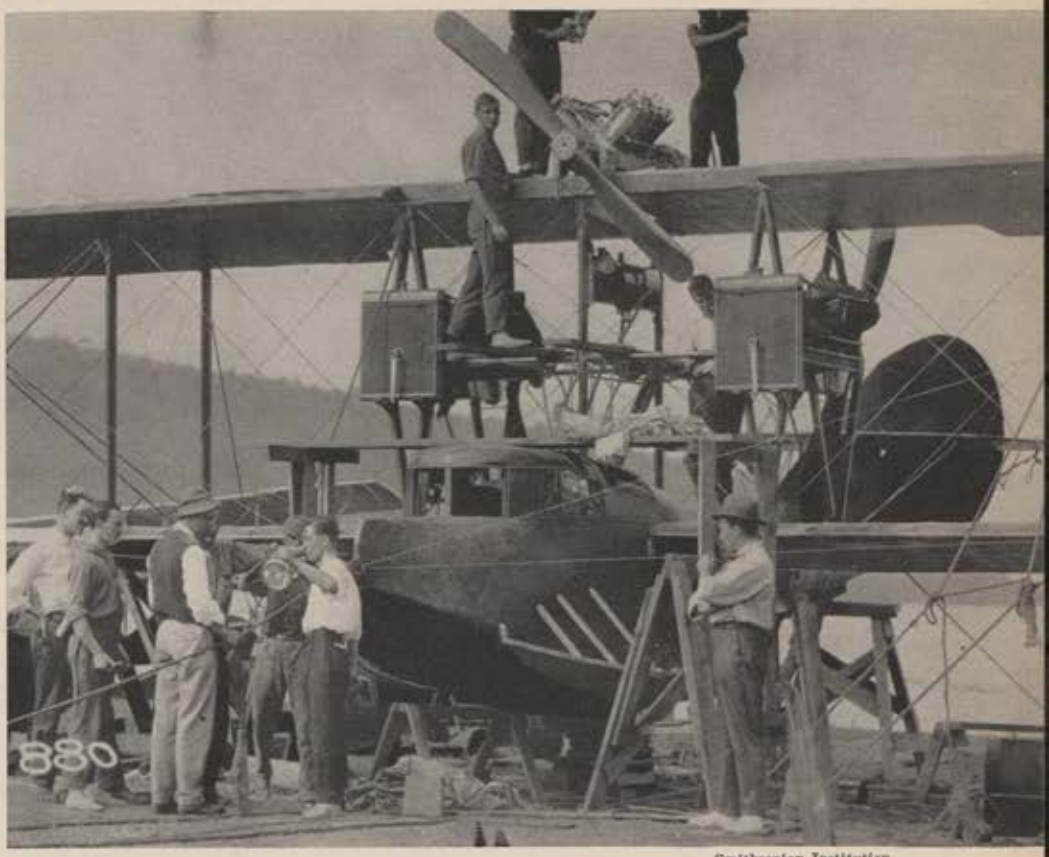
SOME OF THEM MADE IT

By Samuel Taylor Moore



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With financial backing from Rodman Wanamaker, Glenn Curtiss built the flying boat "America" at Hammondsport, N. Y., for the first attempt to span the Atlantic. But the try was abandoned with the outbreak of World War I in 1914.

TRANSATLANTIC air travel is so commonplace today that you can go to Europe and return without so much as leaving a note for the milkman. But back when a flight from the nearest points of land on both sides of the North Atlantic represented the hard way to do it, I knew several of the men who tried. Unquestionably Lindbergh's flight in 1927, and his subsequent pathfinder flights for Pan American, were prime factors in making scheduled transatlantic flights a reality, beginning in 1939. But I am not thinking of the "ballyhoo era" from mid-1927 on. My mind goes way back, to the earliest attempts when critical fuel limitations on the crude crates then available made every start a nip-and-tuck gamble.

Not long ago, one of the two men who, in 1914, were set to make the first try, died of natural causes. That would be Adm. John H. Towers, USN (Ret.), who did the test flying on the flying boat *America*, a twin-engine giant box-kite built by Glenn Curtiss. Rodman Wanamaker, the financial angel of the project, had selected as first pilot, John L. Porte, a retired British naval flyer, because with take-off from St. Johns, Newfoundland, both start and finish lay in Empire territory (Ireland was then ruled by Great Britain). Lieutenant Towers was to have been copilot.

Whether the *America* ever could have made it remains a question. The start of the first World War scratched the attempt. The *America* got to England later, but on a steamship, where it served as the model of England's first anti-sub air fleet of H-boats. War forced suspension of further attempts to span the Atlantic by air for five years. Late spring of 1919 saw a frenzied resumption of attempts, sparked by a prize of ten thousand pounds put up by Lord Northcliffe, which had been awaiting collection since 1913. International rivalry was strong, the number of entries large, and the types of competing aircraft varied. Newfoundland was the critical news point.

Britain's airplane entries all were modified battle types, while back in Scotland, His Majesty's rigid airship R-34 was being groomed to enter. The four British planes, respectively, were, a four-engined Handley-Page; twin-engined Vickers-Vimy and Martynside bombers; a single-engined Sopwith Camel. The power plants in each plane were identical—Rolls-Royce engines of 350 hp. The American entries, all US Navy, were three flying boats, NC (Navy-Curtiss), numbered 1-3-4, with four Liberty engines of plus 400 hp in each, and also a Navy blimp, C-5.

The British pilots all planned direct non-stop flights from St. Johns. The American pilots, their planes poised at the naval air station at Rockaway, Long Island, projected a longer route, with three refueling stops at Trepassy Bay, Newfoundland; Ponta del Gada in the Azores—and Lisbon, Portugal. Destination was Plymouth, England, selected sentimentally as the departure port of the Pilgrim fathers three centuries before. Safety precautions for the ocean legs were elaborate—sixty-eight destroyers, five battleships, all equipped with signal smokes, star-shells, and searchlights to aid the navi-

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After making first non-stop Atlantic flight (1919), Alcock and Brown crashed in Ireland.

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First plane to fly from the US to England, the NC-4 landed at Plymouth on May 31, 1919—after twenty-three days elapsed time.

SOME OF THEM MADE IT — CONTINUED

gators, and on paper, to rescue downed planes as well. As things happened, in both functions, the ships might as well have stayed at anchor.

Some Navy pilots, like Ted King, wanted to make the try non-stop, like the British, using an F-5-L, parent of the later PBY boats. Endurance tests were authorized but the trials failed to convince Navy brass that the older flying boat had the range. Also, all the crews were selected from men who had had the bad luck not to have served overseas. At the time, the Navy was rich in pilots who had had wide experience in flying through fog, winds, and waves on the other side of the ocean, but it did not make use of them. To the deep disappointment of Army flyers, no plane then in the Air Service stable was deemed capable of the effort. DeHavillands and Curtiss Jennies were the only operational types on hand.

The British crews at St. Johns appeared to have a decisive head start. Minor damage to planes in trial flights, and persistent bad weather, however, caused delays which gave the USN entries time to catch up. None of the British landplanes had gotten away before the Navy entries all finally completed the first leg from Rockaway to Trepassy. Even the blimp, in a twenty-five-hour flight, got to Newfoundland ahead of NC-4. That famed survivor of the three flying boats suffered the first of four bad breaks shortly after leaving Rockaway. Off Cape Cod, failing oil pressure and a broken connecting rod forced it down. The crew sailed it on the surface into the naval base at Chatham, Mass., but it did not catch up with the NCs 1 and 3 for six days.

A squall meantime had eliminated the blimp, tearing C-5 from its moorings and ripping its gas bag. In an unsuccessful attempt to save the wreckage from being blown out to sea, two young Canadians were badly hurt, but the crew was unharmed.

British planes were still awaiting good weather when the three American flying boats rose from Trepassy Bay, and, in rough formation, headed for the Azores on May 16. For three days the world awaited word. First news, on the 17th, was of NC-4. It had flown 1,200 miles, mostly through a blinding fog, to land at Horta instead of Ponta del Gada. Much later, came news of NC-1. Uncertain of his position because of the fog, the skipper had made an intermediate landing to take his bearings. Rough seas prevented take-off again. When, providentially, a Greek tramp loomed nearby, the crew transferred to its dirty decks, securing a towline to their plane. Under strain, the line parted. NC-1 foundered 100 miles short of its goal.

A longer wait followed for news of NC-3. Like NC-1, NC-3 had also gone down to take bearings. Rough seas disabled her too seriously to take off again. Her skipper, the same Jack Towers, turned the aircraft's wings into sails, and after fifty-two tortured hours of wallowing about, finally sailed NC-3 stern first into Ponta del Gada. NC-4, out of fuel at Horta, where no fuel was available, had to wait three days before making the short hop into Ponta del Gada.

News of the completion of the first sea-leg by NC-4, received at St. Johns, spurred two of the British competitors to start on May 18. The Martynside cracked up on take-off. But the Camel, with Harry Hawker at the controls and Mackenzie Grieve as navigator, managed to stagger into the air. For days an ominous silence prevailed. Even those who knew little of the problems of such a flight could figure that the single-engined entry never had a chance.

On May 25, news came that Hawker and Grieve had been saved. Their fuel exhausted, they had landed alongside a fishing boat, 700 miles short of the Irish coast. The airplane had sunk, but its two occupants were saved.

NC-4's flight from Ponta del Gada to Lisbon on May 27 was the only decent leg of its entire flight. After three days in Lisbon the flying boat took off on May 30. But a lubricating system failure forced a landing on the Mondega river, a short distance northwards. The craft was repaired only to hit a river sandbar on take-off. Damage was not serious but the time lost prompted a decision to land again at Ferroll, Spain, for an overnight stay.

Twenty-three days had elapsed between NC-4's departure from Rockaway on May 8 and its landing at Plymouth on May 31. Nonetheless the flight marked the first crossing of the Atlantic by air. Somewhat restrained Britishers at Plymouth greeted NC-4's six-man crew, Commander A. C. Read, skipper; Elmer Stone, a Coast Guard officer, first pilot; Walter Hinton, a naval reservist, relief pilot; Ensign Rodd, radio operator; Lieutenant Breeze and Chief Mechanic Rhodes, engineers. America thrilled at the triumph, and the crew came back by ship to a series of fetes.

The Atlantic was soon conquered again in a non-stop flight which rated payment of Northcliffe's fifty grand. On June 15th, John Alcock and Arthur Whitten-Brown flew some 1,900 miles from St. Johns in roughly sixteen hours to land, tail-up and out of fuel, in a soupy Galway bog at Clifden, Ireland. The miracle of that flight was a con-

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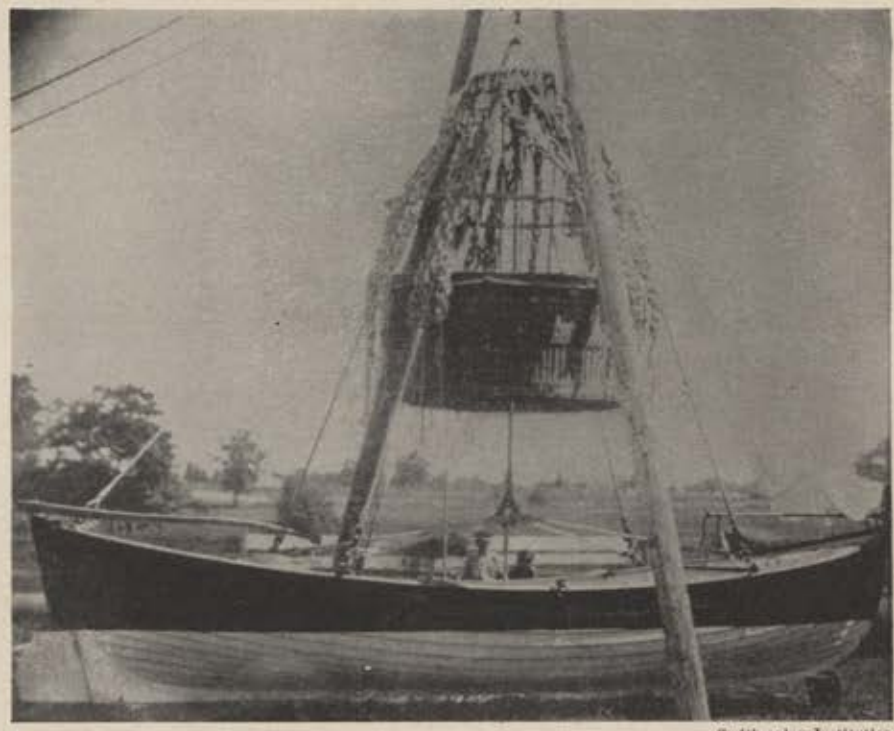
sistent tailwind averaging forty miles an hour. Alcock and Whitten-Brown had waited out the tailwind, because their Vickers-Vimy cruised at only eighty miles an hour. Without the wind's help, the twin-engined bomber would have come down not far from where Hawker and Grieve had dunked. Their speed of close to 120 miles an hour was greater than that of Lindbergh on his solo crossing, and it was well into the 1930s before their time was bettered in a transatlantic attempt.

The money incentive no longer existed for the two British planes still back at St. Johns. Plagued by further minor accidents, the Martynside crew at length gave up. The Handley-Page made a final try three days after R-34 dirigible had left Scotland on July 2, and the crew of the big airship saw the four-engined airplane entry heading east as the dirigible approached the American coast. Mechanical trouble in the bomber shortly thereafter forced its return to St. Johns, and abandonment of further attempts.

The British were not the first to try to span the Atlantic in a lighter-than-air craft. As far back as 1860, Thaddeus S. C. Lowe inflated a 725,000-cubic-foot free balloon at Philadelphia to make the attempt. When the big bag was wrecked during inflation, Lowe built a second balloon which took off from Cincinnati the following year. Fort Sumter's guns had by then signaled the start of the Civil War and when the balloon came down near the South Carolina border, Lowe got back north where, as a civilian, he directed the Union Army's short-lived observation balloon effort. Next to make the free balloon try was Washington H. Donaldson, taking off from New York City in the balloon *Graphic* in 1873. Winds carried the bag north instead of east, and the huge spheroid was wrecked in landing.

The first American to make the transatlantic attempt in a powered airship was Walter Wellman, a journalist-explorer. Taking off from Atlantic City, N. J., in 1910, Wellman and his crew traversed a thousand miles over the ocean. But when a passing steamer took the party off its disabled craft, the airship was only four hundred miles east of Cape Hatteras. In 1912 another attempt was made from the same starting point by Melvine Vaniman in an airship of his own design. That flight failed almost at its start, killing Vaniman.

When Washington was advised that the British R-34 dirigible would soon start its projected round-trip Atlantic crossing late in June 1919, the Army and the Navy were engaged in controversy as to which service would have primary responsibility for the development of rigid airships. A temporary compromise over which service would handle the R-34, should it reach US shores, was reached. The Navy would supply all technical services such as replenishment of hydrogen and water ballast. The Army Air Service would be responsible for landing and ground-handling the behemoth —a perfecto-shaped envelope 870 x 80 feet containing over two million cubic feet of hydrogen. Suspended forward from the hull was a command gondola containing an engine, and three other engine nacelles hung port, starboard, and aft.



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A free balloon with a boat slung under the gondola was to have carried Thaddeus Lowe across the Atlantic in 1860—but the balloon broke upon inflation.

I personally played a part in the flight of the R-34, although a non-glamorous role.

It was my fortune to be awaiting separation at Mitchel Field when, as the ranking lighter-than-air officer, I was tagged for the job. I held a rating of "reserve military aeronaut," but my knowledge of airships was confined to once having seen a yellow French blimp patrolling the harbor at Le Havre. I recalled the story in the New York *Times* which had reported that the R-34 carried sufficient fuel for a round-trip Atlantic crossing. That statement was proven untrue. Navy personnel, their experience limited to blimps, were hardly better qualified for their responsibilities than was I.

The R-34 encountered such persistent headwinds on its outgoing 3,200-mile voyage that it required 108-plus hours to reach Mineola, Long Island. In the final twenty-four hours emergency landings were planned at various points in New England. The six hundred men I had been given to handle the airship all were doughboys awaiting separation at nearby Camp Mills, and restive for discharges after eight months of delay in getting back from Europe. They all but mutinied when the airship stayed here four days instead of making the quick turn-around promised and expected. I had given the unhappy men some elemental training in rope-handling, and we were standing by in barracks early on the morning of July 6 when Captain Scott, the R-34's skipper, sent word by radio that his fuel would be exhausted at Montauk Point, at the eastern tip of Long Island. Without consulting me, the Navy shanghaied my ready crew at Camp Mills, adjoining Mitchel Field, on a special train that was speeding to Montauk, when R-34, aided at last by a tailwind, appeared overhead at Mineola. A member of the staff on board, Major Pritchard, parachuted down, and together we landed the ship with untrained soldiers who had been attracted to the landing site by the circling airship. Eventually I got my men back and they were obliged to

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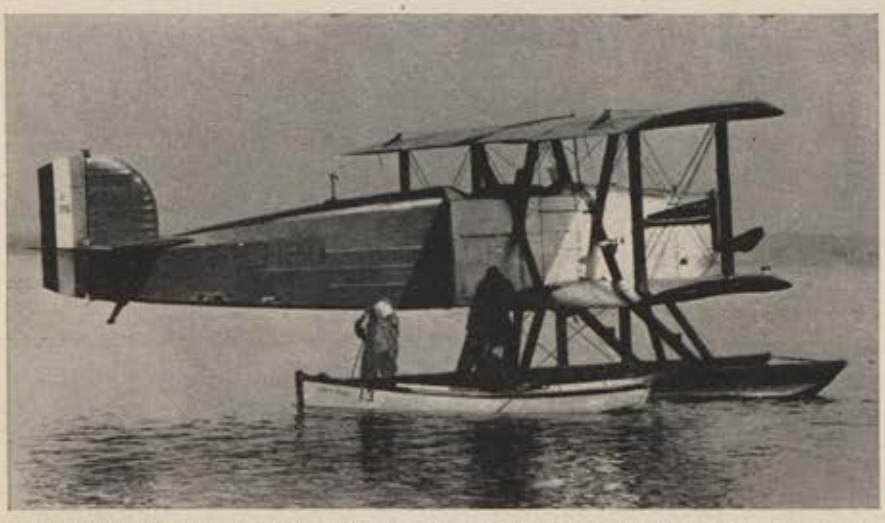

Douglas World Cruiser. Two of these planes crossed the Atlantic in 1924 during a flight around the world. They had interchangeable wheels and floats.

hold the airship on the ground all through daylight hours when the sun superheated the hydrogen. Only after the sunset, when the gas would contract, could R-34 be allowed to float by its own buoyancy at the end of a 500-foot steel cable affixed to its nose and anchored to piling buried deep in the ground. Three times the airship was nearly wrecked by the neophytes handling it.

On the first night when R-34 was let up on its cable, the Navy had replaced ballast only in the forward compartments, instead of filling the tanks evenly throughout the length of the hull. As a result, the airship flew nose-down, tail-up, on its cable like a cockeyed skyscraper. The next morning, getting the vertically-positioned monster down late, after the sun had caused the hydrogen to expand, we yanked out an entire section of its duralium nose-frames. Repairs were made with two-by-four wooden joists and by sewing together the torn fabric. Another night, a sudden drop in temperature after the airship had been put up contracted the hydrogen. The airship sank all the way to the ground, where it surely would have broken into pieces had we not managed to release enough ballast to make it buoyant enough to go back up again. Despite the rough handling, R-34, favored by tailwinds, got back to Scotland in seventy-five hours.

R-34 carried thirty-one passengers and crew both ways, Commander Zachery Lansdowne representing the United States Navy on the westward voyage, Col. Bill Hensley, the Army Air Service, on the eastward leg. In Europe, Colonel Hensley negotiated a contract with the Zeppelin Company to build a rigid airship for the Army, in lieu of German war reparations due us. Delivery of the airship, appropriated by the Navy and christened the *Los Angeles*, marked one of three Atlantic crossings in 1924. Flying non-stop from Frederichshafen, Germany, to Lakehurst, N. J., the Zeppelin established a new westward record of eighty-one hours.

The other flights in 1924 marked the first westward crossings by airplanes. The two surviving planes of the Army's round-the-world flight did it in special single-engined Douglas jobs with interchangeable wheels and floats. The Atlantic marked the last ocean leg of that historic circumnavigation by air. The third plane of the original four had been lost on take-off at Kirkwall, Scotland, after having made it that far. The other had "pranged" an Alaska mountain shortly after the start. Capt. Lowell Smith and Lt. Erik Nelson, pilots of the surviving planes, were a full month getting across. Departing Kirkwall on August 2, two stops each were made awaiting weather in harbors at Iceland and Greenland, before a final eleven-hour hop ended safely at Icy Trickle, Labrador, on August 31. Navy surface ships, which had been indispensable in delivering supplies at refueling points on all water legs of

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First airship to cross the Atlantic was the British R-34 which carried thirty-one passengers and crew on the trip.

the plus 26,000-mile circle, made their first rescue on the Atlantic leg, but it was not one of the Army planes. Uninvited, an Italian pilot, Lieutenant Locatelli, in a Savoia-Marchetti flying boat, had decided to benefit from the usual services arranged for the American planes. Off course, his plane was forced down. A long search followed before he was found and taken off his disabled plane by the Navy.

I had made a courtesy flight in the airplane which in 1926 represented the first try to capture the $25,000 Orteig prize for a non-stop flight between New York and Paris. Igor Sikorsky had built the plane in a dilapidated hangar at the old Roosevelt Field with his workmen, mainly White Russian refugees. It was a transport design, advanced for its day, but its financing had become involved and Capt. Rene Fonck, ranking French air ace in the first World War, made an arrangement to use it for the non-stop attempt. Overloaded with fuel, it crashed and burned on take-off. Two mechanics were trapped in the flames but Fonck and his co-pilot, Lieutenant Curtin, USN, escaped unharmed.

Fonck's project immediately inspired an American to challenge him in the race. While Fonck was conducting preliminary tests on the Sikorsky, Commander Noel Davis, USN, opened negotiations to buy a tri-motored Fokker which had been built for a projected North Pole flight by Capt. George H. Wilkins, an Australian. The negotiations fell through and early in 1927 Davis selected another plane, a Keystone bomber. As an Air Corps plane, it was a twin-engined job. Davis modified his Keystone by adding a third engine in the nose. Few people had ever heard of Lindbergh when Davis announced his plans. It was known that Nungesser and Coli were making ready in France, that Byrd was building a special Fokker for the try, and that probably another entry would be whoever Charles Levine picked to pilot the *Columbia*. On a final load-test at Langley Field, Davis and his co-pilot were killed when the Keystone dived vertically into Back River. Whether ballast shifted into the nose, or the extra engine made the plane nose-heavy, is unknown. Davis had secured the backing of the American Legion for his attempt and my contacts with him were those of his literary ghost. In retrospect, the title we selected for our first article was not a happy one, "Next Stop, Paris!" And that's where I came in.—END