

CHAPTER SEVEN

The tools of war

Under Lend-Lease, Gunderson's Linnton plant manufactured thousands of ship's doors, crow's nests, hatches, manhole covers, scuttles, and other parts for troop transport and merchant marine ships. This soon transformed Gunderson from a job shop making trailers and liquid-storage tanks to a production facility suitable for heavy marine construction. Gunderson's record of prompt delivery and high quality soon brought opportunities to bid on prime contracts for the U.S. Army, Navy and Maritime Commission.

It was then that the company was incorporated in Oregon, on May 29, 1942, and officially became Gunderson Bros. Engineering Corporation — a more apt name, considering the abundance of quality engineers now on its staff.



LCMs at the U.S. Marine landing at Saipan, June 15, 1944. (Photo courtesy of Library of Congress)

One of the first of the new breed of projects that came along was the contract for the 200 LCM tank lighters.

This was when Stan Baier, after working as an independent consultant with Gunderson, joined the firm as production manager and chief engineer. In his preface to a bound wartime editions collection of *The Gunner* he observed: The problem was “the training of people to perform the many tasks in constructing steel tank lighters, wood and plywood lifeboats, life rafts, harbor tugs, covered lighters, landing craft control boats, army trailers, watertight doors, hatches, and miscellaneous steel ship fittings.

“A training program had to be constantly maintained. With the help of motion pictures taken on the job of various operations,

newcomers could see how the job was done, and the pictures served as a refresher for the old hands as well. Labor turnover in wartime is exceptionally high. The Army was continually taking young men after we had just finished training them for some specific job. At year's end we had only fifty people who had been with us a year, out of a work force averaging seven hundred."

This rotating army of employees was put to work on Gunderson's new product lines.

A marine railway was set up at the Front Avenue plant. It had a steel carriage that rolled down into the water on tracks. This carriage was connected to a logging winch to lower the carriage and its load into the water or haul it out of it. An A-frame crane at the head of the railway was used to hoist boats on and off the carriage. This dry-docking marine railroad could handle a ship as heavy as 250 tons.

This served a 140-foot-wide basin with floating walkways on both the up- and down-stream sides. A string of floodlights allowed night work, and a floating paint shop completed the set-up. This manmade naval harbor was capable of holding 100 LCMs.

The LCM(3) was 50 feet long and 12 feet wide, with a drop-down front ramp. This ramp was raised to make a four-sided boat when the craft was underway. During loading or discharging of troops, fighting vehicles, or weapons, ammunition or other equipment, the ramp could be lowered by a mechanical winch powered by the boat's engine. There were no special accommodations for passengers; they crowded into the high-walled well and couldn't see out.

These lighters had a square wheel house, or pilot house, that resembled a huge piece of square steel pipe standing on end, with slots cut in the sides. There was just enough width and height for a man to stand in there and steer. During enemy fire, the pilot could crouch down, protecting his upper body and head. Using the slots, he could barely see enough to pilot the boat, so he occasionally had to peek over the top edge.

Lighters were used in many battles, Tarawa in the Pacific and Normandy in the Atlantic to name two. The lighters were launched and christened with bottles of Coca-Cola. In November 1943, Gunderson began naming tank lighters after outstanding workers, and their names were stenciled on the bows.

The first employee so honored was Albert Marlowe, a machinist who hadn't missed a single minute's working time since his first day in June 1941. All told, eighty LCMs were named for Gunderson workers, both male and female.

While Front Avenue built LCMs, the Linnton plant continued to fill orders for ship components and produce a limited number of trailers and liquid storage tanks. It also became a major subcontractor of steel components for the Front Avenue plant, producing all of the welded steel ramp gates for the tank lighters and other fabricated parts, as well.

One other line of items that came out of the Linnton plant is part of a story all its own. These were the galvanized steel stem and stern

irons for Stan Baier's lifeboats. He designed and patented the craft prior to joining the company. It was the first plywood lifeboat to be approved by the U.S. Coast Guard for use on any ship or any ocean. The Coast Guard checked out the twenty-four footer by loading it with more than three tons of sand, suspending it by its bow and stern, then measuring the hull deflection amidships. There was almost none. Next, the sand-filled boat was lowered into the water and all the emergency supplies and gear were loaded in. It floated fine.



A 22-foot lifeboat in WWII action, this photo taken from an enemy submarine. Gunderson built more than 3,600 life boats and life rafts between 1942 and 1945. (Photo Courtesy Library of Congress)

Finally came the acid test. The sand was dumped out, all the air (flotation) tanks were removed and the drain valves in the bottom were opened. It still refused to sink.

In January 1943, the lifeboat line was going so well that Frank Bosch (in charge of material, production, and purchasing) announced that the boats would be coming out at a rate of 300 a month. Production like that didn't go unnoticed.

In July 1943, Hollywood recognized the Gunderson lifeboat. One was on display at the Broadway Theater in Portland for the opening of a Warner Bros. film, "Action In the North Atlantic." It starred Humphrey Bogart as Joe Rocci, a first mate whose ship is torpedoed and seeks refuge in a lifeboat in a submarine-infested sea.

Hollywood and Humphrey Bogart, however, come in a distant second compared to Seaman Basil Izzi. In October 1943, he turned up at Gunderson to report that he had spent 83 days in one of its lifeboats. He said he had come to compliment the company on the boat's performance.

During 1942-44, Gunderson's Front Avenue Lifeboat Division built 1,500 22-foot and 1,600 24-foot lifeboats for use on U.S. Maritime Commission troop transport and merchant marine vessels.

As the years wore on, Gunderson's dedicated employee force built a host of other war-related products, from hulls to gravity davits (what lifeboats hang from onboard a ship). Late in the war, they took on the job of repairing boats and components damaged in war service. Motors filled with Aleutian sand were disassembled, steam cleaned, reassembled, and tested. Hull bottoms full of muck and grease were steamed out, then turned over to the carpenters for repair.

In the final years of the war, Gunderson manufactured 400 dual-axle semi trailers for the Army, 5 Navy tugboats, 10 cargo lighters, and 511 life rafts.

A Navy machinist's mate 3rd class by the name of Collins K. "Bud" Billing had something to say on the subject of Gunderson war boats, in this case the LCM(3). "Those LCMs of yours are really something. They'll turn on a dime, have plenty of speed and power; and that's mighty important when you're dodging (Japanese) eight-inch shells!"



In the War years employees cashed their paychecks at the "Owl's Perch" tavern, still at the same location on North Lombard street.

Final Tests Given New Gunderson Lifeboat

New Gunderson lifeboat holds 45 men and women wearing heavy life jackets. New model has half again capacity of the 22-foot boat, 1,800 of which have been completed at Gunderson's.

Below, left: The new 24-foot lifeboat still floats, despite the facts that all air tanks have been removed and sea cock opened. Below: Awaiting tests, the new boat is a trim craft as she rides the water, fully equipped for sea.



New 24-Foot Lifeboat, Like Predecessors, Passes Tests With Colors Flying

With production slated to begin Monday on the new 24-foot Gunderson lifeboat, Lieutenant Donald V. Reardon, Pacific Coast naval architect for the United States Coast Guard, last week put his stamp of approval on the design. Although exhaustive tests had been run on the earlier 24-foot Gunderson boat, the new series of tests was run to gain technical data on the revised design which cuts six inches from the beam formerly approved.

The outstanding results of the tests, which again proved that "you can't sink a Gunderson lifeboat," were no surprise to the Coast Guard or to Gunderson men

and women. Many times before, they had deliberately opened the sea cock and tried to sink a Gunderson boat. They failed then and they failed on the new tests, too.

Deserving a pat on the back for much of the paper work that preceded construction of the new boat are Bill Shoemaker's draftsmen. With Coast Guard headquarters in Washington pleading for new drawings in a hurry, Bill and his gang worked day and night, including Easter Sunday, got the job done ahead of schedule. The hard-working boys included Engineer Leighton Johnson and Draftsmen Jim Chapman, Ed Burke and Dick Councilman.



by Coast Guard



Above: Lieutenant Donald V. Rearm (center), Coast Guard naval architect, checks deflection with F. Boscah, (left) in charge of purchasing for the Gunderson's big Lifeboat division. Right: Some idea of how much hemp is needed for 800 lifeboats is gained from this picture taken in rigging loft.

Above: With half a ton of sand moved from port to starboard, the new Gunderson lifeboat still gives 3½ inches of freeboard on low side. Below: Ruby Ellison, splicing line to toggle, points to the schedule of work, showing that 780 feet of line are needed for each new lifeboat.

