
COMMUNICATIONS INTELLIGENCE AND MURMANSK CONVOYS JW 56A, JW 56B, AND RA 56: 12 JANUARY–9 FEBRUARY 1944

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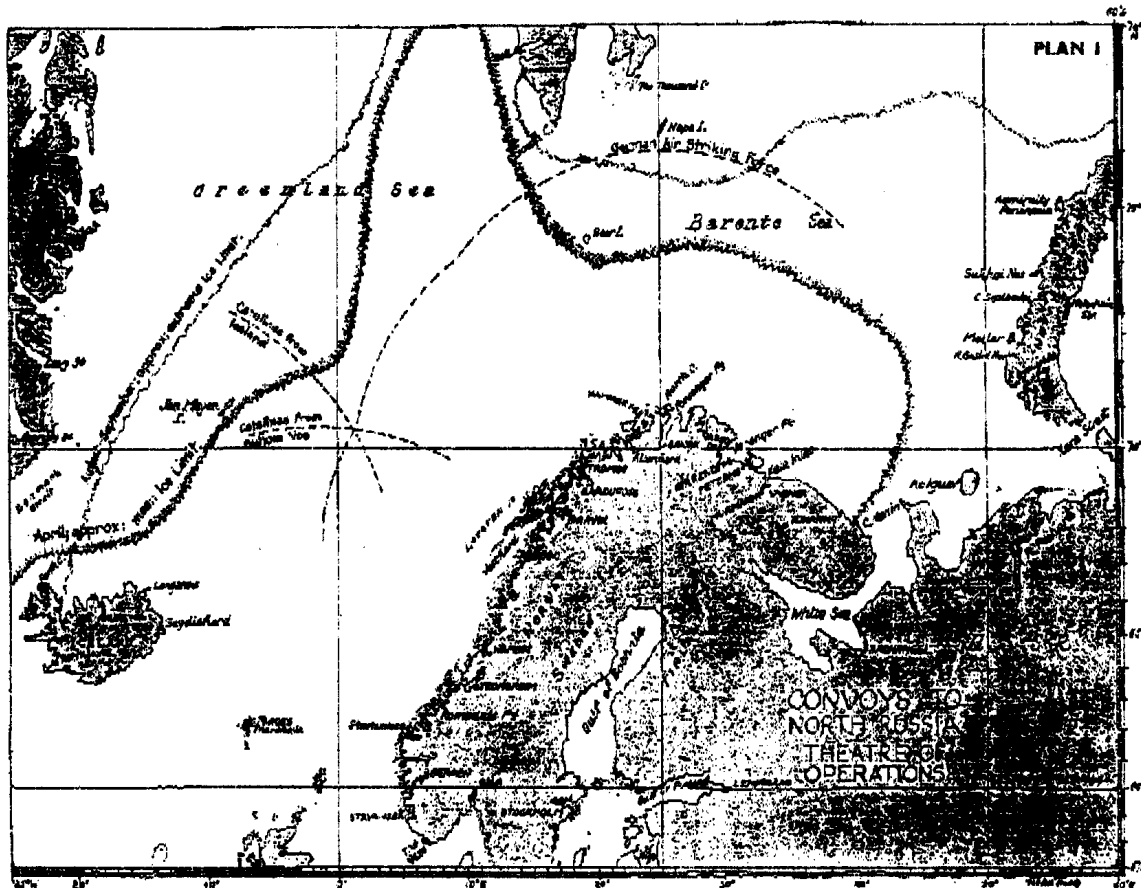
Several weeks after VE Day, Rear Admiral John H. Godfrey, a former director of British naval intelligence, wrote that "no respectable historian would dream of writing a naval history of the late war" without a knowledge of the role of communications intelligence in the conflict.¹ The role of communications intelligence in the battles fought over convoys sailing to northern Russia, with the exception of the destruction of Convoy PQ 17, has been for the most part neglected or played down by historians.² In official histories by S. E. Morison and S. W. Roskill, there are not many references to communications intelligence. These works are, for the most part, surveys for the record as it existed in the 1950s and 1960s. Intelligence officers work in secret and, if possible, like to keep things secret forever. This veil of secrecy was not lifted until F. W. Winterbotham published *The Ultra Secret* (London, 1974) which told, for the first time, of Allied ability to read German coded command radio communications. Publication of *The Ultra Secret* led to declassification and the placing in American and British archives of various documents dealing with communications intelligence during World War II. Even though these documents permit histori-

ans to reconstruct the naval war against the Germans much more clearly and precisely than ever before, scholars have been slow to make use of these materials.³

Between August 1941 and May 1945, the Allies sailed forty convoys, consisting of 811 merchant ships, around northern Norway to the north Russian ports of Archangel and Murmansk. Fifty-eight merchant ships and nineteen warships, including two cruisers, were lost to enemy action.⁴ Sending military supplies to northern Russia was among the most hazardous of convoy operations during World War II. Convoys sailed from Great Britain and Iceland through the Arctic Ocean and Barents Sea via the North Cape of Norway to Murmansk and Archangel. During the winter months, Allied vessels often encountered fierce storms which damaged the ships and scattered the convoys. Moreover, they had to proceed in almost total darkness. Daylight hours in the Arctic during the winter months consist, for the most part, of nautical twilight (the sun being twelve degrees or less below the horizon) producing just a glimmer of daylight.

Whilst battling these harsh natural conditions, Allied ships were also subjected to heavy attacks from German surface units, aircraft, and U-boats based in northern Norway. The Germans attacked the convoys with every weapon at their disposal, for they considered it of the greatest strategic importance to prevent, by any means possible, military supplies from reaching the Russians. Most Allied military aid to the Soviets was shipped through the Far East and Iran, but they were under heavy pressure from Stalin to send supplies through north Russian

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ports.³ Due to this intense pressure, the Allies believed that they had to sail convoys to north Russia almost without regard to the difficulties of the operation and the cost in ships and men.

It was Allied policy at this time to sail small convoys to north Russia in the belief that small groups of ships, which could be easily maneuvered, had a better chance of eluding U-boat and air attacks. Further, small convoys could be more easily kept together and, if scattered by a storm, could be quickly reformed.⁶ As a result, JW 56 was divided into two small heavily-escorted convoys — JW 56A and JW 56B. Convoy JW 56A, consisting of twenty merchant ships, sailed from Loch Ewe, Scotland, at 1500 on 12 January 1944, escorted by warships of a local escort group. Almost immediately, storms and heavy seas scattered the convoy. On 15 January, the American merchant ship *Nathaniel Alexander*, soon followed by three others,⁷ was forced to return to Britain. The rest of the convoy, after suffering heavy damage, was ordered to the port of Akureyri in Iceland for

repairs.⁸

The sixteen merchant ships of JW 56A which arrived at Akureyri also suffered structural damage, and their deck cargoes had shifted and required restowing. The American merchant ship *Joseph N. Nicollet* was found not to be in condition to proceed and returned to Scotland. Working parties from HMS *Kent* repaired the other damaged vessels and restowed their deck cargoes.⁹ On 21 January, the remaining fifteen merchant ships,¹⁰ escorted by eleven warships,¹¹ sailed from Akureyri. Two days later, cruisers HMS *Kent* and HMS *Bermuda* departed from Akureyri to provide a covering force.¹²

For the first time in months, the strategic situation in Norway was relatively favorable to the Allies. There were no major surface units of the German Navy in northern Norway capable of attacking convoys: the battle cruiser *Scharnhorst* had been sunk by the Home Fleet on 26 December 1943; the cruiser *Lützow* was in Germany undergoing repairs, and the battleship

Tirpitz was damaged and was not capable of putting to sea. The German Air Force [GAF] in northern Norway was weak. It could not undertake large-scale attacks on convoys, but could provide reconnaissance. Allied intelligence estimated that there were some thirty U-boats based in Norway, of which about eight to ten were operating across the intended route.¹³

The Germans were expecting the Allies to pass a convoy north of Norway, and had deployed a group of seven U-boats,¹⁴ codenamed *Isegrimm*, about eighty miles southwest of Bear Island. The Germans apparently knew that JW 56A was proceeding to Iceland.¹⁵ It is not clear how they obtained this information. One source states the data came from an agent in Reykjavik,¹⁶ but this is highly unlikely; apparently, there were no German agents in Iceland at the beginning of 1944. It is possible that the Germans obtained some knowledge of JW 56A from reading coded radio messages, but this is also unlikely; they were having difficulty in reading Allied codes at the beginning of 1944.¹⁷ Most likely, the main source of information came not from decoding Allied radio messages, but rather from analysis of radio transmissions. Captain (U/B) Norway [*Führer der U-Booten, Norwegen*] several times cites "radio-communication elucidation," which is radio traffic analysis, as a source of information.

The Germans also had some knowledge of the "cycles or "rhythms" of Allied convoys going to and from Russia.¹⁸ In any event, GAF aircraft from northern Norway undertook reconnaissance flights on 22, 23, and 24 January "against presumed PQ convoy." Nothing was sighted.¹⁹ Nevertheless, it was "appreciated" by the Germans that an Allied convoy would pass through the Bear Island Passage on 25 January.

At the same time, the Allies were reading German coded-command radio messages. They knew that GAF aircraft were hunting for JW 56A, as well as the approximate location of the *Isegrimm* group.²⁰ By the early hours of 25 January, it was clear to both the Allies and the Germans that there would be contact between the *Isegrimm* group and JW 56A. There was not enough sea room in the Bear Island Passage between the southern limits of the ice cap and

the northern shore of Norway for the convoy, by means of evasive routing, to evade the U-boats.

On 23 and 24 January, as JW 56A proceeded in a northeasterly direction towards the Bear Island Passage, ships of the convoy's escort obtained a number of HF/DF (high frequency direction finders) bearings on a nearby U-boat radio transmission. At the time it was thought that this U-boat was not shadowing the convoy. At 0231 on 25 January, Captain (U/B) Norway informed the *Isegrimm* group that "according to radio communications elucidation 'PQ' convoy can be expected to pass Bear Island Narrows soon." At 0958, U-956 radioed "enemy in sight SQ at 6675." Twenty-two minutes later, she reported a destroyer and, at 1046, sighting the convoy. Upon receipt, Captain (U/B) Norway ordered U-314 and U-716 to sail from Hammerfest, northern Norway, to join the *Isegrimm* group.

The *Isegrimm* group was further reinforced at 1257, when U-472 was ordered to join. Finally, at 1059, the U-boats were ordered to operate against the convoy on the basis of U-956's sighting reports.²¹

From the number of radio transmissions made in the vicinity of JW 56A, Captain W. A. Robson, RN, commander of the convoy's escort, concluded that there was a U-boat off the starboard quarter. By 1300, Robson thought that there were at least four U-boats in contact with the convoy, and that the U-boat off the starboard quarter was acting as the "controller," or shadower, for the others. The destroyers HMS *Inconstant* and HMS *Offa* were sent to investigate. The U-boat was U-956, which submerged and fired a *zaunkoenig* — an acoustic homing torpedo — at one of the destroyers but missed. The two destroyers did not sight the U-boat, although Robson thought the operation had been successful; there was a "hiatus" in radio transmissions.²²

At 1340, HMS *Venus* and HN or MS *Stord* were sent to hunt down a HF/DF bearing on the starboard beam of the convoy. At 1400, HMS *Venus* sighted a U-boat, most likely U-601,

which after submerging fired a torpedo at the destroyer.²³ Sonar contact could not be obtained, and both warships then returned to their positions.²⁴

Throughout the late afternoon, the escorts continued to make offensive sweeps to drive away the U-boats. At 1830, HMS *Obdurate* obtained radar contact bearing 300° at a range of 3,000 yards. As the destroyer ran down the radar bearing, sonar contact was obtained. This contact was then run down. The target was classified as a U-boat. At 1834, however, the radar contact disappeared; two minutes later, an acoustic homing torpedo, fired by *U-360*, exploded about 20 feet off the starboard side of HMS *Obdurate*, just abreast of the after torpedo tubes. There were no casualties, but the destroyer's starboard engine was damaged beyond repair and her speed was reduced to 10 knots. At 1915, on Robson's orders, HMS *Obdurate* took up a position on the starboard quarter of JW 56A.²⁵

At 1833, Captain (U/B) Norway detached *U-313* from the *Isegrimm* group and ordered her to serve as a weather reporter. At 1941, he informed the *Isegrimm* group that the convoy was heading for Murmansk, and "the battle will therefore be of short duration;" they must "make full use of contact and weather early on." Later in the evening, the U-boats were informed to expect GAF reconnaissance aircraft in the area on 26 January.²⁶

Throughout the night of 25 January, the U-boats continued to approach JW 56A attempting to get into attacking positions. At 2014, an explosion was heard by HMS *Savage*. At first this was thought to be another depth charge attack. Minutes later, it was realized that the American merchant ship *Penelope Barker* had been torpedoed by *U-278*. At 2023, HMS *Savage* obtained a sonar contact, which was attacked with depth charges two minutes later. Sonar contact was regained but, while running in to attack a second time, the commander concluded that the target was most likely the wreck of the *Penelope Barker*. The attack, if carried out, would kill the survivors in the

water, and so was called off. HMS *Savage* instead picked up fifty-four survivors, after which she rejoined the convoy.²⁷

Just after midnight, *U-360* torpedoed the British freighter *Fort Bellingham*. Hit in the port side, she settled in the water but did not immediately sink. Shortly after the attack, *U-716* torpedoed the American freighter *Andrew G. Curtin*, which quickly sank. HMS *Offa* and HMS *Savage* picked up the survivors. Before rejoining the screen of JW 56A, HMS *Offa* attempted to sink the *Fort Bellingham*. The freighter did not sink, drifted astern of the convoy, and was later sunk by *U-957*.²⁸

The U-boats remained in contact with JW 56A during the morning of 26 January, as reported by *U-717*, *U-314*, *U-360*. The U-boats were by then also supported by GAF reconnaissance aircraft who, at 1134, reported JW 56A's location as 73° 03'N 28° 05'E. They further reported that the convoy consisted of twelve merchant ships steering a course of 50° steaming at a speed of 10 knots, which was confirmed by two Allied seamen from one of the torpedoed merchant ships who were picked up by the *U-957*. The aircraft, using radio beacon signals, attempted to home the U-boats in on JW 56A.

The Allies first sighted a GAF shadowing aircraft at 0910. Two more GAF aircraft were sighted at 1120. From radio traffic, Robson thought that the Germans were about to mount "a full scale" air attack on the convoy. However, this attack did not materialize because, according to the senior officer of the escort, there was "considerable confusion amongst the aircraft already airborne."²⁹

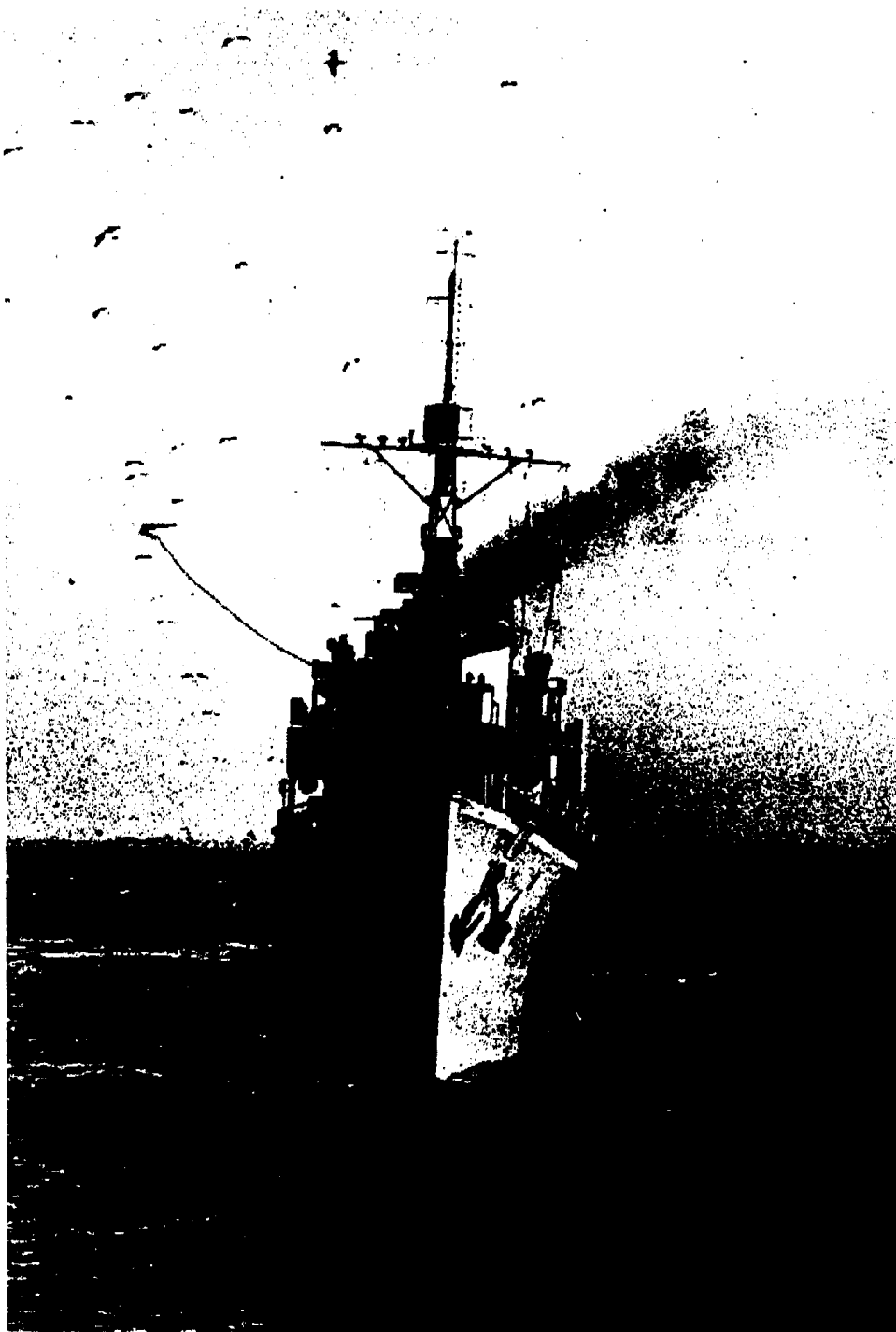
During the afternoon of 26 January, the U-boats lost contact with JW 56A. At 1504, *U-425* reported that she had lost the convoy. At 1637, Captain (U/B) Norway informed the *Isegrimm* group that he thought JW 56A was proceeding via 72° 27'N 33° 51'E and 70° 51'N 36° 30'E to Murmansk. At 1658, *U-737* reported that, in "very bad visibility," she had picked up a hydrophone bearing on the convoy in 73° 03'N 33° 30'E. At 1712, in an effort to get into position ahead of JW 56A, Captain (U/B) Norway ordered the *Isegrimm* U-boats to form a patrol line running from 72° 51'N 37° 50'E to 71°

33°N 32° 30'E.³⁰

At 2056, U-737 reported hydrophone bearings running from 30 to 50° true, "beyond doubt" several destroyers and steamships. She was ordered to send beacon signals in order to home in the others. However, at 2241, she reported that she had lost the hydrophone bearings. No further contact was made with JW 56A on 26 January, and the *Isegrim* group was ordered to move further south to form a patrol line running along 71° 30'N between 32° 30'E and 38° 30'E.³¹

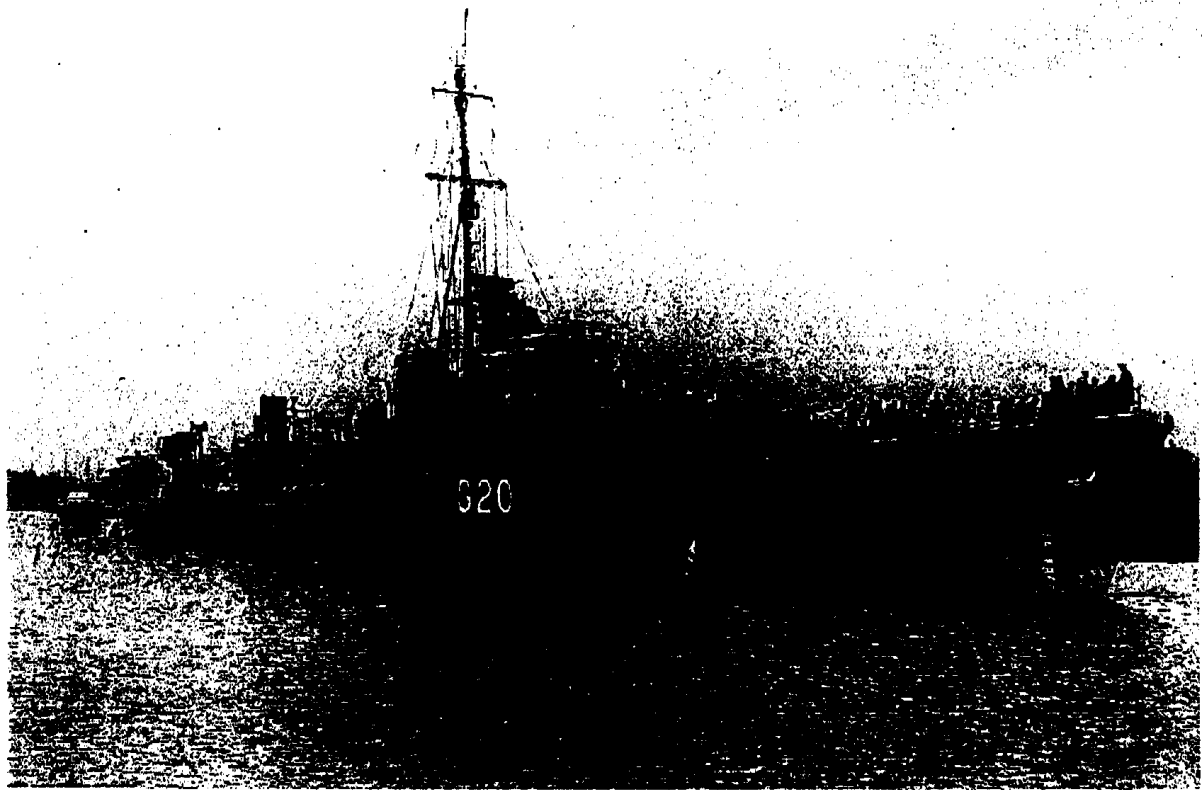
The Germans believed, on the evening of 26 January, that the U-boats attacking JW 56A had sunk at least four merchant ships and two destroyers, and that additional Allied

ships had been damaged. Admiral Northern Waters, after studying the reports of Allied ships sunk and damaged by the U-boats, proposed to send destroyers to sweep through the area of the battle at dawn on 27 January to



HMS *Offa*. Courtesy of the Imperial War Museum.

finish off any damaged ships that might be encountered. This proposal was rejected by Group North and the German Naval Staff as being "not essential" and not serving "any useful purpose."³²



HMS Savage. Courtesy of the Imperial War Museum.

In the meantime, further contact would be made between the convoy and the U-boats. At 0045, 27 January, *U-360* reported that she had been damaged in a collision with the *U-601*. *U-360* was then ordered to return to Norway. At 0652, *U-957* sighted a single ship proceeding south, but the contact was quickly lost. At 0903, GAF aircraft reported that the convoy was at $70^{\circ} 30'N$ $36^{\circ} 55'E$. If this report was correct, then JW 56A had passed the night before through the *Isegrimm* patrol line without being sighted. Captain (U/B) Norway responded to this sighting report by ordering the *Isegrimm* U-boats to move further south and establish a new patrol line running from $70^{\circ} 09'N$ $37^{\circ} 50'E$ to $70^{\circ} 51'N$ $32^{\circ} 50'E$. This new line, being only ninety miles off the Russian coast and across the entrance to Murmansk, was a final effort to intercept JW 56A. However, at 1041 Captain (U/B) Norway ordered the *Isegrimm* group to head west and north to $73^{\circ} 03'N$ $15^{\circ} 30'E$. Operations against JW 56A were ended. The

convoy was drawing near to Murmansk and "another PQ convoy was reported approaching" from the west.³³

In all, twelve U-boats had operated against JW 56A. The U-boats, especially on the night of 26 January, had difficulty in maintaining contact with the convoy, most likely owing to poor visibility as well as to JW 56A maintaining an average speed of $9\frac{1}{2}$ knots. Nevertheless, the U-boats fired at least twenty-nine torpedoes, sinking three Allied merchant ships and damaging HMS *Obdurate*. No U-boats were sunk by the convoy's escort.

Immediately after ending operations against JW 56A, Captain (U/B) Norway began redeployment of the *Isegrimm* group to attack Convoy JW 56B. GAF reconnaissance aircraft had sighted the convoy at 1215A, 27 January, at $68^{\circ} 33'N$ $05^{\circ} 15'W$, and reported that the convoy consisted of fourteen merchant ships, escorted by seven destroyers, on a course of 30° and steaming at 10 knots. Captain (U/B)

Norway concluded that the Allied ships were heading for Bear Island Passage. In the meantime, three U-boats³⁴ of the *Isegrimm* group were ordered to Hammerfest to be refueled and replenished with torpedoes. Seven other U-boats³⁵ were formed into a group codenamed *Werwolf* and ordered to form a patrol line by 0600A, 29 January, to run from 71° 15'N 12° 30'E to 73° 09'N 09° 10'E.

The Allies decoded these orders at 0250 on 28 January.

On 28 January, the GAF sent two JU 88 aircraft to search for and shadow JW 56B. The *Werwolf* group was reinforced by U-313, bringing the strength of the group to eight. At 2137 on 28 January, the *Werwolf* group was informed that, beginning at 0900 on 29 January, GAF aircraft would shadow JW 56B and transmit radio beacon signals to home the U-boats in on the convoy.³⁶

On 22 January, the seventeen ships of JW 56B sailed from Loch Ewe.³⁸ The convoy, escorted by ten British warships,³⁹ proceeded north and then east-northeast, following approximately the same course as did JW 56A. On 23 January, the American Liberty ship *Charles Bulfinch* put back to Scotland, owing to "hot bearings." On 25 January, HMS *Rhododendron* was detached because of "engine defects." On 26 January, the escort was reinforced by six destroyers.³⁹ The next day, JW 56B was sighted, reported, and shadowed by the GAF.⁴⁰

On 28 January, Captain (U/B) Norway ordered U-636 and U-313 to operate in the same area as the *Werwolf* group, and reconnaissance aircraft were dispatched to shadow JW 56B. GAF aircraft intercepted and shadowed the convoy until 1500, reporting that the ships were on a course of 70°. Just after the reconnaissance aircraft departed, JW 56B's escort was reinforced by the destroyer HMS *Meteor*. At 1700, the convoy altered course to the northward. This was done because the Allies knew, from cryptographic intelligence, the location of the *Werwolf* patrol line, and intended for the convoy to pass some 40 miles to the north of the northern end of the *Werwolf* patrol line.⁴¹

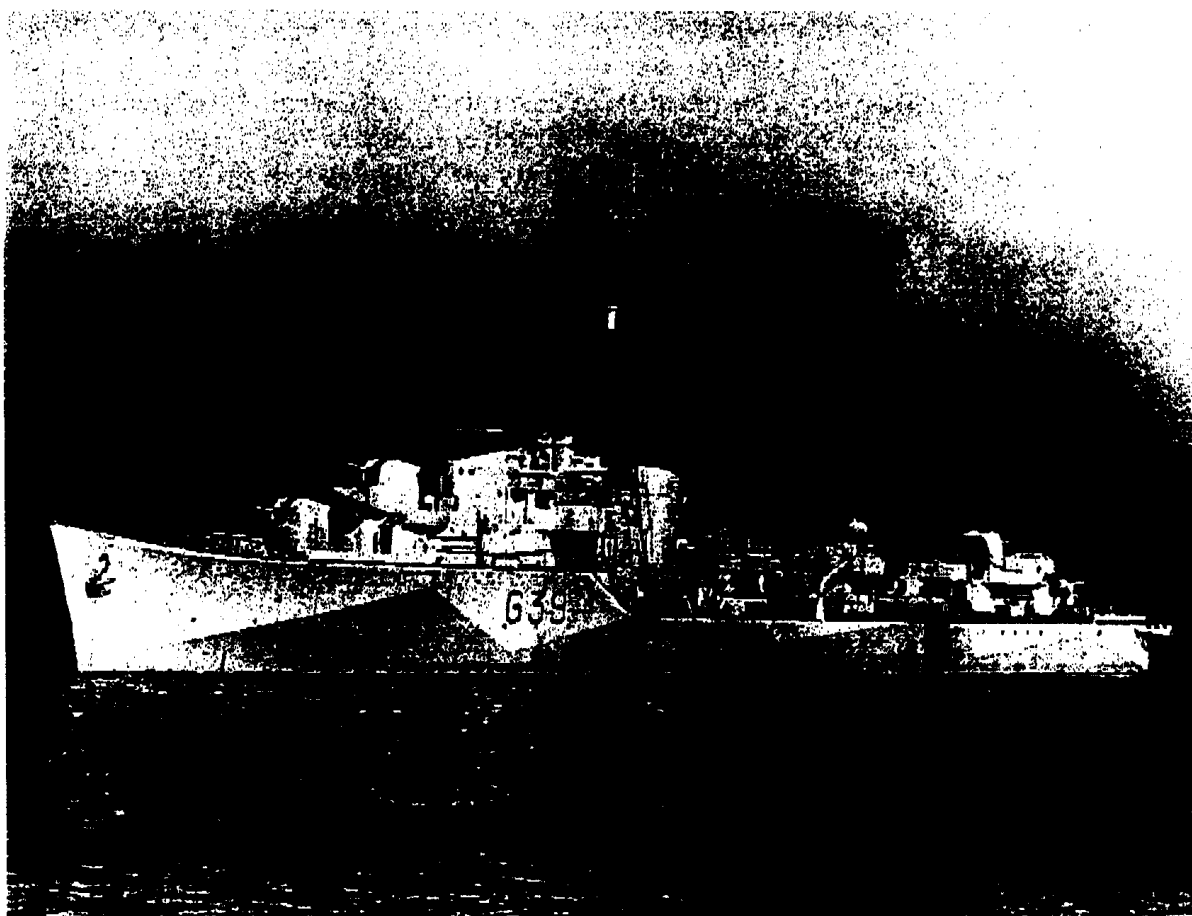
JW 56B would have succeeded in escaping but for an error of navigation; the northernmost

U-boat was about 30 miles north of her assigned position. At 0934, U-956 sighted the convoy and sent a report. Captain (U/B) Norway immediately ordered the *Werwolf* group to operate on that report. While sending her report, U-956 herself was sighted on the surface by HMS *Mahratta*, which attacked the U-boat with gunfire, forcing the German vessel to submerge. She was hunted by HMS *Whitehall* and HMS *Mahratta* with sonar and depth charges for several hours. About thirty minutes after U-956 had sighted JW 56B, the convoy was also sighted by a GAF reconnaissance aircraft.⁴²

At 1200, JW 56B changed course to the eastward. Throughout the afternoon and evening of 29 January, the escorts made repeated sweeps, ran down a number of HF/DF bearings, and conducted several attacks with depth charges. At 2114, the commander of the escort thought that there was a U-boat off the starboard quarter of the convoy as well as possibly one off each beam.⁴³

U-956, after being forced to submerge by JW 56B's escort, lost contact with the convoy for several hours, although at 1531 she once more regained contact with 56B. At 1618, Captain (U/B) Norway ordered her to maintain contact and to send radio beacon signals to enable other U-boats to gain contact. Throughout the evening of 29 January, U-boats maintained contact with JW 56B. At 1647, U-427 reported a hydrophone bearing on the convoy of 70°. U-956 attempted to attack the convoy, but failed when a torpedo exploded prematurely. U-601 sighted a destroyer on an easterly course.⁴⁴

The Allies, knowing of the deployment of the *Werwolf* group, reinforced the escort. On 28 January, eight destroyers⁴⁵ which had formed the escort of JW 56A, sailed from the Kola Inlet and joined the escort just after midnight. They formed a broad screen fifteen miles ahead of the convoy.⁴⁶ At the same time, Captain (U/B) Norway had also strengthened the attacking German forces. Four additional U-boats⁴⁷ sailed from Hammerfest. They were subsequently formed into a group codenamed *Wicking* and ordered to assemble south of Bear Island, also



HMS *Obdurate*. Courtesy of the Imperial War Museum.

across the suspected track of JW 56B. Had these U-boats been able to steam at a speed of 12 knots, they would have been in an attacking position ahead of the convoy by 0900 on 30 January.⁴⁸

In the early hours of 30 January, the Allies thought that there were as many as six U-boats in the vicinity of JW 56B. However, by 0300 the main threat appeared to be off the starboard bow and beam of the convoy. Six destroyers were ordered to sweep along the starboard side of JW 56B. A U-boat was sighted on the surface by HMS *Inconstant*. The British warship forced her to dive and then attacked her with depth charges. At 0347, a bearing was obtained on a U-boat radio transmission on the port quarter of JW 56B. Four destroyers were dispatched to hunt down this bearing. At 0404, HMS *Hardy* was hit by an acoustic homing torpedo fired by U-957. While HMS *Virago* maneuvered to pick up the survivors, HN or MS *Stord* circled the area hunting for the U-boat. At 0415, HNorNS

Stord obtained a sonar contact and attacked it with depth charges. After several attacks, a U-boat was blown to the surface; however, it immediately submerged and sonar contact could not be regained. By 0525, the survivors from HMS *Hardy* had been picked up. HMS *Venus* sank the wrecked destroyer with a torpedo in approximately 73° 37'N 18° 56'E.⁴⁹

At 0700, HF/DF bearings indicated several U-boats ahead of the convoy. Sweeps by HMS *Savage* and HMS *Vigilant* were without result. At 0817, HMS *Meteor* on the starboard bow of the convoy heard a torpedo being fired on her sonar. Throughout the rest of 30 January, there was contact between the escorts and the U-boats. Although the convoy was being shadowed by the GAF, the U-boats were having difficulty maintaining contact. At 1210, U-737 reported that she had been damaged "as a result of ramming ice when being hunted by destroyers." Owing to bad weather over the German air bases in northern Norway, the GAF was forced

to give up.^x

At 1940, JW 56B, in 73° 42'N 26° 34'E, turned southeast. This change was made sooner as well as and further to the west than was customary for convoys proceeding to Murmansk, for it was designed to force the U-boats to lose contact with the Allied force. In the meantime, four destroyers continued on the old easterly course to put down the U-boats which were thought to be ahead, while other ships of the escort made sweeps along the flanks and ahead of the convoy to throw the U-boats off the track. The alteration of course misled Captain (U/B) Norway. At 2000, he ordered the U-boats to form a line running roughly from 73° 30'N 35° 10'E to 72° 35'N 30° 30'E by 0600 on 31 January. If JW 56B had pursued her original course, it would have passed through the middle of this new patrol line.

Even after the convoy had changed to a southeasterly course, several U-boats reported sighting star shells. Captain (U/B) Norway thought them to be "a ruse." He ordered the U-boats to disregard them and to proceed to their assigned positions in the new line.⁵¹

At 0120, 31 January, U-278 reported to Captain (U/B) Norway that she had been forced to submerge by a "hunting group firing star-shells." Hunted for three hours before escaping, she was now "searching to the southeast." Other U-boats also reported sighting star shells as well as the escorts. At 0904, the GAF dispatched a radar-equipped JU 88 aircraft to locate JW 56B. At 0948, the U-boats were ordered to move further to the southeast and to set up a patrol line 120 miles north of Murmansk.⁵²

At 1120, a GAF aircraft reported the convoy at 72° 30'N 34° 10'E on course of 90°. Even though the GAF managed to shadow JW 56B throughout the afternoon of 31 January, the U-boats were now able to attack the ships. At 1817, Captain (U/B) Norway, in a final attempt to intercept JW 56B, ordered the U-boats to establish a "last interception position" right across the entrance to Murmansk just 60 miles offshore. Owing to bad weather over the German air bases in northern Norway, the GAF aircraft, which had been shadowing JW 56B,

had to break off the operation at 2120.⁵³

By the early hours of 1 February, it was clear to the Allies and the Germans that the battle was over. At 0401, U-278 reported that she had been depth charged for four hours and now "consider pursuit useless." By 0700, even though the Allied escorts continued to obtain HF/DF bearings, the commander of the escort knew that the U-boats were dropping astern of the convoy. At 1549, Captain (U/B) Norway ordered the U-boats to steam northward to form a new patrol line and to be ready to attack an Allied convoy proceeding from Murmansk.⁵⁴

The Germans knew that the Allies would next sail a convoy from Murmansk west to the British Isles. Even before the arrival of JW 56B in north Russia, GAF aircraft had spotted some sixty-seven Allied ships, approximately thirty of which were over 5,000 GRT, in the Kola Peninsula. Given that it was Allied policy at this time to run small, heavily escorted convoys to and from north Russia, the westbound convoy had been postponed. This was due to lack of warships, since available warships were being used to reinforce the escort of JW 56B. The Allies decided to combine two convoys into one and sail one large heavily escorted convoy, RA 56, from Murmansk to Scotland.⁵⁵

On 3 February, convoy RA 56, consisting of thirty-seven merchant ships escorted by twenty-three warships, sailed from Murmansk.⁵⁶ The Germans deployed ten U-boats⁵⁷ across the expected course. Departure from Murmansk and the first stages of the voyage westward were covered by Russian aircraft. One aircraft sighted U-278 on 3 February and forced the U-boat to submerge. As a result, Captain (U/B) Norway directed that the U-boats remain submerged by day to "avoid the enemy discovering the patrol line." The next day, U-716 sighted three destroyers, but lost contact. On 6 February, a GAF reconnaissance aircraft sighted the convoy and shadowed it for a while transmitting radio beacon signals. Owing to bad weather, it lost contact.

Luck was with the Allies. Under cover of poor visibility and strong gales blowing from the east, RA 56 made a fast passage from Murmansk without coming into contact with the U-

boats, other than obtaining several long range HF/DF bearings. She arrived in Scotland on 9 February, without being attacked.⁵⁸

The Allies in the operations involving convoys JW 56A, JW 56B, and RA 56 successfully sailed thirty-one merchant ships to north Russia and thirty-seven merchant ships back from Murmansk to Scotland at the cost of one destroyer sunk, one destroyer damaged, and three merchant ships⁵⁹ sunk. No U-boats were seriously damaged. The Germans thought that they had won a large victory, for Captain (U/B) Norway estimated that the U-boats had sunk, from JW 56A and JW 56B combined, seven destroyers and four merchant ships, with another three destroyers probably having been sunk and six merchant ships "torpedoed," although their sinking had not been observed. A further six destroyers and one merchant ship were thought to be damaged.⁶⁰ This gross over-estimation came about because the Germans equated the number of torpedoes exploding at the end of their runs without being observed with successful attacks on Allied ships.

As far as the convoys to north Russia were concerned, each side enjoyed advantages that could at times be crucial. When attacking convoys sailing to north Russia, the Germans had the geographical advantage. A lack of sea room made evasive routing difficult and the Allied ships had to run, almost every time, a gauntlet of GAF and U-boat bases in northern Norway. For a number of reasons, communications intelligence was only of limited importance in overcoming this advantage of the enemy and hence in determining the outcome of the battles. Communications intelligence, in the form of decrypted German radio messages, however, gave the Allies important information concerning the locations of the U-boats.

At times, it was not possible to make full use of such information. For example, using information obtained from communications intelligence, the Allies attempted to route JW 56B around the northern end of a U-boat patrol line, but lack of sea room and GAF reconnaissance aircraft made such evasive routing nearly

impossible. In the end, JW 56A, JW 56B, and RA 56 had no other choice but to pass through the U-boat formations. At the same time, communications intelligence, in the form of radio traffic analysis, also alerted the Germans to the fact that the convoys were at sea, giving Captain (U/B) Norway general but useful information, such as the approximate location of the ships.

Working to the advantage of the Allies was the comparatively short length of the voyage and the relatively high speeds of the convoys, which greatly limited the amount of time the U-boats could be in contact with the ships. In addition, harsh Arctic weather and conditions of almost total darkness, while subjecting the crews of American and British ships to hardship, worked to the tactical advantage of the Allies. German aircraft and U-boats, for the most part lacking sophisticated electronic detection devices, had to rely on the human eye and hydrophone to gain and maintain contact with the enemy.

Of much greater importance to the Allies than communications intelligence was being equipped with sophisticated and technologically advanced types of electronic detection devices,⁶¹ which time and time again gave the escorts warning of the presence of U-boats. When an enemy craft had been detected by either HF/DF, sonar, or radar, one of the most effective tactics was to attack and force the enemy to lose contact with the Allied ships. U-boats, lacking sophisticated electronic devices and not being true submersibles, similar to nuclear submarines, were incapable of counter-acting such electronic detection devices and anti-submarine tactics. Perhaps their weakness in shipborne electronic devices should have been offset by GAF aircraft. Both JW 56A and JW 56B were sighted and shadowed by the GAF, but the Germans, owing to a shortage of aircraft and poor coordination between the GAF and the U-boats, were unable to exploit fully the advantages of air power. Without a great effort made by the GAF, which would not be forthcoming, the U-boats could only harass, but not prevent, the Allies from sailing convoys to north Russia.

At the beginning of 1944, the U-boat was a

weapon system whose time had come and gone. During 1943, in the convoy battles of the North Atlantic, the U-boats had been decisively defeated.⁶² Following such a defeat, attacks against Murmansk convoys were nothing more

than a desperate holding operation on the part of the Germans, with an obsolete weapon system, in an attempt to prevent the flow of military supplies to Russia.



NOTES

1. Public Record Office, ADM 223/469, Godfrey to DNI, 14 June 1945. Hereafter, PRO.
2. Cf. Admiralty Historical Section, *Arctic Convoys, 1941-1945* (London, 1954); Paul Kemp, *Convoy! Drama in Arctic Waters* (London: 1993).
3. The revelation of the existence of *ultra* resulted in a number of people rushing into print and overstating the importance of code breaking in the naval war against the Germans, while ignoring other types of communications intelligence. This trend was checked by the publication of F. H. Hinsley, *British Intelligence in the Second World War* (London: 1979-1990). This is the British official history, giving an overview and mostly relating when and how the British government became aware of various German activities. Besides Hinsley's work, there are also a number of accounts, or general surveys, of the Battle of the Atlantic, such as Dan van der Vat, *The Atlantic Campaign: World War II's Great Struggle at Sea* (New York: 1988); John Terraine, *U-Boat War, 1916-1945* (New York: 1989); and Correlli Barnett, *Engage the Enemy More Closely: The Royal Navy in the Second World War* (London: 1991), which pass, although all too quickly, over the subject of communications intelligence. Another category includes David Kahn, *Seizing the Enigma: The Race to Break the German U-Boat Codes, 1939-1943* (Boston: 1991) and Ralph Bennett, *Behind the Battle: Intelligence in the War with Germany, 1939-45* (London: 1994), 168-201, which deal with code breaking and attempt, albeit in general terms, to assess the importance of communications intelligence in the war at sea. One of the few books which shows in any detail the actual role of communications intelligence in the Battle of the Atlantic is David Syrett, *The Defeat of the U-boats: The Battle of the Atlantic* (Columbia, S.C.: 1994). Moreover, all of the above books are basically about the fighting in the North Atlantic and deal only in passing, if at all, with battles along the convoy routes to north Russia. In fact, with the exception of the analysis of the intelligence failure, which resulted in the destruction of Convoy PQ 17, there are no studies in which communications intelligence documents are integrated with other historical materials relating to the Murmansk convoys.
4. Admiralty Historical Section, *Arctic Convoys*, 129.
5. T. H. Veil Motter, *The Persian Corridor and Aid to Russia* (Washington, DC), 481-485; Francis L. Loewenheim, Harold D. Langley, Manfred Jonas, eds., *Roosevelt and Churchill: Their Secret Wartime Correspondence* (London: 1975), 254-257, 323-324, 380-383.
6. S. W. Roskill, *The War at Sea, 1939-1945* 2 (London: 1954-1961), 290.
7. Jefferson Davis, Charles Bullfinch, John B. Quitman.
8. PRO, ADM 199/77, Convoy JW 56A — Report of Proceedings by Senior Officer Local Escort.
9. COMNAVEU to CNO, Convoys JW 56A-JW 56B, 22 Jan. 1944, 10th Fleet Convoy & Routing Files, Box 67, Naval Historical Center, Washington, D.C.; PRO, ADM 199/77, Vice Admiral Commanding First Cruiser Squadron to Commander-in-Chief, Home Fleet, 1 February 1944.
10. US cargo ships: *Penelope Barker*, Richard H. Alvey, William Tyler Page, Andrew G. Curtin, Charles Scribner, Thorstein Veblen, Woodbridge N. Ferris, Edwin L. Drake. British cargo ships: *Fort Slave*, Empire Ploughman, *Fort Bellingham*. Dutch cargo ship: *Aert Van Der Neer*. British tankers: *San Cirilo*, *San Adolfo*. Norwegian tanker: *Noreg*.
11. HMS Hardy, HMS Savage, HMS Venus, HMS Offa, HMS Obdurate, HMS Inconstant, HMS Vigilant, HMS Virago, HMS Poppy, HMS Dianella, HN or MS Stord.
12. PRO, ADM 199/77, Vice Admiral Commanding First Cruiser Squadron to Commander-in-Chief, Home Fleet, 9 Feb. 1944; List of Convoy JW 56A (Extension), 10th Fleet Convoy & Routing Files, Box 67, Naval Historical Center, Washington, DC.
13. PRO, ADM 223/171, "TIRPITZ" — State of Readiness: U-boat Situation, Week ending 3.1.44; U-boat Situation, Week ending 31.1.44; Roskill, *War at Sea* 3:1, 267.
14. U-957, U-956, U-278, U-739, U-601, U-360.
15. PRO, ADM 223/19, f. 78; National Archives, Record Group 457, "German Navy/U-boat Message Translations & Summaries," 02 Feb. 1941-09 July 1945, SRGN 001-49668, ff. 30757, 30811. Hereafter, SRGN.
16. *War Diary*, Operations Division, German Naval Staff, 25 January 1944. Microfilm edition of the English translation of this source; the original at the

- Naval Historical Center, Washington, DC This source states that JW 56A departed from Reykjavik on 20 January, which is clearly in error.
17. Hinsley, *British Intelligence* II, 553-554, 631-639; *British Intelligence* IV, 111, 193, 196.
 18. PRO, DEFE 3/726, intercepted 1304/13/1/44, decoded 0847/15/1/44; DEFE 3/379, intercepted 1749/25/1/44, decoded 0435/26/1/44.
 19. PRO, DEFE 3/728, intercepted 2157/21/1/44, decoded 0345/22/1/44; intercepted 2004/22/1/44, decoded 2305/23/1/44; intercepted 2337/23/1/44, decoded 0208/23/1/44; intercepted 1128/23/1/44, decoded 2129/23/1/44; intercepted 1738/24/1/44, decoded 1636/25/1/44.
 20. PRO, ADM 223/19, f. 78; SRGN, ff. 30629, 30792; Hinsley, *British Intelligence* II, 548.
 21. PRO, ADM 199/2027, *Analysis of Operations in the Vicinity of Convoys J. W. 56A, J. W. 56B and R. A. 56, January - February 1944*; DEF 3/379, intercepted 0231/25/1/44, decoded 0643/25/1/44; intercepted 1051/25/1/44, decoded 1403/25/1/44; intercepted 1257/25/1/44, decoded 0314/26/1/44; intercepted 1059/25/1/44, decoded 1359/25/1/44; SRGN ff. 30908, 30909.
 22. PRO, ADM 199/77, *Report of Proceedings - Operation F. W. Captain (D) Twenty Sixth Destroyer Flotilla to Commander-in-Chief Home Fleet, 10 Feb. 1944*; DEFE 3/379, intercepted 1534/25/1/44, decoded 0109/26/1/44.
 23. PRO, DEFE 3/379, intercepted 1522/25/1/44, decoded 0318/26/1/44.
 24. PRO, ADM 199/2027, *Analysis of Operations in the Vicinity of Convoys J. W. 56A, J. W. 56B and R.A. 56, January - February 1944*.
 25. SRGN f. 30994; PRO, ADM 199/77, *Narrative of Torpedoing of H.M.S. Obdurate*.
 26. PRO, DEFE 3/379, intercepted 1835/25/1/44, decoded 0401/26/1/44; intercepted 1941/25/1/44; intercepted 2330/25/1/44, decoded 0403/26/1/44.
 27. PRO, ADM 199/77, *Commanding Officer HMS Savage to Captain (D) Twenty Sixth Destroyer Flotilla, 27 Jan. 1944*; DEFE 3/379, intercepted 0132/26/1/44, decoded 0614/26/1/44.
 28. PRO, ADM 199/77, *Report of Proceedings [HMS Offa] J. W. 56A, 12 January-27 January 1944*; DEFE 3/379, intercepted 0452/26/1/44, decoded 0900/26/1/44; SRGN f. 31003; Jurgen Rohwer, *Axis Submarine Successes* (Annapolis: Naval Institute Press, 1983), 204.
 29. PRO, ADM 199/77, *Report of Proceedings - Operation F. W. Captain (D) Twenty-Sixth Destroyer Flotilla to Commander-in-Chief Home Fleet, 10 Feb. 1944*; DEFE, 3/379, intercepted n 1041/26/1/44, decoded 1910/27/1/44; intercepted 1231/26/1/44, decoded 2325/25/1/44; SRGN ff. 30980, 30989, 30997, 31007, 31023, 31033, 31035, 31041.
 30. PRO, DEFE 3/380, intercepted 1504/26/1/44, decoded 2248/27/1/44; SRGN ff. 31054, 31055, 31066.
 31. PRO, DEFE 3/380, intercepted 2056/26/1/44, decoded 0053/28/1/44; intercepted 2118/26/1/44, decoded 2120/27/1/44; intercepted 2241/26/1/44, decoded 23/28/1/44; intercepted 2337/26/1/44, decoded 0004/28/1/44.
 32. War Diary, Operations Division, German Naval Staff, 26 Jan. 1944.
 33. PRO, DEFE 3/380, intercepted 0045/27/1/44, decoded 0010/28/1/44; intercepted 0215/27/1/44, decoded 2306/27/1/44; DEFE 3/381, intercepted 0845/27/1/44, decoded 2338/27/1/44; SRGN ff. 31111, 31117, 31133, 31136, 31176.
 34. U-957, U-425, U-965. SRGN ff. 31156, 31159.
 35. U-956, U-472, U-716, U-314, U-601, U-737, U-739. PRO, DEFE 3/380, intercepted 1425/27/1/44, decoded 0300/28/1/44.
 36. PRO, DEFE 3/380, intercepted 1445/27/1/44, decoded 0250/28/1/44; intercepted 1324/28/1/44, decoded 0141/29/1/44; intercepted 1744/28/1/44, decoded 0542/29/1/44; intercepted 2137/28/1/44, decoded 0359/29/1/44.
 37. US cargo ships: *Charles Bulfinch*, *Abner Nash*, *Albert C. Ritchie*, *Charles A. Mackuster*, *Edward L. Grant*, *Henry Bacon*, *Henry Wynkoop*, *John H. B. Latrobe*, *Paul Hamilton Hayne*, *Robert Lowry*, *Samuel McIntyre*, *Winfred L. Smith*, *Willard Hall*. British cargo ships: *Empire Tourist*, *Fort Creva-coeur*, *Fort Norfolk*. COMNAVEU to CNO, Convoy JW 56A-JW 56B, 22 Jan. 1944, 10th Fleet Convoy & Routing Files, Box 67, Naval Historical Center, Washington, D.C.
 38. HMS *Westcott*, HMS *Wrestler*, HMS *Whitehall*, HMS *Cygnat*, HMS *Rhododendron*, HMS *Honey-suckle*, HMS *Oxlip*, HMS *Onyx*, HMS *Hydra*, HMS *Seagull*.
 39. HMS *Milne*, HMS *Musketeer*, HMS *Opportune*, HMS *Mahratta*, HMCS *Huron*, HMS *Scourge*.
 40. PRO, ADM 199/2027, *Analysis of the Operations in the Vicinity Convoys J. W. 56A, J. W. 56B and R. A. 56, January - February 1944*.
 41. PRO, ADM 199/2027, *Analysis of Operations in the Vicinity of Convoys J. W. 56A, J. W. 56B and R.A. 56, January - February 1944*; ADM 223/19, ff. 80-81; DEFE 3/380, intercepted 1638/28/1/44, decoded 0431/28/1/44; intercepted 1744/28/1/44, decoded 0542/29/1/44; intercepted 1324/28/1/44, decoded 0542/29/1/44.
 42. PRO, ADM 199/77, *Operation FW - Passage of Convoy JW 56B*, Narrative ADM 223/19, f. 81; DEFE 3/380 intercepted 0934/29/1/44, decoded 1959/29/1/44; intercepted 0929/29/1/44; intercepted 1055/29/1/44, decoded 1502/29/1/44.
 43. PRO, ADM 199/2027, *Analysis of Operations in the Vicinity of Convoys J. W. 56A, J. W. 56B and R.A. 56, January - February 1944*.
 44. PRO, DEFE 3/380, intercepted 1531/29/29/1/44, decoded 2050/29/1/44; intercepted 1618/29/1/44, decoded 2135/29/1/44; intercepted 1647/29/1/44, decoded 2135/19/1/44; intercepted 1857/29/1/44, decoded 2209/29/1/44; intercepted 2032/29/1/44, decoded 2311/29/1/44.
 45. HMS *Hardy*, HMS *Savage*, HMS *Venus*, HMS *Offa*, HMS *Inconstant*, HMS *Vigilant*, HMS *Virago*, HN-MS *Stord*.

46. PRO, ADM 199/77, J. W. 56B, 28–31 January 1944; ADM 199/2027, *Analysis of Operations in the Vicinity of Convoys J. W. 56A, J. W. 56B and R.A. 56, January — February 1944*.
47. U-425, U-957, U-278, U-360.
48. PRO, ADM 223/19, f. 81.
49. PRO, ADM 199/2027, *Analysis of Operations in the Vicinity of Convoys J. W. 56A, J. W. 56B and R.A. 56, January — February 1944*; Rohwer, *Axis Submarine Successes*, 204.
50. PRO, ADM 199/77, *Operation FW — Passage of Convoy JW 56B, Narrative*; ADM 223/19, f. 82; DEF 3/381, intercepted 1210/30/1/44, decoded 0551/31/1/44; intercepted 1220/30/1/44, decoded [—].
51. PRO, ADM 199/2027, *Analysis of Operations in the Vicinity of Convoys J. W. 56A, J. W. 56B and R.A. 56, January — February 1944*; DEFE 3/381, intercepted 2000/30/1/44, decoded 0525/31/1/44; intercepted 2103/30/1/44, decoded 0445/31/1/44; intercepted 2223/30/1/44, decoded 0520/31/1/44.
52. PRO, DEFE 3/381, intercepted 2120/31/1/44, decoded 0741/31/1/44; intercepted 0537/31/1/44, decoded 1059/31/1/44; intercepted 0519/31/1/44, decoded 1217/31/1/44; intercepted 0828/31/1/44, decoded 1130/31/1/44; intercepted 0928/31/1/44, decoded 1438/31/1/44.
53. PRO, ADM 199/2027, *Analysis of Operations in the Vicinity of Convoys J. W. 56A, J. W. 56B and R.A. 56, January — February 1944*; DEFE 3/381, intercepted 2130/31/1/44, decoded 0118/1/2/44; intercepted 1817/31/1/44, decoded 0030/1/2/44; intercepted 2130/31/1/44, decoded 0118/1/2/44.
54. PRO, ADM 199/77, *Operation FW — Passage of Convoy JW 56B, Narrative*; DEF 3/381, intercepted 1549/1/2/44, decoded 0217/2/2/44; intercepted 1549/1/2/44, decoded 0217/2/2/44.
55. PRO, ADM 199/2027, *Analysis of Operations in the Vicinity of Convoys J. W. 56A, J. W. 56B and R. A. 56, January — February 1944*; DEFE 3/380, intercepted 1134/29/1/44, decoded 0141/30/1/44.
56. HMS *Milne*, HMS *Vigilant*, HMS *Mahratta*, HMS *Muskeeter*, HMS *Offa*, HMS *Obdurate*, HMS *Venus*, HMS *Virago*, HMS *Savage*, HMS *Stork*, HMCS *Huron*, HMS *Matchless*, HMS *Opportune*, HMS *Scourge*, HMS *Cygni*, HMS *Speedwell*, HMS *Hkyon*, HMS *Oxip*, HMS *Poppy*, HMS *Inconstant*, HMS *Hussar*, HMS *Dearilla*. PRO, ADM 199/77, *Mercantile Convoy No. RA 56*.
57. U-956, U-957, U-425, U-427, U-313, U-716, U314, U-737, U-278, U-990.
58. PRO, ADM 199/77, Captain (D), 3rd Destroyer Flotilla to Commander-in-Chief, Home Fleet, 15 Feb 1944; ADM 199/2027, *Analysis of Operations in the Vicinity of Convoys J. W. 56A, J. W. 56B and R. A. 56, January–February 1944*; DEFE 3/382, intercepted 1149/3/2/44, decoded 15/3/2/44; DEFE 3/383, intercepted 12/3/2/44, decoded 0004/4/2/44; intercepted 2050/4/2/44, decoded 0232/5/2/44; intercepted 2130/4/2/44, decoded 0249/5/2/44; intercepted 1848/6/2/44, decoded 2155/6/2/44.
59. HMS *Hardy* was sunk. HMS *Obdurate* was damaged. And the merchant ships *Penelope Barker*, *Fort Bellingham*, *Andrew G. Curtin* were sunk.
60. PRO, DEFE 3/382, intercepted 1850/1/2/44, decoded 0252/1/2/44.
61. For an account of detection devices employed by the Allies, see Norman Friedman, *Naval Radar* (Annapolis: Naval Institute Press, 1981); Willem Hackmann, *Seek & Strike: Sonar, Anti-Submarine War and the Royal Navy* (London: 1984); Kathleen Broome Williams, *Secret Weapon: U.S. High-Frequency Direction Finding and the Battle of the Atlantic* (Annapolis: Naval Institute Press, 1996).
62. Syrett, *The Defeat of the U-Boats*.