreaking teams an estimated 13,000 computer hours.

The 58 U-505 survivors were kept isolated from all other prisoners of war, eventually being sent to a camp near Ruston, Louisiana. Lange had a leg amputated due to his wounds. The Red Cross was denied access (or even knowledge of their existence) and they were forbidden to write to their families. The Germans never did learn of U-505's capture during the war and the German navy finally officially declared U-505's crew dead in August 1944. The crew was transferred to Great Britain in 1945. Their families were not notified they were alive until 1946, and they were not returned to Germany until December 1947.

Lieutenant (junior grade) Albert Leroy David was awarded the Medal of Honor for his actions in capturing *U-505*. It was the only Medal of Honor awarded to U.S. Navy personnel in the Atlantic Theater during World War II. Regrettably, he died of a heart attack in September 1945 (at age 43) before the medal was presented;

"The President of the United States of America, in the name of Congress, takes pride in presenting the Medal of Honor (Posthumously) to Lieutenant (then Lieutenant (junior grade)) Albert Leroy David, United States Navy, for conspicuous gallantry and intrepidity at the risk of his life above and beyond the call of duty while attached to the USS *Pillsbury* (DE-133) during the capture of an enemy submarine off French West Africa, 4 June 1944. Taking a vigorous part in the skillfully coordinated attack on the German *U-505* which climaxed a prolonged search by the Task Group, LT David boldly led a party from *Pillsbury* in boarding the hostile submarine as it circled erratically at five or six knots on the surface. Fully

aware the U-boat might momentarily sink or be blown up by exploding demolition and scuttling charges, he braved the added danger of enemy gunfire to plunge through the conning tower hatch and, with his small party exerted every effort to keep the ship afloat and assist the succeeding and more fully equipped salvage parties in making U-505 seaworthy for the long tow across the Atlantic to a U.S. port. By his valiant service during the first successful boarding and capture of an enemy man-o-war on the high seas by the US navy since 1815, Lieutenant David contributed materially to the effectiveness of our Battle of the Atlantic and upheld the highest traditions of the US Naval Service." Garcia-class frigate FF-1050 was named in honor of Albert David, in commission from 1968 to 1988, then serving in the Brazilian navy.

Torpedoman's Mate Third Class Arthur William Knispel, USNR, and Radioman Second Class Stanley Edward Wdowiak, USNR, were each awarded the Navy Cross for their actions in capturing U-505. Other members of the original boarding team were awarded the Silver Star. Commander Earl Trosino was awarded the Legion of Merit. Captain Daniel Gallery was awarded the Distinguished Service Medal after all and the entire Guadalcanal Hunter-Killer group was awarded a Presidential Unit Citation. Admiral Ingersoll cited the Task Group for "outstanding performance during anti-submarine operations...a feat unprecedented in individual and group bravery, execution and accomplishment in the Naval History of the United States."

At the end of the war in Europe, *U-505* was used to promote E War Bond sales, and the sub visited New York City, Philadelphia, Baltimore, and Washington D.C. She was then moored in derelict condition at Portsmouth Navy Yard. With great difficulty, Rear Admiral Gallery convinced the Navy not to sink *U-505* as a target. In 1954, the Navy donated *U-505* to the Chicago Museum of Science and Industry, and citizens of Chicago



U-505 (German submarine) and USS *T-35* (DD-935, ex-German *T-35*) on display at the U.S. Naval Academy, Annapolis, Maryland, in October 1945, during the academy's centennial exhibition.

raised \$250,000 to transport the boat up the Great Lakes. The museum placed *U-505* in a climate-controlled building in 2004, which underwent a major exhibit upgrade in 2019 that is truly amazing.

Guadalcanal was decommissioned in 1946 and scrapped in 1959. *Pillsbury* depth charged and sank *U-546* on 24 April 1945, was decommissioned in 1947, recommissioned as a radar picket in 1955, decommissioned again in 1960, and scrapped in 1966. *Chatelain* was decommissioned in 1946 and scrapped in 1974.

Sources include: "The U-505's Service History before Capture: Harald Lange" by S. M. O'Connor, 6 June 2019 at inthegardencity.com. "Escort Carriers: The USS Guadalcanal" prepared by Don Baker at uboat.net. "USS Guadalcanal" entry in NHHC Dictionary of American Naval Fighting Ships (DANFS) by NHHC historian Mark Evans, 2018 at history.navy.mil. History of U.S. Naval Operations in World War II, Vol. X, The Atlantic Battle Won, by Rear Admiral Samuel Eliot Morison: Little, Brown and Cp., Boston, 1957. DANFS for other U.S. ships and uboat.net for German submarines and personalities.