The Battle for Convoy UC-1, 23-27 February 1943

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The increasing tempo of Allied military operations in northwestern Europe and the western Mediterranean at the end of 1942 required so much petroleum that Britain's stocks were almost depleted. To rectify this situation, on 12 December Winston Churchill proposed to Franklin D. Roosevelt a new series of tanker convoys to sail every twenty days directly between Curacao and Aruba in the Dutch West Indies and Great Britain, hoping by these means to increase the amount of oil entering the UK by 100,000 tons per month. The result was the institution of a new group of tanker convoys, known as CU and UC, between Great Britain and the Dutch West Indies.¹

The proposal to operate tanker convoys directly between the UK and the oil ports in the Dutch West Indies was daring strategically but potentially risky, for they would have to make a 4000-mile voyage, most of it outside the operating range of Allied shore-based anti-submarine aircraft, which could provide support for only about 600 miles from their bases in Britain, Gibraltar, and the West Indies. Moreover, some in the Admiralty thought "that without the assistance of air cover, surface escorts are physically incapable of warding off a concerted attack by a pack of U-boats, whose members exceed a ratio of 2 to 1 of their own numbers." This was underscored in January 1943 by the inability of the Allies to protect a tanker convoy between Trinidad and the Mediterranean. TM-1, consisting of nine tankers escorted by one destroyer and three corvettes, was attacked in mid-ocean, out of range of Allied shore-based anti-submarine aircraft, by six U-boats that sank seven of the tankers. As a result, TM-1 was the only attempt by the Allies to operate a tanker convoy directly between the West Indies and the Mediterranean.²

Nevertheless, British authorities began to plan the CU-UC convoys in the same month. On 16 January the Admiralty proposed that the convoys sail in twenty-day cycles protected by four sloops, four frigates and an escort carrier. After considering the "vital importance" of CU-UC convoys and intelligence estimates, Western Approaches Command concluded that the escort should instead comprise a carrier, a division of destroyers, and seven sloops. The intelligence estimates that led to this re-evaluation showed that the Germans could attack with "up to 20 or 25" U-boats. On 7 February, despite the fate of TM-1, the Admiralty decided that the escort for UC-1 should comprise four destroyers and "5 or 6 sloops." The carrier was omitted because UC-1 was to be a

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"fast convoy" capable of steaming at nine or ten knots and making it "improbable that U-Boats could develop pack tactics." As well, the Admiralty concluded "that escort carriers could be more usefully employed elsewhere."

The thirty-two ships of convoy UC-1 sailed from the UK at 1000 on 16 February. The commander of the escort in FTMS Weston was Commander L.F. Durnford-Slater, R.N., who would prove both skilful and resourceful. UC-1 was escorted by four US Navy Benson-class destroyers of the 14th Destroyer Division and six warships of the British 42nd Escort Group. Because the escorts had never worked together and came from different navies, steps were taken before departure to ensure coordination. In addition to the usual pre-sailing conference, a meeting of all escort commanders was held to discuss tactics. A second conclave worked out communications and radio procedures. In addition, a British yeoman of signals and a leading telegraphist were assigned to USS Madison, the ship of the senior officer of the 14th Destroyer Division, to assist with communications between the Americans and the British.

UC-1 proceeded west-southwest, steaming at between nine and ten knots, from the southern end of St. Georges Channel. This was unusual, since most convoys at the time sailed north around Ireland. Upon reaching 50°01'N 14°55'W the convoy turned onto a southerly course to 37°N 18°W, from where it steered southwesterly for the West Indies. For the first few days, UC-1 was escorted by shore-based aircraft. On 21 February it approached "the probable danger area South of the Azores. Arrangements were made to oil all the escorts before reaching the area." The ten escorts were refuelled from tankers in the convoy.

At 0425 on 22 February the Admiralty informed the escort that an Italian U-boat had been located sending a radio transmission near the convoy. At 1435, the escort was told that there was a German U-boat sixty miles to the south. After the event Durnford-Slater thought it was this U-boat that made initial contact. The Germans, however, had no knowledge of UC-1 until it was intercepted inadvertently. There were two groups of U-boats near the Azores. The Rochen group, consisting of eight subs, was south of the islands, while the Robbe group with three U-boats was to the north. Failing to intercept a North America-Mediterranean convoy, the Rochen U-boats were ordered on 21 February to refuel from U-461 some 250 miles south of Sao Miguel Island, while the Robbe group was directed to take up station off Gibraltar. Neither of these movements were carried out, for at 1309 on 22 February U-522, a former member of the Rochen group, sighted UC-1 at 34°21'N 22°31'W and began to shadow it. Upon receipt of U-522's sighting report, the Befehlshaber der U-Booten (BdU) began to form a "wolf pack" by ordering the Rochen group not to refuel and the Robbe group not to proceed to the Straits of Gibraltar; both were instead to operate against UC-1. One of the results was that throughout the operation the eight Rochen U-boats were short of fuel. U-107 of the Robbe group for unknown reasons did not receive the order until 0050 on 23 February when it was ordered to continue to Gibraltar. When at 1930 U-522 lost contact with UC-1, the U-boats were ordered to search for the convoy on the assumption that it was steering between 220 and 280 degrees."
As the Germans searched for UC-1, high frequency direction finders (HF/DF) on the escorts intercepted a number of radio transmissions from U-boats in the vicinity. At 0645 on 23 February, U-522 torpedoed the tanker Athel Princess which, due to a broken compressor, was straggling about eight miles astern of the convoy. The escorts saw a sheet of flame followed by two rockets from Athel Princess. The ships began firing snowflakes (bright white flares); Durnford-Slater quickly concluded that they were illuminating the convoy "to no purpose" and ordered the firing to stop. USS Hilary P. Jones and USS Lonsdale were ordered in vain to search for the sub. Hilary P. Jones picked up fifty crew from Athel Princess, leaving the tanker in a sinking condition."

Throughout the daylight hours of 23 February, HF/DF intercepts indicated several U-boats ahead of UC-1. At 1345, the Admiralty informed the escorts that there "probably" were two U-boats in contact with the convoy. A little over an hour later this estimate was increased to three. At 1200, U-522 and U-87 were in contact with UC-1 and shortly thereafter U-202, U-504, and U-558 also made contact. At 1436, U-522 radioed the BdU that it was attacking the convoy."

At 1418, the masthead lookout on HMS Weston sighted a U-boat ahead and USS Charles F. Hughes was sent to hunt for it, but without success. Shortly thereafter HMS Totland, off the starboard beam of UC-1, obtained a sonar contact at a range of 2000 yards and attacked with depth charges. After the attack "a distinct bubbling and foaming disturbance was seen within the pattern area slightly left of the centre. Between the centre and the last charge a large area of oil appeared on the surface in the vicinity of the attack but there was no evidence of wreckage." This was the end of U-522."

At 1900 Durnford-Slater later thought there was a U-boat off the starboard quarter and one or two more astern of UC-1. He also received a new estimate from the Admiralty that six other U-boats were closing from the northwest. In an effort to throw them off, Durnford-Slater intended to alter course fifty degrees to port while having Charles F. Hughes and Hilary P. Jones conduct sweeps along the flanks and astern and ahead. At 2040, just as UC-1 began to alter course, Charles F. Hughes obtained a radar contact at a range of 8000 yards and steamed to attack. As UC-1 was changing direction, HMS Ness radioed at 2058 that it was attacking a U-boat that it believed had passed through the main body of the convoy. HMS Totland also obtained a radar contact with a U-boat, which was attacked at 2117. Several minutes later, there was an explosion as U-382 torpedoed the tanker Murena, which, however, was able to continue. A second torpedo exploded without hitting anything. Several minutes later, U-202 fired four torpedoes. The tanker Empire Norseman was hit by two of these weapons, while a third struck the tanker British Fortitude which, though damaged, was able to continue. The fourth torpedo, fired from the stern tube, hit the tanker Esso Baton Rouge. After the event Durnford-Slater thought that the attack had been carried out by "at least" four U-boats. Two of them were thought to have been driven off by the escorts while the third penetrated UC-1's screen and torpedoed the ships just as the convoy was completing its course alteration. The fourth U-boat was thought to have later finished off Empire Norseman."
HMS Totland closed with the wreck of Esso Baton Rouge and picked up the survivors. As the British warship approached Empire Norseman, a torpedo from U-558 hit the tanker. Totland began hunting the U-boat and, obtaining a radar contact at a range of 3800 yards, fired ten rounds of star shells, forcing the U-boat to dive. A sonar contact was led to a hedgehog attack, which failed when the weapon malfunctioned. Totland, while preparing for a second attack, obtained but later lost a second radar contact just as Charles F. Hughes appeared and began to hunt for the U-boat. Totland then resumed rescuing the crew of Empire Norseman. At 2200, Empire Norseman sank and Totland left the sinking Esso Baton Rouge with "only 30 feet of her bow above the water."

There were no further attacks on UC-1 during the night, but the next morning the U-boats still had contact and continued to shadow the convoy. At 1345, the Admiralty estimated that UC-1 was being shadowed "by up to 8 U/Bs." At 1330, the USS Madison obtained a contact off the starboard bow and attacked without effect. The hunt for the U-boat was continued by the destroyer while UC-1 executed an emergency turn to port. Thirty minutes later the convoy returned to its base course. During the afternoon the escorts obtained several HF/DF bearings which were run down without result. The BdU ordered the U-boats "in the twilight [to] search energetically for contact. A11 boats must get in on it again. The convoy must be smashed up." At dusk UC-1 altered course forty-five degrees to port in an attempt to throw off the U-boats shadowing it.

Due to the large number of U-boat radio transmissions in the vicinity, Durnford-Slater thought it a good possibility that the convoy would be attacked during the night of 24 February. At the suggestion of the commander of USS Madison, who believed the previous night's attack had come from a U-boat passing through the convoy from the front, the escort screen was altered. One destroyer now was to be stationed 10,000 yards ahead while the others protecting the van would be stationed 7500 rather than 5000 yards in front of the main body of merchantmen. This deployment was designed to maximize the effectiveness of the ships' radar sweeping for U-boats in front of the convoy.

The first contact on the night of 24 February occurred when Hilary P. Jones obtained a radar fix seven and one-half miles astern. The U-boat was attacked with depth charges after it submerged. Returning to station, Hilary P. Jones sighted, chased, forced to dive, and attacked two more U-boats. Next Charles F. Hughes was sent to search off the port beam where HF/DF indicated a U-boat. At 2309, Totland obtained a radar contact and a few minutes later sighted a periscope, but was unable to attack due to a sonar failure. Shortly thereafter Weston obtained a sonar contact and attacked four times with depth charges before the echo faded. At 2336, Totland made another radar contact, forced the vessel to dive, and attacked twice with depth charges. The last incident of the night occurred at 0113 when Weston heard on sonar three torpedoes, probably from U-202. While searching for the U-boat the sloop obtained a radar contact 5600 yards away and the USS Lonsdale was sent to search the area without result. Durnford-Slater reckoned that at least six U-boats had been driven away without the loss of any ships.

After reviewing the radio messages from its U-boats, the BdU concluded that U-382, U-218, U-43 and U-558 had been "detected by destroyers and attacked with depth.
charges," while a number of other subs had been "driven off" by escorts. Further, U-382 had been heavily damaged and was forced to withdraw and U-87 had to cease operations because of a shortage of lubricating oil. The BdU decided that "conditions for detection by destroyers were apparently particularly favourable."

Throughout the daylight hours of 25 February the U-boats maintained distant contact with UC-1. In a radio message at 1656 the BdU urged them to renew the attack. While there were no contacts during the day, the escorts intercepted forty-six radio transmissions from U-boats in the vicinity. At 2235, the Admiralty informed them that it believed there were "at least 8 U-boats in your immediate vicinity."

Just before dusk on 25 February the USS Madison conducted a sweep ahead of UC-1. At 2035, an underwater explosion was heard by Weston, which five minutes later gained "a doubtful" sonar contact that disappeared after being attacked. Lonsdale, to the starboard, obtained a radar contact at 2130 at a range of 4000 yards. As it closed, the U-boat dived and was attacked with depth charges. Several minutes later a second radar contact, probably with U-202 at a range of three and one-half miles, was attacked with gunfire. When sonar contact was also made, the warship dropped depth charges before returning to its station. This marked the last contact that evening.

Damage and fuel shortages forced U-43, U-202, U-521 and U-558 to break off operations. Nevertheless, during the day of 26 February, three U-boats — U-66, U-504, and U-382 — continued to stalk UC-1. At 0910, the Admiralty radioed that "continued heavy W/T traffic indicates U/Boats still in contact." But there were no contacts that day. The next contact occurred at 1944 on 27 February when an HF/DF bearing was obtained on a radio transmission. Lonsdale sighted a U-boat on the surface recharging its batteries and Madison sent to assist without success. After this there were no further contacts. At 1540 on 1 March American shore-based aircraft from the West Indies began to escort UC-1. Although the BdU decided to end operations on 26 February because of "poor prospects of success," the order was withheld until 2324 on 27 February.

The battle for UC-1 was one of the few successful defences of a convoy attacked by a group of U-boats in the Atlantic during February and March 1943, standing in marked contrast to other convoy battles of the period, such as those for TM-1, ON-166 and ONS-154 in which the Allies suffered heavy losses and appeared almost incapable of beating off an attack by a wolfpack. In the battle for UC-1 the Allies lost three ships and had two damaged, while the Germans lost U-522. These losses were acceptable to the Allies, whose objective was the safe and timely passage of shipping. The CU-UC convoys were not cancelled, as were the TM convoys after the disaster of TM-1.

The UC-1 incident was in some respects unique. The U-boats intercepted the convoy inadvertently — communications intelligence played no role — and were poorly positioned to attack. The problem was exacerbated by the fact that UC-1 was a fast convoy. Moreover, for the U-boats the battle was hampered by fuel shortages. At the time the Germans thought that the operation was a success, estimating that they had sunk one destroyer and eight merchantmen despite "unfavourable" conditions and a "strong efficient
remote escort” equipped with radar. To the BdU the battle “proved that the U-boats can win against all odds when commanded by efficient officers and a good crew.”

On the Allied side, the escorts were able for the most part to repel the attacks without air support. There were several reasons for this. First, the escort was extremely strong: ten ships including four modern destroyers. Second, it only had to contend with a pack of twelve U-boats. Finally, communications were good and the escorts, even though they had not worked together before and were drawn from different navies, acted in concert with simple but effective tactics. When radar, F/D/F, or visual contact was made, an escort was dispatched to drive the enemy U-boat away or make it dive.

These were some of the tactics which would later be used successfully in the North Atlantic to defeat U-boats in battles such as the ones for ONS-5 and SC-130. These "aggressive" manoeuvres, while not destroying many U-boats, effectively warded off most attacks. The strategy in the battle for UC-1 was heavily dependent on radar and HF/DF, which gave the Allies technological superiority. Indeed, Durnford-Slater thought that the radar on the US destroyers was particularly effective. The Germans had no means of countering it and were indeed unaware of the existence of HF/DF. As a result, Allied escorts were able to thwart most attacks by forcing the U-boats to lose contact. The battle for UC-1 proved that it was possible in early 1943 for a strong, coordinated, well-trained escort group equipped with radar and HF/DF to beat off attacks by U-boats.

NOTES


3. PRO, ADM 199/2108, ff. 835-836.

4. UC-1 comprised: tankers Mobilgas, Tidewater, Esso Baton Rouge, Gulfpoint, Saintonge, British Fortitude, Eclipse, Empire Marvell, Cymbula, Empire Norseman, San Adolfo, Athel Regent, Athel Princess, Murena, Vinga, and Kaia Knudsen; and freighters Empire Castle, Delius, Martand, City of Durban, Cronish City, Malakad, Custodian, Clan Murdoch, Cape Hawke, Kaimatea, Clan Macneil, Bardistan, Maasterk, Blommersdijk, and Tijuca.

5. The destroyers were the USS Madison, Lonsdale, Hilary P. Jones, and Charles F. Hughes. The RN vessels were the frigates HMS Ness and Exe; the sloops HMS Weston and Folkstone; and the ex-US Coast Guard Cutters HMS Gorleston and Totland. NHC, CONVOY UC-1.


7. Ibid.; NHC, UC-1 "Track Chart."
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8. PRO, ADM 199/1705, Admiralty to Escort of UC 1, 22 February 1943; "Report of Proceedings Convoy UC 1."


12. PRO, ADM 199/1705, Admiralty to Escorts of UC 1, 23 February 1943; V.A. Gibraltar to Escorts of UC 1, 23 February 1943; PRO, ADM 223/116, f. 50.

13. "Report of Proceedings Convoy UC 1." At the time it was thought that HMS Totland had "probably sunk" a U-boat. A postwar reassessment based on German and Allied records showed that Totland had in fact sunk U-522. Naval Historical Branch, Ministry of Defence, "Precis of Attack by Totland," 23 February 1943; R.M. Coppock to author, 22 May 1990. I wish to thank Mr. Coppock of the Ministry of Defence for his assistance.


15. PRO, DEFE 3/711, intercepted 1030/24/2/43 decoded 1535/24/2/43; PRO, ADM 199/1035, Commanding Officer, HMS Totland to Senior Officer, 42nd Escort Group, 1 March 1943; Report of an Interview with Captain W.S. Smith, SS Empire Norseman.

16. PRO, ADM 223/16, f. 51; ADM 199/1705, Admiralty to Cominch, 24 February 1943; DEFE 3/711, intercepted 1840/24/2/43 decoded 1708/25/2/43; "Report of Proceedings Convoy UC 1."


20. PRO, ADM 223/16, ff. 51-52; ADM 199/1705, Admiralty to Escorts of UC 1, 25 February 1943; DEFE 3/711, intercepted 1656/25/2/43 decoded 0114/26/2/43; "Report of Proceedings Convoy UC 1."


22. PRO, ADM 223/16, ff. 52-53; ADM 199/1705, Admiralty to Escorts UC 1, 26 February 1943; DEFE 3/711, intercepted 2324/27/2/43 decoded 0129/1/3/43; "Report of Proceedings Convoy UC 1;" "BdU War Diary," 26 February 1943.

23. U-Boat War in the Atlantic, II, 75-81,91-97; Admiralty Historical Section, The Defeat of the Enemy Attack on Shipping, 1939-1945 (London, 1957); PRO, ADM 199/2108, ff. 836-838. The three vessels sunk were Athel Princess, Empire Norseman and Esso Baton Rouge; those damaged were Murena and British Fortitude.

24. PRO, ADM 223/16,48; "BdU War Diary," 26 February 1943.