

AN EARLY ATTEMPT AT SEA-AIR RESCUE

by

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To those of us who follow the current events in aviation as a matter of fact, the subject of sea-air rescue as performed by a branch of the U.S. Air Force is accepted as a matter of fact. But this phase of aeronautical activity performed by the U.S. Coast Guard and the U.S.A.F. is of comparative recent origin. How did it get started and who actually performed the first attempt at sea-air rescue? The answer is that Early Bird Harry P. Christoffersen made the first attempt on a Sunday, April 25th, 1915, at San Francisco, California. How it came about is told in the following.

This even stands out in the memory of the venerable Harry P. Christoffersen as one of the most eventful days of his whole flying career. At the time that this attempted rescue was made, Harry and his brother Silas were conducting aerial activities from a flimsy hangar on the sandy beach at the south end near the present Flieschacker Zoo. In this hangar a small biplane was built along the general lines of the famous Curtiss pusher. This airplane was powered with an aviation engine built similar to those used in automobiles at the time and was Christoffersen's own design! This engine was perched on wooden engine bearers behind the pilot. The only plane assembly that resembled modern design was the tricycle landing gear. The runway from which all flights and landings were made consisted of flat boards (2 x 12 pine) laid flat on the sandy beach to permit flight operations. (Note how this antedated the steel landing mat used in wartime)

When Sunday April 25th had dawned, the pusher biplane had been prepared for flight operations, the engine warmed, for Sunday was the busiest day of the week! Passenger flights were made every Sunday. The airplane was just being placed on the runway when a mounted police officer rode down the runway to the hangar at a gallop. The engine was still being warmed when it was throttled down to hear the shouting of the policeman. He motioned to Harry frantically with gestures of pointing seaward. Finally it was discerned that a fishing launch with a party of fishermen had capsized beyond the breakers and the danger of drowning was eminent.

Harry Christoffersen looked around him and motioned to Harvey Crawford to take-off with him and endeavor to affect a rescue! Somewhere, somehow, several life jackets had been placed aboard the small pusher biplane by eager hands. The two intrepid airmen strapped themselves to the frail structure, the throttle was opened, and the small airplane staggered into the sky toward the sea and area where the launch had capsized! As the airmen gained altitude Harry could see the partially submerged launch beyond the heavy surf. The small plane battled the sea breeze, and the airmen could see the victims hanging on to the overturned launch. They nosed down close to the water to distinguish the swimmers, and as they did so, one victim went under to the finality of the deep! But there still remained hope that some swimmers could be saved. The biplane was readied for a slow, low approach just above the raging sea. Harvey Crawford released the first life jacket. But as he did so, his fears rose that it may be sucked into the arc of the propeller, but as luck would have it, it missed, but it also fell far away from the struggling swimmers in the sea. The next life jacket was released on the next pass over the stricken group but the wind deflected the life jacket

and sent it wide of its mark. All the life jackets fell wide of the mark after release toward the human targets.

Then without warning the roar of the underpowered engine ceased while the airplane was at low altitude, far from the shore. A quick glance aft by the pilot revealed the cause. And what had made the pilot glance aft? Quick thinking on the part of Harry Christoffersen had saved his life and that of Crawford's. Harry had remembered in an instant an experience that Lincoln Beachey, the great acrobatic pilot, had told him. Beachey in his showmanship would frequently impersonate a daring French mademoiselle, and dress in voluminous skirts while he skirted the airfield in his aerobatic display. His chief delight seemed to be to fly close to the spectators. The sight of a woman flying a biplane naturally was something to marvel at because in those days women hardly had mastered the art of driving an automobile.

During one of these daring performances, the flapping ruffles of Beachey's dress accidentally opened the ignition switch, stopped the engine, while the plane was in a stalled attitude. But quick thinking on the part of Lincoln Beachey prevented an unintentional landing. He closed the switch and the engine fired.

Harry Christoffersen, during that brief instant when his own life hung in the balance, had remembered that and closed the open ignition switch. Fortunately the propeller was still windmilling and the engine fired again to normal r.p.m. But it was a close call to a forced landing at sea!

Unfortunately the first effort to save the drowning fishermen failed as did other rescue efforts from the beach. But Christoffersen's bold attempt at an air-sea rescue should not be taken lightly. It served to reveal the true character of a great pilot who was willing to risk his life that others could live.

But as long as we are discussing Harry and his exploits at the San Francisco Beach more can be told. In several instances the pilots were forced to climb above the fog with passengers aboard. This was thrilling but dangerous. Then by orientation until the mountains to the north of San Francisco could be discerned, the approximate position of the runway was determined and a slow spiral made to the haven of the board runway. Sometimes several passes had to be made before a safe landing could be made. But never a passenger was injured.

One hazard of early aviation was the undependability of engine crankshafts. Harry suffered two broken shafts in the air in three weeks. One of these occurred at about 50 feet altitude with a laboring engine and a passenger aboard.

Harry took his initial flight training with Howard Gill, one of the first of American pilots, in a Burgess-Wright biplane. The Burgess-Wright differed from the Wright Model "B" in that it had a beefed-up structure and improvements in the

control system. However, the air performance was poor, especially during turns and in rough air. The wing chord was about 72 inches and the fabric was only applied to the upper surface of the wing. The ribs and trusses were exposed to the slipstream. The center of pressure travel was large.

Engines in the early days were always a problem as well as nearly prohibitive in price. Harvey Crawford was one of the early pioneers to solve this problem by building his engine from spare parts and used parts. He obtained a worn crankshaft from a wrecked Curtiss Biplane, had cylinders fabricated in a machine shop, and practically duplicated the original engine. However, it weighed 100 pounds more than the original!

The control systems of all early airplanes were poorly designed and ineffective at low air speeds. Dep control, Nieuport control, Wright control, Curtiss control, as well as several others were all used. In the control system of an airplane flown by Joe Boquell, one of the greatest of early aerobatic pilots, the ailerons were operated by movement of the footbar similar to the conventional rudder bar, whereas the rotation of the control wheel actuated the rudder. Fore and aft movement of the control wheel operated the elevators. Horizontal stabilizers were fixed, making longitudinal stability a critical problem to solve with any variation in weight.

Despite the lack of engineering data, many of these early airplanes managed to hold together until the experience and knowledge required to construct better airplanes was acquired. Seaplane flying was popular in view of the uncertainty of engine performance and the ever present danger of a forced landing.

Despite the hazards of pioneer aviation, Harry Christoffersen flew about 15,000 passengers without a fatality in various makes of Christoffersen aircraft. This testifies to the skill and engineering ability of the Christoffersen Brothers.

Christoffersen flying boats were purchased by the Raold Amundsen expedition to the Arctic using aircraft. The first World War halted this daring project before consummation. During World War I, the famous brothers trained student pilots as well as built planes at San Carlos, California. They also operated an airplane factory on the famed Van Ness Avenue in San Francisco on what is now automobile row. To advertise, they had a full-sized airplane parked on the roof!

To those who desire a detailed analysis of the first attempted aerial rescue, read the San Francisco Chronicle, April 26th, 1915, which shows a picture of the attempted rescue with the airplane cruising over the wrecked launch and a life-preserver hurtling down to the drowning fishermen.

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