

The Surrender, Capture and Recovery of U-570

by

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“Captured Nazi U-Boat Brought To Port by Canadian Corvette”

So read a headline in the Montreal Gazette on 19 December 1941. The report which followed, dated 18 December 1941, informed readers that in an address to members of the Commercial Club in Halifax, Nova Scotia, Commander J P Connolly, RCNVR, the Naval Provost Marshal, had told his audience that a Canadian Navy corvette had brought a Nazi submarine into port with its captain and crew. (1)

Whilst Commander Connolly gave no details, he said that the corvette had towed the submarine into an Allied port in the Atlantic after it had been captured by a British aircraft. However, neither the corvette nor the U-Boat was identified, nor were the circumstances and location of the capture revealed.

In fact, the Commander’s security-related caution was unnecessary, especially as an article in the London Times under the headline “*A Captured U-Boat*” had already given the world its first indication of the incident, reporting on 9 September 1941 that:

Many enemy submarines have been destroyed since September 1939, but the capture, almost intact, of a U-Boat operating against shipping in the Atlantic, announced yesterday, is the first either in this war or the last.

In the case now reported the capture was made on the high seas, the enemy surrendering as the alternative to the destruction which her company could not avert.

The episode was a striking example of the interdependence of air and sea forces. It was craft belonging to the RAF which made contact with the enemy ship, made the attack which crippled her, and kept surveillance over her while she lay disabled. But air forces are not capable of boarding even disabled ships, and it was not until the arrival of men-of-war that the capture could be completed, possession could be taken of the prize, and she could be brought into harbour. (2)

Additionally, the London Times of 4 October had carried a report written by ‘*Our Special Correspondent*’ in Barrow-in-Furness in the north-west of England on 3 October under the headline ‘*Captured U-Boat in Port: British Crew Bring Home Aircraft’s Prize*’, saying:

To see a German U-Boat flying the White Ensign and being brought into harbour under her own power is an uncommon and a satisfying sight. That is what we saw here this morning.

The submarine is the U-Boat, which about a month ago made history by surrendering in the Atlantic to a Lockheed Hudson aircraft of the RAF Coastal Command. The RAF’s picturesque conquest was handed over several hours later to the Navy. A few days afterwards she was taken over by the prize crew of 20 who have now brought her to Britain.

When she had tied up at the jetty we were allowed to go on board, though not below.

The U-Boat bore no outward distinguishing marks when captured, but it is known that she was submarine U-570. (3)

This article is therefore an attempt to set the record straight concerning the surrender, capture and recovery of U-570 from sea to the south of Iceland in August, September and October 1941, and to highlight the part played in the operation by the Royal Canadian Navy destroyer HMCS *Niagara*.

Capture

On 24 August 1941 the Type VIIC ocean-going U-Boat, U-570, left the German U-Boat base in Lofjord ten miles to the north of Trondheim in Norway on its first patrol, which was to be in the North Atlantic in the area to the south of Iceland. Three days later on the early morning of 27 August U-570 was spotted on the surface by a Hudson of RAF Coastal Command's No. 269 Squadron operating out of the Kaldadarnes air base in Iceland, but the aircraft's attack was unsuccessful when its depth charges failed to release. However, another Hudson was called to the scene in the hope of being able to locate the U-Boat for a second time.

In the meantime, U-570 remained submerged about 80 miles off the south coast of Iceland, not only to avoid other patrolling aircraft but also to give the crew some respite after their very rough surface passage from Norway, the appalling weather conditions, and the very high seas. The U-Boat re-surfaced at 1050, but before doing so the CO, Kapitanleutnant (Lt Cdr) Hans-Joachim Rahmlow, failed to check whether or not there were any aircraft in the vicinity. As a result, U-570 found itself on the surface almost immediately below a second Hudson of No. 269 Squadron piloted by Squadron Leader James Thompson. The U-Boat's CO ordered a crash-dive, but it was too late. This time the Hudson's four depth charges were released successfully, straddling U-570 and causing it to re-surface minutes later. Believing that their U-Boat was filling with chlorine gas as a result of sea water entering the batteries, the crew began preparing to abandon ship, and the Hudson continued the attack by firing its machine guns, thus causing the crew to wave a white surrender flag.

The latter action was perceived to be necessary in order to prevent death or injuries to the crew who, despite their life-jackets, were loath to jump into the icy water and high seas without any floats, life-boats or other vessels in the vicinity. Thus at 1200 on 27 August Sqn Ldr Thompson sent an 'immediate' message from his aircraft:

Send destroyer to pick up crew of stationary U-Boat damaged on surface showing white flag. Position JZHX 1525. (4)

As a result, and whilst the U-Boat's crew remained on the conning tower awaiting rescue, the Royal Naval authorities in Iceland, Liverpool and London began to take the actions needed to ensure that the surrender turned into a capture. For the next 12 hours, the only Allied forces in the vicinity of U-570 were aircraft, first the No. 269 Squadron Hudson, and then a Catalina of No. 209 Squadron from Reykjavik, also in Iceland. Indeed, for their essential part in the action, Squadron Leader Thompson and his navigator/bomb-aimer, Flying Officer John Coleman, as well as the pilot of the No. 209 Squadron Catalina, Flying Officer Edward Jewiss, were all awarded the Distinguished Flying Cross.

Amongst the Royal Navy responses to Sqn Ldr Thompson's report were two messages sent in mid-afternoon by the Commander-in-Chief (C-in-C) Western Approaches in Liverpool, Admiral Sir Percy Noble, to the destroyer HMS *Broadwater* and to the armed trawlers HMT *Windermere* and HMT *Wastwater*, ordering them to proceed immediately to the scene. However, at that stage the Admiral Commanding Iceland (ACIC), Rear Admiral R J R Scott, took command of the local situation, substituting the destroyers HMS *Burwell* and the Royal Canadian Navy's HMCS *Niagara* for HMS *Broadwater*, as well as ordering two additional armed trawlers, HMT *Northern Chief* and HMT *Kingston Agate*, to sail towards U-570's last reported position. Admiral Scott also sent a message to all concerned, saying:

As it appears that U-Boat flying white flag in position 62.15N, 18.35W may not be reached by surface vessels before dark, aircraft over are being instructed to order crew to expose light and remain on deck until surface vessels arrive under penalty of being destroyed by aircraft. (4)

In the meantime, the unexpected surrender of U-570 was attracting a great deal of interest in the Admiralty in London, with the First Sea Lord, the First Lord of the Admiralty and even the Prime Minister, Winston Churchill, all being personally involved from the very earliest stage.

Of the two destroyers which were ordered to make haste from Iceland to the surrender scene on the afternoon of 27 August, one was HMCS *Niagara* which was the ex-USS *Thatcher* which had been built in 1918, and was one of the 50 old US Navy destroyers transferred to the Royal Navy under the US/UK Lend-Lease arrangements in September 1940. She was commissioned into the Royal Canadian Navy at Halifax on 24 September 1940 and, after carrying out local convoy escort duties and undergoing a short refit at Plymouth in the UK, served in the 4th Escort Group in Western Approaches Command. In May 1941 she was transferred back to Canada, where she joined the Newfoundland Escort Force based at St John's, and was then employed on North Atlantic convoy escort duties.

She was moored at the naval base at Hvalfjord just to the north of Reykjavik when her CO, Lt Thomas P ("Two-Gun") Ryan, OBE, RCN, received the order to leave at the earliest possible moment, and such was the urgency that she sailed without four of her officers and 17 ratings who were all ashore when the order was received. Lt Ryan was a colourful character who apparently always wore a holster whilst on board and who in a previous career, after service in the Royal Navy, had been a District Inspector of Police in Cork, Ireland, where he had worked with the local CID in the supervision of Irish Nationalists.

The net result of the actions on the afternoon of 27 August was that six surface vessels had been ordered to the scene, comprising the two destroyers from Iceland, HMS *Burwell* and HMCS *Niagara*, as well as the four armed trawlers, HMTs *Northern Chief*, *Kingston Agate*, *Wastwater* and *Windermere*. The first to reach the scene was HMT *Northern Chief* which even at that early stage had received a message saying that she was to prevent the U-Boat from scuttling by any means. She had originally been at sea some 60 miles to the south-east of U-570 and the transit therefore took more than six hours before her arrival at 2145, and she then reported:

Arrived in position 62,15N, 18.35 W. No sign of aircraft or U-Boat. Searching to southwestward. Visibility 3 miles. (4)

This situation was resolved an hour later when HMT *Northern Chief* reported at 2250 that U-570 and the accompanying aircraft were in sight. However it was dark, raining and the visibility was poor, and during the night the weather worsened. It was impossible for HMT *Northern Chief* either to board or to take the U-Boat in tow, and so her Captain, Lt N L Knight, sent a message of somewhat dubious legality to U-570 saying:

If you make any attempt to scuttle I will not save anyone, and will fire on your rafts and floats. (5)

Nevertheless, the message worked, and the German crew then spent a thoroughly miserable and uncomfortable night on U-570's deck whilst the other five naval vessels converged on the U-Boat's position, albeit that they were all somewhat surprised that U-570's CO had made no effort either to escape or to scuttle his U-Boat.

Despite this, and whilst the crew was awaiting the arrival of the Allied surface vessels, the U-Boat's CO regained some measure of composure and sense of duty and, as a result, and whilst guarded only by the circling RAF aircraft, he took steps to ensure that most of U-570's confidential books and papers, as well as the *Enigma* cypher machine, were thrown overboard. (6)

HMT *Kingston Agate* arrived to join HMT *Northern Chief* shortly after midnight and, together with HMTs *Wastwater* and *Windermere*, HMS *Burwell* arrived at 0550 on 28 August. At that stage, the latter's Captain, Lt Cdr S R J Woods, took control of the operation, despite the fact that the Captain of HMCS *Niagara*, which did not arrive until some two hours later, had initially been ordered by the C-in-C Western Approaches to take charge on joining the group. Lt Cdr Woods' initial plan was to leave the crew on board the U-Boat and tow it to Iceland, and at 0605 he sent a message:

Am with U-Boat on the surface. Consider it would be impracticable to board and take tow as upper deck awash. Am keeping German crew in U-Boat. (4)

A very busy day followed. First, HMS *Burwell* attempted to pass a towline, but the seas were too rough, and three attempts by HMT *Windermere* also failed. During the course of these actions the whole operation almost ended in disaster when to everyone's surprise a Northrop N-3PB Nomad seaplane of No 330 (Norwegian) Squadron RAF from Reykjavik appeared overhead and dropped two bombs on U-570 before heading in an aggressive manner towards HMT *Northern Chief*. The bombs did not hit the U-Boat and no damage was done, with the incident being described by the CO of HMT *Northern Chief*, viz:

Sighted a single engine float plane approaching to dive bomb the U-Boat. Seen to drop bombs and then make for us at high speed. As he did not make reply and owing to its hostile appearance and movements, I ordered open fire. Ordered cease fire as soon as the markings were seen. (5)

Clearly at that stage very early in the attempt to capture U-570 the Norwegian crews of No 330 Squadron had not been briefed about the operation, and the attack on the U-Boat was a normal part of their routine anti-submarine duties. Fortunately the attack failed, and the rescue mission was able to continue unhindered by any further such diversions.

Later in the morning, after there was a suggestion that U-570 could be sinking and that the German crew appeared to be loath to take any action to rectify the situation, the CO of HMS *Burwell* decided that they needed to be reminded of just who was in charge. Thus, in the words of HMS *Burwell*'s Report on Operation Graph:

As S/M was slowly settling by the head and continuous signals were being received from her that she could not remain afloat much longer, she was ordered to blow more ballast and, if necessary, pump out oil. It appeared that no effort was being made by the S/M's crew so a burst was fired from the starboard 0.5 machine gun over the conning tower. Unfortunately, owing to the laboring of the two vessels some of the bullets hit the conning tower, wounding five of the crew.

This burst had the desired effect. Oil and water were blown out and for the first time the S/M appeared to be in full surface trim. (7)

Lt Cdr Woods then asked HMT *Kingston Agate* to attempt to fix a towline to the U-Boat and, with much effort, a 4-man boarding party managed to get on board U-570 at around noon. However, they too concluded that it was sinking, and took off 12 members of the crew including those who had been wounded by the machine gun fire, as well as all but one of the U-Boat's officers who were very keen to abandon-ship before the rest of their crew. HMT *Kingston Agate* then sent a message saying that it was hoped to take the U-Boat in tow by 1500 and, in the meantime, HMCS *Niagara* had come alongside U-570 and taken off the remaining 31 members of the crew.

Exact details of the part played by HMCS *Niagara* are difficult to discern as there seems to be no surviving copy of Lt Ryan's Report of Proceedings. There is however a short report written by Petty Officer Charles D Emley, the torpedo coxswain who, in the absence ashore of four of the ship's officers, was responsible for the removal of the crew from U-570 and their reception on the Canadian destroyer, viz:

1520/28. The ship was maneuvered to a position head to wind at right angles to the submarine and 20 yds astern. I ordered the line shot over at this time and we sent over our grass and communication lines, and the submarine's crew very willingly hauled the float over to them, but did not want to come over to us as they had previously been ordered to remain aboard, but the Chief Stoker Petty Officer told them in German to get into the float and they did. We hauled the first three German prisoners aboard at 1515 and sent the float back over for more prisoners. Maneuver was repeated until all prisoners were safely on board.

1545/28. When the first prisoners arrived on board I went to the receiving station and we proceeded to deal with the prisoners in the following manner:

- 1. As the prisoners arrived on board two sentries took charge of each one and brought him to me.*
- 2. We searched him and put all articles in a bucket. As we searched each man we stripped off all of his clothing and passed it out to the Engineer Officer for final search.*
- 3. He was given a hot bath and examined by the LSBA.*
- 4. He was then dressed in warm dry clothing which was donated by the ship's company.*
- 5. He was then escorted to the No. 2 Stoke Hold.*

6. *When all prisoners were on board they had a supper of pork and beans, eggs, and bread and butter, and coffee (each rating received rum and coffee after examination). (8)*

After that, HMT *Kingston Agate* at last managed to attach a towline to the by-then abandoned, and possibly sinking U-Boat, sending a message at 1650 saying:

U-Boat filling up with chlorine gas. Have taken crew on board. U-Boat's batteries expected to last 24 hours. After that it is anticipated U-Boat will sink. Have taken in tow . Am proceeding towards Reykjavik. (4)

However, in the course of the afternoon of 28 August the whole of the rescue, which had been allocated the code name '*Operation Graph*', nearly came to a most unfortunate end when the C-in-C Western Approaches, who was not yet aware that the German crew had been taken off U-570, sent a message to HMCS *Niagara* and HMS *Burwell* ordering that:

If weather has not moderated sufficiently to enable boarding to take place by 281800 you are to order crew to abandon ship and U-Boat is to be sunk. (4)

Unsurprisingly, this message was not well received when a copy arrived in London, and it prompted the personal intervention of Winston Churchill, who wrote a short note to the First Sea Lord saying:

Every effort should be made to capture this U-Boat. We cannot afford to throw away the opportunity of gaining a valuable vessel. (4)

It is obvious that the Admiralty was also having similar thoughts, and the Prime Minister's memo has a handwritten comment on the bottom of the page: '*P.M. Spoke to First Sea Lord. This need not be sent*'. Clearly the Prime Minister and the First Sea Lord were of the same mind, and the suggestion by the C-in-C Western Approaches had fallen on very stony ground.

It must therefore have been with some relief to all concerned that at 1750 the C-in-C Western Approaches was able to send a message:

In view of Kingston Agate [message of] 1400/28, it is hoped that it may now be possible to tow the U-Boat into harbour. (4)

HMTs *Wastwater* and *Windermere* were then released for other duties, and the four remaining naval vessels, with air cover from RAF Coastal Command, set off for Iceland in company with U-570 under tow stern first.

Several hours later the tow cable parted, and HMT *Northern Chief* took over the towing duties from HMT *Kingston Agate* with the latter, accompanied by HMCS *Niagara*, proceeding directly to Iceland with the 43 German POWs. Indeed, it is in respect of the POWs that the Canadian destroyer and her Captain featured prominently in the post-capture documents relating to this important incident. Whilst a message from the Admiralty at midday on 28 August had advised Admiral Scott that any interrogation of the POWs was forbidden, it seems that this message was either never passed on to the ships at sea or that it was unrealistic to expect it to be obeyed to the letter.

Instead, it is clear that Lt Ryan made full use of his police interrogation skills whilst transporting his 31 POWs back to Iceland, and when he got there it was too late for Admiral Scott to turn the clock back. Thus the Admiral's Intelligence Staff Officer, Lt E E Thomas, took advantage of all the information that Lt Ryan's informal discussions had elicited from his German charges, to such an extent that Lt Thomas advised the Admiral that:

The Commanding Officer [of HMCS Niagara] is to be commended on his skill in maneuvering information from the prisoners, [and that] Chief Stoker Williams and Petty Officer Emley are [also] to be commended on the information they succeeded in obtaining from the crew [of U-570]. (9)

Lt Thomas' report also tells that Lieutenant Christianson, who was the only German officer amongst the POWs on HMCS *Niagara*, was particularly pleased and relieved to have been taken prisoner by a Canadian warship, recording that:

Leutnant Christianson provided most information. He was at first reserved, but on learning that Niagara was a Canadian destroyer, he grew communicative. He was told by the CO that he was being taken to Canada, and offered to co-operate in towing the U-Boat thither.

The morale of the crew was stated by Niagara to be poor. The men were very relieved to be taken on board, such phrases as 'good rescue' being overheard as they came. It was later learnt that they had been informed with the British shot all prisoners without delay

[Christianson's] attitude to Canada came partly from the fact that he had many U-Boat friends in internment camps there. These wrote to him through the Red Cross praising the treatment and pay received in the camps. (9)

In the meantime, it seemed that the Prime Minister's and First Sea Lord's intentions concerning U-570's future had not been clearly transmitted to the Captain of HMS *Burwell*, who informed HMT *Northern Chief* at 2255 that:

If the tow parts during the night, sink with depth charges. (7)

Fortunately the weather cleared. There was nevertheless still a chance that U-570 might sink during the transit and so, contrary to a suggestion from the CO of HMT *Northern Chief* that they should tow the U-Boat directly to Reykjavik, the CO of HMS *Burwell* decided that the best course of action was to head for the closest harbour which was at Thorlakshafn, near the town of Eyrarbakki at the south-western end of the southern coast of Iceland. Eventually, the 60-mile tow came to a satisfactory conclusion at 2100 in the evening of 29 August when HMT *Northern Chief* released the towline and U-570 grounded gently on the beach at Thorlakshafn, turned sideways and settled on the sand.

The capture of U-570 and its crew was therefore completed, though it is clear that this event was aided and abetted by the incompetence and inexperience of the U-Boat's CO and his crew. In the words of Lt George Colvin, the Royal Naval officer who was sent to recover U-570 and sail it to the UK:

It would appear that the Germans surrendered their ship under the impression that she was more badly damaged than she in fact was. The fact that all the lights went out, the main and auxiliary motors stopped and water rushed into several compartments (from gauge glasses) may well have caused a most discreditable panic.

It is, however, very difficult to understand why (when the crew had at least four hours lying on the surface guarded by only one Hudson aircraft which was then armed only with machine guns) no attempt was made in slow time to access the actual damage, repair it, dive, and escape. (10)

A similar view was formed by the US Navy Officers who inspected U-570 in Iceland in late September, and who recorded that:

It appears that the surrender of the submarine was due entirely to the panicky and frightened condition of the personnel. This was due to their inexperience and lack of knowledge of the details of their ship - because the ship was not severely damaged and might have been able to escape during the night while guarded only by planes, if the lighting situation had been corrected as the main engines were fully and completely operative - in fact, the ship was quite capable of being operated submerged. (11)

Despite this, and in support of HMS *Burwell's* CO's earlier decision to beach U-570 at Thorlakshafn, Captain C G B Coltart, the CO of the 12,000 ton destroyer depot ship HMS *Hecla* in Hvalfjord, subsequently reported to Admiral Scott on 6 September that:

Lieutenant Colvin is strongly of the opinion that had the U-Boat been towed straight towards Reykjavik instead of being beached, she would have sunk before making harbour. It is agreed that when she was beached her reserve of buoyancy was very small, and it has since been discovered that the muffler valves in the engine room were leaking and that the drains to these valves were open. There would thus have been a slow leak into the engine room, and there were in fact 10-15 tons of water in this compartment which could not otherwise be accounted for. (12)

For their part in the capture of the U-Boat, the CO of HMT *Kingston Agate*, Lt H O L'Estrange, and six members of his crew received a formal letter of appreciation from the Admiralty. Additionally, in mid-1942 Lt L'Estrange was awarded the Distinguished Service Cross for his exceptional service throughout his time in command of HMT *Kingston Agate*.

Another interesting reflection on the capture of U-570 is contained in a report written in early October by Captain H N Lake who was on the staff of the C-in-C Western Approaches and who, after a visit to Barrow-in-Furness to inspect the U-Boat, which had by then been commissioned as HMS *Graph*, wrote that:

Graph was nearly lost on the way to Iceland, because no one knew how to shut the main ballast tank vents.

Actually, she arrived in Iceland with main ballast tanks full and vents open, but was kept afloat because the U-Boat's crew had pumped the oil fuel out of the saddle tanks. (13)

‘Lady Luck’ had undoubtedly played her full part in the capture of U-570.

Recovery

With its capture now complete, the next task was to see what could be done to temporarily restore U-570 to a seaworthy condition prior to its possible transfer to the UK where its technology could be studied and decisions taken about its future. To this end, the experienced Royal Navy submarine CO, Lt George Colvin, three non-commissioned Royal Navy engineers, and two civilian experts were dispatched to Iceland with orders to carry out an initial examination of the U-Boat and to assess whether or not it could be salvaged.

Lt Colvin and his small team arrived in Reykjavik by air on the evening of 30 August, and after a transit in one of HMS *Burwell*'s whalers through the breaking surf on Thorlakshafn beach were on board U-570 by 1300 on 31 August in order to make their initial assessment of its condition. The following day Lt Colvin returned to Reykjavik on board HMS *Burwell* where he advised Admiral Scott at the Royal Naval base at Hvalfjord just to the north of Reykjavik that:

U-570's pressure hull was watertight, her machinery apparently undamaged, and although handicapped by lack of compressed air and battery power, I was confident that she could be given sufficient buoyancy to make it safe to refloat her and tow her to Hvalfjord. I added that I considered it probable that, if the ship could be got to Hvalfjord, she could be prepared for passage to the United Kingdom under her own power. (10)

On 2 September Lt Colvin returned to the U-Boat, having been appointed temporarily in command by the ACIC, where he continued to supervise the work necessary to return it to a seaworthy condition. Whilst this was difficult and dirty work, there were no insurmountable problems. The main issue was that U-570 was lying on the beach broadside on to the breaking surf at a steep angle with poor lighting, foul air, no ventilation, and with filth and oil on its decks. Despite this, it would seem from Lt Colvin's Report of Proceedings that U-570's incompetent CO had virtually 'gifted' his U-Boat to the Royal Navy. In summary, the former's Report said:

There is nothing in the hull damage which would make it impossible, or even difficult, to dive the submarine. Similarly the cracked cells in the batteries would not at the time have prevented the submarine from diving. None of the other damage is of a nature to interfere with the diving of the submarine.

The German crew appears to have taken no steps whatever to cope with the situation caused by the depth charges. The electrical supply to the main motors could have been restored at once by re-making the battery supply switches. This was not done.

The supply to the lighting and auxiliaries could have been restored in either a few minutes, or even a few seconds. Apparently no attempt was made to do this.

No attempt had been made to put the steering or hydroplanes in hand.

The German crew reported that the after part of the submarine was full of chlorine gas. It is possible that the Germans merely invented the gas as an inducement to the British to rescue them quickly.

No scuttling charges were placed.

Considering that the crew remained on board for over 24 hours after surrendering they succeeded in doing remarkably little damage to the submarine. (10)

The recovery work was finished by 5 September when, at about 0500 in fine and calm weather, U-570 was hauled off the beach by the salvage tug HMS *Salvonia*, which had been anchored off Reykjavik on immediate notice for sea duties, and which had been ordered to Thorlakshafn in company with yet another armed trawler HMT *Whitethorn* for protection. Fortunately, once it was free of the beach, the U-Boat floated satisfactorily, but with a three degree list to starboard and with its bow low in the water. To resolve the latter problem, and because there was insufficient battery power to run U-570's high pressure air compressor, a pneumatic drilling machine was delivered by a corvette from Reykjavik. HMS *Burwell* was then brought alongside, and an air hose from the drilling machine was passed across to enable the various buoyancy tanks to be charged and blown in order to reduce the chances of U-570 sinking whilst under tow.

The tow from Thorlakshafn beach to Hvalfjord, initially by both HMS *Salvonia* and the corvette, but then by HMS *Salvonia* alone after the corvette's towline parted just before dark, started at 1300 on 5 September and, in Lt Colvin's own words:

I judged it advisable for myself, Mr Giodan, Mr Staker, and the two ratings to remain onboard the submarine in case it might again be necessary to blow the tanks, and we were obliged to remain on deck where the cold was severe as the air inside the submarine by this time was scarcely breathable. (10)

There is some uncertainty about the identity of the corvette which is said to have been involved in the process of getting U-570 successfully off the beach and which was then involved with the first stage of the tow to Hvalfjord. However, the available secondary-source evidence suggests that it was most probably the mis-identified destroyer HMCS *Niagara*. If so, then the Royal Canadian Navy's destroyer had not only delivered the pneumatic drilling machine to the site, but she had also assisted HMS *Salvonia* with the tow from 1300 until the stern towline parted as darkness fell on 5 September. This would certainly corroborate the RCN Provost Marshal's statement in December 1941 that a Canadian Navy corvette had towed a Nazi submarine into port.

Fortunately the weather remained favourable throughout the next 24 hours, and the 18-hour tow was completed without any further incidents. Thus, at 0930 on 6 September U-570 was brought safely alongside HMS *Hecla* in Hvalfjord.

Once U-570 had been successfully recovered to Hvalfjord there was now no point in keeping the surrender and the capture of the U-Boat secret, especially as the U-Boat's CO had already notified the Kriegsmarine's BdU (Ops) (Befehlshaber der Unterseeboote - HQ of Commander Submarines - Operations Division) of his predicament, with the BdU War Diary entry for 27 August recording that:

U-570 made the following wireless message in plain language: "Am not clear to dive and am being attacked by aircraft. AE 7698". The boat has interference in the reception, and it is therefore impossible to communicate with her. Boats in the vicinity were ordered to help her. (14)

Albeit to no avail, BdU then took action to try to recover the situation, with Admiral U-Boats sending out three messages during the course of the afternoon and evening of 27 August, viz:

- a. U-Boat unable to dive in Square AE 7698. Boats nearby are to try to assist.*
- b. U-570 unable to dive. Is possibly in Square AE 7398.*
- c. According to B-Report U-570 unable to dive. Is still in approximately Square AE 7650. Four trawlers have been ordered to the scene. Boats in the vicinity are to assist. (15)*

There was obviously some confusion at BdU as to the exact position of U-570, but U-82 was one of the U-Boats which attempted to assist as requested. It was however unable to locate U-570, sending two messages on 28 August:

- a. 28/0100 Search unsuccessful. During daytime continuous air patrols. Square AE 7695.*
- b. 28/2323 Search without success. Square AE 76 continuous air patrol and bombs. No damage. (15)*

Also, despite the Admiralty's and Admiral Scott's initial thoughts that details of the capture of U-570 could be kept secret, these ideas were soon dispelled by force of circumstances. In particular, it very quickly became common knowledge amongst the US Navy flying boat crews at Reykjavik and the US Navy surface vessel crews in Hvalfjord that a captured German U-Boat was being brought in and, although Admiral Scott tried his best to keep the lid on the spread of this information, it was obvious that he was fighting a losing battle. In particular the Admiral was very keen to maintain good relations with the at-that-stage non-belligerent United States forces in Iceland, and so he quickly gave up his attempts to keep the lid on the information, advising the Admiralty and the C-in-C Western Approaches on 30 August that:

In my opinion incidents of this sort are almost unavoidable where the personnel of the fighting services of a neutral nation, notorious for publicity, are in close liaison with those of a belligerent, whose main interest is secrecy. Every effort will be made to prevent a recurrence, but it is considered most important to do nothing to impair the present close co-operation. (16)

The task of recovering U-570 after it was towed into Hvalfjord then came under the overall command of the CO of HMS *Hecla*, and the next five days were spent on ventilating, cleaning and undertaking initial repairs on the U-Boat, including recharging the batteries. However, when the cooling system was being tested the U-Boat boat was nearly lost at its moorings as it began sinking with both of the open after torpedo and forward deck hatches only just above water level. The bilges were three quarters full of water before the situation

was brought under control, when it was discovered that the cover to the sea water inlet valve had been taken off by the German crew and had been missed in the initial inspections.

Static engine tests were carried out between 10 and 14 September, with local sea trials beginning on 15 September and ending on 20 September when U-570 achieved a surface speed of over 14 knots. A skeleton British submarine crew then arrived from the UK and, after further trials, manoeuvres and the loading of stores, the U-Boat was ready for sea and its transfer to the UK – all in less than a month after its capture.

Additionally, between 23 and 26 September, and although the USA had not yet entered the War, the U-Boat was inspected by two senior officers from the US Navy. As a result, they wrote a comprehensive 75-page report on all the relevant details of U-570. Also, one of its external upper-deck water-tight containers, complete with its torpedo, was removed and donated to the US Navy for further study.

Escorted by the destroyer HMS *Saladin*, and under the command of Lt Colvin with his British crew, U-570 left Hvalfjord on the afternoon of 29 September and, after a surface transit at an average speed of 13 knots, U-570 entered the harbour at Barrow-in-Furness at 1030 on 3 October, before being secured in the Ramsden Dock at 1300. U-570's arrival at Barrow was made in the full glare of national publicity.

After U-570's arrival in Barrow, the next important decision concerned what was to become of it. However, this was not long in coming, as is reflected in Admiral (Submarines) War Diary of October 1941, viz:

5 October: Admiral (Submarines) proposed that captured German submarine U-570 should be commissioned forthwith as HMS Graph.

9 October: Admiralty decided to repair submarine Graph for service as soon as possible. (17)

Perhaps unsurprisingly, the Prime Minister was already making suggestions about the future use of U-570 and, as early as 8 September when it had been in Iceland for just two days, he had written to the First Sea Lord saying:

Might we not offer to the Americans that they should take over the captured German U-Boat, repair it for us, and give it back to us? It would be a particularly provocative thing for them to do. They might be quite willing to do it.

Let me know your view. I don't attach much importance to the suggestion. (4)

In response, the First Sea Lord, Admiral of the Fleet Sir Dudley Pound, replied on 12 September:

The present intention is to take the ship to Barrow and thoroughly examine her. We cannot make any decision as to what to do with her until after this examination is completed and we know what condition she is in.

Your suggestion about sending her to the USA for any repairs that may be necessary will, however, be borne in mind. (4)

As was usual with the Prime Minister he did not give up easily, and on 25 September he wrote to the First Lord of the Admiralty and the First Sea Lord suggesting:

Why not give the Graph U-Boat when she is repaired to the Yugoslav Navy? They have a submarine crew which has arrived at Alexandria, but their vessel was in too bad a condition for the Admiral to allow it to go to sea. I rather like the idea of the Yugoslavs working a captured U-Boat. (4)

In his response, the First Lord of the Admiralty, Mr A V Alexander, advised Winston Churchill on 29 September that:

I very much like your proposal of giving the vessel to the Yugoslavs, but I propose to consult the Commander-in-Chief Mediterranean as to the efficiency of the Yugoslav crews, as I think we ought to be quite certain that we should not be wasting a good submarine on inefficient or inexperienced personnel.

Before we do anything else with the vessel however, I am anxious that she should join the Third Submarine Flotilla at Holy Loch and that exhaustive trials should be carried out by a British crew, since it is clearly of the greatest importance that we should learn everything there is to be learnt about her. (4)

To which Mr Churchill, having highlighted the words ‘Holy Loch’, wrote on the bottom of the page in his typically concise fashion:

Good. No doubt to be decontaminated. So proceed. (4)

This debate about the future of U-570, which had by then been commissioned into the Royal Navy as HMS *Graph*, was finally brought to an end on 9 November when the First Lord of the Admiralty advised the Prime Minister that:

I said that I was consulting the Commander-in-Chief Mediterranean about the efficiency of the Yugoslav crews. I have now come to the conclusion that it would be unwise to turn over Graph to the Yugoslavs. The total submarine complement of the Yugoslav Navy is only 4 officers and 34 ratings, none of whom can be considered more than partly trained. Graph requires 4 officers and 39 ratings, plus a reasonable proportion of spare officers and ratings. Moreover she will need a highly skilled complement to keep her running, since she has practically no spare parts; and for this reason I would not risk letting even the Greeks to man her, although they have a great deal of operational experience.

We have had so many requests for special trials of Graph and investigations into various points, that it will probably be some time before she can be released for operations.

A further point is that as we have declined to transfer her to the Americans, it would perhaps be undesirable for political reasons to transfer her to the Yugoslavs. (4)

The first full inspection of the captured U-Boat took place on 6 October, when a party of Royal Naval officers and scientists from the Admiralty’s Anti-Submarine Warfare Division,

together with a representative of the US Navy, visited Barrow to assess its technical quality. They then wrote a comprehensive report, finishing with an interesting summary, viz:

The boat is cramped, particularly the conning tower.

The torpedo firing arrangements are intricate, particularly the selecting instruments. Several of the interlocks on the tubes seem redundant.

The A.A. machine gun is well placed with a good arc of fire but would take some time to get into action as the barrel has to be shipped.

Main ballasts have very large vents which aid quick diving.

The air trunk to the engine room is a great boon in rough weather (and in cold weather) as the C.T. lid can be kept closed.

Twin rudders are said to make the boat very manoeuvrable.

The main engines are most efficient and easy to run. Practically all machinery is rubber seated.

The Germans seem to have concentrated on essentials: strength of hull, speed of diving, torpedoes, periscopes and main engines. (18)

During the following four months at the Vickers Shipyard in Barrow HMS *Graph* (Dockyard No. ER 9011) was inspected and reported-on in minute detail, whilst at the same time the damage caused by the depth charges and its grounding on Thorlakshafn beach in Iceland was repaired. In the course of the latter activity it was necessary to remove the U-Boat's four armed torpedoes and for his part in this dangerous work, Lt Martin Johnson, who was an explosives expert working in the Admiralty's Torpedoes and Mines Investigations Department, was awarded the George Medal.

During her time in Barrow, HMS *Graph* was in and out of the dry dock four times: 10 Oct 41 to 1 Nov 41, 1 Dec 41 to 18 Jan 42, 31 Jan 42 to 5 Feb 42, and 8 Feb 42 to 12 Feb 42, and on a number of occasions she put to sea to conduct trials and assessments as required by a variety of specialist Admiralty Departments. At the same time, there was very close liaison with the US Navy which, as was shown in a letter to the Admiralty's Director of Anti-Submarine Warfare from the Naval Attache at the American Embassy in London on 28 November 1941, was also keen to learn everything possible about the Type VIIC U-Boat, viz:

Thank you very much for your letter of 25 November forwarding the report of examination of the A.E.G. equipment in the submarine Graph. (18)

The inspection and repair work was finished by mid-February. Thus, on 18 February 1942 under the command of Lt Edward Norman, who had taken over as CO from Lt Colvin on 10 October 1941, the ex-U-570 which was now HMS *Graph* was transferred to Holy Loch in western Scotland in order to begin its new career as an operational submarine in the Royal Navy, thanks in part to the efforts of the captain and crew of the old US Lend-Lease destroyer HMCS *Niagara* in August 1941.

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