

II. Put to the Test (1917-1919)

When the United States entered WW I in April 1917, the small group of Navy and Marine Corps Aviators who had promoted the growth of Naval Aviation was not equipped for combat. The Naval Air establishment had only one air station, a training base at Pensacola, Fla., 54 aircraft (mostly training planes), 48 aviators and students, and 239 enlisted men.

During the 19 months of U.S involvement in the war, however, 39 new naval air stations were established, 27 of them overseas. Thousands of young men became pilots, ground officers, mechanics and technical specialists in the Naval Reserve Flying Corps. From a force of 43 pilots, 193 enlisted men and 54 aircraft, Naval Aviation's resources expanded by war's end to 3,049 pilots, 43,452 enlisted troops, over 2,000 aircraft and 15 lighter-than-air craft.

Early in June 1917, the first U.S. military detachment to reach France was an aviation unit led by Lieutenant Kenneth Whiting, a submariner turned

aviator who contributed much to early aviation development. This small contingent was followed by others, including the First Yale Unit, a group of students who organized a flying unit in 1916 that later became part of the Naval Reserve. One member-of this group was David S. Ingalls, who later became the first ace in Navy history and the only Navy ace in WW I.

U.S. naval aircraft were used primarily for convoy duty, for antisubmarine warfare and to bomb enemy submarine installations. Until American airplanes could be built and shipped to Europe, the aviators used foreign aircraft. Some of these planes were too light to carry machine guns or bombs and the pilots flew with pistols, rifles or shotguns for protection. Hand grenades and even bricks were thrown when nothing else was available.

Development of the long-distance flying boat was an important by-product of the war. Numerous types appeared, from the F-boat for training to the HS, H-12 and H-16 patrol bomber flying boats. All



Father of the Naval Air Reserve F. Trubee Davison was a young Yale student who translated a dream into action. In 1916, he organized the First Yale Unit, a group of students who were interested in flying and later became part of the Naval Reserve. Back row, left to right: John M. Vorys, Artemus L. Gates, Albert J. Ditman, Allen W. Ames, David H. McCulloch, F. Trubee Davison, Robert A. Lovett and Erl C.B. Gould. Front row: Wellesley Laud-Brown, "Ella" the mascot, and Henry P. Davison.

were designs of the American inventor Glenn Curtiss. The British operating these aircraft in the harsh North Sea environment improved on these models out of necessity. The end result was the F5L which saw considerable operational use in the U.S. Navy for a number of years after the war.

Although the Navy-Curtiss (NC) planes were finished too late to take part in the war, one of them, the NC-4, made a trailblazing transatlantic crossing in May 1919. It was the first time any aircraft had flown across the Atlantic Ocean.

On May 8 of that year, three NC aircraft, dubbed "Nancy Boats" by the press, with Commander John H. Towers in command, took off from NAS Rockaway Beach, N.Y., for Trepassy Bay, Newfoundland. Here, they waited for good weather until May 16 to continue their journey. Of the three, only the NC-4, commanded by Lieutenant Commander Albert C. Read, with pilot Lieutenant Junior Grade Walter Hinton and copilot Lieutenant Elmer F. Stone, USCG, reached its destination in the Azores. The NC-1 and NC-3, hampered by unfavorable weather and navigation difficulties, landed at sea. Cdr. Towers sailed NC-3 into the Azores, but the aircraft was so greatly damaged that it could not continue. NC-1 capsized and sank when taken in tow.

NC-4 continued to Lisbon, achieving the first aerial crossing of the Atlantic on May 27. Read and his crew flew on to Plymouth, England, arriving on May 31 to complete the record flight.

Many aviators were satisfied with the capabilities of the flying boat as the primary means of sea-air power, while others thought aircraft should be able to operate from combatant ships. Still another group promoted the development of lighter-than-air craft.

The Navy's LTA program actually began on June 1, 1915, with an order for one nonrigid airship, later designated DN. In 1919, the Navy Department authorized the acquisition of its first rigid airships, ZR-1 and ZR-2, as well as the establishment of a supporting air station, NAS Lakehurst, N.J.

The years that followed also brought advancements in the flying boat but, as WW I ended, interest was already beginning to swing toward a specially constructed flush-deck carrier. In 1919, Congress authorized the conversion of the collier *Jupiter* to the carrier *Langley*, the first of such ships in the U.S. Navy.

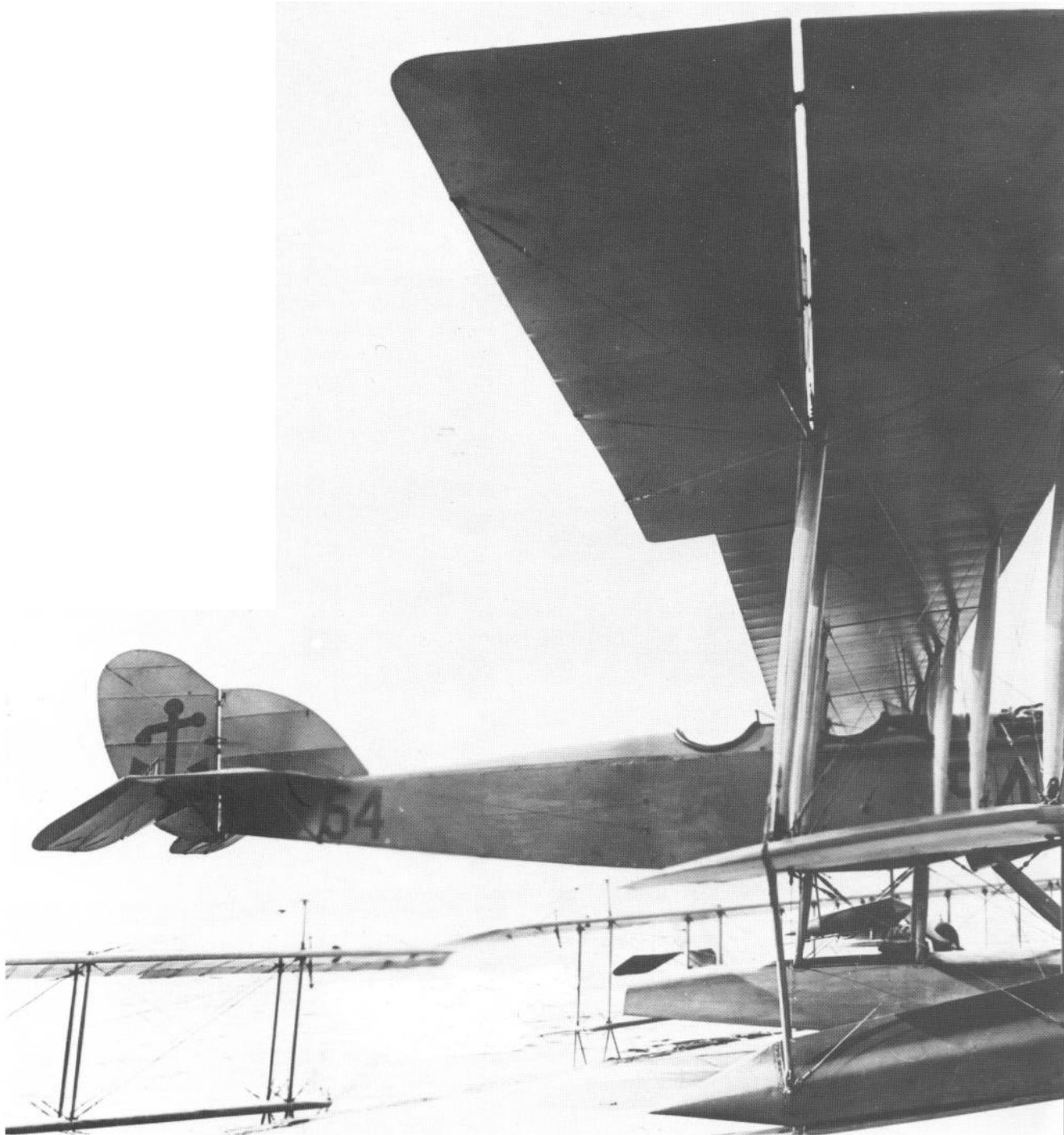


At the outbreak of WW I, Naval Aviation was still in its embryonic stages. Young men were drawn to this new call to adventure by recruiting posters such as this. Lt. Kenneth Whiting led the Navy's First Aeronautic Detachment to Europe in May 1917.

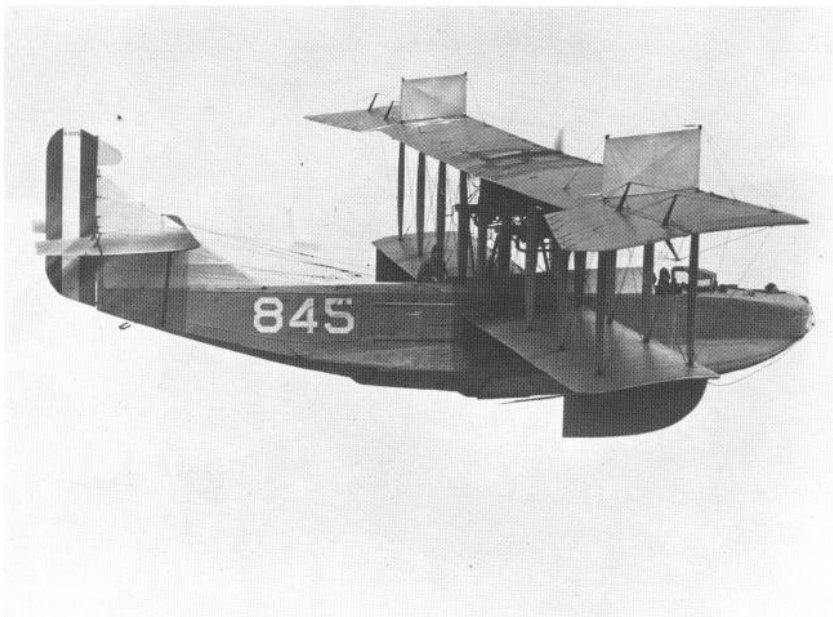
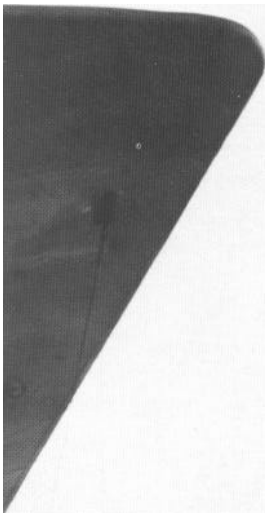


Lt. Kenneth Whiting
Naval Aviator #16

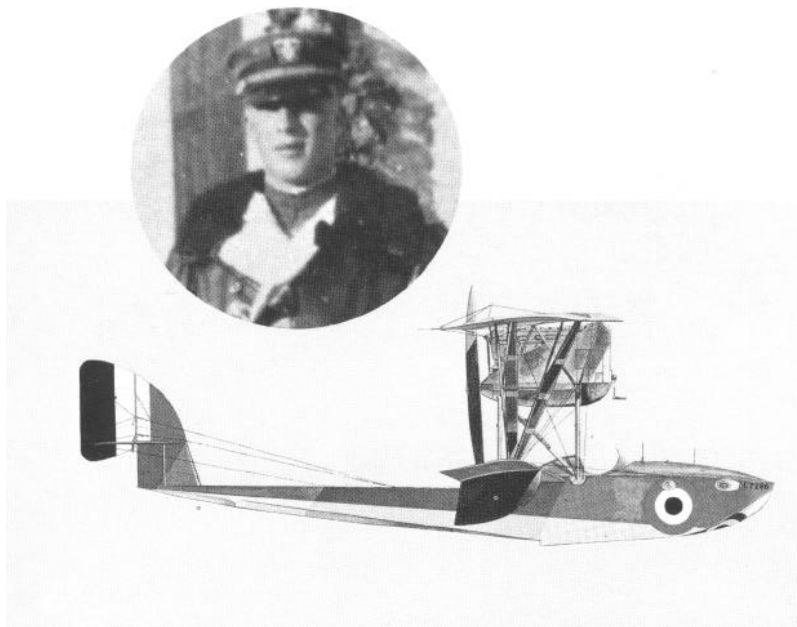
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An early Curtiss-designed seaplane, the N-9, was the standard Navy trainer of WW I. This one is pictured at NAS Pensacola in 1917. With a 100-hp engine and an empty weight of 1,860 lbs., it was the seaplane version of the Army's Jenny with larger wings, ailerons, vertical tail and radiator. The Navy procured 510 N-9s in all, 94 from Curtiss, 360 from Burgess, and 5 from the Army. More than 50 were built from spare parts at Pensacola. The first one was delivered in 1916 at a cost of approximately \$8,000. NH 90238



This 1918 Curtiss H-16 Navy Flying Boat was designed primarily for antisubmarine patrol. It had two 360-hp Liberty engines, 95-foot wing span, and a crew of four (pilot, assistant pilot, mechanic and radio operator). The H-16 was the first aircraft produced at the Philadelphia Naval Aircraft Factory. USN 1072

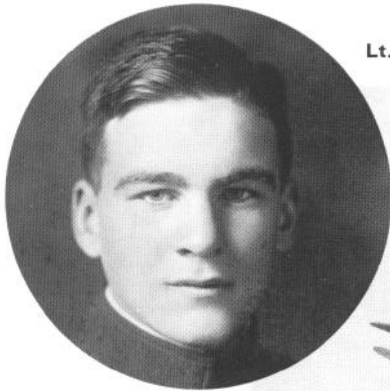


The first U.S. Naval Aviators arriving in Europe had no American-built aircraft to fly and used various Allied aircraft instead. Ens. C.H. Hammann, flying an Italian Macchi 5 seaplane, was Naval Aviation's first Medal of Honor winner.

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A major U.S. naval air training base in France during WW I was NAS Moutchic. Here, several HS flying boats, which were the first American-built aircraft to be assembled in France, are beached. USN 1053802



Lt. David S. Ingalls. Navy's first ace.

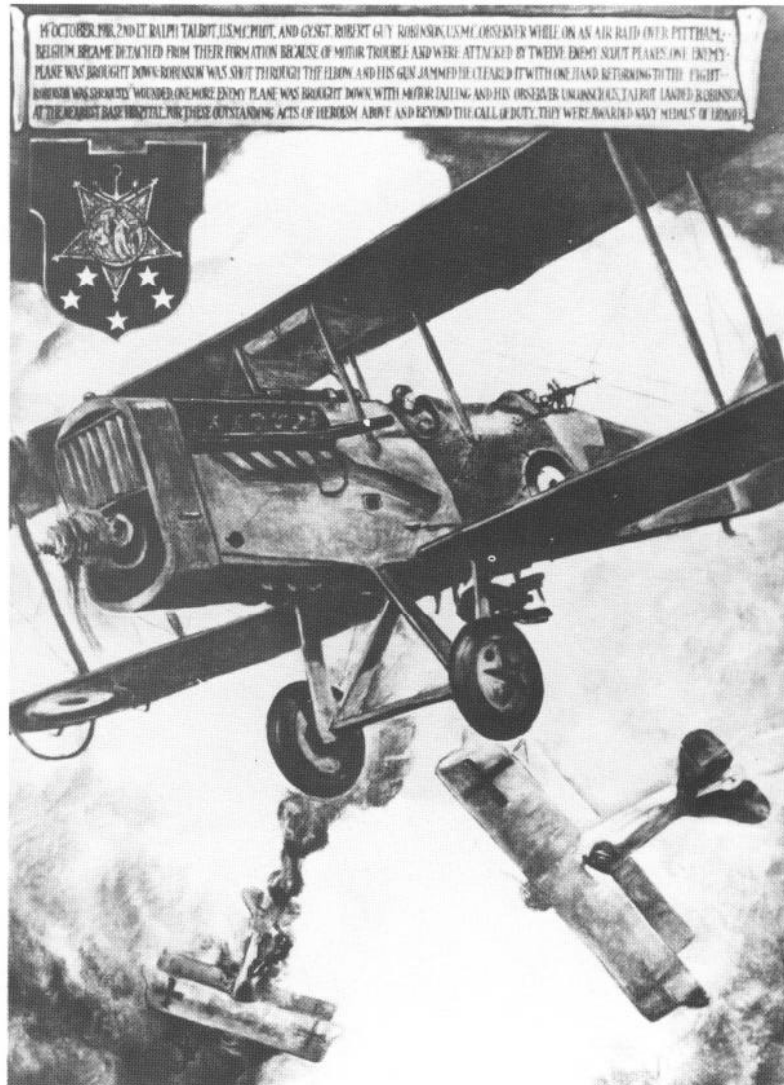
Artist John Ficklen



From July 18 to September 24, 1918, while flying with RAF Squadron No. 213, Lt. David S. Ingalls, USNRF, shot down four enemy aircraft and an observation balloon, for which he was awarded the Distinguished Flying Service Cross by the United States and Britain. He was the U.S. Navy's only ace in WW I.



Photographed on April 27, 1917, the Navy's first nonrigid airship, DN-1, maneuvers on the water at Pensacola, Fla. Due to manufacturing problems and poor engines, it could barely get airborne. AN 8293



14 OCTOBER 1918. 2ND LT RALPH TALBOT, USMC PILOT, AND GYSGT ROBERT GUY ROBINSON, USMC OBSERVER WHILE ON AN AIR RAID OVER PITTHAM, BELGIUM BECAME DETACHED FROM THEIR FORMATION BECAUSE OF MOTOR TROUBLE AND WERE ATTACKED BY TWELVE ENEMY SCOUT PLANE. ONE ENEMY PLANE WAS BROUGHT DOWN. ROBINSON WAS SHOT THROUGH THE ELBOW AND HIS GUN JAMMED. HE CLEARED IT WITH ONE HAND. RETURNING TO THE FIGHT, ROBINSON WAS SHOT AND WOUNDED. ONE MORE ENEMY PLANE WAS BROUGHT DOWN WITH MOTOR FAILING AND HIS OBSERVER UNHARMED. TALBOT LANDED ROBINSON AT THE NEAREST BARRACKS HOSPITAL. FOR THESE OUTSTANDING ACTS OF HEROISM ABOVE AND BEYOND THE CALL OF DUTY, THEY WERE AWARDED NAVY MEDALS OF HONOR.

The first WW I raid-in-force by the Day Wing of the Northern Bombing Group on October 14, 1918, was conducted by eight planes of Marine Day Squadron 9 over Pittham, Belgium. For extraordinary heroism on this and an earlier raid, 2nd Lt. Ralph Talbot, USMC, and his observer, GySgt. R.G. Robinson, USMC, were awarded Medals of Honor. USN NPC-KV40-48

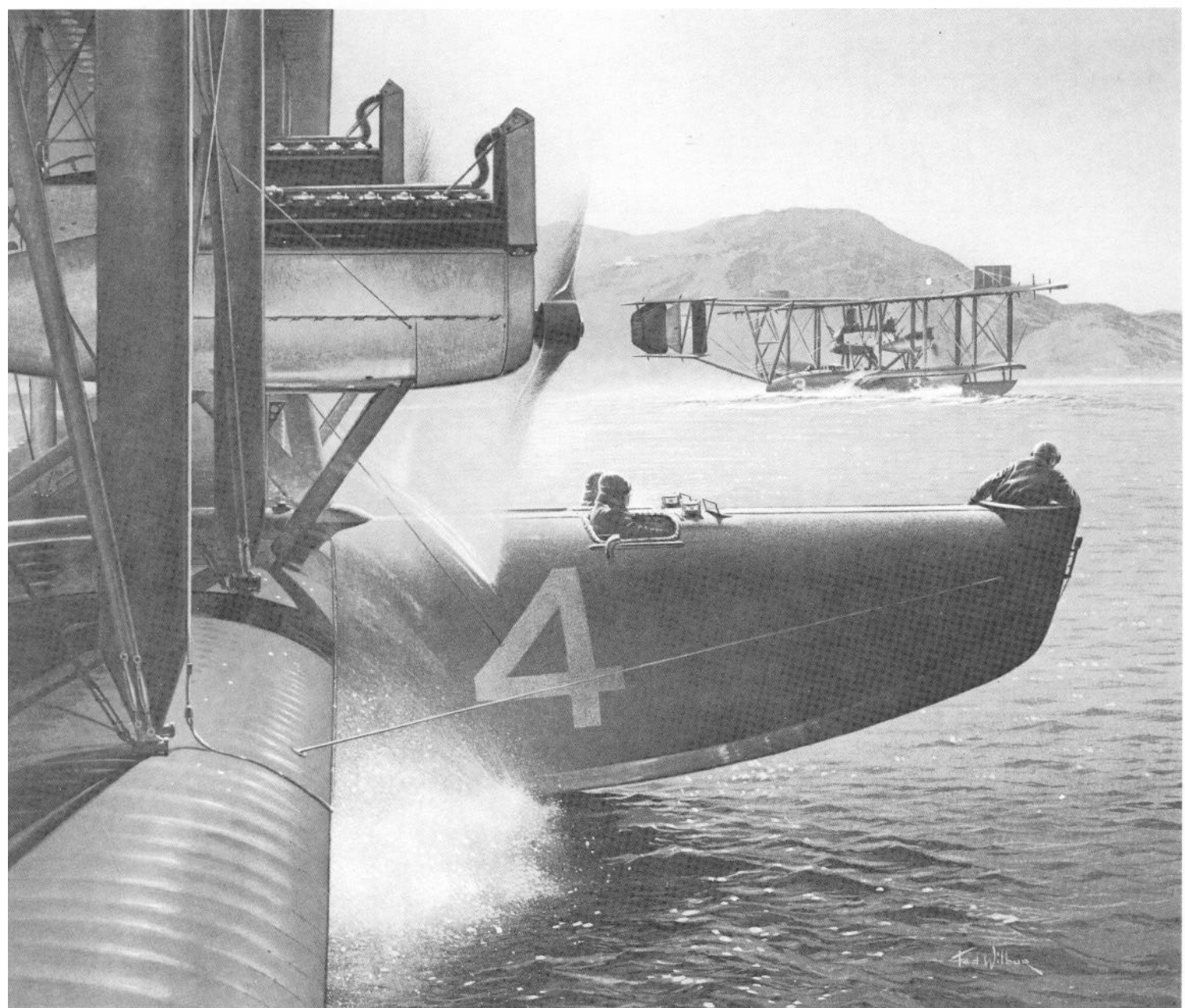
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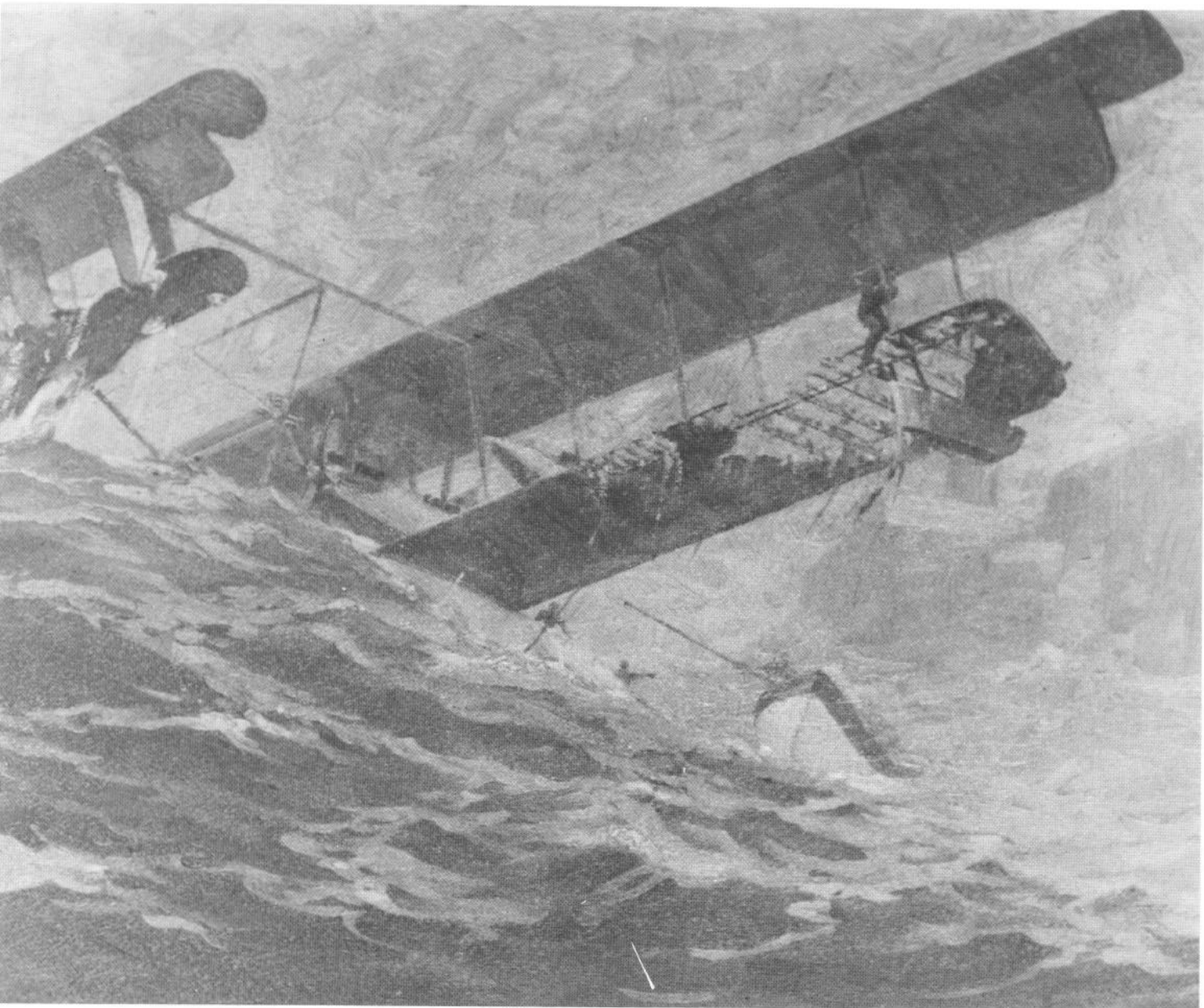
Cdr. John H. Towers
Naval Aviator #3
Commanded the flight of the NCs.



The world's first flight across the Atlantic began from NAS Rockaway, N.Y., on May 8, 1919. Three Navy-Curtiss (NC) flying boats, under the command of Cdr. John H. Towers, departed for Trepassey Bay, Newfoundland, and Lisbon, Portugal, with a planned stop in the Azores. Only one, the NC-4, made it all the way to Plymouth, England, arriving on May 31.

Artist Ted Wilbur. Copyright U.S. Naval Institute. Used by permission.





Artist C E Ruttan



Cdrs. H.C. Richardson and G.C. Westervelt and Lt.Cdr. J.C. Hunsaker. The three Naval Constructors who worked with Glenn Curtiss to design the NC-4. Richardson was Naval Aviation's first maintenance officer.

NC-1 and NC-3 landed in heavy seas before reaching the Azores. Both were damaged and unable to continue the flight. In this oil painting by C.E. Ruttan, NC-1 is taken in tow by the steamship Iona. The aircraft later capsized and sank. NC-3, commanded by Towers, drifted within sight of the Azores, started her engines and taxied in under her own power. Neither crew suffered any personnel losses.

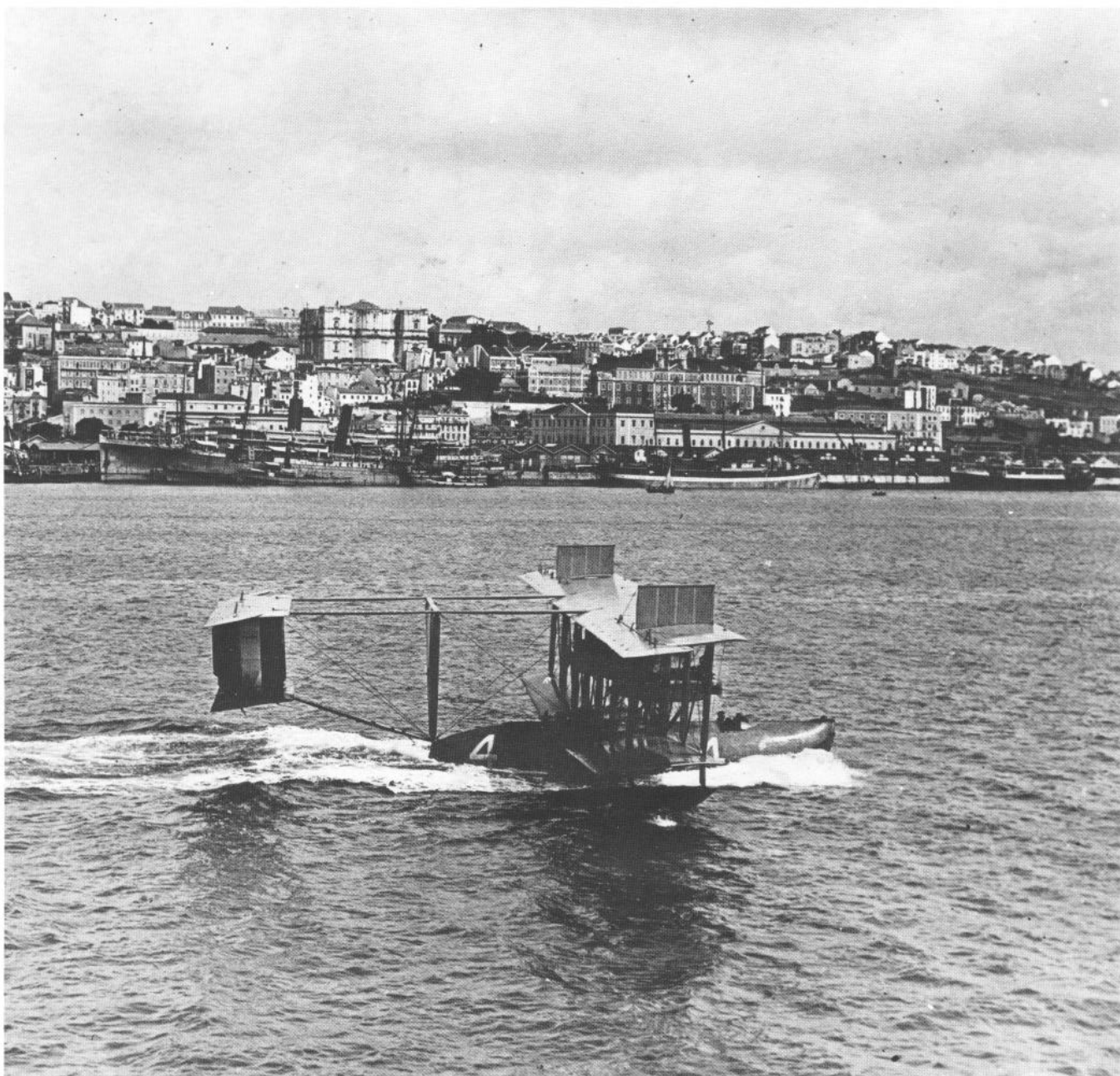


Ted Wilbur

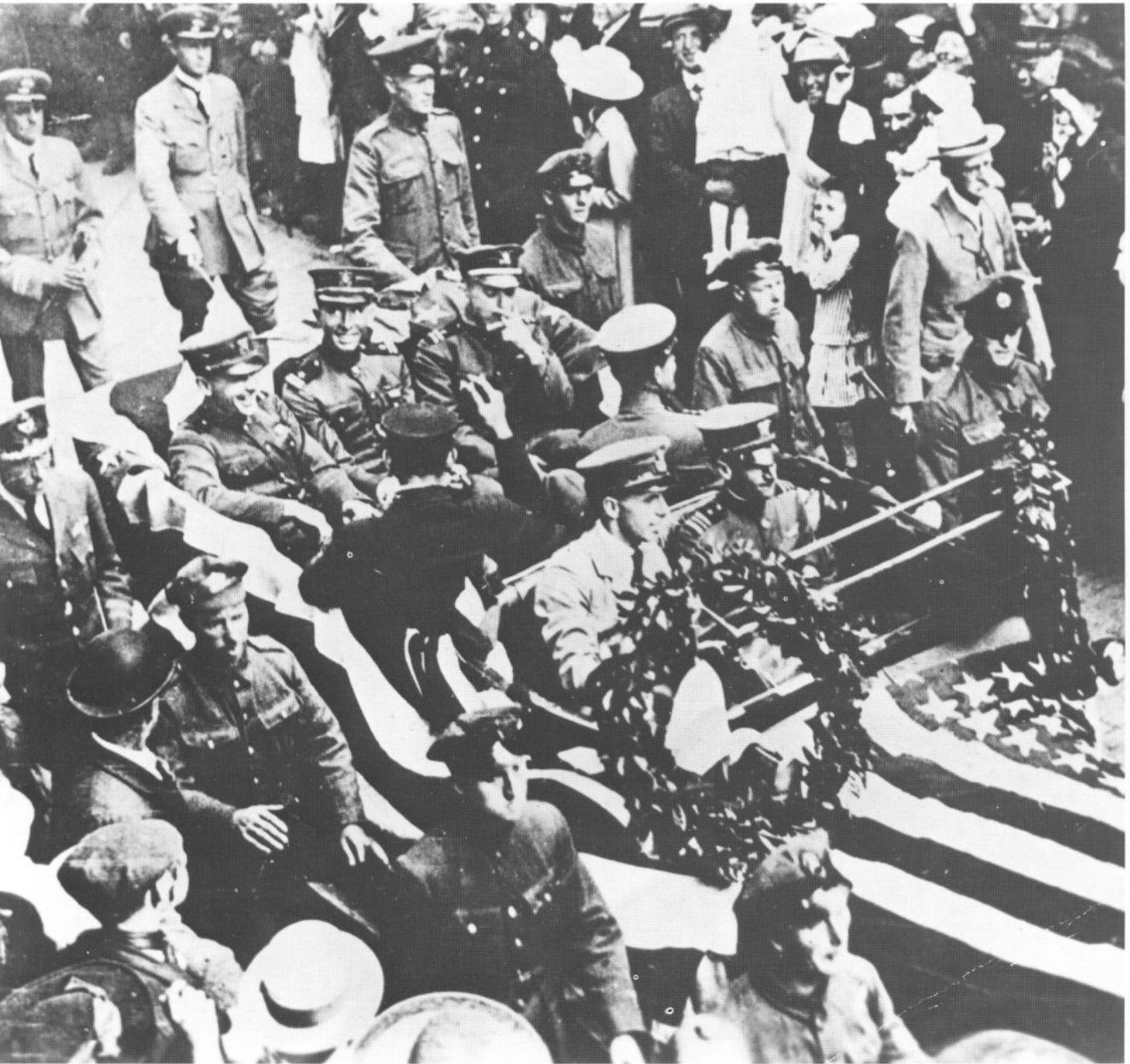
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Despite the adverse weather conditions, NC-4 flew on to the Azores.

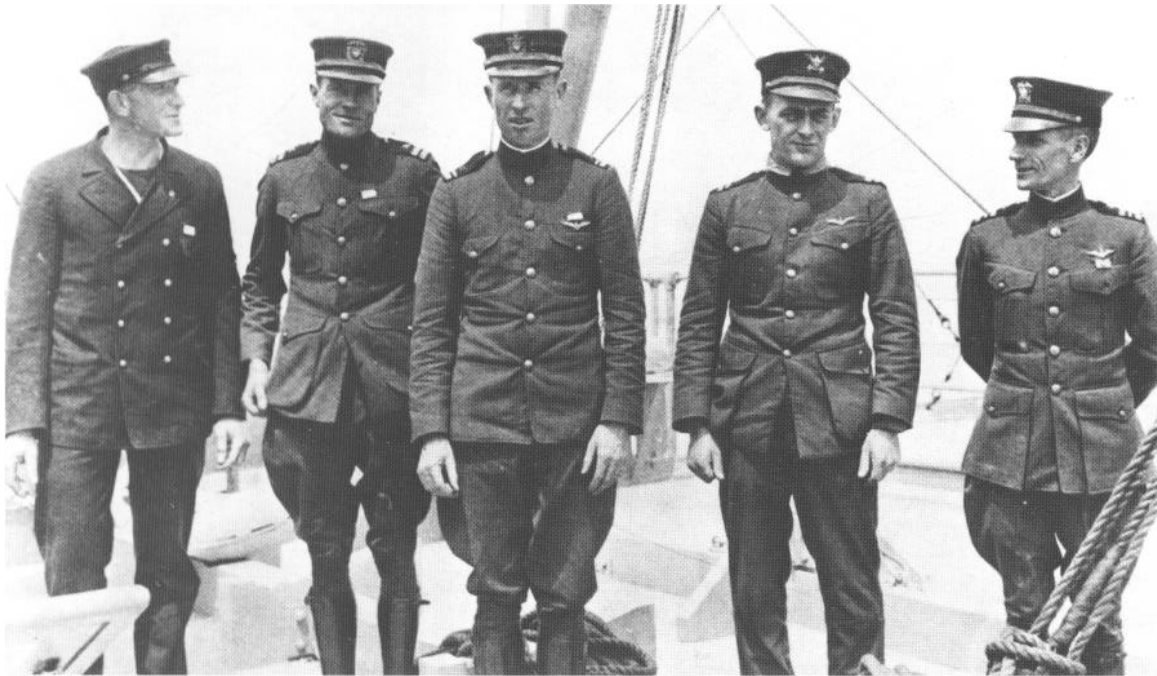
On May 27, NC-4 arrived in Lisbon, Portugal, where she was greeted by cheers, whistles and sirens. USN 650875



II. Put to the Test (1917-1919)



The triumph of the NC-4 drew international applause. Continuing on to Plymouth, England, the crew was treated to a hero's welcome. USN 1022025



The crew of NC-4: L-R, E.C. Rhoads, USN, chief special mechanic; Lt. J.L. Breese, USNRF, flight engineer; Ltjg. Walter Hinton, USN, pilot; Lt. Elmer F. Stone, USCG, pilot; and Lt.Cdr. Albert C. Read, USN, aircraft commander. Not pictured is radio operator Ens. H.C. Rodd, USN. USCG G-APA-10-15-73(04)

Section 1

The New York Times.

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"All the News That's Fit to Print."

VOL. LXVIII., NO. 22,408. NEW YORK, SUNDAY, JUNE 1, 1919. 114 PAGES, In Nine Parts, FIVE CENTS

THE WEATHER
Fair Sunday; probably showers and thunderstorms, with lower temperature Monday.
\$2 Per Annum, \$10.00 In Advance

NC-4 FINISHES NEW YORK-PLYMOUTH FLIGHT; DRIVES STRAIGHT THROUGH FOG TO HER GOAL; SHE MADE 3,925 MILES IN 571-4 FLYING HOURS

FIRST DETAILS OF NC-4'S ARRIVAL AT LISBON

Liberty Engines Functioned Well and Passage Was So Smooth That Crew Had Comfortable Shave in Final Hour.

PICTURESQUE SCENE AS SHE LANDED ON THE WATER

Crew Taken to the Rochester Where Amid Notes and Massed Sailors They Stood at Attention to the Strains of National Anthem

Due to extraordinary cable delays, the following dispatch is from THE TIMES, filed at Lisbon at 10.20 a'clock last Tuesday night, less than an hour and a half after the completion of the NC-4's flight across the ocean, supplies the first details of the event, aside from the brief Bulletin of the Navy Department, received in America.

By WALTER BULAHAYE.

Special Cable to The New York Times

LONDON, Tuesday, May 27.—"There she is!" At four minutes to 9 o'clock tonight the cry burst from the lips of the sharp-eyed lookout on the U. S. S. Rochester's main deck, which was lying near the mooring buoy, a few hundred yards upstream from the mouth of the Tagus river estuary.

For every man on the western sky there appeared a tiny speck, quickly whirling against the progress of the sunset, with its long wings of sun's full glow—"like a Robinson Crusoe sailing," as the artist Stuart Heppner, who had been on duty at the time, described the scene, and before dawn lifted the air.

Special—wireless, it is assumed, on a height of 1,500 feet high above the center of the ship.

And a tremendous tumult of sound she swept past the wharves and all loudly down in a wide curve to the water.

Even with glasses the moment of contact was imperceptible to those who watched; so instant she was flying and the sea she touched gently upon the water.

"A perfect landing," said Commander Combes, briefly, and the words seemed to break the spell of tension that held every one in the boat during the wait of the tall hull here. The nervous strain had been greater than on leave. Many had spoken here when Commander Combes gave the last word to the vigilance: "Tell the Rochester to stand by."

NC-4's Journey from New York to Plymouth Across the Atlantic.

The hours of arrival and departure are given in this New York Times.

LUSTY BRITISH CHEERS FOR FLIER!

Gracefully She Drops in Plymouth Harbor, Escorted from Far Out at Sea by British Airplanes.

GREETED BY MAYOR AT THE MAYFLOWER ROCK

Acclaimed by Throws in Narrow Streets—500 Mile Trip from Ferrol Made, At 72-Mile Clip—Leaky Radiator Caused Mondego Halt.

By LEONARD R. BOLGER.

Special Cable to The New York Times

PLYMOUTH, England, May 26.—Cheering high over Plymouth Sound and pluming slightly down from 1,500 feet aloft, the American scout airplane NC-4 completed her epoch-making transatlantic journey at 2.24 o'clock this afternoon. She took the water gracefully and smoothly, amid the cheers of hundreds that had assembled on the green slopes of the Hoe and the Citadel glades, and tested quietly across to the British airplane base at the Colliery.

"There she came to rest, her long trip over, and Lieut. Commander Read and his crew went off to the United States flagship Haddock to receive the congratulations of Admiral Fishback and a distinguished company of British military and naval authorities. Although she was officially met very soon within the Plymouth harbor, 200 yards ago, she was greeted by a big crowd of people who had gathered to witness the feat of the water, but she was never in any difficulty.

Her entry into Plymouth was uneventful, and nothing could surpass her high, steady flight as she flew around the harbor before taking the water with every grace.

Practically when she alighted and her congratulations. Through Admiral Beaman, Head Chief of Staff at Paris, he was conveyed to Lieut. Commander Read.

"Please accept my heartfelt congratulations on the success of your flight and accept for yourself and your comrades expressions of my very admiration. We are all heartily proud of you." You have won and

IRISH FERMINT LAID TO WALSH

Freeman's Journal Quoted Him as Saying American People Recognized Republic.

RAISED EXTREME HOPES

Sinn Fein Forced to Hasten Publication of Irish Plan.

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British R-34 Ready to Fly in Fortnight; Will Try to Cross Ocean from England

LONDON, May 26.—The great airplane R-34 was formally taken over by the British Admiralty on Thursday.

"The vessel left the builder's cradle on the Clyde at 2 o'clock tonight, a great crowd watching. She will probably make a voyage over part of England before proceeding to her base at East Fortune. It is announced that an attempt will be made to fly across the Atlantic from England within the next fortnight.

The length of the R-34 is 62 ft. and the diameter 20 ft. She weighs 12,000 lbs. and is capable of flying at a speed of 100 m.p.h. Her engine is a 12-cylinder engine of 1,200 h.p. and is capable of running at 1,200 r.p.m. The maximum speed is 120 m.p.h. and the range is 1,000 miles.

3 DIE IN AUTO RACE AT INDIANAPOLIS

Leacock and His Wealthy Mechanician Are Burned to Death Under Flaming Car.

THURMAN ALSO LOSES LIFE

Newark Driver Placed Banishment

Special to The New York Times

INDIANAPOLIS, May 25.—The seventh annual International automobile race of 200 miles, at the remarkably average rate of 70 m.p.h., was won today by several men in which two of the drivers and a mechanic were killed and one other seriously injured, out of three who made the start.

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