From Ship to Shore

At a time when the whir of the airplane motor is a familiar sound, when great airplane carriers constitute a vital part of the United States Navy, when thousands of Iowans are serving in the naval air forces, and when preparation is being made for basic naval pre-flight training at the State University, it is fitting to recall that an Iowa youth made the first flight from ship to shore. A few weeks later he flew from shore to ship and again from ship to shore. Thus the idea of the aircraft carrier was conceived.

Prior to 1910 the airplane was not a seagoing craft, nor in any sense amphibian. The achievements in human flying were confined exclusively to the atmosphere over land. But this was a time of experimentation, of adventure, of striving to accomplish spectacular feats in aviation. Men had only recently learned to fly in heavier-than-air machines with some degree of assurance. If they could conquer the air—fly over sea as well as land...
and from ship to shore and back again—a new era of transportation would be opened. Perhaps a new military weapon could be forged. Daring aviators everywhere were striving to be the first to succeed in this new and thrilling adventure.

As the airplane was improved the scope of its usefulness expanded. One plan was to speed up mail service by flying letters ashore from incoming vessels. Two attempts in 1910 to launch an aeroplane from the deck of a Hamburg-American liner fifty miles off Sandy Hook failed. Meanwhile, military authorities were interested in the progress of aviation, particularly for observation work. The Navy was intrigued with the possibility of using aircraft in connection with battleships and cruisers. Aviators, anxious to be first to demonstrate the potentialities of their craft, were willing to risk their lives.

Early in November, 1910, an inclined platform twenty-five feet wide and eighty-five feet long was built over the forward deck of the cruiser Birmingham and Eugene B. Ely was engaged to attempt the first flight from a naval vessel to a designated place ashore. He assembled and tested his Curtiss biplane on the race track at James-town, Virginia. By Monday, November 14th, he was ready for the flight, though the weather was not propitious. The plane was transferred by
government tug to the Norfolk navy-yard and placed aboard the *Birmingham*. Accompanied by four torpedo-boat destroyers including the *Bailey* and *Stringham* from Annapolis, carrying Assistant Secretary Beekman Winthrop and other naval officers, the *Birmingham* left Norfolk at 11:30 A. M., and steamed thirty miles down Chesapeake Bay.

The object of the experiment, according to the Navy, was to “demonstrate the possibility of an aeroplane of the existing type leaving a ship for scout purposes.” The platform over the bow of the ship was sloped forward to accelerate the take-off. Plans were also made to steam forward into the wind to augment the force of the air with the speed of the ship and thus assist the aviator in making the flight from a short runway.

At one o’clock a report was received from Cape Henry that there was fog over the lower bay, and that light rain was falling. It was feared that Ely would be obliged to postpone his flight. An hour later, however, a wireless message from the cruiser announced that preparations were being made according to schedule. At 2:48 p. m. another message complained that the engine of the biplane was making so much noise that communication was impossible. Apparently they were warming-up the motor. A few minutes later came the words “Ely
off”. It was not necessary to steam into the wind, for Ely “easily succeeded in making the flight while the ship was at anchor, thereby increasing the value of the experiment.”

Witnesses saw the daring aviator coast down the platform, dip down to the bay, hit the water with a splash, rise again, and presently land at Willoughby Spit, a point of land about two and a half miles distant from the cruiser. Despite wind and rain, Ely had decided to attempt a flight. “Watching a favorable opportunity between squalls, he had his engine started, and ran his machine down the incline at a rapid rate. As it left the platform it settled rapidly till it struck the water with a splash, which the spectators supposed marked the termination of the flight. Instead, however, the machine rose again and continued on its way. It reached a height of 150 feet or more, and traveled straight for the nearest land, where it descended without a mishap. Mr. Ely attributed his downward plunge to a faulty movement of his control wheel. When the machine struck the water, the propeller was damaged, and the spray flew up in his face, and so clouded his goggles that it was with the greatest difficulty that he was able to see his way to shore. After landing on the beach near the Hampton Roads Yacht Club, he found everything except the propeller in
good shape. He could have flown back to the cruiser had he deemed this expedient."

On the cover of the *Scientific American* for November 26, 1910, was a full-page illustration of this first flight from ship to shore. News of the exploit was widely proclaimed. Ely was accorded a place of high honor as a daring, spectacular, and successful aviator, and was awarded a prize of $500 by the United States Aeronautical Reserve. The most significant feature of the flight, in the opinion of the *Scientific American*, was "the fact that the aeroplane started under its own power from the cruiser at rest. With but an 85-foot run and a 30-foot drop, and considering the bad weather conditions, this was an excellent performance."

According to the Navy this experiment "demonstrated the conditions governing the location of future platforms on shipboard for this purpose, and showed that they could be installed without interfering seriously with the other features of the ship." Moreover, "landing on or near a ship or returning with information after a scouting trip appears to be practicable", reported the Secretary of the Navy.

"This experiment and the advances which have been made in aviation", continued the annual report for 1910, "seem to demonstrate that it is des-
tined to perform some part in the naval warfare of the future. It appears likely that this will be limited to scouting. A scout which is not strong enough to pierce the enemy’s line can get as near as possible and then send an aeroplane 30 or 40 miles, obtain valuable information and then return to the scout. Even if the aviator did not land on the scout he could be brought on board and deliver his information. The loss of an aeroplane would be of no moment, as the ship may easily carry others. The distinct value of service of this kind is easily seen.

“The department contemplates further experiments along these lines, with the belief that it will be necessary in the near future to equip all scouts with one or more aeroplanes to increase the distance at which information can be secured.”

This success served as a powerful incentive for further adventures. Two months after his spectacular exploit in Hampton Roads, Ely was in San Francisco participating in another naval aviation experiment. Glenn H. Curtiss, who had trained several Army and Navy officers at his flying school in California, was anxious to demonstrate the value of aircraft in warfare. Again with the cooperation of the Navy, Ely made a twelve-mile flight in a Curtiss biplane from Selfridge Field to the deck of the cruiser Pennsylvania.
which was anchored in San Francisco Bay. Thus the feasibility of flying from shore to ship was demonstrated.

For the purpose of accomplishing this landing a special platform had been erected on the stern of the vessel, and canvas shields had been stretched on each side to catch the machine if it should slide off the platform. Special arrangements were made to stop the airplane after it landed.

Ely left the field about 10:30 A.M. on January 17, 1911, climbed two thousand feet, and crossed the San Bruno hills at a great height. He then headed straight toward the warship. At the proper point he shut off his motor and glided down for a perfect landing. He had so little trouble in performing this feat that he believed he could do it nine times out of ten under moderate weather conditions. Although floats had been fitted beneath the lower plane on each side of the center section, this proved to be an unnecessary precaution. The aeroplane was "brought to rest by means of a score of ropes stretched across the platform above the two rails which ran its entire length. These ropes were attached to sand bags at each end, and they were found to act as an efficient brake in checking the momentum of the machine."

The flight of twelve miles was made in thirteen
minutes. Soon after Ely took off from Selfridge Field, the sailors "in the fighting tops of the war­ship" anchored "amid the dense shipping in San Francisco Bay" sighted him as a "tiny speck" above the hills. "The speck grew larger as it rapidly approached and the surfaces of the bi­plane were outlined against the sky. As it neared the harbor Ely's air craft descended rapidly until, when he flew over the West Virginia and the other smaller vessels, he was only 150 to 200 feet in the air. At just the right moment he shut off his motor and glided down to the platform on the stern of the Pennsylvania. He struck this 32x127-foot platform 25 feet from its outer end, which sloped downward 4 feet in 10.'"

After a reception of about an hour on ship­board, Ely returned to Selfridge Field the way he had come in sixteen minutes. This was the first round trip flight between shore and ship. It was the second flight Ely had made from ship to shore. This time he did not strike the water, but soared off for a perfect flight and a happy landing. Again Ely was widely acclaimed as a skillful aviator and again he was awarded a prize of $500 by the United States Aeronautical Reserve.

Eugene B. Ely probably deserved the epithets that were applied to him. Contemporaries called him a "super-skillful pilot", a "hyper-daring dare-
devil", an adventurous and confident "knight of the air" who declared that given power enough he could "fly a barn door". He was born before the days of the automobile or the airplane, on October 22, 1886, on an Iowa farm six miles east of Williamsburg. His father, Nathan D. Ely, was later an attorney and served as a colonel in the United States Army during World War days. His mother was Emma Harrington, a resident of Williamsburg.

When he was about nine years old Eugene moved with his parents to Davenport, where he attended the city schools. While yet in his 'teens "Gene" became deeply interested in automobiles and went to work in a local garage. Presently he was recognized as an expert driver and mechanic. Leaving Davenport young Ely found employment in the town of Cosgrove in Johnson County, where he became chauffeur for Father Smyth, whose automobile was reputed to be "the best in the State". Ely was recognized, at least locally, as "the best driver in Iowa". For a considerable length of time Father Smyth and Ely held the automobile speed record between Iowa City and Davenport.

The story is told that some years later a resident of a nearby village and a friend of the young chauffeur, not having seen him about for some
time, inquired of Father Smyth where Ely had gone. The priest hesitated for a moment, and then with his distinctive Irish brogue, replied: "Ah yes, Ely, Ely, I remember him well. He became entangled in the snares of a woman. He's married now." Ely was indeed married, and his bride was Miss Mabel Hall of San Francisco, California.

Meanwhile, Ely had taken up his residence in California, where he was engaged in the automobile business and was known as an expert driver. In a short time he was conducting an auto stage line from northern California to Oregon.

It was while he was thus engaged that his inquiring and mechanical mind became interested in aviation. He joined the school which Glenn H. Curtiss had established, probably sometime in 1909. In this new adventure he soon became recognized as a leader in attempting to master the air. "No one had a clearer or cooler head, no one more thoroughly understood the mechanical requirements of aerial navigation." Recognizing him as a daring and skillful aviator, Curtiss induced Ely to join the Curtiss Exhibition Company in 1910 and become one of the leading demonstrators of the Curtiss-built airplanes. It was in this capacity that he performed his epoch-making
feats of flying to and from the decks of naval vessels.

But Ely was not content with making scientific flights for the Navy. He was eager to establish new speed records. As a competitor of J. C. Mars, Charles K. Hamilton, Hugh Robinson, C. C. Witmer, Lincoln Beachey, and other ace aviators of his day, he entered many races and won his full share. In 1910 he participated in the International Aviation Meet at the Belmont Park race course, Long Island, New York. In August of the following year he competed for a $5000 prize in a race from New York to Philadelphia, but he lost this contest to his distinguished competitor, Lincoln Beachey, who in June had demonstrated the maneuverability of the aeroplane by flying down the Niagara River gorge and under the suspension bridge. Ely was also with the group of experienced aviators who entertained large crowds at Niagara Falls with their stunt flying.

Ely had a reputation for being a prudent flyer, but the thrills of stunt flying tempted him to take unnecessary risks. In October, 1911, he had a contract for a seven-day series of flights at the State Fair at Macon, Georgia. Huge crowds had witnessed the early performances with great interest. Perhaps the expectations of the spectators
prompted him to climax the exhibition by some extraordinarily reckless maneuvers. The daring "birdman" started his final flight on the 19th in his usual optimistic manner. He circled the field at a great height, whence he descended rapidly, and glided to a level in front of the amphitheatre. Imitating a favorite Beachey trick, he dipped steeply, but the motor failed to pull the plane up again. Instead of alighting on the wheels, the lower end of the cross frame struck the ground and the impact threw the young driver from the seat. Within a few minutes Eugene Ely was dead.

News of the fatal crash was flashed across the continent. Messages of condolence and floral offerings came from many friends who were widely scattered. That the career of one of America's great pioneer aviators had come to such a tragic end was universally lamented. His body was brought home to rest in the Harrington Cemetery near Williamsburg. There in a secluded spot on the Iowa prairie the mortal remains of Eugene B. Ely lie mouldering in the grave "but his soul goes marching on".

On February 16, 1933, President Hoover presented to Colonel Nathan D. Ely the Distinguished Flying Cross as a posthumous award to his son. Captain Walter N. Vernon, White House naval aide, explained that this recognition
of Eugene B. Ely was "for extraordinary achievement as a pioneer civilian aviator and for his significant contribution to the development of aviation in the United States Navy". Rear Admiral W. A. Moffett declared on that occasion that Ely had demonstrated by his flight from the Birmingham "that airplanes were not confined to land utility, but that they could be flown from ships at sea. The modern aircraft carrier is the logical materialization of that demonstration. His landing on the U. S. S. Pennsylvania in San Francisco Bay two months later was a further demonstration of the possibilities for use of landplanes on shipboard.

"Not only is recognition due him, however, for thus creating a dream of the future which has borne the fruits of reality, but for his experimentation which brought him in the end to an untimely death. His noteworthy contribution is undisputed, and it is fitting that the Congress of the United States should thus take cognizance of that contribution."

The thrills and adventures of those early exploits have faded into history but in the years to come, when the history of aviation shall be written, Eugene Ely will be remembered primarily as the aeronautical explorer who first flew from ship to shore.

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