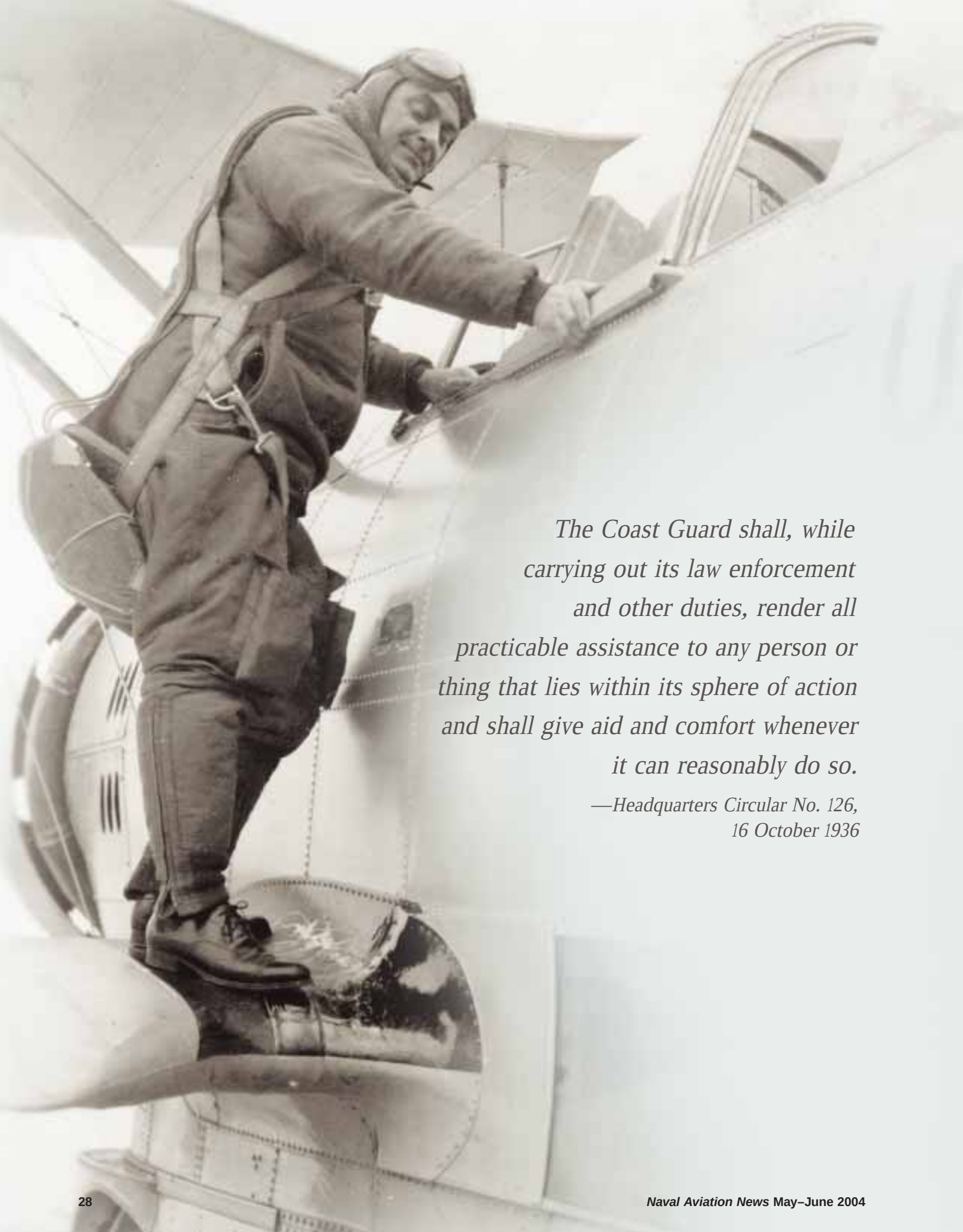


The Coast Guard shall, while carrying out its law enforcement and other duties, render all practicable assistance to any person or thing that lies within its sphere of action and shall give aid and comfort whenever it can reasonably do so.

—Headquarters Circular No. 126, 16 October 1936

Early Coast Guard Aviation

By Dr. Robert L. Scheina

Benjamin M. Chiswell

Norman B. Hall

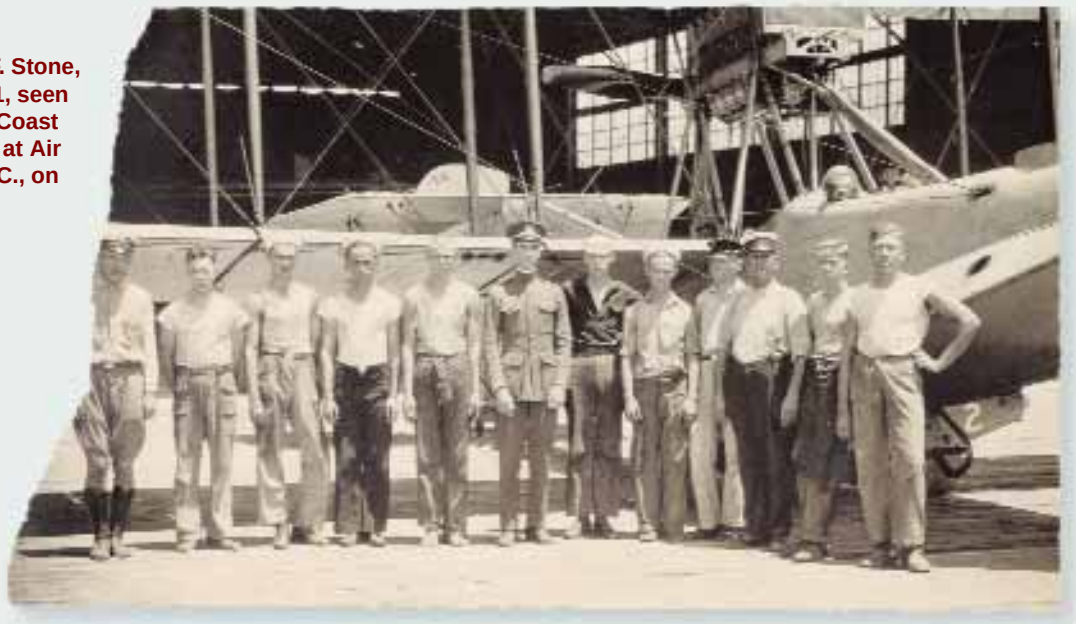
The Coast Guard was introduced to aviation in 1903 when the surfmen from the Kill Devil Hill Lifeboat Station in North Carolina helped carry the fragile Wright Flyer from its shelter to the launch site on 17 December 1903. Surfman J. T. Daniels took the only photograph of the event using the Wright brothers' camera.

The first practical steps toward a Coast Guard air arm occurred in early 1915 when Lieutenants Elmer Stone and Norman Hall conceived of using aircraft for Coast Guard missions. With the backing of their commanding officer, Captain Benjamin Chiswell, they approached the Curtiss Flying School at Newport News, Va., and were taken on experimental flights in the school's aircraft. Stone and five others were then assigned to the Naval Aviation School at Pensacola, Fla., for training in April 1916. Hall was sent to the Curtiss factory to study aeronautical engineering. Later in 1916, Congress authorized the Coast Guard to establish 10 air stations, but no money was appropriated.

During WW I, Coast Guard aviators were assigned to naval air stations in the U.S. and abroad. One Coast Guardsman commanded Naval Air Station Ille Tudy, France, and won the French Chevalier of the Legion of Honor. Another commanded Naval Air Station Chatham, Mass., and piloted one of two HS-1 seaplanes that bombed and machine-gunned a German U-boat off the coast of New England.

The war effort set the stage for the first flight across the Atlantic Ocean. In May 1919, three Navy Curtiss seaplanes, each with a five-man crew, began the great experiment. The NC-4, piloted by Lt. Elmer Stone, USCG, was the only one to succeed. In 1983, Stone became the first Coast Guard pilot enshrined in the National Museum of Naval Aviation in Pensacola, Fla.

In March 1920, the Coast Guard's first air station was established at Morehead City, N.C., when the service took over an abandoned naval air station and borrowed a



Facing page, Cdr. Elmer F. Stone, Coast Guard Aviator No. 1, seen in the early 1930s. Right, Coast Guard aviation personnel at Air Station Morehead City, N.C., on 27 July 1921.

Left, a crew turns up a Loening amphibian in Gloucester, Mass., in 1929. Below, an aircrewman demonstrates how to grasp a pigeon from its cage and, below left, how to throw the bird clear of the aircraft during flight. Before radio communication became the norm, homing pigeons were used to carry messages back to home base.

few Curtiss HS-2L flying boats and possibly one or two Aeromarine Model 40s from the Navy. The aircraft were particularly useful at locating those in distress and finding derelicts. Congress did not appropriate funding to support the operation, however, and the station was closed in 1921. The first permanent Coast Guard air station was established in 1926 at Cape May, N.J.

Prohibition had become the law of the land in 1920 and soon its enforcement became the Coast Guard's dominant mission. In 1925, Lieutenant Commander C. C. von Paulsen borrowed a Vought UO-1 seaplane from the Navy. Operating from Squantum, Mass., and later Ten Pound Island in Gloucester Harbor, he demonstrated the potential of aviation in combating the smuggling of whiskey. As a result, Congress appropriated funding and the Coast Guard purchased its first aircraft, three Loening OL-5 amphibians and two Chance Vought UO-4s, which operated from Gloucester and Cape May. Thus, the Coast Guard's enduring mission of law enforcement was born.

By the late 1920s, the search and rescue clientele had changed primarily from coastal sailors to ocean-going motor ships. Now, when emergencies arose, they were frequently far off the coast. In 1928, an aviation section under Commander Norman Hall was established at Coast Guard Headquarters, and developed the concept of "flying lifeboats." These aircraft could fly hundreds of miles, land in an open and frequently uninviting sea and carry out a rescue. Seven aircraft were acquired—two Douglas Dolphin RD-2s, which were modified to Coast Guard requirements, and five General Aviation PJ-1 Flying Lifeboats, which were specifically designed for the service.

In 1934, Henry Morgenthau became Secretary of the Treasury. An aviation enthusiast, he supported its expansion within the Coast Guard and transferred the aviation detachment of the Customs Service to the Coast Guard. However, the materiel benefits of this transfer were small, because most of the Customs aircraft were in poor condition and impossible to maintain. Regardless, the secretary's enthusiasm for Coast Guard Aviation was important to its development. He obtained Public Works Administration funds for the purchase of new aircraft and additional air stations. By 1936, the Coast Guard had 6 air stations, 2 air detachments and 42 aircraft.

Also during the 1930s, the marriage between the cutter and aircraft began with 327-foot cutters embarking either a Grumman JF-2 or Curtiss SOC-4. These aircraft-equipped cutters were designed to patrol against opium smuggling off the West Coast and fisheries violations in Alaskan waters, and to serve on plane guard duty in the Atlantic to protect the growing over-ocean commercial air service.

WW II accelerated the growth of aviation within all of the armed services, including the Coast Guard. Along the American coastline, Coast Guard aircraft patrolled for U-boats and searched for merchant mariners who were the victims of enemy torpedo attacks. In addition, Coast Guard Aviation played a critical role in the defense of

Above, A Coast Guard PJ-2 medevacs a crewman from SS *Samuel Q. Brown* in 1934. Lt. John Pritchard, left, and Radioman Benjamin Bottoms were killed the day after having rescued part of a B-17 aircrew in December 1942 in Greenland. Below, Coast Guard SOC-4s were embarked aboard cutters in the 1930s to patrol against smuggling off the West Coast and fisheries violations in Alaskan waters, as well as for plane guard duty in the Atlantic.

Greenland. Aircraft operating from cutters helped locate German weather stations in the frozen northern areas of the continent. The Coast Guard captured these stations, which were providing critical data to U-boats operating in the North Atlantic. Patrol Bombing Squadron 6, a Coast Guard squadron under Navy operational control, flew Consolidated PBY-5A Catalinas on antisubmarine and search and rescue patrols from Greenland. Coast Guard aircraft performed harrowing rescues by flying through snowstorms and landing on the ice cap to aid distressed Allied aircrews who had crashed while attempting to ferry aircraft across the Atlantic.

As the war continued, military aviation expanded rapidly, resulting in an increasing number of offshore crashes by student pilots. This led to the establishment of the first Air-Sea Rescue Squadron at San Diego, Calif., in 1943. In December 1944, the Office of Air-Sea Rescue was established at Coast Guard Headquarters, and by 1945 was responsible for 165 aircraft and 9 air stations. During that year, the unit responded to 686 plane crashes.

By 1941, the Coast Guard was very interested in developing the helicopter for search and rescue. LCdr. William Kossler had represented the Coast Guard on an interagency board formed in 1938 for the evaluation of experimental aircraft, including the helicopter. However,

Illustration by Provenza

Above, a Patrol Bombing Squadron 6 PBY Catalina in Greenland during WW II; right, a squadron gunner. Below right, Navy Ensign C. H. Carleston is rescued by a PBY crew from Air Station St. Petersburg, Fla., after a midair collision in 1945. Bottom, an HOS lands on board the cutter *Cobb* during WW II.

WW II interrupted these plans. The Coast Guard, incorporated into the Navy on 1 November 1941, was tasked in early 1943 with developing the helicopter for antisubmarine warfare. Sikorsky HNS-1 and HOS-1 helicopters were ordered and pilot training began at Brooklyn Air Station, N.Y., where the Coast Guard trained all Allied helicopter pilots. As the war progressed and the U-boat threat moved deeper into the North Atlantic and then abated, the service reoriented its helicopter research from antisubmarine warfare to search and rescue. Cdr. Frank Erickson had pioneered this Coast Guard activity, developing much of the rescue equipment himself. On 3 January 1944, Erickson also completed the first lifesaving flight when he delivered two cases of blood plasma lashed to an HNS-1's floats following an explosion on board the destroyer *Turner* (DD 648) off Sandy Hook, N.J.

The post-WW II years brought a proliferation in the number of recreational boats and created new search and rescue clientele. The helicopter was ideally suited to this mission. Able to react swiftly, it could lift entire pleasure boat crews from imminent disaster, or in less trying circumstances, deliver dewatering pumps and fuel. Soon, helicopters rescuing distressed boaters became a commonplace event.

The responsibilities of Coast Guard fixed-wing aviation also increased following WW II. In 1946, Coast Guard aircraft were used for the first time on the International Ice Patrol, a practice that continues today. The primary objective of these flights is to advise shipping in the vicinity of the Grand Banks about current conditions throughout the iceberg season. Coast Guard aircraft also began to be used to intercept and escort aircraft that were experiencing mechanical problems, providing a reassuring presence for both passengers and flight crews.

Above, Cdr. Frank Erickson. Right, an HNS-1 crew simulates a rescue. Below right, Cdr. Donald MacDiarmid commanded Patrol Squadron 6 from October 1943 to May 1944. VP-6 became Patrol Bombing Squadron 6 on 1 October 1944.

From its earliest days using borrowed aircraft through many years of experimentation and expansion, Coast Guard Aviation established itself as an invaluable asset to our nation. As the Coast Guard's missions have evolved throughout the years, its aviation arm has kept pace, acquiring new aircraft and creating new policies and procedures to ensure that its future is as successful as its past.

Dr. Scheina is a former Coast Guard historian. This history is condensed from "A History of Coast Guard Aviation," which is available at http://www.uscg.mil/hq/g-cp/history/h_aviation.html.

Above, the amphibious HH-52 demonstrates its waterborne capabilities. Right, an HH-52 makes a rescue during 1965's Hurricane Betsy.