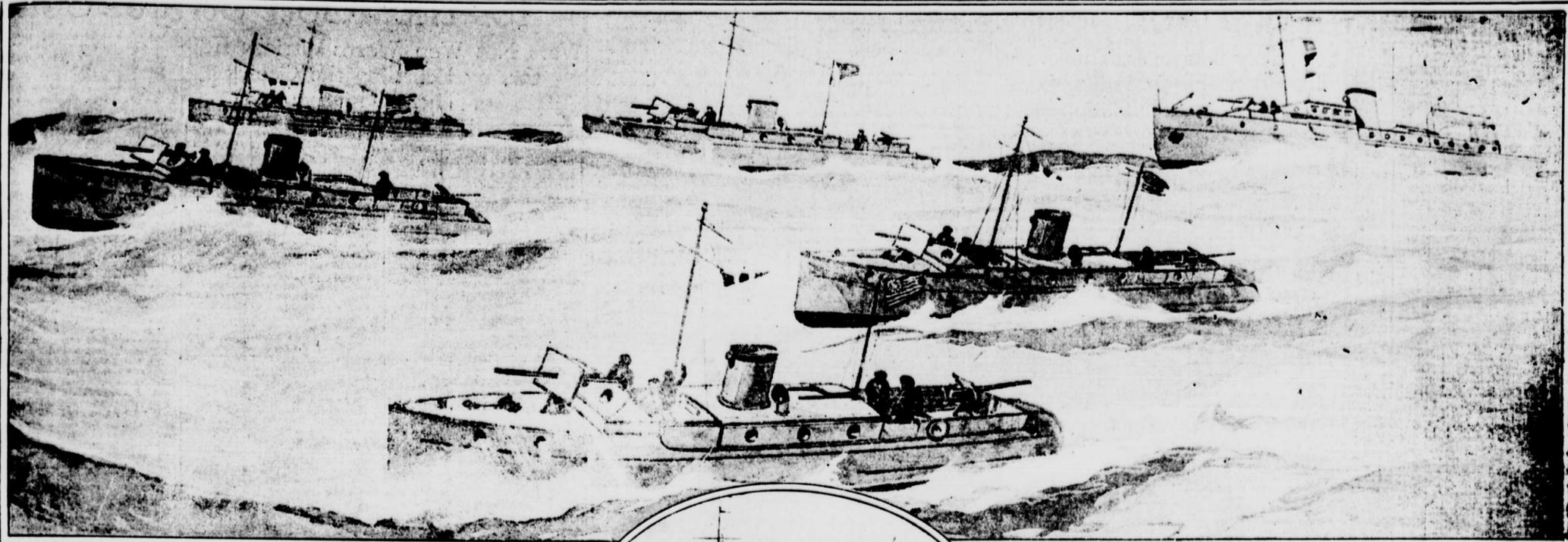


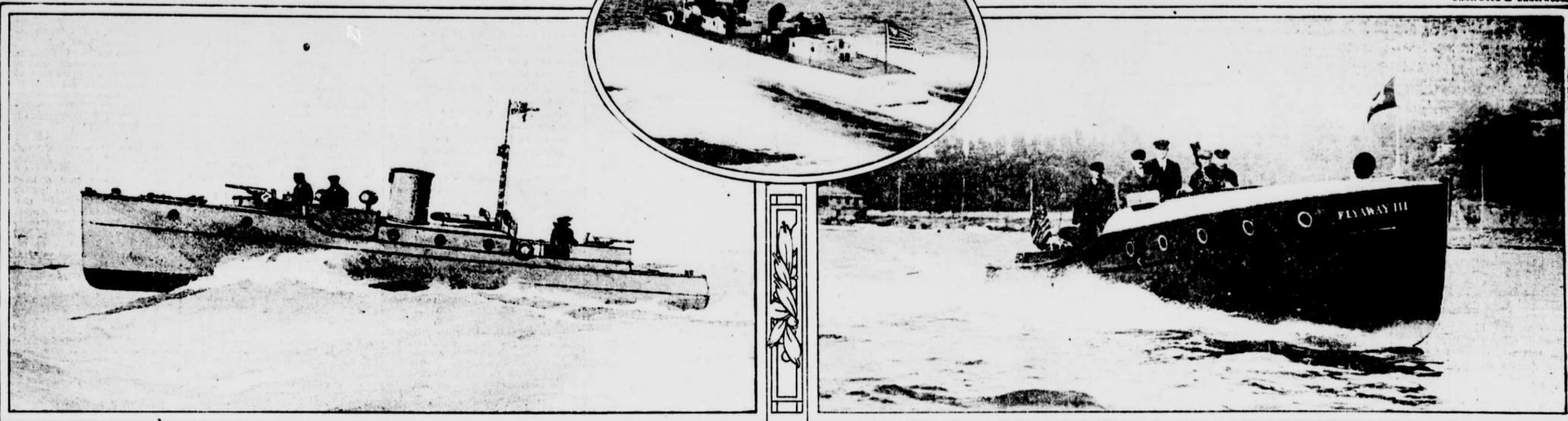
# MOBILIZING THE MOTOR BOATS FOR NATIONAL DEFENCE



An auxiliary squadron of motor boats on patrol duty.

This is the service that boat owners are combining to perform.

Copyright Underwood & Underwood



New 40 foot express cruiser built for Bernard Zahn. This is the type of boat best adapted for patrol duty.

Flyaway III, winner of many long races over ocean courses, 38 feet long and suitable for scout duty.

Photo by Edwin Levick

Photo by Edwin Levick

Above—One of the eighteen high speed patrol boats built for the Russian Government at Greenport, L. I. Her speed is forty miles per hour.

## Plans Formulated to Enroll Fleet of 10,000 to Act as Cruisers and Aid in Patrolling the Coasts

THE motor boat, which has played a prominent part in the present war, will form an important factor in the defence of this country in the event of hostilities. Plans are now being formulated to enroll 10,000 or more boats of varying sizes and speeds so that when they are needed it will be a comparatively easy matter to fit them for duty and to assign them to stations along the coast.

When the present war started in Europe few realized the possibilities of the motor boat. Upon its first advent it was regarded more as a utility vessel, although in recent years the gasoline engine has been so much improved that it is now driving the steam engine out of small craft and is being used as an auxiliary to sails on some coasting vessels and on fishing craft.

Now the British coast is patrolled by a fleet of motor boats. These boats are of many sizes and speeds and they have been supplemented by a thousand high speed boats which were built on this side of the Atlantic and shipped across on steamers. It is through the work of these tiny patrol boats, say as compared with the torpedo boat destroyer and other ships of war, that the submarine has been controlled. While the submarine is dreaded by all merchantmen it in turn dreads the high speed motor patrol.

Only recently a German submarine commander reported that his vessel had been caught in one of the nets set for submarines and that he was forced to rise to the surface to try to break clear of the entanglement. As the submarine rose the commander could see by means of the periscope three speed boats rushing at him from three different quarters and the submarine was forced to submerge again hurriedly, because each one of these boats is equipped with one or more three inch guns, and one shot from one of these guns well placed would put the submarine out of business.

At the start of the war the British yachtsmen at once offered their services and the use of their boats to the Government, and the Royal Naval Volunteer Reserve was organized. In some instances the owner of a yacht showed that he was competent to have charge and received a commission, and in other cases a naval officer was put in charge and the owner became one of his aids. The crews too were enrolled and put on the navy payroll.

It took time to enroll hundreds of yachts, to examine their owners and crews and to fit the vessels to carry armament. Some craft could mount a main gun; others that were not so

strongly built could only mount 1 inch or small rapid fire guns. Many had to be strengthened and their interiors rearranged to furnish some comfort for the officers and crews and to enable them to carry supplies of fuel, lubricating oil and provisions and water.

Having found that the motor boat was of great use the British Government placed an order in this country for 500 boats, 80 feet in length, which can make 21 nautical miles an hour. When this contract was completed another order was placed and as fast as the boats are finished and tried they are shipped to the British authorities. They are giving a good account of themselves in the patrol work.

At the same time the Russian Government placed an order through William H. Young for eighteen high speed patrol boats. These boats were built by the Greenport Basin and Construction Company and fitted with Van Blerck motors. They are 60 feet long and have a beam of 11 feet. They are driven by three engines, each of eight cylinders, and make 26 nautical or 30 statute miles an hour. Each carries a crew of seven men and has good accommodation for the men. They were substantially built and two 3 inch guns were mounted on each as soon as they arrived in Russian waters. One gun is placed forward and the other amidships. These boats are doing service at Archangel and in the Baltic.

The racing boat has been developed so that a speed of sixty miles an hour has been obtained. Of course boats that can make this speed are good for little else, but these racing boats can be of use as despatch boats in harbors and in smooth waters. The Maple Leaf IV, owned by E. Mackay Edgar, which won the British international trophy, which is emblematic of the world's championship for high speed craft, was turned over to the Government at the beginning of the war and has been used for patrol work and as a scout.

It is, however, of motor boats of the cruising type that a defence squadron is to be formed, and here again the aid of the man of means has developed the cruiser so that it is a staunch, fast, seaworthy craft. The long distance ocean races showed the defects in the engines, which have been remedied, and by studying these races the designers have been able to build hulls that are able to withstand the seas encountered outside.

When the war with Spain began this country was unprepared. There were few motor boats in those days, but the yachtsmen lent considerable aid to the Navy Department. The Government purchased many of the best of the big steam yachts, which were transformed into gunboats and cruisers, and one,

the Gloucester, did fine work when Admiral Cervera's squadron tried to get out of Santiago harbor.

These boats cost much money. It took much time to transform them into warships, and all their fine interior fittings had to be ripped out and the hulls had to be strengthened so that they might be able to mount guns and carry ammunition. The Navy Department has this experience in mind. It has also profited by the example of the British in using the motor boat, and now plans are being formulated to enroll a motor boat reserve in this country and the yachtsmen and owners of the different vessels are willing to help.

Naval Constructor J. A. Farrer, U. S. N., who had charge of the raising of the submarine P-4 which sank off the harbor of Honolulu, visited the recent Motor Boat Show and consulted with many owners, designers and builders about the plans of the department. The Navy Department plans to take a census of all the motor boats in the country. It wants to know the size, speed, details of construction, owner and other details of every boat. Then when these particulars are obtained it will be able to divide up the huge fleet into squadrons according to size and speed.

It would be of little value to have a mixed up fleet with boats varying in length from 25 to 150 feet and in speed from 8 or 10 miles an hour to 25 or 30 miles an hour, because the larger and faster boats would be no better than the smallest and slowest

in each squadron. It is planned to divide the fleet into squadrons according to speed and to use these boats that can make 30 miles an hour for special offshore duty and the slower boats for other work.

To gather all this information will take some time and yachtsmen have been asked to send particulars of their boats to the Navy Department. Some boats are strong enough to mount guns, but others will need to be strengthened. The guns are to be mounted forward, and to mount them so that they will be of service and not rack the hull to pieces when fired it will in many instances be necessary to strengthen the hulls by placing extra frames and deck beams and stringers, preferably of steel. The department has no money to spend on these improvements, and to get money it will be necessary to secure an appropriation from Congress, which will take much time. Therefore yachtsmen are asked if they will be willing to do this work themselves, purely from patriotic reasons. Already many have agreed to have this work done. The constructors in the Navy Department will examine the plans for the changes and make suggestions. The boats so improved would be available at once in the event

of hostilities. It would take but a very short time to mount the guns.

The department is also to prepare plans of motor boats that it suggests as suitable for patrol work. When a yachtsman contemplates building the department will furnish plans and details of the hull construction and the yachtsman can arrange the interior to suit his own requirements.

The fleet of motor yachts is scattered all along the coast. The majority of the boats are found between the Delaware capes and Eastport, Me. There are many in Southern waters and on the Pacific coast. In fact, there is a yacht club in every harbor and each club has its fleet of motor yachts.

About two years ago several motor boat owners formed the United Power Squadron. The idea originated among members of the Boston Yacht Club. Roger Tilton was one of the prime movers, and he was made commander.

The United Power Squadron has a flag of its own which has been recognized by the Government. The flag has blue stripes instead of red and the stripes run parallel with the hoist like the stripes in the flag of the Customs. The union is a red anchor surrounded by thirteen stars.

The achievements of the motor boats attracted such favorable attention from the navy that it was decided to try what a torpedo boat equipped with a gasoline engine could do, and only two weeks ago a contract was let with C. P. Brigham, represent-

ing the Greenport Basin and Construction Company, to build a fast motor boat which is to carry a one pounder rapid fire gun forward and a sixteen inch torpedo tube on the after deck.

This boat will be 20 feet long and 10 feet beam, and will be modelled something like the boats that were built for Russia. The contract calls for 41 miles an hour in smooth water and a normal speed of 24 miles an hour of shore. It is to be driven by two eight cylinder Dieselburg-Hartbeek motors of 400 horse-power each, and work is to be hurried so that the boat, which will, if a success, be the beginning of a new class, will be running early in the spring.

P. S. Dieselburg built the engines which drove the Destroyer IX, a small hydroplane, owned by Commodore James A. Hugh of Chicago at the rate of 61 miles an hour last summer. This speed was made in a series of trials over a course of half a mile and is the highest yet attained by a motor boat. Commodore Hugh, not content with this success, and realizing that the motor boats can help much in the defence of the coast, has had designs made for a small torpedo boat that is to make fifty miles an hour. This boat will be seventy feet long and may be built this spring.

One of the most sensational boats of last year was the Hornbill, built from designs by A. Lorenz Swasey for Harold Wesson of Springfield. This boat is thirty-nine feet long and is driven by Sterling engines and can make twenty-seven miles an hour. It is what is known as an express cruiser, that is, it has some of the accommodations of a cruiser but with a high powered engine can make express speed. Now there are to be several Hornbills. Mr. Swasey has improved the model and its best features are to be included in vessels of varying sizes up to 100 feet in length.

Five new boats of forty feet length which are to form a squadron. This squadron is to form the nucleus of a larger patrol squadron, of which Stewart Davis of New York will be the commander. There are to be a squadron quartermaster, a squadron surgeon, and a supervising engineer.

These officers will all serve without pay and all devote themselves to perform one month of actual duty every year as well as to hold themselves subject to calls from the commander in winter or summer.

The five boats, which are being built by Britt Bros., are for Stewart Davis of the Seawanhaka Corinthian Yacht Club, Landon Humphries of Morristown, N. J., John Nelson of the New York Yacht Club, Ernest Rogers of Brookline, Mass., and Roland C. Nickerson of the Eastern Yacht Club. The boats are to be completed in about a

## European War Has Taught That Armed High Speed Gasolene Craft Are the Terror of Submarines

month and will at once start off on a squadron cruise, coming first to New York and then going around the Capes to the Chesapeake and up to Washington, where representatives of the Navy Department will receive them and inspect them as well as watch the manoeuvres of the men.

These boats are 49 feet long, 8 feet 3 inches beam, 30 inches draught and are to be driven by 135 horse-power Sterling engines, which will give a speed of 23 or 24 miles an hour. They have been designed so that their speed can be increased to 30 miles an hour by substituting higher powered engines. Each is to be fitted with a first aid wireless outfit, searchlights and gun mounts. Another boat for Bernard Zahn of New York is being built which is to have more power and a speed of from 30 to 32 miles an hour.

Not many years ago it was a feat to own a fast "ferriboat." These boats were driven by steam engines and their owners used them to run from their country homes to the city and return in the afternoon. The Little Sovereign, Van Hook, Mirage, Scout, Winchester and Tarantula were the best known of this type, but the gasoline engine has revolutionized this type and now high speed boats driven by internal combustion engines are taking their place. Last year former Commodore August Heussler had a boat 110 feet long built which was named Calabria. That boat is to be fitted with three Van Blerck motors this spring and these are to drive her at the rate of 25 miles an hour or more.

Commander Harold Wills of the Ford Motor Company had a boat built in 1914 named Harold. This boat is to be equipped with three 400 horse-power Van Blercks, which will drive three propellers and give a speed of thirty-five miles an hour. Tom Chesapeake, who has raced many high speed boats, is to be a cruiser built by Luders, which is to be 28 feet long and is to make forty miles an hour. Former Commodore Arthur Curtis Jones is having a high speed boat built by Herreshoff which will be 50 feet long and make twenty-five miles an hour. It is to be able to run from Newport to New York in less than five hours.

William Earl Dodge is having a high speed boat of steel construction built by Lawley which is to be driven by three Seward motors and to make twenty-five miles an hour. At City Island a fast cruiser is being built for A. H. Marks which will be driven by Craig heavy oil engines and another boat under construction at City Island is for Irving Raymond of the New York Yacht Club and will also be fast.

These are only a few of the motor boats that are being built and will be available for patrol work.

in the present war started in Europe few realized the possibilities of the motor boat. Upon its first advent it was regarded more as a utility vessel, although in recent years the gasoline engine has been so much improved that it is now driving the steam engine out of small craft and is being used as an auxiliary to sails on some coasting vessels and on fishing craft.

When the present war started in Europe few realized the possibilities of the motor boat. Upon its first advent it was regarded more as a utility vessel, although in recent years the gasoline engine has been so much improved that it is now driving the steam engine out of small craft and is being used as an auxiliary to sails on some coasting vessels and on fishing craft.

When the present war started in Europe few realized the possibilities of the motor boat. Upon its first advent it was regarded more as a utility vessel, although in recent years the gasoline engine has been so much improved that it is now driving the steam engine out of small craft and is being used as an auxiliary to sails on some coasting vessels and on fishing craft.

When the present war started in Europe few realized the possibilities of the motor boat. Upon its first advent it was regarded more as a utility vessel, although in recent years the gasoline engine has been so much improved that it is now driving the steam engine out of small craft and is being used as an auxiliary to sails on some coasting vessels and on fishing craft.

When the present war started in Europe few realized the possibilities of the motor boat. Upon its first advent it was regarded more as a utility vessel, although in recent years the gasoline engine has been so much improved that it is now driving the steam engine out of small craft and is being used as an auxiliary to sails on some coasting vessels and on fishing craft.

When the present war started in Europe few realized the possibilities of the motor boat. Upon its first advent it was regarded more as a utility vessel, although in recent years the gasoline engine has been so much improved that it is now driving the steam engine out of small craft and is being used as an auxiliary to sails on some coasting vessels and on fishing craft.

When the present war started in Europe few realized the possibilities of the motor boat. Upon its first advent it was regarded more as a utility vessel, although in recent years the gasoline engine has been so much improved that it is now driving the steam engine out of small craft and is being used as an auxiliary to sails on some coasting vessels and on fishing craft.

When the present war started in Europe few realized the possibilities of the motor boat. Upon its first advent it was regarded more as a utility vessel, although in recent years the gasoline engine has been so much improved that it is now driving the steam engine out of small craft and is being used as an auxiliary to sails on some coasting vessels and on fishing craft.



Ongoing motor cruisers in a race off Block Island.

Photo by M. Rosenfeld.

Above—Houp, a 25 mile an hour express cruiser owned by Harold Wesson.

Photo by M. Rosenfeld.