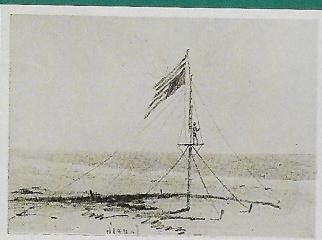
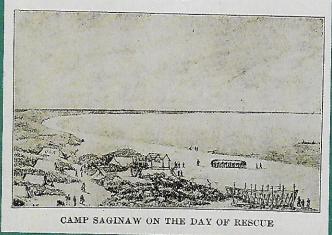
The Wreck of the United States Sidewheel Steamer Saginaw

BY STEVE C. D'ANTONIO

Prior to embarking on a 1,100 mile return voyage across the Pacific Ocean the crew of the USS *Saginaw* steamed close aboard Ocean Island to check for castaways. In one of the great ironies of naval history the crew found themselves wrecked upon the reefs and stranded on the small atoll. The events which followed led to one of the most storied rescues in U.S. maritime history.

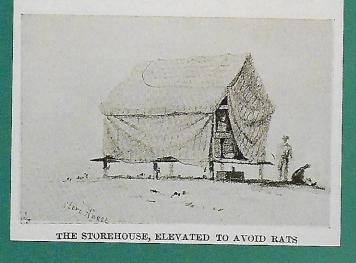


THE FLAGSTAFF FROM WHICH THE KILAUEA WAS SIGHTED





THE CAPTAIN'S TENT

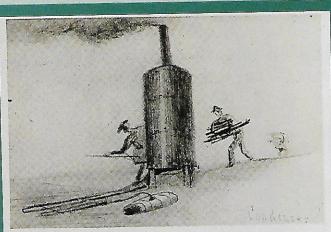


he post Civil War era in the United States was one characterized as having failing naval interests. Five years after the war two-thirds of the seven-hundred ship U.S. Navy was either sold or disposed of. With the nation's energies wholly focused on internal growth, the declining fleet was left to displaying the flag in distant ports, maintaining meager trade and scant foreign interests. Among the inroads being made in the Pacific was the establishment of port facilities on a two-square mile group of islets annexed in 1867 for use as a coaling station. These uninhabited atolls were known as the Midway Islands due to their location half-way between the continental United States and the Orient.

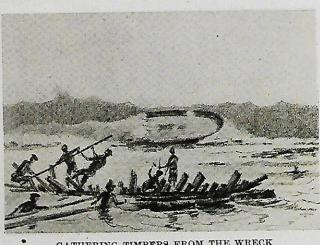
The USS Saginaw, a U.S. Navy schooner-rigged, side-wheel steamer, and West Coast veteran of the war between the states, was charged with transporting and supporting a construction party engaged in widening the entrance channel to the harbor on Midway Island. In February of 1870 the ship departed San Francisco for Midway via Honolulu. Her crew and the construction team worked on the island throughout the summer, occasionally returning to the Sandwich Islands (as the Hawaiian Islands were then known) for mail and supplies. Congress had allotted a limited amount of funds for this project, and when those funds were expended Saginaw, her crew, and the construction unit were ordered home. Her side-wheel began to churn into the Pacific on October 28th, a Friday, traditionally considered an unlucky day to set sail. Saginaw's commanding officer, Lieutenant Commander Montgomery Sicard, decided that, before making for Honolulu, the steamer would head to an obscure sandbar that could barely be termed an island. Ocean Island, now Kure Atoll, lay approximately fifty miles due west of Midway. The Saginaw had diverted to check the island for castaways, which it had been known to support in the past. Both the British ship Gledstanes, wrecked in 1837, and the U.S. ship Parker wrecked in 1842, were casualties of Ocean Island's infamous reefs.

Navigation at sea, by 1870, had progressed to a fair degree of a accuracy. Chronometers and sextants had been refined to a science, and the crews of naval vessels in particular were well versed in their use. However, charts of certain regions, especially those of the vast and little traveled areas of the Pacific, were inaccurate at best. Current day charts of the thousand mile stretch of ocean between Hawaii and Midway continue to bear the ominous warning, "Area to be Avoided."

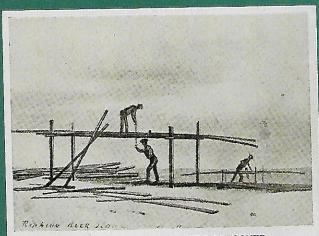
The Saginaw departed Midway at 4:00 p.m under sail, making good approximately three knots. It should have taken them roughly sixteen hours to complete the passage, arriving some time in the early morning. For reasons unknown, Saginaw arrived at Ocean Island several hours earlier, striking the outlying reef at approximately 3:00 a.m., October 29th. A lookout sighted the reef moments before the collision, the halyards were cut and the sails crashed to the deck, but to no avail. Saginaw's keel struck the reef with a shudder, and each swell lifted her higher and higher onto the coral heads. All attempts to back her off with the steam engine failed. By first light the crew, while disheartened by their predica-



THE CONDENSER-MADE FROM A SMALL BOILER AND SPEAKING-TUBES



GATHERING TIMBERS FROM THE WRECK



RIPPING TIMBERS FOR THE SCHOONER



THE FRAME OF THE SCHOONER AS WE LEFT IT

ment, were relieved to see a small island (Ocean Island is only a little over a mile long) a few hundred yards to the southwest. They began to abandon the *Saginaw*, transporting all the provisions, stores, and equipment that could be carried in the ship's boats and on foot. The lagoon between the reef and the island was only as deep as a man's chest, so one could walk ashore. Some men spent most of the first day in the water passing supplies ashore via a human chain. They knew early on that the *Saginaw* would never sail again. The seas had lifted her so far onto the reef that her back broke after only a few hours. The crew, under the direction of Captain Sicard, worked to the point of exhaustion in order to save all that could be saved before the ship broke up entirely.

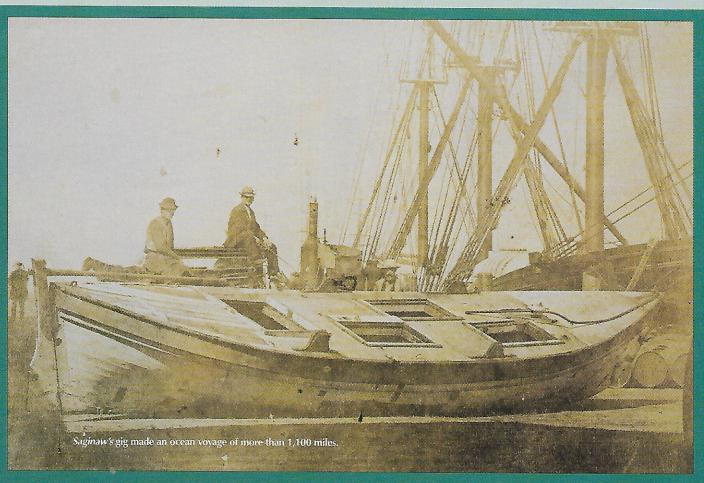
Saginaw. Pay Inspector George Read logged-in and accounted for all supplies and stores. The captain endeavored to maintain positive spirits through strict discipline and a regimented watch bill. Sailors, as well as the contractor party, set to building shelters for storing provisions made from the salvaged remains of Saginaw's hull. Her sails provided the material to erect tents for living quarters. The only dry match salvaged from the wreck provided a light for the fire, which had to be kept burning constantly, fueled by drift wood, wreckage, and the bleached bones of the last vessel unfortunate enough to end her life on Ocean Island, the Gledstanes. Eventually, a lantern and barrel of sperm oil were recovered so that this fire vigil no longer had to be maintained, and valuable wood could be preserved.

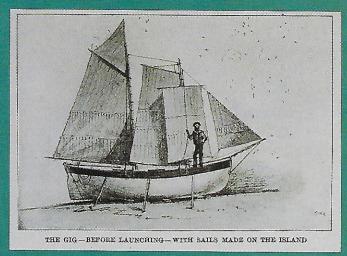
The primary concerns of all 93 men now marooned on Ocean Island were food and water. The island had a permanent population

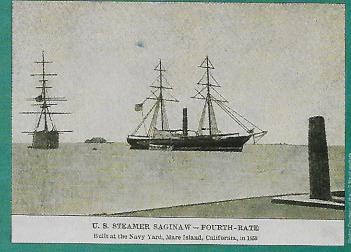
of brown albatross, also known as Gooney birds, seals, and thousands of rats. All were considered a possible food source. Forays into the nesting areas were done carefully and quietly. The men had no intention of scaring away future meals. The seal meat, tough and tasting of fish, made a less than appetizing meal. The Gooney bird was only slightly more palatable. The rats hadn't been sampled yet and were forever attempting to steal the meager provisions that were saved from the wreck. Eventually, a stilted storehouse was built, over which a sentry stood twenty-four hours a day.

Much like Coleridge's Ancient Mariner, the castaways of the Saginaw were surrounded by water they could not drink. The ship's assistant engineer conceived a brilliant plan to salvage one of the construction party's portable steam boilers from the wreck, along with some speaking tubes and canvas hose, for construction of a boiler and condenser. Salt water, heated in the boiler with a fire sustained from salvaged timber, would turn to steam, pass through the speaking tube which they placed in the lagoon, condense and pass back to a barrel on the beach. Since salt will not vaporize with steam the device produced fresh water. The boiler could manage ten gallons of fresh water per hour—an amazing feat that would help to sustain the men of the Saginaw, until the fuel for the boiler had been depleted.

The captain decided that, in order to be more visible and to better see a passing ship, the *Saginaw's* main mast should be erected on the highest point of the island. Unfortunately, this point stood only ten feet above sea level. Each foot of elevation, however, allowed their distress signal, an inverted national ensign, to be seen from an additional two tenths of a nautical mile. It took several hours of back-breaking labor to set the mast in a hole and stay it







with salvaged rigging. Shortly after it had been set a line parted and the mast came tumbling to the sand. Fortunately, it did not break. Captain Sicard ordered that it be erected again, but the second attempt would utilize a deeper hole and doubled lines. Several sailors began to dig a deeper foundation and shortly thereafter a shout rang out, "water!" The crew gathered around the hole as a lone sailor held a shovel full of wet sand to his lips, tasted it and proclaimed, "Boys, fresh water, by God." There had been rumors of fresh water wells on the island but all attempts to find them had

failed. The crew considered it an act of providence that the shroud parted, and gave a prayer of thanks for the blessing. This water, actually trapped rain, would last only as long as the wet climate prevailed. If the weather turned dry, as it would, the well would produce no more water. The boiler too began to give trouble. The salt water caused it to rust rapidly and leak.

Within a few weeks it became clear to most of the inhabitants of Ocean Island that rescue would not be forthcoming. They decided, if rescue would not come to them, they would become their own salvation. Two courses of action were decided upon. Primarily, they formulated a plan to prepare the most seaworthy small boat from the Saginaw, her gig, for an ocean voyage of some 1,100 nautical miles, to the Sandwich Islands. The secondary plan called for construction of a schooner, with timbers salvaged from the Saginaw, that could carry the entire compliment back to civilization. The crew of the Gledstanes had successfully

built a ship, albeit after five months purgatory on Ocean Island.

The ship's carpenters worked first on modifying the gig. They raised her freeboard eight inches, for a total of thirty inches at the amidships mark. Her length overall, twenty-four-feet, ten-inches, remained unchanged. They decked over the little boat, and provided it with four hatches so the crew could work the sails, sheets, tiller, and row during periods of calm. Spars and sails were fashioned from pieces of the *Saginaw's* own rig.

They equipped the gig with salvaged equipment; a barometer,

chronometer, two compasses and "opera glasses." One of the officers hand copied a chart of the region of the Pacific the gig would sail. Another officer painstakingly copied the *Nautical Almanac* for the time the voyage would last. Finally, Assistant Engineer Herschel Main, a 1868 graduate of the U.S. Naval Academy, performed perhaps the most incredible feat of engineering improvisation during the entire saga. The only sextant retrieved from the wreck, it was decided, would remain on Ocean Island for the schooner's voyage, in the event the gig's crew were unsuccessful.

Main "manufactured" a sextant with little more than a cold chisel, hammer, a couple of small taps, four or five half worn and ill adapted files, a pocket knife, a drill-brace and some pieces of steel wire. He fashioned the main face of the sextant from the dial of a steam vacuum gauge, and hammered the arm from a copper bolt pulled from the Saginaw's timbers. Main made the scale from a piece of sheet zinc, flattened and rubbed off with charcoal. He cut the vernier into the zinc with a pocket knife, copying it from the original sextant. This sextant, accurate to one minute of arc, served as a remarkable example of a bit of ingenuity, and a good engineering education.

Upon their discovery of the plan to send a boat to Hawaii, nearly every man volunteered to be part of the crew. The captain and officers decided to choose those that had the most robust constitution, as well as good seamanship skills. They appointed commander of the gig the *Saginaw's* executive officer, Lieutenant John G. Talbot. The

crew included: James Muir (member of construction party) Acting Captain of Hold, John Andrews (member of construction party) Acting Coxswain, Quartermaster Peter Francis and Coxswain William Halford.

The small crew began preparing for the journey by studying the charts. Those who did not know celestial navigation were urged to learn as much as they could in the few days remaining prior to their departure. Provisions consisted primarily of tinned beans, rice, hard tack, and meat. The most important item layed



Coxswain William Halford was awarded the Congressional Medal of Honor.

in, as it turned out, was twenty-five pounds of what the navy called desiccated potatoes.

On November 18th, 1870, again a Friday, exactly three weeks after first being stranded on Ocean Island, the crew of the *Saginaw* took destiny into their own hands. The gig, provisioned, decked over, and rigged, lay at anchor in the lagoon. All hands were mustered on the beach for a prayer service led by Captain Sicard, hands were shaken and well wishes exchanged. The engi-

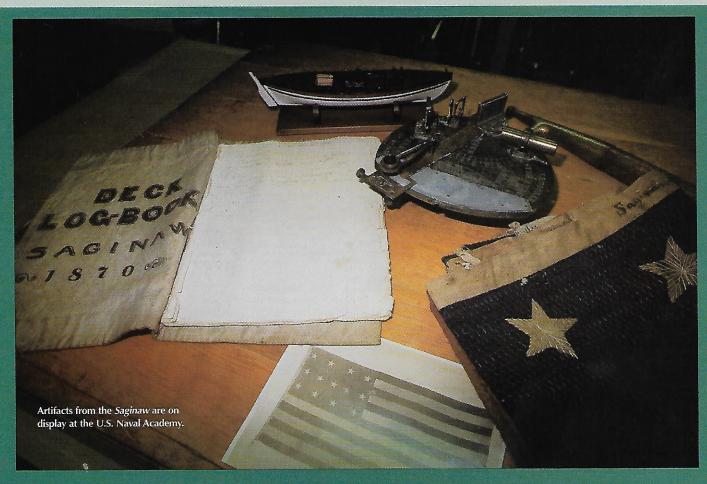
neer had just completed installation of oarlocks as the five men waded out into chest deep water, climbed aboard the gig, weighed anchor, set sail, and made a course toward the western end of the lagoon, and the open sea. Clearing it, they hauled close on the wind and made a heading of North by East. The crew of the gig could hear those left on the island cheering them for as long as they were within earshot. Their odyssey had begun. The hopes, dreams, and very lives of the remaining castaways, rested on the skill and courage of those now sailing the Saginaw's gig.

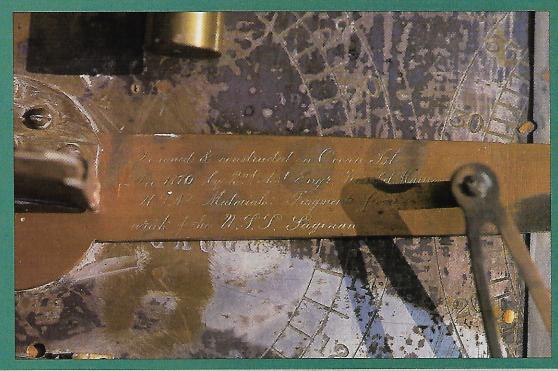
Studying a Pilot Chart for this part of the Pacific Ocean in November reveals that the crew of the gig had a good understanding of the weather patterns they could expect. Ocean Island, at a



latitude of 28.5 degrees North, is in the midst of prevailing easterlies. They would have to sail north, nearly one hundred and fifty miles, before they would encounter more variable winds, and a eastward setting current. Once they reached the 30th parallel, after roughly three days, the weather changed noticeably, the temperature of the air dropped, and the wind began to blow from the northwest. This change assisted in their easting. It began to blow too strong, however, to remain

under sail. They hove to and set a sea anchor. The sea turned angry, pelting the small boat in a tumult of frothing waves and wind driven spray. Breaking waves deluged the gig, filling the bilges with water, soaking the stocks of food that had been so carefully layed in by shipmates now left hundreds of miles astern. The outlook turned bleak indeed. The sea anchor's line parted and a new one had to be improvised from two of the oars. This failure occurred on two more occasions. A day or so after getting the westerly the gig nearly came to grief on a fifty-foot-long, four-foot-wide drifting log. A following sea lifted the boat over the log at just the right moment preventing a capsizing. It did, however, stress the boat so that she required almost constant bailing.







Close up of the gig's sextant.

Photo of the author and the tablet erected at the U.S. Naval Academy by the *Saginaw* survivors to honor their lost crewmembers.

Early on in the passage the crew discovered that many of the stores that had been put aboard were fermenting in their tins due to contamination. Despite this problem the crew did not want to throw the food overboard. Spoiled food, they reasoned, was better than no food. Unfortunately, this decision caused all of them to suffer severe cases of dysentery and they reluctantly decided to send the rancid food over the side. One of the few items that had not been contaminated were the desiccated potatoes. They commenced eating the potatoes, but only three spoonsful a day, and later only two spoonsful per day. For two weeks they ate only potatoes, Muir and Francis never completely recovered from the dysentery. Halford seemed the most fit and attributed this to his consumption of a quantity of sperm oil they carried for the lantern, which they lost early on in the voyage. The others refused to drink it.

By the twenty fifth day the provisions were completely depleted. According to Lt. Talbot's calculations they were at the longitude of the Sandwich Islands, and therefore could begin to head south. About this time a large bird landed on the gig. Halford, the only one awake at the moment, leapt out and grabbed it. He wrung its neck, quickly divided it into five equal parts, and the starving men devoured it. Three days would pass before another meal came their way, but this time from the sea rather than the air. A school of flying fish collided with the gig, depositing several on deck. They too were eaten without hesitation. Shortly after catching the fish Halford noticed a landmass astern. It turned out to be Kaula Rock, the most western portion of the Sandwich group. They were approximately sixty miles further west then they had thought. Lt. Talbot ordered a change of course so that they could make the nearest landfall, the island of Niihau, which lay far to windward. The wind and seas began to increase, blowing the gig further to the East. The gig eventually passed to the East of Kauai in driving rain and lightning. Lt. Talbot intended to stand off of Hanalei Bay, on the North side of Kauai, until daybreak, but the gig's crew became disoriented due to fatigue and hunger. They accidentally entered the breakers in the dark of night. The boat capsized, then righted herself, leaving Halford and Muir the only ones aboard. They were both badly injured, but Halford was able to keep the gig's bow into the wind using a broken spar as a pole. When the gig grounded Halford dragged Muir ashore, where he passed out. When Halford awoke, Muir was nowhere to be found. The gig had washed onto the beach. In the light of day it became clear that thanks to Halford's efforts with the pole they had narrowly averted being dashed on the rocks.

Coxswain Halford wandered inland, using a piece of driftwood as a crutch, eventually coming upon a group of native children. When they saw him they ran off in fright. Little wonder, he was a naked skeleton with a long dirty beard and matted head of hair. Help soon arrived, however, and moved him to a nearby village. Muir was found fifty feet inland, dead. It had been thirty one days since they'd left Ocean Island. The bodies of Lt. Talbot, Seaman Muir and Coxswain Andrews were recovered over the next two days, and buried on a bluff overlooking Hanalei Bay. Quartermaster Peter Francis was never seen again.

Halford had to get his story to the U.S. Consul in Honolulu. The island of Kauai, being relatively remote, made this task difficult. It took three days for him to travel ninety miles. Within two days of the news being delivered, however, the king of the Sandwich Islands had offered his own steamer, the *Kilauea*, for the rescue of the remaining eighty eight *Saginaw* crew members. On January 4th the *Kilauea* arrived at Ocean Island. All were well, and the rescue took place without incident. Their joy, however, was tainted by the news of the deaths of their four comrades.

For his courage and selfless devotion to his shipmates, Coxswain William Halford, the sole survivor of the *Saginaw's* gig, received the nation's highest commendation, the Congressional Medal of Honor.

Steve D'Antonio is a contributing editor to Cruising World magazine and the recipient of the first and second place literary awards from the Boating Writer's International Association in 1996 and 1997. He is director of operations for a boat building establishment on the lower Chesapeake Bay.