H064.2 Close Quarters Anti-Submarine Warfare (Part 2)

Sam Cox, Director of Naval History, 25 July 2021

USS BORIE (DD-215) vs. U-405 -- 1 Nov 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 of 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 they were reading many German messages (this was actually a lot harder than that - although the German's did not know Enigma was compromised, they still took extensive communications security precautions that led to a constant see-saw battle with the Allied code-breakers.) The Allies' ability to use high-frequency direction finding (HF/DF) in a tactically useful manner, taking advantage of the Germans' excessive communications to and from the U-boats, 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 sixnine 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, but eventually supplanted by new massed-produced destroyer escorts, optimized for anti-submarine warfare and convoy escort. Initially, the Hunter-Killer groups operated in loose company with convoys, but later operated completely independently. Taking advantage of decrypted German communications, the convoys would be routed away from U-boat concentrations (wolfpacks) while the Hunter-Killer groups would go after such concentrations, with the primary objective to destroy the "Milchkuh" ("Milk Cow") submarines; larger submarines used to refuel and re-provision other U-boats at sea, to minimize the number of times the U-boats had to run the gauntlet of Allied aircraft and ships in the Bay of Biscay to and from the U-boat bases in Germanoccupied 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, 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 (CVE-11) 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 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 TG 21.14 were BORIE (DD-215,) GOFF (DD-246,) and BARRY (DD-248,) all Clemson-class "four-piper" or "flush deck" destroyers 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 U.S. went to war in December 1941, BORIE served in the Caribbean and then 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, with an original crew complement of about 122. In November 1942, BORIE underwent a major overhaul (similar to other Clemson-class,) 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 anti-aircraft gun, but had her Browning .50 caliber machineguns 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 were almost all reservists, they had served together for three years. The ship was not considered the most "spit and polished" 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-Gibraltar-Mediterranean) 450 NM west southwest of the Azores. At 1628 3 August, a Wildcat/Avenger patrol from CARD caught U-66 on the surface returning from a 14-week 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 anti-aircraft 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, with 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 long-range 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 anti-aircraft 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 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 ENS Sprague were killed, and both U-boats escaped. LTJG Sallenger was awarded a Navy Cross for the attack on 7 August and a Silver Star for the attack on 8 August. ENS 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 shootdowns 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 ten seconds later. Then, just as the U-boat dove, the second Avenger dropped two depth bombs which blew the U-boat back to the surface. The U-boat submerged again but was forced to come back up after 15 minutes, when it 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 (Lieutenant) Adolph Graef. The rescue was cut short when another U-boat 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 depth charged 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, LTJG Hogan once again sighted a U-boat. Attacking in the face of heavy anti-aircraft fire, Hogan dropped a 500-lb bomb which near-missed 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 it, but U-508 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 LTJG 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 VC-9 (cross-decked from BOGUE (CVE-9,)) commanded by Lieutenant Commander Howard M. Avery, with the same aircraft composition as VC-1 except one more TBF-1 Avenger (for 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 above 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 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 USS SPENCER and the escort group was much the same as Convoy ON 166, minus the damaged CAMPBELL (see USS CAMPBELL vs. U-606 above.) 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 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 four-engine 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 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 anti-aircraft 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 re-attacked, 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 submerged as U-460 was sunk. Four aircraft found U-264, but anti-aircraft 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-488; either way all 50-hands were lost. U-378 was also attacked by CARD aircraft nearby, but escaped. An Avenger was damaged by anti-aircraft 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, including 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, LT Hutchins reported sinking the submarine. However, the submarine was only damaged and made it back to France.

Referred to as U-262 in most accounts, the submarine damaged by BORIE was actually U-flak 2 (formerly U-262, re-commissioned as U-flak 2 in August 1943,) one of only four U-boats converted to a "Flakboot" configuration. Flakboots were equipped with two quad 20mm Flakvierling 38 and one 37mm Flak M42 anti-

aircraft guns and additional machine guns. U-flak 2's mission had been to provide anti-aircraft protection to Milchkuh U-488, which obviously was unsuccessful. The 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 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 Siegfried wolfpack and then the smaller (six boat) Siegfried 1 wolfpack, with nothing to show for it. Using Enigma decrypts, the Allies 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 father afield to the South Atlantic and even 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 kts 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 (tighter turn radius,) which Hopman used

skillfully in an attempt to disengage. One account (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. LT 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 U-boat might actually squirm free, Hutchins gave the order to ram. Approaching from the U-boat's starboard quarter, Hutchins ordered the helm hard left, just as Hopman tried to avoid 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 ten 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 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 from Thompson sub-machine 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 ten 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-

degree water. The XO fired a tommy gun from the bridge. About 35 of U-405's 49-man crew died in this close-quarters 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-year old 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 portside below the waterline was crushed. When the U-boat 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, engineroom 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 appeared 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 but couldn't 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, re-illuminating the sub. This time

U-405 turned and tried to ram BORIE's starboard side. With some great shiphandling, Hutchins ordered the helm hard left while backing full on the port engine and starboard engine stopped, swinging the stern toward the sub, and fired the 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 (crewmember's 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 ten 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 into the water, and finally brought U-405 to a stop, hitting the starboard diesel exhaust again.

Accounts differ on what exactly happened afterwards. 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 due to 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 multi-colored flares that were answered by colored flares from a distance, clearly indicating another U-boat nearby. Other accounts suggest the Germans fired multi-color 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 as 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 the 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 ten 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 NM 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, some men jumped from the rafts into the 44-degree water and tried to swim for the rescue ships; none of those who did made it. Others were simply too exhausted to make the climb from 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 7 officers and 120 men. (One account says 4 officers and 125 men were rescued. Another account says 8 officers and 121 men were rescued.) 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 CAPT Isbell's endorsement to BORIE's after action report.) One of those who didn't make it was the Engineer, LT. 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 NM 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 2 November 1943.

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 USS 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 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 fatfinger 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 line with 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 in 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 neck deep in water at the throttle until BORIE 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."

MM2/C 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, 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 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 the Borkum Wolfpack (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 and 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 24 December. However at 0210, U-275 had hit LEARY (which 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, detonating 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 (CVE-9) with 11 U-boats and two Japanese submarines (sunk in the Atlantic – see H-gram 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 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, Okinawa and carrier raids on Japan until 9 August when she was hit by a kamikaze, killing 48 men and wounding 66. BORIE was the last destroyer on radar picket duty to be hit by a kamikaze (See H-gram 051 "The Last Sacrifices.") BORIE was repaired, made a Korean War deployment, helped force a Soviet submarine to the surface during the Cuban Missile Crisis of October 1962, made a Vietnam War deployment and 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 BELGANO (ex-USS PHOENIX (CL-46)) when BELGRANO was torpedoed and sunk by British nuclear submarine HMS CONQEROR. BOUCHARD was damaged by either a dud British torpedo or 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 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. "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 destroyerhistory.org. "A Fight to the Death: The USS BORIE, 31 October to 2 November 1943 at usseverglades.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 Fighting Ships 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 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 ten, 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 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 damaged 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 of 200,021 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 above.) 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.

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 sub-types, 193 Type IX boats were produced (the second most numerous type during WWII) with the Type IXC/40 being the most numerous IX sub-type at 87. 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 with a range of 13,450 NM surfaced (at 10 knots) and 63 NM submerged (at 4 knots,) with a maximum surfaced speed of 18.2 knots and maximum submerged speed of 7.7 knots.

The Type IXC had four torpedo tubes in the bow and two in the stern, and carried 22 21-inch torpedoes (including five in external torpedo containers.) The Type IXC had a bigger deck gun than the more ubiquitous Type VIIC, carrying a 105mm (4.1-inch) C/32 deck gun with 180 rounds. Anti-aircraft armament varied during the war. U-66 carried one 37mm SK C/30 anti-aircraft gun and one twin 20mm FlaK 30 anti-aircraft 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 crew were lost.) On 1 March, U-66 sank the Free French cargo ship ST. LOUIS (5,202-ton) 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 the 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 bottom out in mud to elude the British. The "Milchkuh" (Milk Cow) submarine that was supposed to replenish U-66, the 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 the USS CROATAN (CVE-25) Hunter-Killer group.

On 22 April 1944, Task Group 21.11 departed Norfolk, VA en route the German mid-ocean refueling area (known to the Allies due to 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 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 to remain airborne as long as 14 hours, providing continuous coverage at night.

The screen commander of TG 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.

The USS BUCKLEY (DE-51) was the lead ship of the second class of destroyer escorts built in the U.S. 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. With 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 anti-submarine 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, the BUCKLEY was laid down on 29 June 1942 (actually before EVARTS) and commissioned 30 April 1943. BUCKLEY displaced 1,700-tons, was 306-feet long, and had a two shaft turbo-electric drive capable of 26/27 knots. With a complement of about 186, she was armed with three 3-inch/50 caliber guns, one quad 1.1-inch anti-aircraft gun (later replaced by a twin Bofors 40mm,) eight single Oerlikon 20mm anti-aircraft guns, one triple-tube 21-inch torpedo launcher, one Hedgehog ASW mortar (which could launch 24 depth bombs in a pattern ahead of the ship,) eight K-gun depth charge projectors (five charges each,) and two depth charge rails on the stern (24 charges each,) with a total capacity of 200 depth charges. BUCKLEY had a Type 128D sonar in a retractable dome and a Type FH 4 High Frequency Direction Finding (HF/DF) antenna on top of the mast, with Type SL surface search radar.

On 1 May 1944, the TENTH Fleet reported an HF/DF intercept to CAPT Hughes of a German submarine located 550 NM 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 1/2 May an aircraft from BLOCK ISLAND found U-66 by radar about 60 NM 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, CAPT 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 due to 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 3 NM 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, LCDR 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 O216 on 6 May, an Avenger Night Owl T21 flown by Lieutenant (junior grade)

Jimmie J. Sellars detected U-66 on the surface about 20 NM due north of BUCKLEY

and 66 NM 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 anti-aircraft 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 anti-aircraft 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 CAPT Hughes on BLOCK ISLAND informed. Based on Sellars' description of the U-boats' 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 less than seven miles at 0246. The submarine's irregular course and speed ruled out a torpedo attack. BUCKLEY's crew went to general quarters, 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 counter-measure 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 the 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 3-inch 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 prevented the submarine from submerging. U-66 returned fire, but most rounds were high and went overhead BUCKLEY. Sellars in the Avenger overhead 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 was passing 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 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 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 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 due to 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 over 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 on to 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 windless they shouted for surrender. Other Germans tried to board the ship, but were beaten off by fists, coffee cups, and three-inch 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 sub-machine gunfire from Chief Fire Controlman on the bridge-wing, 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 sixty-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 3-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 three-inch ammunition, 418 rounds of 40mm, 2,700 rounds of 20mm and 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 U.S. via Bermuda under her own power for repair in Boston. The Buckley-class destroyer escort ROBERT I. PAINE (DE-578) took BUCKLEY's place in TF 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, LCDR 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. LCDR Brent Abel was awarded a Navy Cross for the action on 6 May 1944 and the ship was awarded a Navy Unit Commendation.

"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, LCDR Abel immediately proceeded to the scene of contact, preparing his ship, while en route, for any form of anti-submarine 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. LCDR 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 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 (CVE-9) 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 escaped detection by a relieving Avenger. At 0255 on 29 May, overcast thwarted another attempt to sink the submarine.

On 29 May, CAPT 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, detonating 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, CAPT 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 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 R. 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; 28 lost by yet another account.) but great damage control by her crew saved the ship.

At 2040, CAPT 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. CDR 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. CAPT 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, 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 anti-submarine 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 U-boats, 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 USS WHITEHURST (DE-634) starred as the fictitious USS 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. X, The Atlantic Battle Won" by Rear Admiral Samuel Eliot Morison: Little, Brown and Cp., Boston, 1957. NHHC Dictionary of American Fighting Ships 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.