

## IN THE BEGINNING

To the uninitiated a boat, is a boat, is a boat. An unfeeling lump of floating matter capable of transporting goods and people across water and for putting up a fight or defences in times of conflict. They come in all shapes and sizes and offer various degrees of comfort.

So what makes the craft of the “Western Lady Ferry Service” any different? Why single them out for any special notice? The history behind them, the rarity of the class of boat they belong to, but mostly, how craft designed to be “maids of all work” in the theatres of war became “Ladies for leisure” in Torbay.

The “Western Lady” craft are all ex-Royal Naval Coastal Forces veterans and were deployed on many vital tasks to help keep this country safe, relatively speaking, and free from invasion.

The boats are Fairmile ‘B’ Motor Launches. The term ‘motor launch’ usually conjures up a picture of a small open day boat and seems such an unfair description for craft which were capable of ranging for miles, in all sea conditions. Often taking on monumental tasks for boats of their size. Nor were they solely stationed in home waters. They made the long passage to Malta, the Mediterranean and Burma under their own power.

Coastal Forces came into being in 1940, although its strength was not felt until 1941 and by 1942 it was a force to be reckoned with.

Even more remarkable were the men that made up the officers and crews for the Coastal Forces craft. Nearly all volunteers - the majority of which had never been to sea in any type of boat before being H.O. (Hostilities Only), young men with an average age of between 18 - 20 years, although the officers, being mainly drawn from the R.N.V.R. (Royal Navy Volunteer Reserves) did have some experience of the sea, with particular emphasis on navigation.

At the outbreak of World War II there were only a handful of old Motor Launches and Coastal Motor Boats available to patrol the English Channel but the threat of invasion to the Channel Ports in 1940 made it a priority that something be done, and quickly, to bring light craft back into service.

For many years before the onset of war the German and Italian Navies had been developing all types of fast, light coastal forces craft and training officers and men in the special needs to handle the boats and deploy them to the fullest extent. The enemy saw that our destroyers were few and no match for the swarms of fast and very powerful light craft they had developed to range the length and breadth of the English Channel. However, they under-estimated the strength of the British ingenuity and the courage of men who, a few weeks before, had been bank clerks, chefs, motor mechanics and stock brokers.

The evacuation from Dunkirk, made possible by fleets of small boats manned by their owners or anyone good enough to handle a boat across the Channel showed just how capable the British can be and brought home the fact that, as a seafaring nation, and an Island, our men, and women, were more than ready, willing and able to go to the defence of their country and its people. They just needed the right tools to finish the job and the right tool was found in the design of the MTB’s (Motor (Harbour Defence Motor Launches)).

Motor Launches had proved their worth during World War I (1914 Torpedo Boats), MGB's (Motor Gun Boats), ML's (Motor Launches) and HDML's -18) but this type of craft had been allowed to lapse between wars for the simple reason that the Admiralty, through lack of funds, were unable to pursue any natural development. However, from time to time, stray proposals for Motor Launches had been received by the Admiralty from outside designers, notably Sir Noel Macklin of the Fairmile Company of Cobham, who not only put forward ideas for small light craft but had developed a system for prefabricating such craft many years prior to the onset of war.

As the outbreak of war appeared to become inevitable the Fairmile organization approached the Admiralty with a scheme for mass production of a larger motor launch, the design being based on an existing motor yacht. This scheme included proposals that the framing, keels, stem etc could be prefabricated by saw—mills and furniture makers in London and then sent out to various selected yacht builders for assembly.

Initially discussion between the representatives of the Admiralty and members of the Fairmile organisation did not go well and the Admiralty did not take the idea seriously. Noel Macklin then decided to have a boat built at Woodnutts on the Isle of Wight, to prove the idea was sound but had to pay for the project out of his own pocket. By the time it was completed war was looming and the need to supply craft for war service was becoming inevitable. The Fairmile Representatives and the Admiralty met again and, having inspected the boat already designed agreed to accept the concept. They met to talk over requirements for armament and strengthening of the decks, and bottom planking. This was styled the 'A' Class of Fairmile M.L. The Fairmile 'A' was a hard chine craft at 110 foot length over-all and although triple engines were used, giving speeds of up to some 25 knots maximum, it was found that the 'A' class design was both wet and very uncomfortable and in the end only twelve such boats were built but, in almost every other aspect, the boat had come up to design specifications and it was proved that it was possible to have a completely prefabricated craft.

This led the Admiralty to prepare plans with designer W J Holt for a round bilge motor launch of similar construction that they then requested the Fairmile Company to implement. This design was to become known as the Fairmile 'B' (later, just Fairmile's or ML's) which could do just about anything and go just about anywhere.

It was the job of the Fairmile Company, just starting as an organization in the boat building area, and with no previous marine connections themselves, to introduce new methods of boat construction and devise a system of framing to suit their ideas for prefabrication. In addition they had to introduce much new material and get established yacht and boat yards to accept their proposals.

Being both prefabricated and of wooden construction the introduction of the Fairmile 'B' utilised the building capacity of some 43 firms in the U.K. and about 38 boat and yacht yards abroad, plus bringing together many other manufacturing firms who could not have otherwise been kept fully employed.

To ensure that production could be kept going at full stretch those yacht yards nominated by Fairmile and willing to become part of the highly intense building programme. saw the Admiralty withhold placing orders for any other type of naval craft with them.

Owing to the shortage of engines in 1940 it was decided that the 'B' class should be turned out as a twin engine craft and although this then resulted in some loss of speed, it did allow for approximately 50% more craft to be placed in service.

The final design for the Fairmile 'B' was for a craft of 112 feet length over-all with a beam of 18ft 3 inches and an average draught of 4½ feet.

The frames were sawn to the shape of the M.L. out of large sheets of water-proof bonded plywood and notched at intervals to receive the longitudinal stringers. The keel pieces, stem, deadwoods, bulkheads and transom were also cut from timber sheets, shaped and scarphed by the prefabricating companies ready for assembly by the yacht yards.

At the yards the keels were brought together on the keel blocks and the frames, bulkheads, stem and transom etc put together in their relative positions to form the rigid skeleton of the M.L. The timber planking was also sawn to size and planed by the prefabrication firms and was delivered to the yards ready for fitting.

This comprised of a skin of double diagonal mahogany over the timber moulded plywood frames. The outer mahogany planking being ¾' thick and the inner planking 5/8" thick. The planking was laid diagonally in opposite directions at a 45° angle with calico stretched between the two layers. Whenever possible the planking was worked in one length from deck to keel but, if 'short ends' had to be used these were usually worked so that they 'butted' alternatively at the 4th and 8th stringer. A stringer being a 3 inch x 2 inch pitch pine section running fore and aft approximately every twelve inches down the plywood frames, rather on the lines of the old bi-plane construction but with bulkheads added for stiffness. Bent timbers of rock elm were used between the main frames in the engine room and fuel tank room. The bulkheads, formers, keel, engine bearers and bilge frames were joined together with a newly developed epoxy glue. However, because at first there were a few disasters as a result of the adhesive being applied too liberally in some places and not enough in others, or by joiners misjudging the glue mixtures and adding too much water, a few early craft literally came apart in heavy seas. With this in mind it was thought wiser to supplement the adhesive mix with nearly two tons of copper nails on roves and an additional two tons of screw fastenings to ensure it all stayed together. In fact, the end result was strong enough to withstand quite substantial damage. Cases are recorded where shells have ripped open a boat from deck to keel and still they not only kept afloat but managed to return to port, often under their own power and then, because of the constructional design, they have been able to be repaired and placed back into service.

The timber frames and sections for these craft were cut out and supplied by companies such as Mullards, now M.F.I. (could this have been the start of the self-assembly furniture boom?), Parker - Knoll, Gee, Heals and Austins, all well known furniture manufacturers of their day.

Also involved were firms normally found making pianos, green-houses and garden furniture. Linoleum makers turned all the shafting, wire-netting producers made the rudders and foundries more used to casting church bells helped to supply the propellers, alongside the experts in these fields such as Bruntons.

All these individual items were held at the main store situated at Brentford in Middlesex and, as a boatyard completed and launched one boat, each boat taking approximately six to seven months to complete from start to finish, so another kit would be dispatched for the fabrication of the next.

Prefabrication also made 'kits' easy to ship out to boat and yacht yards in Australia, New Zealand, India and South Africa and helped to repair any damaged craft whilst Canadian yards were supplied with drawings to enable them to build Fairmile 'B's on the same prefabrication basis.

Companies such as Austins of East Ham eventually went on to completing whole craft; not just the timber sections but the most prolific builders were boatyards such as Curtis of Looe (and Par), Johnson & Jago (Leigh on Sea), Jas Miller (St Monance) etc. J W & A Uphams of Brixham not only turned out their fair share of these and other Coastal Forces craft but were kept busy repairing damaged craft.

The accommodation below decks - bow to stern was: Reinforced bow section in two compartments, forepeak store, chain locker, crews wash room, crews mess deck/sleeping quarters with folding cots (six to each side), Petty Officers W.C. and cabin, wireless room, galley with coal fired cooking and heating range, engine room, fuel tank room, Officers wardroom, officers W.C. ammunition magazine, boson's store and tiller flat (steering gear housing).

Bow to stern topsides: 3-pounder gun on power turret, hatch to crews accommodation, the Chart-house or Wheel-house, bridge, hatch to galley etc, funnel (with emergency engine room hatch alongside) main engine room hatch, sick bay, twin 20mm Oerlikon MkIX mounting, depth charges etc on stern.

The engines used for the 'B' were twin Hall Scott Defender petrol engines on Lease/Lend from the United States of America which had been developed during the 1930's to meet the large orders being placed by the U.S.A. Coast-Guards in an effort to combat the bootlegging operations of that time. Nearly all the engines fitted in coastal force craft during the war came from either Italy or America. The reason being that no British engines had been developed to any great extent prior to the war which were suitable for fitting in such craft. This sad state of affairs could have had a dire effect on the continued development of coastal force units had not Hall-Scott Defender engines been made available. Each engine had a BHP of 600, capable of driving the boats at a speed of 20 knots at 2,200 RPM maximum for short periods, 16~4 knots at 1,800 RPM continuous speed sustained over long periods to give a cruising range of approximately 850 miles.

Using only one engine the cruising range could be extended to 1,500 miles at a maintained speed of 12 knots. Fuel capacity was roughly 2,300 gallons held in metal tanks which were sealed with a rubber membrane designed to self seal' should the tanks be pierced. Petrol engines fitted to boats of almost entirely wooden construction greatly increased to hazard of fire and explosion.

Typical Fairmile 'B' armament by the late war period comprised of a three pounder gun, a single Oerlikon on a Mk VII mounting, a twin Oerlikon on a Mk IX mounting, 2 rocket flare projectors, 2 x .303 machine guns mounted on the bridge wings and 6 depth charges. In addition to these a range of handguns and rifles were carried and a CO. (Commanding Officer) was known to beg, "steal" or borrow anything he could lay his hands on to increase the fire power of their boats if the opportunity arose.

The Fairmile B' became the "workhorses" of Coastal Forces with very little of the glamour and excitement afforded to their faster brethren, the MTB's and MGB's but they were always on the go patrolling, escorting convoy's, ferrying troops, transporting supplies, mine laying and sweeping and air/sea rescue duties. To make the most of the versatile 'B' class a system was invented which allowed for them to be converted to one or other of these duties at less than 48 hours notice. A quick change of armament was achieved by the arrangement of a series of metal strips on the decks

of the boats in the building stage and the decks additionally strengthen below. The steel strips were fitted with tap holes to suit the various base holding down provisions for the different armament types, such as torpedo—tube supports, gun supports, mine rails, depth—charge shoots and so on. The armament was secured by means of tap bolts and to change from one arrangement to another it was simply a matter of releasing one set of bolts, lifting out the armament and replacing it with the new.

There were six hundred and fifty Fairmile 'B's completed by yards at home and abroad during the war years and, of this number, fifty were of the sub-section RML (Rescue Motor Launch). This class differed from the standard 'B' design only by the addition of a sick bay situated abaft the funnel and engine room hatchway.

In reality the sick bay was just the addition of a wooden box affair, commonly termed the "horse box" but it had room for four metal stretchers which could be let in the ends through individual hatches or through a conventional door. A sick berth attendant would be on duty, with an assortment of medical supplies, to render assistance to the injured until the boat reached a safe port.

RML's worked in close association with the R.A.F. and would be given an area to search in the event of downed' aircraft. If successful in their search, the stretchers would be swung out-board and lowered over the side so that the bodies or injured men could be 'scooped' from the sea with the minimum of effort.

Although equipped for air/sea rescue missions, RML's still had to do their fair share of all the other routine duties allocated to the ML Flotillas.

In keeping with other Coastal Forces craft stationed in 'home' waters, the hull was painted light and dark grey for camouflage but the RML's decks were "International Orange" with a large chequered roundel area to show that they were equipped to "talk" to aircraft via VHF radio and displayed their call-signs when on air/sea rescue missions when first commissioned. They quickly found that this advertisement to the fact that they were on more humane duties held little respect in the theatres of war as the boats were often attacked and given cause to defend themselves.

The final number of craft for coastal forces totalled about 1,700 comprising of: 650 'B' M.L.s, 450 H.D.M.L.s, 300 large M.T.B.s, M.G.B.s and S.G.B.s (Steam Gun Boats) and 300 smaller (70ft) M.T.B.s and M.G.B.s The numbers of boats turned out in such a short period would be no small achievement in itself but it must be remembered that the yards responsible for the production of these craft had mostly been concerned with the peacetime occupation of storage and fitting out of small pleasure yachts and, apart from the assembly of coastal forces boats, which were quite varied in size and design, they also had to cope with the quite complex arrangements of fitting engines, gear boxes, stern gear etc. and dealing with the alignment of up to four engines in one boat. It is admirable that so many small firms, some with nothing more than one shed, were able to cope with the limitations of man-power and facilities to such a high degree.

The boats they built were engaged with the enemy on around 800 occasions. It is a remarkable endeavour that they sank approximately 400 enemy craft with the loss of only 180 British coastal force boats. All the more so when account is taken of the fact that the early boats were ill-equipped with engines and armament whilst the German Schnell Boats (E-Boats) were furnished with three Mercedes-Benz Diesel engines each with 2,500 B.H.P., capable of driving the boats at some 42 knots and had a fire power of four 21 inch Torpedoes, Oerlikon's forward and one 37mm gun mounted aft.

In short, Fairmile's and other craft employed in Coastal Forces such as the MTB's, MGB's, HDML's and many others, were the unsung heroes of World War II. Without these boats many a convoy would not have got through, our coastline would have been more vulnerable to attack from the sea, our warships would not have had such easy passage through the Channel and our Allied communications would have been lost. During the war period some 13,300 lives were saved by air-sea rescue, of these 8,600 were aircrew.

Clearly, the importance of these "little ships" far exceeded their size.

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*She regularly gives talks around Devon on the history of this type of boat and the history of the ferry service and is in the process of re-writing the book covering the full history of the Fairmile B and Western Lady Ferry Service following the success of the "Fair (Few) Miles" written to mark the fiftieth anniversary of the service.*