

H064.1 Close Quarters Anti-Submarine Warfare (Part 1)

Sam Cox, Director of Naval History, 25 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, 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 (he would finish with 15 ships in seven war patrols.) Ites was the second commanding officer of U-94, assuming command on 29 August 1941. He had 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. The Type VIIC was the most widely produced U-boat by far, with 568 built during the war. The 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; endurance was 8,500 NM on the surface at 10 knots and 80 NM 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.

Approaching the Windward Passage on 27 August was Convoy TAW-15 bound from Trinidad and Aruba to Key West. (TAW stood for Trinidad, Aruba, Key West.) Under the command of Commander J. F. Walsh, USN, embarked on destroyer USS LEA (DD-118,) TAW-15 included 15 ships (mostly tankers) in seven columns. Besides the LEA (an elderly Wickes-class destroyer, commissioned in October 1918,) the convoy's escorts included the Netherlands armed minelayer JAN VAN BRAKEL, three Canadian corvettes (HMCS OAKVILLE (K178,) HALIFAX (K237,) and SNOWBERRY (K166),) along with 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; these were 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, prompt reaction by U.S. Navy PBY Catalina flying boats from Guantanamo Bay 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 gun, two .50cal machineguns, 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. LCDR King had earned a Distinguished Service Cross in World War I for sinking a German U-boat while in command of a British Q-ship and being give credit for two more "probables;" he had come 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 and 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 and relayed to CDR 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 "destroyer" per survivor debrief,) 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 50-feet, which straddled the U-boat and detonated when the submarine was about 30-60 feet below the surface, which 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 flare and the PBY's signal lamp flashing "S." OAKVILLE was the first escort to commence an attack.

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 and about 30 seconds later a lookout sighted the bow of a submarine only 100 yards distant. Too close for gunfire, OAKVILLE changed course to ram.

In the first ram attempt, the U-boat passed under OAKVILLE's bow and scraped along OAKVILLE'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 crewmen 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 abaft 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 ordered abandon ship, but 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, LCDR 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 the 4-inch 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 eight-ten feet below.

By this point, OAKVILLE had lost power as a result of damage to bottom plates from the ramming, which flooded the aft boiler room and Asdic compartment. OAKVILLE 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 also gone to battle stations while in his skivvies and the landing on the sub snapped the band and he lost them, leaving him naked except for a pistol,

two hand-grenades, gas mask, and 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 gun.)

As the two Canadians rushed for the conning tower, which had been riddled by shellfire. 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 encountered 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 which 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, cutting his elbow on a broken Coke bottle, in an attempt to reach 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. However by the time LEA's team reached the U-boat only the conning tower was still above the surface, and so there was no attempt to board. The boat also 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 crewmen, but 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 crewmen 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 XO 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 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 1970's when awards for valor were made independent of rank.) Powell was awarded a Distinguished Service Medal. CDR 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, 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. CDR 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) and in 1960-62 commanded the destroyer ZERSTORER 2 (D171, former USS RINGGOLD (DD-500,)) and achieved the rank of Kontreadmiral (two star) in 1975. Otto Ites' 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, serving in the Imperial Japanese Navy as RO-500 until surrendered in August 1945 and scuttled in May 1946 (see H-gram 033 "Yanagi Missions.")

(Sources include: "History of U.S. Naval Operations in World War II, Vol I, The Battle of the Atlantic : September 1939 – May 1943" by RADM Samuel Eliot Morison: Little, Brown and Co., Boston, 1959. "Over-the-Side: The Courageous Boarding of U-94" by Marc Milner, Legion (Canada's Military History Magazine,) 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 militaryhistorynow.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 NHHHC Dictionary of American Fighting Ships (DANFS) for information on U.S. ships.)

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 (at that time of the war 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 code-breakers 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 U-boats 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% of Allied convoy coordination radio traffic, the Germans could only decrypt about 10% fast enough to make tactical use of it. Like the Germans, the British were slow to believe their encryption systems could be compromised. (The U.S. refused to share the ECM Mark 1 encryption devices even with the British for fear of compromise.)

In addition to the deadly U-boat threat, 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 crewmen who ended up immersed in the frigid water was 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 wolfpack 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 which U-606 sank the abandoned U.S. cargo ship GURNEY E. NEWLIN (8,225 GRT) already damaged the previous day by U-436 with the loss of three of her 59 crewmen. The same day, U-606 damaged the Norwegian factory ship KOSMOS II (16,966 GRT,) which was subsequently sunk by U-624 the next day with the loss of 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, who 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 North America ("ON" stood for "outbound to North America,") with 63 freighters, mostly in ballast. The next day ON-166 was met by Ocean Escort Unit A-3, commanded by Captain Paul R. Heineman, USN, 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, ROSTHERN,

TRILLIUM and DAUPHIN. Before entering the air coverage gap, the Polish destroyer ORP BURZA was ordered forward from trailing convoy ONS-167 (“S” stood for “slow”) in order to bolster the defense of ON-166 as 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 wolfpack (“Wolfpack Ritter”) was formed. Based on Ultra Intelligence from decrypted German Enigma traffic, the convoy was re-routed further south to avoid the wolfpack. The Germans detected the re-route and formed another four-boat wolfpack (“Wolfpack Kappen”) to intercept. An additional five U-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; conditions that lasted for eight days, resulting in scattering and straggling amongst ships of the convoy (and resulting in differing numbers in different accounts for how many ships were in ON-166 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 number of ships and tonnage sunk, not cargo. (And like my cat as a

kid 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 crewmen 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 Royal Air Force B-24 Liberator of 120 Squadron with the loss of all 46 hands.

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 escort corvette HMS DIANTHUS actually sank U-225 on 22 February with the loss of all 46 hands. Determining which U-boats were sunk by which ships has been subject to so much revision over the years that it is very difficult to keep straight, but uboat.net has done a pretty good job of sorting them out.

USS CAMPBELL (WPG-32) 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 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 K-gun side-throwing depth charge projectors and two depth charge racks on the stern. She was also fitted with a Hedgehog anti-submarine mortar sometime in 1943, but does not appear to have had it yet for ON-166.

Along with SPENCER (WPG-36,) CAMPBELL was the first U.S. Navy ship to be equipped with a High Frequency Direction Finding (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 (British designation was FH3 and U.S. designation DAR.) Captain Heineman, who commanded the escort group for multiple convoys, alternating between embarking on SPENCER and CAMPBELL, had long been an early vocal advocate of HF/DF in the U.S. Navy. (In July 1943, by then known as "The U-boat Killer," Captain Heineman became Commander of the Atlantic Fleet ASW training unit, significantly responsible for U.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 1920's in the Coast Guard Destroyer Force out of New London, CT (these were WWI-vintage U.S. Navy destroyers seconded to the Coast Guard principally for "Rum Patrol" duties during prohibition (1920-1933.)) He also served on board cutters and as an instructor at the Academy, where during summer class breaks he earned a law degree from George Washington University and was

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 to 1948. 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 for the German Navy, the Poles executed a pre-planned response (the “Peking Plan”) for BURZA and two slightly newer destroyers to 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. However, at 2032 on the night of 21-22 February, U-92 torpedoed and damaged the 9,965 GRT 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 crewmen.

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 10 large and 11 small depth charges on a contact at 1331 with no visible result. She dropped nine more large and nine small depth charges on another contact in the evening at 1917, again with no visible result.

At 0153 22 February, U-92 hit 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, CDR 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 U-boat, 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'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 NM ahead. (N.T. NIELSEN ALONSO would ultimately be 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 CDR Hirschfield to note in his action report that the convoy was in for “a big party.”

At 1220 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 trail (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 crewmen rescued) and the U.S. cargo ship CHATTANOOGA CITY (5,700 tons; all 58 crewmen 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 ten 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) and ordered all of the Germans topside into the frigid water. None of those who went in the water survived.

During the firing, CDR 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, CDR Hirschfield quickly realized 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 crewmen 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 (in 1952!) 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 Pfeiffer, 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 sub 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. CDR 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 U.S. The Germans were treated humanely and provided extensive valuable Intelligence during interrogation.

While CAMPBELL was drifting, 23 February 1943 would be the worst day for ON-166, with seven vessels sunk. The last ship sunk was British-flag MANCHESTER MERCHANT on 25 February by U-628. The final loss tally for Convoy ON- 166 was 14 ships sunk (total 87,994 GRT) of 63 in the convoy; 263 allied crewmen or

passengers were killed or drowned. The cost to the Germans was three submarines sunk, 128 crewmen lost and 12 captured.

On 23 February, U-604 (which had escaped from CAMPBELL on 21 February) torpedoed and sank the British-flag 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 (the 413 was a record for any convoy rescue ship.) STOCKPORT had rescued the crew of EMPIRE TRADER and transferred the 106 survivors to HMCS DAUPHIN. She was attempting to catch up with convoy ON-166 when U-604 caught her alone, firing a spread of four torpedoes, hitting with two and sinking the ship in under three minutes with the loss of all 64 crewmen aboard. (An account by the Royal Fleet Auxiliary Society states 164 were lost, which would indicate other rescued crewmen went down with the ship, and another account says 91 rescued sailors were lost with the ship, but all other accounts I can find only list her own 64 crewmen.)

In illustrator for Life magazine, Anton Otto Fischer, serving as a lieutenant commander aboard CAMPBELL depicted the battle in a series of oil paintings that appeared in the 5 July 1943 edition of Life.

For his actions in command of CAMPBELL against U-606, CDR Hirshfield became one of six Coast Guard personnel during World War 2 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 and 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, but 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 participating 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 anti-ship missile northwest of Hawaii on 29 November 1984.

Of note, there is a statue of K9C Sinbad aboard the current 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 motto of WMEC-909 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 RADM 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 coastguardblog.com.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. U-boat.net for information on German submarines and NHC Dictionary of American Fighting Ships (DANFS) for information on U.S. ships.)