

AMPHIBIOUS PLANES LIKELY TO DOMINATE THE AIR

Craft Plying Land, Water and Sky Promises to Revolutionize Aviation, Both Commercial and Military --- Fleet Already Ordered by British Government---Amazing Records Made by Chief Types of the New Marvel



PROGRESS in aviation has been described in many recent articles in the Magazine Section of THE NEW YORK HERALD, particular stress having been laid on what is being done abroad. The accompanying article tells of still another step forward by Great Britain—the successful use of the amphibious biplane, a machine that rises and alights with equal facility on either land or water.

By MINOTT SAUNDERS, Former United States Air Pilot. Copyright, 1921, by THE NEW YORK HERALD.

FROM the Seine at Pont Alexandre III to the Thames at Westminster Bridge is the latest reality in air travel that marks a decided development. It is a feat of the amphibious plane, a machine that can take off and set down on land or water. In countries situated as England is geographically it promises to revolutionize the flying industry both along commercial and military lines.

Recently members of Parliament taking tea on the terrace outside of the House of Commons were surprised to see an airplane circle overhead, fold up its landing gear and gracefully alight into the river opposite them. For some time it taxied about as handily as a motor launch, and then turned its nose into the wind and took the air again like a great seagull. Since then it has repeated the performance many times, and always with safety and assurance. It is a craft that plies in three natural elements—land, water and the air.

The amphibious airplane has been recognized by the British Air Ministry as necessary to its department and orders have been placed for a fleet of these ships. This department is not alone military or naval, but both, and so it was quick to see the merits of the amphibious machine for both military and naval defensive and offensive tactics. If the war reopened to-morrow this machine would be one of the chief factors in the Air Ministry's work.

Two big companies in England are now producing amphibians. The Air Ministry has approved of the Vickers Viking, built by the Vickers company. The other builder is the Supermarine Aviation Works, Ltd., of Southampton. Both types have proved highly successful and each company is now engaged in turning out commercial and military planes. Extensive tests under unfavorable conditions like rough water, fog and high winds have clearly shown that the amphibion is a safer and more convenient craft than anything ever developed along other lines for air travel.

In principle the two types are identical, but in working out the problem of combining the seaplane and the airplane they have developed individual ideas. The Viking might be called an airplane that can perform all the functions of a seaplane. The Supermarine amphibion is built primarily as a seagoing machine with a sturdy gear for alighting on land. The Viking has a retractable under carriage that draws up so that the wheels set snugly to either side of the fuselage in flight. The Supermarine gear spreads out under the wings when the ship sets down in water. Both have combined the function of the tail skid so that it becomes a rudder in the water. Each type is a "pusher," and the builders of each claim certain features that excel the other.

Viking Wins High Standing In International Competitions

The Vickers company, which is probably the most progressive airplane builder in Britain, is devoting a great deal of its attention to its amphibion. Its Viking was first discussed in December, 1918, and Viking Mark I was flying in the following February. At the end of 1919 the Viking Mark II was launched with many improvements incorporated. This machine was entered in the Antwerp Exhibition in July of last year and was classified as first in (a) shortest time in getting off water; (b) fastest time over a given circuit; (c) shortest time in climbing to 1,000 meters; (d) highest "ceiling" or altitude with full load.

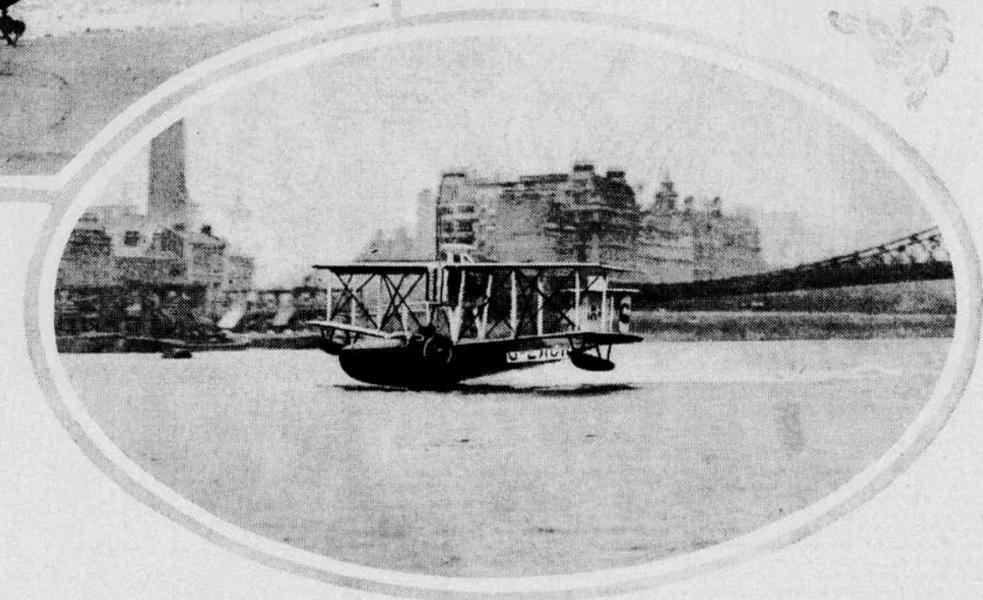
Last September the Viking won the Air Ministry's first prize of £19,000. At the competition the amphibion class was the only one in which the full award was granted, a considerable reduction being made in the prize money in the large and

small airplane classes because the judges felt that sufficient advance had not been made in these types entered.

The Vickers company give four sound reasons for developing the amphibion: (1) it can arise from or alight on the land; (2) it can arise from or alight on the water; (3) it can arise from land and alight on water; (4) it can arise from water and alight on land. In island countries or in places not wholly surrounded by water this type of airplane is obviously unsurpassed. In districts watered by large or small rivers the amphibion has a decided advantage and with it much expense can be saved because water will answer the purpose of aerodromes.

The Vickers company sets forth the advantages of the amphibion in naval work because while the airplane can take off a ship's deck it cannot safely get back. A seaplane can be lowered from a warship and can land beside it and be hauled aboard again, but the amphibion can perform the functions of both. In speed, climb and "ceiling" the Viking is nearly 50 per cent. better than any seaplane ever developed.

The Viking Mark IV is a five seater amphibion with wings arranged to fold forward



Above, the Supermarine amphibious plane, commercial type, and a Viking (at right), on the shore of the Thames, just going into the water. Note the Viking's wheels are down. In the oval the Viking is shown taking off. Note the wheels are now raised.

to reduce the floor space required to house it. It carries a Napier "Lion" motor of 450 horse-power. Three seats can be removed to make 75 cubic feet of space available for commercial load. It can carry a little over a

thousand pounds besides the pilot. The machine weighs 4,000 pounds and carries eighty gallons of gas. It is 33 feet long and has a span of 50 feet. The top plane is straight but the lower has a decided dihedral. At

full speed with the "Lion" it can make 113 miles an hour and climb 6,000 feet in seven minutes. Its ceiling is estimated at 18,000 feet. The boat, or fuselage, is of wood and designed like the bow of a speedy launch.

The chassis is raised by a gear operated from the pilot's cockpit. It entails simply the turning of a crank and can be raised or lowered in a very few seconds.

The Supermarine amphibion has one of the finest examples of seagoing hulls ever built for a seaplane. It is designed to be used from seaplane carriers with the navy or for overseas work with the army. The hull is of flexible and circular construction and can with safety ride a reasonably heavy sea. It was the only type of machine to pass through the recent Government amphibion trials without any breakage; the only machine to do the twenty-four hours mooring-out test, and it received the highest marks in every point of the competition with the exception of climb, speed and get-away, and these three failures were due to lower horse-power than competing amphibions.

The Supermarine Company, leading builder of seaplanes in the British Isles, makes two types of amphibions. The commercial and naval type carries a 350 horse-power Rolls-Royce motor, is 30 feet long and has a wing span of 50 feet. It carries ninety gallons of gas and weighs nearly 6,000 pounds. It has accommodation for five passengers and ranges in speed from sixty to one hundred miles an hour.

The other type, the Sea King, has been designed to meet the requirements of naval powers for the defence of the capital ship, either by bomb dropping or torpedoes. It carries two machine guns and the builders claim a maximum speed for it of 136 miles an hour. They say it can be looped and spun. It is 25 feet long and has a wing span of 32 feet and weighs under 3,000 pounds. Its motor is a 300 horse-power Hispano Sulzer.

The value of amphibions for Channel crossing is obvious and both companies are planning to start a commercial service. They have an inducement for passengers of a safety factor far greater than the airplane or the seaplane. It is not unlikely that in the very near future commercial amphibions will have terminals in the Thames and the Seine.

Old Salts Eager for Berths as Champion Liars of the Sea

By TORREY FORD.

DOWN on Sailors' Snug Harbor on Staten Island the bulletin board is in the corridor of the main hall. It carries, with the customary lack of display, an average assortment of semi-official notices—about the vaudeville show next Friday night, the lost pipe, the change in time of mass at St. Peter's, the new spring schedule of meal hours. Nothing exciting, nothing tremendously important. Yet during the long day most of the seven hundred retired seafarers who make the Harbor their home manage to pass the board at least once to see what's doing.

"Nothin' new," says one.

"Nothin' new," says another.

There isn't much new that can come into the lives of these men who have served their turn and are waiting round for nothing in particular. All of them are past 60, most of them are crawling on toward 70 and 80; too old for active service on the sea, too young to be content with settling down to the placid routine of dry land. But you can never tell about bulletin boards. Something may turn up any minute.

Sometimes the Bulletin Board Has a Thrill for the Sailors

One memorable day, back in the nineties, a brief notice appeared on the board suggesting that relatives of Capt. Joshua Reynolds, deceased, might learn something to their advantage by communicating with Box 193, Los Angeles, Cal. One old timer, claiming kin as a second cousin by marriage, communicated with Box 493 and came into a legacy of \$900. Record of the miracle passed down until now it has become a permanent part of the Harbor lore. The bulletin board has continued to hold a fascination for the otherwise disillusioned inmates of the institution.

And the other day the board made good, quite unexpectedly and beyond the anticipations of the most optimistic of the daily scanners. Every one knew the details before the item had been tacked on the board a full hour. There was a chance—a slim chance, perhaps, but still a chance—for the oldest seadog in the place to get back on the main deck and parade up and down in the regulation navy blue.

In Snug Harbor this passed for just as gloomy a piece of news as a repeal of the Volstead act would bring to Broadway. And it was all true.

The United States Mail Steamship Company announced formally, in a discreetly worded note, that there was a demand for

competent yarn spinners to fill berths on each of the four ships that are being refitted for transatlantic passenger service. The duties would be light and the working hours easy. The yarn spinner would be expected to regale the passengers with sea stories, answer all manner of landlubber questions cheerfully and with some degree of accuracy, meanwhile decorating an armchair in the smoking room or a plush seat in the ladies' lounge with equal and versatile capabilities.

Age made no difference; the absence of chin whiskers would be overlooked; yarning was the essential element. As for recompense, besides the pay the yarn spinner would have full privileges of a ship's officer, the run of the decks, plenty of tobacco and have ample time allotted him for lying in his bunk and thinking up new yarns.

Men who could qualify with "first hand knowledge of ships and voyages and familiarity with the classic fables of the seven seas" were invited to get in touch with E. A. Quarles, assistant to the president of the company, at 120 Broadway. Further details would be given only on individual application.

It is difficult to describe the sensation that this notice caused in Snug Harbor. It came nearer being a panic. There may have been one or two retiring individuals among the seven hundred more or less able bodied seamen who did not feel that they were qualified for the position. If there were they managed to hide themselves rather successfully last week when we made a whirlwind tour of the Harbor in an effort to discover how the old boys stood on the proposition.

One and all from the venerable white haired captain, who admitted to ninety-odd years, to the most recent graduate of the "castle," they stood up on their tiptoes and called, "Aye, aye, mate. That's the job for me," or words to that effect.

Some men had tears in their eyes and a choke in the throat at the prospect of regaining once more the canvas deck, of hearing the waves go swish against the prow and watching the spray come down, of tossing about on the banging billows and wondering when the gale would blow itself out. It might be comfortable at Snug Harbor and they might be old and pretty useless, but what wouldn't they give for a chance to get back and have a try at being a regular tar again?

Dotted about the bulletin board in small groups they discussed the thing in awed whispers. There were the pessimists, who contended that it was all a trick; the croakers, who knew that even if it weren't a trick the jobs would go to natty young fellows with clever little mustaches, the jubilant veterans, who were confident they could outyarn any man in the seafaring world,

and sluggish minded unfortunates, who couldn't make out what all the excitement was about, but knew it was something thrilling. Whatever their attitude or individual reaction, man for man, they were all ready to sign the papers at the crack of dawn, without reservation or stipulation.

"It don't sound like sense to me," said one old salt, shifting his hat two points to starboard and moving his "chaw" from the sou'west to a straight nor'east by port position.

"In my day there wa'n't no call for hirin' professionals to tell lies when we was to sea. All hands, from the Cap' down to the cabin boy, could tell 'em plenty without no official encouragement on the payroll. Yassin, times is changin' powerful fast. But just git me a chance at one of them jobs and I'll show 'em."

Rehearsing Old Yarns And Inventing New Ones

That about sizes up the situation at Snug Harbor—scorn for the idea but pleasure at the prospect. According to the typical seadog logic, a yarn spinner is a useless expense. The money might better be used to provide an official censor to pass on the age, nationality and intent of each story circulated along the main deck. But this slight difference over sea policies has in no measure tempered the excitement. When the committee of judges got round to selecting the four champion yarn spinners there will be no dearth of material. In fact, there is enough potential talent at this moment clamoring for attention to equip an entire fleet, not forgetting subaltern yarn spinners for the lifeboats and incidental tenders.

"Do I know any sea yarns?" commented one ardent seeker for the new job. "Are there any I don't know? Forty-eight years' service, fore and aft, I seen on the high seas, and what I don't know ain't. Not meantin' to boast, you understand, but just state'n plain facts. I kin hold my head up in any old aggregation of marines you want to get together.

"I run away to sea when I was just a kid, took my knocks till they made a man of me, and went up the ladder till I come to port as first mate of the finest sailin' vessel ever shipped out of San Francisco Bay. That's my record. And perhaps I haven't picked up a yarn or two in that time. D'je ever hear the one about the girl and the equator? Or the one about the iceberg and the ghost ship Tyrant II? Say, I know a lot more, too.

"Put me in the smokin' room and I'll guarantee to break up all the poker and pinochle games in sight. Set me down in the main saloon and there won't be no ladies knittin' or writin' homesick letters back to the folks on shore. Give me the kids for an

hour and I'll have their eyes stickin' out and wantin' more. If they're really lookin' for a yarn spinner, why look further?"

There were others just as eager for the job but less certain of their ability to fulfill the requirements. They had the store of sea yarns all right and the local color to go with them, but they lacked the fluent flow of the born story teller. Under the proper cross-examination they could be far more entertaining than the man with the hair trigger "That reminds me."

We found one of these retiring fellows sunning himself on an isolated bench in a remote part of the Snug Harbor grounds. He was gazing off toward the Statue of Liberty, watching through a morning haze the busy harbor traffic.

"Interested in that yarn-spinner job?" we asked.

"Yeah," he grunted. "Interested. Got no chance, though, for nothin' particular ever happened to me. Just sailin' and steamin' round the world for forty years. That don't get a person nowhere."

"Ever been in a wreck?"

"Not what you'd call a regular wreck. I was on the bark Lily Bird when she sunk off Sable. Hit the shoals off Barnegat once and went ashore in a breeches buoy. Got rammed off Belle Isle in a fog and spent eleven days on a raft. Been in a few little smashups like that, but no regular wrecks. Had some excitin' times haulin' troops during the Spanish war. Rounded Cape Horn in a two-master one winter. But that's all just the regular run of business."

"But you could tell some rather exciting stories without overworking the imagination much, couldn't you?"

"Yeah," he grunted again. "Spase I could if I got the chance. But I won't."

Down in the harbor workshops a rugged faced old pirate admitted that he had been making tennis rackets for the last fifteen years and was ready for a change.

"Making rackets for a ladies game. And me with thirty years at sea, ten years on the police force and five more as special deputy, and nothing to show for it but the manly art of making tennis rackets. Say, do you blame me for being ready to ship as a yarn-spinner?"

At the offices of the United States Mail Steamship Company there has been a constant stream of applicants ever since the rumor began to circulate about the need for yarn-spinners. Each day the mail bag has held a few more letters from active and retired seamen, who modestly admit that being a yarn spinner is right in their line.

A temporary mate on a Brooklyn vessel writes: "I wish to inform you that I am the author of a biography entitled 'The Breezy Life of a Worldwide Roamer' (yet

in MSS.), also a lyric entitled the 'Yankee Merchant Marine,' and several other world war poems. I have been at sea since 1878, to all parts of the world, and first came to this country in the bark Lottie Stewart of St. John, N. H., in '78, with a full cargo of Guinness's bottled stout."

Old "Joe" Anthony writes in from an R. F. D. route in Jersey that he is just back from a cruise to Italy on the tramp freighter Middlesex and that he can produce a sea swaggar, salty yarn and even (on demand) chin whiskers. "I'll be glad to come from the farm and do some simple yarning for you if you wish," he concludes.

A Long Island chief engineer thinks that the fact that he ran away to sea at an early age ought to count favorably in connection with his application. "In fact," he argues, "I do not think you ought to appoint a single yarn spinner for any of your ships who had not run away to sea. I feel quite strongly upon this point, but I hope you will pardon me if you think I seem too insistent about it."

An anonymous writer, signing himself "John Smith," recommends a friend for the position. "He is 32 years old and a natural comedian. Was in the U. S. Navy twelve years; been around the world at head of the Roosevelt fleet in 1908. Visited Perimids (sic) of Egypt. At Rome had a audience with the Pope. Had a girl in Japan dipie over him. He tells so many amusing things. He is a continual roar. I guess he has been to every place on seven seas, but he would not want me to give his name, because when he is among business people he is very polished and strictly attends to business. He was on the steamer Arlington 2 1/2 years and we nearly split our sides every meal laughing at him. He can tell stories without end, not all lies either."

A candid applicant, with thirty years' travelling as advance agent of different circuses, speaks of his pleasant disposition at all times, always willing and ready to entertain any one, capable of conversing with any one. "Another thinks that his experience in the navy will stand him in good stead when it comes to answering 'all kinds of foolish landlubber questions.'"

Perhaps a score of candidates will be selected after the elimination trials. These will be gathered for the finals and invited to outyarn each other in a contest similar to the old fashioned spelling match.

The first ship under any flag to put to sea with an official yarn spinner on board will be the steamship George Washington, which is now being equipped at the Hoboken plant of the Todd Shipyards Corporation. Sailing is scheduled for the latter part of July. Three more ships, with three more official liars, will follow soon afterward.