

Wreck of HMS *Falmouth*, off Bridlington

Statement of Significance with supporting narrative

Introduction

This Statement of Significance has been prepared by Fjodr Limited on behalf of Historic England as part of the HMS *Falmouth* project (HE 7025).

HMS *Falmouth* was a Town Class light cruiser laid down February 1910 at Beardmores at Dalmuir on the River Clyde. HMS *Falmouth* was based in home waters during the First World War and was engaged in numerous operations, including several major engagements (Heligoland Bight, 28th August 1914; Raid on Scarborough, Whitby and Hartlepool, 16th December 1914; Jutland, 31st May – 1st June 1916). HMS *Falmouth* sank as a result of being repeatedly torpedoed by U-boats in the fleet action of 19-20th August 1916. The identification and position of the wreck of HMS *Falmouth* are firmly established.

The wreck of HMS *Falmouth* is important in terms of its period and rarity. As an isolated wreck it does not have group value as such, but it has a clear association with the landscape of the North Sea in the First World War. These aspects of its significance arise from the narratives manifest in *Falmouth's* physical remains relating to its construction, motive power, armament, operational history and life on board. HMS *Falmouth* also exhibits several key aspects of England's history immediately prior to the First World War and in the first two years of the conflict.

The importance of the wreck of HMS *Falmouth* is elaborated below in respect of the ship's build, use, loss, survival and investigation.

Build

HMS *Falmouth* presents the only known remains of a Town Class light cruiser. *Falmouth* illustrates distinctive aspects of the development of the Towns in terms of armament, armour, accommodation and propulsion. *Falmouth* also represents:

- aspects of the dreadnought revolution as it applied to cruisers in mounting a uniform main armament and being powered by turbines;
- aspects of the Anglo-German naval arms race that contributed to the First World War;
- the Royal Navy's global field of action, being a vessel capable of acting independently at considerable range;
- the use of civilian yards in warship construction.

In one of very few academic reviews¹, Lyon comments that 'the under-publicised and underestimated "Towns" were arguably the best cruisers of the First World War'.

¹ Lyon, D, 1977, 'The First Town Class 1908-31' Parts 1-3, *Warship*, 1977, 1: 48-58; 2: 54-61; 3: 46-51.

There were 21 Town Class light cruisers, built in a series of five sub-classes corresponding to four naval spending programmes – 1908-09 (Bristol class); 1909-10 (Weymouth Class); 1910-11 (Chatham Class); 1911-12 (Birmingham Class) – plus the Birkenhead Class comprising two vessels ordered by the Greek government but requisitioned at the start of the First World War. HMS *Falmouth* was one of the four Weymouth Class ordered as part of the 1909-10 programme.

The development of the Towns can be understood largely in terms of the Admiralty's development of its own requirements, but these were at least in part a response to the perceived threats posed by specific foreign ships: notably the development of German light cruisers of the Kolberg Class. The development and construction of the Towns also has to be seen in the context of the broader naval arms race between Britain and Germany. Although discussion of this arms race tends to focus on larger units such as dreadnoughts and battle cruisers it also encompassed cruisers, bearing in mind that cruisers were key to naval power in the global, colonial context over which Germany and Britain were competing. Germany sought to significantly expand its light cruisers and Britain sought to maintain its numerical advantage. However, the overall level of public spending on the arms race was a major concern and cost per unit was a factor in the development of the Towns. Britain was also seeking to engage the Dominions in contributing directly to imperial defence, a negotiation that was manifest in Australia ordering four Towns to serve with the Royal Australian Navy: *Sydney* and *Melbourne* were built in the UK; *Brisbane* was built in Australia; *Adelaide* was laid down in Australia in 1915 but not completed until 1922.

There were significant differences between the sub-classes in terms of their armament, armour, hull features and organisation. However, the broad intention of the Towns and their actual use was common to all, and vessels from different sub-classes were deployed alongside each other in their squadrons.

The Town Class light cruisers were initially regarded as Second Class Protected Cruisers. Protected cruisers had an armoured deck running through the entire length of the ship a little above the waterline. This armour was intended to prevent plunging shells from reaching the ship's machinery. The Bristols and Weymouths (including *Falmouth*) did not, however, have side armour. This was only introduced in the Chatham Class and subsequently. The absence of side armour is distinguishable in the hull shape. *Falmouth* and the other Weymouths (and earlier Bristols) have a marked tumblehome whereby the sides of the hull curve back inwards towards the upper deck; the Chathams and later vessels are straight-sided because the ability to bend plate armour in two directions (up and down in addition to fore and aft) was not available.

Second class cruisers were distinguished from first class cruisers by their size and the calibre of their main armament; second class cruisers were, however, sufficiently fast to operate with the fleet, whereas third class cruisers were smaller and slower. This nomenclature was changing because cruiser concepts were themselves in flux. First class cruisers gave way to the much bigger battlecruisers, with an 'all big gun' main armament reflecting the radical influence of the battleship HMS *Dreadnought*. Cruisers akin to *Falmouth* and the Towns were not in favour in the first decade of the C20th so their clearest antecedents are the Challenger Class launched in 1902. The impact of the dreadnought revolution on *Falmouth* is apparent in it being equipped with steam turbines (unlike the *Challengers'* triple expansion engines) and in the choice of a single calibre main armament.

A range of smaller cruisers were constructed before and after the Towns, referred to as 'scouts', destroyer leaders (for flotillas of destroyers) and subsequently 'destroyer-killers' (for countering Germany's destroyers) operating principally in the North Sea. Hence, the Towns were preceded by the Boadicea class and followed by the Arethusas and the 'C' Class cruisers. The Boadiceas, Arethusas and 'C' Class were all significantly smaller than the Towns and carried a lighter, mixed calibre armament.

Rather than the Arethusas and 'C' Class cruisers, which were also referred to as light cruisers, the successors to the Town Class were more properly the Hawkins class, laid down in 1916 but not launched until after the war. As the Hawkins class were armed with 7.5 inch guns they were considered to be heavy cruisers. The reason for regarding the development Challengers-Towns-Hawkins to be separate from the development Boadiceas-Arethusas-'C' Class is attributable to the difference in endurance, and is encapsulated in the reference to at least some of the Towns as 'colonial cruisers' in their design phase. Unlike the other classes of light cruisers that were intended only for fleet actions in the North Sea, the Towns were intended to serve across Britain's global empire: protecting trade; acting as commerce raiders against the enemy; and projecting power locally. The Towns had a range of over 5,500 nautical miles; the 'C' Class around 1,600.

The Towns also had a larger complement to be able to fulfil a global role, and this led to the extension of the forecastle in the successive sub-classes. The Bristols had a short forecastle with only the bow 6-inch gun mounted on it; all the broadside guns were mounted on the main deck. The Weymouths – including *Falmouth* – had an extended forecastle providing more accommodation and also mounting the forward broadside guns, resulting in a distinctive set of three guns at this higher level. The subsequent sub-classes of Towns had a forecastle that extended even further, around 2/3 the length of the ship such that only the rearmost three guns were on their original deck level. In the case of the Weymouth class – including *Falmouth* – the extended forecastle was fitted for an Admiral and his staff, so that they could serve as flagships. It is notable that the Bristols and Weymouths (including *Falmouth*) also presented a change in the traditional pattern of accommodation in the RN; in these two classes, officers were accommodated forward and crew aft, reversing the usual pattern. The pattern reverted to officers aft in the Chatham Class. In a further change in hull form, the Chathams and later classes had a 'clipper/ram' bow (concave, raked forwards) which was superior at sea to the 'straight ram' bow (raked slightly aft) of the Weymouths (including *Falmouth*) and Bristols.

Although they were built with a global capability, it was also anticipated that the Towns would operate in a fleet role in the North Sea, hence their speed, armour and armament.

As noted, one of the key changes from the Challengers to the Town Class was the switch from triple expansion engines to steam turbines, achieving an increase in design speed from 20 knots to 25 knots – though actual speeds were often higher. Like almost all the Towns, *Falmouth* was equipped with Parsons steam turbines, which powered four screws (several of the Towns had two-screw arrangements). *Falmouth* had ten large and two small Yarrow Small Tube boilers with an authorised power of 22,000 Shaft Horse Power (SHP).² Again like almost all the Towns, *Falmouth* burnt coal sprayed with oil; *Chester* was the only Town to be fuelled by oil alone, which was to become the norm with the Arethusas and subsequent

² Rayson notes that after Jutland, Edwards congratulated the ship's company for their behaviour in action and 'also that the ship Developed more Horse power than she was Designed for 30000 hP built for 22000.'

classes. It is worth noting that the coal bunkers on the Towns formed part of the ship's protection, as they were placed over the armour deck to help absorb impacts.

The Weymouths (including *Falmouth*) were the first Towns to mount a single calibre main armament. The earlier Bristols had two 6-inch guns at bow and stern and a broadside of four 4-inch guns on each side (i.e. 10 main guns in total), reminiscent of the mix of first class cruisers. The Weymouths had all 6-inch guns but eight rather than ten, i.e. bow and stern plus three on each broadside. The Chatham's had the same armament as the Weymouths, but the Birmingham's had nine rather than eight 6-inch guns, including two side-by-side (in separate mounts) at the bow. The Birkenhead's had ten 5.5-inch guns – one forward, one aft and four on each broadside. Although smaller, these 5.5 inch guns were easier to handle and still had good range and penetration. A characteristic of all the Towns was that the gun shields were open at the rear and there was a gap between the bottom of the shield and the deck; this weakness resulted in leg injuries to gun crews in action.

Reflecting the changing technologies of war at sea, the Towns were equipped with torpedoes, which were mounted in the hull below the waterline to fire perpendicular to the direction of the ship. The Weymouths (including *Falmouth*) and subsequent sub-classes were fitted with 21-inch torpedoes rather than the 18-inch torpedoes fitted in the Bristols. Similarly, the growing importance of air power was addressed through the inclusion of a 3-inch High Angle gun, fitted retrospectively (Jan 1915) on a platform between funnels two and three.

The Towns were designed by the Department of Naval Construction (DNC) under the Director of Naval Construction to instructions from the Third Sea Lord as Controller of the Navy. Philip Watts – designer of HMS *Dreadnought* – was Director of Naval Construction when *Falmouth* was designed, being succeeded by Eustace Tennyson D'Eyncourt in 1912.

HMS *Falmouth* was built at the Dalmuir yard of William Beardmore and Co. on the River Clyde, a civil shipbuilding yard. Sixteen of the Towns were constructed in civil yards, reflecting the importance of civil shipbuilding to warship construction in the early twentieth century. Civil shipbuilding was of phenomenal importance to the histories of the communities in which it took place and to the broader history of the country from the mid-nineteenth to the mid-twentieth centuries. Although the physical remains of the Royal Dockyards have been studied and are well-protected by statutory protection, civil yards have largely been overlooked and erased: Beardmore's Dalmuir Yard where *Falmouth* was built lies under an industrial estate, hospital and hotel. The wreck of *Falmouth* also represents, therefore, the physical remains of the role of civil shipbuilding in warship construction.

All but two of the 21 Town Class were scrapped, mostly in the interwar period³. The wreck of HMS *Nottingham* (Birmingham sub-class) has not been located – it was reported lost about 60 nautical miles off Alnmouth, Northumberland – hence HMS *Falmouth* presents the only known remains of a Town Class light cruiser.

Use

The wreck of HMS *Falmouth* is important as the only known remains of a class of vessel that played a very active role in the First World War in all the principal naval theatres; Town

³ *Adelaide* was commissioned in 1922 and served in the Second World War, and was not sold for breaking until 1949.

Class light cruisers were directly involved in many of the key engagements of the conflict around the globe. *Falmouth* itself served with the Grand Fleet in home waters, including as flag ship to light cruiser squadrons. *Falmouth's* career represents both the 'routine' activities associated with sweeping the North Sea but also being directly engaged in the main fleet actions of the first part of the war, including the Battle of Heligoland, the attempted interception of the raid on Scarborough, Whitby and Hartlepool, and the Battle of Jutland. At Heligoland, *Falmouth* was one of the ships that reduced SMS *Mainz* to a sinking condition. At Jutland, *Falmouth* was flagship of the Third Light Cruiser Squadron. Attached to the Battle Cruiser Fleet, *Falmouth* took part in all the principal phases of the battle from the first contact with German units through to an encounter with a Zeppelin during the night action. *Falmouth* was in action at several points, including engaging SMS *Wiesbaden* and SMS *Derfflinger* and SMS *Lützow*. *Falmouth* was hit once but suffered only minor damage. The wreck of HMS *Falmouth* is the only substantial wreck of a Royal Navy veteran of Jutland in English Territorial Waters.⁴

The wreck of HMS *Falmouth* is important by virtue of its own operational history from 1911 to 1916 but also in representing the operational activities of the Town class as a whole, of which it is the only known surviving example. As noted above, the Towns were built with both a global capability and a fleet capability. When war broke out, the Towns fulfilled both roles, taking part in many of the key engagements of the conflict.

In the global capacity, for example, HMS *Glasgow* was part of Craddock's Squadron engaged in the Battle of Coronel off Chile; took part in the destruction of SMS *Leipzig* in the Battle of the Falkland Islands; and helped intercept the cruiser SMS *Dresden* in the Juan Fernandez Islands in the Pacific. *Chatham*, *Dartmouth* and *Weymouth* tracked down and blockaded the cruiser SMS *Königsberg* in East Africa. HMAS *Sydney* defeated the raiding cruiser SMS *Emden* at the Cocos Islands in the Pacific. Towns also served extensively in the Mediterranean and Adriatic, including engagements at Gallipoli, the two battles of Durazzo, and the Battle of the Strait of Otranto.

Serving as part of the Grand Fleet in home waters, the Towns were extensively engaged in both routine activities and major actions, including the First Battle of Heligoland Bight; the Battle of Dogger Bank; the attempted interception of the raid on Scarborough, Whitby and Hartlepool; and the Battle of Jutland. *Chester* is noted for damage sustained at the Battle of Jutland; it was for his service aboard HMS *Chester* at Jutland that Jack Cornwall was famously awarded a posthumous VC. *Southampton* sank SMS *Frauenlob* in the Battle of Jutland.

The Town Class had several key encounters with submarines and air warfare. In addition to *Falmouth* and *Nottingham* sunk by U-boats, *Weymouth*, *Dartmouth* and *Dublin* were all torpedoed but survived, whilst *Chatham* struck a mine and also survived. HMS *Birmingham* is noted for being the first warship to sink a U-boat, ramming U-15 off Fair Isle.⁵ Various

⁴ After its career in the Second World War, HMS *Warspite* – also a Jutland veteran – was being towed for breaking when it ran aground in Mount's Bay, Cornwall. HMS *Warspite* was almost entirely scrapped *in situ*, but two boilers are said to remain close to St Michael's Mount. The wrecks and hulks of a number of other Jutland veterans from both the British and German fleets are known in UK (especially Scottish) and international waters. There is only one warship that fought at Jutland in preservation, the 'C' Class light cruiser HMS *Caroline*, which survived fortuitously – though with modifications – as a headquarters and training ship in Belfast since 1924.

⁵ *Falmouth* was with *Birmingham* at the time; Rayson states that U-15 attempted to torpedo *Falmouth* but missed before being rammed by *Birmingham*.

Towns – including *Falmouth* – engaged Zeppelins with anti-aircraft fire in the course of their wartime careers, and Towns were also used for mounting aircraft on flying-off platforms mounted over a gun turret: *Yarmouth* was the first cruiser from which an aircraft was to take off, presaging the more general use of reconnaissance aircraft on ships. Several of the Towns had flying-off platforms fitted and used operationally, resulting in some air-to-air successes. Some Towns were also fitted with kite balloons (for spotting) and paravanes (as mine countermeasures).

In sum, the Town Class played a central and active role in RN operations in the First World War. As noted previously – the wreck of HMS *Falmouth* presents the only known physical remains of this important class⁶.

Like many of the other Towns, *Falmouth* itself had an eventful wartime career, principally in home waters in the Light Cruiser Squadrons attached to the Grand Fleet under the command of John D. Edwards.⁷ The Light Cruiser Squadrons comprised 4-6 ships; in *Falmouth's* case, the squadrons were all Towns. From August 1914 *Falmouth* was attached to the First Light Cruiser Squadron based at Scapa Flow and briefly at Lough Swilly. In December 1914, *Falmouth* became the flagship of the Second LCS commanded by Napier attached to Beatty's Battle Cruiser Fleet, still based at Scapa. In March 1915 the Battle Cruiser Fleet – including *Falmouth* as flagship of the Third Light Cruiser Squadron under Napier – moved to Rosyth. Although no longer flagship, *Falmouth* was still in the Third LCS with the Battle Cruiser Fleet at Rosyth when it was sunk in August 1916.

As well as taking part in fleet actions, *Falmouth* was involved in numerous operations individually and in conjunction with other light cruisers from its squadron or other units. For example, *Falmouth* was involved in numerous sweeps to intercept vessels trading with Germany as part of the blockade. These operations started at the immediate outbreak of the war. In August 1914, *Falmouth* intercepted a series of German fishing vessels, inspecting them, removing their crews and sinking them. On 5th August, the first full day of the war, three crew from *Falmouth* were lost from a sea boat and only one was recovered; these two men – Leslie Albert Green and Stanley Gerald Wilson – are probably the first British operational casualties of the First World War. The vessels sunk by *Falmouth* in August 1914 were the trawler ON 10 and drifter ON 510; trawler Ochtum; and the trawlers *Borkum and Hude*. Whilst sinking the trawlers on 23rd August, a dog aboard one of the trawlers was rescued and – named Kaiser Bill – became *Falmouth's* mascot.

HMS *Falmouth's* first major engagement was in the Battle of Heligoland Bight on 28 August 1914. This started as an operation by submarines and destroyers and their supporting cruisers based in Harwich to attack a German destroyer patrol relatively close to the home bases of the German fleet. At a late stage, Jellicoe provided reinforcements from a Battle Cruiser Squadron under Beatty and the First Light Cruiser Squadron under Goodenough. The operation was confused and nearly went seriously awry, but the appearance of the First Light Cruiser Squadron and the Battle Cruiser Squadron resulted in a victory for the Royal Navy. *Falmouth* with *Liverpool*, *Southampton* and *Birmingham* finished off the light cruiser SMS *Mainz*, which sank. In his wartime recollections, Pears (a junior gunnery officer aboard *Falmouth* at the time) implies that *Falmouth* found and was principally responsible for the destruction of SMS *Mainz*, but this does not tally entirely with other accounts. Irrespective,

⁶ Some individual components survive, notably the gun at which Jack Cornwall served from HMS *Chester*, currently displayed at the IWM; and the tripod mast and one gun from HMAS *Sydney*, displayed in Australia.

⁷ Ranks are generally omitted from this narrative as individuals' ranks changed over the period under discussion.

Tyrwhitt – commanding the destroyers – reported ‘the Light Cruiser Squadron appeared, and they very speedily reduced the “*Mainz*” to a condition which must have been indescribable.’ A sequence of photographs taken from one of the Light Cruiser Squadron – possibly *Falmouth* – shows the *Mainz* at close range shortly before sinking. *Falmouth* also engaged another vessel (possibly SMS *Cöln*) briefly, which also sank in the course of the battle.

Falmouth was with *Nottingham*, *Birmingham* and *Southampton* in the effort to intercept the German units that raided Scarborough, Whitby and Hartlepool in December 1914. *Falmouth* was the most northerly of the four, steaming westward on parallel courses. Although *Southampton* spotted and briefly engaged German light cruisers, contact was lost due to a signalling error and a sudden spell of poor weather. What looked likely to be a major engagement dissipated with the opposing forces perhaps only 15 minutes from each other. The failure of the interception was at some cost to the Admiralty in view of the public response to a raid on the UK mainland that the Royal Navy appeared incapable of preventing.

Falmouth became Napier’s flagship of the Second Light Cruiser Squadron on 28 December 1914. At the time of the Battle of the Dogger Bank in January 1915, *Falmouth* was attached to the Battle Cruiser Fleet but at Cromarty. The First Light Cruiser Squadron rather than the Second accompanied the Battle Cruisers that brought the German units to action. *Falmouth* (and presumably the rest of the Second Light Cruiser Squadron) seems to have been despatched subsequently: in his diary, Stoker 1st Class Victor Rayson notes on 24 January ‘steaming Full Speed for Heligoland had Signal 10 am to say our Battle Cruisers were in Action’. *Falmouth*’s log notes that *Falmouth* made a course to join the First LCS and at 4pm took station 10 (?cables) astern of HMS *Lion* as part of a defensive screen, as *Lion* had been badly damaged and was under tow.

Falmouth became Napier’s flagship of the Third Light Cruiser Squadron in March 1915, based with the Battle Cruiser Fleet in Rosyth. *Falmouth* was still the flagship of the Third LCS at the Battle of Jutland on 31 May / 1 June 1916. *Falmouth* and the Third LCS – including the seaplane carrier *Engadine* – left Rosyth as part of Beatty’s Battle Cruiser Fleet, and were providing a screen to the south east of the Battle Cruisers when contact with German forces was first made at about 1420. After repositioning to the north of the Battle Cruisers, *Falmouth* and the Third LCS, together with the First LCS, shadowed four German light cruisers (Second Scouting Group – SMS *Frankfurt*, *Elbing*, *Pillau* and *Wiesbaden*) during the ‘run to the south’, attempting to engage the light cruisers at about 1630. Shortly after 1530, the Second Light Cruiser Squadron, to the south of the Battle Cruisers, saw the main force of the German High Seas Fleet heading north. This prompted the Battle Cruisers to turn 180 degrees to draw the German Fleet towards the Grand Fleet in what became known as the ‘run to the north’: *Falmouth* and the Third LCS – seeing the Battle Cruisers now heading towards them, also turned in order to stay ahead. Napier reports seeing ‘the wreckage of a sunken ship’ during the run to the north, which may have been the remains of the *Indefatigable* or the *Queen Mary*, which had both exploded during the run to the south.

At 1733 *Falmouth* was the first to sight the cruisers screening the Grand Fleet, enabling the two forces to combine over the next hour while engagements continued⁸. The complex movements of the deployment at this stage are known as ‘windy corner’: Napier reports

⁸ It is at this point that *Chester* (also a Town Class) screening Battle Cruisers in the van of the Grand Fleet was closely engaged by the German Scouting Groups, causing significant damage.

'Here we were much restricted for room'. The combined force now formed a single line, crossing the T of the approaching High Seas Fleet: HMS *Falmouth*, leading the Third LCS, was at the very front of this unparalalled force. Napier reports engaging a German light cruiser 'I think *Elbing*' but probably *Wiesbaden*; *Falmouth* fired a torpedo. Napier reports that fire then shifted to two other light cruisers, which turned away. The Third LCS then engaged two detached German battle cruisers heading east, thought by Napier to be *Derfflinger* and possibly *Lützow*. Napier reports that the Third Battle Cruiser Squadron joined the fire on *Derfflinger* and *Lützow* while the Third LCS continued: 'No other target presenting itself, fire was directed at the leading Battle Cruiser ... and fire was returned by the Battle Cruisers with 6-inch'. Napier continues: '*Falmouth* and *Yarmouth* both fired torpedoes at her and it is beleved that *Falmouth's* hit, as an underwater explosion was distinctly visible'. However, 'About 6.30 pm *Invincible* [leading the Third BCS firing at *Derfflinger* and *Lützow*] blew up ... My impression is that it was the result of a shot into her magazine. There was certainly no sign of water in the explosion'. *Lützow* had itself been severely damaged and subsequently sank. Napier notes ' the enemy Battle Cruisers turned away and we were left without an enemy to engage'. At about this time the High Seas Fleet had turned away; it repeated the manoeuvre turning back towards the Grand Fleet at around 1900, at which point the Third LCS were joined by *Canterbury*, staying ahead of the Battle Cruisers and to the west of the German forces. The German forces then staged a torpedo attack using destroyers accompanied by the Battle Cruisers of Scouting Group 1 in what became known as the 'death ride', while the main force of German ships turned back to the south under the cover of a smoke screen. Later, Napier reports as follows: 'Five enemy cruisers were sighted W. by N. and fire was opened at 8.18 pm ... the enemy replied but their fire was erratic ... at 8.38 we lost sight of the enemy in the mist, and fire was checked'.

Napier then reports that 'we then found ourselves drawing across the bows of the enemy' s Battle Cruisers , who I think were being engaged by our Battle Cruisers, and we turned about W.S.W. and then S.S.W. to regain our position ahead of our Battle Cruisers'. *Falmouth* stayed in the van of the Grand Fleet as it headed south during the night, whilst the High Seas Fleet managed to turn west through the British lines and away. Being in the van, *Falmouth* missed the sometimes intense fighting of the night action. However, Napier reports that they did drive off a Zeppelin at 0315 with shrapnel fire. Although they were unable to bring it down, Napier notes a subsequent report that L.24 'in a badly damaged condition, succeeded in reaching the coast ... but then came down, and broke in two places'.

Napier concludes his account by noting that 'although the Squadron was under fire during the afternoon and evening of the 31st May, no ship received any direct hits except *Falmouth* whose fore top communication were cut. Ships were occasionally struck by shrapnel and small pieces of shell. There were no casualties'. According to Rayson, the damage to *Falmouth* occurred in the engagement with *Derfflinger* and *Lützow*: 'we fired two or three broadsides at her and in response she fired at us and only one of the shells hit us and that was our foremast, breaking the two voice pipes on a level with the forebridge but not much damage done to the mast. One boy was struck on the arm by a splinter but was not hurt much'. Rayson also notes that during the action, *Falmouth* 'fired about 300 rounds of ammunition and two torpedoes'.

After Jutland, on 19 June – anticipating a major refit – Napier transferred his flag to *Chatham* whilst *Falmouth* went to Palmers at Hebburn on the Tyne. *Falmouth's* next major engagement was the one in which the ship was torpedoed and subsequently sank.

Loss

The loss of HMS *Falmouth* draws attention to a relatively little-known action in August 1916 that is nonetheless regarded as a turning-point in the First World War at sea. Thereafter, neither fleet sought to bring about a fleet action. The circumstances of *Falmouth's* loss foreshadow the role of aircraft and submarines in eclipsing big gun warships in naval doctrine: *Falmouth* was returning to its station after attacking a Zeppelin and was sunk by torpedoes from a U-boat. Following the action of 19 August an engagement such as Jutland – the fundamental expectation up to that point from the perspectives of both Britain and Germany but also all of the major naval powers – would not occur again either in the First or the Second World War. As well as strategic changes, the wreck of HMS *Falmouth* also represents the specifics of its loss, notably the persistent – and almost successful – effort to save the ship and obtain safety. The prolonged survival of *Falmouth* despite four torpedo strikes reflects the strength of the Town Class, including all the other Towns that were torpedoed or mined and in most cases survived. The wreck of HMS *Falmouth* is also important for its commemorative value in respect of 12 crew that died, including eight for whom the wreck itself may be the last resting place.

Falmouth sank on 20 August 1916, having been torpedoed during a fleet action that largely took place on 19 August. The action on 19 August was a further instance of the German High Seas Fleet trying to draw out components of the Grand Fleet, in this case through a raid planned on Sunderland. The Grand Fleet, informed by wireless intercepts, knew of the German activity and sought to bring the High Seas Fleet to action with the Grand Fleet as a whole.

The High Seas Fleet had planned for the operation by stationing U-boats in lines across the anticipated route of units of the Grand Fleet: off the Tyne; off Flamborough; in the southern North Sea; and near Dogger Bank. The High Seas Fleet withdrew without a major engagement taking place, but the U-boat lines caught first *Nottingham* and then *Falmouth*. These were the only two of the 21 Town Class to be sunk throughout the class's history. Although there was no major engagement on 19 August, it was to prove a turning point. The hazard from torpedoes and mines was considered too great a risk to major warships, and neither side sought again to bring about a fleet engagement in the North Sea. Having brought U-boats back into a fleet role in summer 1916, Germany switched emphasis back to attacks on merchant ships as the only way to combat Britain's maritime supremacy.

The specific circumstances of *Falmouth's* loss are as follows. *Falmouth*, still with the Third LCS but no longer flagship, deployed with *Chatham*, *Chester* and *Birmingham* with the Battle Cruiser Fleet. *Falmouth* attacked a Zeppelin at 1615 on 19 August and was just regaining its station at about 1640 when a spread of three torpedoes was seen. At the time *Falmouth* was about 60 nautical miles east of Scarborough. The first torpedo missed as a result of *Falmouth's* evasive action but the second and third hit the stem and stern respectively. Two men – Maurice Edward Coe and William Howells – were killed in the initial attack and were buried at sea. The torpedoes had been fired by U-66, commanded by Thorwald von Bothner.

Falmouth's engines were stopped and the boats cleared. The engines were then re-started and *Falmouth* made 3 knots. However, five officers and 340 men were taken off, leaving a skeleton crew to work the engines, four of the guns and to make repairs. During the transfer of men to the trawler *Cooksin*, one man – Walter James Mallaby – fell between the

side of the ship and the trawler and was lost. A further man – Norman Stanley Fry – died of his wounds aboard *Cooksin* and was buried at sea.

Two further torpedoes were seen approaching *Falmouth* at 1710 and 1830, while the men were being transferred to *Cooksin*. Both torpedoes passed beneath the ship.

During the night, *Falmouth* was able to make 2 knots towards the coast. Two attempted tows by accompanying destroyers – which had been dispatched to screen *Falmouth* – both failed; tugs arrived in the morning but they were only able to achieve 2-3 knots.

At midday on 20th August, heading for safety in the Humber but still about 30 nautical miles due east of Scarborough, *Falmouth* was hit by two further torpedoes. One hit the stern and the other hit between Nos. 2 and 3 boiler rooms. Eight men were killed in No. 3 stokehold: Collier; Harner; James; Rawbone; Hewitt; McWalter; Sanderson and Jones. The torpedoes had been fired by U-63 commanded by Otto Schultze.

Falmouth remained afloat and under tow, but a slight list became a sudden list and Edwards, the captain, was of the view that sinking was imminent. The ship was abandoned and the remaining officers and crew were picked up. A third tug arrived and the speed increased to 4-5 knots. A fourth tug arrived. Although settling slowly the ship remained buoyant and it was hoped that the Humber could be reached.

At about 1720 a volunteer party re-boarded the ship to search for the eight missing men 'but nothing was found'.

Falmouth was towed clear of the War Channel and was proceeding along the 10 fathom line when, at 2000 *Falmouth* took a heavy list to starboard. The tugs were ordered to head west to attempt to beach the ship but *Falmouth* sank by the stern, to the south of Bridlington.

In addition to the 12 men killed, 13 were wounded sufficient to need hospital treatment.

Edwards included the following comment in his report, after noting the 2-3 knot speed achieved by the first two tugs: 'I cannot help thinking that if more powerful tugs had been available the ship would have been brought safely into harbour'. *Falmouth* had certainly proved a strong ship. In the damage assessment following the initial two hits, Edwards noted: 'the remainder of the ship was water-tight and all bulkheads held well, this I attribute largely to the good construction of the ship, the attention paid to the care and maintenance of water-tight fittings in general and to the fact that permanent shores were fitted, only one of which was displaced by the explosions'. *Falmouth* took four torpedoes before sinking, and even then after a further eight hours. *Nottingham* too had survived the first two torpedoes and sank only after a third, but with the loss of 39 men. The strength of the class is underlined by the fact that at various points in their career *Weymouth*, *Dartmouth* and *Dublin* were all torpedoed – whilst *Chatham* struck a mine – and all survived.

Both Napier and Jellicoe formally recorded that Edwards appeared to have done all that was possible to save his ship. The volunteer party who returned to the ship to look for those missing was particularly commended. Napier further recorded 'That the Officers mentioned should have distinguished themselves is what I should have expected from my experience of them when my Flag was in *Falmouth* ... and the men named deserve great credit'.

The wreck is situated on England's North Sea coast just to the south of Flamborough Head, in the theatre in which *Falmouth* was active throughout the war. Its location is a direct

consequence of the efforts to save the ship as a result of it being attacked in the course of the action of 19 August. The attacks by U-boats were themselves a direct consequence of their disposition in lines – including the line off Flamborough – as a ‘trap’ as part of the German battle plan. In noting that ‘the ship was towed clear of the war passage’ Edwards demonstrated further responsiveness to the strategic geography of the North Sea in the decisions that resulted in the wreck’s location.

Survival

The wreck of HMS *Falmouth* has been subject to extensive salvage in a series of operations starting straight after the vessel’s loss. The wreck is reported as being dispersed in 1922 but was ‘rediscovered’ and subject to further salvage in the 1930s. Since the 1970s there has been further salvage, including the reported use of explosives, plus ‘rummaging’ by recreational divers. Despite all this activity, it appears that the wreck retains a fair degree of coherence and there are identifiable elements that may have evidential as well as illustrative value. References to the wreck becoming partly buried in clay immediately after sinking, and the recovery of organic and relatively fragile items, suggests that parts of the wreck may survive quite well. Human remains may be present.

Salvage operations on the wreck of HMS *Falmouth* started immediately after its loss. An Admiralty Salvage Officer (Gracey, RNR) was dispatched on 21st August, the day after the sinking. It was established that salvage of the vessel as a whole was not possible, so arrangements were made to salvage the guns and other items. Bad weather intervened but the first gun was recovered on 28 August. Operations continued until 11 October at which point persistent bad weather had already intervened and salvage was abandoned. In the course of the operations, seven of the eight 6-inch guns were recovered complete with mountings and shields (but not pedestals), plus the 3-inch High Angle (anti-aircraft) gun with pedestal and two searchlights. The eighth 6-inch gun was said to have fallen from its pedestal and been buried by sand, though a further reference refers to it being under the casing and pushed further down by the increasing list of the wreck. At this point the wreck is described as being heeled over on its beam ends, with a list of 130 degrees to starboard – a sketch confirms this showing the wreck on its side with the bows to the south west. The highest point of the wreck is said to be 18 ft below low water springs. References are made to the wreck becoming buried by 10 ft into the clay, a sample of which was identified as stratified Boulder Clay by the Director of the Geological Survey and Museum of Jermyn Street London. Gracey notes that the shell plating on the port (uppermost) side had started at the butts and seams and that the deck planking on the port side was opening out. Gracey also gives his view that the wreck may roll right over and partially break up in the winter gales, and that an examination might be made in the spring regarding the salvage of propellers and the necessity of blowing up the wreck.

Further salvage operations have taken place on the wreck of HMS *Falmouth*, though a clear time-line has not yet been established.

The survey history included within the UKHO Wreck Index indicates that the wreck remained buoyed until it was dispersed in 1922. There is no further reference in the survey history until 1974.

The wreck was apparently rediscovered in the early 1930s by RAF personnel attached to RAF Catfoss (near Hornsea) who were based at Bridlington to monitor the offshore bombing

ranges. The wreck was discovered when a lobster pot was recovered containing rust, which led to a diving inspection and subsequently to salvage operations by John Deheer Ltd.

The wreck was first dived recreationally in 1973 by local divers.

The UKHO survey history describes the wreck as 'very broken up, barely recognisable as a ship' in 1981. In 1985, divers from a fishing vessel – and two explosions – are noted.

The wreck is quite well known to recreational divers. One website refers to the wreck being 'so broken up due to a salvage operation using 4 tons of gelignite!'. It is also described as a 'Fascinating dive for novices and rummagers'⁹.

A range of non-ferrous artefacts are on display at Bridlington Harbour Heritage Museum, on loan from Mike Radley. The database maintained by the Receiver of Wreck includes seven droits attributable to HMS *Falmouth* (plus an anchor thought to be from a dive boat); the Receiver is also aware of a few other finds not in the database because they precede the reporting/recording system. As well as non-ferrous metal, recovered artefacts include organic material, notably elements of a sailor's uniform.

Underwater video and still photographs by divers¹⁰ shows extensive debris including identifiable components such as hull plates and machinery, including elements of Yarrow Small Tube boilers. Although the turbine room has been heavily salvaged, some elements survive that – according to preliminary enquiries – may be significant in relation to the development of marine turbines in warships.

An initial view of a recent high-resolution multibeam survey commissioned by the Maritime and Coastguard Agency supported by Historic England indicates that the wreck retains a fair degree of overall coherence. The lower part of the hull appears to be intact and many of the distinctive Yarrow Small Tube boilers are visible in the data.

The wreck does not appear to be especially fragile or vulnerable. There is a degree of inherent fragility in the long term arising from the majority of the remains being ferrous, but as most of the wreck above bed level has already collapsed (probably as a result of natural processes exacerbated by dispersal and salvage interventions) then further degradation of this sort may be minimal. 'Rummaging' by recreational divers may continue to cause localised damage, especially if organics or other sensitive materials are disturbed; and if recovered artefacts are not reported under the Merchant Shipping Act 1995 then they will be lost also. Video of the wreck shows the presence of both commercial fishing gear (pots) and sea angling gear; the videos show that the wreck is well-populated with lobsters, crabs and a variety of fish. It is understood that most potting takes place near the wreck rather than on the wreck, as the wreck poses a risk to the recovery of gear. Sea angling is relatively benign in terms of the survival of the wreck, though lost gear can present a hazard to divers. Both the presence of static gear and sea anglers may inhibit investigations or access, but these activities are of limited duration and can be addressed through contact locally.

The multibeam data suggests the survival of elements relating to *Falmouth's* construction, motive power and life on board. Most of the main armament was removed, but it seems

⁹ <http://www.ukdiving.co.uk/wrecks/wreck.php?id=193>; <http://www.divernet.com/100-best-uk-wreck-dives/p301908-the-hms-Falmouth-78.html>

¹⁰ James Hartley uploaded 2014 <https://www.youtube.com/watch?v=hy9Ln8xwc80> ; Colin Mariott uploaded 2007 <https://www.youtube.com/watch?v=54xvv7F1gNA> ; Mike Radley 2015.

possible that the remaining 6-inch gun is buried beneath the wreck, which is likely to be regarded in itself as an important artefact. The material remains are likely to have evidential value relating to the design and construction of a dreadnought-era warship, and historical (illustrative) value relating to the numerous aspects of England's history in the First World War at sea in which HMS *Falmouth* was directly involved. It is possible that the material remains may also have evidential value in relation to the cause of loss, namely four torpedo hits on the starboard side, possibly at a level on the hull that still survives on site.

It should be noted that there is no reference to the recovery of the bodies of the eight men killed when *Falmouth* was torpedoed again at 1200 on 20 August. It is possible that there are human remains still present on the wreck. Irrespective of the presence of human remains, the surviving remains of the wreck will have communal (commemorative) value for those that lost their life in the course of *Falmouth's* loss, and perhaps more generally for those that served on HMS *Falmouth* and for those who lost their lives in the engagements in which *Falmouth* took part, including Jutland.

The wreck plainly has a broader social value to a number of groups and individuals, including local divers, people with family connections, and people who research and collect First World War medals.

Investigation

There are extensive documentary archives associated with HMS *Falmouth* and an assemblage of recovered artefacts. The recent multibeam survey presents a solid foundation for further field investigation, digital access and diver trails. The wreck has great potential for further investigation and for public engagement.

HMS *Falmouth* has not been subject to archaeological investigation, other than in the course of the predominantly desk-based study that has informed this Statement of Significance. However, the wreck has great potential both for investigation and for public engagement; and indeed for public involvement in investigation.

The wreck is relatively accessible. Underwater video and stills photography and an initial view of a recent multibeam survey indicates the presence of extensive and reasonably coherent remains, notwithstanding previous major interventions for salvage and dispersal. The wreck is suitable for the deployment of various remote and diver-based archaeological techniques.

A number of artefacts have been recovered from the wreck of HMS *Falmouth* at different points and could be further investigated as a collection. In addition, *Falmouth's* steam cutter, salvaged at the time of loss and still in preservation, is awaiting restoration.

The Imperial War Museum also has a large model of HMS *Falmouth* in its collections; this model is thought to be the builder's model presented to the King that subsequently formed part of the initial collection of the IWM. The model was restored in 1979 and is being recorded by 3D digital scanning by Historic England.

There do not appear to be any surviving original plans of HMS *Falmouth* (other than a rigging sketch) but the NMM holds a complete set of large scale as-built plans of *Falmouth's* sister ship *Weymouth*. NMM also holds two volumes of the 'Covers' for the *Weymouth* Class, which are the bound collection of correspondence and drawings relating to construction and

trials. Plans illustrating the design sequence of the Towns are also held by the National Archives.

There are extensive documentary records (documents; photographs) associated with HMS *Falmouth*, though relatively dispersed amongst the collections of the Imperial War Museum, National Archives, National Maritime Museum, National Museum of the Royal Navy, the Admiralty Library (Naval Historical Branch), the Liddle Collection of the University of Leeds, and undoubtedly in other collections not yet accessed. Records of *Falmouth's* service history encompass both the ship itself and the operations in which it was engaged, including the Battle of Jutland. These include documents forming part of the collection of Trevelyan Napier's private papers in the IWM. Unofficial documents include individual accounts and photographs relating to *Falmouth* by Bickmore, Combe, Edwards (photographs), McAlpine, Nicholls, Pears, Watson and Rayson.

As the wreck has a distinctive history, is relatively accessible, reasonably coherent and is accompanied by a substantial array of documentary and artefactual material, then it has considerable potential for public engagement. Such public engagement could use various aspects of *Falmouth's* build, use and loss to address broader topics in the history of the First World War at sea. Because of its location, there is particular potential to engage visitors to the coast and a range of recreational sea-users as well as recreational divers. Engagement could encompass involving the public in further investigation of HMS *Falmouth* through family history, personal research and/or community archaeology on site.

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