

by **Ralph J. Ferrusi**

2,710 "Liberty Ships", a class of "simple, low-cost" mass-produced US cargo ships built during World War II, were developed "...to meet British orders for transports to replace ships that had been lost." They were the largest number of ships ever produced to a single design. They carried more than two-thirds of the cargo leaving the US. Their original design life was five years...

The ships originally took about 230 days to build, but the average eventually dropped to 42 days. By 1943, three Liberty ships were being completed daily. The SS Robert E. Peary was famously launched four days and 15 ½ hours after the keel was laid. This was scorned as a "publicity stunt". As of this writing, a mere two Liberty Ships are still "operational".

They were built between 1941 and 1945 at eighteen shipyards in 12 states along the Atlantic, Pacific and Gulf coasts: Alabama, California, Florida, Georgia, Louisiana, Maine, Maryland, North Carolina, Oregon, Rhode Island, Texas, and Washington.

They were welded, instead of riveted, together—riveted ships took much longer to construct—by a newly-trained work force: no one had previously built welded ships!!! The shipbuilding yards employed women, replacing men in the armed forces.

The ships were not huge, but not small: 441 feet, six inches long—think a football field and a half!!! Or, home plate to the center field fence at Yankee

Let's Talk About Liberty Ships

Stadium. They were 56 feet, 10 ¾ inches wide, and had an astounding range of 23,000 miles. Capacity was 10,856 TONS. Speed: 12.7-13.2 mph... They were armed: a 4-inch stern-mounted deck gun, and anti-aircraft guns. Their mid-40's cost was \$2 million apiece!!!

The SS Patrick Henry—"Give me liberty or give me death": hence, "Liberty" ships that would bring liberty to Europe—was launched by President Roosevelt on September 27, 1941. The ships initially had a poor public image due to their "Ugly Duckling" appearance, and were usually named after famous Americans, beginning with the signers of the Declaration of Independence. 17 ships were named after outstanding African-Americans, and the SS Harriet Tubman recognized the only woman on this list. Exceptions to the naming rule were the SS Stage Door Canteen, named for the USO club in New York, and the SS U.S.O, named after the organization itself.

A Liberty ship worthy of note was the SS Stephen Hopkins. On September 27, 1942 the Hopkins became the first (and only) U.S. merchant ship to

sink a German surface combatant during the war. Ordered to stop by the heavily armed German "commerce raider" Stier, the greatly outgunned Hopkins fought back. BRAVO!!!

The last new-built Liberty ship was the SS Albert M. Boe, launched on September 26, 1945. More than 2,400 Liberty ships survived the war. Hmmm, that makes 310 that didn't... 200 were of these were "lost to enemy action", and 835 made up the post-war cargo fleet.

Wikipedia has a (very daunting) complete list of Liberty ships, broken down by names: A-F, G-Je, Je-L, M-R, and S-Z (the last name is the SS Zona Gale, scrapped in 1964...). Thumbing down these (VERY daunting) lists it became very obvious that a huge percentage of the ships were SCRAPPED, just about always in the 60's and early 70's. I wondered what, exactly, "scrapped" meant???

Hoo Boy, Liberty Ships were famous for "structural defects". "During World War II there were nearly 1,500 instances of significant 'brittle fractures'."

Twelve ships BROKE IN HALF WITHOUT WARNING. The chief suspects were the inexperienced welders in the shipyards, and new welding techniques used "to produce large numbers of ships in great haste."

A thought: a very small percentage of parachutes fail to open. But, if I ever strap on a parachute again, I will wonder if this is one of the ones that make up that "very small percentage". Conversely, "only" 12 of the 2,710 Liberty ships produced "suddenly broke in half". But, this had to be in the back of more than a few sailors' minds on dark and stormy nights in the bitter cold North Atlantic...

But...alarmed, The Ministry of War Transport did some serious testing, that ultimately demonstrated, surprisingly, that the fractures did not start in the welds themselves!!! The fractures were caused by "low temperature embrittlement" of the steel. But... the same steel was used in riveted construction, and, did not have this problem.

Ships in the North Atlantic "were exposed to temperatures that could fall below a critical point at which the steel changed from being ductile to becoming brittle, allowing cracks to start easily." !!! And, the "predominantly welded hull construction allowed small cracks to propagate unimpeded, unlike in a hull made of separate plates riveted together" WOW!!!

And, surprise surprise, ships were often grossly overloaded, quite naturally increasing stresses. And, some of the problems occurred during or after severe storms at sea...

"Minor revisions" and various reinforcements were applied to arrest the problem. Victory ships, successor to the Liberty ships, used the same steel, "with improved design to reduce potential fatigue"... Hoo Boy.....

In September 1943 Liberty ships were pressed into emergency use as troop transports: 225 were eventually converted. Field kitchens were installed on deck, and latrines flushed by hoses (!!!) serviced

the 900 troops sleeping on or between decks. Most converted Liberties were intended to carry no more than 550 troops. Thirty-three were converted to transport 1,600 (Get Outta Here!!!) on "shorter" voyages from mainland U.S. ports to Alaska, Hawaii and the Caribbean.

In February 1944, concerned about "hull cracks", the US Coast Guard recommended Liberty ships be withdrawn from troop carrying. But...military commitments required their continued use, even though the ships were generally unsuitable as troop transports. There were "considerable complaints" concerning poor mess, food and water storage, sanitation, heating/ventilation, and lack of medical facilities. Wow....

In May 1944 the converted Liberty ships were returned to cargo-only operations. But... military necessities again required use of the ships, and the number of troops was increased to 550 on 200 Liberty ships for redeployment to the Pacific, and these ships were used in the immediate postwar period in order to return troops from overseas as quickly as possible.

Which brings us to the SS John B. Floyd, that my Dad, Corporal Ralph Joseph Ferrusi, returned aboard from Hawaii to California in 1945. The Floyd, hull number 431, keel laid October 9, 1942, launched November 7, 1942, scrapped 1965 was named after the 31st Governor of Virginia, Confederate General John BUCHANAN Floyd.

Buchanan, New York, was Pop's home town..... Here's Pop's story, in his own words: "They put us on a liberty ship. They were built so fast, the welder was paid by the inch, and they did a lousy job. The John B. Floyd started splitting right down the middle. We hit a storm and the bow would go down and the propeller would be spinnin'. They used to corral us in the back of the boat and give you a sandwich; that was it. The best-fed, best-trained, best-dressed army in the world were fighting for a Spam sandwich."

Of the 2,710 Liberty Ships built, a mere four survive, and only two are "operational".

- Operational : the **SS John W. Brown** is a museum ship in Baltimore Harbor, Maryland.
- Operational: the **SS Jeremiah O'Brien** is a museum ship docked at Pier 45 in San Francisco.
- The **SS Arthur M. Huddell** was transferred to Greece in 2008, renamed Hellas Liberty, and restored as a maritime museum in Piraeus harbor, Greece.
- The **SS Albert M. Boe**—the last Liberty Ship built—is currently landlocked in Kodiak, Alaska as the headquarters of Trident Seafoods, and was sold to private ownership in 1964, renamed Star of Kodiak, and used as a fish cannery ship.



*SS John W. Brown,
still operating as a museum ship.
Photo courtesy of Wikipedia*