

# OUR NAVY AVIATORS HAVE DONE MUCH DESPITE HANDICAPS

### Initiative in Marine Flying Early Taken by Small Group of Pioneers and Maintained Despite Odds

THE United States navy should, by right of priority and initiative in aviation, lead the world in the field of marine flying. The American public knows but little of the really big things done by a handful of pioneers in the service to put us at the forefront of the art.

Well nigh every day news comes from abroad of the conspicuous service rendered by seaplanes as distinct from the strictly military or army aeroplanes, and while we may be thrilled by these performances only a few people here realize how much these accomplishments rest upon the sure foundation of pioneer performances on this side of the Atlantic. British seaplanes have achieved wonders in guarding the coasts of the British Isles. British seaplanes have repeatedly raided those parts of the Belgian littoral held by the Germans; and aircraft of this character sooner or later are going to make Zeppelins and other submarine bases untenable.

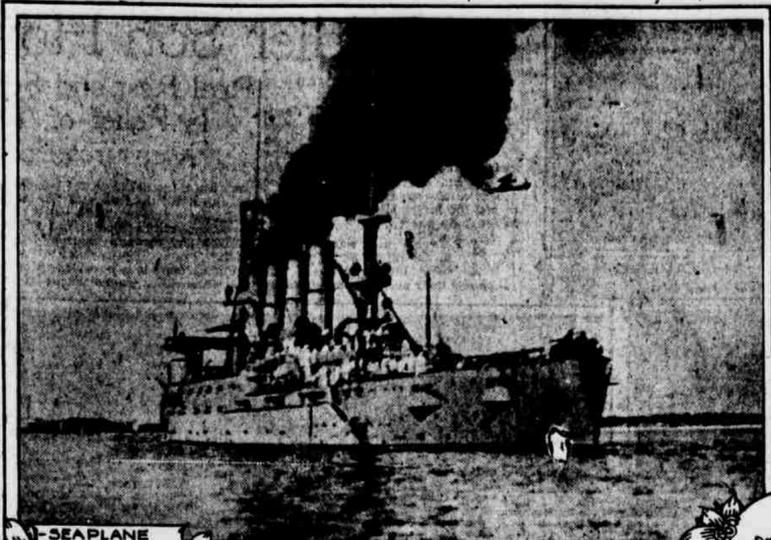
The enemy has been equally resourceful in his employment of the marine flying machine, and a good many vessels have been halted and others placed in jeopardy by the sudden attack of seaplanes overhead. More than this, the Teutons have taken a step in advance by using nautical aircraft as mobile bases from which to drop bombs or to bring rapid fire guns into service. They have bodily cribbed Admiral Fleker's invention of the seaplane by the entire practicability of launching torpedoes effectively from the larger seaplanes. British censors have allowed us to learn of the sinking of at least one merchantman in this fashion.

Only the other day a French liner reached this side of the Atlantic largely because hostile submarines were disconcerted twice and driven away by protecting seaplanes when seeking to get close enough to torpedo the passenger steamer. For two days after leaving her home port the liner was shadowed by a French cruiser equipped to play the part of ocean-going mother ship.

The submarines dared not show themselves during the daytime. Both attacks were attempted when the light was dim; the first when night had fallen and the second on the following evening during the period of dusk. The convoying aircraft were alert upon both occasions.

**Navy to Build Aircraft.**  
Despite the condition of low visibility at twilight, the venturesome U-boat, rising to the surface to make sure of her aim, was caught napping. Before the submarine could hide beneath the waves one of the seaplanes swooped and landed on the deck. Only a few hundred feet above the enemy craft, and then, in rapid order dropped half a dozen bombs, two of which landed squarely upon the submarine. The U-boat was mortally hurt and sank like a stone.

These are things that American naval aviators might have been doing several years ago if the work of their brother officers and the efforts of co-operating civilian experts had received adequate encouragement. Instead, our allies and our foes have secured a running start, and the best we can hope is to catch up by a tremendous effort. We have got to pay doubly for the years of administrative indifference. Mr. Daniels has asked Congress within the past few weeks to appropriate \$45,000,000 for naval aeronautics, and it is probably no exaggeration to say that fully about the same amount is needed to get the factory ready to begin production by the end of the coming October. By way of satisfying the demand for fighting flying machines the Secretary of the Navy says that the League Island establishment will have an initial output capacity of a thousand



SEAPLANE ALOFT AFTER BEING LAUNCHED FROM THE NORTH CAROLINA.



GETTING A SEAPLANE ABOARD PREPARATORY TO CATAPULTING IT FROM ONE OF OUR ARMORED CRUISERS.



ONE OF OUR HIGH-POWERED NAVAL SEAPLANES.

planes a year. Certainly this is to be desired, and as the navy has achieved much in aviation, the public should have a glimpse at least of what they have essayed and what they have achieved in their efforts to advance the cause. Contrary to popular understanding, the navy realized at an early date that the flying machine was something to be reckoned with. When the Wright brothers were making their modest demonstrations at Fort Myer in 1903 an officer, Lieut. G. C. Sweet, then attached to the bureau of aviation, called to the Department's attention the potential service of the airplane as an adjunct to battle squadrons.

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**Pioneers of Navy.**  
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Belmont Park and a number of American naval officers were directed to be present.

Following that memorable occasion in October, 1910, Capt. Washington I. Chambers, one of the officers in question, tried to get one of the two competing American airplane concerns to join efforts in effecting a flight from a United States man-of-war. Glenn Curtiss responded willingly and Eugene Ely, then alive and associated with the Curtiss company, cooperated in a manner that brought the naval possibilities of flying strikingly before the world.

Officially the Navy Department as a whole was doubtful in its attitude, but the enthusiasm of Curtiss, Ely and Capt. Chambers carried the project along and on November 12, 1910, Ely rose in a Curtiss land machine from the U. S. S. Birmingham, then anchored at Hampton Roads, Va. His aircraft, equipped with only a fifty brake-horse-power motor, got a running start from an extemporized inclined platform rigged forward on the scout cruiser.

Significant as that performance unquestionably was, it occasioned but little comment on this side of the Atlantic, and yet that courageous blazing of a trail for the navy's aviation initiative wended among the battle fleets of the European belligerents. True, the land machine was manifestly un-fitted for naval adoption as it stood, but those really interested in naval aviation grasped the essential fact that acrobatic flight would be of incalculable value to a squadron commander and realized that the problem before them was to bring about modifications that would permit the airplane to be carried on shipboard and to alight, in safety upon the water. To

effect this an initial sum of \$25,000 was suggested, and it was proposed that an office having to do with aeronautics be created in the Navy Department.

Recalling that this modest grant was not made, and remembering that we are looking back less than seven years, the present plea to Congress for \$45,000,000 is all the more instructive. Aviation in the navy, at least technically, has advanced despite departmental failure to appreciate its possibilities and in the face of actions amounting at times to deliberate discouragement. Indeed, persistent enthusiasm on the part of a few officers has kept the flame of invention and improvement alive, but foreigners as a rule have been the richest beneficiaries of this zeal.

Ely's performance in getting away from the deck of the U. S. S. Birmingham was only a trifle more than two months ago when he accomplished a still more surprising feat. On January 18, 1911, he arose from the exposition field at San Francisco, flew across the bay and alighted upon a platform built for the occasion upon the after deck of the U. S. S. armored cruiser Pennsylvania. It was a hazardous essay, because of the twofold problem of striking the inclined platform squarely and then of checking the speed of the machine so as to bring it to a standstill in a short distance without wrecking it or harming the pilot.

The same day Ely flew away from the ship and returned to San Francisco. With this lead in nautical aviation one finds it hard to explain the failure to push on and to make flying an integral and an important branch of our naval preparedness. Apathy on the part of the Secretary

N. Y., during that period was epochal and Curtiss and his naval collaborators were able to produce a standard type of hydroaeroplane which in its broad features has remained pretty much the same ever since.

These same men likewise worked out a form of control which made it easier and safer to train would-be pilots. Foreigners appreciated these improvements and were quick to alter their views and prompt in copying everything they could.

**Flying Interested Dewey.**  
It is evidence of the broadness of mind and the professional grasp of Admiral George Dewey that he was at all times deeply interested in aviation as a potential aid to the navy. And it is quite probable that but for his stand in the matter and his position as president of the General Board Congress would not have appropriated the \$25,000 authorized in 1911.

Even so, aviation has had an uphill struggle in the navy until late, and as recently as March 3, 1915, our national legislators authorized the first really substantial sum for aeronautics. Then it reappropriated out of balances of other appropriations a matter of \$1,000,000, but did not make this amount available until the European war had been under way for nearly a year. At the same time authority for the creation of an advisory committee for aeronautics was given.

Largely because of governmental inaction American aeroplane builders found little domestic encouragement and native manufacturers gave scant heed to safety devices and the navigational instruments which have since multiplied and become recognized parts of the equipment of fighting aircraft. Five years ago the pilot had indeed to be an aerial acrobat whose problem was that of balancing his machine upon an invisible slack wire. Inherent stability was something dreamed about, but seemingly a long way off. The real reason for this was that the automatic stabilizer offered the likeliest solution of the aviator's wearisome and even exhausting task of governing his teetering craft.

It was then that Elmer A. Sperry proposed a gyroscopic stabilizer. The inventor to go ahead and promised to buy the apparatus when fit for installation. Naval aeronauts even lent their aid and helped by their experience to make the Sperry stabilizer a reliable instrument of control.

This was in the winter of 1911, and the inventor, but is further proof of the unheralded part that the navy fliers of the United States have taken in promoting the art of aerial navigation. It is rather suggestive, however, that the flying machines of our fleet have not yet been provided with any of these stabilizers, unless this has happened very recently, while it is commonly reported that Mr. Sperry is turning out a great many of these devices for foreign Governments.

Officers of the naval flying corps and the bureau of construction and

the other considerations to devote all his time to cooperating with the Government. All private endeavors and considerations of personal ease must be banished, he resolved. He saw a sphere of usefulness for him in helping the Government to get recruits for the navy and the naval reserves. He knew that time was vital and figuratively speaking he took his coat off and at once buckled down to the task. The value of his service has now become strikingly evident at Washington.

George Baker, Jr., the present commodore of the New York Yacht Club, has a unique place on the honor roll, for the service he rendered was decidedly out of the ordinary. When our war was begun he wanted to give his yacht to the Government and, like Mr. Astor and Mr. James, looked forward to the proud day when U-boats should catch it from guns mounted on a vessel he had owned. But reports had reached him that the submarines were mounting four and five inch guns and that some of the craft being used in European waters to hunt them were not regarded as competent.

The question then arose in Mr. Baker's mind whether the vessel he was about to offer could be made competent for full report on all her qualifications was gone over carefully by Mr. Baker without bias. He came to the conclusion that while good enough perhaps she might be better. So instead of giving her for Government service he bought a new yacht at an expense of something like a quarter of a million dollars and told Uncle Sam to take that one.

The name of J. P. Morgan is well up on the list. Following in the footsteps of his father, who gave his yacht, the old Corsair, to the Government for the Spanish war, Mr. Morgan has given the present Corsair in the confident

hope that his reward may come through this yacht's serving up to the fine standard set by the former Corsair, which was renamed the Gloucester.

Responding to the patriotic spirit of Mr. Morgan, the men who served on the Corsair did not want to give up their jobs, but sought to be enrolled in the navy, so they could do their bit. Many succeeded. Where red tape interferes, it is as far as possible being cut. The navy feels that these men will make up in spirit and patriotism what they may lack in technical training. The training can be acquired, the spirit cannot.

Harold Vanderbilt, who is on the honor list, has shown such spirit. He believed in the early days of the war that the submarine chaser would be an all important factor in ridding the seas of the U-boat pest. He felt that his type of craft perfected without regard to expense would be able to cope with the most modern submarine which Germany could turn out. He therefore built one at his own expense and turned it over to the Government.

"Of course you'll make any changes you desire," he said to the Navy Department when the ship was completed. "But there's one accessory I'd like very much to have you keep on board if it can be arranged."

### Foreign Governments Quick to Develop Ideas Worked Out Here —Department's Awakening Late

repair have done epoch making work in solving hydroplane floats and in improving the seaplane in a number of ways. The novel experimental basin at Washington and also the wind tunnel there have figured conspicuously in these evolutionary labors.

**Credit Due the Navy.**  
In connection with these developments Glenn H. Curtiss helped still further by devising a way by which the flying boat could land on shore as well, employing for the purpose wheels that could be lowered to provide the needed support upon alighting. That was the machine known some years back as the "O. W. L." type, the short for "over water and land." This happened in 1912, but the march of events in aviation was more urgent in other directions, and for the nonce the flying boat forgot that extremely promising innovation. It has since been found well worth adoption abroad.

To American naval officers credit is undoubtedly due for discovering the value of the airplane as a means of detecting submerged submarines. In the summer of 1912 the naval aviation camp at Annapolis and some of our submarines collaborated in the nearby waters of Chesapeake Bay. Chesapeake Bay is always more or less muddy and the submarines found little trouble in hiding when resting quietly upon the bottom, but the aviators soon learned to locate them by means of apparatus of oil upon the bay's surface and the occasional rising of masses of air bubbles—tell-tale evidences that are to-day recognized in hunting hostile U-boats from aloft.

Probably nothing developed by our navy has done more toward widening the maritime use of the airplane than the flying machine that the catapult or launching device made practicable by Capt. Chambers. Something of the sort was absolutely necessary before the seaplane could be made an integral part of fleet scouting along lines akin to those that have become so common upon the battle fronts of continental Europe. Capt. Chambers realized that the seaplane, no matter how sturdy, would find it next to impossible to rise from a boisterous sea, and in order to make a reconnaissance flight feasible he believed that some compact and reliable apparatus aboard ship should be provided in order to set the scouting machine away from its navigable base.

Crude as was his experimental apparatus, it was sufficiently perfected in the course of some months as to embody sound and satisfactory operative principles. It should be a source of gratification to Americans to know that a goodly number of our battle-craft are now equipped with catapults of an improved sort which put us ahead of other nations, and the apparatus is so skillfully designed that it can be used on a ship of any size and is practically no handicap upon the fighting of the vessels guns.

There has been a disposition in some directions here to lay undue stress upon the work of the British and the French in a kindred field. The experts of both of these foreign fleets have simply borrowed generously from the labors and the accomplishments of our people and have in no wise yet equalled the best that we have achieved in this department of naval aviation.

When our ships were sent to Vera Cruz in 1914 our naval aviators proved there what they could do with their seaplanes. This was before the outbreak of hostilities in Europe, and the performances on the Mexican coast may very properly be considered pioneer work. The expert character of our service in the matter of flying it is little short of amazing how many were the discouragements that had to be faced by the officers engaged in naval aviation. They were hampered in nearly every direction by inadequate facilities, a lack of appreciation of the part of the head of the Navy Department. Even so they risked life and limb and gave of their mental best unstintingly. This spirit explains why the art has made the progress it has in our fleet.

# NEW YORK HAS LONG HONOR ROLL OF PATRIOTIC CITIZENS WHO AID IN THE WAR

THERE is an honor list tucked away in the Government files at Washington which contains the names of prominent Americans who are rendering conspicuous and disinterested war service to the nation. It is not available to the public because these men have asked that they be allowed to show their patriotism quietly and with no other reward than that which comes of their own sense of duty well performed.

But with the consent of officials a few men have had a peep at the list and he finds those at the head of it are nearly all New York men, and men whose activities along other lines are daily attracting attention. Incidentally the city of New York has earned the honor place among American cities, for it has, even at the expense of its own laws and regulations, come forward to extend such needed help to the Government.

In explaining why little has been said about the service being rendered by prominent New York citizens to the national cause reference may be made to an incident in Paris in the early days of the war. The incident seems to have set the fashion in rendering service without expectancy of popular acclamation. It is not permitted to give the names of the little group of New York men who were directly concerned except to say that Robert Bacon was one of them and knows all about it. But it is permissible to give a general outline of what happened.

"War between Germany and the United States is coming as sure as night follows day," one man predicted. "But in the meantime we must apparently be mere lookers on while others blaze the way to make our ultimate task easier."

Discussion turned to the question of how that little gathering could best help the cause. The answer could not enter the Foreign Legion or the aviation service, for all were past the age limit. Besides, they were not military men. But they wanted to help in some way, and meant to find one then and there.

"Suppose each of us chips in \$100,000 or some such amount for American ambulance and Red Cross work?" was a casual suggestion.

The idea was jumped at. In less than half a minute the funds were pledged and arrangements outlined to make the plan effective. The only point on which every one present in- sisted was that the names of the individuals who made the contributions were not to be made public. It was to be known as the American ambulance contribution, they stipulated.

More than a year later, when the funds provided by these New York men were saving thousands of lives and making American hospital work a model throughout the world, Mr. Bacon was asked at the Ritz Hotel in London whether it would not be possible to get the names of the little group of New York men responsible for the work.

wanted to give his yacht Noma to the Government for war purposes he was informed that it could not be done legally.

"The Government cannot accept gifts from private individuals," he was told. It sounded like red tape to Mr. Astor and he looked about to see where it might best be cut. He knew the Government needed ships, and badly, and he knew that the Noma, which had been his most prized plaything, was a pretty good ship of its kind. Incidentally he knew that it would cost the Government tens of thousands of dollars to build a ship even approaching the Noma, to say nothing of time and labor.

But there was Government red tape binding Mr. Astor to put out of his mind any thought of rendering American sea forces more efficient by a gift.

"Well, if the Government can't take the yacht perhaps it can buy her from me," Mr. Astor suggested. "There is nothing in the law which prohibits that."

"All right," was the reply. "What will you sell her for?" "One dollar." The bargain was sealed. The Noma is now rendering splendid service, and no Government law has been outraged. Also a precedent had been set for preventing the Government from refusing to acquire ships urgently needed by virtual gift. But Mr. Astor did not confine his service to giving his fine yacht. He gave himself as well to Uncle Sam. If the Noma is going to be shot up by the U-boats he'd like to be aboard her in her death struggles," he confided in friends, "and if she comes through with flying colors I want to be on the spot to congratulate her on her success."

Mr. Astor's mind for months before his final break with Germany. When there appeared to be a likelihood of the United States becoming involved he made a hurried trip to Washington to sound friends as to whether they thought he should have to combat the U-boat campaign. That was last year, and he explained that he did not want to wait until war was actually here before offering his services to the nation, for he felt that he needed training to make them really worth while.

What he learned was enough to convince Mr. Astor that his duty was to set aside all other considerations except prospective war service. He enlisted in the Second Battalion of the naval militia, going in with the same blinding hope in its mind as some ambition was at that time. He rose to the rank of ensign by hard work and was taken into the regular service at the outbreak of the war. He was delighted when he learned later that he had been assigned to his former yacht, the Noma, but he made it clear to the officer who gave him the order that he had not asked for it. His real reward will come, he says, if the Noma gets into the thick of a fight and gives a good account of herself. Her target practice records will be his chief concern until that day.

The name of Arthur Curtiss James, former commander of the New York Yacht Club, is also well up on the honor list. Not only has he given his yacht, the Aloha, to the Government for war service but he has worked like a Trojan to persuade every other yacht owner he knows to do likewise. He is one of those who saw war coming and enlisted in advance.

No sooner had Germans declared ruthless submarine warfare last February than Mr. James calmly set aside

ing as possible. Reports have reached here that Germany will not consider converted yachts as part of the recognized naval forces and will hang men captured on such craft as pirates.

These reports are not taken seriously, but even if they were they would act only as an incentive to the class of American yachtsmen who are coming forward.

Nearly all the prominent New Yorkers who since last April have been making every effort to get a chance at the U-boats are men over thirty-one and not liable to conscription. In some cases these men have had to fight to have their services accepted, but they have overcome obstacles with the help of Franklin D. Roosevelt, Assistant Secretary of the Navy, who believes in practical action and simply won't have his hands tied with red tape.

Senator Peter G. Gerry of Rhode Island found he was barred from giving his yacht Owers to the Government because he was a member of the Senate. He introduced a special bill authorizing him to do so, and won his fight.

threw the law in the waste paper basket and Mayor Mitchell ordered full steam ahead.

Then red tape snapped all along the line. The city turned over to the Government several city parks next to the Brooklyn Navy Yard, also Pelham Bay Park, where the ships are being put into barracks to house and train 4,000 men. The Department of Docks and Ferries in New York turned over piers and buildings belonging to the city. The technical question of "right" to do so was ignored. The fact that the nation was at war was the only thought.

"Do it first and then think about your right to it," was the slogan. Officers of assistance from various classes of men began pouring in from the city to the Government. The American association of Architects, including the most prominent architects in the city, offered their services and the services of their entire staffs in rushing new buildings to completion. Civil engineers with their entire staffs came to the front offering their services gratis and agreeing to charge Uncle Sam nothing for their staffs.

"We want to do our part," was the simple statement accompanying many of these offers.

Many in New York have offered the Government the country places free of cost for use as hospital or recuperation stations for officers and men. The list is so long that individual names could not be given without reflecting unintentionally on those not included. These New Yorkers offer to move all the furniture and surrounding equipment, install hospital beds, &c., at their own expense. The total aggregate cost may run into millions. But it is not another sample of the spirit which has put New York on the honor list.