Great Lakes

A brief history of U. S. Coast Guard operations

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Coast Guard Bicentennial Series
The Great Lakes provide a natural waterway for the transportation of goods from the rich American heartland. Together, they form the most important inland waterway in North America.

As early pioneers and commerce pushed westward through this great waterway, the federal government provided four small organizations that helped those who sailed upon the lakes and provided a maritime federal law enforcement presence in the old Northwest. Eventually, these four agencies were amalgamated to form the modern day U.S. Coast Guard.

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An artist's rendition of one of the first stations along Lake
Superior's shoreline. Many of the first U. S. Life-Saving Service stations were in small cottages at very isolated locations.
One of the drills the men of the Life-Saving Service had to perform weekly was the capsizing and righting of the lifeboat. This need for assistance to those upon the lakes brings up the old argument between salt and fresh water sailors. Many an old salt would ask what danger could there be on a lake? With the opening of the St. Lawrence Seaway in 1959 some of the questioning sailors had a chance to sail on the “mill ponds” and soon found that waves of twenty feet in height, or higher, can be quickly generated and danger is as real for a sailor on Lake Michigan as on the ocean.

If one looks at the statistics, it becomes abundantly clear that this body of fresh water is huge. The chain of lakes making up the region encompasses 94,510 square miles. Indeed, it does appear that the lakes are, in the words of one writer, the “Eighth Sea”.

The U. S. Lighthouse Service was the first of the four agencies that would eventually make up the U.S. Coast Guard on the Great Lakes. The service traces its roots to 1716 with the establishment of a lighthouse on Little Brewster Island, at the entrance to Boston Harbor. By 1789 there were 12 lights located within the new United States.

There is considerable debate on where the first light was established in the Great Lakes. A fire in 1920 destroyed many of the service’s records, so an accurate listing is not possible. However, F. Ross Holland, the foremost writer on United States lighthouses, sets the 1819 establishment of Presque Isle, on Lake Erie, as the first light in the region. Whichever lighthouse it was, the need for aids to navigation grew as shipping increased.

By 1866 there were 72 lights guiding ships to safety. The need for lights is well illustrated when one realizes that by the 20th century there would be more than 100 lighthouses dotting the shorelines of the lakes and the St. Lawrence River.

The builders of Great Lakes lighthouses faced great difficulties in erecting their structures. Lighthouse Service engineers had to contend with high bluffs, sandy coasts, shoals, and other problems. The hazards are best illustrated by the establishment of Spectacle Reef Light, the “greatest engineering achievement in lighthouse construction on Lake Huron, and one of the outstanding feats in the lighthouse service as a whole ....” Spectacle Reef, located at the eastern approach to the Straits of Mackinac, was, according to official reports, “probably more dreaded by navigators than any other danger now unmarked throughout the entire chain of lakes.” Congress, in 1869, authorized work to begin on the project with an estimated cost of $300,000. Major 0. M. Poe, of the U.S. Army
Corps of Engineers, was the supervising engineer for the project. Poe selected a shallow area on the reef with only 11 feet of water over it. Before commencing work on the foundation, however, the wreckage of the iron ore schooner Nightingale had to be cleared away.

A crib dam was then constructed ashore and then transported to the reef. Once the dam was in place, the water was removed so the work crew would have a dry location in which to labor. Next, the construction force leveled the foundation and, using three foot long bolts, bolted pre-shaped stones to the base rock, with 21 inches of the bolt sunk into the reef. Then, the courses of stone were bolted to each other and to the layers of stone below. Each bolt was "set in pure portland cement which today is as hard as the stone reef."

The tower of the light itself is a solid stone mass for the first 34 feet and then rises at least five stories to the top of the structure. It took at least four years to complete Spectacle Reef Light. So severe was the winter of 1873 when the keepers came to open the new light, they found ice rafted against the structure to 30 feet in height. This was seven feet above the entrance and the men had to chop

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Lighthouse keepers used words like loneliness and monotony to describe their lifestyle

the ice away before they could seek shelter. The light was officially first exhibited on June 1, 1874, and "has since guided lake vessels past the dangerous reef and toward the Straits of Mackinac which lead into Lake Michigan."

Lighthouses may seem a perfect place for many of us in this hectic, modern age. However, the words most used by keepers to describe their existence are "loneliness" and "monotony." A great deal of a keeper's life centered on the mundane duties of keeping the station and its equipment clean.

Before the advent of electricity, one of the keeper's primary duties was to keep a close watch on the lamp which was the main source of illumination. The wick of the lamp had to be carefully trimmed to produce a strong light. In fact, a keeper was judged by how well his lamp was trimmed. This constant attention to wicks led to lighthouse keepers earning the nickname "wickies."

Most people today probably view the profession of lighthouse keeper as male dominated. This is in large part true, but in the United States many of those lighthouses whose histories go back at least to the 1800s "at one time or another had female assistant keepers; and a surprising number had women as principal keepers." This
The Lightship Huron was the last of her type on the Great Lakes. She left her station on Aug. 21, 1970, replaced by a horn buoy.

was, however, not because of an enlightened view on the part of the service. Rather, it was a means of saving money. Many of the principal keepers were married and it was cheaper to have a husband and wife team than to provide two separate quarters. Both wives and family members helped in the running of a light. For example, on May 11, 1890, a rowboat capsized in the Detroit River. A passing tug signalled to the keeper of the Mamajuda Light for help. The keeper and his boat, however, were not at the station, so 14 year old Maebelle L. Mason, daughter of the keeper, with the help of her mother, launched a small punt. Then, by herself, the girl pulled for one mile and managed to get the exhausted man aboard the boat and then rowed back to the lighthouse. For her rescue, the young woman received the Silver Lifesaving Medal, the second highest award for rescue work.

Lighthouses, such as Spectacle Reef, were some of the most isolated stations in the service. For the most isolated and dangerous duty, however, one had to serve aboard lightships. These small, special ships guarded areas where it was impossible to build a light structure. The obvious danger in this type of duty is that the vessel must remain on station no matter how fierce the gale, plus the ever present danger of being rammed by another ship in thick weather.

The first lightships on the Great Lakes, numbers 55, 56, and 57, took their stations on Simmons Reef, White Shoal, and Gray’s Reef in northern Lake Michigan on Oct. 22, 1891. Unlike many early vessels of this class, which were fitted with sails, the first lightships in this region were, as one official report put it, able to go “to and from their stations with their own steam, the only lightships in any service to which this is possible.” The number of lightships grew to 20 and a total of 18 different stations were occupied. The complement of the small ships was usually one warrant officer and 10 crewmen. In general, their duties were “monotonous, repetitious, dangerous, and above all, lonely.”

The U.S. Lighthouse Service also operated another fleet of ships — known as Lighthouse Tenders. The tenders provided the means to bring supplies and needed work parties to the scattered and isolated lighthouses. The locations of lights made this duty hazardous, as lighthouses by their very nature are located in dangerous areas. The fleet of tenders consisted of “vessels whose duty it is to go where no other vessels are allowed to go, and who, through storm, darkness and sunshine, do their work ....” The first tenders on the lakes were vessels chartered by the Lighthouse Service. In 1874, the Dahlia was the first tender constructed especially for light ice on the inland seas. She was 141 feet in length, steam powered, iron-hulled,
Oswego, N.Y. U. S. Life Saving Station crew. Great Lake crews experimented with uniforms during the early days of the service.

and the first to start the custom of naming this class after flowers, shrubs, trees, or plants.

The next predecessor agency of the modern day U. S. Coast Guard to be stationed on the Great Lakes was the U. S. Revenue Cutter Service. Established in 1790 by the first Secretary of the Treasury, Alexander Hamilton, the service was formed to help combat the loss of revenue by sea-going smugglers. The service operated small cutters and, in 1831, received the assignment of “winter cruising,” or performing lifesaving duties on the high seas.

By the 1820’s, U.S. Revenue Cutter Service cutters were cruising the Great Lakes enforcing revenue laws and assisting lakers in distress. The nature of the duty on the Great Lakes was different. When the winter freeze halted shipping, most of the crew was paid off — except for a small watchkeeping force. The officers, and the ship were laid up.

The Revenue Cutter Service on the Great Lakes had a wide variety of duties. For example, in 1906 the cutter Mackinac was assigned to Sault Ste. Marie, Michigan, “for customs duty, and to enforce the rules and regulations governing the movements and anchorages of vessels in the St. Mary’s River.” The cutter’s crew, assisted by two launches, carried out this assignment, which became known as the St. Mary’s River Patrol. To help in the regulating of traffic, the cuttermen manned six permanent lookout stations located along the waterway. In addition to this assignment, the cutter was also required to patrol local regattas.

The next predecessor organization to appear in the Great Lakes was the U. S. Life-Saving Service. The mission of this service was to launch small boats in an effort to rescue people shipwrecked close to shore. The service began as a volunteer organization on the eastern seaboard. The federal government entered the picture in 1848 and moved haphazardly until 1854 when a strong storm swept the east coast and many died due to shipwrecks. Congress then authorized more money for the construction of lifesaving stations. The early years of the service were marked by a series of disasters in which weaknesses were pointed out and Congress responded with money to strengthen the organization. After the 1854 storm, for example, Congress authorized $12,500 to purchase lifeboats to serve twenty-five points on Lake Michigan and such other points as the Secretary of the Treasury might determine. By the end of the year there were nine boats...
The crew of a Revenue Cutter sometime around the turn of the century. During the Spanish American War, World War I, and World War II cutters were pulled from the Great Lakes to fight on the oceans. (right) The USRC Chase photographed during the late 1800's. Photo was taken from the “stereographic” photo series, “Oswego and Vicinity” by F. W. Oliver of Oswego.
Presque Isle Light Station at Erie, Pa., considered the first lighthouse established on the Great Lakes. This photograph was taken in the 1870's. The Erie Pierhead Light is considered the direct descendant of the first lighthouse on the lakes. (below) The U. S. Revenue Cutter *William P. Fessenden*, a side-wheeler type of craft that began service on the lakes in 1865. She operated from Cleveland, Ohio to Detroit. In 1882, her hull was replaced with a new iron hull and she was relaunched. She was decommissioned in 1903, but was again placed back into service in 1905 and served until 1907 in Florida. She was decommissioned in 1908. (bottom) Many of the isolated stations kept the old building plans of the U. S. Life-Service. When the U. S. Coast Guard was formed in 1915, some of the stations looked like small lake-shore cottages. This photo shows the Sleeping Bear Point, Mich., Station in 1916.
Crew of the Evanston, Ill., U. S. Life-Saving Station (above). Keeper Lawrence O. Lawson, center row, facing left, was in charge of this station from 1880 to 1903. The entire crew earned the highest lifesaving award — the Gold Lifesaving Medal — for their rescue of the Calumet during a driving sleet storm on Nov. 28, 1899. Under Lawson’s leadership, the station is credited with the rescue of 447 people from over 35 shipwrecks. Evanston Historical Society Photo. (below) The Evanston, Ill. Station was unique because it was crewed by students from Northwestern University. (above right) The South Manitou Island Station crew works lifeboat into the ice in 1926. Note lifeboat still used tiller instead of a wheel.

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on Lake Ontario, 14 on Lake Erie, 23 on Lake Michigan, and one on Lake Superior. These boats were generally placed at light stations.

The winter of 1870-1871 on the Great Lakes was harsh. More than 214 died in maritime related accidents and, once again, the Life-Saving Service came under fire for its poor performance. This time, however, Sumner Kimball was appointed to head the service. Kimball, an inveterate organizer, managed to remake the organization. The improved reputation of the service can be traced to the efforts of this man.

Officially, the service began on the Great Lakes in 1876 with 11 stations on Lakes Erie, Ontario, and Huron. The next year additional units were added and expanded to include Lakes Superior and Michigan. As shipping increased, so did the need for more stations until, by 1914, there were 62 stations scattered throughout the lakes.

The rescues performed by the crews of the service caught the imagination of the public and the press. Indeed,
the sight of a keeper, erect in the stern of his boat, urging on his crew as the boat pitches in high surf, could make the most staid journalist gush forth with purple prose. Surfmen soon began to be dubbed "soldiers of the surf" and "storm warriors." The men who served at the stations, however, led lives that could be best described as consisting of hours of boredom, interspersed with seconds of sheer terror.

The man in charge of a station, officially known as a keeper, had years of maritime experience and could handle men and boats in difficult situations. The keeper spent many years in one area, becoming an expert on the weather and surf conditions. Furthermore, because crewmen, called surfmen, were chosen from the local community, the stations remained principally a local affair and this is one of the main reasons behind the strong bond that now exists between the modern day U.S. Coast Guard and the municipalities that dot the Great Lakes shorelines.

One of the best examples of the old U.S. Life Saving Service keepers and his bond to a local area is Lawrence 0. Lawson of the Evanston, Illinois, Station. Lawson was born in Sweden on September 11, 1842. After working on Baltic Sea ships for a period of time, he emigrated to the United States and worked on the inland waters, eventually settling in Chicago and pursuing a living as a fisherman. On July 12, 1880, he was appointed the keeper of the Evanston Station. The station was unique in the annals of the service, for it was located on the grounds of Northwestern University and the surfmen were all college students. For the next 23 years Lawson instilled in his crews "a sense of responsibility, faithfulness and courage." One memorial to the keeper states that under "his superb leadership 447 persons were rescued from more than 35 shipwrecks...."

Arguably the greatest rescue of Lawson's long career, and one of the most difficult on the Great Lakes, came on Nov. 28, 1889, when the steamer Calumet foundered off Fort Sheridan. The entire crew of the Evanston Station, and their boat, were transported by rail to the location. Then the crew had to wrestle the boat down a steep bluff to the beach. Lawson and his college crew next had to face a howling gale, towering waves, and wind-lashed sleet to reach the shipwreck. For their rescue of the 18 crewmen of the Calumet, the entire Evanston crew received the Gold Lifesaving Medal, one of the few times that the highest lifesaving award had been presented to an entire crew. Lawson finally left the service on July 16, 1903 and died on Oct. 29, 1912, still residing in the Evanston area. At the time of his retirement one writer aptly summed up the old lifesaver: he "set standards and traditions that will last a life time."

The last of the four predecessor agencies to eventually form the U.S. Coast Guard on the Great Lakes is also the one that has been the least documented and, therefore, will be discussed only briefly. The Steamboat Inspection Service came about due to the large growth of steam powered
Escanaba was assigned to Grand Haven, Mich., in 1932. When she was sunk in June, 1943, only two of her crew survived.

ships and the resultant explosions of faulty boilers, with great loss of life. The mounting death toll led to the passage of the first laws, in 1838, to regulate passenger carrying steam vessels.

In the early years of steamboat development, inland waterways were better suited to the new vessels than ocean navigation. The waters of the Great Lakes, of course, were ideally suited to this new type of propulsion. The Steamboat Inspection Service grew in fits and starts. The service usually gained more responsibilities after a marine disaster. By 1911 the organization would list as their duties: the inspection of vessel construction and equipment; the examination and licensing of marine officers; the examination of seamen and investigations of marine casualties and violations of inspection laws; establishing regulations to prevent collisions; and establishing regulations for the transporting of passengers and merchandise. There were two Steamboat Inspection Service Districts in the Great Lakes: the Eighth included all the waters north and west of Lake Erie and the Ninth, which encompassed the St. Lawrence River, Lakes Erie, Ontario, and Champlain. Headquarters for the Eight was in Detroit and the Ninth District headquarters was located at Cleveland, Ohio.

The first decades of the 20th century would bring huge changes to the four small federal maritime agencies on the Great Lakes. The gradual adding of stations and shifting of various cutters continued but, in general, as the new century began the status quo was maintained until 1915.

Then, in an effort to streamline government operations, a major change came about. On Jan. 15, 1915, the U.S. Revenue Cutter Service and the U.S. Life Saving Service were amalgamated to form the U.S. Coast Guard.

At first glance there seems to be little difference between the new service and its predecessors. Cutters still performed their traditional duties, the St. Mary’s River Patrol still operated during shipping season, and small rescue boats continued to put out into storm tossed lakes to rescue those in distress. Indeed, in November 1919, during a strong gale, with the temperature hovering at 18 degrees above zero, the rescue of the H. E. Runnels near Grand
Marais, Michigan, was a feat that one historian noted was “worthy ... even by the standards of the old Life-Saving Service ...” All of the U. S. Coast Guardsmen who rescued the 19 crewmen of the Runnels received the Gold Lifesaving Medal. There were, however, large changes on the horizon.

The first major task of the new service came in 1920 with the passage of the Volstead Act, the experiment to outlaw liquor in the United States. For the next 14 years the U.S. Coast Guard waged a war against the smugglers of illegal spirits. With easy access to Canada, smugglers had a field day. Illegal activities on the lakes reached its zenith during the fall of 1927 and the spring of 1928. To combat the rum runners on the Great Lakes, station crews were doubled, patrol boats were increased, and a 75 foot picket boat class was added to the U.S. Coast Guard’s inventory. Although these measures helped, the flow of liquor was never completely stopped and only the passage of the 21st Amendment, the repeal of Prohibition, brought the rum war to a close.

The role of the new U.S. Coast Guard in the effort to keep America dry was not a popular one. One historian has noted the service was unpopular with the “drys” because they could not completely cut off the supply of illegal liquor. On the other hand, they were also unpopular with the “wets” who were angry over the supply of spirits that were interrupted. “It was a cross which the Coast Guardsmen had to bear, and he bore it well.” Out of the long rum war, however, some good did emerge. The U.S. Coast Guard had, in general, been known only locally. Now it received national and international notice. Most importantly, the service “remained larger and more important than it had been previously.”

The 1930s not only marked the end of Prohibition, it also ushered in the beginnings of new technology for the U.S. Coast Guard on the Great Lakes. In 1932, a new class of cutter was constructed at the DeFoe Works, Bay City, Mich., and christened the Escanaba. She was 165 feet in length and powered by a 1,500 horsepower steam turbine. On Dec. 9, 1932, the new cutter was assigned to her homeport of Grand Haven, Mich. The Escanaba
was designed to help keep shipping lanes open as late as possible. Twenty days after arriving in Grand Haven, the cutter participated in her first rescue, pulling two downed pilots from the cold waters of Lake Michigan.

In 1938, a Grumman V-118 twin engine amphibian airplane was assigned to the Great Lakes Air Patrol Detachment at Traverse City, Mich. The detachment operated for three months to test the feasibility of constructing an air station in the area. The first evaluation, however, recommended operations only during shipping season.

One year later, as war clouds began to thicken, President Franklin D. Roosevelt made another major change to the U.S. Coast Guard. Again, citing governmental efficiency, the U.S. Lighthouse Service was taken over by the Coast Guard. Shortly after this, the service itself became part of the U.S. Navy as the nation prepared for World War II.

The Great Lakes assumed an even greater role as a transportation artery during World War II. It now became an important part of the war effort for the Coast Guard to keep shipping moving as late as possible and to guard against sabotage. U.S. Coast Guard personnel guarded shorelines, docks, vessels, bridges, patrolled harbors, and manned lookout stations to protect vital shipping. In 1942, as a wartime measure, the Steamboat Inspection Service, now called the U.S. Bureau of Marine Inspection and Navigation, was transferred to the U.S. Coast Guard. The transfer was made permanent in 1946. In order to keep shipping moving as long as possible, $8 million was appropriated to build an icebreaker for Great Lakes use. On March 20, 1943, the 290 foot Mackinaw’s keel was laid. She was launched and commissioned on March 4, 1944, the most powerful icebreaker in the world at the time for her designed purposes.

At the outbreak of World War II, some cutters were transferred from the Great Lakes to help in the Battle of the Atlantic. One of the cutters making the move to the Atlantic was the Escanaba. In June 1943, while operating with a convoy out of Narsarsuak, Greenland, Seaman First Class Raymond O’Malley, at 5:10 in the morning, heard “a noise which sounded like three or four bursts of 20 mm machine gun fire.” Within minutes after this noise, there was a tremendous explosion that ripped the cutter in two. Only two men survived, O’Malley and Boatswain’s Mate Second Class Melvin Baldwin. The citizens of Grand Haven, Michigan, established a memorial park and raised more than a million dollars in U.S. war bonds to build another ship to bear the name Escanaba. Since World War II, Grand Haven has held the U.S. Coast Guard Festival in August of each year.

The U.S. Coast Guard that emerged from World War II is basically the service that still operates its multifaceted missions today. To be sure, there have been major changes. Technology, for example, has made it possible for the closing of many units. Better ship navigation has made the use of some lighthouses no longer necessary. Technology has also made it possible to automate lighthouses and keepers are no longer required. In fact, when the U.S. Coast Guard took over the U.S. Lighthouse Service, it began to seek ways to automate many of the isolated stations. Spectacle Reef Lighthouse, the great engineering feat of the 19th century, for example, was automated in 1972. It is estimated that at the end of the 1980s there will be no manned lights in the United States, thus ending an era in our maritime history. Lightships have also been replaced. The last lightship on the Great Lakes, the Huron, was disestablished and a lighted horn buoy and radio beacon replaced her station on Aug. 21, 1970. Lastly, the number of small boat stations have been greatly reduced by changing technology, including Keeper Lawrence O. Lawson’s old Evanston, Illinois, unit. Keeper Henry Cleary, of the Marquette, Michigan, U.S. Life-Saving-Service Station, conducted tests on the first 34 foot lifeboat equipped with a two cylinder, 12 horsepower engine. Eventually, these tests developed the workhorse of the U.S. Coast Guard small boat stations—the 36 foot motor lifeboat. In 1961 a new 44-foot motor lifeboat replaced the older boat. While these boats made it possible to reduce the number of small boat stations, one of the largest reasons for the reduction was the development of the helicopter as a rescue tool and the addition of more air stations on the Great Lakes. In 1966, a new air station was opened near Detroit and equipped with Sikorsky HH52A helicopters. This “chopper” has a top speed of 125 mph. It was designed to pick up an injured person either by rescue hoist or by landing in the water, and then return to base with a safe margin of fuel remaining. In its first year of operation, the station is credited with saving 330 lives.

In 1967 another major administrative change came to the U.S. Coast
Guard on the Great Lakes. After nearly 177 years in the Treasury Department, the service, on April 1, 1967, became a part of the Department of Transportation. Under the new Department, an air station was added at Glenview, in the Chicago area.

Like the old U.S. Revenue Cutter Service, the U.S. Coast Guard still continues to perform a multitude of duties on the Great Lakes. In the 1960s, after lifesaving, icebreaking, to keep the shipping lanes open as long as possible, was one of the larger missions. Beginning in mid or late December, three operations were usually underway to accomplish this duty: "Taconite," centered mainly in Whitefish Bay, the St. Mary's River, and the Straits of Mackinac, designed to keep the ore boats carrying taconite from Minnesota to Gary, Ind., moving; "Coal Shovel," along the south shore of Lake Erie to Detroit, kept the coal supply moving to factories in Michigan's largest industrial city; "Oil Can," assisted tankers in the Green Bay, Wisc., and Grand Traverse Bay, Mich., region.

In the early 19th century units of the modern day U.S. Coast Guard began their long service to the maritime community of the Great Lakes region. Nearing the 200th birthday of the U.S. Coast Guard, the dangers to modern day sailors on the lakes are still as strong as ever, witness the sinking of the Carl D. Bradley and the Edmund Fitzgerald. Indeed, the men and women of today's U.S. Coast Guard, who respond to the emergencies upon the waters of the Great Lakes, are carrying on, and surpassing, the strong foundations of service to others established by the deeds of their illustrious predecessors.

Units like this HH-52A from Coast Guard Air Station Chicago, the 44-foot motor lifeboat and cutter Macinaw can be seen on the Great Lakes today.