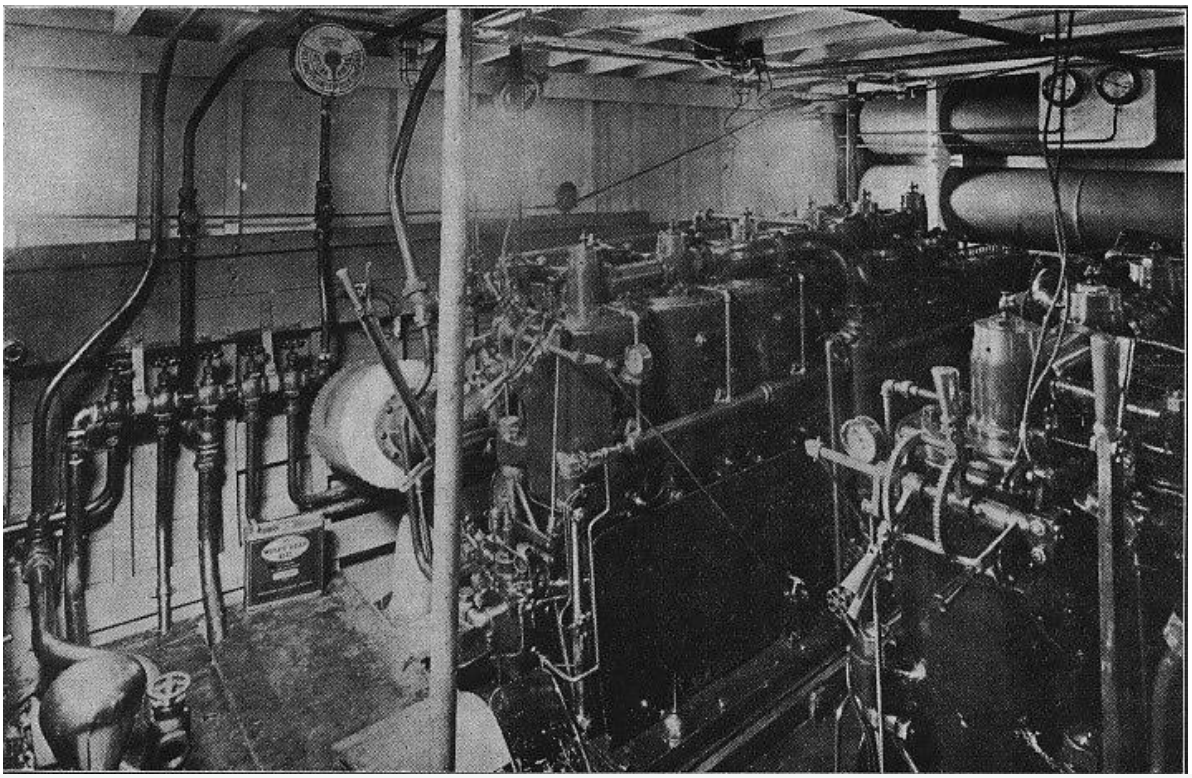
Motor Launches



The engine room of a motor launch

Motor Launches were a product of the war, designed to meet the demand for higher numbers of vessels to sufficiently protect the UK coastline. They were high speed, hardy, simple, and effective. This article explores their origins, construction, and some of their stories. This article has been researched and written by MAT volunteer Andrew Daw.

Forgotten Wrecks of the First World War

Research Report

During the Maritime Archaeology Trust's Heritage Lottery funded Forgotten Wrecks of the First World War project, scores of volunteers undertook online research into vessels that were lost off the south coast of England during the First World War.

Their findings were used to populate the project database and contributed to Site Reports. Both are publicly available via the Forgotten Wrecks website.

This Research Report was undertaken by one of our volunteers and represents many hours of hard and diligent work. We would like to take this opportunity to thank all our amazing volunteers.

Maritime Archaeology Trust

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FIRST WORLD WAR CENTENARY

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The Story of His Majesty's Motor Launches

From http://navymuseum.co.nz/worldwar1/

The Beginning

By early 1915, it was becoming clear that the naval war was not just about large fleets of capital ships and the potential for climatic battles across the waters of the North Sea, the Atlantic or the South Western Approaches. The advent of the submarine and its naturally covert deployment brought naval warfare to the coastal waters of Great Britain, threatening ports, seaways, local traffic and the economic issues of inter-port transport and fishing. It was also becoming clear that the vessels of the Auxiliary Patrol, at that time requisitioned trawlers, smacks, steamers, colliers et al were not sufficient in number, location or capability to protect the coastline and take the offensive in the naval battle effectively.

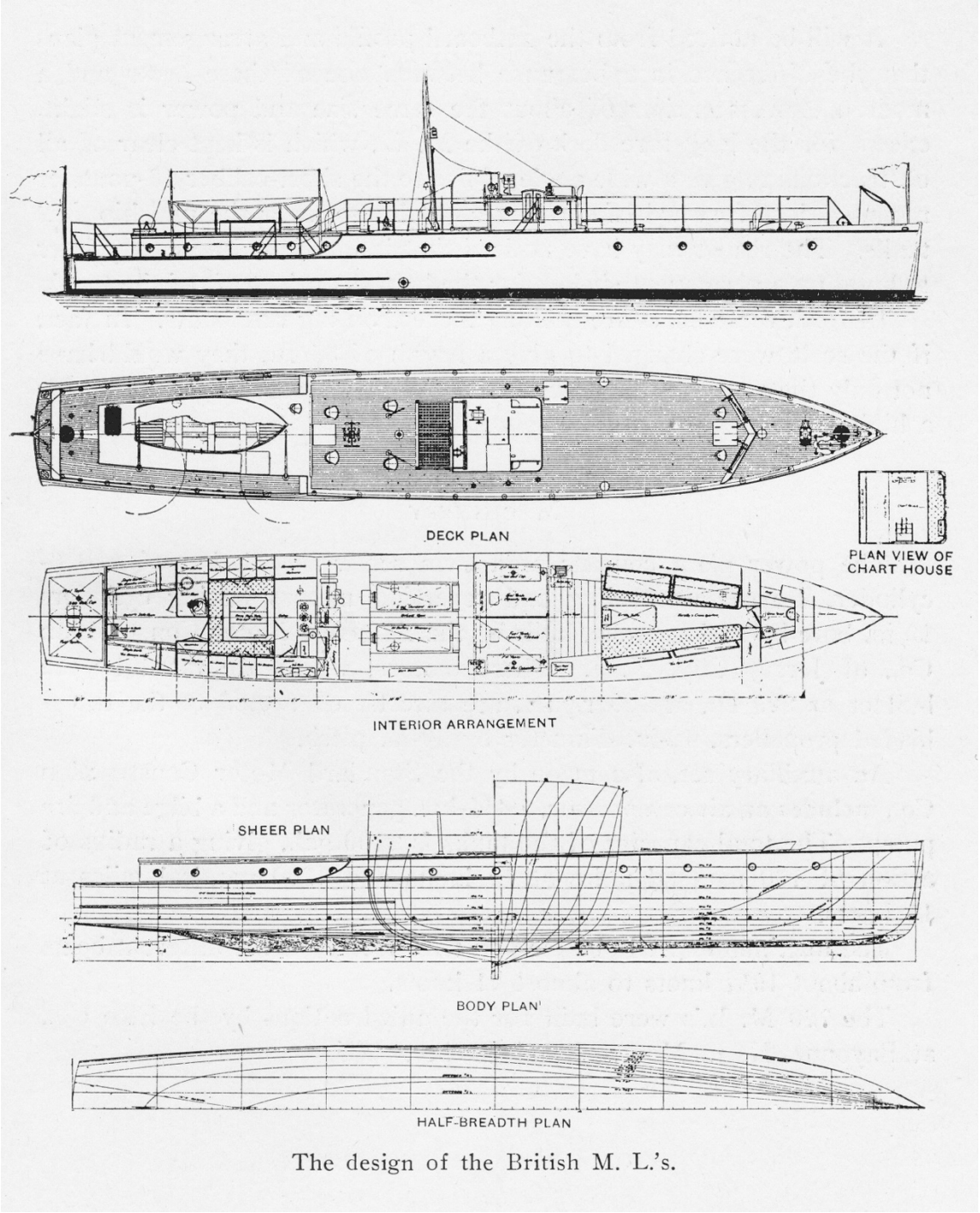
With this in mind a senior delegation from the UK Government and Royal Navy met with US engineers and boat builders in New York in February 1915 with the intention of defining and procuring vessels for the Auxiliary Patrol to counter the growing menace. Such was the urgency – and perhaps on-going and detailed co-operation – that the contract for the first batch of boats was signed on 9th April 1915 and by 1st May 1915, the Electric Launch Company (Elco) had the frames of the first boat erected. Incidentally (and perhaps crucially for UK resolve), on the 1st May 1915, the *Lusitania* set sail from New York and a week later was lost to a submarine attack, an event which prompted the UK Admiralty to revise the order, adding an additional 500 vessels to the contract. Thus, Elco were contracted to provide 550 motor launches for delivery by November 16th 1916 (for a total of $22 million dollars (£490 million in today's money) or about £8400 per boat (£890,000 today)).

The Royal Navy placed a number of stringent conditions on the design and build of the launches. Amongst these were a minimum speed when fully loaded of 19 knots, combined with a cruising radius which demanded a fuel capacity of 2,000 gallons (implying a weight of 12,000 pounds just for fuel). In seaworthiness term, the RN required that the boat should be able to maintain station in any weather. Further, the launches were to have the ability to accommodate a deadweight of 20,000 pounds (which is equivalent to the weight of the guns, ammunition, water and supplies of a patrol). In order to achieve the contracted delivery times (and cost), there was a need to standardise construction and so the design details had to be kept simple; for example there was no double planking of the hull for strength. Recognising the issues of transport and delivery, the RN also required that the boats had to be of a size "to fit four at a time on the deck of a steamer for transport across the Atlantic."

Ultimately, three batches of vessels were completed;

Batch 1 (ML 1 - 50)

- 34 tons.
- Dimensions : 75 x 12 x 3.75 feet.
- Guns: 1–3 pdr. or 2 pdr. AA. and/or 1 or 2 M.G. or Lewis guns.
- Machinery: 2 sets of standard petrol motors (apparently six cylinder).
- B.H.P. (combined) 440–450 = 19 kts.
- Petrol: about 1650 gallons.
- Complement, 8. (note: Elco indicates eight crew and two officers.)



From *The Cinderellas of the Fleet (Nutting, 1920)*

Batch 2 (ML 51 – 500)

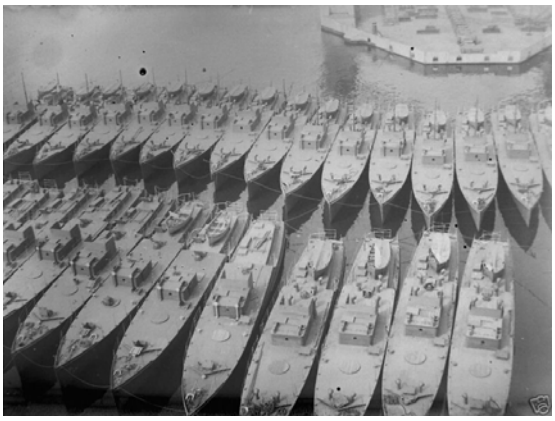
- 37 tons.
- Dimensions : 80–88 x 12' 2" x 3' 10".
- Guns : 1–3 inch AA. or lesser calibre of AA. and other types.
- Machinery: 2 sets of Standard petrol motors (apparently six cylinder).
- B.H.P. (combined) 440–450 = 19 kts.

- Petrol: about 1850 gallons.
- Complement, 9. (again perhaps 8 + 2 officers)

Batch 3 (ML 501 – 580) – built in 1918, limited information available and perhaps not for the RN.

- About 30-35 tons.
- Dimensions : 80-85' x 12-13' x 4-5'. (not very specific)
- Guns : 1–75mm. field gun converted to naval mounting. Two depth charges.
- Machinery: 2 sets petrol motors giving 20–22kts nominal, 19 kts about best maximum at sea for any length of time.
- Radius of action: about 500 miles at full speed and 1000 miles at 12–15kts or less.
- Fuel: about 2000 galls. petrol
- Complement 8-10.

The US administration demanded that the strict neutrality of the United States be maintained and although the first batch of 50 vessels was built at the Elco yard in Bayonne, New Jersey, their topsides were painted white (as opposed to grey) and were sailed on their own bottoms to Halifax for delivery to the UK. Subsequently, the boats were assembled in Canada through two yards: Canadian Vickers of Montreal (ML 51 – 260) and Davie Shipbuilding Lauzon, Quebec (ML 262 – 550), although all the components of the boats were crafted in the U.S. and shipped to the yards for final assembly. The pressure of delivery schedules was such that the usual Elco supplier of bronze component assemblies such as rudders and quadrants was unable to deliver the required level of mass-production. Instead, the Tiffany studios in New York, producers of bronze sculpture and lighting fixtures, was contracted and successfully delivered everything demanded of them.



1: Awaiting shipment to England (from http://www.motorlaunchpatrol.net/)

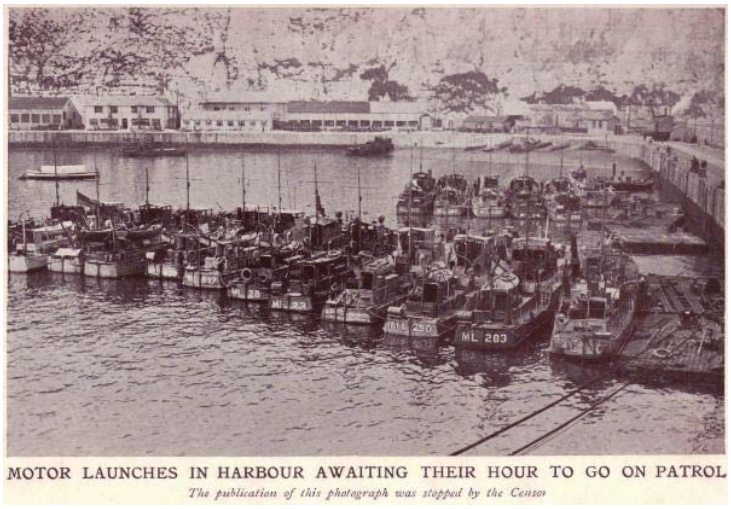
Delivery of these 550 motor launches was achieved via 130 transport ships, none were lost to mishap during the Atlantic crossing and all 550 were delivered in 488 days! It is noted in *The Auxiliary Patrol* that MLs 1, 2, and 3, were commissioned at Portsmouth by October 14, 1915. An additional 30 or so MLs were delivered to the Royal Navy later in 1917 making the total 581. Within these totals, some 40 craft were transferred to the French Navy.

Elco also sold at least 105 MLs to Italy and some may have made it into the Russian navy as well. Elco eventually built 701 MLs with at least two being deployed by the US Navy and many finding their way into civilian hands after the war.

Armaments were typically installed by the Royal Navy after shipment to England as part of the general fitting out process when the boats were being commissioned.

At War

Following commissioning, work-up and arming, the motor launches were deployed in flotillas of six craft throughout the various theatres of war - the English Channel and North Sea (primarily based in Dover, Harwich and Scapa Flow with numerous smaller ports having at least one ML flotilla), Ireland and in French ports such as Dunkirk; in the Mediterranean, ML flotillas ranged from Gibraltar to the Adriatic and White Sea, while further east flotillas could be found in Alexandria and Port Said, patrolling the Suez Canal, Beirut and Tripoli. There was even a flotilla on the West Indies station!



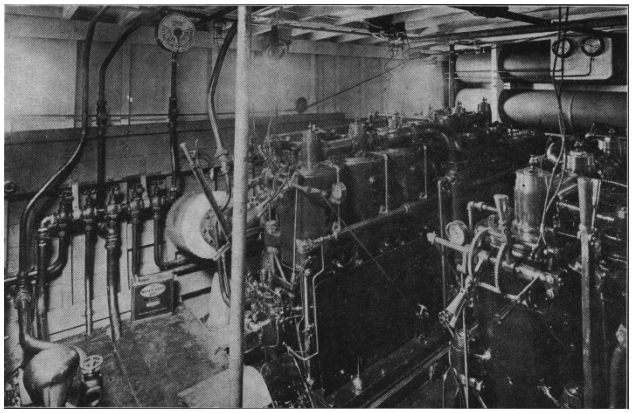
MOTOR LAUNCHES IN HARBOUR AWAITING THEIR HOUR TO GO ON PATROL
The publication of this photograph was stopped by the Censor

2: A photograph of Motor Launches at Dover
(stopped by the censor (from http://www.motorlaunchpatrol.net/))

In service, an ML complement comprised two officers, two motor mechanics two leading seaman and four seamen. One of the seamen was detailed as the cook and each ML had 2 seamen trained in the use of the hydrophone. Most of the officers and motor mechanics were from the Royal Naval Motor Boat Reserve.

In a vessel of this size, space was at a premium and facilities were sparse. The level of equipment on board was significant and the following pictures highlight typical installations and ML equipment.

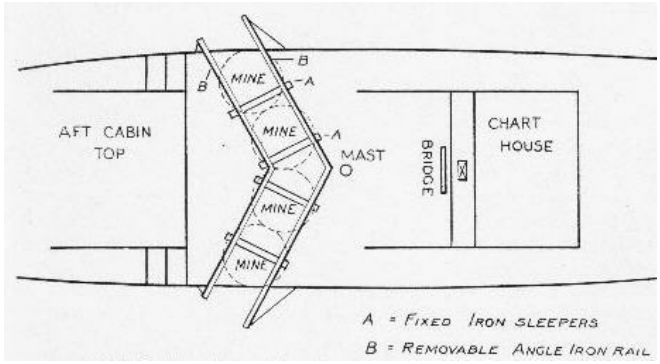
3: Officer's cabin looking aft. *Russell Odell Photo Album*



5: Engine room looking forward and to port. *The*

British M.L.s (Author's Private Collection; Jeffrey Charles)

4: Mess room table and C-Tube hydrophone head. *Russell Odell Photo Album*



6: Mine-laying rails, *(Nutting, 1920)*

7: ML's 13-Pounder Gun. These 13-pounders were originally mounted in MLs but afterwards removed, (Keeble Chatterton 1923).

The Motor Launches and their crews saw extensive service throughout their deployments and there are many occasions of valour, decorations and mentions in despatches, including the award of a Victoria Cross to Lieutenant Percy Thompson Dean, R.N.V.R. (Motor Launch 282) following the Zeebrugge raid in April 1918.;

"For most conspicuous gallantry. Lieutenant Dean handled his boat in a most magnificent and heroic manner when embarking the officers and men from the blockships at Zeebrugge. He followed the blockships in and closed "Intrepid" and "Iphigenia" under a constant and deadly fire from machine and heavy guns at point blank range, embarking over 100 officers and men. This completed, he was proceeding out of the canal, when he heard that an officer was in the water. He returned, rescued him, and then proceeded, handling his boat throughout as calmly as if engaged in a practice manoeuvre. Three men were shot down at his side whilst he conned his ship. On clearing the entrance to the canal the steering gear broke down. He manoeuvred his boat by the engines, and avoided complete destruction by steering so close in under the mole that the guns in the batteries could not depress sufficiently to fire on the boat. The whole of this operation was carried out under a constant machine-gun fire at a few yards range. It was solely due to this officer's courage and daring that M.L.282 succeeded in saving so many valuable lives."

Two Victoria Crosses were awarded following the Ostend Raid in May 1918 to Lieut. Geoffrey H. Drummond, R.N.V.R. and Lieut. Roland Bourke, D.S.O., R.N.V.R.

"The former "*volunteered for rescue work in command of M.L. 254. Following "Vindictive" to Ostend, when off the piers a shell burst on board, killing Lieutenant Gordon Ross and Deckhand J. Thomas, wounding the coxswain, and also severely wounding Lieutenant Drummond in three places. Notwithstanding his wounds he remained on the bridge, navigated his vessel, which was already seriously damaged by shell fire, into Ostend harbour, placed her alongside "Vindictive," and took off two officers and thirty-eight men some of whom were killed and many wounded while embarking. When informed that there was no one alive left on board he backed his vessel out clear of the piers before sinking exhausted from his wounds. When H.M.S. "Warwick" fell in with M.L. 254 off Ostend half an hour later the latter was in a sinking condition. It was due to the indomitable courage of this very gallant officer that the majority of the crew of the "Vindictive" were rescued.*"

Lieut. Bourke, D.S.O., R.N.V.R. "*volunteered for rescue work in command of M.L. 276, and followed "Vindictive" into Ostend, engaging the enemy's machine guns on both piers with Lewis guns. After M.L. 254 had backed out Lieutenant Bourke laid his vessel alongside "Vindictive" to make further search. Finding no one he withdrew, but hearing cries in the water he again entered the harbour, and after a prolonged search eventually found Lieutenant Sir John Alleyne and two ratings, all badly wounded, in the water, clinging to an upended skiff, and rescued them. During all this time the motor launch was under a very heavy fire at close range, being hit in fifty-five places, once by a 6 in. shell - two of her small crew being killed and others wounded. The vessel was seriously damaged and speed greatly reduced. Lieutenant Bourke, however, managed to bring her out and carry on until he fell in with a Monitor, which took him in tow. This episode displayed daring and skill of a very high order, and Lieutenant Bourke's bravery and perseverance undoubtedly saved the lives of Lieutenant Alleyne and two of the "Vindictive's" crew.*"

Within the primary source for this article (http://www.motorlaunchpatrol.net/), there are many superb cross references to other publications, reminiscences, books articles and photographs. In one of these "The Motor Launch Patrol", Gordon Maxwell, Lieut., RNVR recounts his life in the Motor Launch Patrol during the First World War (commanding ML 314). He includes numerous humorous and horrifying anecdotes, provides insights into little details of life aboard, and generally pulls the reader into the daily life of an RNVR officer during the war. Clearly the anticipation of action, the boredom of inaction, the tribulations of weather and the achievements of success all bring rich emotions and these are captured within his text. One of the achievements of success was the awarding of salvage money for captured vessels and several crews received payments for their endeavours in both the Home Waters and the Mediterranean.

In war, ships and lives are lost and the Motor Launches within the Auxiliary Patrol were not immune to these losses. An all wooden vessel using petrol as a fuel (albeit potentially 'cut' with kerosene to reduce the flammability) retains a very high risk of fire both as a result of damage and accident. Several vessels were lost to fires in ports, harbours and shipyards, while others were lost to storms as well as enemy action. In total, records seem to suggest that 24 MLs were registered as war losses (extracted from Jane's Fighting Ships © for 1919).

Post War

In 1919, after the armistice, the Royal Navy sent flotillas of MLs into Europe as part of the occupation and reconstruction (The Rhine Patrol Flotilla). The UK also quickly became involved in the ongoing revolution in Russia and a number of MLs were deployed to Russia in company with other craft of the Royal Navy. Others were purchased by the fledgling Irish Free State for use in patrolling home waters.

Even at this time, the Motor Launches and their still largely RNVR crews were adventurous and a Polish article (http://facet.interia.pl/historia/news-rewolucja-monitorow-pierwsze-antykomunistyczne-powstanie-na-,nId,1849265) raises the possibility of ML319 travelling to Budapest in a venture against the

communist forces in Poland and Hungary with reports of fire, emergency retreat, damage to the boats and avoidance of international scandals – all going on apparently with limited knowledge of the activities and decisions of Versailles and the peace negotiations. With the advent of Polish control of part of the Baltic coast in 1918 came the need for a new navy suited to the scale and budget of planned operations. A decommissioned Allied ML—most likely British—was purchased and refurbished to become a guard, observation and security boat for the Polish Naval Air Squadron. Quickly, the ML, christened "Msyliwy" ("Hunter" in Polish) became Flagship of the entire Polish Navy!

A limited number of motor launches continued in service for a period after the war, but by 1924 only eight remained and by 1927 even these had gone. Most were sold at bargain prices and were converted to houseboats and pleasure craft.

A number of launches survived (in whatever form) to serve their country some twenty years later as part of the armada of little ships that effected the evacuation of the BEF from Dunkirk in 1940. ML286 illustrated below was one such vessel.

8: Photograph by B.J. Woods Photograph by B.J. Woods from The Association of Dunkirk Little Ships

In 2015, ML286 otherwise known as Cordon Rouge or Eothen was (re)discovered at Isleworth in a derelict state. ML286 had served her country again in a second war as one of the 'little ships' associated with the evacuation of the BEF from Dunkirk in 1940.

Many of the operational details about a large number of the Motor Launch fleet are unknown (http://www.naval-history.net/WW1NavyBritishShips-Dittmar2.htm#ML) and the full extent of the losses is also unknown. It is known that at least 23 were lost during the war, (2 from the 1st batch, 20 from the 2nd and 1 from the 3rd and final group) and that a further 9 were lost after the Armistice. Of these, several exist within the remit of the Forgotten Wrecks project area and are summarised below;

ML52
Sandown Bay – on 29th November 1917, ML 52 was at anchor in Sandown Bay when fire broke out and completely destroyed the vessel. http://www.wrecksite.eu/wreck.aspx?164392

ML 247
Oar Rock, near Clodgy Point, St Ives – on 29th September 1918, in Atlantic off SW England, ML 247 was one of four MLs which entered St Ives Bay for shelter during strong southerly gale, wind veered and "increased to hurricane force", threatening to blow them ashore. The group attempted to start engines and reach deeper waters to ride out the storm but ML247 developed engine trouble one mile off Clodgy Point and drifted towards the rocks. ML247 blew up upon impact (probably caused by the depth charges carried on board, or petrol fumes) and all but one of the crew were lost in the explosion or probably drowned, the sole survivor washed ashore and was saved by people on the beach. ML247 was commanded by Geoffrey Allfree, a RN Official War Artist, at the time of its loss. By the time of his death, Allfree had developed a range of paintings and sketches of life in the Motor Launches, as well as scenes of events at Gallipoli and the naval bases in Portsmouth and the Orkneys.
http://www.pastscape.org.uk/hob.aspx?hob_id=907678

ML 431
Poole Harbour – on 22nd April 1917, ML431 was at anchor in Poole Harbour when fire broke out and completely destroyed the vessel. http://www.pastscape.org.uk/hob.aspx?hob_id=1233811

ML 498
This is a post-war loss but is included in the Forgotten Wrecks dataset due to the significant role that motor launches played in the First World War and the limited number of them in the project area. ML 498 had been sold in the years following the war and was in private hands under the master William Gallon when on 23rd August 1921 it became stranded on the rocks half a mile west of Gurnard's Head. The vessel was reported to have broken up very quickly and a week later, only part of the deck could be seen floating under the cliff http://www.pastscape.org.uk/hob.aspx?hob_id=1087442

Additionally, several other MLs were lost in the vicinity of the research area:

- **ML.55** 28th January 1918 in the yard of Messrs Wills and Packham, Sittingbourne, Kent, ML 55 was destroyed by fire http://www.naval-history.net/WW1NavyBritishShips-Dittmar2.htm#ML
- **ML.278** Dunkirk Pier – on 15th January 1918 in Strait of Dover, ML278 was wrecked on Dunkirk Pier having served in Dover Command
  http://www.naval-history.net/WW1NavyBritishShips-Dittmar2.htm#ML
- **ML.356** – on 12th April 1918 having served in Dover Command, ML356 was sunk after collision off Dover, Kent. http://www.naval-history.net/WW1NavyBritishShips-Dittmar2.htm#ML
  This was an Albert Medal (George Cross)-boat awarded to Lt A G Bagot RNVR. [Citation reads: The KING has been graciously pleased to approve of the award of the Albert Medal for Gallantry in Saving Life at Sea to Lieutenant-Commander Keith Robin Hoare, D.S.O., D.S.C., R.N.V.R., and Lieutenant Arthur Gerald Bagot, D.S.C., R.N.V.R.

On the 12th April, 1918, an explosion took place in the engine-room of H.M. Motor Launch 356, and the forward tanks burst into flame. The Officer and some of the crew were blown overboard by the explosion, and the remainder were quickly driven aft by the flames, and were taken off in a skiff. By this time the flames were issuing from the cabin hatch aft, and there was much petrol burning on the surface of the water. It was then realised by the crews of adjacent vessels that the aft petrol tanks and the depth charge were being attacked by the fire, and might explode at any moment. At the moment when others were running away, Lieutenant Hoare and Sub-Lieutenant Bagot jumped into their dinghy, rowed to the wreck, got on board, and removed the depth charge, thereby preventing an explosion which might have caused serious loss of life amongst the crowd of English and French sailors on the quay. http://theoldcoot.blogspot.co.uk/2014/01/george-cross-g-bagot.html]

Sources / Acknowledgements

The essence of this article is derived from an excellent tribute site http://www.motorlaunchpatrol.net/ supplemented by a range of additional web research sites and compendia.

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Photographs:

Frontis Photo: http://navymuseum.co.nz/worldwar1/ancillary-forces/auxiliary-patrol/

1 - http://media.motorlaunchpatrol.net/3b_3-lg.jpg and
http://media.motorlaunchpatrol.net/53_3-lg.jpg
2 - http://media.motorlaunchpatrol.net/from_naval_censor_lg.jpg
3 - http://media.motorlaunchpatrol.net/p05_n4_lg.png
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