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NAVAL STAFF MONOGRAPHS  
(HISTORICAL)—VOLUME XIX

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HOME WATERS—Part IX

May, 1917—July, 1917

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May, 1917—July, 1917

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May to July, 1917

## Introduction

This volume covers the period from May to July, 1917. It deals with the constitution of the Naval Staff in May and the introduction of the convoy system for homeward bound trade. The German submarine movements are given for the South-West Approach, the Channel and the North Sea, and the measures taken to circumvent them. In June, an important modification was introduced into the Approach Route system in the case of Approach Route B (West of Ireland), where fixed rendezvous with fixed routes, changing periodically, were introduced (S.163), though this change was not extended to Approach Routes A (S.W. Approach) and C (North of Ireland) till August. The Harwich Force on May 10 and June 5 was engaged with German destroyers (S.139), and in June and July was occupied in intercepting German ships, trading between Germany and Holland (S.188). At Dover a portion of the barrage was being relaid and preparations were in train in July for a landing on the Belgian coast in conjunction with the Passchendaele campaign (S.189, 190). July was a month of development and extension of the convoy system. The Grand Fleet suffered a severe blow when H.M.S. *Vanguard* blew up in Scapa Flow on July 9 (S.185).

## Note on Sources

The Admiralty Telegrams for May, 1917, will be found in H.S. 442-450, for June in H.S. 457-465, and for July in H.S. 477-486. Special Telegrams (based on intercepts) are in H.S. 645. Grand Fleet movements are in Grand Fleet Reports of Proceedings, January to September, 1917, H.S. 875.

Movements of Commodore (T) are in Commodore (T)'s Diary, H.S. 247.

Movements of British Submarines are in Volumes as follows:—

9th Flotilla (Harwich), in Commodore (S) War Records, H.S.A. 273-274; 10th Flotilla (Tees), in H.S.A. 227; 11th Flotilla (Blyth), H.S.A. 277; 12th and 13th Flotillas (Grand Fleet), in H.S.A. 127; *Platypus*' Flotilla (Buncrana) in H.S.A. 278; Dover Papers in H.S.A. 296-317.



Minelaying, British, will be found in Captain Lockhart Leith's History of Minelaying (typescript) and in H.S.A. 837-850, which cover the whole field of policy and execution.

Minesweeping information will be found in Minesweeping Statements (Fortnightly Report), H.S.B. 170.

### Submarine Campaign.

Home Waters, Ships Attacked, I.D. Volumes 643-652.

The Logs of E.I. Section, I.D. (Enemy Submarines' Section), contain reports of sightings of, sinkings and attacks by, and attacks on German Submarines.

Return of Submarine Losses, C.B. 1292.

I.D. War Diaries (Enemy Intercepts) and I.D. Submarine History Sheets.

Decoy Ship Reports (Queenstown), H.S. 647, also Actions between Special Service Vessels and Enemy Submarines, C.B. 01496.

Return of Merchant Shipping (Losses), Command 199, Admiralty, August 19, 1919 (British Merchant Ships Lost and Attacked).

Foreign Vessels, Sunk or Damaged, Naval Staff, January 1, 1919.

German Minefields (High Sea Fleet Submarines) in O.U. 6020A.

German Minefields (Flanders Submarines) in O.U. 6020B.

Information from German Historical Section.

The German naval historical section previously known as "Marine-Archiv" changed its name in 1936 to "Kriegswissenschaftliche Abteilung der Marine" (War Research Department).

*Nam neque validiores opibus ullae inter se civitates gentesque contulerunt arma, neque his ipsis tantum unquam virium aut roboris fuit, et haud ignotas belli artes inter sese, sed expertas primo Punico conserebant bello, et adeo varia fortuna belli ancepsque Mars fuit, ut propius periculum fuerint, qui vicerunt.—Livii, Liber XXI.*

*For no more powerful states or peoples had ever met in arms and the combatants themselves had never been so strong in men or might. Each too, in the first Punic war, had gained experience of the skill and devices of the other; so uncertain, moreover, was the varying fortune of war that those who finally conquered had come nearest to the brink of ruin.—Livy, Book XXI (of the war between Rome and Carthage, 264-241 B.C.).*

## CHAPTER I.

### OPERATIONS IN THE NORTH SEA, MAY 1917.

**1. Sweep for Raider Reported Homeward Bound, April 29-May 5.**—The beginning of May found British light cruisers searching the North Sea once again for an enemy raider. Information to expect one, homeward bound, had been sent to the Commander-in-Chief on April 29,<sup>1</sup> and he at once sent out the *Calliope* and *Comus* of the 4th Light Cruiser Squadron (Commodore Charles E. Le Mesurier) and two destroyers to patrol an area between 62° and 63° N., and 0° and 3° E. Patrolling to the north-westward of them, in an area extending from 63° to 66° N. and from 0° to 5° W. was the 2nd Cruiser Squadron (Rear-Admiral Sydney Fremantle), while British submarines were watching the coast of Norway between Utvaer and Utsire. Submarine G.10, too, had been patrolling off Bergen and, on the 29th, was returning to Scapa where she was due at 4 p.m. on April 30.<sup>2</sup>

The short hours of darkness and the danger of submarine attack necessitated the light cruisers proceeding at 18 knots for 16 hours in every 24. This placed a severe strain on the fuel endurance of the destroyers and during the night of April 30 an attempt was made to fuel the *Minion* from the *Calliope*, which had to be abandoned,<sup>3</sup> however, owing to the swell.

On May 1, the *Cambrian* and *Caroline* went out from Scapa and relieved the *Comus* and *Calliope*, and were, themselves, in turn, relieved on the 3rd by the *Chatham* and *Chester*.<sup>4</sup> Three days later, as nothing more had been heard of the raider, the light cruiser patrol was withdrawn.<sup>5</sup>

The report had no real foundation. Of the three raiders which had been operating on the high seas at the beginning of 1917, the *Moewe* had already got home, the *Wolf* was far away and the *Seeadler* was in the Pacific, where she continued to work till she was wrecked on Nopeha Island<sup>6</sup> on August 2, 1917.

**1A. Dover, Coastal Motor Boats, May 2.**—On May 2, at 8.20 p.m., four British coastal motor boats (Nos. 2, 7, 10 and 13) left Dunkirk to attack any destroyer they might find off Zeebrugge. At 9.43 p.m.

<sup>1</sup> H.S. 645/269, April 29/1805.

<sup>2</sup> H.S.A. 225, Grand Fleet Orders and Memoranda, April 29.

<sup>3</sup> H.S.A. 342/416.

<sup>4</sup> H.S.A. 225, May 3.

<sup>5</sup> H.S. 645/273.

<sup>6</sup> Papers titled "Colonial Office, September 25, 1917."



they were off Nieuport, whence they proceeded to a position  $8\frac{1}{2}$  miles to the north of Ostende Pier; thence they shaped course N. 81 E. for a position 2 miles north of Zeebrugge occulting buoy.<sup>1</sup> They had hardly steadied on this course when shells began bursting overhead coming from three German destroyers coming up astern. They manœuvred at once to attack, but as they did so C.M.B. No. 7 broke down, and when she got going again the Germans were only 500 yards away. She lost sight of them and returned to Dunkirk, followed by C.M.B. 10. C.M.B. 13 carried away her steering wire and, careering thrice round at full speed, fired a torpedo, which missed, at the disappearing enemy. C.M.B. 2 came under heavy fire; her Captain, Lieutenant George Anson, R.N.V.R., was wounded, but she got safely back to Dunkirk. Admiral Bacon in his report remarked that he did not intend to allow these boats to operate on very light nights, but on medium dark nights to attack the enemy and on dark nights to waylay his raiding destroyers.<sup>2</sup>

**2. Encounter between British Light Cruisers and Zeppelin "L.43," May 4, 1917.**—The next day (May 3) at 5.50 p.m., a force consisting of the light cruisers *Sydney* (Captain John S. Dumaresq) and *Dublin* (Captain Albert C. Scott), and the destroyers *Nepean*, *Pelican*, *Pylades* and *Obdurate*, left Rosyth for one of the periodical sweeps of "M" Channel and Queen's Channel.<sup>3</sup> About 9 a.m., on May 4, they reached the southern end of "M" and shaped course for Queen's Channel.<sup>3</sup> The day was very fine, with light variable airs that scarcely stirred the surface of the smooth sea. Shortly after 10 a.m., the light cruisers reached the southern end of Queen's Channel and altering course to the northward at 10.5 a.m. had just completed the turn when the *Sydney* ordered the *Obdurate* to examine a sail bearing east. Although a slight haze lay over the water, the overhead visibility was very good, and at 10.25 a.m., in  $54^{\circ} 26' N.$ ,  $3^{\circ} 19' E.$ , the *Dublin* sighted a Zeppelin approaching from the eastward and reported it to the *Sydney*. The range of the airship was over 30,000 yards and both light cruisers turned and closed it at full speed. At 10.45 a.m., the *Dublin* opened fire with her foremost 6-in. gun at extreme range with common shell, and then with shrapnel with maximum fuze setting; the *Sydney* opened fire a little later. The Zeppelin, however, was not alone; at 10.54 a.m., in about  $54^{\circ} 27' N.$ ,  $3^{\circ} 37' E.$ , the *Dublin* observed the track of a torpedo pass ahead,<sup>4</sup> and at 11 a.m., the *Obdurate* sighted a submarine on her starboard side and opened fire. During the next 20 minutes the *Dublin* sighted submarines thrice and after firing at one of them,

<sup>1</sup> Position of the buoy was  $51^{\circ} 24' N.$ ,  $3^{\circ} 30' 40" E.$

<sup>2</sup> Dover papers, H.S. 1288/444.

<sup>3</sup> Two of the swept channels in the North Sea. Queen's Channel was swept after August 19. See "Home Waters," vii, 97, Plan 11.

<sup>4</sup> Submarine not identified. *U.94* was in the vicinity, but the German report states she did not fire a torpedo. H.S./Q.41.

dropped a depth charge near another. It was then 11.20 a.m. and, Captain Dumaresq thinking that the airship might be leading the British vessels into a submarine trap, altered course to the north-westward in the hope of drawing her in that direction. His ruse was entirely successful for she turned and followed him at a range of 15,000 yards, with the iron crosses and numbers painted on her plainly discernible, identifying her as *L.43*. She followed, for half an hour, and then, at 11.50 a.m., Captain Dumaresq, after sending the *Obdurate* and *Pylades* to examine a sail to the northward, which proved to be a Dutch fishing vessel, ordered the *Nepean* and *Pelican* to work round to the south-westward of her. By 12.15 p.m. she was surrounded and the light cruisers turned and attacked her again,<sup>1</sup> first with their 6-in. and then with their high-angle guns, while the destroyers opened fire with their pom-poms. She retaliated about 12.25 p.m. by dropping three heavy bombs so close to the *Obdurate* that some of the splinters fell on her deck, and then between 12.49 p.m. and 12.56 p.m., made a determined attack on the *Sydney*, dropping some 10 or 12 large bombs close to her,<sup>2</sup> which Captain Dumaresq evaded by keeping the airship on his beam and turning frequently which forced her to drop all of them across his track. Meanwhile the cruisers' gunfire had driven her up to a great height, which Captain Dumaresq estimated as never less than 20,000 ft., and none of the bombs hit. After making this attack, she turned away to the eastward.

At 1 p.m. another Zeppelin *L.42* came into sight far away over the E.N.E. horizon, but by that time both airships were out of range and the British force turning north-westward continued its sweep down Queen's Channel.<sup>3</sup>

On the German side, there had been a thick fog during the night in the Bight, where *L.43* had been patrolling off Terschelling with *L.42* to the north-east. *U.70*, on her way back from the west, reported herself in  $57^{\circ} 36' N.$ ,  $1^{\circ} 7' E.$  at 10.40 a.m. (May 4), nearly 200 miles north of the British force. At 12.36 p.m., *L.43* reported being chased by four cruisers in  $54^{\circ} 20' N.$ ,  $4^{\circ} 15' E.$ , which was passed to *U.94* at 1.31 p.m. (May 4) with orders to proceed towards Terschelling. She reported having attacked an enemy cruiser (the *Dublin*) escorted by destroyers in  $54^{\circ} 28' N.$ ,  $3^{\circ} 25' E.$ , but makes no mention of firing a torpedo, though she stated that she was damaged by a depth charge and forced to return.<sup>4</sup> By 3.20 p.m., when the British force disappeared, *L.43* had exhausted all her ammunition and was under the impression she had made a hit on a light cruiser.

<sup>1</sup> In  $54^{\circ} 29' N.$ ,  $3^{\circ} 12' E.$

<sup>2</sup> At least six of the bombs fell in two salvos of three bombs each, the splinters from one salvo falling on board the *Sydney*.

<sup>3</sup> Captain Dumaresq's report in H.S.A. 332/613.

<sup>4</sup> "Beschädigt durch Wasserbombe." The date given is May 3 (possibly an error) in the German report.



Actually, during an encounter lasting over two hours, neither side suffered any damage, though 10 days later *L.22* was to be less fortunate. Meanwhile, in the south, Commodore (T) had had a brush with the enemy and had driven them off the Dutch traffic route.

**3. Action between Harwich Force and German Destroyers, May 10.**—Early on the morning of May 10, Commodore Tyrwhitt, with a strong detachment of the Harwich Force, was returning from escorting the Dutch traffic across to the Hook, when he fell in with a flotilla of enemy destroyers near the North Hinder and a running fight lasting for more than an hour ensued. Twelve eastbound and 10 westbound steamers were crossing between England and Holland that night and the Commodore, in the *Centaur*, with the *Carysfort* and *Conquest*, had left Harwich at 2 p.m., May 9, with the *Nimrod* (Captain Rafe G. Rowley-Conwy) and the 3rd and 4th Destroyer Divisions, which were to escort the westbound ships. The *Lightfoot* (Commander Wion de M. Egerton) and 1st and 2nd Divisions had followed them at 5 p.m. escorting the eastbound vessels and at 3.30 a.m., May 10, after seeing the last eastbound steamer safely into territorial waters, had turned back. At 3.55 a.m., they were off the Maas Light Vessel steering N. 76 W. at 25 knots, while the *Nimrod's* division with the westbound traffic was some 15 miles west of the North Hinder.<sup>1</sup> Meanwhile, Commodore Tyrwhitt's cruisers with four destroyers in company had reached a position 6 miles E.N.E. of the North Hinder Light Vessel in 52° 9' N., 2° 47' E., and were steering N. 72 W. at 25 knots when they sighted to the south-westward, 8 or 9 miles off, steering towards the light vessel, 11 or 12 enemy destroyers disposed in two lines of five or six boats each, about half a mile apart. It was close on 4 a.m.<sup>2</sup> and the Commodore, turning south, worked up to full speed in an endeavour to head them off from Zeebrugge; at 4.5 a.m., the range having closed to about 13,000 yards, he opened fire in the growing dawn. In spite of the poor light, the fourth salvo straddled and the enemy promptly made off helter-skelter to the southward, opening a heavy fire in return and straddling the *Centaur* with their 4.1-in. guns at a range of 14,000 yards.

The weather was fine and the sea calm with a gentle breeze varying from southerly to easterly, but the light was not good for spotting, and the conditions were made worse by British funnel smoke and by an effective smoke screen put up by the Germans. In spite of these handicaps, the British salvos were falling among the enemy, some of them close enough to be regarded as hits.<sup>3</sup>

<sup>1</sup> H.S.A. 349/88; H.S.A. 149/369. The position of North Hinder was 52° 5' N., 2° 40' E., to which it had been moved on June 22, 1916.

<sup>2</sup> Commodore (T) and *Centaur's* reports say at 3.55 a.m.; *Carysfort's* report says 3.53 a.m.; *Conquest's* report says 3.50 a.m.

<sup>3</sup> *Conquest*, 4.9 a.m., and *Centaur*, H.S. 349/380. Note.—Time of sunrise, 4.17 a.m.



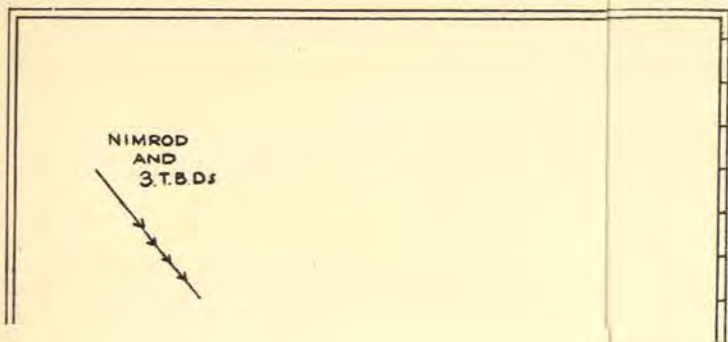
At 4.23 a.m., Commodore Tyrwhitt ordered the destroyers to chase south-west, but just as he gave the order most of the *Centaur's* signal staff were knocked out by the blast of her 6-in. gun fired on an extreme forward bearing. This delayed the signal, which was not received in the *Stork* until 4.30 a.m.; the destroyers too were "somewhat slow" in working up to full speed, for it was observed that the cruisers steaming 29 knots were keeping pace with them for a time. Then they began to go ahead and seemed to be gaining on the enemy, so far as glimpses of the latter could be caught through the pall of smoke.

By 5.2 a.m., however, the Germans were clearly out of range of the light cruisers, and Commodore Tyrwhitt, after turning four points and firing a few last salvos, being then close to Thornton Bank, reduced to 20 knots and turned 16 points, leaving the *Stork* and her division to continue the chase. Just then the *Lightfoot* (Commander W. de M. Egerton) and her division came in sight hurrying down from the north-east. She had received the signal reporting the enemy at 4.15 a.m. and made for Thornton Ridge to cut them off. At 5.5 a.m. she caught sight of a German destroyer, but it was far off and a ranging shot at 10,000 yards fell only half-way, though the *Stork* (Commander Francis A. W. Buller) was still ahead and hot on the trail. About 5.15 a.m. some of the German destroyers turned to attack her but, apparently sighting the *Lightfoot's* division, thought better of it and turned back. It was 5.30 a.m. when the Germans reached Wenduyn Bank just west of Zeebrugge and, discontinuing their smoke screen, turned into single line along the north edge of the Bank to make for home.

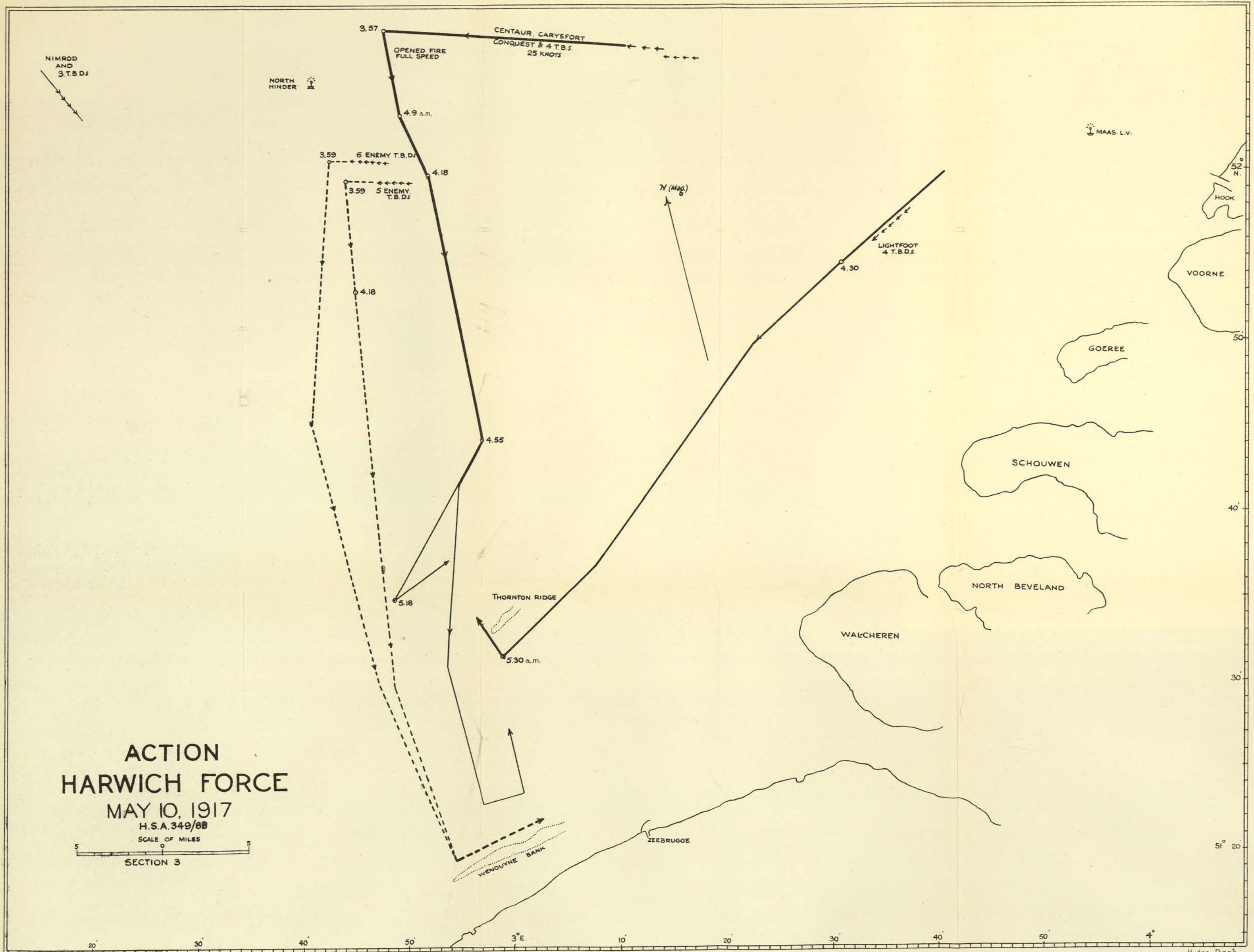
The *Stork* turned parallel to them, but finding the range too great turned in towards them to bring it down. This move however brought an immediate rejoinder from the shore batteries who opened a hot fire on her, their shells falling unpleasantly close and their splinters coming on board. By this time the enemy destroyers were far out of range of the light cruisers and at 5.33 a.m., Commodore Tyrwhitt made the general recall. The *Lightfoot*, observing the *Stork's* division under heavy fire from shore batteries, ordered her to cease fire and rejoin the flag and by 6 a.m. the force was on its way back to Harwich.

The German force had gone out to attack Dutch traffic. It consisted of the 3rd Flotilla (Commander Kahle) of eight boats—S.53 (Leader), V.71, V.73, V.81, G.91, S.54, V.70, S.55, and the Zeebrugge 1st Half Flotilla of four boats—which had orders to proceed to cruise between  $51^{\circ} 48' N.$  and  $52^{\circ} 12' N.$ , and  $2^{\circ} 40' E.$  and  $3^{\circ} E.$  The Zeebrugge 2nd Half Flotilla of four boats had orders to reconnoitre to the westward and the Flanders Torpedo-boat Flotilla of eight boats to perform the same task to the south-west. The British force was sighted at 3.49 a.m., but at 4.2 a.m., when the British opened fire, the range was too great for reply by any but

.AN I.







**ACTION  
HARWICH FORCE  
MAY 10, 1917**

H.S.A. 349/88  
SCALE OF MILES  
SECTION 3



the rear boats. At 4.13 a.m., G.91 fired a torpedo at the cruisers which was not seen by any British ship. The German flotilla reached the vicinity of Thornton Bank at 5 a.m. and then made for home. During the chase the *Sturgeon* (Commander Robert A. Hornell), one of the destroyers escorting the westbound traffic to the north of the action, met with a nasty accident. At 4.16 a.m., a depth charge exploded in her accidentally, damaging her stern so badly that she had to be taken in tow. The accident happened in about 52° 8' N., 2° 13' E., where the *Minos* took her in tow at 5 a.m. and brought her safely home. (Plan 1.)

The encounter was a sudden one and no hits were obtained on either side. The Dutch traffic got safely across and the Germans managed to get safely home. A week later the Harwich force was to have another brush in performing the same task.

4. **Bombardment of Zeebrugge,<sup>1</sup> May 12.**—The Harwich encounter was only a prelude to a much bigger operation in the south on May 12, when the *Nimrod* (10th Flotilla) and three destroyers of the Harwich Force were detached to support Admiral Bacon's command, which mustered in full force on that day for a bombardment of Zeebrugge. The force consisted of the monitor *Terror* (Captain Charles W. Bruton), flying the flag of Vice-Admiral Sir Reginald Bacon, and five other monitors, 10 destroyers of the 6th Flotilla under Commander Graham Edwards, six paddle minesweepers and 10 motor launches. Though the lock gates were not actually hit, a great deal of damage was done inside the port and an air intelligence report showed some 21 shots to have fallen within 50 yards of the lock gates, one of which disabled the machinery for 24 hours. Two days later the Germans received a nasty check in the air.

5. **The Destruction of "L.22," May 14.**—Early in the morning of May 14 a Curtiss flying-boat, Type 12H, No. 8666, left Yarmouth to patrol in the vicinity of the Dutch coast, under the command of Flight-Lieutenant C. J. Galpin, R.N.A.S. With him were Flight-Sub-Lieutenant Robert Leckie, as pilot, C.P.O. Whatling, as observer and wireless operator, and Air Mechanic J. R. Laycock, as engineer. When she left Yarmouth the machine carried 265 gallons of petrol (225 gallons in her tanks and 40 gallons in tins), four bombs weighing 100 lb. each, three Lewis guns and a supply of Brock, Pomeroy, and Buckingham inflammable ammunition. The flying-boat rose at 3.30 a.m., and for an hour and a quarter steered N. 80° E. to make the Terschelling Light Vessel. For many miles thick weather was encountered, and the low cloud bank which lay over the sea made the water invisible at heights varying from 20 ft. to 200 ft.

<sup>1</sup> Admiral Bacon's report of May 19 in H.S.A. 315/212. For a fuller account of the operation, see Monograph No. 18, O.U. 5413 (D), Dover Command, page 43.

At a height of 1,500 ft., however, the visibility extended to about a mile only and a south-east wind blowing about 12 miles an hour accompanied by heavy rain made the flying conditions extremely bad. Some 20 miles short of the Texel, however, they improved and the visibility increased to 15 or 20 miles. At 4.15 a.m., Lieutenant Galpin took over the pilot's wheel from Sub-Lieutenant Leckie and flew on without incident for more than half an hour. This interval of quiet ended abruptly at 4.48 a.m., when a Zeppelin, end on, came into sight some 10–15 miles ahead. The flying-boat was then at a height of 5,000 ft. and making 60 knots, her cruising speed; two minutes later, at 4.50 a.m., she passed the Terschelling Light Vessel, and climbing another thousand feet, increased to 65 knots. It was necessary to lighten her and at 5 a.m. three of her bombs were dropped and Leckie took over the wheel again, while C.P.O. Whatling went aft to the rear gun and Galpin manned the two Lewis guns mounted parallel in the bow. The airship by this time had turned 16 points to starboard and steadied on a north-easterly course, apparently being quite oblivious of the Curtiss against its background of dark fog and cloud, and turning merely to keep within the limits of her patrol. The flying-boat by this time was only some 2 miles astern of her and swooping to 5,000 ft., Galpin increased to 75 knots. He was within half a mile of the enemy and was still some 2,000 ft. above her, when the Zeppelin evidently sighted him and putting her nose up, increased speed. The British boat dived furiously at her at 90 knots, coming up slightly astern at a height of 3,800 ft., and levelling out at 75 knots, overhauled the airship about 20 ft. below the level of her gondolas, and at once opening a devastating fire with both Lewis guns at a range of 50 yards hit her starboard quarter with a stream of incendiary bullets. Then both guns jammed, fortunately not before the starboard gun had nearly emptied a complete tray. The combatants were by this time only 100 ft. apart and the flying-boat swung away to port while Galpin tried to clear his starboard gun. It was no longer needed. As the boat began to turn, a slight glow appeared inside the airship; she burst into a flame and, 15 seconds later, was hanging tail down at an angle of 45° with the lower half of the envelope well alight. Within a few seconds in a glowing mass she was plunging downwards tail first. As she fell C.P.O. Whatling saw the number "L.22" painted under her nose; he saw, too, one of her crew jump from her after-gun position on the top of her tail fin and another from her after gondola.<sup>1</sup> When she had fallen about 1,000 ft. four columns of water sprang up from the sea surface in quick succession, caused either by bombs or by her engines falling out. As she fell her envelope was burnt completely off; her bare skeleton plunged into the sea, leaving a mass of black ash on the surface, from which a tall column of brown smoke, 1,500 ft. high, rose and floated sullenly for a time.

<sup>1</sup> Neither of them had parachutes.



It was sighted about 5.20 a.m. by Flight-Lieutenant Egbert Cadbury, who had risen from Yarmouth in a Short seaplane at 3.45 a.m. and had followed much the same track as the flying-boat. By the time he reached the spot, some 18 miles to the N.N.W. of the north end of Texel Island,<sup>1</sup> the flying-boat had left the scene of action and there was nothing in sight but a solitary trawler 7 miles away to the south-east. Meanwhile, the Curtiss machine had been making for home and, flying through heavy rain nearly all the way, reached Yarmouth at 7.30 a.m. Beyond being struck by two bullets, she had suffered no damage and her crew returned from their memorable and dramatic achievement to receive the decorations they had so suddenly and splendidly earned.<sup>2</sup>

#### 6. Third German Battle Squadron Ordered to Baltic, May 15.—

On May 15, orders were issued by the German Commander-in-Chief that the 3rd Battle Squadron of Königs,<sup>3</sup> together with the light cruiser *Königsberg* and 5th Destroyer Flotilla, were to be detached to the Baltic. This was the strongest battle squadron in the High Sea Fleet, and the signal<sup>4</sup> intercepted and decoded at Whitehall, promised to ease the outlook in the North Sea.

The very next day (May 16) however, directionals placed the High Sea Fleet off the Jade and it was thought that they were assembling for another sortie. The Grand Fleet was ordered to short notice at 11.18 a.m., the Dutch traffic was stopped, and minelayers proceeding to the Bight were recalled; at 3.16 p.m., the Harwich Force was ordered to 1½ hours' notice; orders were sent out to stop south-bound traffic on the East Coast and order it into the Humber. At 5.45 p.m. a warning was sent out to prepare for a coast raid. The alarm did not materialise. Actually, the High Sea Fleet had only gone out for exercise<sup>5</sup>; no raid took place and at 7.15 a.m., on May 17, normal conditions were resumed.<sup>6</sup>

#### 7. Harwich Force Encounters Enemy Destroyers in a Dense Fog, May 17.—

Late on the night of May 17, a destroyer division of the Harwich Force, escorting the Dutch traffic once again, ran into German destroyers some 20 miles E.S.E. from the North Hinder. The meeting was entirely unforeseen; the night was pitch dark and a dense fog making it darker, cast a thick cloak of uncertainty

<sup>1</sup> Galpin gives position as 53° 25' N., 4° 35' E.; Cadbury as "Approximately 53° 20' N., 4° 30' E."

<sup>2</sup> Flight-Lieutenant C. J. Galpin: received D.S.O.; Flight-Sub-Lieutenant R. Leckie, D.S.C.; C.P.O. Whatling and Air Mechanic Laycock, D.S.M.s M.05937/17 in X.10066/17, Commodore Lowestoft and M.66920/17.

<sup>3</sup> *König* (Vice-Admiral Behncke), *Grosser Kurfürst*, *Markgraf*, *Kronprinz*, *Bayern*—All ten 12-in., fourteen 5·9-in.

<sup>4</sup> I.D., Vol. 3028/65, War Diary, signal May 15/2126, Chef der Hochseestreitkräfte to Hochseeflotte.

<sup>5</sup> I.D., Vol. 3028/67.

<sup>6</sup> Special Telegrams H.S. 645/290; H.S. 446/760, 769, 789, 808, 1053.

over the happenings of the night. Commodore Tyrwhitt's orders for the Dutch traffic on that night were contained in a memorandum dated May 17. Thirteen steamers and some Dutch tugs were crossing to Holland, while a dozen more were making the return journey. The eastbound vessels were to cross the meridian of 2° E. in latitude 52° 5' N., at 6.30 p.m. on May 17, then make for the Hook of Holland, passing 3 miles south of the North Hinder and 3 miles south of the Maas Light Vessel. The westbound vessels after leaving the Hook of Holland at 7.30 p.m., May 17, were to proceed direct to a position in latitude 52° 20' N., longitude 3° E. and thence, after crossing 2° E. in latitude 52° 5' N., to the War Channel. Orders for the escorting vessels were attached.

The light cruisers *Centaur* (Flag), *Penelope* and *Canterbury*, with the *Lightfoot*, and 4th and 5th Destroyer Divisions, were to sail in company "as soon as ready" and proceed through the Sledway.

The 1st and 3rd Destroyer Divisions escorting eastbound traffic were to follow them at 4.30 p.m. The *Undaunted*, *Cleopatra* and *Carysfort*, were to sail from Harwich at 7.30 p.m., and anchor in Hollesley Bay<sup>1</sup> until 2.30 a.m., May 18, when they were to proceed to the North Hinder, being joined by the leading division of west-bound traffic near 2° E., and cruise there until Commodore Tyrwhitt joined them about 4 a.m.

The Commodore in the *Centaur* (Captain Barry E. Domvile), with his cruisers and the *Lightfoot's* divisions sailed at 2 p.m. (May 17) and, after passing the North Hinder at 5.45 p.m., arrived at the Maas about 7.30 p.m. On reaching it the *Lightfoot* and six destroyers remained behind to wait for the west bound traffic, and at 8 p.m. sighted seven steamers near the light vessel. The weather, which had been foggy and wet throughout the afternoon, had grown worse and none of the steamers could be identified. After leaving the *Lightfoot* at the Maas, Commodore Tyrwhitt and the light cruisers proceeded westward for the Schouwen Bank at 15 knots. At 8.40 p.m., when they reached a position<sup>2</sup> off the Schouwen Bank, about 20 miles, S. 70 W., from the Maas Light Vessel, loud shouts were heard apparently from a small boat,<sup>3</sup> and in a visibility of only 3 or 4 cables, the force turned back to investigate. For an hour it searched without success, and then after steering S. 59 W. from 9.40 p.m. until 10.3 p.m., proceeded eastwards towards the North Hinder Light Vessel.

At 11.5 p.m., faint flashes were seen to the northward and a wireless message from the *Sylph* reported enemy vessels proceeding S.S.E. For 10 minutes the Commodore made towards the flashes,

<sup>1</sup> Between Harwich and Orfordness.

<sup>2</sup> About 51° 50' N., 3° 26' E. The position of the Maas Light Vessel was 52° 1' 20" N., 3° 53' E., at the time.

<sup>3</sup> Not identified.



then turned E.N.E. and finally south-west. There was no sign of the enemy and at 12.30 a.m. (May 18) he made for the rendezvous to meet the *Stork's* division. The visibility was barely 5 cables and by 1.50 a.m., as the fog had become so dense as to offer little hope of sighting anything, Commodore (T) ordered the *Stork* and 1st Division to meet him at the rendezvous.<sup>1</sup>

8. The "*Sylph*" and "*Setter*," May 17.—The destroyers *Stork* and *Sylph*, leaders of the 1st and 3rd Divisions, had left Harwich at 4.30 p.m. in a dense fog. The weather was clearer outside and at 7 p.m. they parted company, the *Stork* to escort the leading ships and the *Sylph* the rear ships of the east-bound convoy.

The visibility was scarcely a mile, but the 1st Division, under command of the *Stork*, caught sight of three steamers in the rear of the convoy, which soon, however, disappeared in the fog.<sup>2</sup> The 3rd Division also picked up the rear end of the convoy, and in single line ahead, in the order—*Sylph* (Commander James V. Creagh), *Setter*, *Minos* and *Recruit*, was accompanying it S. 70 E. at 10 knots, when, at 10.50 p.m., in a position<sup>3</sup> some 20 miles E.S.E. from the North Hinder, a vessel steering approximately south loomed suddenly out of the fog nearly right ahead of the *Sylph* and in an excellent position to torpedo her. The officer of the watch, Lieutenant S. N. Blackburn, thinking that she was one of the convoy, ordered the helm hard-a-starboard, but almost at once sighting two other craft, evidently destroyers, astern of her challenged and increased to full speed. Shouts in German and a whistle could be heard, and the enemy fired a few rapid rounds<sup>4</sup> which fell near the *Recruit*. Commander Creagh, sighting a third destroyer slightly before the starboard beam (the *Sylph* heading about north-east) gave the order hard-a-port, but passed astern, crossing her wake on an easterly course. His forecastle gun was trained on her but the headpiece was disconnected, the fire-gong push could not be found in the dark, and before fire could be opened the enemy had vanished in the fog, their rear ship firing eight rapid rounds which fell erratically anywhere.

Commander Creagh continued to turn to starboard till the *Sylph's* head was nearly west; another division of four more destroyers keeping good station were seen by the yeoman of signals crossing her wake astern and Commander Creagh reduced to 20 knots to let his division come up. A few flashes flamed out on the port beam and he steered for them. Then the wake of a vessel was sighted going S.S.E. and following it at 26 knots he sighted a vessel slightly abaft the port beam and, as the fog lifted for a moment, caught a

<sup>1</sup>H.S.A. 149/390.

<sup>2</sup>H.S. 149/406.

<sup>3</sup>52° 2' N., 3° 11' E.

<sup>4</sup>"Heavy and very rapid fire." *Minos*, H.S.A.149/402.

glimpse of another beyond it. Thinking from their white stern lights that they were hostile, Commander Creagh turned to port ready to ram, challenging and switching on the fighting lights intermittently in case they might be British. Both were unanswered, but Commander Creagh decided to turn up and follow, ready to open fire with guns and tubes trained. The destroyer ahead appeared to alter course to port and Commander Creagh gave the order "Hard-a-starboard"; then, as he was gaining rapidly, reduced to 15 knots. Suddenly the leading destroyer altered to starboard across his bows; Commander Creagh, recognising her as British, gave the order "Full speed astern" and "Hard a-port." It was just too late and at 11.10 p.m. the *Sylph* crashed into her at an angle of 60°, penetrating her side from somewhere near the cabin flat up to the engine-room bulkhead. The damaged destroyer was H.M.S. *Setter*, Lieut.-Commander Edward S. Graham. She had seen three salvoes fired by the German destroyers when the 3rd Division ran into them; but nothing else could be made out and the *Sylph* had disappeared in the fog in a south-easterly direction. The *Setter* followed at 20 knots for 10 minutes, then altered course S. 68 E., signalling to the *Recruit* "Speed, 10 knots." The signal was not taken in and the *Recruit* coming up on the port beam drew across her bows, forcing Lieut.-Commander Graham to put the helm hard a-port and engines full speed astern to avoid a collision. He had barely begun to go ahead when the *Sylph* crashed into her starboard quarter. In a short time her engine-room was flooded but, for nearly an hour, the *Sylph* worked to take her in tow. Her after stokehold bulkhead then collapsed and it became evident that nothing could save her. Her crew were ordered to go on board the *Sylph* and 10 minutes later, 1 hour and 20 minutes after being rammed,<sup>1</sup> she sank, a victim to the vagaries of convoy on a dark and foggy night.

The *Minos*, the remaining destroyer of the 3rd Division, had lost touch. When a signal reporting the collision between the *Sylph* and *Setter* came in, she steered for the spot, but could not find them and at 12.50 a.m. (May 18), in obedience to a signal resumed her patrol, and at 2.40 a.m. proceeded to the North Hinder in accordance with a further signal.<sup>2</sup>

9. S.S. "*Cito*" Sunk.—The *Setter* was not the only loss of that dark and foggy night, for the German destroyers succeeded in sinking one of the merchant vessels. This was the British s.s. *Cito*, a small steamer of 819 tons, one of the three vessels of the eastward bound convoy sighted by the *Stork*. At 10.45 p.m.<sup>3</sup> she had reached

<sup>1</sup>H.S.A. 149/399.

<sup>2</sup>Reports of Commodore (T), *Sylph*, *Minos*, and *Recruit* in H.S.A. 149/395 et seq.

<sup>3</sup>The mate's report says 11.45 p.m., but this is apparently summer-time, or no gunfire was heard except at 10.45 p.m.



a position some 20 miles east of the North Hinder Light Vessel,<sup>1</sup> when she was suddenly attacked in the thick fog by German destroyers and sunk with the loss of her captain and 10 of her crew. The mate, Mr. George Chapman, was saved. He was roused from his bunk by gunfire and going on deck saw the German destroyers 100 yards off. Her decks were being swept with gunfire. Eight or nine shells struck her hull and she heeled over; he got into the lifeboat with nine others and, as he pushed off, the ship turned over and went down. The destroyers went off to the south-west, but returned shortly afterwards. After cruising round for three hours in darkness and fog, he made for the English coast and was picked up off Sizewell Bay by a patrol vessel.<sup>2</sup>

#### 10. The "Stork" and "Redoubt" Attack a Submarine, May 18.

—Meanwhile, the *Stork* and her division,<sup>3</sup> after losing sight of the rear end of the convoy in the fog, had gone on at its average speed. Between 10.51 and 11.2 p.m., they heard distinctly the firing of guns astern, but Commander Buller, of the *Stork*, in view of the fog and darkness, thought it better to hold his course. At 4 a.m. next morning, May 18, he was returning and was in latitude  $52^{\circ} 31' N.$ , longitude  $2^{\circ} 49' E.$ , or 6 miles S. 60 E. from the North Hinder Light Vessel, with the *Redoubt* astern,<sup>4</sup> when Lieutenant Ian Morten, the officer of the watch in the *Stork*, sighted a submarine about two points on his starboard bow, 700 yards off, and at once went on to full speed. The submarine was diving at a very steep angle, and as her stern disappeared, the *Stork's* stem missed it by only 20 yards. Two depth charges<sup>5</sup> were then dropped, one exploding nearly on top of the submarine and the other within 50 ft. of her.

The *Redoubt*, too, had sighted the enemy, and coming up on the *Stork's* starboard quarter at full speed, let go two depth charges apparently right over her. All four charges exploded almost simultaneously, and, one and a half minutes later, a fifth under-water explosion was distinctly heard. The captains of both destroyers were confident that an enemy submarine had been destroyed and their prompt action drove the submarine down and brought them a reward.<sup>6</sup>

<sup>1</sup> This would put her in  $52^{\circ} 9\frac{1}{2}' N.$ ,  $3^{\circ} 11' E.$ , some 9 miles N.N.E. of the destroyer encounter. It seems probable that she was only some 5 miles distant and was attacked by the rear division of German destroyers.

<sup>2</sup> M.66886/17.

<sup>3</sup> 1st Division.

<sup>4</sup> 1st Division was in sub-divisions in line ahead columns disposed abeam to port.

<sup>5</sup> One Type "D" and one Type "G."

<sup>6</sup> Commander Buller, D.S.O., and Lieutenant Morten were mentioned and Lieut.-Commander Reginald Holt of the *Redoubt* received a D.S.O. The attack was marked as a "Possible" in I.D. M.06093/17, in H.S. 1289.

The submarine was *U.C.64* (Lieutenant Müller-Schwarz), which had left Zeebrugge at 10.41 p.m. (May 17) to operate in the Hoofden and was on her way from Schouwen Light Vessel to the North Hinder, when at 4 a.m. three destroyers appeared suddenly on the starboard bow and forced her to make an alarm dive. As she lay on the bottom<sup>1</sup> in 40 metres, a depth charge exploded unpleasantly near, followed two minutes later by another further off. She was fortunate enough, however, to escape without damage and rising at 1.40 p.m., continued her cruise.<sup>2</sup>

The German destroyers which had fired into the fog belonged to the 3rd German and Zeebrugge Flotillas, which had pushed out with orders to attack the Dutch traffic and escort. Commodore Tyrwhitt was of opinion that if these attacks were definitely aimed at the Dutch traffic, the procedure of crossing should be regulated. As the ships on account of their varying speeds (7 to 15 knots) tended to straggle enormously, he suggested that they should be divided into one or two groups of fast and slow ships; that ships should proceed at the speed of the slowest vessel and that the slowest vessels should be removed from the route.<sup>3</sup>

11. **Dover, End of May.**—The end of the month saw another brush with the enemy off the Belgian coast. Admiral Bacon intended to try another bombardment<sup>4</sup> of the Belgian coast on May 26 and May 27 and the *Centaur*, with six light cruisers and four destroyers, accompanied by the *Lightfoot* and eight destroyers, went down on the 25th to support the Dover force to the north-eastward. The operation was postponed (presumably on account of unfavourable weather), but in the forenoon of May 26, while the monitor *General Wolfe* was doing experimental firing off the Ratel Bank with the monitors *M.27* and *M.24*, and the destroyer *Leven*, Lieutenant Arthur P. Melsom, R.N.R., four large German destroyers, appearing suddenly to the north-west, made a hurried attack, firing a torpedo at *M.24*, which passed 100 yards ahead. Engaged by the *Leven* at 7,000 yards, they drew off at 12.30 p.m. and were followed by her till they disappeared towards Blankenberghe.<sup>5</sup> They belonged to the 2nd Half Flotilla (Zeebrugge). Admiral Bacon intended to make another attempt at bombardment on May 29, but the conditions were again unfavourable. Nor did the disablement of another destroyer help matters, when on the morning of the 29th the *Minos* ran into the *Matchless*, which had to be towed to Dover.<sup>6</sup>

<sup>1</sup> German report gives  $52^{\circ} 2' N.$ ,  $2^{\circ} 44' E.$

<sup>2</sup> Marine-Archiv in H.S./Q.16.

<sup>3</sup> Commodore (T) to Commander-in-Chief, May 19 1917, in H.S.A.149/391.

<sup>4</sup> V.A., Dover's, Orders in Memo. 16, May 1917 in H.S. 314/256; also H.S.A. 315/212; Commodore (T)'s Diary, H.S. 247/150; H.S. 444/1161.

<sup>5</sup> H.S.A. 309/20, 22.

<sup>6</sup> H.S. 450/68 and *Matchless*, decklog. The destroyer *Redgauntlet* struck a British mine on May 21, but got into Dover.



12. **British Minelaying, Heligoland Bight, May.**—The minelaying in Heligoland Bight, begun in January, was continued through May, when nine fields were laid, comprising 2,899 mines. The first was laid on May 12 by submarine *E.34* (Lieutenant Richard Pulleyne) off the Ems, some 10 miles south of Borkum Riff Light Vessel.<sup>1</sup> It consisted of 20 mines laid irregularly only 8 ft. below the surface and lay right across the "Way In" route signalled to German submarines on April 28. *E.34* started laying the mines at 0.32 a.m. (May 12), but the appearance of an armed trawler forced her to dive and to complete her task underwater. On her way back she sighted some merchant vessels and a destroyer, both too far off to attack. It was not long before her mines found a victim. On May 16 the German destroyer *S.17* struck one<sup>2</sup> and sank; two minesweepers, *M.14* and *T.78* met the same fate in attempting to tow her wreck away, and the armed trawler *Scharnhorst* struck another mine on May 20. On May 25, the armed trawler *Max Schinkel* was blown up in it and the loss of another sweeper, the *Denebola*,<sup>3</sup> followed the same day, making the sixth vessel within a fortnight. There were evidently difficulties in clearing the field for on June 17, a merchant ship, the *Venus*,<sup>4</sup> struck a mine in it and sank, and the next day (June 18) another minesweeper, *M.9*, was sunk in its northern half. Energetic sweeping followed and the field was probably cleared by the end of June. This small field of 20 mines was therefore responsible for the loss of no less than eight vessels. On the night of May 12, while *E.34* was off the Ems, the *Royalist* (Captain the Hon. Herbert Meade), *Blanche* (Captain the Hon. Reginald Plunkett-Ernlé-Erle-Drax) and *Abdiel* (Captain Berwick Curtis) were laying another field<sup>5</sup> off Horns Reef. It was laid some 5 miles south-east of Horns Reef Light Buoy and consisted of 155 B.E. and 80 Service mines laid 9 ft. below the surface, spread 20 to the mile on various courses in six lines with a gap of half a mile between each line. The minefield<sup>6</sup> (Field 67) laid on April 18, across the "Way In" had been found<sup>7</sup> by the German minesweepers a fortnight before, and this may have been the reason on the British side for laying a new minefield well to one side of the "Way In." It soon claimed an important victim. *U.59* (Lieut.-Commander Baron von Fircks) left Heligoland on May 14 at 10.30 a.m., and at 6.30 p.m. was warned of mines in a position about 10 miles west of Horn Reef; the position was incorrect (a gale was blowing at the time) and was

<sup>1</sup> Field 142 (Leith) in about 53° 35' N., 6° 5' E. *E.34*'s report in H.S.A. 273/602.

<sup>2</sup> In 53° 33' N., 5° 56' E.

<sup>3</sup> May 25/2215. Possibly in Field 138, *E.46* of 28.4.17.

<sup>4</sup> There are three small German vessels of this name in Lloyds Register, 1917.

<sup>5</sup> Field 62, between 55° 32' N. and 55° 56' N. and 7° 23' E. and 7° 26½' E. Orders and Reports in M.00176/17 in H.S. 893/20, 193.

<sup>6</sup> Mines found on April 30, May 1, 2.

<sup>7</sup> On April 30, May 1.

cancelled the next day, but the warning may have diverted *U.59* to the eastward of her course, for at 11.40 p.m. (May 14) she and her trawler escort, the *Fulda*, struck mines and sank with a loss of all her crew except four. The wreck was located the next day (May 15) in 55° 27' N., 7° 16' E.<sup>1</sup> and the area was reported as "infested" with mines which blew up another sweeper, the *Heinrich Ratjen* at 1.46 p.m.<sup>2</sup> *U.59* was the second submarine<sup>3</sup> to fall a victim to the mines of the *Royalist*, *Abdiel* and *Blanche*, and the German minesweepers spent some days in establishing the limits of the area which was promulgated later as dangerous.<sup>4</sup> (See S.32.)

13. **British Minelaying, May 16-31.**—On May 16, *E.41* (Lieutenant Norman Holbrook) laid a field of 19 "S" mines off the Dutch coast some 6 miles north of Ameland<sup>5</sup> and two days later on May 18, *E.51* (Lieutenant Hugh R. Marrack) laid 20 "S" mines to the westward of it about 5 miles N.N.W. of Ameland Gat.<sup>6</sup> Both of these fields were laid close to the German "Way In" route by Terschelling, which had been signalled to submarines on April 28, and intercepted the same day at Whitehall.<sup>7</sup>

No vessels appear to have been lost on them.

The *Royalist*, *Blanche* and *Abdiel* were out again however on the night of May 18-19,<sup>8</sup> escorted by the light cruisers *Galatea* and *Cordelia* and eight destroyers and laid 155 B.E. and 80 Service mines some 16 miles W.S.W. of Horns Reef Light Buoy.<sup>8</sup> The field lay right across the "Way In" route but was discovered by German minesweepers the next morning (May 20). No special effort seems to have been made to clear it, though a minesweeper was apparently sunk there on August 21, 1917.

The *Princess Margaret* (Captain Lockhart Leith), *Angora* (Captain Walter Petre) and *Wahine* (Captain Harry Smyth) were equally active in the south of the Bight. In the early morning of May 20 escorted by six Harwich destroyers they laid a large field<sup>9</sup> of 500 B.E. and 500 Service mines, some 7 miles north of Vlieland. It was laid

<sup>1</sup> I.D., Vol. 3028/65. The position first reported was in 55° 22' N., 7° 12' E., not far from the minefield laid by *Royalist* on April 18 (Field 67). This was corrected on May 15, and the revised position is nearer the field laid on May 12 (Field 62). See I.D. 3028/62.

<sup>2</sup> 136 alpha left, i.e., in 54° 27' N., 7° 22' E.

<sup>3</sup> *U.C.30* was probably lost on the mines laid on April 18.

<sup>4</sup> Leith, 235.

<sup>5</sup> Field 146, laid May 16, 1.55 a.m. in about 53° 33½' N., 5° 50' E. Report in H.S.A. 273/603.

<sup>6</sup> Field 225 in Leith (Field 44 in Chart X.127), laid 1.13 a.m. in about 53° 31½' N., 5° 32' E. Report in H.S.A. 273/605.

<sup>7</sup> Signal April 28/1805 in I.D., Vol. 3027/101.

<sup>8</sup> Commander-in-Chief's orders of 15.5.17 for operation A.12 in H.S. 839/209, Field 69. The centre as laid was in about 55° 26' N., 6° 52½' E. Leith (p. 236) states that *Royalist* reported it laid 4 miles east and 1 mile north of position ordered, but a comparison of Admiralty orders and Captain Meade's report H.S. 839/212 makes it only 1½ miles 322° of position ordered.

<sup>9</sup> Field 176 in about 53° 26' N., 4° 55' E. Report in H.S. 839/224.



right across the approach to the "Way In" by Terschelling and was the largest field laid during the month. It was discovered by German minesweepers the same morning<sup>1</sup> and definite warnings went out on May 28. On June 5, the airship *L.40* at low water counted 70 mines in it, three of which were on the surface. Though a route was swept through the centre and along the southern edge it continued a source of danger; the minesweeper *M.47* struck a mine in it on June 8, 1917; the s.s. *Turin* was sunk close to it on June 15, the armed trawler *Sonnin*<sup>2</sup> was blown up close to it on June 28, and finally on November 29, 1917, it accounted for the submarine *U.B.61* which was skirting its southern edge. It was probably responsible too for the loss of the armed trawler *Dirk Von Menden* which was escorting *U.B.61* and was mined near it about the same time.

On May 22, the *Royalist*, *Blanche* and *Abdiel*, were out again and escorted by two Grand Fleet light cruisers and eight destroyers laid another field<sup>3</sup> on the Horns Reef route about 25 miles W. by S. of the Light Buoy. Though it was laid right across the "Way In" route of April 28, it was not discovered till October 15, when the north-east corner was picked up. No systematic sweeping can be traced on it but sweeping must have been carried out to the eastward of it where there was a "way" running north and south. It was close to this field that a year later the armed trawler *Kabeljan* struck a mine<sup>4</sup> on May 14, 1918 and sank.

In the night of May 25-26, 1917, the *Angora* and *Wahine* were again busy minelaying, the *Ariadne* (Commander Pieter Van der Byl) on this occasion taking the place of the *Princess Margaret* which was laid up with a damaged turbine. The minelayers, escorted by six Harwich destroyers left the Humber at 9.30 a.m.; a fix was obtained by Terschelling Light Vessel at 11.12 p.m.; minelaying commenced at 1.4 a.m. and finished at 2.12 a.m. The night was very light and Captain Petre was of opinion that under similar conditions it would be advisable for destroyers to remain with the minelayers while laying. The field<sup>5</sup> consisting of 900 Service mines was laid some 10 miles west of Vlieland in the approach to the "Way In" signalled on April 28. It was discovered by German aircraft on June 8 or 9<sup>6</sup> and no losses can be traced to it.

<sup>1</sup> "Sweep slipped in 5° E." Signal May 20/0415 in I.D. 3028/87 (War Diary, May 1917).

<sup>2</sup> In 24 epsilon (53° 27' N., 5° 5' E.), I.D. 3029/98. The *Sonnin* probably struck *E.41*'s field of June 27.

<sup>3</sup> Field 70 in about 53° 27' N., 6° 35' E. Orders and report (Operations A.13) in H.S. 839/233.

<sup>4</sup> 12th (German) Minesweeping Half Flotilla report: "Kabeljan struck a mine in 101 alpha" (55° 32' N., 6° 35' E.). May 14/0654 in I.D. 471/346.

<sup>5</sup> Field 177, in about 53° 25' N., 4° 35' E., extending over some 10 miles of latitude. Report (Operation W.8) in H.S. 839/237.

<sup>6</sup> I.D. 3029/34, Signal 9/0032.

The last field laid in May 1917, was put down by the *Royalist*, *Blanche* and *Abdiel* on the night of May 30-31 about 60 miles north of Vlieland,<sup>1</sup> consisting of 80 Service and 155 British Elia mines. It does not appear to have been found till the end of October 1917 and claimed its first victim in the destroyer *G.37* which was mined and sunk on November 4, 1917. Three other small vessels were sunk during May in minefields laid earlier in the year. Off Borkum<sup>2</sup> on May 9, the armed trawler *Nuttlerkamp* was sunk, near a small field, laid by *E.41* on Jan. 16. On May 11 the *August Brohan*<sup>3</sup> met a similar fate on the Horns Reef route probably on mines laid by *E.46* on March 13. On May 23, the trawler minesweeper *Othmarschen* was sunk when mines were found in Nordmanns Tief (near Horns Reef), laid by *E.46* on April 2<sup>4</sup> and *E.34* on April 14.

14. **German Losses on British Mines.**—During the month of May, nine fields were laid by British minelayers in the Bight containing 2,899 mines. The losses due to them in May 1917 were Destroyers 1, Submarines 1, Sweepers 2, Armed Trawlers 5 and subsequent to May, Destroyers 1, Submarines 1, Minesweepers 3, Armed Trawlers 1, Merchant Vessels 1. In May, too, there were lost on British fields laid previously in the year 1 Destroyer and 3 Minesweeping Trawlers.

## CHAPTER II.

### SOUTH-WEST APPROACH, HIGH SEA FLEET SUBMARINES. (PLANS 4 AND 5.)

15. **Submarines, South-West Approach, May 1, 1917.**—On May 1, the following submarines were in the South-West Approach:—

Operating in South-West Approach ( <i>U.21</i> , <i>U.58</i> , <i>U.62</i> , <i>U.81</i> ) .. .. .	4
Arriving in Area ( <i>U.44</i> , <i>U.C.75</i> ) .. .. .	2
	6
Sunk (May 1), <i>U.81</i> by <i>E.54</i> .. .. .	1
	5

<sup>1</sup> Field 115 in 54° 20' N., 4° 35' E. Report in H.S. 839/67.

<sup>2</sup> In 53° 50' N., 6° 45' E., 2 miles north of Field 136. I.D., Vol. 3028/43.

<sup>3</sup> In about 55° 5' N., 8° E., Field 58.

<sup>4</sup> Field 54 (*E.46*) and 53 (*E.34*).



On the way home were seven (*U.67*, *U.69*, *U.43*, *U.61*, *U.93*, *U.70*, *U.82*), of which *U.93* had been severely damaged in action with H.M.S. *Prize* (April 30).<sup>1</sup>

16. "**U.69**," April 11–May 6.—*U.69*, Lieut.-Commander Ernst Wilhelms, which had been working to the west of Skelligs in April, was now on her way home. Proceeding north, at 2.35 p.m. (May 1) in 55° 8' N., 13° W., she torpedoed and sank the American s.s. *Rockingham*,<sup>2</sup> 4,409 tons. The crew took to the boats and 33 survivors were picked up by an armed trawler and 14 by the British s.s. *Hubert* outward bound. The next day, May 2, at 8.10 a.m., off the Hebrides, in 56° 52' N., 10° 9' W., she torpedoed the British s.s. *Troilus*, 7,624 tons, outward bound from Glasgow to the Cape. The ship had wireless and a 4.7-in. gun which fired a single shot. The crew of 83 with 45 passengers took to the boats and reached land at Tiree and Barra safely. This was *U.69*'s last ship. She arrived safely home on May 6, after sinking a total of 22,646 tons during her cruise, of which two vessels of 12,033 tons went down in May.

17. "**U.81**," April 17–May 1.—*U.81*, Lieut.-Commander Raimund Weissbach, operating in the South-West Approach in April had sunk six ships of 17,787 tons. On May 1 her cruise came to a sudden and disastrous end with her destruction by H.M. Submarine *E.54* (Lieut.-Commander Robert Raikes, D.S.O.),<sup>3</sup> one of the *Vulcan*'s flotilla of eight submarines working from Queenstown. At 9.45 a.m. that morning in 52° N., 14° 20' W., she had torpedoed the British s.s. *San Urbano*, 6,458 tons, an oiler bound from Mexico to Liverpool. The ship was armed with a 4.7-in. Q.F. gun, but had no opportunity of using it and was sunk by a second torpedo after the crew had abandoned her. Her S.O.S. seems to have been taken in by H.M.S. *Marne*, who picked up her boats a few hours later.

*U.81* went on to the south-eastward and at 2.30 p.m. (May 1) in 51° 33' N., 13° 38' W.,<sup>4</sup> sent a torpedo into the British s.s. *Dorie*, 3,264 tons, bound from Antigua to Queenstown with sugar. The ship was abandoned, but *E.54* (Lieut.-Commander Robert Raikes, D.S.O.) had heard the explosion and seen the steamer lying stopped. At 4.30 p.m. he sighted *U.81* on the surface and for over half an hour was manœuvring skilfully for a position. At 5.11 p.m. he fired both bow tubes; both torpedoes hit, one before and another abaft the conning tower; *U.81* sank immediately, though *E.54* was able to pick up seven survivors, including the captain, who was saved by Lieutenant E. A. Aylmer. This was the end of *U.81*, one of Germany's

<sup>1</sup> See Naval Staff Monograph H.W. VIII, S.327.

<sup>2</sup> No details, Queenstown report, H.S. 533/305.

<sup>3</sup> Home Waters VIII, S.330. The *Vulcan* moved to Lough Swilly in May.

<sup>4</sup> Lieut.-Commander Raikes' report (M.05473/17); *Dorie* gives position as 51° 45' N., 13° 43' W.

latest and finest submarines. The *Dorie*'s crew were put back on board and she reached Berehaven safely. Admiral Lewis Bayly commended the "great skill and coolness" of the attack, and Lieut.-Commander Raikes received a bar to his D.S.O. and Lieutenant Aylmer a D.S.C.<sup>1</sup> *U.81* in May sank only one ship of 6,458 tons.

18. "**U.21**," April 19–May 18.—*U.21*, Lieut.-Commander Otto Hersing, after sinking the Russian s.v. *Borrowdale* on April 30, may have moved to the south-east for on May 1 at 9 a.m. in 48° 32' N., 8° 57' W., the British s.s. *Cordova*, 2,284 tons, Seville to Hull with copper ore, sighted a periscope. The master steered for it; a torpedo missed her stern by 6 ft., the ship got off one round with a 13-pdr. and the submarine (*U.21* or *U.93*) dived. *U.21* moved westward and on May 3, at 7.45 a.m., in about 49° 10' N., 13° W.,<sup>2</sup> stopped the Russian s.v. *Lindisfarne*, 1,703 tons, bound from Caleta (Cuba) to Havre. The day was fine, the sea was calm, and the ship was sunk by gunfire. The next day, May 4, at 7.45 a.m., some 90 miles to the south-west, in 48° 2' N., 14° 34' W., the British s.s. *Monmouthshire*, 5,097 tons, sighted a periscope 6 points on the port bow and fired three shots at it without result. This may have been *U.21*, or possibly *U.58*. On May 5, about 11.44 a.m., the British s.s. *Photinia*, 4,583 tons, on her way to the Bay in 47° 40' N., 8° 10' W., was missed by a torpedo. If this was *U.21*, she must then have moved north, for on May 6 at noon in 51° 6' N., 11° 40' W., she torpedoed and sank the British s.s. *Adansi*, 2,643 tons, bound from Sierra Leone to Liverpool, armed with a 14-pdr. and unescorted. The crew of 38 men took to the boats and were all picked up. Going west again, *U.21*, on May 8 at, about 4 a.m., in 50° 55' N., 14° 44' W., stopped the British s.v. *Killarney*, 1,412 tons, from Brunswick, U.S.A., to Fleetwood, and sank her by gunfire.

The survivors were in the boats for three days before they were picked up on May 11 by an U.S. destroyer. On May 9, at 9.50 a.m. in 50° 45' N., 12° 45' W., the British s.s. *Astyanax*, 4,872 tons, was chased by a submarine which may have been *U.21* (or *U.62*). She reached home north about on May 18 having sunk in May three ships of 5,758 tons.

19. "**U.58**" (two guns), April 21–May 11.—*U.58* (Lieut.-Commander Wipperm), which had been working out in 12° W. at the end of April<sup>3</sup> continued in the same area. On May 2, at 10.50 a.m. in 50° 50' N., 13° W., she met the British s.v. *Beeswing*, 1,462 tons, from Pensacola to Liverpool, and sank her with gunfire in fine weather and a calm sea. At 1 p.m. (May 2) in 50° 39' N., 12° 45' W., the Norwegian s.v. *Dione*, 785 tons, on the way to Bristol, suffered the

<sup>1</sup> *E.54*'s report in M.05473/17 in H.S. 1319/94.

<sup>2</sup> Master's position is 49° 20' N., 14° W.

<sup>3</sup> Home Waters VIII, S.333.



same fate. Coming from Florida, she had received no instructions as to her route. Not far off her was another Norwegian s.v., the *Vanduara*, 2,079 tons, going from Jamaica to Havre with dyewood, and she too was sunk by gunfire at 2.45 p.m.

*U.58* seems to have turned back about May 4, for at 7 p.m. on May 5 she was off Tory Island in 55° 40' N., 12° 10' W. There she met another Norwegian, the s.v. *Asra*, 1,975 tons, proceeding from Belfast to New York in ballast, which she stopped and sank with gunfire. This was *U.58's* last ship on this cruise. She returned north about and reached Heligoland safely on May 11, having sunk four ships and 6,301 tons in May.

20. "**U.62,**" April 21–May 18.—*U.62* (Lieut.-Commander Ernst Hashagen), which had sailed on April 21 had sunk two steamers and the "Q" ship, *Tulip*, in April. During May he was working closer in and on May 3 at 12.30 p.m. in 51° 41' N., 12° 21' W. torpedoed without warning the British s.s. *Frederick Knight*, 3,604 tons, going from Cuba to Queenstown. The ship was armed with a 12-pdr. 12-cwt., which she had no chance of using; no other vessels were in sight; and though the sloop *Zinnia* came to her assistance, driving *U.62* down, she managed to get a second torpedo into the ship and sank her. *U.62* proceeded north-east and the next day (May 4) at 4 p.m. in 52° 15' N., 11° 30' W. met the Danish s.v. *Jorgen Olsen*, 310 tons, and bound from Florida to Liverpool with timber, and fired 42 rounds into her. At 4.30 p.m. the *Zinnia* came up from the south-west and opening fire at about 3 miles drove *U.62* down. The derelict barque remained afloat and was later towed to Berehaven and salvaged.<sup>1</sup> Three days passed before on May 7 at 1.30 p.m. in 49° 2' N., 8° W., *U.62* torpedoed without warning the British s.s. *Polamhall*, 4,010 tons, bound from Alexandria to Hull with a general cargo. The ship, armed with a 12-pdr. 12-cwt., sank in 20 minutes; the crew in two boats were picked up six hours later by a French schooner which transferred them to H.M.S. *Acasta*. Five hours later at 6.30 p.m. (May 7) in 49° 5' N., 7° 40' W. the British s.s. *Southwaite*, 3,618 tons, bound from New Zealand to London with wool was attacked by a torpedo which missed. She was armed with a 4-in. Q.F., but the submarine (probably *U.62*) was not seen.

Two days later on May 9 at 12.40 a.m. in 50° 35' N., 11° 20' W., a torpedo fired by *U.62* or possibly by *U.21*, narrowly missed the U.S.A. destroyer *McDougal*, passing just under her forefoot. The next day (May 10) at 6.10 a.m. in 50° N., 11° 4' W., *U.62* met the Norwegian s.v. *Gazelle*, 288 tons, proceeding from Haiti to Hull with wood and sank her with gunfire; four hours later at 11 a.m. in 50° 6' N., 11° 30' W., the French s.v. *Bérençère*, 2,851 tons, on the way to Havre from Buenos Aires laden with timber suffered the same fate.

<sup>1</sup> H.S. 650/272.

On May 11 at 4.15 p.m. in 52° 2' N., 14° 50' W., the British oiler *San Onofre*, 9,717 tons, which left Puerto Mexico, for Queenstown on April 20 with 14,000 tons of oil was missed by two torpedoes fired by *U.62*.<sup>1</sup> The oiler had orders to make the Skelligs at dawn on May 13 and, as this would have necessitated her cruising about at sea for a whole day, for the Skelligs were only 180 miles off, H.M.S. *Primrose* meeting her took her under escort.<sup>2</sup> On May 12 at 6.45 a.m. in 52° 26' N., 11° 52' W. with the *Primrose* zig-zagging ahead of her she was torpedoed, and sank in ten minutes, being at the time within 60 miles of the coast in broad daylight, apparently the result of not adjusting her speed in accordance with her orders. Her assailant was *U.48*.<sup>3</sup>

*U.62* was then on the way home, where she arrived on May 18. During May she had sunk four vessels of 10,753 tons, making 17,404 tons for her cruise.

21. "**U.44,**" April 23–May 7.—*U.44* (Lieut.-Commander Paul Wagenführ), left Borkum on April 23 to work off the West of Scotland, with little enough success. On May 2, at 8 p.m. in about 60° 50' N., 3° 40' W. in a heavy sea, she stopped the Norwegian barque *Natuna*, 1,121 tons, going from Stornoway to Odense and sank her with gunfire. She returned on May 7, having sunk 1,121 tons in May and 3,672 tons on her cruise.

22. "**U.C.73,**" April 24 to Mediterranean.—*U.C.73* (Lieut.-Commander Kurt Schapler) left Germany on April 24 for the Mediterranean proceeding north about. On May 1 at 6.30 p.m. in 54° 34' N., 13° W. she stopped the Russian s.v. *Imberhorne*, 2,042 tons, bound from Mobile Bay to Greenock, and set her on fire. The crew were all saved, reaching the coast of Ireland in their boat on May 3.<sup>4</sup> She was west of Ireland on May 3 and at 11.30 a.m. in 50° 10' N., 13° 50' W.<sup>5</sup> fired a torpedo at the Italian s.s. *Misurata*, 2,691 tons, bound from Genoa to Glasgow. The torpedo missed and *U.C.73* coming to the surface sank her with gunfire. At 2.30 p.m. (May 3) in 50° 15' N., 15° 25' W., she stopped the French s.v. *Mezly*, 1,568 tons, bound from Antofagasta to Nantes, and after setting her on fire, continued her voyage to the Mediterranean, arriving at Cattaro about May 20, where her mine tubes were removed and she was converted into a transport for the carriage of arms and supplies to Tripoli. In the South-West and West Approach in May she had sunk three ships of 6,301 tons.

<sup>1</sup> *U.62* gave time as 4 p.m., H.S./Q.46.

<sup>2</sup> *Primrose's* report, H.S. 650/280.

<sup>3</sup> See Section 27.

<sup>4</sup> Marine-Archiv in H.S./Q.49.

<sup>5</sup> *E.54's* report; another report says 17° 15' W.; German position is 49° 53' N., 14° 55' W. H.S./Q.59.



23. "U.C.75," April 28-May 18.—Seven High Sea Fleet U.C. minelayers were also working during the month on the Irish coast. U.C.75 (Lieutenant Johann Lohs), the first of them, left Heligoland on April 28 and proceeding by the Channel was off the Scillies on May 1; at noon that day in 49° 36' N., 5° 31' W. she attacked with gunfire the Russian s.v. *Alide*, 146 tons, bound from La Rochelle to Swansea with pit props, which had started under convoy but had lost touch with it. She did not sink and was towed into Falmouth.

U.C.75 went on to the south coast of Ireland and on the night of May 2-3 laid 18 mines in four fields off Daunts' Lightvessel<sup>1</sup> (Queenstown) which were discovered that morning by a trawler minesweeper; paddlesweepers, trawlers and torpedo boats got to work and swept up 14 mines.<sup>2</sup> U.C.75 made to the westward and that night (May 3) about 8 p.m. some 15 miles south of the Fastnet sank by gunfire seven small British fishing vessels, totalling 113 tons.

The next day, (May 4) at 2.30 p.m., off Waterford in 51° 40' N., 6° 40' W., she met the French s.v. *Marie*, 189 tons, bound from Camaret to Cardiff with pit props (which had sailed with a convoy, but had lost it) and sank her with bombs. A bigger victim awaited her. On May 5 at 11.15 a.m. in 51° 55' N., 7° 19' W., H.M. Sloop *Lavender* was proceeding N. 86 W. at 12 knots, zig-zagging, when the look-out shouted "torpedo coming"; it hit her starboard side, forward, abreast the Captain's cabin, killing the Captain (Lieut.-Commander Thomas S. L. Dorman, D.S.O.), the Officer of the Watch, Lieutenant Williamson, R.N.R., and most of the men on the bridge. The ship remained afloat about a quarter of an hour, then broke in half and sank. U.C.75 came to the surface and spoke the Carley raft; the sea was smooth and calm, and the sun was shining; the boats pulled for the shore and were picked up that afternoon by H.M.S. *Parthian*. The subsequent enquiry found that no blame was attributable to anyone and Lieutenant Edward Milne, R.N.R., and Sub-Lieutenant Cyril Alford, R.N., received Their Lordships' commendation.<sup>3</sup>

U.C.75 went off to the Cornish coast where, on May 5 at 5.20 p.m. in 50° 58' N., 4° 32' W., off Hartland Point, a submarine was sighted by the French s.s. *Sahara*, 691 tons, who fired 12 shots at it, driving it down. On May 6 at 10 a.m. in 50° 28' N., 5° 16' W., U.C.75 sank with gunfire the French s.v. *President*, 354 tons, bound from

<sup>1</sup> O.U. 6020A, Fields 231-234, round about 51° 44' N., 8° 15' W.

<sup>2</sup> On May 23, at 10.55 p.m., in 51° 37' N., 8° 17' W., the British s.s. *Chicago City*, 2,524 tons, bound from New York to Bristol, was damaged by an explosion, but managed to get into Queenstown. The night was dark, windy and squally, and ship was darkened. The Master thought she had been torpedoed, but I.D. thought she had been mined. U.C.75's field of May 3 and U.C.44's of May 19 were, however, both about 10 miles off. She was probably torpedoed by U.C.62 (see S.68).

<sup>3</sup> Report of enquiry, L.876/1917 in H.S. 1912/373.

St. Malo to Swansea with ore. On May 7 at 9.55 a.m. in 50° 22' N., 5° 40' W., the "Q" ship, H.M.S. *Viola*, sighted a submarine of U.C. type (possibly U.C.75), which submerged on the appearance of a seaplane.<sup>1</sup> A whole week elapsed before U.C.75 appeared off the Lizard and at 7 a.m. (May 15) in 49° 54' N., 5° 34' W., torpedoed the British s.s. *Polymnia*, 2,426 tons (ex-German s.s. *Henrietta Woermann*), bound from Lisbon to Cherbourg. The ship was armed with a 3-pdr. Vickers, which did not fire and sank in a few minutes with a loss of eight lives out of 27. U.C.75 was then on her way home to Heligoland, where she arrived on May 18. She had sunk three ships totalling 2,969 tons, seven small fishing craft of 113 tons and the sloop H.M.S. *Lavender*.

24. "U.49," April 29-May 25.—U.49 (Lieut.-Commander Richard Hartman), left Borkum on April 29. On May 2 at 9.30 p.m. in 59° 25' N., 4° 57' W., west of the Orkneys, the British s.s. *San Melito*, 10,160 tons, from Port Arthur to Kirkwall, on a course N. 89 E., in fine weather, moonlight and a heavy sea, sighted a submarine astern. The *San Melito* opened fire with her 15-pdr. gun and sent out an S.O.S.; the submarine disappeared and two destroyers from Kirkwall brought the ship safely in. This may have been U.49. She was westward of Tory Island on May 5, and at 6 p.m. in 54° 8' N., 13° 36' W. stopped the Norwegian s.v. *Snig*, 2,115 tons, going to St. Thomas (West Indies) in ballast and sank her with gunfire.

By May 8 she was west of the Scillies and at 6.30 a.m. in 49° 26' N., 8° 36' W. met and engaged the British s.s. *Petunia*, 1,749 tons, on the way from West Africa to Leith with ground nuts. The *Petunia* opened fire with her 12-pdr. 12-cwt. gun and by keeping the submarine astern managed to get away for a time. At 7 p.m., however, in 49° 24' N., 7° 21' W., she was again attacked by gunfire and at 9.50 p.m. was torpedoed and sunk, her master, Mr. T. Harcus, being taken prisoner. U.49 is stated by Mr. Harcus<sup>2</sup> to have been cruising for a time off St. Georges Channel, which seems probable, for on May 11, she turned up off the south coast of Ireland and, at 1.55 p.m. in 51° 48' N., 7° 46' W., sank without warning the British s.s. *Barrister*, 3,679 tons, going from Pernambuco to Liverpool. The ship was unescorted, and armed with a 12-pdr.

U.49 then made a long cast to the west, and on May 14 at 9.30 a.m. was in 50° 20' N., 13° 10' W., where she met the British s.v. *Carnmoney*, 1,299 tons, homeward bound from Buenos Aires to Queenstown under route instructions given by the British Consul in Buenos Aires in February 1917, three months before. She was sunk with gunfire and bombs, her crew of 23, including the Master's wife, being picked up, all safe, three days later, off the coast of Ireland.

<sup>1</sup> I.D. Log A.7/7.

<sup>2</sup> Report, s.s. *Petunia*, 8.1.1918, in I.D., Vol. 643.



It may have been *U.49* again that was sighted twice on May 15, out in longitude 15° W. by the U.S. destroyer *McDougal*.

On May 17 at 7 p.m. in 52° 55' N., 13° 56' W., she met the British s.s. *George Pyman*, 3,859 tons, from Cuba to Queenstown with sugar, and torpedoed her without warning; the ship sank and the crew of 31 men were picked up the next day and landed at Queenstown. On May 21 at 3.55 p.m. in 56° 10' N., 11° 35' W., the British s.s. *Austrian*, 3,127 tons, escaped from a submarine which may have been *U.49* on her way home. She passed Fair Isle in the dark and reached Emden on May 25, having sunk five vessels of 12,701 tons.

25. "**U.94,**" April 29—May 5.—*U.94* (Lieut.-Commander Saalwachter), left Emden on April 29. She seems to have been cruising in the North Sea, for she was reported to have been damaged by a depth charge and forced to return by a destroyer, which attacked her on May 3 at 5.10 a.m. in 57° 39' N., 0° 30' W., off Peterhead.<sup>1</sup>

On May 4 at noon,<sup>2</sup> she was within sight of the encounter between the *Sydney* and *Dublin*, and Zeppelin *L.43*, and stated that she attacked a light cruiser, though she does not mention firing a torpedo. There may have been other submarines in the vicinity, for the *Dublin* at 10.54 a.m. in about 54° 27' N., 3° 37' E., sighted the track of a torpedo ahead and after firing at one submarine, dropped a depth charge near another.<sup>3</sup> *U.94*, however, if it were she, escaped unscathed and arrived at Heligoland on May 5.

26. "**U.80,**" May 1—26.—*U.80* left Heligoland on May 1. On May 7 off St. Kilda she sank with bombs two small Danish sailing vessels, the *Sophie*, 237 tons, Queenstown to Firth of Forth in 57° 22' N., 9° W., and the *H.H. Petersen*, 192 tons, Glasgow to Denmark in 57° 31' N., 8° 53' W., and on May 8 at 7.30 p.m. in 54° 34' N., 9° 47' W., the Danish s.s. *Hans Broge*, bound from Senegal to Greenock, 1,432 tons, by gunfire. The same night (May 8) she laid 12 mines in Tory Sound,<sup>4</sup> one of which destroyed the armed trawler *Senator* on May 21 at 7.30 p.m. in 55° 13' N., 8° 11' W. while heaving in her sweep.<sup>5</sup> Proceeding south, *U.80* laid six mines in Galway Bay on May 10, and nine in the Shannon.<sup>6</sup> On June 15, one of these was found adrift, and being towed ashore by the "natives" of Galway, under the illusion that it was full of rum, exploded and killed one man.

<sup>1</sup> Marine-Archiv's report, in H.S./Q.41, but no such attack can be traced in British reports. H.M.S. *Bonetta* reported a submarine at 10 a.m. (May 3) in 56° 16' N., 1° 24' W.

<sup>2</sup> War Diary, intercept May 4/1331, I.D., Vol. 3028.

<sup>3</sup> See Section 2.

<sup>4</sup> In about 55° 12' N., 8° 11' W. O.U. 6020A, Field 219.

<sup>5</sup> Report in H.S. 1319/511.

<sup>6</sup> *Idem*, Fields 220 and 221.

The next day (May 11) off Valentia at 10.5 a.m. in 52° N., 10° 45' W., *U.80* torpedoed and sank the British s.s. *Calchas*, 6,748 tons, going from New York to Liverpool. The *Calchas* which was, contrary to instructions, within 10 miles of land in broad daylight was armed with a 4.7-in. gun which did not fire; the crew were saved by H.M.S. *Crocus* patrolling 5 miles off. *U.80* proceeded south and at 4.30 p.m. (May 11) in 51° 30' N., 11° W., stopped the Russian s.v. *Anna Alwina*, 364 tons, going from Pensacola to Liverpool with wood and sank her with bombs. The next day (May 12) she laid nine mines in the mouth of the Shannon and five mines in Bantry Bay in 51° 38' N., 9° 46' W.,<sup>1</sup> one of which damaged the British s.s. *Arlington Court*, 4,346 tons, when she came in, already damaged by a torpedo, on May 15.<sup>2</sup>

It may have been *U.80* again that at 8.13 p.m. (May 12) in 51° 25' N., 9° 42' W., fired a torpedo, which missed, at the British s.s. *Cuthbert*, 3,834 tons, going from New York to Liverpool. On May 16 in the Tory Island area she caught a glimpse of the *Olympic* and *Mauretania* going out on a westerly course,<sup>3</sup> too far off to attack.

She was back in the Bight by May 26, having sunk five vessels totalling 8,973 tons.

27. "**U.48,**" May 6—29.—*U.48* (Lieutenant.-Commander Buss) left Emden on May 6, and on May 12 at 6.45 a.m. sank the British s.s. *Onofre*, 9,717 tons in 52° 26' N., 11° 52' W. (See S.20). On May 13 at 11.10 a.m. in 51° 18' N., 14° 20' W., she torpedoed the British s.s. *Jessmore*, 3,911 tons, going from Baltimore to Manchester. The ship was armed with a 4.7-in. gun, but saw nothing of the submarine, her boats being picked up by the s.s. *Neilrose*, 3,568 tons, Bahia Blanca to Liverpool, which was missed by a torpedo while doing so. *U.48* proceeded west and on May 14 at 4.30 p.m. in 51° 12' N., 16° W., attacked the "Q" ship *Carrigan Head*<sup>4</sup> without success. The French s.s. *Meuse*, 4,075 tons, from New York to Havre was close by and was ordered by the *Carrigan Head* to steer north—which she did. She was evidently shadowed for at 10.35 p.m. (May 14) in 52° N., 15° 46' W., she was struck by two torpedoes and went down in five minutes. The crew, after a terrible eight days in an open boat managed to reach the Irish coast.

The next appearance of *U.48* was to the eastward where on May 17 at 9.30 a.m. in 51° 28' N., 12° 42' W. she sank by gunfire in a heavy sea the Russian s.v. *Margareta*, 1,873 tons, going from Beaumont (Texas) to Liverpool. The crew were all picked up by an Armed Trawler and brought in to Berehaven. On May 19 at 1.10 a.m., *U.48* reported herself by wireless in 49° 42' N., 9° 4' W.,

<sup>1</sup> O.U. 6020A, Field 222 in 51° 38' N., 9° 46' W.

<sup>2</sup> See S.28.

<sup>3</sup> War Diary, May 28, I.D., Vol. 3028/122.

<sup>4</sup> H.S. 648/310; no details of this attack.



and two days later on May 21 at noon in 50° 57' N., 8° 31' W., stopped the Norwegian s.v. *Madura*, 1,096 tons, going from Gulf Port to Cardiff, and sank her with gunfire and a torpedo. At 1 p.m. (May 21) in 51° N., 8° 20' W., she stopped the Russian s.v. *Lynton*, 2,531 tons, going from Pensacola to Greenock, but was rudely disturbed by the U.S. destroyer *Erricsson* who came up and fired a torpedo forcing her to dive hurriedly, not however before she had sunk the *Lynton* with one torpedo and fired another at the *Erricsson*, which missed.

It was time for *U.48* to return, but on the way home she had a narrow escape. *E.47* (Lieutenant Edward C. Carré) of the IX Flotilla at Harwich (H.M.S. *Maidstone*, Captain A. K. Waistell) was cruising on anti-submarine patrol in the North Sea and on May 28 at 4.30 a.m. in 54° 18' N., 3° 56' E., sighted a submarine four points on the port bow, and at 4.42 a.m. fired both bow tubes at her.<sup>1</sup> They missed and *U.48* got safely home.

She had sunk six vessels, totalling 23,203 tons, had been once engaged by a "Q" ship, and been missed by three torpedoes.

28. "U.57," May 7-June 4.—*U.57* (Lieut.-Commander Ritter George) left Heligoland on May 7.

On May 12, at 10 a.m., north-west of Ireland in 55° 48' N., 11° 40' W., she met the British s.s. *Refugio*, 2,642 tons, Ardrossan to Huelva, and after missing her with a torpedo rose and opened fire. The ship replied with a 13-pdr. maxim but was stopped and sunk, her route instructions<sup>2</sup> being captured.

*U.57* proceeded south and on May 14 at 9.45 p.m. in 51° 24' N., 11° 20' W., torpedoed the British s.s. *Arlington Court*, 4,346 tons, bound from Halifax to Cherbourg with timber. The ship was armed with a 3-pdr. Vickers and opened fire; though the propeller was gone and the after part wrecked the master stuck by her; she kept afloat and H.M.S. *Gladiolus* got her in tow of a tug. At 2.50 a.m. (May 15) in 51° 28' N., 11° W., as she crawled along two torpedoes missed her, but she managed to reach Berehaven where she was unlucky enough to strike one of the mines laid by *U.80* three days before.<sup>3</sup> In spite of this climax of misfortune she was successfully beached at Mill Cove and salvaged.<sup>4</sup>

*U.57* continued to cruise in the Skelligs area and on May 15, at 2.50 p.m. in 51° 46' N., 11° 47' W., was sighted ahead 7 miles off by

<sup>1</sup> H.S.A. 273/639. *U.48* at 0658 reported a British submarine in 54° 20' N., 4° 5' E. I.D. Vol. 3028, War Diary, May 28/0658.

<sup>2</sup> To Inishtrahull, thence to 56° 10' N., 10° 10' W., thence west (true) to 17° 30' W.; thence to 45° N., 18° 30' W., thence south (true) to 35° 40' N., etc. Papers captured from German Submarine. War against Commerce, 1917, C.B. 01370/75, extracts from papers of s.s. *Refugio*.

<sup>3</sup> See S.26.

<sup>4</sup> H.S. 1313/34. Their Lordships' appreciation to Master, Mr. Wm. Benjamin.

H.M.S. *Laburnum* while escorting the British s.s. *Esperanza de Larrinaga*, 4,981 tons, towards the Fastnet. After taking her convoy at utmost speed to the north-east, the *Laburnum* turned back and, sighting a submarine 6 miles off almost on the same spot, proceeded towards it and at 6.30 p.m. dropped a depth charge.<sup>1</sup>

Two days later, on May 17 at 8.35 a.m., some 40 miles to the north-east, in about 52° 9' N., 10° 55' W., the "Q" ship *Heligoland* encountered a submarine. The *Heligoland* was close-hauled on the starboard tack heading E. by N., when a submarine, bearing W.N.W., was sighted some 5,000 yards off. Approaching to within 3,500 yards, the submarine stopped and opened a deliberate fire. The *Heligoland* opened fire at 2,500 yards and the submarine (probably *U.57*) went down.<sup>2</sup>

On May 19 in the morning,<sup>3</sup> somewhere about 8 a.m. in 51° 27' E., 10° 20' W., *U.57* fired a torpedo which missed, at the British White Star liner *Celtic*, 20,904 tons, under escort of the U.S. destroyer *Porter*.

An hour or so later, at 9.5 a.m. (May 19) in about 51° 23' N., 9° 58' W., she was able to torpedo the British s.s. *Farnham*, 3,102 tons, bound from Bizerta to Glasgow. This vessel was making only 6½ knots, zig-zagging, escorted by H.M.S. *Laburnum*, 5 cables on her port bow, zig-zagging at 13 knots. She was torpedoed amidships and sank at once, with a loss of 17 out of 27. The *Laburnum*, sighting an oily wake, made for it and dropped a depth charge.

Some 30 miles to the northward that afternoon (May 19) at 1.20 p.m., off the Skelligs in 51° 33' N., 10° 30' W., the "Q" ship *Acton* (Lieut.-Commander G. Rolfe) was cruising off the Skelligs when a submarine opened fire.<sup>4</sup> The *Acton* (one 4-in., four 12-pdr.) returned the fire at 3,000 yards and the submarine went down at once. Nothing more was heard of *U.57* for some days, till on May 24 at 11.40 a.m. in 50° 56' N., 10° 46' W., she torpedoed the British s.s. *Belgian*, 3,657 tons, going from New Orleans to Liverpool, under the escort of H.M.S. *Buttercup*, 4 cables on her starboard bow. The ship, armed with a 4.7-in. gun, saw nothing of the submarine and sank about 3.35 p.m. The movements of *U.57* between May 24 and 29 are unknown, though it is possible that she (or *U.C.66*) was the submarine attacked north of the Scillies by Seaplane 8656 at 9.25 a.m. on May 27.<sup>5</sup>

<sup>1</sup> H.S.1313/235 and Marine-Archiv, H.S./Q.41.

<sup>2</sup> H.S.1313/241 and H.S./Q.41.

<sup>3</sup> Queenstown report (H.S. 649/20) says 8.40 a.m., 10° 20' W. Telegram (H.S. 447/409) says 9° 10' W.; Marine-Archiv (H.S./Q.41) says between 2.55 a.m. and 4.10 a.m.

<sup>4</sup> *U.57* gives time as 11.9 a.m. and says nothing of fire being opened. H.S./Q.46.

<sup>5</sup> See *U.C.66*, Section 72.



On May 29 at 4.20 a.m. in 51° 37' N., 10° 37' W., the British s.s. *Pavia*,<sup>1</sup> 2,945 tons, was missed by a torpedo fired by *U.57*, which was probably then on her way home, for on June 1, she was off the Shetlands where, in 59° 41' N., 5° 52' W., she sank the British f.v. *Teal*.

She was back at Heligoland on June 4, having sunk three ships of 9,401 tons and a fishing boat and having been attacked twice by "Q" ships without success.

29. "**U.46,**" May 9-30.—*U.46* (Lieut.-Commander Saalwachter), left Emden on May 9. On May 15 at 9 p.m. in 55° 40' N., 12° 45' W., she stopped the Norwegian s.s. *Grosholm*, 1,847 tons, going from Liverpool to Norfolk and sank her by gunfire; on May 17 at 2.30 p.m.,<sup>2</sup> in 53° 25' N., 13° 30' W., she torpedoed the British s.s. *Lewisham*, 2,810 tons, which left Halifax on May 3 for Limerick with 4,000 tons of wheat; with the exception of the Master and two gunners, who were taken prisoners, no one was saved.

*U.46* proceeded south-eastward and on May 18 at 4.50 a.m. in 52° 48' N., 12° 15' W., torpedoed without warning the British s.s. *Penhale*, 3,712 tons, bound from Cuba to Queenstown with 4,500 tons of sugar. The ship carried a 12-pdr. 12-cwt., but had no opportunity of using it and sank in 40 minutes. After taking the Master prisoner, *U.46* went on to the south-west and at 6 p.m. (May 18) in 51° 41' N., 13° 49' W., sent two torpedoes into the British s.s. *Llandrindod*, 3,841 tons, going from Durban to Glasgow with 5,000 tons of maize. The ship was armed with a 13-pdr., which did not open fire; her wireless was disabled by the explosion and she sank in quarter of an hour. It is noteworthy that the *Llandrindod* at 9 a.m. had sent a wireless to Queenstown stating that the ship would reach the rendezvous given her at Sierra Leone (51° 40' N., 14° W.) at 5 p.m., and that at 6 p.m. *U.46* was close to the rendezvous waiting for her. Two days passed before *U.46*, who by this time had the masters of three British ships on board, found another victim—this time a "Q" ship.

On May 20, the "Q" ship *Paxton*,<sup>3</sup> Lieut.-Commander George O. Hewett, was cruising some 50 miles west of the Fastnet; at 9.15 a.m. in about 51° 33' N., 11° 29' W., steering N. 79 W. (magnetic) at 9 knots in hazy weather, she sighted a submarine on the port bow 4,000 yards off. The submarine (which was *U.48*) opened fire; the *Paxton* dropped smoke boxes and after being hit, at 10.45 a.m., returned the fire and the submarine went down. All that afternoon the *Paxton* was busy disguising herself and proceeded on her way with a new name "*Tosca Sverige*," on her side. At 7.15 p.m. in

<sup>1</sup> I.D. Log F.31/4; Marine-Archiv H.S./Q.46.

<sup>2</sup> Master of *Penhale's* report, I.D. Vol. 724; Marine-Archiv H.S./Q.41.

<sup>3</sup> Alias *Lady Patricia* or *Q.25*.

51° 36' N., 14° W., the track of a torpedo was seen; it struck the port side aft, blew up the gunhouse and broke the propeller shaft; the ship began to settle aft; the crew went to "panic" stations and abandoned ship, leaving the Captain, Engineer Lieutenant George Prescott, R.N.R., and the guns' crew on board. Her assailant, however, who on this second occasion was *U.46*, was too cautious to break surface and at 7.30 p.m. sent a second torpedo into the ship, which broke in two and sank immediately. Her commander was taken prisoner and Engineer Lieutenant George Prescott was killed at his post of duty by the explosion of the second torpedo. A lifeboat with 21 survivors and with only three oars managed to reach Black Rock after a perilous 7 days at sea; the s.s. *Dundrennan*, on May 26, picked up four out of 11 men, who had got on a raft (the other seven died); another boat with 11 survivors was picked up by the U.S. destroyer *Wadsworth* on May 22.<sup>1</sup>

*U.46's* next victim was the Japanese s.s. *Tansan Maru*, 2,443 tons, "lost without trace," proceeding from Boston to Manchester, torpedoed and sunk on May 22 at 8 p.m.<sup>2</sup> in 53° 25' N., 13° 30' W. *U.46* seems then to have been on her way home for on May 24 at 11 a.m. in 58° 30' N., 8° 36' W. (off the Hebrides), she torpedoed and sank the British s.s. *Jersey City*, 4,670 tons, going from Norfolk to Hull with 7,000 tons of grain. The ship had a 12-pdr., but nothing was seen of the submarine; the crew were picked up off Noup Head in the Orkneys. *U.46* was back at Emden on May 30, having sunk six ships of 19,323 tons (which she gave as 19,300 tons) and a "submarine trap," the "Q" ship *Paxton*.

30. "**U.30,**" May 10-30.—*U.30* (Lieut.-Commander Grünert) left Emden on May 10, to cruise on the West coast of Ireland. Off the Hebrides she narrowly escaped the fate of *U.81*. *E.54* (Lieut.-Commander Robert Raikes) of the *Vulcan's* flotilla at Lough Swilly was cruising there when on May 16 at 1.2 p.m. in 56° 18' N., 11° W., she sighted an enemy submarine 335°, about 2½ miles off steering to the southward. It was estimated that on her then course of 270° and speed of 5 knots *E.54* would get within striking distance, but at 1.20 p.m., the enemy began to draw rapidly ahead and at 1.28, *E.54*, seeing the distance increasing, fired both bow tubes at 1,200 to 1,500 yards.<sup>3</sup> Both missed and *U.30*, for it was probably she, went on.

She had small success and sank only two ships. That evening (May 16) at 7.0 p.m. in 56° 3' N., 12° 30' W., she torpedoed and sank the British s.s. *Middlesex*, 8,364 tons, proceeding from Liverpool to

<sup>1</sup> Reports on loss of H.M.S. *Paxton* in H.S. 648/343. It appears that 36 were saved and 23 lost.

<sup>2</sup> Statement of Master of *Penhale* (prisoner in *U.46*) in I.D. Vol. 645; Marine-Archiv, H.S./Q.41.

<sup>3</sup> H.S.A. 278/125.



Australia. The ship was armed with a 4.7-in. gun which had nothing to fire at. She was not escorted, but was able to send out an S.O.S. by wireless. *E.54* found the boats next day (May 17) at 11 a.m. but when closing them was driven down by a shot and a depth charge from the destroyer, H.M.S. *Rapid*, who picked them up.<sup>1</sup> Six days elapsed before *U.30* found another victim. On May 22 at 10 p.m. in about 59° 54' N., 7° 16' W., she sank by gunfire the small Danish s.v. *Freden*, 166 tons, going from Setubal (Portugal) to Thorshaven. The crew, with the exception of the master and cook who died from exposure, were picked up by the Danish schooner *Cimbria* on the way to Stornoway with an armed guard on board from the French armed merchant cruiser *Champagne*. *U.30* was back in Emden by May 30, having sunk two ships of 8,530 tons. She had been attacked once by a British submarine, *E.54*.

31. "U.C.33," May 13-28.—*U.C.33* (Lieut.-Commander Martin Schelle) left Heligoland on May 13, proceeding by the Channel to the South Coast of Ireland. There on May 17 she laid six mines off Capel Island<sup>2</sup> (by Youghal, Ireland South) which were discovered on May 19, by *M.L.173* sighting a moored mine showing on the surface. *U.C.33* shaped course to the eastward and on May 18 laid another six mines off Waterford,<sup>3</sup> which do not appear to have been found till May 30, and six east of Waterford in Ballyteige Bay.<sup>4</sup> It may have been she<sup>5</sup> that, the "Q" ship, *Salvia*, sighted in that area on May 18 at 7 a.m., in 51° 17' N., 8° 15' W.; the submarine was steering W.S.W. and submerged at 7.30 a.m.; at 7.40 a.m. the *Salvia* sighted an oily wake moving west and at 7.52 dropped two depth charges ahead of it.

H.M.S. *Vala* the next day, May 19, at 10 a.m. sighted an oily patch moving at about 7 knots and working ahead of it at 11 a.m. in 51° 33' N., 8° 11' W., dropped two "D" depth charges. This was probably *U.C.33*<sup>6</sup> but the attack evidently had no effect, for she went on round Ireland to the Faroe Islands where between May 22 and 24 she made an inglorious attack on a fishing fleet, sinking 11 fishing vessels, nine Danish of 697 tons and two British<sup>7</sup> of 420 tons. On May 25 at 9.5 a.m. in 61° 4' N., 2° 53' W., she stopped and set on fire the Norwegian s.v. *Whinlatter*, 1,378 tons, bound from

<sup>1</sup> Master's report in I.D. Vol. 645; H.S.A. 278/126.

<sup>2</sup> O.U. 6020A, Field 196, 51° 51' N., 7° 51' W.

<sup>3</sup> *Idem*, Field 197, in 52° 6' N., 6° 56' W.

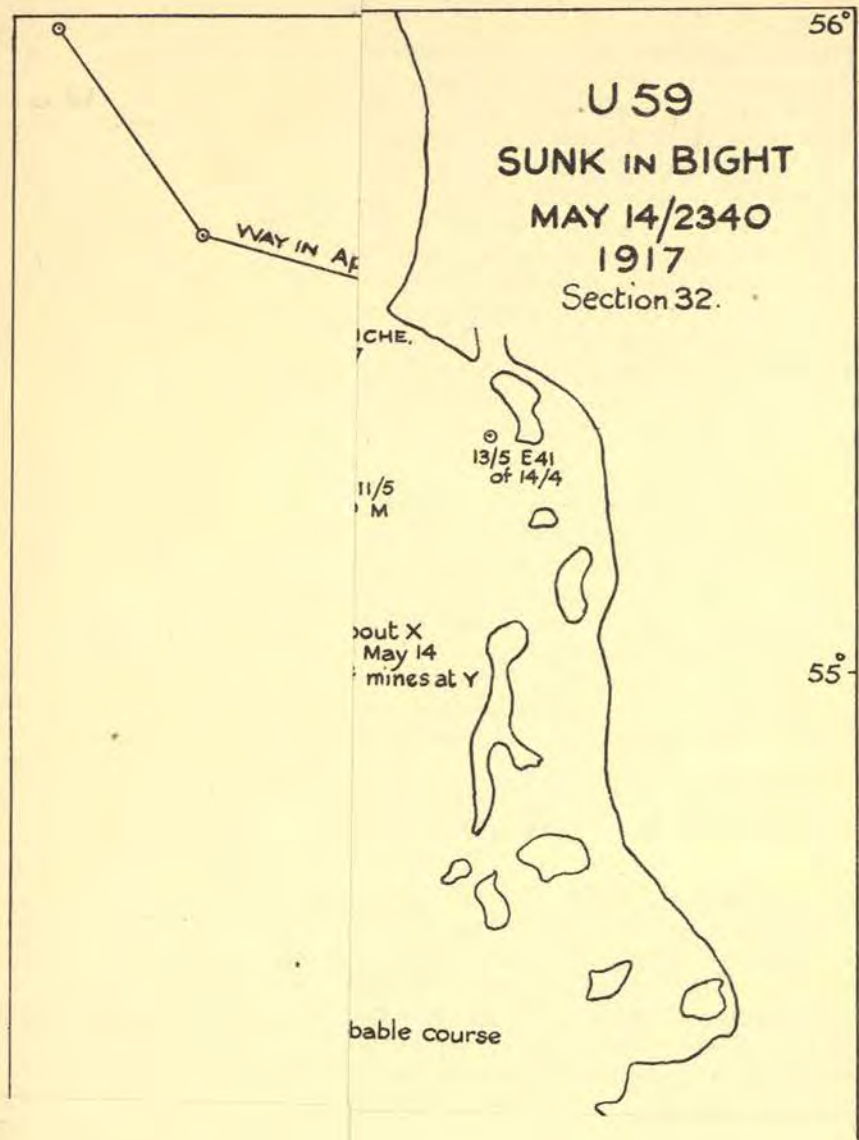
<sup>4</sup> *Idem*, Field 198, 52° 9' N., 6° 51' W.

<sup>5</sup> Or *U.B.36*, or possibly *U.49*. *U.C.33* noted in her War Diary that she was leaving an oily track, but makes no mention of depth charges. Marine-Archiv H.S./Q.23; *Salvia's* report in H.S.648/330.

<sup>6</sup> Marine-Archiv, H.S./Q.46.

<sup>7</sup> May 23, 4.30 p.m., in 60° 55' N., 8° 45' W., British f.v. *Sisapon*, 211 tons; and at 6.40 p.m., in 61° N., 8° 30' W., British f.v. *Oleavia*, 209 tons.





Queenstown to Copenhagen, and at 7.15 p.m., off Muckle Flugga (Shetlands), in  $61^{\circ} 7' N.$ ,  $1^{\circ} 2' W.$ , she sank with bombs the Norwegian s.s. *Glyg*, 358 tons, bound from Lerwick to Iceland with herrings.

She was back at Heligoland on May 28, having sunk only 2 ships, totalling 1,736 tons and 11 fishing vessels of 1,117 tons, total 2,853 tons.

32. "**U.59**," **May 14.**—*U.59* (Lieut.-Commander Freiherr Wilhelm von Fircks) left Heligoland on May 14. At 2.30 p.m., as she was on her way north, in a position somewhere opposite Sylt, she was warned of mines. The warning went out in error for it was cancelled the next day (either the wrong position had been given or no mines had been found there), but it possibly led *U.59* to alter course. In any case about 11 p.m. (May 14) she ran into a mine, possibly one of those laid by the *Royalist*, *Blanche* and *Abdiel* on May 12, 1917,<sup>1</sup> or one of a German minefield laid on May 13. Her wreck was found in a position given finally as  $55^{\circ} 27' N.$ ,  $7^{\circ} 13' E.$ <sup>2</sup>; her captain died and only four of her crew were saved. (Plans 2 and 3).

33. "**U.C.76**" **blown up May 10.**—*U.C.76* (Lieutenant Wilhelm Barten) was blown up while embarking mines at Heligoland on May 10.<sup>3</sup> The captain and all the crew, except nine hands who were ashore were lost. She was salvaged later but apparently never went out again during the war.

34. "**U.C.44**," **May 14-30.**—*U.C.44* (Lieut.-Commander Kurt Tebbenjohanns) left Heligoland on May 14, following *U.C.33* down Channel to the South Coast of Ireland. On May 19 she laid 12 mines off Kinsale Head,<sup>4</sup> which were found on May 20 by the sighting of a moored mine on the surface. She laid her remaining six mines the same day, off Galley Head,<sup>5</sup> one of which was sighted on the surface on June 16 and sunk by the American s.s. *Sterrett*. On May 20 at 7.15 a.m. close to the Fastnet in  $51^{\circ} 24' N.$ ,  $9^{\circ} 39' W.$ , she sighted the American s.s. *Kroomland*, a transport of 12,806 tons, escorted by

<sup>1</sup> Field 62, 235 mines laid May 12-13, 5 miles south-east of Horns Reef Rev. Light Buoy.

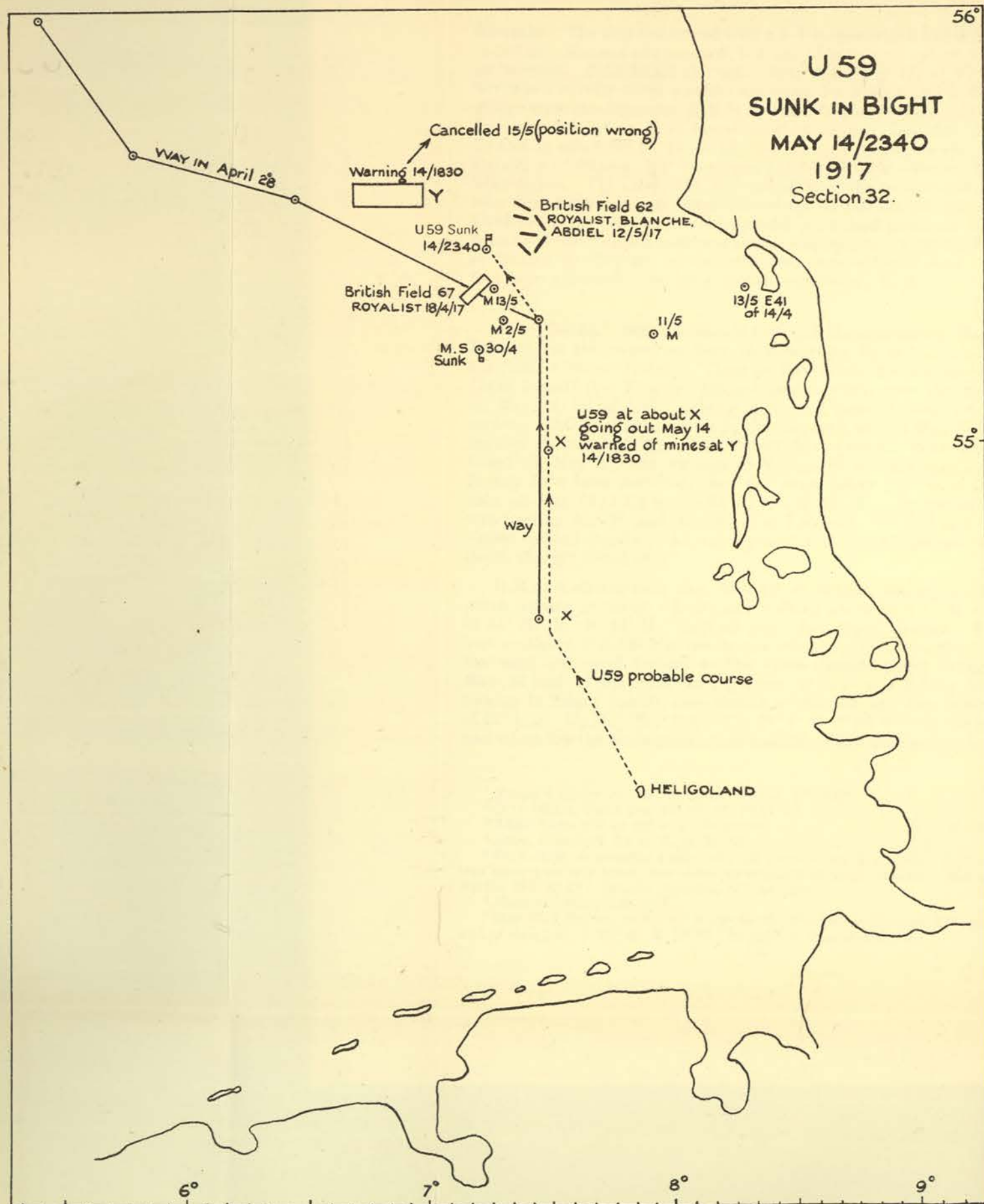
<sup>2</sup> German History, Nordsee, vol. 6, p 269; this position is 6 miles west of British Field 62, and 5 miles north of Field 67, laid by *Royalist*, *Blanche* and *Abdiel* on April 18. Position of *U.59* was first given by German minesweepers as  $55^{\circ} 20' N.$ ,  $7^{\circ} 14' E.$ , which is in Field 67. Leith's History of British Minefields, p. 231, has given it to Field 67, but it should be noted that Field 67 had previously been found by the German sweepers.

<sup>3</sup> Date is from Mittler, Halbstocks der Flagge. A survivor of *U.C.44* gave the date as May 14 (I.D. Vol. 549A.)

<sup>4</sup> *O.U.6020A*, Fields 210, 211 in about  $51^{\circ} 35' N.$ ,  $8^{\circ} 32' W.$

<sup>5</sup> *Idem*, Field 212 round about  $51^{\circ} 29' N.$ ,  $8^{\circ} 54\frac{1}{2}' W.$





Queenstown to Copenhagen, and at 7.15 p.m., off Muckle Flugga (Shetlands), in  $61^{\circ} 7' N.$ ,  $1^{\circ} 2' W.$ , she sank with bombs the Norwegian s.s. *Glyg*, 358 tons, bound from Lerwick to Iceland with herrings.

She was back at Heligoland on May 28, having sunk only 2 ships, totalling 1,736 tons and 11 fishing vessels of 1,117 tons, total 2,853 tons.

32. "U.59," May 14.—U.59 (Lieut.-Commander Freiherr Wilhelm von Fircks) left Heligoland on May 14. At 2.30 p.m., as she was on her way north, in a position somewhere opposite Sylt, she was warned of mines. The warning went out in error for it was cancelled the next day (either the wrong position had been given or no mines had been found there), but it possibly led U.59 to alter course. In any case about 11 p.m. (May 14) she ran into a mine, possibly one of those laid by the *Royalist*, *Blanche* and *Abdiel* on May 12, 1917,<sup>1</sup> or one of a German minefield laid on May 13. Her wreck was found in a position given finally as  $55^{\circ} 27' N.$ ,  $7^{\circ} 13' E.$ <sup>2</sup>; her captain died and only four of her crew were saved. (Plans 2 and 3).

33. "U.C.76" blown up May 10.—U.C.76 (Lieutenant Wilhelm Barten) was blown up while embarking mines at Heligoland on May 10.<sup>3</sup> The captain and all the crew, except nine hands who were ashore were lost. She was salvaged later but apparently never went out again during the war.

34. "U.C.44," May 14-30.—U.C.44 (Lieut.-Commander Kurt Tebbenjohanns) left Heligoland on May 14, following U.C.33 down Channel to the South Coast of Ireland. On May 19 she laid 12 mines off Kinsale Head,<sup>4</sup> which were found on May 20 by the sighting of a moored mine on the surface. She laid her remaining six mines the same day, off Galley Head,<sup>5</sup> one of which was sighted on the surface on June 16 and sunk by the American s.s. *Sterrett*. On May 20 at 7.15 a.m. close to the Fastnet in  $51^{\circ} 24' N.$ ,  $9^{\circ} 39' W.$ , she sighted the American s.s. *Kroomland*, a transport of 12,806 tons, escorted by

<sup>1</sup> Field 62, 235 mines laid May 12-13, 5 miles south-east of Horns Reef Rev. Light Buoy.

<sup>2</sup> German History, Nordsee, vol. 6, p 269; this position is 6 miles west of British Field 62, and 5 miles north of Field 67, laid by *Royalist*, *Blanche* and *Abdiel* on April 18. Position of U.59 was first given by German minesweepers as  $55^{\circ} 20' N.$ ,  $7^{\circ} 14' E.$ , which is in Field 67. Leith's History of British Minefields, p. 231, has given it to Field 67, but it should be noted that Field 67 had previously been found by the German sweepers.

<sup>3</sup> Date is from Mittler, Halbstocks der Flagge. A survivor of U.C.44 gave the date as May 14 (I.D. Vol. 549A.)

<sup>4</sup> O.U.6020A, Fields 210, 211 in about  $51^{\circ} 35' N.$ ,  $8^{\circ} 32' W.$

<sup>5</sup> *Idem*, Field 212 round about  $51^{\circ} 29' N.$ ,  $8^{\circ} 54\frac{1}{2}' W.$



a British destroyer, and fired a torpedo at her which missed.<sup>1</sup> At 3.15 p.m., in 51° 23' N., 10° 3' W. the "Q" ship *Vala* going N.W. by W. sighted a submarine breaking surface 800 yards astern which proceeded to open fire. The *Vala* dropped her screens and returned the fire, getting off 4 shots, which appeared to shatter the conning tower, before the submarine, which was *U.C.44*, dived undamaged.<sup>2</sup> On May 21 at 6.25 p.m. in 51° 27' N., 10° 27' W. the U.S. destroyer *Tucker* sighted her at long range and opened fire on her, driving her down.<sup>3</sup>

Like *U.C.75* and *U.C.33*, she sank nothing more in the South-West Approach, but she seems to have decided to try her luck on the East Coast of Scotland on her way back. There was certainly a submarine lurking in the Moray Firth on May 26, for about 2.30 p.m. in 57° 46' N., 3° 30' W., the armed trawler *Chalcedony* sighted one thrice, and at 4.40 p.m. in 57° 41' N., 3° 52' W., the British oiler *Baku Standard*, 3,708 tons, reported being chased. On May 28, *U.C.44* was off Peterhead, and at 4 a.m. in 57° 48' N., 1° 8' W., sent a torpedo into the Norwegian s.s. *Turid*, 1,148 tons, south-bound from Trondheim, via Lerwick to Hull in a south-going Scandinavian convoy. The crew were picked up by one of the escorting destroyers and *U.C.44* went on, reaching Heligoland on May 30. She had sunk only one ship of 1,148 tons.

35. "U.C.50," May 14-June 6.—*U.C.50* (Lieutenant Rudi Seuffer) left Heligoland on May 14 and, proceeding by the Channel to the West Coast of Ireland on May 21, laid 16 mines off the Bull Rock<sup>4</sup> (near Dursey Head), which were responsible for the loss of the armed trawler-sweeper *Ina Williams*<sup>5</sup> on May 30 at 9.23 p.m. in 51° 34' N., 10° 18' W. On May 26 at 4.30 p.m. in 51° 11' N., 12° 13' W., she fired a torpedo, which missed, at the British s.s. *Inca*, 3,593 tons, homeward bound from Jamaica to Liverpool, escorted by H.M.S. *Crocus* at the time. She seems to have continued cruising in that area, for on May 27 in 51° 9' N., 8° 46' W., she sank a British steamer, the *Dartmoor*, 2,870 tons, which was lost with all hands.<sup>6</sup> She probably remained a day or two longer in the vicinity, for she did not reach Heligoland till June 6. She had sunk only one ship of 2,870 tons.

36. "U.86," May 15-June 9.—*U.86* left Emden on May 15 to operate in the Atlantic and Channel Approach. She was forced to return through stress of weather, sailing again on May 17. She got

<sup>1</sup> The Master stated four torpedoes were fired, three of which hit without exploding. I.D. Vol. 648.

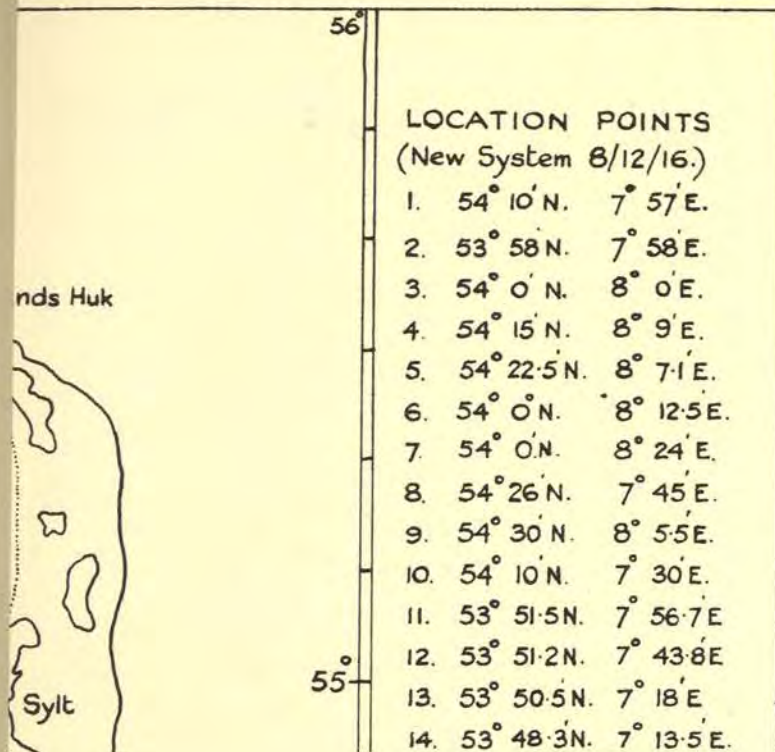
<sup>2</sup> Marine-Archiv in H.S./Q.49.

<sup>3</sup> Marine-Archiv, H.S./Q.41.

<sup>4</sup> O.U.6 020A, Field 223a in 51° 34' N., 10° 18½' W., and Field 223b in 51° 34' N., 10° 17' W.

<sup>5</sup> H.S. 450/724.

<sup>6</sup> *U.C.50's* report in C.B. 01370/51; H.S. 1314/252.

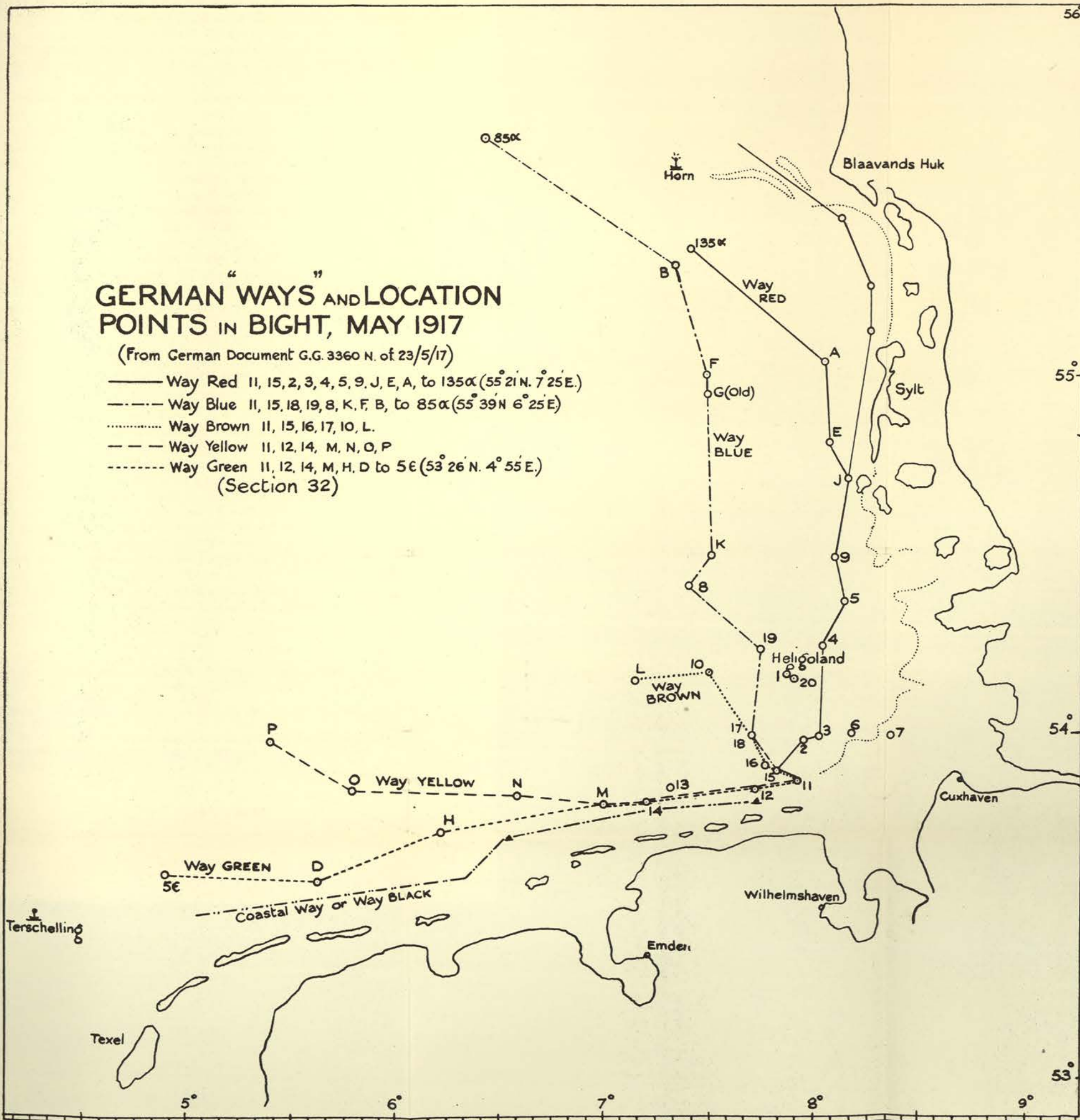




# GERMAN WAYS AND LOCATION POINTS IN BIGHT, MAY 1917

(From German Document G.G. 3360 N. of 23/5/17)

- Way Red II, 15, 2, 3, 4, 5, 9, J, E, A, to 135α (55° 21' N. 7° 25' E.)
  - - - Way Blue II, 15, 18, 19, 8, K, F, B, to 85α (55° 39' N. 6° 25' E.)
  - ..... Way Brown II, 15, 16, 17, 10, L.
  - - - Way Yellow II, 12, 14, M, N, O, P
  - - - Way Green II, 12, 14, M, H, D to 5ε (53° 26' N. 4° 55' E.)
- (Section 32)



## LOCATION POINTS (New System 8/12/16.)

- |         |              |             |
|---------|--------------|-------------|
| 1.      | 54° 10' N.   | 7° 57' E.   |
| 2.      | 53° 58' N.   | 7° 58' E.   |
| 3.      | 54° 0' N.    | 8° 0' E.    |
| 4.      | 54° 15' N.   | 8° 9' E.    |
| 5.      | 54° 22.5' N. | 8° 7.1' E.  |
| 6.      | 54° 0' N.    | 8° 12.5' E. |
| 7.      | 54° 0' N.    | 8° 24' E.   |
| 8.      | 54° 26' N.   | 7° 45' E.   |
| 9.      | 54° 30' N.   | 8° 5.5' E.  |
| 10.     | 54° 10' N.   | 7° 30' E.   |
| 11.     | 53° 51.5' N. | 7° 56.7' E. |
| 12.     | 53° 51.2' N. | 7° 43.8' E. |
| 13.     | 53° 50.5' N. | 7° 18' E.   |
| 14.     | 53° 48.3' N. | 7° 13.5' E. |
| 15.     | 53° 53.2' N. | 7° 52.5' E. |
| 16.     | 53° 54.3' N. | 7° 49.5' E. |
| 17.     | 54° 0' N.    | 7° 42.5' E. |
| 18.     | 54° 0' N.    | 7° 42.5' E. |
| 19.     | 54° 14.5' N. | 7° 45' E.   |
| 20.     | 54° 9.5' N.  | 7° 53.9' E. |
| A.      | 55° 2' N.    | 8° 3' E.    |
| B.      | 55° 18' N.   | 7° 20' E.   |
| D.      | 53° 35' N.   | 5° 40' E.   |
| E.      | 54° 55' N.   | 8° 3' E.    |
| F.      | 55° 0' N.    | 7° 30' E.   |
| G (old) | 54° 57' N.   | 7° 30' E.   |
| H.      | 53° 43.5' N. | 6° 14' E.   |
| J.      | 54° 44.5' N. | 8° 8.5' E.  |
| K.      | 54° 30' N.   | 7° 30' E.   |
| L.      | 54° 9.6' N.  | 7° 10' E.   |
| M.      | 53° 48' N.   | 7° 0' E.    |
| N.      | 53° 49' N.   | 6° 37.8' E. |
| O.      | 53° 50.8' N. | 5° 51' E.   |
| P.      | 53° 59' N.   | 5° 25' E.   |

Positions From  
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nothing off Ireland, but on May 28 at about 8.20 a.m. in about 48° 50' N., 10° 10' W.,<sup>1</sup> torpedoed and sank the British s.s. *Antinoe*, 2,396 tons, proceeding from Seville to Newport (Mon.) with iron ore. The boats were drawn down by the suction of the water, and only four men out of 26 were saved. At 12.45 p.m. (May 28) in 48° 50' N., 9° 45' W.,<sup>2</sup> *U.86* torpedoed a larger ship, the British s.s. *Limerick*, 6,827 tons, going from Sydney to London with frozen meat and butter, sinking her with a second torpedo. Both these ships were armed; the *Antinoe*, with a 12-pdr., the *Limerick* with a 4.7-in., but in neither case was there any opportunity of opening fire. The *Limerick* went down in an hour with a loss of eight men out of 63. The next day (May 29) at 8.15 a.m., the British s.s. *Oswego*, 5,793 tons, bound from New York to Hull, had just reached her rendezvous in 48° 44' N., 10° 15' W., when she was torpedoed, and a second torpedo hit and sank her just as the boats got clear. They were picked up 2 hours later by the destroyer *Brisk* which had come out to escort her in. Two days later (May 31) at 9 a.m. in 48° N., 12° 30' W., *U.86* fired two torpedoes at the Greek s.s. *N. Hadzikyriakos*, 3,533 tons, on the way from Rosario to London with 5,600 tons of maize. The first torpedo went under the ship, but a second hit and sank her. The boats were badly damaged and some 23 men were lost by drowning and exposure.

*U.86* was back in the Ems on June 9, having sunk four ships, of 18,549 tons, which she gave as 23,327 tons.

37. "U.71," May 20–June 9.—*U.71* (Lieut.-Commander Walter Gude), one of the big minelayers, left Heligoland on May 20. On May 26 she laid 12 mines<sup>3</sup> in St. Magnus Bay (Shetlands, North-West) in the approach to Swarbacks Minn, on the West Coast of the Shetlands, the base of the 10th Cruiser Squadron. On June 1, the armed trawler *Lysander* found one of them which had been cut adrift by a paravane,<sup>4</sup> and 10 more were found between June 1 and 6. *U.71* laid the remainder of her mines to the number of 22 on the East Coast of the Shetlands off Fetlar,<sup>5</sup> evidently intending them to catch the Scandinavian convoys, though nearly 2 months passed before they registered a success. Then on July 26, at 10.15 a.m., the French s.s. *Flore*, 3,553 tons, struck a mine in 60° 36' N., 0° 37' W., and sank, and the same night the British s.s. *Ethelwynne* struck

<sup>1</sup> From s.s. *Limerick's* report in I.D. 646. *Limerick* at 9.30 a.m. saw a torpedoed ship bearing N. 45 E., "a long way off"; the position in *Antinoe's* report, 49° 25' N., 8° W. (approximately), was from a Maltese A.B.

<sup>2</sup> From I.D. report. Master's deposition (M.67594) says 48° 40' N., 9° 35' W., 148 miles W. by S. of Bishop's Rock.

<sup>3</sup> O.U. 6020A, Fields 216, 217, six in 60° 25' N., 1° 43' W., and six in 60° 27' N., 1° 40' W.

<sup>4</sup> In 60° 24' N., 1° 46' W.; the paravane was probably H.M.S. *Minotaur's* which had sailed from Swarbacks Minn on May 31. H.S. 450/875.

<sup>5</sup> O.U. 6020A, Field 218, 60° 39' N., 0° 40' W.



another in 60° 36' N., 0° 32' W., but managed to reach Fetlar on the Shetland coast.<sup>1</sup>

U.71 sank nothing in May and was back in Brunsbüttel on June 9.

38. "U.87," May 20–June 9.—U.87 (Lieut.-Commander Rudolf Schneider) left Borkum on May 20. On May 23, at 2.40 a.m. in 59° 39' N., 3° 20' W.<sup>2</sup> (off the Orkneys), she met the Dutch s.s. *Bernisse*, 951 tons, and the Dutch s.s. *Elve*, 962 tons, both from West Africa to Rotterdam with peanuts. They had been intercepted by H.M.S. *Patia* and were on their way to Kirkwall with armed guards on board, while the armed yacht *Rosabelle* with three armed trawlers were waiting for them off Noup Head. U.87 opened fire and the ships were abandoned, but the *Rosabelle* seeing the gun flashes in the twilight, and catching sight of the submarine, opened fire at 5,000 yards and made for it at full speed. U.87 went down, but managed to send a torpedo into the *Elve* at 3.5 a.m. and another into the *Bernisse*. The *Rosabelle* dropped a depth charge; the *Elve* sank; two armed trawlers came up; the survivors were picked up; the *Bernisse* was boarded and towed safely into Kirkwall.

U.87 went on and the next day (May 24) (off the Hebrides) met a "Q" ship. This was the *Merops* (Lieutenant Thomas Price, R.N.R.). She had been cruising in the Minches and left Oban for Longhope on May 21. She had been given a position in 59° N., 9° W.,<sup>3</sup> and was making for it at 3.30 a.m., May 24, when she was stopped and boarded by the armed trawler *Saxon* which reported having sighted a submarine. Sure enough at 5.55 a.m. in 58° 54' N., 9° 4' W., with the ship steering north-east, a submarine was sighted on the surface right astern; it opened fire at 4,000 yards and as its fire grew more intense, the *Merops* opened fire at 3,000 yards, and managed to get off five rounds from her 12-pdr. and six from her 4-in. before the submarine went down, leaving her with spars and rigging badly knocked about. This was the second time Lieutenant T. E. Price had distinguished himself and he received a D.S.O., while an award of £250 was given to the ship's company.<sup>4</sup> U.87 did not escape scot free; the first two rounds straddled her, cutting her guard wire; another shot hit her, damaging the after trimming tank and knocking off an air cock, but she repaired the damage, and on May 26 at about 5.30 a.m. in 55° 54' N., 8° 23' W., stopped the Russian s.v. *Lucipara*, 1,943 tons, going from Ardrossan (Clyde) to South America. Her torpedo missed and the ship was sunk by

<sup>1</sup> It is possible that the *Flore* was torpedoed.

<sup>2</sup> A.Y. *Rosabelle's* report in N.L. 35899/17 in I.D. Vol. 645. The *Bernisse* was on *Elve's* port bow, 200 yards; *Elve's* report in *idem*.

<sup>3</sup> Close to the position of the Danish s.s. *Freden*, on May 22, when sunk by U.30.

<sup>4</sup> M.06522/17 in H.S. 1374/43. U.87 reported an action with a "submarine trap," a barque, off the Butt of Lewis. C.B. 01370/49, 51.

gunfire; the crew took to the boats and made land. Not far off (in 55° 50' N., 8° 27' W.) was a British s.v. the *St. Mirren*, 1,956 tons, from Glasgow to Santos. She too was sunk by gunfire at about 6 a.m. Her next target was H.M.S. *Ebro* (of the 10th Cruiser Squadron) which was approaching the spot, and at 9.30 a.m. (May 26) in 56° N., 8° 51' W., was missed by a torpedo astern, afterwards picking up at 11.15 a.m. the survivors of the *St. Mirren*.

U.87's next appearance was in the Scillies area four days later, where on May 30 at 1.50 p.m. in 49° 23' N., 8° 43' W., she met the British s.s. *Hanley*, 3,331 tons, bound from Bahia to Cherbourg with grain, and the British s.s. *Bathurst*, 2,821 tons, bound from West Africa to Hull with "palm kernels" and mahogany. The *Hanley* was armed with a 13-pdr. Q.F., while the *Bathurst*, unarmed, was on her starboard beam; both were torpedoed and sunk; the armed trawler *Saurian* came up, forcing U.87 to submerge, but too late to save the ships. This was the last appearance of U.87 in May; during the month she had sunk five vessels totalling 11,013 tons; she had been attacked twice, once by the A.Y. *Mirabelle* and once by the "Q" ship *Merops*.

39. "U.88," May 22–June 9.—U.88 (Lieut.-Commander Walter Schwieger) left Emden on May 22. In the North Sea on May 23 at 5 p.m. in about 56° 3' N., 2° 5' E., she stopped the Norwegian s.s. *Hector*, 1,146 tons, bound from Bergen to Hull, and torpedoed her. It was probably she, too, that G.13 (Lieutenant G. F. Bradshaw) of the 10th Submarine Flotilla (H.M.S. *Lucia*, Captain Leonard Donaldson) watching off Muckle Flugga (Shetlands North) sighted on May 24 at 8.55 p.m. in 60° 50' N., 0° 28' W., steering 290° to the westward, and chased at full speed without success.<sup>1</sup> U.88 escaped and found an important victim. On May 25 at 7.10 a.m. in 60° 33' N., 3° W., H.M.S. *Hilary* (Captain Frederic W. Dean) of the 10th Cruiser Squadron, on her way to Swarbacks Minn, had reduced speed to 10 knots to drop her paravanes; at 7.22 a.m., as she increased speed again, a torpedo hit her on the port side abreast the boiler room; the water rose quickly and put out the fires; though the wireless was severely damaged, the operator managed to get a signal through to the depôt ship H.M.S. *Gibraltar*, at Swarbacks Minn; at 8.5 a.m. a second torpedo struck her on the port side killing four men; a third torpedo hit at 8.40 a.m., and at 9.15 a.m. the ship heeled slowly over and sank. The boats were 40 miles from the coast and made their way to the Shetlands under oars and sail, bringing the whole of the crew safe to land with the exception of five men killed in the explosions.

U.88 went on, and on May 28 at 2.15 p.m. in 51° 50' N., 11° 10' W. off the Skelligs, opened fire on a small Russian s.v. the *Roma*, 382 tons,

<sup>1</sup> I.D. Log, June 8/2; H.S. 627/89.



bound from Pensacola to Liverpool, which was abandoned but later towed into Berehaven by H.M.S. *Safeguard*, a coastguard cruiser<sup>1</sup> attached to Queenstown.

U.88 then made a long cast to the south and on May 29 turned up in the Channel Approach where at 9.34 a.m. in 48° 54' N., 10° 25' W.<sup>2</sup> (in Approach Route A) she met and chased the British oiler *Ashleaf*, 5,768 tons, bound for Falmouth; her S.O.S. was taken in by the destroyer *Brisk* (Lieut.-Commander Algernon Lyons) which had come out to escort the s.s. *Oswego* in; the *Oswego*, however, had been torpedoed by U.86 at 8.12 a.m. and the *Brisk* arriving on the scene at 8.55 a.m. in time only to pick up survivors, hurried off at full speed to help the *Ashleaf*, reaching her at 9.52 a.m. U.88 had evidently seen her coming and had gone down, for the *Brisk* could see nothing of a submarine. She took the *Ashleaf* under escort and was zigzagging ahead of her at 11.25 a.m. (May 29) when the *Ashleaf* was torpedoed in 48° 40' N., 9° 30' W.<sup>3</sup> Two fleeting glimpses were caught of a submarine and the *Brisk* let go two depth charges, which drove U.88 effectively down. There seemed no likelihood of saving the ship and the *Brisk*, after picking up the crew, 42 in number, went off at 12.15 p.m., in accordance with a signal received at 10.50 a.m. from the Commander-in-Chief, Devonport, to meet another ship, the *Alcinous*. The *Ashleaf*, however, did not sink; the *Brisk* found her that afternoon still afloat, and at 3.20 p.m. sent a message<sup>4</sup> to say that it might be possible to save her. It does not seem to have been received till about 9.45 p.m. and the Commander-in-Chief, Devonport, ordered S.N.O. Scillies to send a tug to 48° 45' N., 10° 8' W., the position given by the *Brisk*.<sup>5</sup> A tug, the *Sun II*, was despatched to this position, but sighted nothing; she had wireless but no code<sup>6</sup> and after waiting about helplessly for an hour returned.

The next day (May 30) at 5.30 p.m., the "Q" ship, *Salvia*, found the *Ashleaf* still afloat in a position given as 48° 40' N., 9° 30' W. She gradually collected five armed trawlers and with the help of a small tug, *Danube II*, made a strenuous effort to get her into port, but on May 31, at 2.30 p.m., in a heavy, labouring sea, the tow had to be abandoned, the wreck broke in two and sank.<sup>7</sup>

U.88 that day (May 31), at 9.15 a.m., in 49° 15' N., 9° W., torpedoed the Japanese s.s. *Miyasaki Maru*, 7,892 tons, bound

<sup>1</sup> H.S. 1314/371.

<sup>2</sup> *Ashleaf's* signal, H.S. 450/128.

<sup>3</sup> H.M.S. *Brisk's* report in H.S. 1314/448.

<sup>4</sup> Intercepted by S.N.O., Scillies, 9.45 p.m. See report, 1.6.1917, in H.S. 1314/461.

<sup>5</sup> *Brisk's* Wireless Log 35205.

<sup>6</sup> It appears that she ought to have had the General Service Code and Tables (see H.S. 1314/468).

<sup>7</sup> Reports in H.S. 1314/457.

from the Cape to London. She had received at Cape Town orders to make Scillies at dawn, but at 9.15 a.m. was 110 miles away from it. She was armed with a 4.7-in. gun but was torpedoed without warning. The sea was rough and a gale blowing. A second torpedo was sent into her and she sank at 10.55 a.m., leaving the survivors to be picked up by H.M.S. *Begonia* (sloop) and H.M.S. *Spitfire* (destroyer).

U.88 went on to the south-west and at 2.30 p.m. (May 31), in 48° 27' N., 10° 19' W. stopped the French s.v. *Jeanne Cordonnier*, 2,194 tons, from Iquique (Chile) to Harve with 3,150 tons of nitrate. She was sunk with gunfire and a torpedo in mist and rain. This was U.88's last ship in May. She had sunk during the month four merchant ships of 17,000 tons (of which 1,146 tons were in the North Sea) and the auxiliary cruiser *Hilary*.

40. "U.C.45," May 22-June 10.—U.C.45 (Lieut.-Commander Hubert Aust) left Heligoland on May 22. In the Channel on May 26, at 6 p.m. off C. De La Hague in 49° 49' N., 1° 56' W. she sank the French s.v. *St. Hubert*, 423 tons, bound from Swansea to Fécamp with 548 tons of coal. South of the Fastnet, on May 28 at 10.55 a.m. in 50° 3' N., 9° 37' W., she met the Norwegian s.v. *Teie*, 1,974 tons, making north-east under all sail, bound from Georgia to Liverpool with 2,000 tons of whale oil, and sank her with bombs, the master's boat being picked up by H.M.S. *P.35* off Coningbeg on May 31. U.C.45 went on to the Little Skellig where on May 30 she laid 18 mines,<sup>1</sup> which do not seem to have found any victims.

On June 4 at 12.35 p.m. on her way home she sank the British s.s. *Phemius*, 6,699 tons, outward bound from Birkenhead to China, (Ireland, north-west in 54° 56' N., 12° 7' W.) and was back at Heligoland on June 10. During May she had sunk two ships of 2,397 tons (of which one of 423 tons was in Channel).

41. "U.66, May 23-June 16.—U.66 (Lieut.-Commander Gerhardt Muhle) left Emden on May 23, proceeding north about to the west coast of Ireland. It was possibly she that was sighted north of the Hebrides by the armed trawler *Arley* (one 12-pdr., one 6-pdr., attached to the 10th Cruiser Squadron) on May 28, at 7.30 p.m., in 59° 2' N., 6° 48' W. The *Arley* (Sub-Lieutenant Charles Foster, R.N.R.) was towing a Swedish schooner the *Drott* to Stornoway when a large submarine was sighted. The *Arley* cast off tow and engaged her till she made off on a 12-pdr. shot falling unpleasantly close.<sup>2</sup> U.66 must have arrived on her station about May 29, but sank nothing in May.

<sup>1</sup> O.U. 6020A, Field 213-215 in about 51° 43' N., 10° 26' W.

<sup>2</sup> H.S. 1275/442.



42. "U.155," May 23–September 5.—U.155 (Kapitän König) the mercantile submarine *Deutschland* converted into a cruiser type (two 5·9-in., two 3·5-in.), left Kiel on May 23; proceeding by the Sound and northabout to operate in the Azores area, on May 25 she stopped the Dutch s.s. *Bali*, 3,389 tons, off the coast of Norway and let her proceed. She probably passed well to the westward of Ireland between May 27 and 28, and sank no ships on her way.

43. "U.C.55," May 24–June 9.—U.C.55 (Lieut.-Commander Theodor Schultz<sup>1</sup>) left Heligoland on May 19, but had to return to Borkum with engine defects and did not put to sea again till May 24. Proceeding by the Channel, on May 28, at 3.45 a.m. in 49° 36' N., 9° 28' W., she met the Norwegian s.v. *Asters*, 1,531 tons, bound from Philadelphia to Havre and sank her with gunfire and bombs. The boats were picked up at 7.30 p.m. by a British destroyer. Early the next morning (May 29) she was off the Fastnet and at 4 a.m. in 50° 57' N., 10° 12' W., met the British s.s. *Clan Murray*, 4,835 tons, bound from Port Natal to Belfast, with 6,500 tons of grain. This ship was unescorted, steering easterly at 10 knots when a torpedo struck her amidships, the starboard side. The ship took a sudden list and sank almost immediately, before the boats could be got out, leaving only 12 survivors out of a crew of about 78. The third officer, Mr. A. G. Macpherson, was rescued by the submarine and taken prisoner. U.C.55 went on and the next day (May 30) laid nine mines off Valentia<sup>2</sup> (Ireland, south-west) which were discovered that day by a mine showing on the surface. Her remaining nine mines were laid close by three miles to the south-west.<sup>3</sup> In her report, she states that she attacked an unknown British steamer of 3,500 tons that day off the Skelligs. This must have been the British s.s. *Fernley*, 3,820 tons, bound from Havana to Queenstown, the only ship attacked in the area on May 30. She was torpedoed at 11 a.m., in 51° 46' N., 10° 52' W., a position which would have brought her to the coast about 1 p.m. instead of, according to instructions, at dawn. H.M.S. *Parthian*, patrolling in the area sighted her and was making towards her when she was hit. U.C.55 dived hurriedly as the *Parthian* came up. The engine room and boiler room of the ship were undamaged, Lieutenant Bittleston of the *Parthian* got the crew back on board, the chief engineer raised steam and the ship was got into Berehaven.<sup>4</sup> Mr. Macpherson, the third officer of the *Clan Murray*, who was a prisoner on board U.C.55 stated that the submarine was hit on May 30, "the machinery carried away" and she went down at a

<sup>1</sup> According to Mr. Macpherson, 3rd officer of *Clan Murray*, and prisoner in U.C.55. In I.D.646.

<sup>2</sup> O.U. 6020A, Fields 228, 299 in about 51° 58' N., 10° 23' W.

<sup>3</sup> *Idem*, Field 230 in 51° 55' N., 10° 27' W.

<sup>4</sup> H.S. 1314/473. Chief Engineer Mr. Oliver H. Jelley awarded D.S.C.; Their Lordships' appreciation to Lieutenant Colin J. L. Bittleston, D.S.C., R.N.

very steep angle.<sup>1</sup> As H.M.S. *Parthian* makes, however, no mention whatever of any attack, it looks as if U.C.55 lost her trim when diving suddenly and one of her engines gave out. Her only other victim was a Norwegian s.v. *Clara* of 923 tons, sunk on June 6 when U.C.55 was on her way home north about. During May she sank only two ships of 6,366 tons.

44. "U.69," May 24–June 17.—U.69 (Lieut.-Commander Ernst Wilhelms) left Emden on May 24, to cruise west of Ireland. Proceeding north about on May 28 at 3.15 p.m. in 60° 30' N., 5° W., it was probably she that attacked the Russian s.s. *Krasnoiarshk*,<sup>2</sup> 5,811 tons, bound from Archangel to Belfast. It was very foggy, the submarine appeared three miles off on the port beam and opened fire. The ship, going 11½ knots, returned the fire with an old 3·6-in. French gun, brought the submarine astern, and escaped. On May 29, at 4 a.m. in 59° 50' N., 9° 30' W., she stopped the Danish s.v. *Consul N. Nielsen*, 1,394 tons, bound from Buenos Aires to Copenhagen, which had been boarded by H.M.S. *Virginian* and was on her way to Stornoway with an armed guard. U.69 opened fire at 2,000 yards, severely wounding the mate and sank her by gunfire. The crew and armed guard all reached the Hebrides in the boats. As they were making for land another submarine came up and spoke to them—presumably U.66. The Swedish s.v. *Argo* 123 tons, bound from Holmstad to Iceland with wood, was in sight of the *Consul Nielsen*, with an armed guard on board from the *Hilary*. She was set on fire and sank; the sea was calm, the weather fine, the boats made Sulisker and landed there.

U.69 went on to the southward and at 11.30 a.m. (May 29) in 58° 56' N., 8° 59' W. stopped the Swedish s.v. *Ines*, 261 tons, bound from Holmstad to Iceland, on the way to Stornoway, with an armed guard under Sub-Lieutenant Hutchings, R.N.R., from H.M.S. *Arcona*. The armed guard were made prisoners and the ship set on fire. The weather was fine and the crew were all picked up by the armed trawler *Saxon*. It was probably U.69 that, on May 30 at 6.15 p.m. in 56° 30' N., 11° W. (off the Hebrides), opened fire at a distance of 5 miles on the armed trawler *Vale of Lennox* (one 6-pdr.) (Lieutenant Robert Andrews, R.N.R.), escorting the British oiler *San Ricardo*, 6,465 tons, to the westward. The *Vale of Lennox* engaged her and, drawing her away in rainy and hazy weather, enabled the *San Ricardo* to escape.<sup>3</sup> U.69 proceeded to the westward and on May 31 at 5.35 a.m. in 55° 50' N., 13° 50' W. torpedoed the British s.s. *Esneh*, 3,247 tons, bound from Liverpool to Alexandria;

<sup>1</sup> I.D. Vol. 646. U.C.55 had serious engine trouble again in August and was lost in September through losing her trim.

<sup>2</sup> Not the ship of 172 tons in Lloyd's List.

<sup>3</sup> H.S. 1321/79. Submarine had two guns.



the ship was armed with a 3-in. gun which did not open fire; she sank in about an hour and the boats, with the crew of 41, reached Barra in the Hebrides. (See Plan 5).

This was the last ship sunk by *U.69* in May. During the month she had sunk four vessels totalling 5,025 tons.

45. "**U.C.41,**" **May 26–June 15.**—*U.C.41* (Lieut.-Commander Kurt Bernis) left Heligoland on May 26, evidently proceeding by the Channel, for on May 29, off the Scilly Islands at 6.5 p.m., in 49° 48' N., 6° 47' W., she was sighted by Seaplane 8656 (Squadron Commander R. J. Hope-Vere), which pounced down on her from astern and dropped four 100-lb. bombs, shaking her badly, damaging an oil tank and starting a thin oil track behind her.<sup>1</sup> H.M.S. *Leonidas* was searching for her not far off and at 6.40 p.m. asked the seaplane if she could see the submarine,<sup>2</sup> but *U.C.41* managed to get away and on May 30 laid nine mines off the Fastnet<sup>3</sup> and the remaining nine in the same area on May 31. They were discovered on June 2 by an armed trawler sighting a mine on the surface. *U.C.41* sank nothing in May and returned home on June 15.

46. "**U.54,**" **May 28–June 23.**—*U.54* (Lieut.-Commander Freiherr von Bothmer) left Heligoland on May 28<sup>4</sup> to cruise off the south-west coast of Ireland. She sank nothing in May and only two ships in June.

47. "**U.C.29,**" **May 29–June 6 (sunk).**—*U.C.29* (Lieut.-Commander Ernst Rosenow) left Heligoland on May 29 and may have gone north-about. She was sunk by the Q-ship *Pargust* (Commander Gordon Campbell, R.N.) on June 7 off the south-west coast of Ireland<sup>5</sup> and her cruise will be considered in that month.

47A. "**U.70,**" "**U.43,**" "**U.75,**" "**U.78,**" "**U.95,**" "**U.96,**" "**U.55.**"—On May 28, *U.70* left Emden for the Bay and Spanish coast; on May 29, *U.43* left to operate west of Ireland; *U.75* to lay mines on the north of Ireland; *U.78* to perform the same task on

<sup>1</sup> Marine-Archiv in H.S./Q.23 and report in H.S. 1314/166. Fifteen miles to the eastward in 49° 43' N., 6° 25' W., the British s.s. *Hyson* had sighted a periscope at 3.30 p.m., and almost ran it down. The conning tower, without periscope or guardrails, appeared 600 yards astern with submarine's bow out of the water. The *Hyson* opened fire with her 4.7-in., but got no hits. She sent out an S.O.S. and H.M.S. *Midge* was on the spot within 10 minutes and carried out a search with the *Leonidas*, which came up at 5 p.m. The *Leonidas* sighted S.P.8656, so the *Hyson's* submarine was probably *U.C.41*. R. J. Hope-Vere received a "mention."

<sup>2</sup> *Leonidas'* report in H.S. 1314/176.

<sup>3</sup> O.U. 6020A, Fields 199, 200, 201, round about 51° 24' N., 9° 33' W., and 51° 28' N., 9° 42' W.

<sup>4</sup> War Diary. I.D. Vol. 3028, May 28/0725.

<sup>5</sup> Report in H.S. 649/27; Marine-Archiv, H.S./Q.50; I.D. Vol. 588 (survivors).

west coast of Scotland; *U.95* to operate west of Ireland, and *U.96* in the Channel Approach; finally, on May 31, *U.55* left to operate on the south coast of Ireland. None of these submarines sank any vessels in May.

On June 1 there were seven submarines, *U.43*, *U.75*, *U.78*, *U.95*, *U.96*, *U.55* and *U.C.29*, on their way to the South-West Approach.

### CHAPTER III.

48. **Flanders Submarines, May 1.**—On May 1 there were in the Channel, Irish Sea and Bay, 14 Flanders submarines as follows:—

<i>U.B.18.</i>	Channel.
<i>U.B.31.</i>	Channel.
<i>U.B.32.</i>	Returning.
<i>U.B.38.</i>	Channel.
<i>U.B.39.</i>	Did not return.
<i>U.B.40.</i>	Channel.
<i>U.C.26.</i>	Channel (Le Havre).
<i>U.C.36.</i>	Channel, returning.
<i>U.C.48.</i>	Cornwall coast and Bristol Channel.
<i>U.C.61.</i>	Bay of Biscay.
<i>U.C.66.</i>	Returning.
<i>U.C.65.</i>	Irish Sea.
<i>U.C.69.</i>	Bay of Biscay.
<i>U.C.72.</i>	Bay of Biscay. (See Plan 6.)

During the month 24 submarines appeared in the Channel (not including two High Sea Fleet submarines on passage to the west), of which four made two cruises and one began a third, making 29 cruises in all. The highest figures of tonnage sunk were:—

*U.C.69*, 25,604 tons; *U.B.40* (two cruises), 21,982 tons;  
*U.C.21*, 18,260 tons; *U.C.65*, 16,598 tons; *U.C.48*, 11,345 tons.

49. "**U.C.66 (I),**" **April 15–May 3.**—*U.C.66* (Lieutenant Herbert Pustkuchen) was off Ushant on May 1, where at 7 a.m., in 48° 41' N., 5° 8' W., she sent a torpedo into the British s.s. *Bagdale*, 3,045 tons, bound from Falmouth to Nantes. The ship was number four in a French coal trade convoy escorted by armed trawlers, which left Mounts Bay on April 30 and was steering S. by W. about 8 knots when hit. Nothing was seen of the submarine; the vessel sank in a couple of minutes, and the master and 24 men out of a crew of 27 were lost. *U.C.66* went off to the Channel Islands, where at 7.45 p.m., in 49° 35' N., 2° 43' W., she stopped and sank with bombs



the French s.v. *La Manche*, 335 tons, on the way from Granville to Cherbourg. At 9.10 p.m. (May 1), in 49° 42' N., 2° 58' W., the British s.v. *John W. Pearn*, 75 tons, on the way from Granville to Plymouth, suffered the same fate. *U.C.66* sank nothing more and returned to Zeebrugge on May 3, having sunk 3,455 tons in her first cruise in May.

50. "**U.C.36,**" April 18–May 2.—*U.C.36* (Lieut.-Commander Gustav Buch) had been working in the Bay off Ushant. She sank nothing in the Channel and reached Zeebrugge on May 2—the last time she was to enter it, for she was sunk on her next cruise.

51. "**U.B.31,**" April 22–May 3.—*U.B.31* (Lieutenant Thomas Bieber), working off Plymouth and in the Channel, sank nothing in the early part of May and was back in Zeebrugge on May 3.<sup>1</sup>

52. "**U.B.32,**" April 22–May 2.—*U.B. 32* (Lieut.-Commander Viebig) which had been working in the Channel off Plymouth sank nothing in May, and was back on May 2.

52A. "**U.B.39,**" April 23—did not return.—*U.B.39* (Lieutenant Heinrich Küstner) sailed for the Channel and Bay of Biscay on April 23 and was due to return about May 7. Her loss has been regarded as due to the attack by *S.P.8655* and *H.M.S. Ambuscade* off Portland<sup>2</sup> on April 24, but it is possible that this was not the case and that she was operating in the early part of May. On May 6 at 1 p.m. in 48° 48' N., 8° 30' W., in the Channel Approach, the British s.s. *Countess of Mar*, 2,223 tons, going N. 53 W. at 5 knots in a rough sea, saw a submarine a point on the starboard bow, 250 ft. off with half the conning tower above water. She put her helm hard-a-port and ran over it. When docked, her bilge keel was bent 6 in. for about 7 ft., her stern plating was scored and she was making water in No. 2 hold.<sup>3</sup>

53. "**U.B.38,**" April 25–May 7.—*U.B.38*<sup>4</sup> which had been working in the Portland area in April moved westward, and on May 1 at 6 a.m. off the Scilly Islands in 49° 52' N., 5° 59' W., stopped, the British s.s. *Ladywood*, 2,314 tons, bound from Port Nolloth (Cape Colony) to Swansea with copper ore, and sank her with

<sup>1</sup> On May 1 at 1 p.m., was somewhere about 49° 55' N., 0° W. *U.C.26* report, I.D. 1156/2.

<sup>2</sup> See Home Waters 8/449. The loss of *U.B.39* was formerly attributed to an encounter with the Q-ship *Glen* on May 17 in the Channel (at 6 p.m., in 50° 5' N., 1° 25' W.). The submarine attacked by the *Glen* is now known to have been *U.B.18*, which was not damaged. C.B. 1292G, p. 29; H.S./Q.46.

<sup>3</sup> *U.62* was in the area and attacked a ship shortly after noon, but her report says nothing of a collision. Marine-Archiv, H.S./Q.49.

<sup>4</sup> Lieutenant Amberger or Bachmann.

gunfire and bombs; the armed trawler *Foss* came up about 7 a.m. and the submarine dived. Three days passed before she appeared again in the Havre area where on May 4 at 5.30 a.m. in 49° 34' N., 0° 55' W., she stopped the Greek s.s. *Assos*, 2,720 tons, from Saigon to Dunkirk, and the Greek s.s. *Aghios Nicolaos*, 2,231 tons, from Benisef to Boulogne, sinking them both with gunfire and bombs. At 6.45 a.m. in about 49° 35' N., 0° 50' W.<sup>1</sup> she sank the British s.v. *Joseph*, 205 tons, bound from St. Helens to Caen. Two days later, on May 6 at 1 a.m. in 50° 13' N., 0° 27' E., it may have been she (or possibly *U.C.26*) that opened fire on the British s.v. *Katie Cluett*, 136 tons; her masts and bowsprit were shot away, but she was saved by the mist and by the arrival of a torpedo boat which towed her in. *U.B.38* was back in Zeebrugge on May 7, having sunk four vessels and 7,470 tons in May. (See Plan 6.)

54. "**U.C.65,**" April 25–May 12.—*U.C.65* (Lieut.-Commander Steinbrinck) after passing through the Channel and Irish Sea laid 18 mines in the Clyde approaches on April 30 and May 1.<sup>2</sup> One of these was found floating in the forenoon of May 1, and another, moored, was swept up; the Clyde was closed to traffic, and three drifting mines were destroyed off Cumbrae that afternoon.<sup>3</sup> The mines were however widely scattered and on May 22 at 2.37 p.m. in 55° 34' N., 4° 55' W. the armed trawler *Merse* while sweeping ahead of *H.M.S. Ramillies*, outward bound, struck one and was blown up with all hands.

*U.C.65* then proceeded to cruise for a couple of days in the North Channel between Belfast Lough and the Mull of Galloway, sinking four small vessels on May 1, viz., at 7.48 p.m. in 54° 41' N., 5° 15' W., the Norwegian s.v. *Ivrig*, 1,169 tons, and at 8 p.m., close to the same position, the British s.v. *W. D. Potts*, 112 tons, bound from Falmouth to Glasgow—both by gunfire; the British s.s. *Devonshire*, 500 tons, from Cork to Glasgow, was attacked by gunfire at 8.45 p.m. in 54° 46' N., 5° 20' W., but returning the fire with a 3-pdr. gun escaped. At 9.15 p.m., in 54° 35' N., 5° 16' W., the British s.s. *Helen*, 322 tons, bound from Garston (Lancs.) to Bangor, and at 11.30 p.m. in 54° 35' N., 5° 10' W., the British s.s. *Dora*, 296 tons, were sunk by bombs. *U.C.65* then went over to the Belfast coast, and on May 2 at 2.40 a.m. in 54° 30' N., 5° 20' W. in fine clear weather, stopped the Japanese s.s. *Taizan Maru*, 3,569 tons, bound from Cartagena to Ardrossan, with 5,000 tons of iron ore, and sank her with bombs. At 5 a.m. (May 2) in 54° 27' N., 5° 21' W. she

<sup>1</sup> Report gives 49° 39' N., 0° 28' W., but the *Aghios* was in sight on her starboard quarter. Report in H.S. 1296/91. One of the positions is incorrect.

<sup>2</sup> O.U. 6020B, Field 376, 55° 42' N., 4° 59' W.; Field 376A, 55° 38' N., 4° 55' W. (off Bute); Field 376B, 55° 35' N., 5° W.; Field 376c, 55° 24' N., 5° 2' W.; Field 376D, 55° 19' N., 4° 56' W. (off Arran).

<sup>3</sup> H.S. 442/329.



stopped the British s.s. *St. Mungo*,<sup>1</sup> 402 tons, from Troon to Dublin, and sank her with bombs; half an hour later at 5.35 a.m. in 54° 29' N., 5° 23' W. in a calm sea the British s.s. *Derrymore*, 188 tons, going from Dublin to Troon suffered the same fate; the British s.s. *Amber*, 401 tons, from Troon to Waterford, was stopped at 6 a.m. in 54° 29' N., 5° 22' W., and she too was sunk; the armed trawler *Trojan* escorting a small oiler, *Isla*, 222 tons, southward down the coast was then a few miles to the Eastward,<sup>2</sup> picking up the crew of the *Taizan Maru*, and sighting a submarine some 4 miles off she made at full speed for the spot. *U.C.65* by that time was attacking the British s.s. *Morion*<sup>3</sup> 299 tons, from Dublin to Carnlough, which she sank with bombs, in 54° 29' N., 5° 19' W., opening fire at the same time on the *Trojan*<sup>3</sup> in 54° 26' N., 5° 18' W., which returned the fire, forcing *U.C.65* down, while the *Isla*, 222 tons, was taking refuge inshore.

*U.C.65* came up again, however, not far off, and about 8 a.m. (May 2), in 54° 29' N., 5° 18' W., stopped the British s.v. *Ernest*, 111 tons, bound from Ardrossan to Dublin with coal, and sank her with bombs, going down again when the armed trawler *Goshawk* came up. Early that very morning the S.N.O., Liverpool, had stopped the Liverpool traffic,<sup>4</sup> and the Admiralty sent instructions to Vice-Admiral Charles Dare at Milford to send out all available P-boats to hunt, which may have resulted in *U.C.65*'s lying low for the next two days.

Then she turned up 150 miles to the southward, off Fishguard, and on May 4, at 7.15 a.m. sank with bombs two British fishing smacks—the *Strumble*, 45 tons, and the *Victorious*, 39 tons; the British s.v. *New Design II*, 66 tons, followed them to the bottom, with bombs again, at 12.30 p.m., in 52° 13' N., 5° 43' W. At 5.20 p.m. (May 4), in 52° 8' N., 5° 31' W., she was sighted by the British s.s. *Maidan*,<sup>5</sup> 8,205 tons, which fired four shots at her. At 8.45 p.m. (May 4), in 52° 17' N., 6° 13' W., off the Tuskar, she attacked a small collier, the British s.s. *Yorkshire*, 394 tons, but the armed drifter *Barbara Cowie* opened fire on her at 2,500 yards and forced her down.<sup>6</sup> She was busy again, however, off the Tuskar at 9.30 p.m. (May 4), in 52° 10' N., 6° 8' W., when she torpedoed the British s.s. *Pilar De Larinaga*, 4,316 tons, homeward bound from Galveston to Manchester with wheat and general cargo. The Tuskar line of Milford Haven net drifters could be seen a mile or two off in the bright moonlight, and one of them opened fire; the ship (12-pdr. gun) had no time to open fire, nor even to send out a

<sup>1</sup> H.S. 1320/392, 397.

<sup>2</sup> *Trojan's* report says "5 miles north-east of South Rock Lightship," i.e., in about 54° 29' N., 5° 15' W. H.S. 1320/387.

<sup>3</sup> *Trojan's* report in H.S. 1320/387414; *Morion's*, H.S. 1320/406.

<sup>4</sup> Telegram 2/0145.

<sup>5</sup> I.D. Log 5/18; no details, but apparently homeward bound.

<sup>6</sup> H.S. 1312/34.

wireless call; she sank in a few minutes with a loss of 20 out of 39 of the crew, a number being dragged down in a boat whose fall was foul. The armed net drifter *Good Hope II*, riding to her nets, had sighted a submarine on the surface 400 yards off and opened fire; then casting off her nets opened fire again at 9.30 p.m., just as the torpedo hit. *U.C.65* dived at once, leaving the *Good Hope II* to pick up survivors,<sup>1</sup> while the rest of the net drifters came hurrying up. She was not heard of again for two days till May 6, when at 11.30 p.m. in 52° 38' N., 4° 54' W., off Bardsey Is., she sank with bombs the small British s.v. *Maude*, 72 tons, bound from Padstow to Manchester. This was her last ship though she did not return to Heligoland till May 12, having sunk in May 13 ships and two fishing vessels of 11,407 tons in all; three ships had escaped her, and she had been twice attacked by patrols. In her cruise from April 25–May 12, she had sunk 17 ships and three fishing vessels of 16,598 tons, rather more than in her previous cruise in the same area in March when she had accounted for 15 ships of 15,613 tons.

55. "U.C.69," April 25–May 11.—*U.C.69* (Lieut.-Commander Erwin Wassner) was in the Bay on May 1, and was operating for a week on the route along the North Coast of Spain.

Her cruise may be traced briefly as follows:—

- 1/1500. 43° 31' N., 4° 6' W.—Port. s.s. *Barreiro*, 1,738 tons (wine and cocoa), sunk, bombs.
- 3/1530. 43° 47' N., 7° 15' W.—Nor. s.s. *Polstad*, 2,692 tons, Liverpool to Gibraltar, sunk, bombs.
- 3/1600. 43° 47' N., 7° 15' W.—Gr. s.s. *Maria*, 2,574 tons, Liverpool to Gibraltar, sunk, bombs.
- 4/0712. 43° 39' N., 7° 15' W.—Gr. s.s. *Iohannis P. Goulandris*, 3,153 tons, sunk, bombs.
- 4/1330. 43° 46' N., 7° 34' W.—Nor. s.s. *Tromp*, 2,751 tons, sunk, bombs.
- 4/1400. 43° 50' N., 7° 41' W.—It. s.s. *Ilva*, 2,137 tons, Cadiz to Liverpool, sunk, bombs.
- 6/1100. 43° 39' N., 5° 49' W.—Nor. s.s. *Gurth*, 1,340 tons, Liverpool to Gibraltar, sunk, bombs.
- 6/1100. 43° 38' N., 5° 48' W.—Nor. s.s. *Voss*, 2,422 tons, Penarth to Messina, sunk, bombs.
- 6/1500. 43° 33' N., 5° 13' W.—Nor. s.s. *Andora*, bound for Bilbao, stopped and allowed to proceed.
- 7/1145. 43° 27½' N., 2° 49' W.—Nor. s.s. *Tiger*, 3,273 tons, Naples to Newport, sunk, gunfire and bombs.
- 7/1500. 43° 28½' N., 2° 52' W.—Nor. s.s. *Leikanger*, 3,544 tons, Baltimore to Nantes with grain, sunk by bombs.

<sup>1</sup> H.S. 1312/358.



All these ships were on the Spanish coastal route, and in the case of five of them—the *Tromp*, *Gurth*, *Voss*, *Tiger* and *Leikanger*, strong representations were made by the British Ambassador to the Spanish Government that the ships were in territorial waters when summoned to stop, a view supported by the fact that the Germans took four of them—the *Gurth*, *Voss*, *Tiger* and *Leikanger*—out to sea to sink them, having, in the case of the *Tiger*, to raise steam in order to do so. A long correspondence developed round this point, but the Spanish authorities held firmly to their opinion that the ships had been sunk outside territorial waters.<sup>1</sup>

*U.C.69* was located by wireless off Ushant on May 9 at 10 p.m. and 20 miles north of Cape De La Hague at 10 p.m. on May 10. She returned to Zeebrugge on May 11, having sunk 10 ships (eight neutral and two allied) of 25,624 tons without having been attacked.

56. "U.C.72," April 25–May 9.—*U.C.72* (Lieutenant Ernst Voigt) was not so fortunate in her contemporaneous cruise to the Bay. She was off the Gironde on April 30 where she sank the British s.s. *Gretaston*, 3,395 tons. On May 2 she was off the Ile d'Yeu where she met the French sloop *Keryado* escorting four small sailing vessels carrying pit props to Swansea. It was a bright moonlight night, fair weather, and a calm sea. At 12.30 a.m. (May 2) in 46° 49' N., 2° 39' W., a torpedo hit the *Keryado* which disappeared in a cloud of flames and smoke. *U.C.72* then came to the surface and sank with bombs the French sailing vessels *Yvonne*, 100 tons, *Russie*, 127 tons, *Cancais*, 232 tons, and *Victoire*, 290 tons. Her next appearance was right away to the southward on May 4, off St. Jean de Luz, where at 9 a.m. in 43° 48' N., 2° 5' W. she sank with gunfire two French fishing vessels, the *Marne*, 25 tons, and *Verdun*, 25 tons, who were armed, and bravely, but uselessly, returned the fire.

*U.C.72* then went up the coast and at 12.55 p.m. (May 4) in 44° 23' N., 1° 28' W., was attacked near the coast by a French Seaplane without result. This seems to have driven her off the coast for the next day (May 5), at 7.40 a.m. she was in 46° 14' N., 3° 44' W., where she opened fire on the French s.s. *Gard*,<sup>2</sup> 1,657 tons, bound from Casabianca to Nantes with general cargo. The *Gard* was armed with two 3.6-in. guns and returned the fire at 4,000 metres. A second submarine was sighted,<sup>3</sup> which also opened fire till the *Gard* screened herself with smoke boxes. The mast was hit, the steering gear was damaged, a stoker killed, three engineers wounded, and the bridge

<sup>1</sup> I.D. Vol. 643, M.08676, under *Gurth* and *Tromp*; Marques de Lima to Hardinge, 26.6.17.

<sup>2</sup> Also described as Q-ship, see S. 59.

<sup>3</sup> Probably *U.C.61*, which was in the area.

came under a storm of shell but a shot from the *Gard* falling near the first submarine finally drove it down, and the second did not continue the chase.<sup>1</sup>

*U.C.72* returned to the Gironde, and at 6 p.m. (May 5) in 45° 34' N., 1° 55' W., stopped, and sank with bombs, the Norwegian s.s. *Nydal*, 1,809 tons, bound from New York to Bordeaux with zinc, copper and rubber. At 3 a.m. the next morning (May 6), she was off the Gironde and was engaged by a French patrol vessel,<sup>2</sup> but at 3.55 a.m. in 45° 53' N., 1° 32' W., she torpedoed the Italian s.s. *Francesco*, 3,438 tons, bound from Genoa to Barry, via Gibraltar; the ship was steering north at 9½ knots when torpedoed; she carried a 3-in. gun which was not used, and was finally sunk by bombs. This was the last ship sunk by *U.C.72* on this cruise, though she was located by directionals off the Loire at 9 p.m. and off Brest at 11 p.m. the next day (May 7). She was back at Zeebrugge on May 9, having sunk in May six vessels and two fishing vessels, altogether 6,046 tons, and having been counter-attacked twice, and attacked once by a patrol vessel and once by a seaplane. During her whole cruise she had sunk seven vessels and six fishing vessels of 9,441 tons.

57. "U.C.48," April 26–May 10.—*U.C.48* (Lieut.-Commander Ramien) was off the Cornish coast on April 30. It was she that, on May 1, at 8 p.m. in 50° 12' N., 6° W., stopped the small British s.v. *Raymond Esther*<sup>3</sup> and sank her with bombs. She then went off to the north-east, for the next day (May 2) at 3 a.m.<sup>4</sup> in 50° 30' N., 5° 10' W., she torpedoed without warning the British s.s. *Warnow*, 593 tons, coming down the coast. The ship sank rapidly, carrying down the Master and 13 of the crew; the survivors clinging to an upturned boat were picked up by a French Q-ship, the *Duguesclin*. *U.C.48* went back to the south-westward, and at 10.32 a.m. (May 2) in 50° 17' N., 5° 31' W., met the British fishing smack *United*, 61 tons, Padstow to Lowestoft, and sank her with bombs, in a smooth, calm sea, where a British destroyer had passed only quarter of an hour before. At 2.15 p.m. (May 2) in 50° 27' N., 5° 22' W., a submarine (probably *U.C.48*) attacked the British s.s. *Gorsemore*, 3,079 tons, and after firing a torpedo, which missed, was driven down by patrols.<sup>5</sup> Three hours later, 10 miles to the westward at 5.45 p.m. (May 2) in 50° 23' N., 5° 36' W., the destroyer *Contest*<sup>6</sup> (Lieutenant Harold Joyce, R.N.), steering S. 88 E., after picking up the survivors of the smack, saw a submarine break surface S. 50 W., about 2,000 yards off on the quarter. The *Contest* made for the position at

<sup>1</sup> Etudes, May, 65.

<sup>2</sup> Etudes des Mouvements, May, p. 3, I.D. Vol. 726.

<sup>3</sup> Marine-Archiv in H.S./Q.49.

<sup>4</sup> I.D. Log A.3/4; H.S. 1312/139.

<sup>5</sup> No details; the attack on *Gorsemore* is given in Merchant Shipping Losses, p. 142. See also report of French ship *Primrose*, May 5, H.S. 443/550.

<sup>6</sup> 4th Flotilla, Devonport.



full speed and, observing a disturbance in the water, headed for what appeared to be the submarine's wake on a southerly course, and dropped four depth charges (2 "D" and 2 "G") just ahead of it, all of which exploded, without anything further being seen.<sup>1</sup> The attack seems to have driven *U.C.48* away for her next appearance was off Waterford, where on May 5 at 2.40 p.m. in 51° 56' N., 7° 23' W., the British s.s. *Bengore Head*, 2,490 tons, was shelled by a submarine, but replied to the fire and got away.<sup>2</sup> An hour later, at 3.15 p.m. (May 5) in 51° 55' N., 7° 20' W., the British s.s. *Greta*, 297 tons, from Cork to Neath Abbey (Wales), in ballast, was stopped and sunk by gunfire. To the westward at 5.30 p.m. in 51° 45' N., 7° 56' W., the British s.s. *Norton*,<sup>3</sup> 1,825 tons, was attacked, but managed to escape apparently by superior speed.

*U.C.48* made eastward again, and at 7.40 p.m. (May 5) in 51° 56' N., 7° 24' W., met the British s.s. *Feltria*, a Cunarder of 5,254 tons, homeward bound from New York to Avonmouth, unescorted, and torpedoed her without warning. The ship was proceeding S. 86 E. true, 11½ knots, when a torpedo struck her the port side, blowing all the port boats to pieces and wrecking the wireless. The ship, armed with a 3-in. anti-aircraft gun, did not open fire, and sank in about 20 minutes with a loss of 48 lives out of 69.

*U.C.48* next appeared in the Scillies area, where on May 7 at 1.20 a.m. in 49° 59' N., 5° 35' W., off Land's End, she torpedoed without warning the British s.s. *Kinross*, 4,120 tons, homeward bound from Capetown to London unescorted. There was a gale blowing with a heavy sea, and the ship was only making 6 knots on a N. 77 E. course. She had orders to call at Falmouth for orders, and when torpedoed was between Land's End and the Lizard, evidently making for that port; the 12-pdr. gun fired only a signal of distress, effectually, for all the crew of 34 were saved, two of the boats being picked up by merchant steamers and the third by an armed trawler. This was *U.C.48*'s last ship, and she went off to lay eight mines off Plymouth on the night of May 7-8<sup>4</sup>; three of these were found in the morning and the port was closed at noon by the Commander-in-Chief, Devonport<sup>5</sup>; seven mines altogether were swept up without damage to any ship, and the port was reopened to all ships on May 10.<sup>6</sup>

*U.C.48* was back in Zeebrugge on May 10; she had sunk in May six ships of 10,325 tons; three ships and 7,394 tons had escaped her, and she had been attacked once by a destroyer.

<sup>1</sup> H.S. 1312/145. Note that the date May 1 in C.B. 1292 (Submarine Losses) is incorrect. *U.C.48*'s report in H.S./Q.49.

<sup>2</sup> No details; I.D. Log F.5/4.

<sup>3</sup> No details.

<sup>4</sup> O.U. 6020B, Field 373b, 50° 18' N., 4° 11' W.

<sup>5</sup> By Admiralty, by telegram, 3124Q of 8/1635.

<sup>6</sup> Admiralty telegram 3137Q of 10/1130.

58. "U.B.18," April 27-May 3.—*U.B.18* (Lieut.-Commander Claus Lafrenz) sailed on April 27 and appears to have done nothing in April. On May 1, at 5.50 a.m., in 50° 27' N., 1° 4' E., she torpedoed the British s.s. *C. A. Jaques*, 2,105 tons, bound from Havre to the Tyne in ballast, which had left Havre in convoy on April 30, escorted by French armed trawlers; the convoy (evidently French coal trade) was proceeding at 7 knots with an escort ahead and on each bow, when the *C. A. Jaques* was hit and sank in four minutes with a loss of three killed; another torpedo missed the British s.s. *Haslingden*, 1,934 tons, but nothing was seen of the submarine, though the escort sent out a wireless which brought out two French planes, B.3 and B.4, who at 7.15 a.m. sighted two submarines (probably *U.B.18* and *U.C.26*) and dropped four bombs, and the planes B.4 and B.6 following them, at 11.30 a.m. dropped two more near *U.C.26*. *U.B.18* had meanwhile proceeded off Le Havre, and at midnight (May 1-2), in about 49° 48' N., 0° 51' W., torpedoed the British s.s. *Juno*, 1,384 tons, bound from Rouen to Cardiff, going N.W. ¼ N., 8½ knots; the ship, armed with a 12-pdr., which did not fire, went down in three minutes,<sup>1</sup> but all hands were saved and were picked up in the morning by an armed trawler. Nothing was seen of *U.B.18* who, at 12.30 a.m. (May 2), in about 49° 50' N., 0° 50' W.,<sup>2</sup> torpedoed and sank the British s.s. *Tela*, 7,226 tons, bound from Havre to Barry; the night was calm and clear with a bright moon shining, and the ship was proceeding N. 57 W. at 17 knots, zigzagging when struck aft the port side; her 4-7-in. gun did not fire; her main wireless was disabled, but she was able to send out an S.O.S. with an auxiliary set, and her whole crew of 79 was picked up safely by a British destroyer.

*P.12* (Lieutenant H. E. Raymond) was escorting the transport *Ardgarth*, 770 tons, that night to Havre, proceeding S. 22 W., zigzagging ahead of her at 10 knots, when at 2.20 a.m. (May 2), in 49° 50' N., 0° 26' W., a submarine was sighted in the moonlight 1¼ miles on the starboard beam. Clearly recognisable as she passed through the moonbeams, *P.12* coming "down moon" was not seen till she was close to when the submarine made a crash dive a cable's length off. The wake was still clearly visible when *P.12* released a depth charge just ahead of it, which exploded. Lieutenant Raymond received a D.S.C. for his swift attack, and though *U.B.18* was not sunk, her return to Zeebrugge the next day looks as if she had sustained some damage. She had sunk three ships of 10,715 tons.

59. "U.C.61," April 26-May 15.—*U.C.61* (Lieut.-Commander George Gerth) left Zeebrugge on April 26, but it was not till May 1 that she laid six mines off Portland,<sup>3</sup> just east of the Shambles. The

<sup>1</sup> H.S. 1296/14.

<sup>2</sup> Position of *Juno* and *Tela* have been adjusted to conform with reports and speed of *U.B.18*.

<sup>3</sup> Field 396d, O.U. 6020B, about 50° 31' N., 2° 19' W. She laid the other twelve off the Needles and St. Alban's Head on April 30.



mines did no damage; a torpedo-boat sighted one afloat, sinking it at 5.30 a.m. (May 1), and three more were swept up by 7.15 a.m. by the morning sweepers. She had been sighted that night at 1.15 a.m. (May 1) in 50° 27' E., 2° 33' W., when the British s.s. *Querida*, of 1,175 tons, was fired at by a submarine, but a patrol vessel, the armed drifter *Sarepta*,<sup>1</sup> was close at hand and the *Querida* returning the fire escaped. *U.C.61* went on to the Bay, and on May 3 at 9 a.m. in 48° 1' N., 5° 1' W., just off Ar-men (Ushant), opened fire on the French f.v. *Victorine Helene*, which managed to get away with three men killed and two wounded. At 10 a.m. (May 3) in 47° 59' N., 4° 54' W., she sank with gunfire another small French fishing vessel, the *Fils de Progrès*, 25 tons. That evening (May 3), at 7 p.m. in 47° 3' N., 3° 42' W., off Belle Ile, the Italian s.s. *Giovannina*, 3,030 tons, bound from Catania to Liverpool with oranges, suffered the same fate. At 8 a.m. the next morning (May 4) in 45° 27' N., 4° 4' W., the French s.s. *Haiti*, 6,288 tons, going 13 knots,<sup>2</sup> was attacked with gunfire but got away. The next day (May 5), at 5.25 a.m. in 46° 14' N., 3° 44' W., she came into brisk action with a French "Q" ship, the *Gard*, which sighted a submarine 4,000 yards astern, and, quarter of an hour later, another<sup>3</sup> some distance behind. The first submarine opened fire, hitting the mainmast and disabling the wireless with the second shot. The *Gard* returned the fire and the second submarine joined in; the *Gard* by this time had laid a smoke screen and her fourteenth shot appeared to hit the first submarine, which went down, leaving the second to continue firing for a time and then go down. Three days passed without any success; then on May 8, at 4.40 a.m., in 47° 15' N., 5° 2' W., the French s.s. *Nelly*, 1,868 tons, bound from Oran to Rouen with wine, was attacked and returned the fire with a 3.6-in. The ship stopped after the Captain and four men had been wounded and was sunk with bombs. *U.C.61* was then on her way back to the Channel, where she reappeared off Portland on May 10. At 4.30 a.m., in 50° 25' N., 2° 32' W., she opened fire at 800 yards on the British s.s. *Broomhill*, 1,392 tons, bound from Penarth to Sheerness, disabling her helm and compass, and killing two men, then sinking her with bombs. *U.C.61* moved off to Lyme Bay, and at 9.45 a.m. (May 10), in 50° 30' N., 2° 40' W., opened fire on the French s.s. *Daphne*, 1,467 tons, bound from Caen, who returned the fire and escaped, *U.C.61* then going off to attack the Norwegian s.s. *Minerva*, 518 tons, bound from Havre to Swansea, in 50° 27' N., 2° 49' W., which was sunk with bombs in sight of another Norwegian steamship, the *Freikoll*, 1,169 tons, which escaped. This was *U.C.61*'s last victim. The French patrol vessel, *Regulus*, caught a fleeting glimpse of a submarine off Portland on May 11 at 6 a.m.,

<sup>1</sup> H.S. 675/150.

<sup>2</sup> No details. Etudes, May 64.

<sup>3</sup> *U.C.72*.

and on May 12 *U.C.61* sustained a severe attack. At 12.30 p.m., in 50° 30' N., 1° 50' W., off Anvil Point, the armed trawler *Maristo* (Lieutenant Peter Nicholson, R.N.R.) on patrol sighted an object south-west 1½ miles and, closing at full speed, found it to be a conning tower running awash to the eastward. A little later a periscope was seen crossing ahead which went down only 25 yards away. The *Maristo* dropped a depth charge (Type "D") which exploded, and when the periscope appeared again 50 yards off, dropped another and a third. The submarine was *U.C.61*, which reported two depth charges exploding close by which threw out the switches and stopped the pumps. She went to the bottom in 105 ft. and got away.<sup>1</sup> She was back in Zeebrugge on May 15. She had sunk four ships and a fishing vessel, altogether 6,833 tons; three ships and a fishing vessel (8,950 tons) had escaped her, she had been once attacked by a French patrol without result and had been damaged by the *Maristo*'s depth charges.

60. "U.B.40," April 30-May 5.—*U.B.40* (Lieut.-Commander Howaldt) left Zeebrugge on April 30 and cruised probably in the eastern part of the Channel. On May 3 at 6.50 p.m. in 50° 43' N., 0° W., off Newhaven, she torpedoed the British s.s. *Clodmoor*, 3,753 tons, proceeding from Bahia to the Tyne unescorted, with 5,700 tons of wheat. The ship was armed with a Japanese 12-pdr., but nothing was seen of the submarine; all the crew were picked up by T.B. No. 5. This was *U.B.40*'s only ship; she was back in Zeebrugge on May 5, having sunk 3,753 tons.

61. "U.C.26," April 30-May 8 (Sunk).—*U.C.26* (Lieut.-Commander Matthias Graf von Schmettow) left Bruges for the last time in the afternoon of April 30, passing Dover barrage at 3 a.m. on May 1. The moon was setting and she sighted three destroyers on patrol. On May 1 at 7.15 a.m. in 50° 16' N., 0° 50' E., on the way to Havre, she was sighted by two French planes B.3 and B.4 and attacked with bombs, and attacked by them again at 11.30 a.m. 25 miles to the south-westward when two bombs "almost hit." On May 2 between 1 a.m. and 4 a.m. she laid nine mines off Havre just outside the buoys. Half an hour later H.M.S. *Derwent*, one of the Portsmouth Escort Flotilla, in company with the *Teviot* and T.B. No. 21, escorting the hospital ship *Grantully Castle* and three other transports to Le Havre, ran into one of them at 4.22 a.m., two cables north of the Whistle Buoy (49° 29' N., 0° 4' W.). The ship broke in half, the fore part capsizing and imprisoning the men there; the after part remained upright and afloat for seven minutes, and the Commanding Officer, Lieutenant Edward Chicheley Thornton,

<sup>1</sup> Marine-Archiv, H.S./Q.49; H.S. 1296/136. Lieutenant Nicholson was awarded a D.S.C. and the *Maristo* £200. The submarine was considered by I.D. to have been damaged.



who had been blown overboard, was able to hail the ship and encourage the men<sup>1</sup>; the sea was calm and 62 men were saved out of 86.

*U.C.26* proceeded to lay four mines off Caen, somewhere round 49° 21' N., 0° 13' W., three of which were swept up the next day, May 3. *U.C.26* apparently ran aground in the process about 5 a.m., but got off without any difficulty<sup>2</sup> and at 6 a.m. in 49° 30' N., 0° 19' W.,<sup>3</sup> met a convoy of four ships (presumably French Coal Trade) from St. Helens to Havre, escorted by two armed trawlers, the *Sweeper* and *Vale of Leven*, and succeeded in torpedoing the leading ship, the Norwegian s.s. *Certo*, 1,629 tons, which sank in a quarter of an hour. On May 3 about 2 a.m. *U.C.26* laid five mines off Cherbourg, which seem to have been discovered almost at once, for when the British s.s. *Ussa*, 2,066 tons (Admiralty transport), arrived off the port at 2.30 a.m. she was told by the patrol boat *Hyène* to wait outside till the channel had been swept, with the result that at 4.30 a.m. in 49° 41' N., 1° 39' W., 1,386 metres N. 17 W. from the West Breakwater Fort, she struck a mine and sank in 10 minutes, all the crew being saved.<sup>4</sup> *U.C.26* then went off to cruise off St. Catherines (Isle of Wight) having to dive twice that afternoon to avoid destroyers, and once to avoid two patrol vessels. Efforts to attack two steamers off the Owers<sup>5</sup> between 8 and 10 p.m. in bright moonlight were unsuccessful. May 4 was another blank day; at 1.35 a.m. off St. Catherines she dived to attack two steamers convoyed by a T.B.D. but was seen in the moonlight and could not attack. In the evening she was back off Havre, where at 7.30 p.m. (May 4) in 49° 26' N., 0° 10' W., she fired a torpedo (which missed) at the French s.s. *Arthur Capel*, 822 tons, and at 9.5 p.m. (May 4) about the same spot fired another at the French s.s. *Ville De Royan*, 421 tons, which again went wide.

On May 5 at 10.25 a.m. cruising off Havre in 49° 37' N., 0° 15' W., two sudden explosions took place not far off, from bombs dropped by a French seaplane unpleasantly near, which drove her down to 79 ft. That evening she was off C. Barfleur and sighted several steamers off Cherbourg but had "no luck." On May 6 the weather was bad and she went to the bottom at noon to escape it. On May 7 she was cruising off Havre again, avoiding destroyers and trawlers, sighting a convoy at 9 p.m. which "of course we do not bag." Here Sub-Lieutenant Petersen's diary came to an end. On May 8 at 11.50 p.m.,<sup>6</sup> the destroyer H.M.S. *Milne* (Commander Victor L. A. Campbell) was on patrol in Dover Straits off 7 A Buoy

<sup>1</sup> Report in M.12065/17 in H.S. 1292/458.

<sup>2</sup> Sub-Lieutenant Petersen's Diary, I.D. 1156.

<sup>3</sup> M.66292 in I.D. Vol. 643.

<sup>4</sup> Master considered she had been torpedoed, and complained of having been kept waiting outside. H.S. 1292/487.

<sup>5</sup> No reports on British side.

<sup>6</sup> 12.50 a.m. B.S.T., May 9.

in 51° 3' N., 1° 40' E., when a submarine was sighted, about 3 points on the port bow, on the surface heading about east. The *Milne* headed for her at full speed, and just as she started to dive, rammed her before the conning tower, while her deck was still awash, and dropped three depth charges (one "D" and two "G") on top of her. The submarine was *U.C.26*. She had started to dive, but was delayed by a considerable sea running at the time. The conning tower hatch had just been closed when the *Milne* crashed into her. She went to the bottom in 25 fathoms with water pouring in the starboard side before the conning tower. The explosion of a depth charge was heard. The water rose steadily, and the first attempt to open the hatches failed. Compressed air was turned on and the hatches opened, but the first few men who were shot up seem to have perished. Only two got to the surface alive—Sub-Lieutenant Heinrich Petersen and Engineer Petty Officer Acksel. The captain and some 27 men perished. Commander Victor L. A. Campbell, for his "great promptitude" and "highly successful piece of work," received a bar to his D.S.O., and Lieutenant Leonard E. Pearson a D.S.C.<sup>1</sup> In a cruise of seven days (May 1-7) *U.C.26* had gone down 12 times to avoid destroyers or patrols; she had been thrice attacked by French seaplanes; five steamers had evaded her; she had fired torpedoes at three, missing two and sinking one (in French Coal Trade convoy), results which establish the effectiveness of the work of the patrols and of the French Coal Trade convoy in the Channel East. She had sunk one ship of 1,629 tons, and had herself been sunk.

62. "U.B.18 (II)," May 9-May 19.—*U.B.18* (Lieut.-Commander Claus Lafrenz) sailed again on May 9, proceeding to the Havre area, where on May 11 at 3.45 a.m. in 49° 30' N., 0° 49' W., in bright moonlight, he stopped the British s.s. *Tarpeia*, 538 tons, proceeding from Alderney to Treport with stone, and sank her with bombs. It was possibly *U.B.18* that, on May 13 at 8 a.m. in 48° 3' N., 5° 2' W., off Ushant, was sighted and fired at by the French s.s. *Fez*, which had fallen 1½ miles astern of her convoy.

On May 14 at noon *U.B.18* was in mid Channel and in 50° 15' N., 1° 13' W., stopped and sank with bombs the British s.v. *Elizabeth Hampton*, 108 tons, bound from Cardiff to Carentan, appropriating the bell, barometer, clock, tea, sugar and a packet of Quaker oats.

On May 15 she was in the Channel Islands area where at 7.30 p.m. in 49° 1' N., 3° 30' W., she stopped and sank with bombs the Greek s.s. *Panaghi Lykiardopulo*, 3,193 tons, bound from Newcastle to Genoa with 4,250 tons of coal. Arriving at Cherbourg some hours after the French Coal Trade convoy had left, she had continued her

<sup>1</sup> Commander Victor Campbell's report in H.S. 1287/377; Interrogation of Survivors and Petersen's Diary in I.D. 549A. Note that date of destruction is usually given as May 9, being 12.50 a.m. B.S.T.



voyage unescorted and met the above fate. This was *U.B.18*'s last ship, but before she got home, she had an evening encounter with a "Q" ship, and it may have been she, too, that on May 17 at 5.30 p.m. in 50° 13' N., 1° 24' W., was sighted 4 miles to the southward by submarine *C.4*<sup>1</sup> who proceeded to attack till the submarine disappeared at 5.55 p.m., apparently driven down by a seaplane.

Within 8 miles of *C.4*'s position on May 17, at 6 p.m.<sup>2</sup> (G.M.T.) in 50° 5' N., 1° 25' W., H.M.S. *Glen* (Lieutenant Richard J. Turnbull), a "Q" ship schooner, attached to the Portsmouth command, armed with 1 12 pdr. and 1 3 pdr. was steering north-east close-hauled with wind east by south, force 4, when a shot was heard from a submarine bearing south, about two and a half miles. The *Glen* backed her foreyard and stopped. The submarine submerged some 800 yards off till only her periscope was showing, approaching right astern till about 200 yards off, when she came to the surface at 6.30 p.m. abaft the starboard beam about 80 yards off, just as the boat with the "panic party" was leaving the ship. Lieutenant Turnbull dropped his screens and opened fire; the first 12-pdr. shot went over; the conning tower hatch opened; the second shot appeared to burst in the hull under the conning tower; according to the *Glen*'s report the submarine started to dive too late, for the third and fourth shots of the 12 pdr. appeared to burst in the after part; the 3 pdr. firing six rounds and apparently obtaining four hits. As the submarine went down she was listing to port, having been apparently hit seven times at point blank range.

As the first submarine was disappearing the periscope, of what appeared to be another, was sighted at 7 p.m., 400 yards on the starboard bow. The *Glen* went on to the northward, and at 7.30 p.m. (somewhere about 50° 10' N., 1° 20' W.) sighted a "very large submarine" on the starboard beam, 2 miles off, heading north-east which opened fire with two guns, firing in all about 20 shots; the *Glen* brought her astern, firing on her till she disappeared about 8 p.m., steering west.

From the *Glen*'s report<sup>3</sup> it seemed clear that the first submarine had been sunk and this was the opinion at the time. Lieutenant Turnbull, R.N.R., received a D.S.O., Sub-Lieutenant Keith Morris, R.N.R., a D.S.C. and £300 was awarded to the *Glen*.

According to the German report, however, the submarine was not hit. There can be no doubt that the submarine engaged was *U.B.18*<sup>4</sup> which went down undamaged and was able to come up again and engage the *Glen* a second time.

<sup>1</sup> H.S. 1296/296. *C.4*, however, says nothing of the *Glen*'s action.

<sup>2</sup> *U.B.18* gives the time as 4.30-6.30 p.m. H.S./Q.46.

<sup>3</sup> M.06222/17 in H.S. 1295/518.

<sup>4</sup> The loss of *U.B.39* was originally attributed to the *Glen* (in Submarine Losses Return, C.B. 1292), but apart from *U.B.18*'s report, *U.B.39* sailed on April 23 and should under ordinary circumstances have returned about May 7.

According to *U.B.18*, she was north of Cape de la Hague at 4.30 p.m. (G.M.T.) on May 17 when she sighted a sailing ship to the northward and gave chase. As the ship did not lower a boat, *U.B.18* went down and approached her submerged, coming to the surface, about 200 metres off, when she saw a boat lowered. As the boat shoved off the screens fell down and the ship opened fire. *U.B.18* was all ready to dive and went down at once, rising to take a photograph of her through her periscope and coming up again at 4,000 metres engaged her till 8 p.m., when darkness put an end to the fight.<sup>1</sup> *U.B.18* had had a fortunate escape and got back to Zeebrugge on May 19 having sunk three ships totalling 3,839 tons.

63. "U.C.17" May 8-21.—*U.C.17* left Zeebrugge on May 8, passing Dover Barrage at dusk that evening, having to dive twice to avoid destroyers in the Straits.

On May 10 at 4 a.m. in 50° 31' N., 2° 40' W. (Lyme Bay), the British s.s. *Treverbryn*, 4,163 tons, Beni Saf to Tyne, coming up Channel along the coast, was attacked by a submarine with gunfire at 4,000 yards. The ship had no wireless, but brought the submarine astern, and, opening fire with her 12-pdr. 12 cwt. gun, escaped; then proceeding at full speed to the north-west for 7 miles sighted another submarine attacking another vessel.<sup>2</sup> At 10.48 a.m. (May 10) *U.C.17* in 50° 32' N., 2° 47' W., rose suddenly by the Norwegian s.s. *Veni*, 654 tons, from Newport to St. Malo, with 777 tons of coal, opened fire and sank her with bombs, taking away provisions and her chronometer. That night (May 10-11), *U.C.17* laid her 18 mines round Lyme Bay,<sup>3</sup> off Lyme Regis, Sidmouth and Beer Head, Dawlish and Berry Head, not unsuccessfully, for on May 12 at 10.15 a.m. three miles east of Teignmouth in 50° 32' N., 3° 24' W., the British s.s. *Galicia*, 5,922 tons, bound from London to Kingston, with general cargo, struck one of them and, drifting to the southward, hit another and sank, without loss of life. The area was declared dangerous by Commander-in-Chief, Devonport, at 11.25 a.m., and by the Admiralty that evening.<sup>4</sup> The field off Beer Head was discovered by motor launches on May 11; on May 19 at 5.15 p.m. in 50° 30' N., 3° 21' W., the armed trawler *Kumu*, while sweeping, struck a mine which blew away her fore part, killing two men, but was successfully beached. The mines were evidently considerably

<sup>1</sup> *U.B.18*'s Bericht, Marine-Archiv 246 of 13.8.34 in H.S./Q.46. It is quite clear that only one submarine was in question, for it was *U.B.18* who saw the deckhouse screens fall down for the first and only time. *U.B.18* met *U.B.40* at 9.55 p.m. and warned her.

<sup>2</sup> *U.C.61* attacking s.s. *Broomhill*. The *Broomhill* must have been to the north-west or *Treverbryn* to the south-east of the positions given by them.

<sup>3</sup> O.U. 6020B, Field 389.

<sup>4</sup> Q.3151, 12/1930.



scattered, and some weeks elapsed before the Devonport sweepers had swept them all up.<sup>1</sup>

*U.C.17* had meanwhile been lurking in the area. On May 11, at 6 a.m. in 50° 33' N., 3° W., a small steamer,<sup>2</sup> was reported to have been attacked, but evidently escaped. At 10 a.m. (May 11) in 50° 16' N., 2° 55' W., the armed trawler *Cassowary* (Devonport), heard gunfire to the south-east, and proceeding towards it sighted the Norwegian s.s. *Thoger*, 459 tons, being chased; she opened fire at 3,500 yards and the submarine went down, leaving the armed trawler to drop a depth charge on an oily patch, while her report brought four destroyers and an observation balloon<sup>3</sup> to the spot in three quarters of an hour.

*U.C.17* evidently thought it advisable to make off, for she turned up that evening (May 12) off Plymouth where at 6.33 p.m. in 50° 8' N., 4° 8' W., she sank with bombs the British fishing smack *G.L.C.*, 24 tons. Close to the spot at 8.35 p.m. (May 12) in 50° 8' N., 4° 9' W., the French s.s. *N. Verbeckmoes*, 1,353 tons, saw a periscope in the twilight and was missed by a torpedo.<sup>4</sup> *U.C.17* went off to the south-west, and on May 13, at 6.15 a.m. in 49° 12' N., 4° 26' W., sank with bombs the Danish s.v. *Anna*, 610 tons, bound from Jamaica to Havre with logwood. At 7.10 p.m. she was off Ushant and in 48° 51' N., 5° 36' W., stopped the Norwegian s.v. *Hudson*, 817 tons, bound from Haiti to Havre and sank her with bombs.

She then took a stretch to the westward and on May 14, at 7.40 a.m. in 48° 56' N., 7° 22' W., torpedoed without warning the British s.s. *Farley*, 3,692 tons, bound from Cardiff to New York in ballast. The weather was fine, and the sea smooth; the wireless was disabled by the explosion, and the ship's 12-pdr. did not fire; the ship was finally sunk by gunfire, the boats reaching the Scilly Isles. The British s.s. *Grelhame*, 3,740 tons, Admiralty transport, passing the spot at about 8.20 a.m. (May 14) sighted a submarine, but, turning at once, managed to escape into a patch of fog. *U.C.17* returned to the French coast, and on May 15 at 7.30 a.m. in 47° 57' N., 4° 36' W. (Bay d'Audierne) opened fire on the Norwegian s.s. *Athos*, 1,708 tons, which made for the coast at full speed and escaped, saved by the fire of a coast battery at L'Ervily which drove the submarine down, the report bringing a French seaplane to the spot which attacked her at 10.25 a.m. in 47° 53' N., 4° 40' W. *U.C.17* went off again to the westward and on May 16, at 9.40 p.m. in

<sup>1</sup> *Galicja* in H.S. 1292/542; report in Minesweeping Statements H.S. 170B/717.

<sup>2</sup> Doubtful; no details. In telegram (H.S. 445/523) name is s.s. *Millstone*, but there is no such name in Lloyd's List.

<sup>3</sup> H.S. 1296/128.

<sup>4</sup> *Etudes*, May 1917, 75.

48° 36' N., 7° 35' W. suddenly opened fire on the French s.v. *L'Hermitte*, 2,189 tons, from Falmouth to Australia in ballast. *L'Hermitte*, which was armed and escorted by a British yacht<sup>1</sup> returned the fire and the submarine disappeared. This was *U.C.17*'s last attack, though she was not back in Zeebrugge till May 21. She had been out 14 days, had sunk four vessels and a fishing smack of 5,797 tons, and her mines had sunk a ship of 5,922 tons. She had attacked unsuccessfully four ships of 9,872 tons (escaped by gunfire and speed, 1; gunfire and escort, 1; patrol vessel, 1; coast battery, 1; torpedo missed, 1); she had been twice attacked—by a British patrol vessel and by a French seaplane.

64. "U.B.36." May 9—Did not return.—*U.B.36* (Lieutenant Harald von Keyserlingk) left Zeebrugge on May 9 and never returned. In German reports she is stated to have sailed for the Western entrance of the Channel, but the following reconstruction of her possible cruise shows her operating at first between the Isle of Wight and Cherbourg.<sup>2</sup> On May 11 at 2.30 a.m. the periscope of a submarine was seen in 50° 28' N., 1° 52' W., off St. Albans Head by the British s.s. *Princess*<sup>3</sup> and at 6 a.m., a little further west in 50° 23' N., 2° 5' W., the French patrol vessel, *Regulus*, sighted a "large submarine" through the mist at 300 yards, and passed close to it letting go depth charges which did not go off, and firing two shots.<sup>4</sup> Late that night at 11.50 p.m. in 50° 27' N., 2° 18' W. the armed trawler *Sarepta* sighted a "large submarine" (possibly *U.C.61*), which dived during flashes of lightning.

On May 13 at 4 p.m. in 50° 31' N., 0° 41' W., off the Owers, the French patrol vessel *Hirondelle* sighted a submarine for a few minutes through the mist. That night (May 13) H.M.S. *Exe*, a Portsmouth destroyer (Lieutenant L. F. Ommaney) was escorting the British s.s. *Irwell*, 1,040 tons, from Portsmouth to Havre at 10 knots. The night was dark at 9 p.m. when in 50° 18' N., 0° 27' W., Lieutenant Ommaney sighted something like a sail on his starboard beam, 1,000 yards away. He turned at full speed in an attempt to ram but the submarine<sup>5</sup> disappeared in a rain squall leaving the *Exe* to drop a depth charge near the spot. *U.B.36*, if it was she, did not appear again till May 15 when at 4.55 p.m., *T.B.81* (Lieut.-Commander Carter) sighting a seaplane firing Verys' lights<sup>6</sup> followed her on a south-west course, though the use of hydrophones was

<sup>1</sup> *Etudes*, May, 76.

<sup>2</sup> Marine-Archiv states it is possible that she remained in this area. H.S./Q.23.

<sup>3</sup> I.D. Log 11/10. Possibly also *U.C.61*.

<sup>4</sup> *Etudes*, May, p. 17. This may have been *U.C.61*. Marine-Archiv, H.S./Q.46.

<sup>5</sup> Possibly also *U.B.20*. I.D. Log 14/1.

<sup>6</sup> The attack by the seaplane S.P.9846 was on *U.B.20*. Marine-Archiv, H.S./Q.46.



impeded by the arrival of H.M.S. *Christopher* with explosive paravanes. At 7.32 p.m. (May 15) however, in 50° 32' N., 2° 17' W., he heard a submarine on the hydrophone, and remained stopped, and at 8.10 p.m. a "large submarine" appeared on the surface some 8,000 yards off, distinctive by her great length and high conning tower.<sup>1</sup> *T.B.81* chased at full speed to south, being "easily able" to follow the wake of her periscope, which was last seen 1,000 yards off in a large patch of oil, and 500 yards further on where the wake came to a very abrupt termination, *T.B.81* (apparently about 8.15 p.m.) fired a depth charge which brought up a second large patch of oil; a faint noise could be heard in the hydrophone, but nothing more was seen or heard<sup>2</sup> that night.

On May 20 at 5.6 a.m. in 49° 55' N., 2° 42' W., two small British sailing vessels were stopped and sunk with bombs; one was the s.v. *Dana*, 182 tons, going from St. Malo to Fowey, the other was the s.v. *Mientji*, 120 tons, going from St. Malo to Boulogne with barley. That night a submarine appeared in the Ushant area. At 11 p.m. (May 20), in 48° 16' N., 5° 22' W., the Brazilian s.s. *Tijuca*, 2,304 tons, bound from Rio to Havre with coffee was torpedoed without warning on a calm still night, and sank in five minutes.<sup>3</sup>

The next day (May 21), a French coal convoy of 34 vessels from Falmouth—unusually large owing to 14 vessels having been held up on May 19 in order to leave the passage free for a large convoy crossing from France—escorted by four armed trawlers was on its way from Falmouth to Brest, when at 5.15 a.m. (May 21) in 48° 42' N., 5° 14' W., 15 miles north of Ushant, the French s.s. *Ferdinand A*, 2,062 tons, Glasgow to Nantes with 2,600 tons of coal, was struck by a torpedo and sank in 15 minutes, the crew being saved by the armed trawler *Isabella Fowlie*. Forty minutes later, at 5.55 a.m. (May 21), somewhere about 48° 36' N., 5° 13' W., the French s.s. *Molière*, 1,545 tons (Captain Le Gac Louis), Port Talbot to Rochefort, sighted a periscope emerging just on the port bow. He put his helm hard over, intending to ram, and a scraping<sup>4</sup> was felt along the hull, while the track of a torpedo emerging apparently from the *Molière* passed astern of the s.s. *Antonios*. A few seconds later a big upheaval took place about 30 ft. off on the port quarter, rising as high as the taffrail, on which fire was opened, and, though nothing was seen of the submarine and though no shock, "properly speaking," had been

<sup>1</sup> These features are more applicable to a "U" boat or to *U.C.61*, but it was possible at dusk to confuse the two types.

<sup>2</sup> H.S. 1296/188. The attack was marked "Possible" in I.D. in conjunction with the attack by S.P.9846 on *U.B.20* at 4.36 p.m.

<sup>3</sup> She reported the submarine as a large one with two guns, like *U.46*. *U.48* was cruising to the westward at the time, but the position is improbable for her, and there is no mention of the ship in her report.

<sup>4</sup> "Un rage."

felt, by 9.30 a.m. the ship was making water and down by the bows, and on putting into Brest was found to have a large hole in the port bow 27 ft. from the stem, 7½ ft. below the water line, with several dents extending aft.<sup>1</sup> There can be no doubt that a submarine was there and that the *Molière* struck it, and as no submarine that returned reported the incident<sup>2</sup> or the sinking of the *Ferdinand A*, it may be assumed that the submarine concerned was sunk. The only submarine in the area was *U.B.36*<sup>3</sup> and the French authorities were of opinion that, after torpedoing the *Ferdinand A* at the head of the column, she had taken station between the columns to get a shot at a rear ship, and that the *Molière*, which was out of station between the columns, had run into her.

In the cruise as outlined above she had sunk four ships of 4,668 tons.

65. "**U.B.20**," May 13-23.—*U.B.20* (Lieutenant Hermann Glimpf) left Zeebrugge on May 13. On May 15 at 1.40 p.m. in 50° 20' N., 2° 24' W., the British s.s. *Ibex*, 308 tons, bound from Guernsey to Swansea, going 16 knots, sighted her conning tower 3,000 yards off, and brought it astern, signalling at the same time to one of three patrol vessels cruising inshore, and at 2.15 p.m. was missed by a torpedo which passed harmlessly under her. S.P.9846 (Flight-Lieutenant C. W. Scott, R.N.A.S.) was apparently informed of this report, and at 4.30 p.m. (May 15) in 50° 15' N., 2° 17' W., sighted the conning tower of a submarine which went down, and was able to drop a 65-lb. bomb two minutes later. *U.B.20* went on undamaged, and on May 16 at 8 a.m. in 50° 3' N., 3° 35' W., off Start Point, sank the Dutch s.v. *Frisco*,<sup>4</sup> 155 tons; that night (May 16) about 11 p.m., off Wolf Rock, in about 49° 58' N., 5° 28' W., she sank the British s.s. *Kilmaho*, 2,155 tons, bound from Cardiff to Dunkirk, which was evidently torpedoed, for out of 22 in her crew, an Arab fireman was the sole survivor. On May 18, round about 49° 41' N., 6° 53' W. about 4 p.m., she sank two British fishing vessels, the *Primrose*, 62 tons, and the *Adventure*, 50 tons. She then made over to the French side, for on May 19 at 8.50 a.m. in 48° 36' N., 5° 17' W., she stopped another coal ship, the Norwegian s.s. *Askild*, 2,540 tons, bound from Cardiff to St. Vincent. The French torpedo-boat *Claymore* (Brest Flotilla) came on the scene and *U.B.20*, after sinking the ship with a torpedo, went down.<sup>5</sup> The next day (May 20) at 5 a.m. in 48° 36' N., 5° 17' W., north of Ushant, she met another collier, the Norwegian s.s. *Normand*, 2,097 tons, carrying coal from

<sup>1</sup> Etudes, May 1917, 82; Home Waters, Ships Attacked, I.D. Vol. 645, *Molière*.

<sup>2</sup> Marine-Archiv in H.S./Q.23.

<sup>3</sup> Exchange H.S./Q.64/21.

<sup>4</sup> Etudes, p. 11, no information from British source.

<sup>5</sup> Etudes, May 1917, 86.



Cardiff to Dakar, and sank her with bombs. According to Marine Archiv's List, this was *U.B.20's* last ship. She got back to Zeebrugge on May 23. She had sunk four vessels and two fishing vessels, totalling 7,059 tons, and had been attacked once by a seaplane.

66. "U.B.40 (II)," May 13-22.—*U.B.40* (Lieut.-Commander Howaldt) left Zeebrugge on May 13. On May 15 at 8 p.m. in 50° 35' N., 0° 12' W., off Newhaven she stopped and sank with bombs the British s.v. *Cuba*<sup>1</sup>, 271 tons, bound from Teignmouth to Tréport with China clay. The next day (May 16) at 5.11 a.m., some 5 miles to the northward in 50° 40' N., 0° 10' W., she torpedoed without warning the British s.s. *Pagenturm*, 5,000 tons, proceeding down Channel from Barry to Mesopotamia with stores for the Indian Government, which sank in sixteen minutes with a loss of four lascars. The ship was armed with a 4-in. gun, which did not open fire, and was being escorted by one armed trawler the *White Ear* (one 3-pdr.), stationed on her port bow; the weather was misty and the sea smooth. The India Office represented to the Admiralty that the ship was able to steam 12½ knots,<sup>2</sup> but in order to keep station with her escort had only been going "about 6½." She had had four escorts up to Dungeness, where she had had to wait fifteen minutes for another. The Commander-in-Chief, Nore, had asked for instructions as to an escort on May 12 and 13, and on May 15, failing a reply, had instructed the various areas (Dover, Newhaven, Portsmouth) to provide an escort. The India Office asked if it would not be preferable to allow ships to proceed unescorted rather than with escorts of lower speed and inferior armament "which appear to increase instead of diminishing the risk of destruction."

*U.B.40* had meanwhile moved off some 20 miles to the westward and at 12.30 p.m. (May 16) in 50° 28' N., 0° 38' W., torpedoed without warning another good sized ship, the British s.s. *Highland Corrie*, Nelson Line, 7,583 tons, bound from Montevideo to London. She too was armed with a 4.7-in. gun which did not open fire; she was unescorted, proceeding east at 12 knots, zigzagging in a sea very calm with a slight haze, and remained afloat for two hours. She had sent out a wireless, and the destroyer *Badger* was on the scene within twenty minutes, but her efforts to get the ship in tow were ineffectual. The *Highland Corrie* when she left Montevideo on April 18, had been given a special rendezvous in 48° 50' N., 10° W. and on May 14 at 6 p.m. sent a wireless to say that she was arriving at the special rendezvous at 10 p.m. that night.<sup>3</sup> The Commander-in-Chief, Devonport, had no destroyer immediately available and the ship

<sup>1</sup> A second submarine was stated to have been seen, possibly *U.B.20*.

<sup>2</sup> H.S. 1296/201. India Office, June 11, M.67926/17. The I.D. return states she was proceeding W. by N., 8½ knots.

<sup>3</sup> This gave the C.-in-C., Devonport, only three hours (telegram received at 1859) notice of her arrival at a rendezvous 240 miles away.

continued her route up Channel, apparently not having received at Montevideo the regular instructions to call at Falmouth.<sup>1</sup> The next day (May 17) at 5 a.m. in 50° 28' N., 1° 15' W., the British s.v. *Florence Louise*, 115 tons, from Rouen to Briton Ferry was stopped,<sup>2</sup> and had been abandoned when the destroyer *Nymphe* came racing up and forced the submarine down. The *Florence Louise* went on her way till noon, when off the Needles in 50° 32' N., 1° 32' W., *U.B.40* stopped and sank her with bombs. It was possibly she that on May 20 at 5.30 a.m. in 50° 22' N., 0° 52' E., attacked the British transport *Southwestern Miller*, 6,514 tons, proceeding from Southampton to Boulogne under escort in hazy weather. The submarine fired a torpedo which missed, and was immediately attacked by the escort H.M.S. *Defender* who drove it down. Another submarine was seen astern which dived at the same time as soon as the *Defender* opened fire.

That evening (May 20), *U.B.40* was off Beachy Head and at 6.10 p.m., in 50° 38' N., 0° 8' W., torpedoed and sank the British s.s. *Tycho*, 3,216 tons, bound from Bombay to Hull; the ship was armed with a 3-pdr. Q.F., but nothing was seen of the submarine; the weather was hazy with a light drizzle. About quarter of a mile off was the British s.s. *Porthkerry*, 1,920 tons, proceeding from Cardiff to Sheerness, which stopped to pick up the *Tycho's* boats, and was herself hit at 6.27 p.m. (May 20), by a torpedo whose explosion blew up one of the *Tycho's* boats, killing the master and 14 men, and sent the *Porthkerry* to the bottom in 2 minutes. *U.B.40* hung about in the vicinity, and the next morning (May 21), at 4.45 a.m. in 50° 38' N., 0° 5' W. torpedoed without warning the British s.s. *Jupiter*, 2,124 tons, going from Dieppe to Manchester in ballast; her 3-pdr. gun did not fire and she sank almost at once. *P.50* made for the spot on receipt of a wireless from an armed trawler, and at 6 a.m. picked up five men clinging to the wreckage, all that survived of a crew of twenty-six. A few miles to the northward at 5.30 a.m. (May 21) in 50° 40' N., 0° 9' W., the British s.s. *Karoo*, 3,941 tons, going from Southampton to Calais, was also attacked with gunfire; the ship was armed with a 4.7-in. Japanese gun, and by returning the fire at 6,000 yards and bringing the submarine abaft the beam, escaped.

This was the last ship attacked by *U.B.40* who returned to Zeebrugge on May 22. She had sunk in 10 days, seven vessels of 20,229 tons, and three vessels of 11,080 tons, which had been attacked, had escaped, one by the timely arrival of patrols, one by her destroyer escort, and one by speed and gunfire.

67. "U.C.36." May 16; did not return.—*U.C.36* (Lieut.-Cdr. Gustav Buch) left Zeebrugge on May 16 at 8.20 p.m. with instructions

<sup>1</sup> C.-in-C., Devonport, June 7, in H.S. 1296/256.

<sup>2</sup> By *U.B.40* or possibly *U.B.36*.



to lay mines off the Nab and Needles which she apparently did on the night of May 17-18, for on May 18 at 2 a.m., on a fine clear night in 50° 39' N., 0° 59' W.<sup>1</sup> (off the Nab) the British s.s. *Elford*, 1,739 tons, an Admiralty transport proceeding from Chatham to Cherbourg, escorted by an armed trawler, ran on a mine and sank in three-quarters of an hour. At 7.45 a.m. the same morning in 50° 35' N., 1° 3' W., the British s.s. *Camberwell*, 2,589 tons, proceeding from London to Calcutta was also blown up and seven lives lost; and again that afternoon at 2.20 p.m., in 50° 35' N., 0° 56' W.,<sup>2</sup> the field claimed a third victim in the armed trawler *Lucknow* while she was firing at mines on the surface at low water. A fourth vessel was sunk on this field on May 30, at 10.3 a.m. in 50° 42' N., 0° 53' W., viz. the British s.s. *Corbett Woodall*, 917 tons, carrying 1,250 tons of coal from South Shields to Poole. These losses occurred in positions at least 4 miles apart, some 5 miles from the coast of the Isle of Wight, the mines apparently being laid outside the ordinary traffic route.

On May 18, at 3.40 a.m. in 50° 20' N., 1° 35' W., the British s.s. *Denetown*, 652 tons, going from Guernsey to Swansea, sighted a submarine on the surface<sup>3</sup> half a mile off which fired a torpedo then opened fire at 400 yards. The *Denetown* fired two rounds with a 13-pdr. Vickers which jammed, then abandoned ship, but the armed trawler *Cleopatra III*, coming up on hearing the gunfire, drove the submarine down and saved the ship. The submarine was possibly *U.C.36*. She had instructions to meet another Flanders boat off Cherbourg on May 18, but never appeared, which points clearly to her loss somewhere between the Nab and Cherbourg, on May 17 or 18. The "Q" Ship, H.M.S. *Glen* engaged a submarine at 6 p.m. on May 17 in 50° 5' N., 1° 25' W., but it is clear from *U.B.18*'s journal that this action was fought with *U.B.18*, which escaped undamaged. *U.C.36* must have been lost about this time, possibly on one of her own mines<sup>4</sup>.

67A. "U.B. 31 (II)," May 14-25.—*U.B.31* (Lieutenant Robert Bieber) left on May 14 to carry out a second cruise in the Channel in May, operating off the Lizard. It was she who on May 21 at 3.40 p.m. in 49° 54' N., 5° 30' W., torpedoed without warning the British s.s. *City of Corinth*, 5,870 tons, from Singapore to London. The ship was making for Falmouth where she had been told to call for instructions, going N. 84 E., 12½ knots, unescorted and zigzagging in a smooth sea and hazy weather when she was hit

<sup>1</sup> Marine-Archiv, H.S./Q.23.

<sup>2</sup> This position is not far from Field 367, laid by *U.C.70* on April 17.

<sup>3</sup> The *Denetown* reported her assailant, however, as a large submarine with two guns. H.S. 1296/310.

<sup>4</sup> For H.M.S. *Glen*'s action, H.S. 1295/516; German account of *U.B.18*'s action in Exchange, H.S./Q.46; see S.62.

by a torpedo on the port side. A periscope was seen for a few seconds and the gunner at her 13-pdr. gun had just opened fire on it when a second torpedo hit her amidships the port side. The ship heeled over and sank in about forty minutes, the whole crew of 68 being picked up in the boats without casualties by an armed trawler, which was on the scene within ten minutes. The ship was apparently not carrying out her instructions to make the Scillies at dawn.<sup>1</sup>

Not far from the spot at 5.30 p.m. (May 21) in 49° 49' N., 5° 21' W. the Italian s.s. *Ugo Bassi*, 1,799 tons, from Breira (Algeria) to Jarrow, with iron ore, was missed by a torpedo which passed astern. The crew abandoned ship remaining in the boats for some twenty minutes till two armed trawlers the *Isabella Fowlie* and *Nodzu* came up and putting the crew on board took the ship in tow and brought her into Mounts Bay.<sup>2</sup>

Two hours later at 7.35 p.m. (May 21), some 10 miles to the south-eastward in 49° 52' N., 5° 20' W., the British s.s. *Medora*, 5,134 tons, bound from London to Montreal,<sup>3</sup> was proceeding N. 65 W., 12 knots and zigzagging when the master, Captain C. Hodder, sighted a periscope just abaft the port beam half a mile and putting his helm hard over saw a torpedo pass fifteen feet astern, receiving later an expression of Their Lordships' appreciation.<sup>4</sup> It was possibly *U.B.31* who on May 23 at 12.20 a.m. in 49° 35' N., 6° 35' W., off the Scillies fired a torpedo at the P. and O. Ship *Nellore*, 6,853 tons, which missed. This was the fourth occasion on which the *Nellore* had skilfully evaded an attack, and the Master, Captain Arthur M. King, was awarded a D.S.C.<sup>5</sup> *U.B.31* was back in Zeebrugge on May 25.

68. "U.C.62" May 16-June 1.—*U.C.62* (Lieutenant Max Schmidt) left for her first Channel cruise on May 16. On May 17 or 18 she laid eight mines off Dungeness, round about 50° 53' N., 0° 58' E.<sup>6</sup>; one of the mines on the surface was sunk by a destroyer on the 18th and four more were swept up on the 20th. On May 18, she laid the remaining ten off the Royal Sovereign Light Vessel round about 50° 42' N., 0° 34' E. These were apparently not found till May 30, when at 1 a.m. in 50° 42' N., 0° 40' E., the British s.s. *Lisbon*, 1,203 tons, struck one and sank; it was a pitch dark night; she was in a convoy of three ships, escorted by *T.B.80*, and it was thought at first she had been torpedoed, but mines were swept up later round the spot. The first week of *U.C.62*'s cruise is

<sup>1</sup> H.S. 1313/358 and Marine-Archiv, H.S./Q.46.

<sup>2</sup> H.S. 1313/371.

<sup>3</sup> Apparently unescorted.

<sup>4</sup> H.S. 1313/378.

<sup>5</sup> H.S. 1313/419; no details as to course or speed. Marine-Archiv states this attack was not made by *U.C.62*. H.S./Q.49.

<sup>6</sup> O.U. 6020B, Field 414.



obscure. She apparently went on to the South Coast of Ireland, for she reported sinking an unknown steamer off the Old Head of Kinsale on May 24. This was evidently the British s.s. *Chicago City*, 2,324 tons, bound from New York to Bristol with a general cargo and Government stores, the only ship attacked in that vicinity at that time. At 10.55 p.m.<sup>1</sup> on May 23 in 51° 37' N., 8° 17' W., the *Chicago City* was proceeding east  $\frac{1}{2}$  north, 8 $\frac{1}{2}$  knots, in mist and squalls of rain when an explosion occurred on the starboard bow, some 12 ft. from the stem; the master, Captain Montagu Crinks, the Chief Engineer and 2nd and 3rd officers remained by the ship; tugs arrived from Queenstown at 9.30 a.m. and she was got safely into that port and beached.<sup>2</sup> Not far from the same spot on May 25 at 2.5 p.m. in 51° 34' N., 8° 12' W., the British s.s. *Rabymere*, 1,776 tons, bound from Dakar to Liverpool course east-south-east, 7 knots, sighted a torpedo track about four points abaft the starboard beam; the helm was put hard a starboard, and the torpedo passed a few feet ahead. *U.C.62* was still off the South Coast of Ireland on May 27; at 8.55 a.m. that day in 51° 18' N., 8° 26' W., H.M.S. *Salvia*<sup>3</sup> (Lieut.-Commander Wybrants Olphert, D.S.C., R.N.R.) steering east, 11 knots sighting a submarine bearing S. 18 E. 10,000 yards steering west, proceeded to close it, and on the submarine submerging at 9.31 a.m. some 7,000 yards away, dropped three depth charges in disturbed water sighted ahead at 9.43 a.m. Large quantities of oil appeared on the surface, and later splintered wood and some pieces of timber were seen. The submarine was evidently *U.C.62* who reported diving at 9.25 a.m. for a vessel which had altered course in a suspicious way out of the traffic route. At 10 a.m. and 10.10 a.m. in 51° 12' N., 8° 52' W., three depth charges were heard exploding but no damage was done.<sup>4</sup> (See Plan 4.)

This is the last incident in *U.C.62's* cruise. She returned to Zeebrugge on June 1, having sunk one ship of 5,870 tons; her mines had sunk one ship of 1,203 tons; four ships amounting to 16,088 tons had escaped her—one beached and salvaged, and three missed by torpedo; she had been attacked once by a "Q" ship without result.

69. "U.C.70," May 16–June 1.—*U.C.70* (Lieut.-Commander Werner Furbringer) left Zeebrugge on May 16 to operate in the Channel and on the French coast. It may have been she, that on May 18 at 1.30 p.m. in 49° 43' N., 2° 57' W. opened fire on the armed drifters *Silvery Harvest* and *Coulard Hill*, escorting five small sailing vessels from Fowey to Cherbourg; the drifters returned the fire

<sup>1</sup> 0.55 a.m., May 24, German Summer Time.

<sup>2</sup> H.S. 1313/442. Admiral Lewis Bayly had no doubt she had been torpedoed.

<sup>3</sup> "Q" 15.

<sup>4</sup> H.M.S. *Salvia's* report and £200 award in H.S. 648/406. *U.C.62's* in H.S./Q.23.

and the submarine submerged. At 3 p.m. (May 18) in 49° 49' N., 3° 16' W., she met the British s.v. *C.E.C.G.*, 47 tons, Jersey to Par (Cornwall), and sank her by gunfire, and at 8 p.m. in 49° 19' N., 2° 37' W. stopped the British s.s. *Dromore*, 268 tons, going from St. Malo to Swansea and sank her probably by bombs.

On May 21 she was off Havre, where she laid 18 mines round about 49° 4' N., 0° 3' W.<sup>1</sup> These mines were found that day, when seven were swept up and eight more within a week without losses.

*U.C.70* then proceeded westward, and on May 23 at 11 p.m., off Ushant, in 48° 55' N., 5° 4' W.–5° 16' W., meeting a French coal trade convoy of seven ships proceeding north, torpedoed and sank the Spanish s.s. *Begona III*, 2,699 tons, then, following the convoy at 1.10 a.m. (May 24), attacked the British s.s. *Madura*, 4,484 tons, hitting her with a torpedo which did not explode.<sup>2</sup>

*U.C.70* is stated by Marine Archiv to have been cruising on May 27 and 28, from 70 to 100 miles south-west of Ushant. She reported sinking a steamship of 1,500 tons on May 28, which may refer to a call for help from the French s.s. *Flore*, 3,553 tons, at 10 a.m. in 47° 50' N., 7° W.<sup>3</sup> She was back in Zeebrugge on June 1. She had been out 16 days, had sunk three vessels totalling 3,014 tons, had attacked another without success and had been driven down once by armed drifters.

70. "U.C.21," May 19–June 3.—*U.C.21* (Lieutenant Reinhold Salzwedel) left Zeebrugge on May 19 to operate in the Bay. On May 21 at 11 p.m., in 47° 44' N., 4° 27' W., off Brest, a torpedo that missed the Roumanian s.s. *Bucuresti*, 2,269 tons, may have been fired by her.<sup>4</sup> On May 22 at 7 a.m. in 47° 6' N., 3° 45' W., the French f.v. *Jeune Albert*, 25 tons, which had lost the fishing convoy, was stopped by her and sunk by gunfire.

On May 23 she was off the Loire and laid six mines round about 47° 15' N., 2° 35' W.,<sup>5</sup> one of which on May 26 at 9.45 p.m., in 47° 15' N., 2° 30' W.,<sup>6</sup> blew up the Norwegian s.s. *Norhaug*, 1,245 tons, bound from Swansea to the Gironde in convoy, which sank at once with a loss of five men. Four more mines were swept up that day.

<sup>1</sup> Field 403. H.S. 13170/3/723.

<sup>2</sup> H.S./Q.59 (3); H.W.S.A., May, I.D. Vol. 646.

<sup>3</sup> I.D. Log, May 28/3, but not reported in Etudes et Mouvements.

<sup>4</sup> Marine-Archiv says "not reported by *U.C.21*." H.S./Q.46. The torpedo may have been imaginary.

<sup>5</sup> O.U. 6020B, Field 421a.

<sup>6</sup> Etudes, May 1917, 7–6 m. S. 50 E. from feu du Four (Loire). The position in Vice-Consul's report (in H.S. 1314/80), viz., 47° 52' N., 5° 12' W., is incorrect, for the boats were found at 5.30 a.m., May 27, in 47° 9' N., 2° 33' W. (I.D. Log 27/8).



At 4.55 a.m. (May 23) in 46° 57' N., 2° 30' W. she met a convoy of seven ships proceeding to England under an escort of two armed trawlers and sent a torpedo into the British s.s. *Lesto*, 1,940 tons, bound from La Pallice to Liverpool, which sank in 4 minutes with a loss of four men. At 7 a.m. (May 23), the American s.v. *Harwood Palmer*, 2,885 tons, bound from New York to St. Nazaire with a cargo of cotton and steel goods, came in sight and was stopped. But when *U.C.21* opened fire, the armed trawler *Cobra*, leaving the convoy in which the *Lesto* had been sunk, came up from the westward, drove *U.C.21* down, and after putting the *Harwood Palmer's* crew back on board, left the ship to the care of two French patrol vessels, who anchored her off the coast, but being too small to tow her had to leave her finally abandoned, when she went ashore and was wrecked. (See Plan 7.)

*U.C.21* went to the southward to lay six mines that night off La Rochelle round about 46° 7' N., 1° 22' W.,<sup>1</sup> which were found the next day,<sup>2</sup> and swept up during the week. She then went on to the southward, and after laying six mines off the Gironde on May 24 round about 45° 24' N., 1° 17' W.,<sup>3</sup> made to the westward. At 2.15 p.m. (May 24), in somewhere about 45° 15' N., 2° 18' W., the French "Q" ship *Marguerite* sighted a periscope  $\frac{1}{2}$  mile off, and tried to ram it. Failing to do so, the Captain abandoned ship, opening fire, when the submarine closed to 800 metres, but she was too quick and dived at once. To the northward a patrol vessel at 11 p.m. (May 24) in about 45° 25' N., 2° 13' W., dropped a depth charge on a submarine,<sup>4</sup> which must have been *U.C.21*, who went on to the Spanish coast, and on May 26 at 9.30 a.m. in about 43° 33' N., 3° 41' W., stopped the Greek s.s. *Aristidis*, 2,179 tons, bound from Huelva to Plymouth with iron ore, which she sank with bombs; a long diplomatic discussion followed as to whether she was in Spanish territorial waters or not, the Master maintaining that she was 2 to 2½ miles, the Spanish authorities that she was 3¼ miles from the shore.<sup>5</sup> Proceeding westward along the coast on May 27 at 4.50 a.m. in about 43° 37' N., 5° 30' W., she sank with bombs the Greek s.s. *Efsthathios*, 3,847 tons, proceeding from New York to Bordeaux, which had slipped outside territorial waters in a fog. On May 28 at 1.45 a.m. in approximately 43° 46' N., 7° 30' W. (off C. Moras), she stopped the Norwegian s.s. *Waldemar*, 1,628 tons, bound to Dublin with copper ore and sank her with bombs.

<sup>1</sup> O.U. 6020B, Field 421b. Note longitude 3° 42½ W. should apparently be 1° 22' W.

<sup>2</sup> Etudes, 85.

<sup>3</sup> Field 421c. Etudes attributes the loss of the Norwegian s.s. *Nann Smith*, 2,930 tons, mined and sunk on May 22, 8.30 p.m., in 47° 32' N., 3° 15' W., to a mine laid by *U.C.21*. German statement, however, makes no mention of mines laid there by *U.C.21*; the mine may have been one of those laid by *U.C.69* on March 27, 1917, in 47° 30' N., 3° 15' W.

<sup>4</sup> Etudes, May, p. 6, 88.

<sup>5</sup> I.D. Vol. 646, M.69745/17.

At 10.20 a.m. (May 28) in about 43° 41' N., 8° 6' W. (off Cedeira), another Norwegian s.s., the *Urna*, 2,686 tons, bound from Melilla to Barrow with iron ore, was stopped and sunk with bombs, and at 7.45 p.m. in about 43° 20' N., 9° 2' W., the same fate befel the Norwegian s.s. *Hiram*, 598 tons, going from Villarial to Rouen with copper ore. The destruction of these ships evoked further protests that they were sunk in territorial waters, but the Spanish authorities held stoutly to their assertion that the *Urna* was 9 miles and the *Hiram* 3¼ to 3½ miles from the coast.<sup>1</sup>

*U.C.21* was on her way home on May 30, for the American s.s. *Virginia*<sup>2</sup> reported at 3.45 p.m. a submarine chasing her in 47° N., 8° 5' W. *U.C.21* reported sinking that day (May 30) the Norwegian s.s. *Sorland*, 2,472 tons, from St. Nazaire, in the Bay.<sup>3</sup>

She was back in Zeebrugge on June 3, having sunk eight vessels and a smack, in all 18,260 tons. She had missed one ship with a torpedo; she had been driven down once by an armed trawler, attacked once by a French "Q" ship, and once by a French patrol vessel.

71. "U.B.38 (II)," May 22–May 29.—*U.B.38* (Lieutenant Wilhelm Amberger) left Zeebrugge on May 22. On May 23 at 9 p.m. in 50° 13' N., 1° 6' W., between Isle of Wight and Cherbourg, the British s.s. *Carperby*, 2,104 tons, was missed by a torpedo, and at 10 p.m. (May 23) in 50° 9' N., 1° 14' W. the British s.s. *Petone*, 708 tons, in convoy from Rouen, sighted a submarine which was driven down by the escorting French destroyer. On May 24 at 11.30 a.m. in 50° 4' N., 2° 28' W., *U.B.38* stopped the Danish s.v. *Thyra*, 285 tons, going from Haiti to Havre, and sank her with gunfire; and at 3.20 p.m. in 50° 5' N., 2° 50' W. stopped the Norwegian s.s. *Gudrun*, 1,472 tons, from Jamaica to Havre, and sank her with bombs.

On May 24 at 9.30 p.m. in 50° 22' N., 1° 7' W., the French s.s. *Charles Leborgne*, 1,020 tons, with coal from Newport to Havre, in a French coal trade convoy of 11 ships, escorted by English patrol vessels, sighted a mile off a submarine which opened fire. The ship pressed on at full speed to close her convoy, and opening fire with her 3.6-in. gun escaped. At 5.40 a.m. the next day (May 25) in 50° 20' N., 3° 12' W., the British s.s. *Sjaelland*, 1,405 tons, was attacked by

<sup>1</sup> Correspondence in I.D. Vol. 646. The *Waldemar*, according to the Master's reckoning, seems to have been in 43° 47' N., 7° 31' W., or 3½ miles from shore (Chart 1053). The Master of the *Urna* gives her position, in deposition to British Vice-Consul at Ferrol (N.I.D. 13183, I.D. Vol. 646), as Cape Prior W. by S. 13 miles, which puts her some 4 miles inland. He seems to have meant Cape Prior S.W. by W.

<sup>2</sup> Tonnage not given; there were three ships of that name.

<sup>3</sup> Probably somewhere about 47° 20' N., 6° 40' W.



gunfire, the submarine rising to the surface and opening fire without warning; the master was killed by a fragment of shell, and the ship sunk. She had belonged to a convoy from Rouen which had dispersed at 8.35 p.m. on May 24. The British s.s. *New Pioneer*, 722 tons, which had crossed in the same convoy, saw the British s.s. *Sjaelland*, being attacked and sunk, and herself came under fire from the submarine, but turning her stern towards it managed to escape in a patch of fog.<sup>1</sup> At 10.45 a.m. (May 25) in about 50° 16' N., 3° 8' W. a submarine opened fire on the British f.v. *Competitor*, 51 tons, whose crew abandoned her; the destroyer *Acasta* was on watch at the time off Berry Head, and making towards the gunfire and coming down from the northward with the *Achates*, sighted the *Competitor* at 11.5 a.m.; about half a mile north of the smack (in 50° 13' N., 3° 10' W.)<sup>2</sup> her first paravane exploded, her second exploding at 11.25 a.m. a mile or so south of her. Nothing more was seen of the submarine, and the *Competitor* was re-boarded and taken into Brixham.<sup>3</sup> *U.B.38* seems to have proceeded eastward, and on May 27 at 3.50 a.m. in 50° 14' N., 1° 17' W. it may have been she that opened fire on the British s.s. *Indian Transport*, 4,111 tons, proceeding from Havre to Barry, course N.E. by E., which returned the fire at 2,800 yards and escaped. *U.B.38* returned to Zeebrugge on May 29; she had been out eight days, had sunk three ships totalling 3,507 tons. Five attacks had failed from the following causes:—

One—missed by torpedo; one—in convoy, saved by escort; one—in convoy, returned fire; one—returned fire and escaped in fog; one—saved by a destroyer in hunting patrol; one—returned fire and escaped.

72. "U.C.66," May 22—did not Return.—*U.C.66* (Lieutenant Herbert Pustkuchen) sailed from Zeebrugge on May 22 to lay mines off Swansea and Milford Haven and to operate on South Coast of Ireland.<sup>4</sup> Nothing definite is known of her cruise and her mines do not appear to have been laid. It looks as if she was operating for a time in the Channel where she may have made the following attacks, which were not reported by any submarine that returned.

On May 25 at 5.40 a.m. in 50° 20' N., 3° 12' W. the British s.s. *Sjaelland*, 1,405 tons, was attacked by gunfire off the Start and sunk by a submarine which may have been *U.C.66* or *U.B.38*.

<sup>1</sup> H.S. 1296/413, 419. The *Sjaelland* described the submarine as having one gun, about 80 ft., old type, grey and very rusty, which points to *U.B.38*; but the *Sjaelland* is not included in her list of "sinks." Marine-Archiv attributes her loss to *U.C.66*. H.S./Q.46.

<sup>2</sup> *Acasta's* report, H.S. 1296/429.

<sup>3</sup> The *Competitor* described the submarine as 300 ft. long.

<sup>4</sup> O.U. 6020B/55 and H.S./Q.46.

On May 27 at 5.50 a.m., in 49° 8' N., 6° 58' W., the British s.s. *Meaford*, 1,888 tons, bound from Barry to Bona, was proceeding south-west at 8 knots, zig-zagging, when a submarine broke surface 300 yards off on the starboard bow. Fire was immediately opened with the 12-pdr., the second shot appearing to hit the periscope and the third the conning tower, and nothing more was seen of the submarine.<sup>1</sup> That same day (May 27) at 7.50 a.m. H.M. Q-Ship *Acton*, steaming N. 47 W., 9 knots, north of the Scillies in 50° 7' N., 6° 25' W.,<sup>2</sup> was fired at by a submarine a long way off, about 4 points on the starboard bow. The *Acton* shaped course to the southward for the Seven Stones Lightship and the submarine went down. At 8.10 a.m. she came up and opened fire at very long range, firing her last round at 8.35 a.m. The *Acton* went to "panic" stations and was about to stop when the submarine, which seemed to have two guns,<sup>3</sup> ceased firing without having hit her, and disappeared at 9 a.m. The gunfire had been heard from shore, and at 9.5 a.m. (May 27) Seaplane 8656 (Flight Sub-Lieutenant John E. A. Hoare) rose to go to the help of the supposed merchant vessel. At 9.20 a.m. in 50° 9' N., 6° 24' W., a submarine, "apparently of *U.33* type" with high fore-castle and conning tower well aft, was sighted on the surface steering north-east, and opened fire on the plane with a machine gun, hitting the radiator; at 9.25 a.m. Flight Sub-Lieutenant William L. Anderson dropped four 100-lb. bombs, obtaining two direct hits before the conning tower and the submarine went down by the bow with her stern at an angle of about 60°. The radiator was leaking, but C.P.O. Frederick Tadman climbing into the wing stopped the leak. Nothing more was seen of the submarine,<sup>4</sup> which may have been *U.C.66*. On June 4, however, at 7 p.m., in 48° 42' N., 7° 52' W., the Norwegian s.v. *Songvand*, 2,206 tons, bound from Barry to Santos with coal, was stopped and sunk with bombs. In the Irish Sea, the British s.s. *Keeper*, 572 tons, was lost with all hands about June 10, which may have been the work of *U.C.66*. The latter's loss was subsequently attributed, in 1919, to an attack, on June 12, by the armed trawler *Sea King* (Lieut.-Commander Godfrey Herbert, D.S.O.), leader of a Hydrophone flotilla, which at 11.30 a.m., in 49° 56' N., 5° 10' W. (off the Lizard), sighted the jumper stay of a submarine 400 yards away, 3 points on the port bow, moving about 4 to 5 knots to the westward. Lieut.-Commander Herbert put his helm hard over, and as the

<sup>1</sup> H.S. 1314/105. Noted by I.D. as "improbable." It was considered by Admiral Moore's Committee in 1917 that some damage was inflicted and an award of £100 was made.

<sup>2</sup> About 65 miles from the *Meaford's* position—probably not the same submarine.

<sup>3</sup> H.S. 649/16. This would make her a High Sea Fleet boat, possibly *U.57*, but no boat that returned reported the encounter. H.S./Q.46. See S28.

<sup>4</sup> H.S. 1314/147. Awards of D.S.C. to Flight Sub-Lieutenants J. E. A. Hoare and W. L. Anderson, and a C.G.M. to C.P.O. Tadman.



submarine dived let go a D\* depth charge "right over the submarine" which was followed by a series of heavy explosions while the other three trawlers coming up let go their depth charges round the spot.<sup>1</sup>

It is now known, however, that *U.C.66* sailed on May 22, and under ordinary circumstances should have been back about June 8, some days before the *Sea King's* encounter.

Apart from the possibility of destruction by her own mines, the following cases may be cited, as possible causes of her destruction in the month of June: On June 3 at 11.20 a.m., 20 miles S. by W. from Beachy Head, in 50° 7' N., 3° 34' W., H.M. Q-ship *Balham* (Lieutenant Chas. C. W. Walters, R.N.R.), a sailing ship armed with two 12-pdrs., saw a submarine emerging which cruised round with conning tower awash till 2 p.m., then disappeared on a W.S.W. course. At 4.30 p.m., the submarine was again in sight on the port beam about 2½ miles off and closing slowly to 1½ miles right out of water with wireless masts up, opened fire at 5 p.m. at about 2,500 yards. The weather was fine and clear, and the sea calm and smooth. Lieutenant Walters started to abandon ship, but as the submarine showed no intention of allowing him to do so, opened fire when a shell had shattered the after end of the gun house. The third round from the foremost gun at 2,600 yards appeared to hit the submarine below the conning tower, as well as the fourth and fifth; the fourth, fifth, sixth and seventh shots from the after gun also appeared to hit. The submarine sank rapidly stern first at an angle of 45° to 60°.<sup>2</sup>

On June 4 at 12.10 p.m. in 50° 35' N., 0° 56' W., off Portsmouth, *T.B.98* (Lieutenant John I. Harrison, R.N.R.), sighting the conning tower and periscope of a submarine a mile off, which submerged instantly, made for it at full speed and dropped two depth charges which both exploded. The periscope was again sighted at 1.10 p.m., 150 yards ahead, and *T.B.98* went full speed (23 knots) ahead to ram it, but only a slight grating sound was heard. H.M.S. *Conflict* (Lieut. R. L. Hubbard, R.N.R.), close astern,<sup>3</sup> sighted a periscope and dropped one depth charge and then another.

On June 4 at 1 p.m. in 50° 31' N., 1° 37' W. off Poole, the drifters *W.P.G.* (Hydrophone Officer), *White Oak* and *M.L.423*, were listening on a line N. by E. and S. by W., 1½ miles apart, when *W.P.G.* heard the sound of a motor engine starting, not very loud, but gradually increasing, plainly indicating a submarine submerged.

<sup>1</sup> H.S. 1316/237. Lieut.-Commander G. Herbert received a "mention."

<sup>2</sup> H.S. 1287/387. Admiral Colville thought it unlikely at such a long range that the submarine was seriously damaged. I.D. classification—"Improbable." Lieutenant C. W. Walters was awarded a D.S.C., and £200 award given to ship.

<sup>3</sup> *Conflict* stated she was "about a mile off." H.S. 1297/37. The case was noted as "Improbable" in I.D. The two commanding officers were given a "mention."

The *White Oak* had heard the same sound so loudly that she had dropped a depth charge (D\*). The *W.P.G.* closed *White Oak* and dropped another. They then stopped and listened, and the motor engine was heard again. *White Oak* fired another charge D\*, and *M.L.432* dropped one 300 yards to the eastward. The signal was made to stop and listen, and another explosion not accounted for was heard; the *White Oak* again heard a motor engine start and stop close to, and dropped two "G" charges set to 40 ft.—making six charges in all.<sup>1</sup>

On June 6 at 3 p.m. in 50° 12' N., 0° W., H.M. *T.B.5* (Newhaven, Divisional Naval Transports), Lieutenant J. C. N. MacMillan, on a course S. 15 W., 20 knots, sighted in hazy weather a small object on the port bow, about 1 mile off, bearing S.S.E. *T.B.5* steered at once straight for it at full speed, and could see it as a conning tower of a submarine submerging quickly; the wake could be seen about 10 yards on the starboard bow trending south-west, and *T.B.5* attacked it with depth charges, dropping four in all (types G, C\* large, G, C\*) and subsequently finding thick oil extending over a considerable area.<sup>2</sup>

On June 8 at 5.50 p.m. in 50° 52' N., 1° 27' E. (5 miles N. 70 W. mag. from Cape Gris-nez), H.M.S. *P.50* (Lieutenant Frederick E. Raw, R.N.), on a southerly course, sighted a disturbance on the water, 5 cables off on the starboard bow; on reaching it a track could be seen proceeding S.W.; speed was increased to 20 knots, depth charges were set, and when the ship was immediately above the end of the wake, the starboard depth charge set to 80 ft. for 28 fathoms was released. There was a "large" explosion, followed by a second, and "vast quantities" of oil were seen rising to the surface, air bubbles and oil continuing to rise. The *Mansfield* and *Melpomene* arriving at 8 p.m. to assist in the search saw large quantities of oil coming to the surface, and an oil track several miles long.<sup>3</sup>

Of these cases, the following may be suggested as the most probable, though weak points are to be found in each:—

May 27 .. Seaplane 8656, off Scillies, but the submarine was stated by her and by H.M.S. *Acton* to be of "U" type.

June 3 .. Q-ship *Balham*, off Beachy Head, but the date is too early for return of *U.C.66*.

<sup>1</sup> H.S. 1297/54, noted as "Improbable" in I.D. No awards.

<sup>2</sup> H.S. 1297/59 (report with sketch). Noted as "Improbable" by I.D. D.A.S.D. remarked, however, that there were no reports of submarines within 120 miles of the spot for 48 hours.

<sup>3</sup> H.S. 1288/215. D.A.S.D. considered that a submarine had been destroyed; noted as a possible in I.D. Lieutenant Raw received a "mention."



June 8 .. P.50, off Gris Nez, but the course of submarine was south-west, which looks like a submarine outward bound, though it may have been waiting for dusk to pass the straits.

It is possible, too, that she may have been blown up while laying her mines, for wreckage (no details) was reported on May 28 in Carmarthen Bay. One thing remains certain that she never returned and during May, apparently sank only one ship of 1,758 tons.

73. "U.C.72 (II)," May 26–June 12.—U.C.72 (Lieutenant Ernst Voigt) left Zeebrugge on May 26 to operate in the Bay. She was still in the Channel on May 28,<sup>1</sup> but that evening at 7.40 p.m. in 48° 3' N., 5° 9' W., off Ar-men, she stopped and sank with gunfire the small British s.v. *Detlef Wagner*, 225 tons, bound from Lisbon to Jersey. She then went on to the southward, and on May 31–June 1 laid six mines off Biarritz and 12 off St. Jean de Luz, in the corner of the Bay.<sup>2</sup> During May she sank only one ship of 225 tons.

74. "U.B.23," May 28–June 6.—U.B.23 (Lieutenant Hans Niemer) sailed from Zeebrugge on May 28 to operate in the Channel. It may have been she that on May 28 at 11.10 p.m. in 50° 35' N., 1° 37' W., was seen on the surface off the Needles. On May 29 at 3.15 p.m. in 50° 32' N., 0° 23' W. (Portsmouth area), a submarine opened fire on the British s.s. *Peebles*, 4,284 tons, going from South Shields to Genoa with coal, which brought the submarine astern, and opening fire at 8,000 yards with her 3-in. gun, escaped in the haze.<sup>3</sup> On May 31 at 7 a.m., U.B.23 was off Plymouth where, in 50° 6' N., 4° 21' W., she opened fire on the U.S. s.v. *Dirigo*, 3,005 tons, bound from New York to Havre, which she sank with bombs. This was the only ship sunk by her in May.

75. "U.B.18 (II)," May 31–June 14.—U.B.18 (Lieut.-Commander Claus Lafrenz) left Zeebrugge on May 31 to operate in the Channel. She sank no vessels in May.

76. **Not Identified.**—On May 27 at 3 a.m. in 49° 31' N., 0° 9' W., the net drifter *Kestrel* lying off Havre at the end of a 2,000 yard length of indicator nets on a dark night saw her nets suddenly swing round, and when cut adrift move away with the buoys alight. French T.B.295 arrived and following them up at high speed dropped two depth charges (45 lb.) and then a third. Lieutenant Herbert L. Upton, R.N.R., received a D.S.C. and an award of £300 was made.<sup>4</sup>

<sup>1</sup> Marine-Archiv, H.S./Q.46.

<sup>2</sup> O.U. 6020B, Fields 412, 412a, 43° 30' N., 1° 36' W., and 43° 26' N., 1° 40' W.

<sup>3</sup> H.S. 1296/468—or possibly U.C.72.

<sup>4</sup> H.S. 1296/374, 442. Marine-Archiv is unable to identify the submarine.

The same day (May 27) at 1.46 p.m., the destroyer *Lark* (Portsmouth), in 50° 13' N., 0° 28' W., sighted a submarine and opened fire on it, dropping two depth charges at 1.50 p.m. and another two at 3.35 p.m.<sup>1</sup>

## CHAPTER IV.

### SUBMARINES, NORTH SEA, MAY.

77. **North Sea.**—The work of German submarines in the North Sea falls into four sections:—

- (1) High Sea Fleet boats, proceeding on passage north about.
- (2) High Sea Fleet boats, operating on the East Coast and the Shetland-Norway route.
- (3) Flanders boats, operating in the Hoofden against the Dutch trade.
- (4) Flanders boats, minelaying on the East Coast as far as Flamborough Head.

The High Sea Fleet boats proceeding to the westward did little work in the North Sea, though directionals were frequently received from them as they approached the Bight.<sup>2</sup>

78. **East Coast.**—Ten High Sea Fleet boats sailed to operate on the East Coast, laying 126 mines, and one (U.19) on the Lerwick to Bergen route as follows:—

U.C.29.	22/4– 4/5.	England, North-East.
U.B.21.	26/4– 9/5.	England, North-East.
U.B.22.	26/4– 8/5.	Scotland, North-East.
U.C.77 (I).	29/4–10/5.	Scotland, East.
U.C.49.	2/5–17/5.	Scotland, East.
U.C.42.	2/5–15/5.	England, North-East.
U.C.40.	6/5–17/5.	England, North-East.
U.C.51.	2/5–16/5.	Orkneys.
U.C.31.	5/5–20/5.	Orkneys.
U.19.	6/5–30/5.	Norway route.
U.B.41.	17/5–27/5.	England, North-East.
U.C.77 (II).	27/5– 9/6.	England, North-East., Scotland, East.
U.B.21 (II).	29/5–12/6.	England, East.

Their cruises will be briefly described.

<sup>1</sup> I.D. Log Channel, May 27/10, and *Lark's* log. No details.

<sup>2</sup> Some 125 directionals were plotted in the North Sea in May, chiefly between 58° N. and 56° N.



79. "U.C.29," April 22-May 4.—*U.C.29* (Lieutenant Ernst Rosenow) was working between Holy Island and the Tyne. On April 24 at 2.45 p.m. in 55° 14' N., 0° 5' W., she opened fire on the Q-trawler *Roskeen* (Lieutenant F. H. Peterson, D.S.C., R.N.R.). The *Roskeen* at 3.20 p.m. opened fire at 2,000 yards and thought she had got three hits before the submarine disappeared; she then dropped two depth charges (one D\*, one G), both of which exploded.<sup>1</sup> *U.C.29* does not appear to have been damaged for she was off the Tyne on May 1, where, in 55° 1' N., 1° 21' W., at 7.20 a.m., she torpedoed and sank the British s.s. *Firelight*, 1,143 tons, leaving the river for London with coal. *U.C.29* was back in Heligoland on May 4, the last time she was to reach home.

79A. "U.B.21," April 26-May 9.—*U.B.21* (Lieutenant Franz Walther) on April 29 at 4.40 p.m. in 54° 23' N., 0° 19' W., off Scarborough torpedoed without warning and sank the British collier transport *Victoria*, 1,620 tons, then at 4.45 p.m., attacked with gunfire the British s.s. *Gena*, 2,784 tons, and *Princess Helena*, 667 tons, both of which were armed and returning the fire at 4,000 yards were able to escape till two destroyers, coming up, drove the submarine down. Not far from the same spot on May 2, at 9.35 p.m. in 54° 23' N., 0° 22' W. she torpedoed the Norwegian s.s. *Rikard Nordraak*, 1,123 tons, going from Sunderland to Rouen, not in convoy, which sank in a few minutes. On May 4 at 8.30 a.m. in 54° 27' N., 0° 26' W., H.M.S. *Mallard* sighted about 1,800 yards away the periscope of a submarine attacking the British s.s. *Devereux*, 1,371 tons (not in convoy nor under escort); heading towards it at full speed, she opened fire with 12-pdr. and 6-pdr.: the periscope disappeared and a depth charge was dropped in the estimated position of the submarine (probably *U.B.21*).<sup>2</sup>

On May 5 at 4.45 a.m. in 54° 25' N., 0° 20' W., off Robin Hood Bay, she sank with bombs the British f.v. *Edith Cavell*, 20 tons; but again a patrol vessel came hurrying up and *U.B.21* had to dive hurriedly taking five of the crew of the fishing boat down with her.

The next day (May 6) at 10.10 a.m. in 55° 56' N., 0° 2' W., she stopped the Swedish s.s. *Harold*, 1,571 tons, bound from the Tyne to Goteborg and sank her with gunfire. This was her last ship; she returned to Heligoland on May 9, having sunk a total of 4,334 tons on her cruise and 2,714 tons in May. Three ships had been saved from destruction by the appearance of patrol vessels.

80. "U.B.22," April 26-May 8.—*U.B.22* (Lieutenant Karl Wacker) was working off Aberdeen and Buchan Ness at the end of April, and on April 28, at 8.20, p.m., in 57° 10' N., 1° 38' W. sank with

<sup>1</sup> Report in H.S. 1281/570; Reports of Survivors, *U.C.29*, in I.D. Vol. 549A.

<sup>2</sup> M.05692/17 in H.S. 1280/47. Lieutenant William S. Nelson, R.N.R., awarded D.S.C.

bombs the British f.v. *Dilston Castle*, 50 tons, and the next day (April 29) at 3 p.m. with gunfire, the British f.v. *Argo*, 54 tons, in 57° 30' N., 1° 17' W. On April 30 at 10.55 p.m. in 57° 36' N., 1° 20' W., she was sighted close to by H.M.S. *Noble* which dropped a depth charge without effect.<sup>1</sup> It may have been she that on May 2 at 9.15 p.m. in 57° 35' N., 1° 33' W., chased the British s.s. *Hambleton Range*,<sup>2</sup> 3,682 tons, in 57° 35' N., 1° 35' W. She evidently found the Scandinavian convoy too much for her and was back in Heligoland on May 8, having sunk only 104 tons.

81. "U.C.77," April 29-May 10.—*U.C.77* left Heligoland on April 29 to work on the East Coast of Scotland. On April 30 at 11 p.m. in 56° 15' N., 2° 17' W., a torpedo was fired (probably by her) at H.M.S. *Nepean* which missed.<sup>3</sup> On May 2<sup>4</sup> she laid mines between Montrose and the Tay; two were swept up off Montrose on May 5, five off the Tay on the 11th, and four off Tod Head on the 16th.

*U.C.77* had meanwhile gone off to Aberdeen where on May 3 she laid the rest of her mines; the discovery of two of them by motor launches almost as soon as they were laid, led to the immediate closure of the port, not however, to the avoidance of subsequent loss, for on May 3<sup>5</sup>, the British s.s. *Glentanar*, 449 tons, from Seaham, arrived off Aberdeen in the forenoon and the port being closed was sent on to Peterhead. On her arrival there she was told at 4.30 p.m. that Aberdeen was open, and returning thither was blown up off the pier at 7.10 p.m. in 57° 10' N., 2° 2' E. and sank in five minutes. Another loss on the fields first laid was the British collier, *Herrington*, 1,258 tons, which struck a mine on May 4, at 5.45 a.m. off Red Head (near Montrose) in 56° 37' N., 2° 27' W., and sank.<sup>6</sup>

*U.C.77* continued to cruise off the coast between the Moray Firth and the Forth. On May 4 at 8.20 a.m. in 56° 44' N., 1° 31' W., off the Forth, she met a Scandinavian convoy of seven ships north-bound from Newcastle to Bergen escorted by three T.B.D's. and three armed trawlers and torpedoed the Norwegian s.s. *Vale*, 720 tons, which sank in half a minute with the loss of three lives.<sup>7</sup> On May 5, at 8.30 a.m., in 55° 56' N., 2° 8' W., close to St. Abbs Head, she fired a torpedo at the Danish s.s. *Odense*, 1,756 tons, not in convoy; the torpedo missed and *U.C.77* coming to the surface opened fire

<sup>1</sup> H.S. 1374/20.

<sup>2</sup> I.D. Log, C.3/1; no details.

<sup>3</sup> H.S. 442/32.

<sup>4</sup> Date is from Marine-Archiv report, which says "near Dundee." The field is not mentioned in O.U. 6020A (German Statement of Mines Laid).

<sup>5</sup> May 3, 6.40 a.m. H.S. 442/913.

<sup>6</sup> H.S. 443/106.

<sup>7</sup> H.S. 1372/13; Marine-Archiv, H.S./Q.49.



and left the *Odense* to drift ashore, with one man killed, two wounded, and one drowned. On May 6, she attacked another convoy north-bound at 3.37 p.m. (May 6), in 57° 2' N., 1° 7' W., torpedoing and sinking the Norwegian s.s. *Kaparika*, 1,232 tons, Blyth to Sarpsbog.

It may have been she too that on May 7 at 8 a.m. in 55° 54' N., 1° 58' E. (off Berwick), opened fire on the British s.s. *New Abbotshall*, 783 tons, Kircaldy to London, which returned the fire with a 6-pdr. at 1,900 yards, driving the submarine down<sup>1</sup>.

It may have been her wake again that later in the day (May 7), at 4.50 p.m. in 56° 42' N., 2° 29' W., off Arbroath, was sighted by the armed trawler, *Vale of Clyde*, when minesweeping with two other trawlers, and three depth charges were dropped near it, one of which failed to explode.<sup>2</sup>

This was the last incident in her cruise and she was back in Heligoland on May 10, having sunk 3,708 tons.

82. "U.C.49," May 2-17.—*U.C.49* (Lieut.-Commander Karl Petre) left Heligoland on May 2 to lay mines on the coastal route of Peterhead. On May 3 at 3 p.m. in 56° 29' N., 2° 24' E., she sank with bombs the Danish s.v. *Helge*, 162 tons, from Newcastle with coal for Denmark, leaving the crew of six to be picked up by a Dutch trawler after 16 hours in their boat.

On May 5 she laid her 18 mines off Peterhead in four groups<sup>3</sup> round about 57° 28' N., 1° 45' W.

They were located the next day by motor launches of the Auxiliary Patrol who sighted three of them on the surface; the trawler *Windward Ho* was blown up on one on May 9 at 7.25 a.m. 57° 28' N., 1° 42' W., and the fishing vessel *Bel Lily*, 168 tons, on May 14 at 9.45 a.m. in 57° 33' N., 1° 43' W., and five were swept up between May 16 and 30. *U.C.49* reported no traffic off "Skudignaas."<sup>4</sup> She was back in Heligoland on May 17, having sunk 162 tons.

83. "U.C.42," May 2-15.—*U.C.42* (Lieutenant Hans Albrecht) left Heligoland on May 2 to lay mines off the Tyne and Tees. She laid six mines off the Tyne on May 4, of which two were found on May 5 and four on May 6,<sup>5</sup> the only loss being a small British sailing vessel, the *Angela*, 122 tons, which was blown up on May 5, at 8 p.m. *U.C.42* went on to Sunderland and on May 5 laid 12 mines

<sup>1</sup> H.S. 1372/22. Award of D.S.C. to Captain William T. King, Master.

<sup>2</sup> I.D. Log, C.7/6, H.S. 456/231.

<sup>3</sup> O.U. 6020A, Fields 202, 203, 204, 205.

<sup>4</sup> Skudenes Fiord or possibly Skuda Sound in 60° 40' N., 0° 54' W., Shetland, east coast, War Diary, I.D., Vol. 3028, May 16/1200.

<sup>5</sup> H.S. 443, 751, 998.

in three groups off the entrance,<sup>1</sup> of which seven were swept up on the 6th. The British s.s. *Hebble*, store carrier, 904 tons, fell a victim to one, being blown up on May 6 at 11.50 a.m. in 54° 55½' N., 1° 19' W., with a loss of five lives. Later in the month on May 23, about 9 p.m., the Norwegian s.s. *Gran*, 1,153 tons, struck another in 54° 53' N., 1° 18' W., and sank.<sup>2</sup>

*U.C.42* then seems to have proceeded north, for on May 9 at 8 a.m. in 56° 11' N., 1° 35' W. (off St. Abb's Head), she sank the British f.v. *Kitty*, 181 tons, with gunfire and bombs, taking the skipper prisoner.

Fourteen miles to the southward at 1.50 p.m. (May 9) in 56° 2' N., 1° 20' W., the British s.s. *Malda*, 7,895 tons, proceeding from the Tees to Montreal, was attacked by a torpedo which missed. She had left the Tees at 5.45 a.m. and was proceeding at full speed (13 knots) to overtake the north-bound convoy which had passed the Tees at 3 a.m. A torpedo was seen on the port beam, the helm was put hard-aport and the torpedo passed astern. The destroyer *Osprey* was detached at once from the convoy force and brought the *Malda* safely into convoy.<sup>3</sup> Her assailant was probably *U.C.42*. She found no other target and was back in Heligoland on May 15, having sunk one ship of 181 tons, and, with her mines, three ships of 2,179 tons.

84. "U.C.40," May 6 (about)-17.—*U.C.40* (Lieutenant Gustav Deuerlich) on May 8 laid nine mines off Whitby<sup>4</sup> round about 54° 30' N., 0° 36' W., one of which was sighted on the surface the next day, and another on May 10 at 3.45 p.m. in 54° 31' N., 0° 37' W., blew up the armed trawler, *Lord Ridley*, which sank at once leaving only one survivor. The Norwegian s.s. *Monarch*, 1,318 tons, was blown up by another in 54° 29' N., 0° 25' W., on May 23, 8.45 p.m. *U.C.40* probably remained lurking in the vicinity for at 4.30 p.m. (May 10), in 54° 40' N., 0° 50' W., the British s.s. *Hessle*, 952 tons, was missed by a torpedo. Her remaining mines were laid off Hartlepool on May 11<sup>5</sup> round about 54° 45' N., 1° 5' W.

It was probably *U.C.40*, too, that on May 13 at 2.15 p.m. in 54° 37' N., 0° 44' W., fired a torpedo that missed the British s.s. *Fiscus*, 4,170 tons, bound south from Blyth to Naples with coal. She then proceeded off the Forth, for on May 15 she was in action with the *Roskeen* (Lieutenant F. H. Peterson, R.N.R.), an armed trawler "Q" ship belonging to the Granton base. The *Roskeen* and *Coot*, two "Q" trawlers, had left Granton on May 14 to intercept

<sup>1</sup> O.U. 6020A, Fields 187, 188, 189. The positions given are about 2 miles north of the actual positions where mines were found.

<sup>2</sup> H.S. 448/632.

<sup>3</sup> H.S. 1372/49.

<sup>4</sup> O.U. 6020A, Fields 206, 207.

<sup>5</sup> O.U. 6020A, Fields 208, 209.



a submarine located by directionals 40 miles east of May Island (56° 22' N., 1° 21' W.). The *Roskeen* had dropped astern and at 8.10 a.m. on May 15 was in 56° 23' N., 1° 24' W., when fire was opened on her by a submarine some 6 miles away to the north-east. The "panic party" left the ship at once, while the submarine still firing closed to 1,500 yards, then opened fire with shrapnel, wounding Lieutenant Frederick H. Peterson, R.N.R., on his way to the 12-pdr. gun and Skipper Forbes at the helm. The 12-pdr. had fired only one shot when the submarine, which was evidently on the alert, submerged, followed by four depth charges which were dropped near the spot. Lieutenant Peterson was awarded a bar to his D.S.C. and Skipper Adam Forbes received a mention.<sup>1</sup> *U.C.40* was on her way back the next day and reached Heligoland on May 17. Her torpedoes had done nothing. Her mines had sunk one ship of 1,318 tons and an armed trawler.

85. "U.C.51," May 2-16.—*U.C.51* (Lieutenant Hans Galster)<sup>2</sup> left Heligoland on May 2 to lay mines off the Moray Firth and Shetlands. On May 4 at 8.30 p.m. in 58° 30' N., 1° 4' W., she attacked a Scandinavian convoy of nine vessels southward bound, torpedoing and sinking the Danish s.s. *Marie*, 772 tons, bound from Norway to Hull.<sup>3</sup>

On May 5 at 5.30 a.m. in 58° 51' N., 1° 47' W., about 20 miles east of Kirkwall she stopped and sank with gunfire the Norwegian s.s. *Segovia*, 1,394 tons, proceeding from the Tyne to Gibraltar with coal. The *Segovia* on May 3 had got out of the Tyne too late to join a northbound convoy and had proceeded north up the coast, following instructions given by the Shipping Intelligence Officer at Newcastle to proceed through the Pentland Firth. Off Rattray Head a destroyer stopped her, told her the Pentland Firth was closed and directed her to proceed to Kirkwall, whither she was proceeding when sunk.<sup>4</sup> *U.C.51* went on and on May 6 laid six mines in the Moray Firth off Tarbet Ness<sup>5</sup> round about 57° 53' N., 3° 41' W., and on May 7 three mines off Clyth Ness, south of Wick, which do not seem to have done any damage.

The same day (May 7) at 10 a.m. in 58° 34' N., 0° 34' W. (off Wick), she met a north-going convoy of six ships, escorted by one whaler, four trawlers and two destroyers, and torpedoed without

<sup>1</sup> H.S. 1281/591. Report from S.N.O., Granton (Admiral James Startin). *U.C.40* reported she had been in action with a "Q" ship. I.D., Vol. 588, and Marine-Archiv report in H.S./Q.48.

<sup>2</sup> Or perhaps Lieut.-Commander Wilhelm Schröder.

<sup>3</sup> H.S./Q.54.

<sup>4</sup> Report S.N.O., Wick, H.S. 1371/15.

<sup>5</sup> O.U. 6020A, Fields 224, 225. Note that the oiler *Appleleaf*, 5,891 tons, struck a mine on November 10, 1917, in 57° 47' N., 3° 42' W., and was towed in, which was attributed to a British deep minefield laid off Tarbet Ness. H.S. 1371/296.

warning the Norwegian s.s. *Tore Jarl*, 1,256 tons, proceeding from the Tyne to Trondjhem, which sank with 500 bags of mail. The *Tore Jarl* was the leading ship of starboard column with the destroyer *Test* 1,200 yards on her starboard bow. Both destroyers swept at once at full speed down the convoy without result.<sup>1</sup> *U.C.51* went on and on May 9 laid nine mines off Noss Head, Shetlands, round about 60° 6' N., 0° 57' W., three of which were found on May 10-12, and three more on May 31 without mishap.<sup>2</sup> This was the last incident in *U.C.51*'s cruise, though she was not back in Heligoland till May 15. She had sunk only three ships of 3,422 tons.

86. "U.C.31," May 5-20.—*U.C.31* (Lieut.-Commander Otto von Schrader) left Heligoland on May 5 to lay mines off the Orkneys. On May 8 she laid nine mines in the approaches to Kirkwall.<sup>3</sup> H.M. Yacht *Zarefah*, Northern Patrol, at 7 p.m. sighted one about 2 miles north of Mull Head (59° 0' 30' N., 2° 44' W.) and sank it by gunfire, and 12 minutes later was blown up by another, with a loss of 16 lives.<sup>4</sup> The port was closed and all the nine mines were accounted for between May 8 and 14, seaplanes and the 4th Fleet Flotilla assisting in the sweep. On May 10, *U.C.31* laid her remaining nine mines on the north-west coast of the Orkneys at the entrance to Westray Firth,<sup>5</sup> these mines apparently not being found till May 27, all nine being swept up by June 4 without loss.<sup>6</sup>

A whole week passed without incident. Then on May 16 at 8.46 a.m. in 58° 47' N., 2° 51' W., close in to the Orkneys East Coast, the destroyer *Rowena*, steaming 15 knots, suddenly sighted a conning tower and periscopes 200 yards on the quarter and turning hard round at once dropped a depth charge (type "D"), which exploded unpleasantly close.

On May 17 at 4.45 a.m. in 58° 49' N., 1° 8' W., east of the Orkneys, the British s.s. *Chiswick*, steering N.  $\frac{1}{4}$  E. on the way to Archangel, in calm clear weather, sighted a submarine coming to the surface, 2 miles off on the port bow. The ship brought her astern and opened fire at 4,000 yards with her 12-pdr., firing 11 rounds in all, before it dived.

At 6.55 p.m. (May 17) in 58° 49 $\frac{1}{2}$ ' N., 1° 59' W., some 22 miles west of Auskerry, outside Kirkwall two Swedish ships were torpedoed. They were the *Viken*, 1,820 tons, bound to Goteborg with 2,580 tons of sulphur and the *Aspen*, 3,103 tons, bound to Stockholm with 3,875 tons of wheat. The *Viken* had been detained at Kirkwall

<sup>1</sup> H.S. 1367/38.

<sup>2</sup> H.S.B. 170/761, 763.

<sup>3</sup> O.U. 6020A, Fields 190, 191, 192 in about 59° N., 2° 47' W.

<sup>4</sup> H.S. 1370/13.

<sup>5</sup> O.U. 6020A, Fields 193, 194, 195.

<sup>6</sup> Minesweeping Statements, H.S.B.170/763.



since November 22, 1916, and the *Aspen* since February 9; having been released on May 10, on May 17 they were offered an escort to Lerwick, if they could wait a couple of days, which they refused. They were no sooner well clear of the harbour than the *Viken* was torpedoed by *U.C.31* and went down almost at once with a loss of eight men. The *Aspen* had lowered her boat to pick up survivors when she too was torpedoed, and *U.C.31* coming to the surface opened fire on her.

At 10.10 p.m. the boats were sighted by H.M.S. *Saumarez* (Captain Anselan Stirling) who detached the *Michael* (Lieut.-Commander Claude L. Bate) to investigate. The latter, after picking up the crews, found the *Aspen* still afloat with her forehold flooded. The crew refused to return to the derelict ship, and the *Michael*, after raising steam in her, managed with the help of the tug *Oceana* to get her safely into Kirkwall at 11.48 a.m., May 18.

As the ship with her cargo (only one quarter spoilt) was worth at least £140,000, and had been exposed for several hours to submarine attack, a claim for salvage was put in by the vessels concerned. Unfortunately, before the ship was turned over to the Receiver of Wrecks at Kirkwall, a quantity of stores and other articles had been removed from her<sup>1</sup>, and after an enquiry, ordered to be held into the looting of the vessel, the Admiralty refused to give their sanction for the further prosecution of the salvage claim<sup>2</sup>. The *Aspen* was beached and temporarily repaired and was able later to proceed home.

This was *U.C.31*'s last exploit and she was back at Heligoland on May 20, having sunk one ship of 1,820 tons.

87. "U.19," May 6-30.—*U.19*, a High Sea Fleet boat (Lieutenant Kolbe) left Borkum on May 6 to operate on the Scandinavian convoy route. She evidently hung about off Holmengraa, for on May 12 at 12.47 p.m., in 61° 12' N., 3° 47' E., she attacked an east-bound convoy and torpedoed the British s.s. *Wirrall*, 4,207 tons, proceeding to Archangel with munitions, which had left Lerwick with a convoy escorted by two destroyers; the ship was armed with a 12-pdr. but no submarine was seen; the crew of 42 were all saved by one of the escorting destroyers, H.M.S. *Morning Star*. Five days later on May 17, *U.19* was off the Shetlands, and at 9.40 p.m. in 60° 7' N., 0° 9' W., attacked another east-bound convoy of seven ships escorted by the destroyers *Portia*, *Patriot*,

<sup>1</sup> There seems to have been an impression that a derelict ship "belonged to" the salvors.

<sup>2</sup> See report in Case 548. The Admiralty refused any refund of the preliminary legal expenses involved. The procedure was by authority of the Court of Session exercising the powers of Admiralty in Scotland.

and *Lively* and five armed trawlers, and torpedoed the Swedish s.s. *Vesterland*, 3,832 tons, Lerwick to Gothenburg, which sank in 25 minutes.

On May 20, *U.19* was back on the Norwegian side when at 8.5 p.m. in 60° 47' N., 4° 7' E., she attacked a west-bound Scandinavian convoy of seven ships escorted by three destroyers, and torpedoed the Norwegian s.s. *Arnfinn Jarl*, 1,097 tons, proceeding from Narvik to the Tyne. H.M.S. *Sylvia* (Lieutenant Peter Shaw, R.N.R.) had just finished picking up the survivors when she sighted the periscope and track of a submarine 7 cables off, and rushing up, dropped a depth charge, which may have caused two other torpedoes to miss.<sup>1</sup>

Six days later (May 26) H.M.S. *Sylvia* was with an east-bound convoy of six ships escorted by three destroyers, when at 12.55 p.m. in 60° 55' N., 4° 19' E., *U.19* got a torpedo into the Norwegian s.s. *Norway*, 1,447 tons, proceeding from Lecta to Christiania, which was struck on the starboard side and sank in 4 minutes.<sup>2</sup> On May 27 she stopped and sank the Danish s.v. *Deborra*, 159 tons.<sup>3</sup>

On May 29, a Scandinavian east-bound convoy of nine ships was on its way across to Bergen, escorted by three destroyers, an armed yacht and four armed trawlers. About half way across a submarine was sighted at 2.55 a.m., and a warning signal made, but at 3.4 a.m. in 60° 30' N., 1° 51' E., two torpedoes struck the Norwegian s.s. *Fridtjof Nansen*, 2,190 tons, bound from Lerwick to Christiania with 2,640 tons of coal, which sank in 3 minutes.<sup>4</sup> Her assailant was possibly *U.19*.

She was back in Emden on May 30, having been out 25 days, and having sunk six ships, totalling 12,932 tons, of which five were in convoy.

88. "U.B.41," May 17-27.—*U.B.41* (Lieutenant Gunther Krause) sailed on May 17 for the North-East Coast of England. On May 22 at 8 a.m. in 54° 30' N., 0° 29' W., off Whitby, he stopped, with gunfire, the British s.s. *Lanthorn*, 3,200 tons, proceeding unescorted from London to the Tyne. The ship, after being hit five times was abandoned and was sunk probably by bombs; the submarine was reported to have *U.46* on her conning tower.

On the afternoon of May 25 in 55° 23' N., 0° 50' W. about 30 miles from the Tyne, a fishing vessel was chased by a submarine. H.M.S. *Talisman* (Lieut.-Commander John I. Hallett) intercepted a report and leaving harbour at 7.15 p.m. made for the spot at full speed.

<sup>1</sup> H.S. 1367/130. Lieutenant Peter Shaw, R.N.R., was awarded a D.S.C. for his promptitude.

<sup>2</sup> H.S. 1367/167.

<sup>3</sup> No details; position unknown.

<sup>4</sup> H.S. 1367/222.



At 10.45 p.m. in 55° 55' N., 0° 11' E., in a calm sea, visibility 1,500 yards, with a small moon, going east at 25 knots, she sighted a black object on the port bow, obviously a submarine; it submerged 30 ft. ahead, and the *Talisman* running almost over it dropped two depth charges ("D" type) which both exploded. The submarine was *U.B.41* which was apparently damaged for she was home on May 27, and the *Talisman's* stem was found in July to have been scored and indented. For this and two other later attacks Lieut.-Commander John I. Hallett received a D.S.O.<sup>1</sup> *U.B.41* sank only one ship of 3,200 tons.

89. "U.C.77 (II)," May 27-June 9.—*U.C.77* sailed again on May 27, and on May 30 laid mines off Coquet Island (Northumberland) and on the night of May 31<sup>2</sup>, off May Island (Firth of Forth). Two of them, however, were located off May Island on May 30<sup>3</sup> showing on the surface, and five more were swept up on May 31 without any damage, the area between May Island and North Carr Lighthouse having been declared dangerous by the S.N.O., Granton. A moored mine was reported afloat off Coquet Island on June 1, but it was not till June 8 that four more were found a couple of miles south by east of the Island.<sup>4</sup> No losses occurred in either of these fields, and *U.C.77* sank nothing in May on this cruise, though in June she managed to secure the Swedish ship *Anton*, 1,568 tons, and the Danish ship *Harald Klitgaard*, 1,799 tons, in convoy off the Forth. She was back in Heligoland on June 9.

90. "U.B.21 (II)," May 29-June 12.—*U.B.21* sailed again on May 29, sinking nothing in May and only one ship, the British s.s. *Sir Francis*, 1,991 tons, off Scarborough, in June.

91. Flanders Minelayers, North Sea, England S.E.—During May, *U.C.1*, *U.C.4*, *U.C.6*, *U.B.12*, *U.C.11*, *U.C.14*, working from Zeebrugge, laid on the East Coast 22 fields of 247 mines (as compared with 14 fields of 168 mines in April), as follows:—

May.	Submarine.	Place.	Mines.	Ships sunk.
2.	<i>U.C.4</i> (Field 371)	<sup>5</sup> Sizewell Bank	.. 12	
4.	<i>U.C.6</i> (372)	.. Tongue Lightship	12	
4.	<i>U.B.12</i> (369)	.. Gravelines	.. 8	
8.	<i>U.C.1</i> (374)	.. Hearty Knoll	.. 12	A.T. <i>Bracklyn</i> , 11/5.

<sup>1</sup> H.S. 1281/332, 357. *U.B.41* was out again on June 9. See S.155.

<sup>2</sup> These are the dates given in Marine-Archiv's report, but are not in the German Statement handed over in 1919. (O.U. 6020A).

<sup>3</sup> Round about 56° 13' N., 2° 33' W. H.S. 450/779. This would make the date for May Island May 30, and the date for Coquet Island May 29.

<sup>4</sup> About 55° 19' N., 1° 31' W. H.S. 459/163.

<sup>5</sup> Reference (in brackets), is to number of Field in O.U. 6020B, German Statement of Mines laid by Flanders Command (N.I.D., 1919), which gives the latitude and longitude.

May.	Submarine.	Place.	Mines.	Ships sunk.
10.	<i>U.C.4</i> (385)	.. Shipwash	.. 12	
11.	<i>U.C.6</i> (377)	.. Kentish Knock	.. 12	
12.	<i>U.C.11</i> (375)	.. Shipwash	.. 12	
15.	<i>U.B.12</i> (379)	.. Calais	.. 8	
15.	<i>U.C.14</i> (382)	.. Great Yarmouth	11	A.T. <i>Tetenhall</i> , 23/5.
16.	<i>U.C.1</i> (381)	.. Gravelines	.. 12	
18.	<i>U.C.6</i> (383)	.. Long Sand	.. 12	
19.	<i>U.C.11</i> (384)	.. Shipwash	.. 12	
19.	<i>U.C.4</i> (386)	.. Haisborough	.. 12	Dutch s.s. <i>Westland</i> , 25/5, 1,283 tons.
21.	<i>U.B.12</i> (387)	.. Calais	.. 8	
21.	<i>U.C.14</i> (388)	.. Hearty Knoll	.. 12	
25.	<i>U.C.11</i> (390)	.. Shipwash	.. 12	
26.	<i>U.C.1</i> (391)	.. Gravelines	.. 12	
26.	<i>U.C.4</i> (392)	.. Aldborough	.. 12	
26.	<i>U.B.12</i> (393)	.. S. Foreland	.. 8	
26.	<i>U.C.6</i> (394)	.. Margate	.. 12	
30.	<i>U.C.14</i> (397)	.. Great Yarmouth	12	
31.	<i>U.C.11</i> (395)	.. Shipwash	.. 12	
Total ..				247

These mines resulted in the loss of three vessels, the armed trawlers *Bracklyn*, and *Tetenhall*, and the Dutch s.s. *Westland*, 1,283 tons. On May 11, at 1.50 p.m., in 52° 42' N., 2° 10' E. (off Yarmouth), the *Bracklyn* was sweeping when she struck a mine and went down with the loss of her commander, Lieutenant Rudd, R.N.R., and nine men. As a submarine had been seen off Smith's Knoll on May 8, and four mines had been swept up on the spot on May 9, she evidently struck one of the mines laid by *U.C.1*, on May 8, round about 52° 42' N., 2° 8' E.

It was a Lowestoft sweeper too, the *Tetenhall*, that on May 23, about noon, in 52° 30' N., 1° 54' E., struck a mine and sank at once with the loss of the skipper and five men. Seven mines were swept up in the area, evidently those laid by *U.C.14* on May 15.<sup>2</sup>

It was further north, near Haisborough Light, that the third vessel was mined. On May 25 the Dutch s.s. *Westland*, 1,283 tons, bound from the Forth to Rouen with coal, was in 53° 4½' N., 1° 20' E. (off the Wash) at 2 a.m., steering S.E. ½ S. in fine clear weather, when she struck a mine and sank in 15 minutes without loss of life. There

<sup>2</sup> H.S. 1380/35, O.U. 6020B, Field 382.

<sup>3</sup> H.S. 170B/661; H.S. 1380/17; O.U. 6020B. Field 374.



can be little doubt<sup>1</sup> that she struck one of the mines laid by *U.C.4* on May 19, round about 53° 1' N., 1° 27' E.

92. **Flanders Submarines in the Hoofden.**—During May, six cruises were made by Flanders boats in the Hoofden with a sinkage of 13 Dutch vessels, totalling 3,138 tons, of which only one was a steamer, the others being small sailing and fishing craft.

- U.C.62.* April 30–May 6 .. 2/5. Dutch s.v. *Noordzee*, 136 tons.  
4/5. Dutch s.s. *Neptunus*, 1,580 tons.<sup>2</sup>
- U.C.71.* April 30–May 7 .. 2/5. Dutch f.v. *Westland*, 100 tons.  
2/5. Dutch f.v. *Simon*<sup>2</sup> (say 100 tons).
- U.B.20.* May 1–8 .. .. 7/5. Dutch f.v. *Prinz Hendrik der Nederland*, 182 tons.  
7/5. Dutch f.v. *Marthe Maria*, 248 tons.
- U.C.63.* May 3–11 .. .. Nil.<sup>3</sup>
- U.C.71.* May 13–20 .. 16/5. Dutch s.v. *Boreas*, 192 tons.  
16/5. Dutch s.v. *Hendrika Johanna*<sup>2</sup> 134 tons.  
17/5. Dutch f.v. *Mercurius*, 80 tons.  
17/5. Dutch f.v. *Jacoba*, 107 tons.  
18/5. Dutch s.v. *Annetta*, 100 tons.
- U.C.64.* May 18–24 .. 18/5. At 4 a.m. attacked by H.M.S. *Stork* and *Redoubt*, depth charges. See S.10.  
20/5. Dutch s.v. *Voorwarts*, 147 tons.  
23/5. Dutch s.v. *Alberdina*, 134 tons.

Seaplanes were specially active in this area in keeping submarines down. On May 10 at 5.25 a.m. in 52° N., 2° 49' E., S.P.8667 dropped two 230-lb. bombs apparently 10 yards from the periscope of a submarine.<sup>4</sup>

<sup>1</sup> The Master considered she had been mined, but the Commodore, Lowestoft, thought the explosion might have been internal.

<sup>2</sup> Marine-Archiv (not in any British report).

<sup>3</sup> Marine-Archiv gives Dutch s.v. *Gruno*, but the name is not in Lloyd's List, nor in Foreign Vessels Sunk or Damaged (Trade Division, Jan., 1919), nor in I.D. Home Waters, Ships Attacked.

<sup>4</sup> Possibly *U.C.63* or *U.C.1*.

On May 19 at 5.30 p.m. in 51° 44' N., 2° 49' E. and again at 7.32 p.m. in 51° 55' N., 2° 29' E., S.P.8663 dropped bombs on a submarine.<sup>1</sup>

The next day (May 20) at 7.50 p.m. in 52° 14' N., 2° 57' E., S.P.8663 sighted a submarine on the surface about 5 miles off steering south-east and making for it dropped two bombs which appeared to fall directly in front of the conning tower,<sup>2</sup> while the periscope was still above water and could be plainly seen.

On May 22 at 6.10 a.m. S.P.8658 in 51° 59' N., 2° 53' E. dropped three bombs which exploded near a submarine.<sup>3</sup> H.M.S. *Zephyr* the next day (May 23) was escorting four paddle minesweepers who were sweeping a channel for minelayers when at 2 p.m. in 51° 43' N., 2° 25' E. a torpedo was fired at her which missed.<sup>4</sup>

On May 25, however, a German submarine was able to retaliate by setting S.P.9060 on fire and taking the pilot prisoner.<sup>5</sup>

<sup>1</sup> Possibly *U.C.64* or *U.C.14* or *U.C.71*.

<sup>2</sup> Possibly *U.C.71* or *U.C.14*. In January, 1919, the loss of *U.C.36* was allotted to this attack (M.06246/17), but Marine-Archiv thinks it highly improbable that *U.C.36* was there as she left for the Channel on May 16.

<sup>3</sup> Possibly *U.C.64*.

<sup>4</sup> Possibly *U.C.64*.

<sup>5</sup> I.D. Log, B.30/3. See S.131.



## CHAPTER V.

## SUBMARINE WARFARE STATISTICS FOR MAY.

93. **Ships and Tonnage Sunk.**—The figures for May showed a substantial decrease in losses, amounting to 285,821 tons or nearly 34 per cent. In the different areas the total gross tonnage sunk of merchant shipping, Allied and neutral, was:—

TABLE A.

Tonnage Sunk by Submarines (a).

May, 1917.

Area.	Ships.	Tonnage.	Per-centage.	April.	Increase or Decrease.	Per-centage.
South-West and West.	74	201,180 (b)	36.2	343,558	-142,378	-58%
Channel, Channel Approach, Irish Sea, Bristol Channel, Bay.	103	163,039	29.4	133,231	+ 29,808	+22%
Mediterranean ..	82	151,687(c)	27	271,657	-119,970	-55%
North Sea ..	34	33,340	6	85,331	- 51,991	-39%
Arctic .. ..	1	1,751	.4	2,945	+ 1,194	+60%
Baltic .. ..	6	1,788	.4	—	—	—
Unknown .. ..	—	—	—	1,884	—	—
Total .. ..	300	552,785(d)	38.9	838,606	-285,821	-34%

(a) Not including vessels sunk by mines laid by submarines, viz., 21 of 31,313 tons.

(b) Includes ships sunk by High Sea Fleet submarines (operating to south-west and west) on passage through Channel (four ships, 3,349 tons) and in North Sea (three ships, 3,256 tons). Excluding these figures, the figure is 194,575 tons.

(c) Includes five ships of 7,846 tons sunk by U.35 (from Mediterranean) in a cruise to west of Gibraltar.

(d) The above figures include fishing vessels (34 vessels of 2,953 tons). Subtracting this item to reduce to the same basis as Statistical Review, gives 277 vessels, 549,832 tons, which is 245 tons more than the Statistical Review figure of 549,587 tons. (Statistical Review, Admiralty, 1918.)

The decrease was most marked in the south-west and west<sup>1</sup>—and Mediterranean where the sinkings had dropped 58 per cent. and 55 per cent. respectively. In the Channel, Irish Sea and Bay of Biscay the Flanders boats had increased their toll of sinkings 22 per cent.

94. **Submarines Out and Causes of Decrease in Merchantship Losses.**—The first question to consider is: Was the big drop of about 140,000 tons in the South-West Approach and to westward due to any decrease in the number of submarines at work there? The answer is definitely No. There were in May in the south-west and west at least two more submarines than in April. In "tons per day per submarine" there was a heavy drop in the south-west of nearly 300 tons and another notable drop in the North Sea. Nor can the big drop in the South-West Approach be ascribed to convoy for the first convoy from Gibraltar (May 11–20) did not pass through the South-West Approach area and the first Atlantic convoy did not leave Hampton Roads till May 24 and did not enter the submarine zone till about June 3.

It would seem therefore that the big drop in tonnage sunk in May must be attributed partly to the increase in submarines sunk (seven in May as compared with three in April), and partly to increased vigilance and greater energy in attack, and partly perhaps to a stricter attention to routeing instructions, induced by the heavy losses of April.

In the case of the Mediterranean too, there was a big drop in the tonnage sunk.<sup>2</sup>

<sup>1</sup> By south-west is signified the approach area south of 52° 30' (River Shannon) and west of 8° W. (between Minehead and Cork). West is the area north of 52° 30' N. (Tory Island and Scotland West).

<sup>2</sup> The "cruising days" for the Mediterranean are not known. Information as to the Mediterranean was incomplete. It was known that U.63 and U.38 were out in May and that U.35 made a cruise to the west of Gibraltar, but little was known of the movements of the "U.C." boats.



TABLE B.

*Submarines, Number and Tons per Day.*  
May 1917.

	May.	April.	Increase or Decrease.	Percentage
<i>Submarines to Westward</i> ..	37 (a)	24	+ 13	+ 54%
Number of submarine cruising days.	411	427	- 16	- 6%
Tons per day per submarine ..	490 (b)	805	- 315	- 29%
Submarines sunk .. ..	1	0	—	—
<i>Submarines in Channel and Bay</i>	22	20	+ 2	+ 11%
Number of submarine cruising days.	280	216	+ 64	+ 30%
Tons per day per submarine ..	580	610	- 30	- 5%
Submarines sunk .. ..	4 (c)	2	—	—
<i>Submarines in North Sea</i> ..	24	29	- 5	- 18%
Number of submarine cruising days.	376	322	+ 54	+ 17%
Tons per day per submarine ..	89	264	- 175	- 64%
Submarines sunk .. ..	1 (d)	—	—	—

(a) This figure includes seven submarines which left the Bight after May 27 and had not reached the SW. Approach by May 31. Also two submarines on passage overseas, viz., *U.C.37* and *U.155*. If these be subtracted, there remain 28, an increase of only four over April.

(b) But if the seven submarines in (a) be omitted, the number of cruising days becomes 399, which gives "tons per day per submarine" as 510.

(c) Or three, if *U.C.66* was sunk in June.

(d) By mine in the Bight.

Of the ships sunk in the South-West Approach, 48 per cent. (67 per cent. in tonnage) were British as follows:—

TABLE C.

*Ships sunk in South-West Approach.*

British .. ..	32	131,225 tons	67·2%
French .. ..	5	10,877	5·5%
Russian .. ..	6	10,456	5·4%
Italian .. ..	1	2,691	1·3%
Japanese .. ..	2	10,335	5·3%
American .. ..	1	4,409	2·3%
Norwegian .. ..	12	16,547	8·1%
Danish .. ..	5	4,118	2·1%
Swedish .. ..	2	384	·2%
Greek .. ..	1	3,533	1·8%
Total .. ..	67	194,575 tons <sup>1</sup>	—

<sup>1</sup> See Table A, note (b).

The number of sailing vessels sunk was British, three; French, four; Russian, six; Italian, nil; Japanese, nil; Norwegian, eight; Danish, four; Swedish, two; Greek, nil—a total of 27, of 36,199 tons or 40 per cent. in number and 18·5 per cent. in tonnage, a not inconsiderable figure as representing a body of tonnage whose routing was not amenable to control.

**95. Ships Escaped, Number of.**—An interesting figure is the proportion of ships attacked that escaped and the causes of escape.

*Ships Attacked—Causes of Escape—May 1917.*

	S.W.&W.	Channel.	North Sea.	Totals.	
Ships attacked and sunk ..	74	103	34	211	
Ships attacked, escaped ..	19	45	9	73	
Percentage sunk .. ..	79%	69%	79%	74%	
Causes of escape:—					
Torpedo missed .. ..	9	15	3	27	37%
Torpedo did not explode	—	1	—	1	1·3%
Ship's gunfire .. ..	1	—	1	2	3%
Speed .. ..	1	3	1	5	7%
Gunfire and speed .. ..	—	11	1	12	16%
Mist .. ..	1	3	—	4	5%
Patrol, saved by .. ..	2	5	2	9	12%
Under escort, saved by escort.	—	2	—	2	3%
In convoy, saved by escort	—	2	—	2	3%
Salved .. ..	3	2	1	6	8%
Coast battery .. ..	—	1	—	1	1·3%
Not stated .. ..	2	—	1	3	5%
	19	45	9		

It will be seen that the principal agency of escape in May was a miss by the submarine's torpedo (37 per cent.), then "Speed" or "Speed and gunfire" (23 per cent.), then "Saved by patrols" (12 per cent.).



96. **Attacks on Submarines.**—Attacks on submarines were as follows:—

TABLE D.  
May, 1917.

Attacks by	S.W. & W.	Channel.	North Sea.	Mediterranean.	Total.
Light cruisers .. ..	—	—	1	—	1
Destroyers—					
British .. .. .	4	4	4	1	13
United States .. ..	2	(1 sunk) <sup>a</sup>	—	—	2
French .. .. .	—	—	—	2	2
Torpedo boats .. ..	—	2	—	—	2
“P” boats .. .. .	—	1	—	—	1
Patrols—					
Armed yachts .. ..	—	2	—	—	2
Armed trawlers .. ..	1	2	2	1	6
Armed drifters .. ..	—	—	—	—	—
Net drifters .. .. .	—	1	—	—	1
Patrols, French .. ..	—	2	—	—	2
Aircraft, British .. ..	—	3	8	—	11
Aircraft, French .. ..	—	5	—	2	7
Aircraft and Patrols .. ..	1	—	—	—	1
Submarines, British .. ..	2	—	4	—	6
	(1 sunk)				
Submarines, French .. ..	—	—	—	1	1
	(b)			(sunk) <sup>c</sup>	
“Q” ships, British .. ..	6	3	—	—	9
“Q” ships, French .. ..	—	2	—	—	2
Merchant ships .. .. .	1	4	—	—	5
		(1 sunk)			
		(h)			
Coast battery, French .. ..	—	1	—	—	1
Mines .. .. .	—	—	1	—	1
			(1 sunk)		
Internal explosion .. ..	—	—	1	—	1
			(1 sunk)		
Unknown .. .. .	—	2	—	—	2
		(2 sunk)			
		(d) (g)			
	17	33	23	9	82

(a) *U.C.26*, rammed by *H.M.S. Milne*, May 9, off Dover.

(b) *U.81*, torpedoed by *E.54*, May 1, Ireland, south-west.

(c) *U.C.24*, torpedoed by French submarine *Circe* off Cattaro, Mediterranean.

(d) *U.C.36*, lost between Nab and Cherbourg on May 17–18.

(e) *U.59*, sunk by mine in Bight, May 14.

(f) *U.C.76*, sunk off Heligoland, May 14 (salved).

(g) *U.C.66*, in Channel, unknown, possibly *H.M.T. Sea King*, June 12 (see S.72).

(h) *U.B.36*, sunk by French s.s. *Molier*, May 21, off Ushant.

The ratio of attacks to the days out was:—

TABLE E.

Attacks on Submarines—May, 1917.

	Submarine Days.	Attacks.	One Attack per
South-west and West .. ..	411	17	24 days
Channel .. .. .	280	33	8.5 ..
North Sea .. .. .	376	23	16.3 ..

The greatest number of attacks was by Aircraft (19 or 24 per cent.), then Destroyers (17 or 21 per cent.), then “Q” ships (12 or 15 per cent.) and fourthly, Patrols (11 or 13 per cent.). Submarines proved an effective counter and were successful in sinking two submarines out of seven attacked. The Channel was the most dangerous area for German submarines. In the South-West Approach, Channel and North Sea, of attacks by destroyers, “P” boats and armed trawlers, there were: by vessels escorting, 6; by vessels patrolling, 13; which tends to indicate that more opportunities of attack occurred to vessels on patrol.

97. **Submarines Sunk, May 1917.**—Altogether seven German submarines were sunk in May in Home Waters, of which four were in the Channel.

On May 1, at 3.40 p.m. in 51° 33' N., 13° 38' W., *U.81* was torpedoed by *E.54*, Lieut.-Commander H. T. Raikes. (H.S. 1319/99).

On May 8, at 11.50 p.m. (G.M.T.) in 51° 3' N., 1° 40' E., *U.C.26* was rammed by *H.M.S. Milne*.

On May 14, about 11 p.m. in 55° 27' N., 7° 13' E., *U.59* was sunk in the Bight by a mine.

On May 14, *U.C.76* was blown up at Heligoland by an internal explosion and was later salvaged.

*U.C.36* was lost in the Channel on May 17–18 between the Nab, where she had laid mines, and Cherbourg, where she was to meet another submarine.

*U.B.36* was lost off Ushant on May 21 at 6.55 a.m. in 48° 42' N., 5° 14' W., being rammed by the French s.s. *Molier* while attacking a convoy.

*U.C.66* was lost in the Channel, possibly off the Lizard on June 12,<sup>1</sup> at 11.30 a.m. in 49° 56' N., 5° 10' W., after being depth charged by the armed trawler *Sea King*.

<sup>1</sup> *U.C.66* was cruising in this area, but should have been back about June 8.



98. **Mines Laid by Submarines.**—The number of mines laid in May 1917, by submarines, increased from 529 to 743 in Home Waters and 761 in all, an increase of about 44 per cent., while the tonnage sunk by mines increased to 36,263 tons or 149 per cent. as follows:—

TABLE G.

*Mines Laid by Submarines.*

May 1917.

	South-West and West.	Channel and Bay.	North Sea, South-East.	North Sea, East Coast.	Mediterranean	Arctic.	May.	April.	
Mines laid .	176	194 <sup>(a)</sup>	247	126	Say 18 <sup>(b)</sup>	—	761	529	+ 44%
Ships sunk .	2 <sup>(c)</sup>	10	1	7	1	1	21	—	—
Tonnage ..	2,920 <sup>(c)</sup>	20,455 <sup>(d)</sup>	1,283	6,655	4,792	158	36,263	14,670	+149%
Armed yacht	—	—	—	1	—	—	1	0	—
Armed trawler.	2	2	2	3	—	—	9	9	—
Destroyers .	—	1 <sup>(e)</sup>	—	—	—	—	1	0	—
Tonnage per mine.	18	105	52	52	—	—	41	28	—

(a) U.C.36 is included: she apparently laid her mines off the Nab (see S.67).

(b) Not exactly known.

(c) Not including British s.s. *Arlington Court*, 4,846 tons, mined in Bantry Bay, salvaged; including British s.s. *Lodes*, 396 tons, sunk 5th May, Ireland, South, on U.C.33's mines of 15th April.

(d) Including two vessels sunk in May in April fields—British s.s. *Lowmount*, 2,070 tons, and *Mary Baird*, 1,830 tons.

(e) H.M.S. *Derwent* on mines laid by U.C.26 on April 9th. On May 21st, in Dover Barrage, in 51° 5' N., 1° 55' E. H.M.S. *Redgauntlet*, on the way to Dunkirk in thick weather, struck a British mine, but was salvaged.

The tonnage sunk by submarines and by mines laid by submarines was:—

By submarines (torpedo, gunfire and bombs) . . . 300 ships, 552,785 tons (95 per cent.).  
By mines laid by submarines<sup>1</sup> . . . . . 21 ships, 36,263 tons (5 per cent.).

Total . . . . . 321 589,048

<sup>1</sup> One ship of 4,376 tons was sunk in May by mines laid by the raider *Wolf*, viz., on May 26th the Spanish s.s. *C. de Eizaguirre* off South Africa. This would give a total of 22 ships of 40,639 tons sunk by mines in May. The figures in the Statistical Review are 21 ships, 39,616 tons.

99. **Traffic Statistics.**—The amount of traffic passing on the different routes is only determinable in the case of British shipping. It will be remembered that in the Approach Route system instituted on March 2, 1917,<sup>1</sup> the selection of rendezvous, in the case of British ships from United States ports, was made by the British Consuls and Vice-Consuls abroad. The number of British steamships sunk, that sailed under this system for the period April 18–May 18,<sup>2</sup> was as follows:—

TABLE H.

*Analysis of North Atlantic Traffic, April–May 1917.*

*British Steamships in North Atlantic from United States and Halifax, Homeward bound, with Routes given by British Consuls.*

	April 18– May 18.	April 21– May 21.
Sailed . . . . .	281 <sup>3</sup>	307 <sup>3</sup>
Average per day . . . . .	9	9.8
Arrived . . . . .	274	297
Attacked and escaped . . . . .	18	27
Sunk . . . . .	7	10
Per cent. sunk . . . . .	2.8 per cent.	3.2 per cent.

The above figures for the North Atlantic route, covering all British ships homeward bound from United States and Canada, may be compared with the estimates of the Convoy Committee Report<sup>4</sup> for British, Allied and Neutral ships of less than 12 knots, requiring convoy.

The estimated numbers of arrivals per month were:—

(a) Northern United States ports and Canada (New York Convoy).	Per day, 6; per month, 186.
(b) Southern United States ports and Gulf (Hampton Roads Convoy).	Per day, 4.5; per month, 140.
(c) South America, Africa, South and West (Dakar Convoy).	Per day, 4; per month, 124.
(d) Mediterranean (Gibraltar Convoy).	Per day, 5; per month, 155.
Total . . . . .	605 per month.

<sup>1</sup> See Home Waters VIII, sections 247, 375.

<sup>2</sup> These dates have been chosen as vessels sailing after May 18 would not enter the submarine zone in May.

<sup>3</sup> These figures are compiled directly from the lists of vessels cabled over by the Consuls as having sailed for rendezvous where they were to be met by destroyers. (Telegrams, North America and West Indies, H.S. 655.)

<sup>4</sup> Report of Convoy Committee, June 6, in H.S. 1327/25.



During the month of May, there were sunk in the South-West Approach 22, and in the Channel 5, making—on the basis of the Convoy Report estimate of homeward bound traffic—a percentage of 3.6 per cent. for these areas, which approximates closely to the percentage for the North Atlantic route in Table H. These figures for British steamships, homeward bound, represent in the North Atlantic, on the assumption of a round voyage once a month, a loss of something like 40 per cent. a year.

It does not appear, however, that the routes given by the British Consuls in the United States for the North Atlantic route offered any greater immunity than the routes given by the authorities in the South Atlantic. If the losses in Homeward bound British steamers be compared according to Departure Ports, we find that the Mediterranean was the heaviest sufferer.

TABLE K.

*South-West Approach. May, 1917.**Losses, Departure Ports, British Steamers, Homeward Bound.*

	No. of Ships Sunk.	
	S.W.	Channel.
Gulf and West Indies .. .. .	5	1 = 6
North Atlantic .. .. .	6	1 = 7
South America .. .. .	2	0 = 2
Africa and Australia .. .. .	6	3 = 12
Mediterranean .. .. .	3	

These figures, so far as the South Atlantic is concerned, do not indicate any striking difference in favour of the North Atlantic route, where the consular routing system was in force.

**100. Homeward Bound and Outward Bound, South-West Approach**

—A striking difference, however, is found in a comparison of the incidence of losses in shipping homeward and shipping outward bound.

TABLE L.

*South-West and West, Analysis of Homeward and Outward Bound Shipping.*

Area.	Total Sunk:		Homeward.		Outward.	
	Ships.	Tonnage.	Ships.	Tonnage.	Ships.	Tonnage.
South-West .. .. .	43	140,183	43(a)	140,183	0	0
Ireland, South .. .. .	2	3,867	2	3,867	0	0
West (Ireland & Scotland)	15	44,700	3	8,144	11(b)	32,042
Scotland, North .. .. .	7	5,825	2	1,560	5	3,241
Total .. .. .	67	194,575	50	153,754	16	35,283

(a) Includes *Dartmoor*, 2,870 tons, destination unknown, probably homeward bound.

(b) Destination unknown, 1.

Of these 67 ships, 32 or 48 per cent. were British. It will be seen that, to the Westward, 79 per cent. of the tonnage and 75 per cent. of the ships sunk were Homeward bound, while to the South-West of Ireland *all* ships sunk were Homeward bound, a figure which confirms those of April 1917,<sup>1</sup> indicating that though the routing system in force was effective in safeguarding ships outward bound it was in May ineffective for those homeward bound. Further, of 43 ships sunk in the South-West Approach, 39, or 90 per cent. were unescorted, indicating that the system could not ensure the provision of escorts for homeward bound traffic.

The ships sunk were mainly British, as follows:—

	Steamships.		Sailing Vessels
	Escorted.	Unescorted.	Unescorted.
British .. .. .	4	18	3
Allied .. .. .	—	5	7
Neutral .. .. .	—	1	5

These figures tend to show that in the South-West Approach, omitting sailing vessels (whose routing could not be controlled) the losses may have risen as much from the lack of escorts as from shortcomings in the system of homeward routes.

**101. Scandinavian Convoys.**—The Scandinavian Convoys started on April 29, 1917. From May 1–31, there sailed through Lerwick:—

	No. of Ships.	Sunk.
East Bound .. .. .	164	7 or 4.2 per cent.
West Bound .. .. .	186	3 or 1.6 per cent.
Total .. .. .	350	10 or 2.8 per cent. <sup>2</sup>

These ten ships were sunk in convoy, constituting 47 per cent. (10 out of 21) of the ships sunk on the East Coast, figures which tend to show that a resourceful and bold commander was not to be deterred by convoy and that possibly, the efficacy of convoy lay rather in its capacity for evasion than in its power of defence.

<sup>1</sup> See Home Waters, VIII, S.376; also *infra* S.105.

<sup>2</sup> For names of ships and escorting vessels see Shetlands, Auxiliary Patrol, H.S. 522/299, 323, 342, 363. For names of ships sunk, see Vice-Admiral, O. & S.'s (Sir Frederick Brock) report on the working of the convoy system (July 1, 1917) in H.S. 1325/207. The above figures do not represent the whole of the traffic, e.g., ships joining at Hull or Tyne and parting company at Forth or Aberdeen; a low estimate of this traffic would be 50 ships, making a total of 400 ships in convoy per month, with a loss of 2.5 per cent. (*see* S.126).



102. **Dutch Traffic.**—During May there crossed by night from Harwich to the Hook and back escorted by Harwich destroyers :—

East Bound .. ..	43.
West Bound .. ..	46.
Sunk by Submarine ..	Nil. <sup>1</sup>

The escorts were specially strong, consisting usually of three light cruisers and eight destroyers, and the activity of British aircraft in the Hoofden seems to have helped materially to keep submarines down at the dangerous hour of dawn.

103. **French Coal Trade.**—There were four French Coal Trade crossings :—

Crossing A.—Falmouth (S.N.O., Falmouth) to Brest (C.-in-C., Brest).

Crossing B.—Portland (S.N.O.) to Cherbourg (C.-in-C., Cherbourg).

Crossing C.—Portsmouth (C.-in-C.) to Havre (S.N.O.).

Crossing D.—Southend to ports between Dunkirk and Dieppe, controlled by Vice-Admiral, Dover.

The average daily crossings may be taken as :—

Falmouth .. ..	8(a).
Portland .. ..	12(b).
Portsmouth .. ..	15(c).
Dover (say) .. ..	7(d).

giving a total of 42 per day or 1,302 for the month.

The losses under convoy during May were: On the Falmouth Route, 3<sup>2</sup>; Portsmouth to Havre Route, 2<sup>2</sup>; a total of 5, making a percentage of losses of 0.37 per cent. or if the return journeys (about the same number) be included, of only .18 per cent.

<sup>1</sup> One ship, British s.s. *Cito*, 819 tons, was sunk on May 17 by German destroyers. For figures see Commodore (T)'s Diary, H.S. 247/130.

(a) From February 12—June 21 (= 129 days), from Falmouth, 951 ships (per day, 7). From Brest, 1,040 (per day, 8). H.S. 1396/61.

(b) May 20—26, 94 = 12 per day. Portland report, H.S. 675/181.

(c) C.-in-C., Portsmouth, 11.7.17: "2,300 of these vessels having crossed up to date." H.S. 1393/258.

(d) Estimate in H.S. 1393/74.

<sup>2</sup> 1/5, British s.s. *Bagdale*; 21/5, French s.s. *Ferdinand A.*; 23/5, Spanish s.s. *Begona III.* On Portsmouth—Havre route: 1/5, British s.s. *C. A. Jacques*; 2/5, Norwegian s.s. *Certo*.

104. **Transports Crossing.**—During May, some 817 transports<sup>1</sup> crossed to France, under escort by night from Southampton, Newhaven and Folkestone. The losses were nil. On 20th May, the British s.s. *Southwestern Miller*, 6,514 tons, bound from Southampton to Boulogne, was missed by a torpedo,<sup>2</sup> the submarine (possibly *U.B.40*) being driven down by H.M.S. *Defender*.

## CHAPTER VI.

### MEASURES, MAY 1917.—WEST AND SOUTH-WEST.

105. **Routeing System.**—All outward bound shipping was regulated by the Routeing systems (Routes for Western Trade) introduced in November 1916.<sup>3</sup> During May, the South of Ireland route and the Atlantic route via Fastnet and Skellig were closed for outward bound traffic; the routes open or "in force" being, for westbound ships, by the North of Ireland and North Channel, while shipping for the Mediterranean and South Atlantic went via the Scillies.<sup>4</sup>

A confirmation of these instructions is found in German reports, for *U.49* working in the Southward Approach from April 20 to May 25 reported *inward bound* traffic only, and *U.69* sighted no outgoing steamers except two off the North Channel.<sup>5</sup>

The comparatively small loss suffered by outward bound traffic on the Atlantic route in May, may therefore be attributed to the Routeing system in force for them. Of ships sunk to the westward, 75 per cent.—and of those to the south-westward, 100 per cent.—were homeward bound, clearly indicating a grave deficiency in the control of homeward bound ships.<sup>6</sup>

<sup>1</sup> Telegrams "Transports Crossing" in H.S. 442-450. No telegrams for May 1, 2, 7, 14, 17, 19, 21, 22, 23, 24, 25, 31.

<sup>2</sup> May 20, 6.30 a.m., in 50° 20' N., 1° E., ship proceeding 13 knots, weather hazy.

<sup>3</sup> See Home Waters VIII, plate 18.

<sup>4</sup> Ad. Tel. April 29/1854. Routes in force, 1, 3, 18, 26, 31, 43, 57, 61, 79, 86, 91. These routes had the effect of sending outward bound English Channel traffic by the Scillies to 49° 10' N., then due west; Clyde shipping by North of Ireland; Bristol Channel shipping by the Scillies.

<sup>5</sup> C.B. 01370, War against Commerce (I.D. translation), pp. 37, 45, 63.

<sup>6</sup> The instructions for homeward bound ships were issued by Operations Division. Weekly Naval Appreciation No. 1 (May 31) pointed out that the majority of sinkings occurred among inward bound ships, the proportion for the week (May 21-27) being 8 to 1, whilst in April, five-sixths of the ships sunk in the vicinity of the United Kingdom were homeward bound.



The necessity of exercising a more effective control of inward bound traffic was evidently appreciated for on May 15 the Director of the Trade Division (Captain Richard Webb) submitted "that some system of diversion of incoming vessels is urgently essential," and put forward a Diversion Code for the purpose, consisting of three words, the first indicating the vessels concerned, the second the new latitude where they were to cross their meridian, and the third their new landfall.<sup>1</sup> The Signal Section had a draft of the code ready by May 31 and the Trade Division on June 26 asked for 30,000 copies of it, but questions of distribution arose; the General Service Code on which it was based was due for renewal on September 1, so that the Diversion Code was not ready for distribution till September and did not affect events in May or June, or July or August.<sup>2</sup>

**106. South-West Approach, German Submarines, May.**—Operating in the south-west approach on May 1 were four submarines—*U.21* (west of Ushant), *U.58* (west of Fastnet), *U.62* and *U.81* (west of Skelligs).<sup>3</sup> *U.81* was sunk on May 1 by *E.54*, and *U.93* had been so severely damaged by the Q-ship *Prize* on April 30 in 49° 44' N., 11° 32' W. as to be forced to go home; these two losses probably diminished submarine activity by about 21 "submarine-days."

**107. South-West Approach, Queenstown Force.**—The main strength of the Queenstown force consisted on May 1 of:—

Sloops (1st Sloop Flotilla), 19, of which 16 were available, and 11 were at sea, also eight destroyers,<sup>4</sup> "on loan" from the Grand Fleet; and lastly 14 Q-ships of which eight were at sea.<sup>5</sup>

The sloops were strung out on the main incoming route from the west, in about 52° N., and along the South of Ireland. The destroyers assisted by the sloops performed the task of meeting and escorting "valuable" ships of which some two to four were arriving daily.<sup>6</sup> The Q-ships were posted according to circumstances; on May 1, one was in the Irish Sea on the watch for *U.C.65*, one or two in the Bristol Channel approach, and one or two on the South of Ireland route.

<sup>1</sup> Admiralty, May 15, 1917, in H.S. 1329/174. See, too, D.O.D.'s suggestion (Fixed Routes) of 25.5.17 in Case 636, Vol. I.

<sup>2</sup> H.S. 1329/197. Draft of a French version "Code de Déroutement" in *Idem*, 201.

<sup>3</sup> See Plan.

<sup>4</sup> From 11th Flotilla, three; 12th Flotilla, two; 14th Flotilla, one; 15th Flotilla, two. Positions and movements.

<sup>5</sup> Queenstown Station Reports in H.S. 650/258. This does not include the Auxiliary Patrol Force (Area XXI) of four armed yachts and 24 trawlers.

<sup>6</sup> From May 7 to 26 (20 days) the following ships were ordered to be escorted: "specially valuable," 8; "valuable," 67; total, 75; of which five "valuable" ships were sunk (= 6.7 per cent.), of which two were under escort and three were not.

**108. Approach Route B, Ireland, West.**—The number of British ships arriving daily on the North Atlantic route was about seven or eight.<sup>1</sup> On April 21, in consequence of the serious losses, the First Sea Lord had sent instructions to Admiral Bayly at Queenstown that homeward bound traffic on Approach Route B was to be diverted to the north of 52° N. and to the south of 51° N., so as to avoid the specially dangerous area between 51° N. and 52° N. Admiral Bayly had sent out instructions at once, and on May 1 the Q-ships *Tulip* and *Carrigan Head* were patrolling as far as 20° W. to warn shipping to this effect, when the *Tulip* was sunk on April 30 by *U.62*.<sup>2</sup>

**109. Arrival of U.S. Destroyers, May 4.**—To the South-West Approach the arrival of the United States destroyers brought a much needed relief. On May 4, the first six<sup>3</sup> arrived at Queenstown and were out on May 9 patrolling to the westward in 50° N. to 52° N. and escorting valuable ships. It was in this work they received their baptism of attack, for the U.S. destroyer *McDougal* was missed by a torpedo on May 9 and the *Wainwright* on May 12. It was this reinforcement that constituted the principal factor in reducing losses, according to Admiral Bayly, who on May 16 reported that the small number of casualties in Approach Route B was "due in part to the increased number of destroyers available for the patrols beyond 14° W. and in the entrance to the Irish Sea."<sup>4</sup>

Up to May 8, the number of destroyers out was eight, which was increased on May 9 to 14 by the American reinforcement. It may have been their arrival which led to the mining by *U.80* on May 12 of Berehaven for the first time in the war. On May 16 Admiral Sims and Lieutenant Commander Babcock proceeded to Queenstown to confer with Admiral Bayly on the question of their employment.<sup>5</sup>

The arrival of the American destroyers enabled four Grand Fleet destroyers to be transferred to Lough Swilly on May 13, with the intention that they should work on Approach Route C (*i.e.*, the route North of Ireland), but they were hardly there when they were ordered to rejoin the Grand Fleet.<sup>6</sup>

<sup>1</sup> Home Waters VIII, p. 378 for figures.

<sup>2</sup> See Admiral Bayly's order of April 21 in Home Waters VIII, 468, and H.S. 648/254. On April 27 Consular Officers abroad were told not to give rendezvous between 50° 40' N. and 52° 20' N., H.S. 655/273. The Western limit of Approach Route B was extended to 15° W. on April 27, H.S. 655/273.

<sup>3</sup> *Wadsworth, Conyngham, Porter, Wainwright, McDougal, Davis* left Boston April 24, H.S. 655/284.

<sup>4</sup> H.S. 650/271, Queenstown Station Reports.

<sup>5</sup> Telegram, May 23, from Admiral Sims to Secretary of Navy, Washington, H.S. 448/563.

<sup>6</sup> H.S. 444/620, 445/1083, 446/307.



110. **Ireland, Northern Route.**—The mines laid by *U.C.65* in the Clyde Approaches were found on May 1, and led to a stoppage of traffic in the Clyde Approaches<sup>1</sup> and Liverpool, while her subsequent raid in the Irish Sea was met by an order to stop all traffic proceeding north of 53° 30' N. It was not released till May 5.<sup>2</sup>

The *Skipjack* was sent with three other gunboat sweepers to sweep the area, but two more mines were found on May 7, which led to a second closure and troublesome congestion; at Greenock there were 40 ships held up which the S.N.O., Ardrossan suggested passing out with minesweepers working ahead.<sup>3</sup> He was able to resume local traffic, however, on May 8.

Measures for safeguarding the northern route had already been under consideration, and on May 9 the Auxiliary Patrol (Lough Swilly)<sup>4</sup> was reinforced by the *Vulcan* and eight submarines, working from Buncrana.

111. **North of Ireland, New Command.**—This was not all. The work of the Auxiliary Patrol Areas in the north was further unified by instituting a Northern Section of the Coast of Ireland Station, comprising the North of Ireland from Eagle Island on the west to Skulmartin Light on the east.<sup>5</sup> This change involved a change in the Auxiliary Patrol Areas on the West Coast of Ireland, Area XIX (Killybegs) being abolished by absorption partly into Area XVIII (Lough Swilly) and partly into Area XX (Galway Bay).<sup>6</sup>

The new command was placed under Rear-Admiral Francis Miller, who was appointed to be under the general orders of the Vice-Admiral, Queenstown, with instructions for his flag to be hoisted at Buncrana on May 18.<sup>7</sup> To assist him on Approach Route C (Tory Island Approach) came four Grand Fleet destroyers transferred from Queenstown<sup>8</sup> as soon as the American destroyers arrived. These measures did much to strengthen the North of Ireland route.

The British submarines started with a lucky miss. On May 8, at 7.42, p.m., in 55° 18' N., 10° 21' W., *D.3* of the *Platypus* Flotilla fired two shots at *E.48* of the *Vulcan's* Flotilla, which fortunately missed, and led to instructions that adjacent boats on patrol should be 30 miles apart.<sup>9</sup> The Commander-in-Chief, Grand Fleet, was also instructed to keep his submarines north of 57° N., while the

<sup>1</sup> H.S. 444/327.

<sup>2</sup> Telegram, May 3, 10.34 p.m., H.S. 442/1272.

<sup>3</sup> H.S. 444/154, 229, 283.

<sup>4</sup> H.S. 442/1208.

<sup>5</sup> A.L., May 13, 1917, in H.S. 1319/454. Bounded on south by parallel of latitude of Eagle Island (*i.e.*, 54° 17' N.); on north by latitude of Skerryvore; on south (Irish Channel) by line from Mull of Galloway to Skulmartin.

<sup>6</sup> See Patrol Areas Map, "Auxiliary Patrol List," May 2 and July 4.

<sup>7</sup> H.S. 1319/454.

<sup>8</sup> May 8, H.S. 444/620.

<sup>9</sup> H.S. 1319/83; H.S. 444/479.

*Vulcan* and *Platypus* would work south of 56° 45' N.<sup>1</sup> By May 15 there were four of the *Vulcan's* submarines out on surface patrol between 54° N. and 56° N., and 10° W. to 12° W.<sup>1</sup>

112. **Approach Route E to Bay of Biscay, May 8.**—On May 8 an additional approach route—Approach Route E—was issued for ships proceeding to France and the Bay. Ships were to cross 17° W. between 44° N. and 48° N., and 6° W. between 46° N. and 48° N., making the French coast at dawn between Belle Ile and Point de Penmarch (south of Brest).<sup>2</sup>

113. **Twelve U.S. Destroyers Arrive May 24.**—The situation was further improved by the arrival on May 24 of 12<sup>3</sup> more U.S. destroyers of the 6th Division, making 18 in all; and by the end of May, 19 destroyers (American and British) were available at Queenstown, while another six<sup>4</sup> of the U.S. 5th Flotilla, which had sailed from St. Johns on May 26, were on their way across.

114. **Approach Route B—Ireland, West.**—Approach Route B (the approach to the Skelligs and Fastnet) maintained to the full its dangerous reputation. The system instituted on March 2, 1917,<sup>5</sup> was based on dispersion, each homeward bound British ship being given, by the Consular officer in America, a rendezvous falling within the Approach Area, with the proviso that no two successive ships were to be given the same rendezvous. The date the ship would cross 10° W. in Route A (or 14° W. in Route B or C, or 6° W. in Route D) was cabled to the Admiralty and sent on to the Commander-in-Chief, whom it concerned, as the special rendezvous for that ship. Under this system the rendezvous were dispersed some distance apart, and this dispersion in conjunction with a different landfall (Skellig, Dursey, Mizen Head or Fastnet) for each ship involved a corresponding dispersion of escorts.<sup>6</sup>

On May 25, Operations Division submitted an important proposal<sup>7</sup> suggesting the institution of a single rendezvous for all ships, and a fixed patrolled route to be changed at intervals, in place of the system of a separate rendezvous for each ship.

Admiral Duff was not sanguine about the change, as he thought that its success depended on the assumption that sloops spaced

<sup>1</sup> H.S.A. 278.

<sup>2</sup> Telegram, May 8/0400.

<sup>3</sup> *Rowan, Cassin, Ericsson, Tucker, Winslow, Jacob Jones, Cushing* (S.N.O., Commander Hanrahan), *O'Brien, Cummings, Benham, Nicholson, Sampson*. H.S. 448/1247.

<sup>4</sup> *Drayton, Jenkins, Patterson* (S.N.O., Lieut.-Commander Newton), *Paulding, Trippe, Warrington*. H.S. 655/926.

<sup>5</sup> Case 636, Vol. I, Approach Routes.

<sup>6</sup> May 6, 1917, *e.g.*, s.s. *Bayleaf*, rendezvous 52° 30' N., 14° W., to Skelligs; s.s. *Buranda*, 53° 20' N., 14° W., to Blaskets. H.S. 655/502.

<sup>7</sup> O.D. 25.5.17, M.06472/17 in Case 636, Vol. I.



15 miles apart could afford effective protection and was in favour of closing Approach Route B altogether. Admiral Bayly agreed in principle to the change, pointing out however, that there were only 11 sloops available for the work (Vice-Admiral, Queenstown, 5.6.17, *in idem*). The proposal, however, received Admiralty approval and instructions to carry it out were issued on June 11.<sup>1</sup>

115. **North of Ireland, Traffic Stopped, May 26.**—On May 26, when *U.87* made an attack on the s.s. *Ebro* at 9.30 a.m. in 56° N., 8° 51' W. (North of Tory Island) on the North of Ireland route, the Admiralty ordered Commodore,<sup>2</sup> Larne to stop westward bound traffic, which was done at 8.26 p.m.<sup>3</sup>

Buncrana (Lough Swilly) at the same time received permission to send out the destroyers *Lyra* and *Lapwing* (which were waiting at Lough Swilly to meet the *Calgarian* and four transports from Halifax) to hunt the submarine, but they saw nothing of it.<sup>4</sup>

When on May 30 there were indications of two submarines<sup>5</sup> on the route, westward traffic was stopped again by Commodore, Larne, and 14 ships going west were brought into Lough Swilly.<sup>6</sup>

116. **Approach Route A, May 28-31.**—The severest attack of the month took place, however, not in the north, but in Approach Route A, from May 28 to 31, when 10 ships were sunk by *U.86*, *U.87* and *U.88*, between 48° N. and 50° N. and 8° W. to 11° W.

Queenstown was only affected to the extent of being told on May 31 at 3 p.m. to send two destroyers, and sent out the *Wadsworth* and *Wainwright*, Admiral Bayly, reporting at 9.30 p.m. that three Q-ships, the *Salvia*, *Begonia* and *Tamarisk*, were already there;<sup>7</sup> the German submarines were evidently, however, too wary for the Q-ships, none of which got home an attack. It may be said finally that, in the South-West Approach, the principal factors contributory to the big drop in sinkage in May seem to have been the diversion of homeward bound ships in Approach Route B (S.105) and the arrival of the U.S. destroyers.

<sup>1</sup> Telegram, June 11/1532 in Case 636, Vol. I.

<sup>2</sup> Commodore Robert Cuming, R.N.R.

<sup>3</sup> H.S. 449/258, 299.

<sup>4</sup> H.S. 449/160.

<sup>5</sup> Armed trawler *Lennox's* report, May 30/1815, in 56° 50' N., 11° W. H.S. 450/700.

<sup>6</sup> H.S. 450/848.

<sup>7</sup> H.S. 450/1034. The *Tamarisk* sighted a submarine on 31/0930; *Salvia* found the s.s. *Ashleaf* afloat and tried to tow her (see *U.88*), and *Begonia* on May 31 picked up survivors of the *Mayasaki Maru*.

## CHAPTER VII.

## MEASURES—CHANNEL.

117. **Traffic in Channel.**—In the Channel, conditions were very different from those prevailing in the South-West Approach. Here the traffic fell under three heads:—

- (a) The transports crossing to France from Southampton, Newhaven, Folkestone and the Downs.
- (b) The through traffic, up and down.
- (c) The French Coal Trade from Falmouth, Portland, St. Helens and the Downs.

The number of transports crossing to France in the month was 817—with no losses.

In the French Coal Trade about 1,300 crossed with a loss of five or six, i.e., 0.45 per cent.

In both these cases, traffic moved only at night.

118. **French Coal Trade.**—The particulars of this traffic, which started in February 1917, may be briefly summarised. There were four crossings:—

Crossing A.—from Falmouth to Brest—assembling at Mounts Bay, to arrive 8 miles North (true) of Ushant as near daylight as possible.

Crossing B.—Portland to Cherbourg—assembling in Weymouth Roads to arrive 5 miles North (true) of Cherbourg at daylight.

Crossing C.—St. Helens to Havre—assembling at St. Helens to arrive at Havre at daylight.

Crossing D.—East Coast ports—assembling at Southend; crossing as directed by Vice-Admiral, Dover.

On the Cherbourg crossing there was a lack of trawlers, and on May 2, Commodore Harbord, at Portland, pointed out that nine British sailing vessels had asked for an escort across, but the F.C.T. requirements of four to six trawlers nightly, left him none to spare for sailing vessels.<sup>1</sup> There were minor difficulties arising from steamers arriving and joining the convoy at the last moment without instructions, and again from vessels "hanging about" at the conclusion of the voyage off Anvil Point, where they were supposed to disperse.<sup>2</sup>

<sup>1</sup> H.S. 442/682.

<sup>2</sup> Commodore (R. Harbord), Portland, 23.5.17. H.S. 1393/161.



At Falmouth, on May 20, the convoy, an unusually large one of 34 vessels (as 14 had been held up the evening before to allow the first Gibraltar convoy to pass) was escorted by only four armed trawlers. It was attacked by a submarine, *U.B.36*, off Ushant, and after one ship the *Ferdinand A* had been torpedoed and sunk, *U.B.36* was rammed by the French s.s. *Molière* and sunk. A revised draft of instructions was issued by the Admiralty on May 31.<sup>1</sup>

On May 19, at 6 p.m., the first "experimental" Gibraltar Convoy was in 48° 10' N., 6° 20' W., off Ushant steering for Plymouth, and Commander-in-Chief, Devonport, had instructions<sup>2</sup> to bring it into Plymouth except five ships which were to be escorted to the Smalls by two destroyers. It arrived safely at Plymouth on May 20.

**119. Channel, Through Traffic.**—The Through Traffic in the Channel has been estimated roughly at about 80 ships a day.<sup>3</sup>

In each of the five Channel Patrol Areas (Dover, Portsmouth, Portland, Devonport, Falmouth) some two to three ships were escorted daily along the coast by armed trawlers. Thus in the Newhaven Area (Portsmouth, Area XII) in the five days May 14–18, ten valuable ships were escorted of which one, the s.s. *Pagenturm*, was torpedoed by *U.B.40* on May 16, and one the s.s. *Elford* was mined on May 18. In the Portland area the number escorted was about the same.<sup>4</sup>

Though the armed trawlers were by no means a negligible factor in the campaign they were slow and feebly armed, and were not able to do much against a bold submarine commander.

Thus on May 16, at 5.11 a.m., the British s.s. *Pagenturm*, 5,000 tons, 12½ knots, on the way out to Mesopotamia with valuable stores, escorted by an armed trawler, was torpedoed and sunk off Newhaven by *U.B.40*. She had had four escorts up to Dungeness, where she had to wait quarter of an hour for a single armed trawler which could only go 6½ knots. At noon the same day (May 16) some 20 miles to the westward another big British ship, the s.s. *Highland Corrie*, 7,583 tons, on her way up Channel from Monte Video was torpedoed and sunk by the same submarine. This ship had no escorts, and her loss throws a ray of light on the workings of the system. The Commander-in-Chief, Plymouth, had been warned on April 23, of her departure from Monte Video, but the Admiralty had given her destination as Liverpool, instead of London; nor was she told at Monte Video, as she ought to have been, to call at Falmouth for orders; at 6 p.m. on May 14 she signalled to Devonport, her time of arrival at the rendezvous in 48° 50' N., 10° W. (some 200 miles from Devonport), only four hours before she got

<sup>1</sup> M.06321 in H.S. 1393/134.

<sup>2</sup> H.S. 445/1234.

<sup>3</sup> See Home Waters VIII, p. 336, Through Traffic, 2,400 a month.

<sup>4</sup> Portland, May 20–24, ten vessels, H.S. 675/181.

to it;<sup>1</sup> on that date eight destroyers of the 2nd Flotilla (which did the escort work at Devonport), were off the North Coast of Ireland bringing in H.M.S. *Devonshire* and four transports from Halifax, and the Commander-in-Chief, Plymouth, could only inform the Admiralty that he had none available to meet the *Highland Corrie*. In spite of this complication of difficulties she passed safely through Approach Route A and up Channel as far as the Isle of Wight where she met her fate from *U.B.40*.

**120. Devonport Flotillas (2nd and 4th).**—A heavy burden of escort work fell on the 2nd Flotilla (16 destroyers) at Devonport, and on May 17 the Commander-in-Chief (Admiral the Hon. Sir Alexander Bethell), was told to send no less than six to Greenock to be there on May 22 to escort H.M.S. *Ramillies* to Liverpool.<sup>2</sup> These constant calls for work on the North of Ireland route reacted on Approach Route A, and on more than one occasion there were no destroyers available there to bring in specially valuable ships.<sup>3</sup> The 4th Flotilla (19 destroyers) was reserved for "hunting" and for patrols. Its first use for escort work was on May 18–20 when it was told to bring in the Gibraltar Convoy. On May 21 when a submarine was lurking off Ushant on the French Coal Trade route, Devonport was asked to send two destroyers there; the *Christopher* had already gone and the *Liberty* was sent after her.<sup>4</sup>

On May 25 when *U.B.38* and another submarine, possibly *U.C.66* (subsequently lost) were working east of the Start, Devonport was asked if they were being hunted, and replied that four destroyers and a kite balloon were there. The only one, however, that saw a submarine was the *Acasta* who sighted and attacked one at 10.55 a.m. The work of "hunting" may conceivably have kept submarines down, but it achieved little in the way of actual destruction.

**121. Patrolled Lane, Channel.**—The Patrolled Lane instituted on January 21 (see Home Waters VIII, 29) does not appear to have been a conspicuous success. For one thing, in Lyme Bay the mines laid on May 11 by *U.C.17* had driven the traffic off the coast; then again the French coal trade convoys made a heavy call on the armed trawlers of the Auxiliary Patrol. At Portsmouth for instance in the week May 17–26, though some 18 armed trawlers and two yachts were on continuous patrol, on May 17 no escort was available in the Newhaven area for the oiler *Tuscarora*, and during the week

<sup>1</sup> H.S. 1296/56, 258.

<sup>2</sup> H.S. 446/109.

<sup>3</sup> *Scythian* on May 3, H.S. 442/1083; *Highland Corrie* (*supra* S.119); *Atholl* on May 31, H.S. 450/944.

<sup>4</sup> H.S. 447/1286.



Portsmouth patrols had to take seven ships through the Newhaven area for lack of escorts there.<sup>1</sup>

Portsmouth had also to provide escorts as far as Portland for valuable ships westbound, besides a couple almost daily for cross Channel work, exclusive of the four to six required daily for French coal trade convoys. Under the pressure of these calls, the "patrolled lane" had faded away.

On May 27 the Commander-in-Chief, Portsmouth, "so that there should be no false sense of security," pointed out that "the traffic route" in the Portland area "was at times left entirely unprotected except between St. Catharines and Anvil Point where the Poole net drifters were stationed."<sup>2</sup> These net drifters numbered 55 of which 14 were allocated to Portsmouth to maintain a patrol of nine on the route between St. Catharines and Anvil Point. On May 20, 24 were despatched to Portland to escort the Gibraltar Convoy up Channel.

**122. Mines, Channel.**—The German submarines were as busy as ever minelaying. Portland which *U.C.61* had visited was closed to traffic on May 1, and not fully opened till May 4.<sup>3</sup> On May 2 reports of a submarine (it was *U.C.65*) in the Irish Sea led to a suspension of sailings for that area, the detention of ships at Liverpool, and instructions to Milford Haven to send any available "P" boats (Admiral Dare had seven there and four out) to hunt it.<sup>4</sup>

The mines laid by *U.C.26* off Havre on May 2 blew the destroyer *Derwent* up that morning, and closed the port for a day, detaining the French coal trade vessels.<sup>5</sup> Cherbourg was closed for the same reason on May 3 (*U.C.26* again), opening again on May 4.<sup>6</sup> *U.C.65*'s mines laid in the Clyde approaches had closed the Clyde on May 1 and no sooner was it opened on May 6 than the discovery of two more mines the next day (May 7) closed it again, though there were some 40 vessels at Greenock still waiting to sail, and traffic was only fully resumed on May 8.

Sailings for the Irish Sea north of 53° 30' N. had been suspended on May 3, and were not resumed till May 5.

It was these considerations that led to the *Olympic*, with 6,000 troops from Halifax, on her arrival off Oversay (Islay) on May 4 being ordered to Lough Swilly at 10.35 p.m., to sail later with an escort of four Devonport destroyers (2nd Flotilla).<sup>7</sup>

<sup>1</sup> Auxiliary Patrol, Portsmouth, in H.S. 595/309.

<sup>2</sup> C.-in-C., Portsmouth, 27.5.17, in H.S. 595/299.

<sup>3</sup> Partly open, May 2. H.S. 442/91.

<sup>4</sup> H.S. 442/555, 737.

<sup>5</sup> H.S. 442/643.

<sup>6</sup> H.S. 443/362.

<sup>7</sup> H.S. 442/1280.

Plymouth's turn came on May 8 when the port was closed for mines laid by *U.C.48*, being opened under restrictions the next day (May 9). In the Portland area three submarines (*U.C.17*, *U.C.61* and *U.B.36*) were specially active on May 10–11 in Lyme Bay and sustained two attacks.<sup>1</sup>

Shipping was diverted from the coast and the Commander-in-Chief, Plymouth, was told that it was desirable to keep a destroyer patrolling between the Start and Portland in daylight.<sup>2</sup> On May 18 Portsmouth was closed (except for transports up to 8 p.m.) on the discovery of the mines laid by *U.C.36* on the night of May 17/18, being opened<sup>3</sup> the same day under certain restrictions. Havre was closed<sup>4</sup> three days later (May 21) on the discovery of mines laid by *U.C.70*, and opened the same day.

In addition to all these stoppages and hindrances the results obtained by German mines in the Channel were considerable. They amounted to one destroyer (*H.M.S. Derwent*), 19,825 tons of merchant shipping, and four ports closed for a total of about five days. The 10th Flotilla (Harwich) suffered a casualty from a British mine. The destroyer *Redgauntlet* on May 21 at 8.25 p.m. proceeding along the Dover barrage in thick weather struck a British mine on the net barrage near Buoy 16A,<sup>5</sup> but managed, with the foremost compartments flooded, to get safely into the Downs and on to Sheerness, where her repairs were completed by the end of June.<sup>6</sup>

**123. Channel, British Ships and Escort.**—Of British ships over 4,000 tons, 13 were attacked in the Channel during the month, of which five were sunk and eight escaped. Of these, 69 per cent. were unescorted, namely: escorted, 3; in convoy, 1; unescorted, 9. Of the five ships sunk, four or 80 per cent. were unescorted and one was escorted. Of the eight ships that escaped, five or 63 per cent. were unescorted, two or 25 per cent. were escorted, and one was in convoy.

The usual hour of attack was between midnight and 6 a.m., viz., nine out of 13 (or 69 per cent.).

These deductions, however, rest on a narrow statistical basis and apply only to large ships that were attacked. Hundreds of ships passed that were not attacked at all, and though, with the coming of convoy, the patrol system fell into disrepute, it seems possible that the system made a considerable contribution to the safety of traffic by forcing submarines to proceed submerged.

<sup>1</sup> By French patrol vessel *Regulus*, May 11, and armed trawler *Maristo*, May 12.

<sup>2</sup> H.S. 445/1214.

<sup>3</sup> H.S. 447/207.

<sup>4</sup> H.S. 447/1118.

<sup>5</sup> 51° 5' N. 1° 55' E.

<sup>6</sup> Report and Enquiry in H.S. 1288/88.



124. **Approach Route A, May 28-31.**—Approach Route A which was the wedge shaped approach to the Scillies for ships coming from Gibraltar, Dakar, and the Cape, South America, and also for ships from the North Atlantic ports bound up Channel, suffered a sharp attack in the last three days of the month of May which continued through June. The area of this attack lay roughly from 48° 30' N. to 50° N. and from 8° W. to 11° W. It was the task of the 2nd Flotilla at Devonport to meet and escort valuable ships in, but on May 28 out of 15 destroyers only two were available at Devonport, viz. the *Brisk* and the *Ruby*. Of the remainder, five were at Lough Swilly waiting to bring in the *Calgarian* and four transports from Halifax, due on May 29 or 30 in 56° N., 15° W., and three were at Liverpool to escort the *Devonshire* and *Justicia* outward bound.<sup>1</sup> It would be possible to think that transports at that time were receiving more than their share of escorts, for that day and in the next two days seven ships were sunk in Approach Route A by *U.86*, *U.87* and *U.88*.

The following is a list of the ships sunk on these dates, with the rendezvous<sup>2</sup> given to them and whether they were equipped with wireless:—

May 28.	<i>Limerick</i> , 6,827 tons, from Dakar ; r.v. 49° N., 10° W. ; W/T .. .. .	<i>U.86</i>
May 28.	<i>Antinoe</i> , 2,396 tons, from Seville ; no r.v. ; no W/T .. .. .	<i>U.86</i>
May 29.	<i>Oswego</i> , 5,793 tons, from New York ; r.v. 48° 45' N., 10° W. ; W/T .. .. .	<i>U.86</i>
May 29.	<i>Ashleaf</i> , <sup>3</sup> 5,768 tons, from Port Arthur ; r.v. ; W/T (probable) .. .. .	<i>U.88</i>
May 30.	<i>Bathurst</i> , 3,331 tons, from Lagos ; no r.v. ; no W/T .. .. .	<i>U.87</i>
May 30.	<i>Hanley</i> , 2,821 tons, from Lagos ; no r.v. ; no W/T .. .. .	<i>U.87</i>
May 31.	Japanese s.s. <i>Miyasaki Maru</i> , 7,892 tons, from Dakar ; no r.v. ; W/T .. .. .	<i>U.88</i>

These ships were all sunk in Approach Route A between 48° 30' N. and 49° 30' N., and 8° 30' W. and 10° 26' W. The area had been definitely banned by War Warnings and a primary consideration applicable to these losses is that ships with wireless had no business to be there.

In the critical days of April 1917, the Consuls abroad had been told to give rendezvous outside the dangerous area in Approach Route B (see S.108). No instructions, however, had been issued to them with regard to Approach Route A. Between May 17 and 22

<sup>1</sup> Positions and Movements, May 29 ; also repairing, five.

<sup>2</sup> r.v. = rendezvous ; W/T = wireless equipment.

<sup>3</sup> Name and rendezvous appear to have become mutilated in the telegram in H.S. 655/867, which reads "? (*Brambleleaf*) . . . special rendezvous 50."

there sailed, with rendezvous for Approach Route A, 16 ships, of which two (the *Limerick* and *Oswego*) were sunk.

The following measures had been taken to safeguard Approach Route A: Queenstown had been told on April 26 to send out a War Warning that "incoming vessels ordered to make the Scillies were to cross 10° W. between 46° and 47° 30'"—in other words to *keep well to the south-east of Approach Route A* while Devonport was told to instruct all destroyers patrolling Approach Route A to pass this warning to any ship they might meet. In addition, Consuls and Shipping Intelligence Officers abroad were told to give instructions to all ships that all War Warning signals were to be obeyed.<sup>1</sup> These instructions were carried out in the various commands.

A War Warning to the above effect was sent out by Queenstown on April 26, and continued to be sent out punctiliously at intervals right up to the end of May.<sup>2</sup>

It seems clear then that two at least of the above eight ships, namely, the *Limerick* and *Oswego*, both of which certainly had wireless, were ignoring the War Warning.

It was probably on this account that on May 30 a telegram was sent to consular and shipping officers abroad that "Masters of ships with valuable cargoes were to be warned that if their special rendezvous was in an area prohibited by the War Warning, they were to cross the meridian between the parallels authorised in the War Warning."

These losses must have added a powerful impetus to the urgent proposals put in by the Trade Division on May 15 for more effective control of homeward bound traffic (see S.105).

On May 29, Devonport was told to keep at least two destroyers (of the 4th Flotilla) hunting the submarine operating W.S.W. of the Scillies, and on May 31 was directed to send the special service ships *Mavis* and *Rule* there. That afternoon (May 31), s.s. *Atholl* (4,647 tons), with a specially valuable cargo from the United States, was due at her rendezvous (49° N., 10° W.), but no destroyers were available to meet her, though three of the 4th Flotilla were "hunting" evasive submarines in the vicinity ; she was fortunate indeed to get home safely for *U.88* was lurking in the area and could not have been far off.

<sup>1</sup> H.S. 655/241.

<sup>2</sup> See War Warning 16/5, H.S. 446/777 ; 21/5, H.S. 447/1318 ; 25/5, H.S. 448/1384 ; 27/5, H.S. 449/645 ; 28/5, 10.48 p.m., "Eastbound ships making Scillies cross 10° W. between 47° 30' N. and 46° N.," H.S. 449/983.



## CHAPTER VIII.

## NORTH SEA AND GENERAL MEASURES.

125. **North Sea—Traffic and War Channel.**—Conditions in the North Sea were different again from those in the Channel. With the exception of the Dutch traffic (Hook to Harwich), the traffic followed the War Channel route as far as the Farne Islands. This War Channel, marked by buoys at every mile the S.M.S. (Superintendent of Minesweeping, Captain Lionel Preston) proposed on May 26 to extend to St. Abbs Head, reinforcing for sweeping purposes the Tyne Area, with eight minesweeping trawlers from Lowestoft and Grimsby. This was approved and the extension was completed by Trinity House by July 4.<sup>1</sup>

The starting of the Scandinavian Convoy on April 29, 1917 brought about 60 per cent. of the North Sea coastal traffic into convoy.

There followed a big drop in North Sea sinkage, the numbers falling from 74 ships of 85,331 tons in April to 34 ships of 33,340 tons in May—a fall of 61 per cent.

126. **Scandinavian Route.**—The figures for the Scandinavian route (Humber to Lerwick, and Lerwick to Bergen) were for the month of May:—

Submarines operating ..	10 <sup>2</sup>	Tons sunk ..	28,922
Submarine cruises ..	13	Tons per submarine—	
Submarine—days ..	147	day .. ..	197
Minefields laid ..	13	Number of convoys ..	49
Ships sunk by mines ..	9	Convoys attacked ..	11
Ships attacked in convoy	11	Ships in convoy ..	400 <sup>3</sup>
Ships sunk in convoy ..	10	Ships not in convoy ..	250 <sup>4</sup>
Ships attacked, not in		In convoy, percentage	
convoy .. ..	21	sunk .. ..	2.5 <sup>5</sup>
Ships sunk, not in convoy	11	Not in convoy, percentage	
		sunk .. ..	4.4

<sup>1</sup> H.S. 1375/395, 397; for conference on War Channel, early in year, see H.S. 1281/679.

<sup>2</sup> Maximum, 9 (May 7); minimum 2 (May 20–31).

<sup>3</sup> Admiral, Orkneys and Shetlands, Auxiliary Patrol Report gives 350 sailed in convoy from Lerwick (see S.101); 50 ships have been added for coastal trips not touching Lerwick, though the number was probably more (from A.O. & S., Auxiliary Patrol Report, H.S. 522/297, 322, 342, 363, 383).

<sup>4</sup> C.-in-C., Coast of Scotland (Rosyth) stated 75 to 90 passed weekly unescorted, but this may be regarded as a maximum. H.S. 1322/177.

<sup>5</sup> This is the same as the percentage (2½ per cent.) given by Admiral, O. & S., for the period April 29 to June 30, in H.S. 1325/206.

127. **Decrease in Sinkage.**—A portion of the decrease on the Scandinavian Route is attributable to a decrease in the number of submarines out, viz., 13 in May compared with 16 in April, and 147 submarine days in May with 175 days in April. There was in addition a decrease in the tonnage sunk per submarine day.

	April.	May.
Submarine-days ..	175	147
Tonnage sunk ..	42,168	28,922
Tons per Submarine-day	239	197
Average tonnage sunk	2,630	2,230
per cruise.		

These figures show in the tonnage sunk per submarine-day a decrease of 18 per cent. and of 15 per cent. in the average tons per cruise. Convoys were less liable to attack. Of the ships that sailed in convoy 3.2 per cent. were attacked, and of those without convoy 8 per cent.

Out of 11 ships attacked in convoy, 10 (or 90 per cent.) were sunk, which tends to indicate that the efficacy of convoy in the North Sea lay rather in evasion than in counter attack.

On the other hand no submarine got in more than one attack on any single convoy, a figure not attributable to lack of torpedoes, for out of 81 torpedoes carried apparently only 17 were fired (four of which missed) which looks as if some of the less experienced commanders were reluctant to face a destroyer attack.

The loss of the Norwegian s.s. *Kaparika* in convoy (May 6) was attributed by Admiral Sir Frederick Brock to the fact that a destroyer and two trawlers had dropped astern to guard the s.s. *Ulla* which could only go six knots. This loss led to the issue of orders that no ship of less than 7 knots was to join a convoy.<sup>1</sup>

128. **Scandinavian Convoy.**—An illuminating report by Admiral Sir Frederick Brock on the Scandinavian Convoy is dated May 17.<sup>2</sup> The convoys had started on April 29 and had been running regularly North and South three days out of four. The East going convoys left Lerwick at 4 p.m. daily with an escort of three destroyers and not less than four Auxiliary Patrol vessels (whalers and trawlers); they proceeded to a rendezvous halfway across where the incoming traffic was picked up while the destroyers took the outgoing ships on to a selected point on the Norwegian coast. For this work a force of six Grand Fleet destroyers was based on Lerwick, assisted by three local destroyers.

There still remained a weak point in the system. The minimum number of destroyers asked for at the Longhope Conference had

<sup>1</sup> Admiral, O. and S., H.S. 1371/21.

<sup>2</sup> In H.S. 1322/166.



been 23, but only 20 had been allocated, and Admiral Brock asked for three more. The Commander-in-Chief, Grand Fleet, supplied them for a time from the Grand Fleet, sending on May 13, an urgent telegram as follows to the Rear-Admiral, East Coast, asking the Admiralty at the same time to direct the latter to comply. "Request you will use your utmost endeavour to maintain convoy escorts . . . Destroyers are doing far better work by escorting convoys, where there are many chances of attacking enemy submarines, than by patrolling the coast." The Admiralty approved of the escort force of destroyers being brought up to 23<sup>1</sup>, also for better coaling facilities at Lerwick and for an additional R.N.R. midshipman being appointed to the destroyers.<sup>1</sup>

**129. Attacks on Submarines, Scandinavian Route.**—The Scandinavian Convoy was the only important measure applied to the North Sea area in May. The United States on May 14, had proposed a scheme of closing the North Sea with a mine barrage, but in the opinion of the Admiralty the project was considered "quite impracticable" in view of the distance, the depths, the distance from a suitable base of operations, and the materials and patrols required.<sup>2</sup>

There is nothing distinctive to be noted in the attacks on submarines. On the Scandinavian traffic route there were some six attacks by patrol vessels and Q-trawlers as follows:—

On May 4 at 8.30 a.m. in 54° 27' N., 0° 26' W., about 15 miles north of Scarborough, H.M.S. *Mallard*<sup>3</sup> (Lieutenant William S. Nelson, R.N.R.) patrolling along the coast sighted the periscope, about 1,800 yards off, of a submarine attacking s.s. *Devereux*; heading for it at full speed and opening fire she drove it down, then escorted the *Devereux* 5 miles on her way. The submarine was probably *U.B.21* which continued her cruise.

On May 7 at 4.50 p.m. in 56° 39' N., 2° 29' W. (off Montrose, Scotland, East), the armed trawler *Vale of Clyde* engaged in mine-sweeping sighted the wake of a submarine, and following it up dropped a depth charge; some 20 minutes later, a periscope was again seen and the armed trawlers *Trinity* and *Cicero* dropped depth charges. The submarine was probably *U.C.77*, which continued her cruise.

On May 14 in 55° 13' N., 1° 18' W., off Blyth, Seaplane 9066 attacked a submarine, possibly *U.C.40* or *U.C.42*.

Based on Granton (Admiral James Startin) were 14 Q-ships, mostly Q-trawlers, of which six were fishing on the East Coast<sup>4</sup>

<sup>1</sup> H.S. 1322/192. C.-in-C.'s Telegram in H.S. 445/1216.

<sup>2</sup> H.S. 655/614, 686.

<sup>3</sup> Report in H.S. 1280/44, 47.

<sup>4</sup> See Weekly Reports in H.S. 1450, Granton Q-ships.

on May 12. Only one came into action. This was the Q-trawler *Roskeen* (alias *Bendigo II*). She and the *Cool* had left Granton on May 14 with intelligence of a submarine located by directionals. On May 15 at 8.10 a.m. in 56° 23' N., 1° 24' W. (off the Forth), the *Roskeen* was steering S.S.E when fire was opened on her. The ship was abandoned, but the submarine evidently scented a trap for she kept up the fire for nearly an hour, when she commenced to fire shrapnel, wounding the Skipper Forbes and Lieutenant F. H. Peterson, R.N.R. The *Roskeen* then opened fire; the submarine dived and four depth charges were dropped after her. The submarine was *U.C.40*, which escaped undamaged, and Lieutenant Peterson was given a bar to his D.S.C.<sup>1</sup> His ship was also awarded £200 for her action with *U.C.29* on April 24 at 3.20 p.m. off Blyth;<sup>2</sup> when the submarine apparently received a hit.

On May 16 at 8.46 a.m. in 58° 47' N., 2° 51' W. (off the Orkneys), H.M.S. *Rowena*, while engaged in screening minesweepers in a flat calm, sighted a periscope 200 yards off on the quarter, and putting her helm hard over, dropped a depth charge. The British submarine *G.12* was in sight on the surface, and the *Rowena's* action may have saved her from attack. The submarine was probably *U.C.31*.

On May 17 about 6.30 a.m. in 54° 52' N., 0° 48' W., off the Tees, the armed yacht *Miranda II* sighted the periscope of a submarine (probably *U.C.40*) and dropped a depth charge without result.<sup>3</sup>

No further attacks occurred till May 25, when H.M.S. *Talisman* (Lieut.-Commander J. I. Hallett) on Blyth taking in at 6.12 p.m. a wireless signal reporting a hostile submarine 30 miles off the Tyne, went off at 7.15 p.m. at full speed for the locality. At 10.45 p.m. in 55° 55' N., 0° 11' E. steering east at 25 knots, she sighted a black object, obviously a submarine, on the point of diving and dropped two depth charges.<sup>4</sup> The submarine was *U.B.41*, and it looks as if she may have been damaged, for she did nothing else and was home by May 27.

**130. Dutch Traffic.**—The Dutch traffic during May numbered 90 ships (45 eastward, 45 westward), of which none were sunk by submarines, though one, the British s.s. *Cito*, was torpedoed by a German destroyer on May 17. This traffic was given powerful escorts, usually of eight destroyers with three light cruisers in support, and like the cross-Channel traffic, suffered few casualties, though there

<sup>1</sup> H.S. 1281/591.

<sup>2</sup> See Reports of Survivors, *U.C. 29*, in I.D. Vol. 549A.

<sup>3</sup> No details.

<sup>4</sup> H.S. 1281/332.



were in the first half of the month some three or four submarines cruising in the area.<sup>1</sup> They were not left unmolested.

**131. Air Patrols, Hoofden.**—The Handley-Pages from Felixstowe and Westgate Air Stations carried out daily patrols over the North Hinder<sup>2</sup> and made six attacks on submarines.

On May 10 at 5.55 p.m. in 52° 5' N., 2° 28' E., in the North Hinder area, S.P.8667 dropped two 230-lb. bombs near a submarine (probably U.C.63 or U.C.1). Ten days passed before, on May 20 at 7.50 p.m. in 52° 14' N., 2° 57' E., 10 miles east of the North Hinder,<sup>3</sup> S.P.8663 (Flight Sub-Lieutenant C. R. Morrish, R.N.A.S.), steering 20°, sighted on the starboard bow, 5 miles off, a submarine on the surface with full buoyancy. He passed over her making the recognition signal, and receiving no answer, at 7.55 p.m. dropped two 100-lb. bombs which exploded in front of the conning tower when the periscope was still above water.<sup>4</sup> The seaplane crashed on landing and all records of times and courses were lost.

In the same area and about the same time, at 7.10 p.m. (G.M.T.) in 52° 24' N., 2° 41½' E., the British submarine E.33 (Lieut.-Commander Victor E. Ward) sighted a plane coming from the south which dropped two bombs on her as she dived, damaging the port hydrophone.<sup>5</sup>

On May 22 at 6.41 p.m. in 51° 59' N., 2° 53' E., S.P.8658 dropped four bombs, of which three exploded near a submarine (possibly U.C.64).

These attacks, though unsuccessful in destroying a submarine, helped to keep them down and mark the growing power of the air in anti-submarine warfare. There were the usual regular patrols too, off the Belgian coast by the Dunkirk planes, in one of which on May 25 about 7 p.m. in 51° 22' N., 2° 16' E., S.P.9060 came down through engine failure and was set on fire by a German submarine, which took the crew prisoners.

There was only one attack on a man-of-war. On May 23, at 2 p.m. when in 51° 43' N., 2° 19' E., H.M.S. *Zephyr*, a Nore destroyer, was missed by a torpedo, possibly fired by U.C.64. German torpedo

<sup>1</sup> April 30–May 6, U.C.62; April 30–May 7, May 13–20, U.C.71; May 1–8, U.B.20; May 3–11, U.C.63; May 18–24, U.C.64. For Dutch Traffic see Commodore (T)'s Diary, H.S. 247.

<sup>2</sup> Aircraft Weekly Patrol Report, May and June, 1917, in H.S. 616/29.

<sup>3</sup> Report in M.06246/17, X.10057/17, *i.e.*, 52° 7½' N., 2° 56' E. Another report gives 15 miles E.N.E. of North Hinder.

<sup>4</sup> In January, 1919 (C.B. 01292G, p. 32), the loss of U.C.36 was attributed to this attack. Marine-Archiv, Berlin, however, regards this as very improbable (H.S./Q.23), firstly because U.C.36 left Zeebrugge for the Channel on May 16 and secondly the position is well north of the route from Zeebrugge to Dover Straits.

<sup>5</sup> H.S.A. 273/586, 596. Commodore (S) considered that the attack on E.33 had been made by a German plane.

planes scored a single success. On May 1 at 6.45 a.m. off Lowestoft, the British s.s. *Gena*, 2,784 tons, was torpedoed and sunk by planes, and on May 20 at 1.40 p.m. in 52° 17' N., 1° 49' E., the British s.s. *Birdsgrove*, 2,821 tons, was missed by two torpedoes fired by planes.

**132. Submarine Patrols, North Sea, May.**—British submarine patrols from Harwich and Blyth had no success in May.<sup>1</sup> C.19, patrolling in the Hoofden on May 3 at 5.50 p.m. in 52° 2' N., 2° 32' E., sighted a submarine and chased without success. On May 7 at 5.13 a.m., E.43, off Terschelling, sighted a submarine with one gun (possibly U.19) and fired two torpedoes, which missed.

C.6, on May 14 at 7.30 a.m. off the North Hinder, sighted a submarine on the surface 300 yards away, which dived, and a little later fired a torpedo at C.6, which passed over her.<sup>2</sup>

In the north, the Blyth submarines (11th Flotilla) were equally unsuccessful, sighting submarines on five occasions without gaining an opportunity to attack.<sup>3</sup>

Two attacks were made by British vessels on British submarines. On May 3 at 11.5 a.m., off Blyth, the destroyers *Ouse* and *Bat* opened fire on C.10, killing one man and wounding another, and on May 20 at 12.50 a.m. the armed yacht *Miranda II* opened fire on a Blyth submarine (apparently J.3 or G.1).<sup>4</sup>

**133. Measures—Naval Staff.**—In the Conference at Rosyth, on Friday, April 13, when the Prime Minister (Mr. Lloyd George), the First Lord (Sir Edward Carson), had met the Commander-in-Chief (Sir David Beatty),<sup>5</sup> and in a second Conference with the First Sea Lord (Admiral Sir John Jellicoe) at the Admiralty, special stress had been laid on the necessity for reorganising the staff system at the Admiralty. Papers on the subject are few, but Lord Jellicoe states that "in the early part of 1917, the illogical nature of the War Staff organisation became apparent in that it had no executive functions and as the result of discussions between Sir Edward Carson and myself, the decision was taken that the duties of the Naval Staff (the term decided upon in place of the War Staff) should be made executive, and that the First Sea Lord

<sup>1</sup> Harwich Submarine Report, in H.S.A. 273; Blyth Submarine Reports in H.S.A. 126.

<sup>2</sup> H.S.A. 273/563.

<sup>3</sup> J.1 on May 8, 9; J.2 on May 9; J.5 on May 19; J.6 on May 19. H.S.A. 126.

<sup>4</sup> H.S. 442/1166; H.S. 447/827.

<sup>5</sup> H.S.A. 141/170. C-in-C.'s Notes for Conference, April 14, 1917.

"(c) The remedy lies in a thorough re-organisation of the Staff system at the Admiralty."



should assume his correct title as Chief of the Naval Staff, as he had in fact assumed the position."<sup>1</sup> The office of Chief of the Staff, thus became merged with that of the First Sea Lord, and two further posts were created—the Deputy Chief of the Naval Staff (D.C.N.S.) and Assistant Chief (A.C.N.S.), both as additional Sea Lords with seats on the Board and exercising the executive authority of the Board. Admiral Sir John Jellicoe, the First Sea Lord, thus became Chief of the Naval Staff; Vice-Admiral Sir Henry Oliver, the Chief of the War Staff, became Deputy Chief of the Naval Staff, and Rear-Admiral Alexander L. Duff, the Director of the Anti-Submarine Division, Assistant Chief of the Naval Staff, being succeeded as D.A.S.D. by Captain William W. Fisher, Captain of H.M.S. *St. Vincent* in the Grand Fleet. Rear-Admiral George Hope, became Director of the Operations Division in succession to Rear-Admiral Thomas Jackson. These changes were being considered early in May.<sup>2</sup> Behind them stood the Commander-in-Chief, the First Sea Lord, the Prime Minister and the War Cabinet, and the notification of the new organisation was issued on May 14.<sup>3</sup> It is not possible to tabulate the results of this reorganisation; they belong to the sphere of "immeasurables," but it is permissible to think that they were not small, and the impetus given by the Naval Staff exercised a very considerable influence on the war against the submarine.

These changes went hand in hand with a number of other changes on the Board. The most distinctive appointment was that of Sir Eric Campbell Geddes as Controller with the temporary rank of Honorary Vice-Admiral; Rear-Admiral Lionel Halsey became Third Sea Lord vice Rear-Admiral Frederick C. T. Tudor, and Rear-Admiral H. D. Tothill became Fourth Sea Lord vice Rear-Admiral Halsey.

**134. Troop Convoys.**—Up to the month of May, the use of convoys had been confined to transport work, the burden of their escort falling chiefly on the 2nd Flotilla at Devonport. No less than six cruisers—the *Antrim*, *Isis*, *Berwick*, *Carnarvon*, *Donegal* and *Devonshire*<sup>4</sup>—were employed in escorting these convoys across the Atlantic, to be then met by a strong destroyer escort somewhere about 15° W. or 16° W. No ships were lost in them.

<sup>1</sup> "Crisis of Naval War," 10.

<sup>2</sup> May 8, Admiralty to C.-in-C.:—"It is imperative to strengthen the Admiralty War Staff by the best officers, etc." H.S. 447/487.

May 9, C.-in-C. to Admiralty:—"Strongly urge that new organisation should provide for free and constant interchange of ideas and opinions between War Staff and C.-in-C., G.F." H.S. 444/817. Also H.S. 444/659, 996.

<sup>3</sup> Office Memorandum signed by Sir Graham Greene, May 14, 1917, in H.S. 1329/168.

<sup>4</sup> Telegram, May 15, H.S. 655/701.

In May, there were five or six of these troop convoys which deserve to be noted, for this month marks the first use of convoys for general trade as distinct from troop transports.

May 4. *Devonshire* and five transports sailed from America for r.v. 55° 18' N., 14° W., to be reached May 12. On May 7, six Devonport destroyers were at Queenstown ready to meet her. HS. 655/364, 442/824, 444/329.

May 4. *Olympic* from America to be met off Oversay. On May 6, four destroyers brought her in from Lough Swilly. HS. 443/895.

May 4. *Marmorata* sailed from Devonport with convoy to Sierra Leone, 11 transports, 9 destroyers. HS. 443/347. On May 22, the *Drake* and *Calgarian* sailed from America with four transports. (HS. 655/879.)

**135. General Convoy (April 26).**—The use of convoy was now to be extended to trade in general. On April 26, Rear-Admiral Alexander Duff (D.A.S.D.) submitted that the time had arrived for a comprehensive scheme of convoy,<sup>1</sup> a sketch of which he attached.

**135A. First Gibraltar Convoy.**—The next day (April 27), Rear-Admiral Duff, submitted detailed proposals for a convoy from Gibraltar, which was considered a suitable port for trial. The convoys were to consist of 16 to 20 vessels and were to sail in four columns of four ships each, not however, to include neutrals nor ships of over 11 knots maximum speed. The S.N.O., Gibraltar, was to assemble the ships, select the route and issue sailing orders, and on April 28, was informed that the first convoy should sail in about ten days time.<sup>2</sup>

Captain Hughes C. Lockyer, C.B., R.N., was appointed Commodore, 2nd class, in charge of it, and left Plymouth on May 2 in the special service ship *Mavis*. The route was to lie through 36° N., 13° W. to 45° 15' N., 13° W. (alternatively 44° 30' N., 14° 20' W.) thence to the Lizard, to be met by destroyer escorts in 46° 30' N., 11° W. at 8 a.m. about May 17. Commodore Lockyer arrived at Gibraltar on May 7; then a conference was held on May 10 and a convoy of 16 ships with a total tonnage of 51,923 tons with the *Mavis* and *Rule* (Lieutenant R. Langton-Jones) left Gibraltar on May 11;<sup>3</sup> it was in three columns and was escorted out to 11° W. by armed yachts. Once the ships had "got into their stride" the station keeping was good with few exceptions.

*U.C.17* was working westward of Ushant and on May 16 at 9.40 p.m. in 48° 40' N., 7° 26' W., not far from the convoy's route,

<sup>1</sup> See Home Waters VIII, p. 382. Papers in H.S. 1322/206.

<sup>2</sup> Draft dated April 27, 1917, and A.L., April 28, M.05112, in H.S. 1322/201.

<sup>3</sup> The *Rule* weighed on May 10 at 8 p.m.



made an unsuccessful attack with gunfire on the French s.v. *L'Hermitte*, 2,189 tons, on her way from Falmouth to Australia escorted by a British armed yacht. On the report coming in the Commander-in-Chief, Plymouth, sent out the *Achates* (4th Flotilla) and another destroyer to sweep out the position and wait for the convoy. On May 18, owing to the convoy being for some reason, not mentioned, 30 miles to eastward of its route and to a breakdown in the *Rule's* wireless, it did not pick up the destroyers till 4 p.m.

On May 19, at 6 p.m. it was in 47° 3' N., 6° 40' W. The *Sorestes* and *Lookout* were patrolling off Plymouth; six destroyers of the 4th Flotilla, the *Hardy*, *Laurel*, *Porpoise*, *Achates*, *Spitfire* and *Acasta* were with the convoy and a big America seaplane had been sent out to locate it. There were no submarine reports in the West Channel that day or the next.

On May 20, five of its ships for the West Coast were detached at dusk off the Scillies with an escort of two destroyers. The remainder, except the s.s. *Kalo*<sup>1</sup> which had dropped behind on May 15 in a mist, arrived safely in Devonport on May 20 at 1 p.m.

That evening they left Devonport escorted by destroyers, were met off Portland by a strong escort of 24 Portland drifters and got safely to their ports of destination. The first experimental convoy had proved a distinct success.<sup>2</sup>

135B. **Convoy Committee, May 17.**—Meanwhile a Convoy Committee had been appointed at the Admiralty.<sup>3</sup> It included Captain Horace Longden, Trade Division, Fleet Paymaster H. W. E. Manisty and Mr. Norman Leslie of the Ministry of Shipping, and received much assistance from Commander R. G. H. Henderson who had been making a special study of the subject. Its report was presented on June 6<sup>4</sup> and its adoption may be regarded as the commencement of the era of mercantile convoys in the Atlantic.

<sup>1</sup> She arrived in safety later.

<sup>2</sup> The report was sent in by Lieutenant R. Langton-Jones to C.-in-C., Devonport, May 24, 1917. See Convoy Records, Vol. 48; Admiralty Papers in H.S. 1322/207.

<sup>3</sup> M.05981/17, May 17, in H.S. 1322/269. Sir Eldon Manisty in 1922 stated that in April 1917 a convoy committee consisting of Fisher (*i.e.*, Commander Thomas Fisher, Trade Division), Henderson (Commander Reginald Henderson, Anti-Submarine Division) and himself had been appointed, but had "fallen through."

<sup>4</sup> Atlantic Trade Convoy. Report of Committee, June 6, 1917 (print 20 pp.).

## CHAPTER IX.

## GRAND FLEET OPERATIONS IN NORTH SEA, JUNE 1917.

136. **Grand Fleet, Destroyer Position.**—On June 1, the Grand Fleet consisted of 38 battleships, 9 battle cruisers, 5 cruisers, 28 light cruisers, 108 destroyers, 29 fleet sweepers, 1 aircraft carrier, and 24 armed merchant cruisers. Of the destroyers, 10 were temporarily detached for anti-submarine work (Aberdeen, 6; Queenstown, 1; Devonport, 3) and 11 were repairing and refitting, leaving 89 for service with the Fleet. In May the Commander-in-Chief, found it necessary to point out that, owing to the large number of destroyers detached, only the 1st Battle Squadron, 2nd Battle Squadron, 5th Battle Squadron, and Battle Cruiser Fleet could proceed to sea properly screened, and had been informed that his difficulties were fully realised but it was considered that the risk was justified by the conditions of submarine warfare.<sup>1</sup> The arrival of the United States destroyers in May had tended to ease the situation and the number of destroyers detached had fallen from 15 to 10.

137. **German s.s. "Gamma" torpedoed in Norwegian Waters—June 2.**—The traffic between Narvik and Germany<sup>2</sup> had constantly engaged the Commander-in-Chief's attention and in June a small force was despatched against it to patrol off the Norwegian coast between Utsire and the Naze. The force, consisting of the *Cambrian*, Captain Charles A. Fountaine (Senior Officer), the *Comus* and four destroyers left Scapa at 4 p.m. on June 1. From Utsire the two cruisers, spread to visibility distance apart (about 8 miles), swept down the coast at 18 knots, the *Cambrian* inshore, screened by the *Marvel* and *Mindful* keeping in sight of land but outside territorial waters.

At 8.30 a.m. (June 2) the *Cambrian* in 53° 35½ N., 5° 22¾ E. sighted a steamer, bearing S. 52 E. about 8 miles off, flying German colours and steaming NNW. at 8 knots. Captain Fountaine turned at once towards her, hoisted the signal "Heave to" and fired a round of blank; the steamer, ignoring the signal<sup>3</sup> turned and made straight for the shore.

Captain Fountaine did not open fire, but turned to intercept her, giving an order for full speed which failed to reach the engine room. At 8.42 a.m. the *Marvel* was ordered to intercept her and at 9 a.m.

<sup>1</sup> Commander-in-Chief, May 3, 1.19 a.m., H.S. 442/877; reply from 1 S.L., H.S. 442/1048.

<sup>2</sup> During May 1917, eighteen German vessels called at Bergen. H.S. 1290/490.

<sup>3</sup> *Cambrian*, January 4, in H.S. 1290/526.