



In Search of El dorado

A daily journal of my travels and adventures in my.....Search for Eldorado

Hello to Family & Friends



Today is a second attempt to visit Galveston Island. Morgan, I actually drove past that same tree today, but I did NOT take any photos, too bad of a memory. My free campsite last night was in a small industrial area about here. My first stop today is Seawolf Park, over here. Take note of the ferry route. I could keep marking every spot I visited, but it would look like the 1944 Disney Goofy cartoon "How to play Football" when Goofy designs a play on the chalkboard.

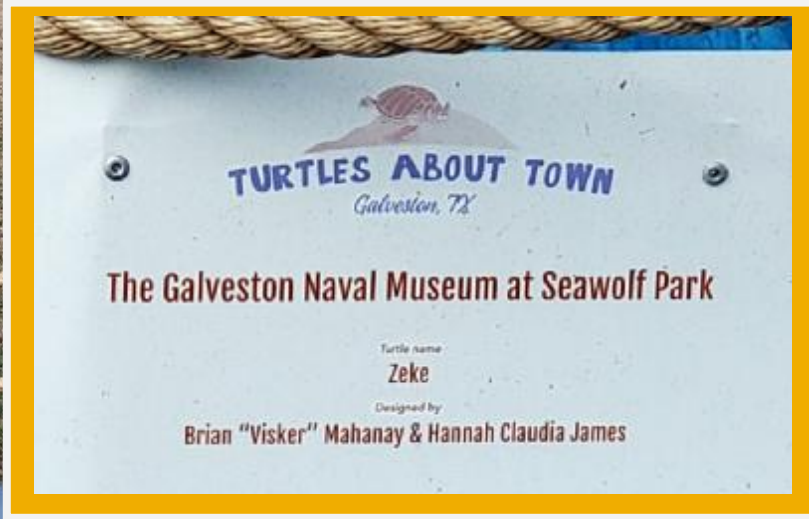


My first impression was good, the view to the right, before even entering the park. Then I was a little peeved. \$10 for RV parking (there were 8 other cars in the 600 car lot) and \$13 for admission to the museum. I thought it was just a park with a submarine and a battleship, on the ground, to walk around and look at.

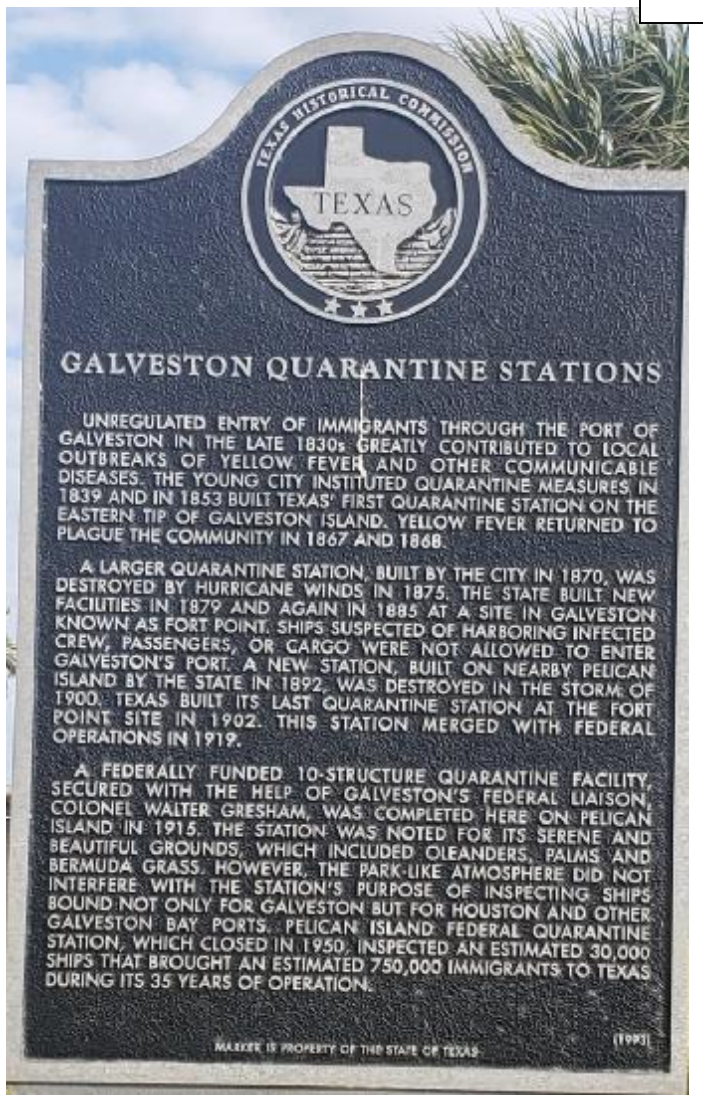




A small sculpture to start with. Sea turtles are big here. They have an 800 number to call if you're lucky enough to spot one.

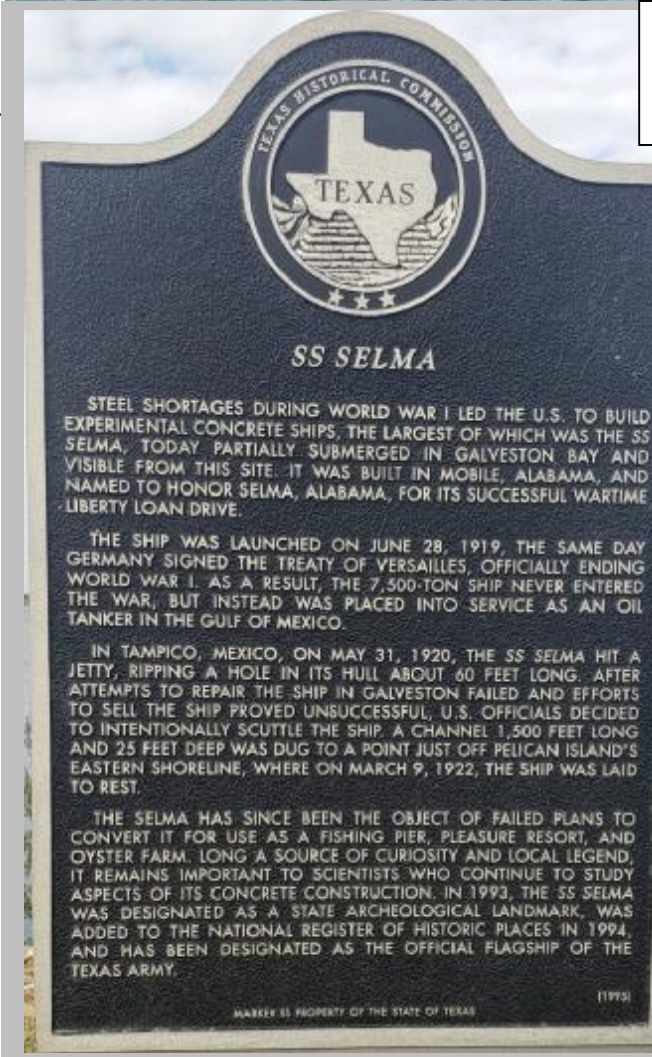


I started with a walk along the boardwalk that encircles the park.





I think I've heard this one before, but I'm not sure....ships made of concrete?



Above is the ferry I mentioned on page 1. Continuous FREE crossings to Bolivar Peninsula. There is free camping on the beach there.

Below is a Coast Guard Cutter



Below is a line of cargo ships, I think. Not sure if they are in line waiting to dock or setting sail for some foreign, exotic land.



Galveston Naval Museum

Home of the USS STEWART (DE-238) and USS CAVALLA (SSK-244)

ENTRANCE

Now we get to the nitty gritty. I have been on a few submarines before, most recently you joined me in San Diego to take a tour of one. I think Morgan and I visited a WWI German sub near Charleston, SC about 10 years ago, but it might have been a WWII vintage.

USS Cavalla



WWII Service

- On her first war patrol in the Philippine Sea, the USS Cavalla sank the IJN aircraft carrier Shokaku on June 19, 1944. The Shokaku was one of the carriers that attacked Pearl Harbor on December 7, 1941.

- She made six war patrols in support of the Mariana and Western Caroline Island Operations, the Palau Invasion, and 3rd Fleet Operations against Japan.

- She also sank a destroyer, two merchant ships and a sampan for a total of 34,180 tons.

IJN – Imperial Japanese Navy



USS Cavalla

- Built in 1943 by Electric Boat, Groton, Connecticut

- Commissioned February 1944

- Length 311 Feet
- Beam 27 Feet
- Draft 15 Feet

- Complement: 6 Officers, 54 Enlisted

- Maximum Speed 21 knots on surface
- Range 11,000 nautical miles @ 10 knots

- Decommissioned 1946

- Recommissioned 1951-52, 1953-68 for Cold War Operations



	Tons	%
Submarines	4,861,000	55
Navy Carrier Air	1,453,000	16
Army Air	910,000	10
Navy Land Based Air	383,000	4
All Other Causes	1,290,000	15
Total	8,897,000	100

Japanese Merchant Shipping Sunk

Epilogue

USS Cavalla earned four Battle Stars and was awarded the Presidential Unit Citation for sinking the Aircraft Carrier Shokaku.

From the Citation:

“For outstanding performance in combat during her First War Patrol in enemy controlled waters in the Eastern Philippines Area. Contacting a large Japanese aircraft carrier escorted by two cruisers and at least three destroyers, she successfully penetrated a strong protective screen and delivered devastating torpedo fire which resulted in the sinking of the valuable enemy warship. This reflects the highest credit upon her gallant officers and men and the United States Naval Service.”

Submarines in the WWII Pacific Theater

- United States Navy Submarines were responsible for 55% of Imperial Japan's merchant marine losses. British and Royal Netherlands submarines added to that total.
- The war against shipping was the single most decisive factor in the collapse of the Imperial Japanese economy.
- Submarines also conducted reconnaissance patrols, landed special forces, and performed search and rescue tasks, especially for downed air crews.



Alright already, let's get to the good stuff.

The conning tower (I was surprised that deck was just slats of wood); and the aft torpedo room.



These metal frames are bunks for the crew. I always dreamed of sleeping on top of 1000 pounds of explosives, haven't you?



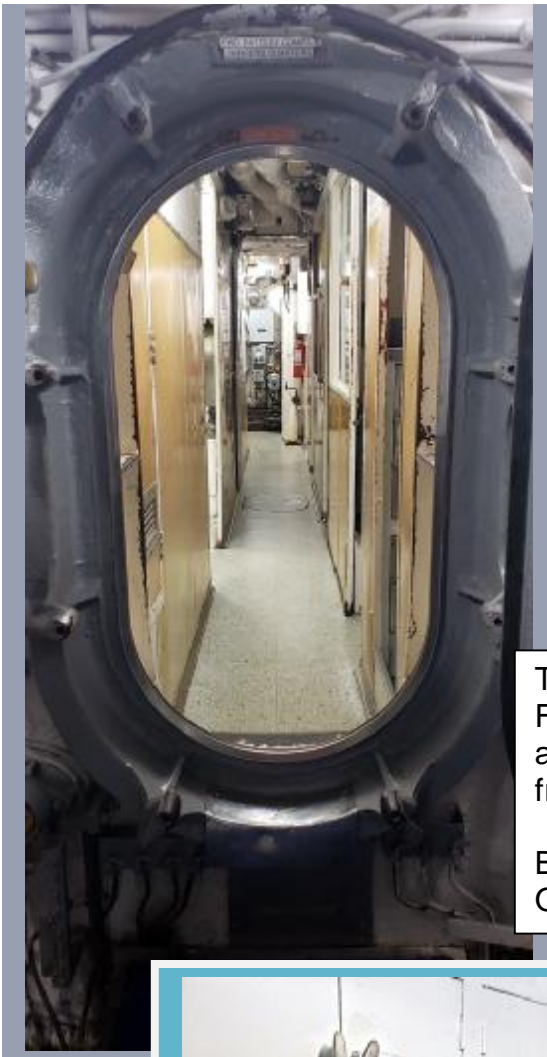
MARK-16 TORPEDO

The Mark 16 is a single-speed 21 in. by 21 1/4 ft. submarine torpedo. It is a gas-steam turbine torpedo that uses hydrogen peroxide (NAVOL) instead of compressed air to supply the oxygen necessary for the combustion process. Using a catalyst, the hydrogen peroxide is decomposed to form water (steam) and oxygen. The oxygen unites with the fuel (alcohol) in the combustion pot where combustion is initiated by a conventional igniter. The resulting hot gases mix with the steam to drive the main engine turbines.

By using NAVOL, no air is fed into the combustion pot and no nitrogen is present in the exhaust to leave a noticeable wake associated with other torpedoes.

In Service 1945
 Weight 4,000 pounds (1,800kg)
 Length 20 ft 6 in
 Explosives 1,000 pounds
 Range/Speed 7,000-11,000 yards at 46 knots
 3,700 produced.
 High-performance / high-cost torpedo.
 Not used during the war but it remained in service until the mid-1970s.





USS CAVALLA
FORWARD BATTERY
WARDROOM PANTRY AND OFFICERS' SHOWER
OFFICERS' WARDROOM
CAPTAIN'S STATEROOM
OFFICERS' STATEROOMS (2)
CHIEF PETTY OFFICERS' QUARTERS
LOWER LEVEL
126 BATTERY CELLS WEIGHING ABOUT ONE TON
EACH. THIS BATTERY AND ITS TWIN AFT
FURNISHED 250 VOLT DC POWER FOR
PROPULSION AND AUXILIARY EQUIPMENT WHEN
SUBMERGED. CAPACITY 5600 AMPERE-HOURS.

The officer's galley. Just an FYI, if you're not aware what aft means, the tour is starting from the back of the sub.

Below are the Chief Petty Officer's quarters.

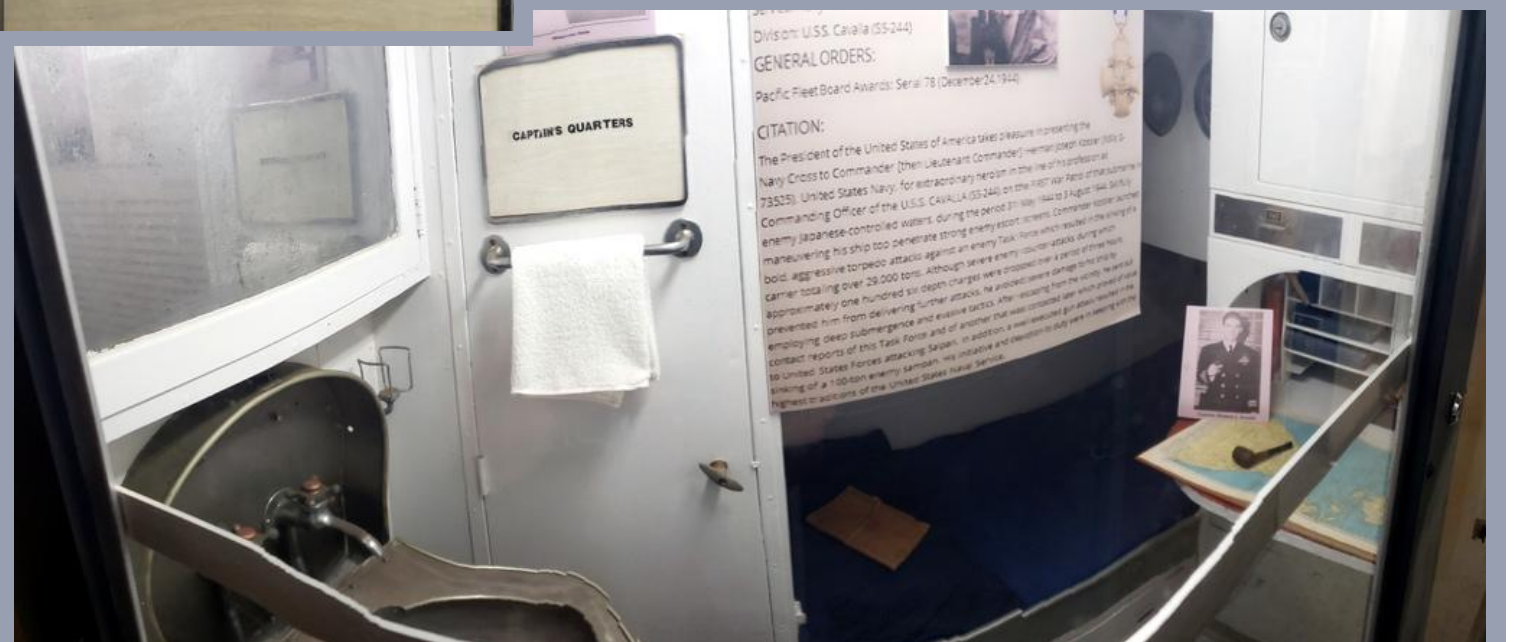


The Officer's Mess, or dining room



The photo below is a panoramic, so there's a little distortion, but I think it turned out well.

Since I have room here I would like to say that this is the best preserved WWII submarine I have been in. Everything is very spic and span, well documented, and easy to photograph for such a confined space. I was not overwhelmed with plaques, which means neither are you. Possibly because it's no longer in the water but preserved on dry land.



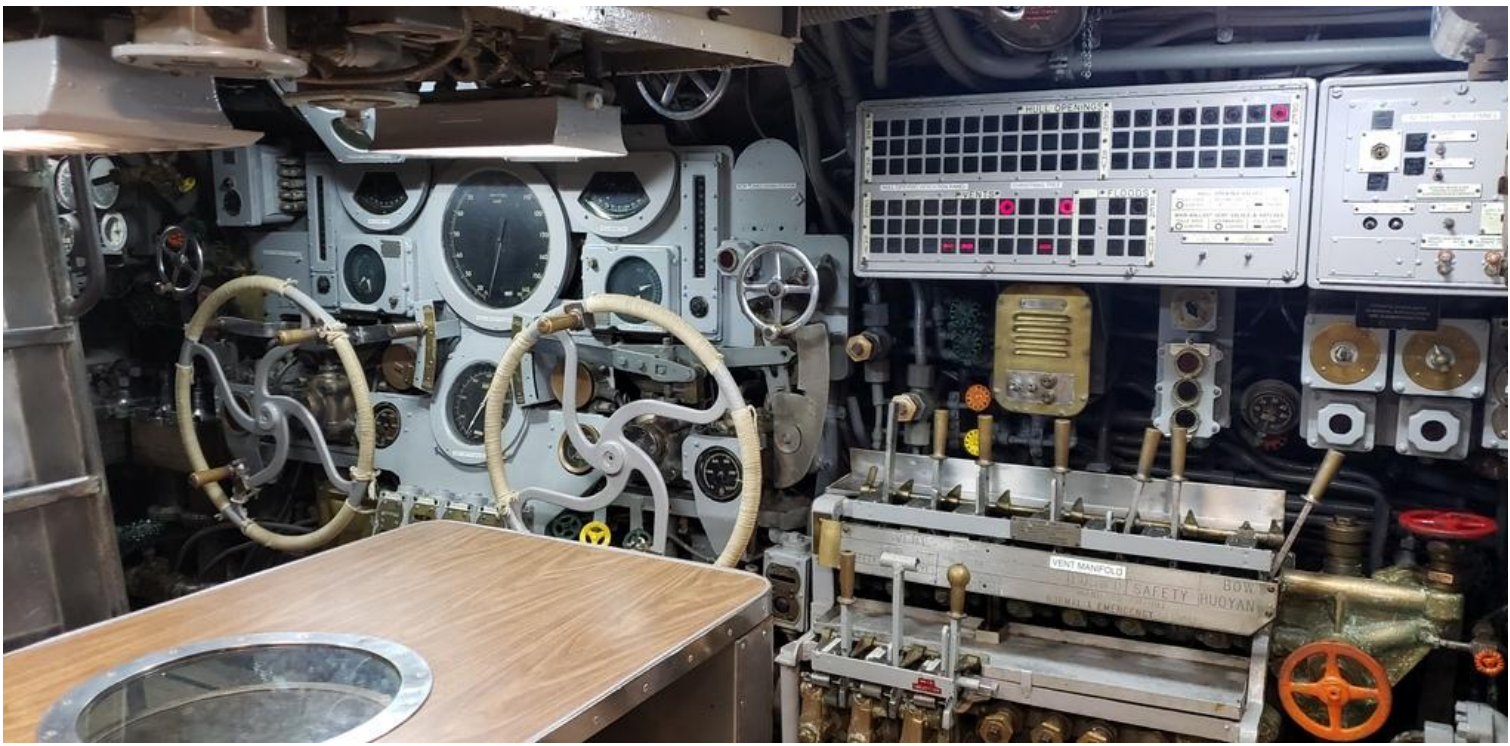


EXECUTIVE OFFICER
FIRST LIEUTENANT
ENGINEERING OFFICER

NAVIGATOR'S QUARTERS



The control room, above and below

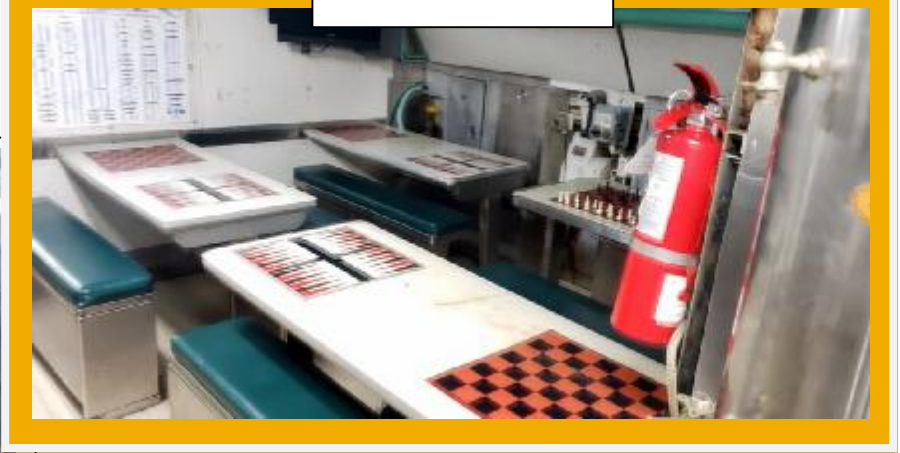


The dials, pipes, valves, gauges and whatnot are just amazing in a sub. The planning and configuration of what goes into building one of these boats is mind-boggling. And this was in 1943. Just imagine what technology has done for a sub built in 2020.

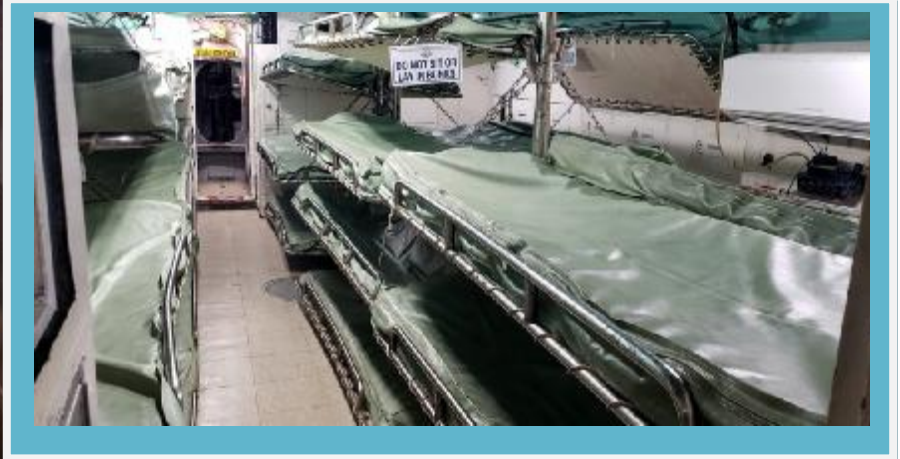
RADIO ROOM



The crew's mess



AFTER BATTERY COMPT. & AFTER CREWS BERTHING



The engine room



Winton GM 16-278A



General Motors Winton V-16-278A has two banks of 8 cylinders, each arranged in a V-design with 40 degrees between banks. Each engine is rated at 1535 bhp at 750 rpm. The diesel engine drives a General Electric 1100 Kilowatt Generator.

You can't see it in this photo, but there is a bench in the lower right corner where they control the engines from.



The forward torpedo room. Once again, note the bunks over the torpedoes.

USS Cavalla June 19 and 20, 1944

On her maiden patrol the USS Cavalla SS-244 was ordered to relieve the submarine Flying Fish SS-229 on June 15, 1944 at the San Bernardino Strait. In route, Lieutenant Commander Herman J. Kessler received an abrupt change of orders: Imperial Japanese Navy, Vice Admiral Jisaburo Ozawa's, massive attack force had been spotted by the Flying Fish steaming towards the Marianas. Admiral Lockwood instructed the Cavalla to lay in wait for the task force about 350 miles east of San Bernardino Strait. The Enemies were planning a major attack and their strategy to offset the growing American superiority was practical. Enemy carrier planes from nine carriers would attack the American fleet and fly on to land bases to rearm and refuel. Meanwhile, Enemy land-based aircraft from Guam, Tinian, and Saipan would strike from their surrounding positions and seek resupply on the carriers. This would produce a doubling of Enemy attack power.

Three hours after she reached her station, Cavalla detected four ships by radar. Captain Kessler began a high-speed "end around" to pass the ships and obtain a prime shooting position. After four hours of skirting the enemy ships, Cavalla closed in with the convoy. Kessler dived the boat and began plotting a firing solution. The convoy consisted of two tankers escorted by destroyers. Before Kessler was ready to shoot, one of the escorts swung onto an attack course with the Cavalla. Realizing he had been spotted, Kessler sought deep refuge. The destroyer lingered over the Cavalla until the rest of the convoy could escape. Upon surfacing, Kessler was greeted by an empty sea.

Kessler radioed Pearl Harbor that his intentions were to abandon the chase of the two tankers and wait for the warships. Admiral Lockwood deduced that the tankers were headed for a rendezvous with capital ships to refuel them. He ordered Cavalla to resume tracking the tankers. Air activity was becoming an increasing problem for Cavalla. Enemy aircraft restricted Cavalla's progress, forcing her to dive numerous times. After a long and trying day, the Cavalla's radar screen came alive. On 19 June, at 0800 hours, the lone submarine Cavalla had crossed the path of fifteen plus battleships, cruisers, and destroyers.

Captain Kessler now faced a dilemma. Standing orders required he report the battle group's size, speed, and course ahead of all other considerations. Kessler found himself in a favorable position for an approach to one of the cruisers. But he decided to stick to orders. While following the group and assessing their strength and make-up, Cavalla was detected by destroyers and driven down. The battle group released two destroyers to deal with Cavalla.

It was night before Cavalla was able to surface and send off a report of the sighting. Although the crew was disappointed and the captain heartsick, their report was of the greatest strategic significance to the worried American fleet. Now US naval planners knew exactly where the enemy strength lay. The task force had gotten away but Kessler wasn't willing to give up the chase. Though beginning to get low on fuel, Cavalla continued to follow the tankers. After hours of high-speed surface running, it became apparent that the trail had grown cold. Kessler turned Cavalla around and headed back for the San Bernardino Strait.

Shortly after dawn, enemy air activity in Cavalla's vicinity had increased to a fever pitch. Kessler radioed headquarters and reported the position. Shortly before noon on June 19, while surveying the swarming planes from periscope depth, Cavalla's sound man reported heavy screws approaching. Rushing to meet the planes was a battle group of one carrier, two cruisers, and a destroyer. It was the enemy aircraft carrier Shokaku, one of six carriers that attacked Pearl Harbor.

Kessler and his crew plotted a ninety-degree attack approach on their first target. Shokaku was at the center of countless aircraft circling and landing. Cavalla closed the range to 1200 yards. At 1118 hours, Kessler fired all six of his bow torpedoes. As the torpedoes streaked towards the carrier, a nearby destroyer spotted the wakes and wheeled to attack. Cavalla dove deep to evade retribution. Three of her torpedoes found their mark. The Shokaku rocked with the explosions of her munitions and fuel reserves. In four hours the Shokaku sank. Cavalla had taken out one of the largest vessels in the world. A heroic escape ensued after Cavalla's success.

Enemy destroyers drove Cavalla under her designed 300 feet of seawater maximum depth. The Cavalla maneuvered away from a massive attack from two enemy destroyers in pursuit of Cavalla. The sound gear was knocked out of commission and the hull ventilation system was damaged. Kessler managed to allude enemy destroyers and three hours later after a 105 depth charges were dropped on his boat. Kessler radioed Pearl Harbor:

"HIT SHOKAKU CLASS CARRIER WITH THREE OUT OF SIX TORPEDOES . . . RECEIVED 105 DEPTH CHARGES DURING THREE HOUR PERIOD . . . HEARD FOUR TERRIFIC EXPLOSIONS IN THE DIRECTION OF TARGET TWO AND ONE HALF HOURS AFTER ATTACK . . . BELIEVE THAT BABY SANK."

Hours prior to Cavalla's sinking of the Shokaku, the submarine USS Albacore SS-218 along concentrated air power by the US Navy's Hellcat pilots sank enemy carrier Taiho. The Cavalla dealt the crippling blow causing the Imperial Navy to abandon their defense of the Marianas Islands and retreat. The Cavalla's sinking of Shokaku changed the course of World War II in the Pacific Ocean.

When I first saw this I thought, no, this is too much to include in the newsletter. But after I read it I knew you had to read this true story. It's broken down into three sections below for ease of reading.

USS Cavalla June 19 and 20, 1944

On her maiden patrol the USS Cavalla SS-244 was ordered to relieve the submarine Flying Fish SS-229 on June 15, 1944 at the San Bernardino Strait. In route, Lieutenant Commander Herman J. Kessler received an abrupt change of orders: Imperial Japanese Navy, Vice Admiral Jisaburo Ozawa's, massive attack force had been spotted by the Flying Fish steaming towards the Marianas. Admiral Lockwood instructed the Cavalla to lay in wait for the task force about 350 miles east of San Bernardino Strait. The Enemies were planning a major attack and their strategy to offset the growing American superiority was cunning and practical. Enemy carrier planes from nine carriers would attack the American fleet and fly on to land bases to rearm and refuel. Meanwhile, Enemy land-based aircraft from Guam, Tinian, and Saipan would strike from their surrounding positions and seek resupply on the carriers. This would produce a doubling of Enemy attack power.

Three hours after she reached her station, Cavalla detected four ships by radar. Captain Kessler began a high-speed "end around" to pass the ships and obtain a prime shooting position. After four hours of skirting the enemy ships, Cavalla closed in with the convoy. Kessler dived the boat and began plotting a firing solution. The convoy consisted of two tankers escorted by destroyers. Before Kessler was ready to shoot, one of the escorts swung onto an attack course with the Cavalla. Realizing he had been spotted, Kessler sought deep refuge. The destroyer lingered over the Cavalla until the rest of the convoy could escape. Upon surfacing, Kessler was greeted by an empty sea.

Kessler radioed Pearl Harbor that his intentions were to abandon the chase of the two tankers and wait for the warships. Admiral Lockwood deduced that the tankers were headed for a rendezvous with the capital ships to refuel them. He ordered Cavalla to resume tracking the tankers. Air activity was becoming an increasing problem for Cavalla. Enemy aircraft restricted Cavalla's progress, forcing her to dive numerous times. After a long and trying day, the Cavalla's radar screen came alive. On 19 June, at 0800 hours, the lone submarine Cavalla had crossed the path of fifteen plus battleships, cruisers, and destroyers.

Captain Kessler now faced a dilemma. Standing orders required he report the battle group's size, speed, and course ahead of all other considerations. Kessler found himself in a favorable position for an approach to one of the cruisers. But he decided to stick to orders. While following the group and assessing their strength and make-up, Cavalla was detected by destroyers and driven down. The battle group released two destroyers to deal with Cavalla.

It was night before Cavalla was able to surface and send off a report of the sighting. Although the crew was disappointed and the captain heartsick, their report was of the greatest strategic significance to the worried American fleet. Now US naval planners knew exactly where the enemy strength lay. The task force had gotten away but Kessler wasn't willing to give up the chase. Though beginning to get low on fuel, Cavalla continued to follow the tankers. After hours of high-speed surface running, it became apparent that the trail had grown cold. Kessler turned Cavalla around and headed back for the San Bernardino Strait.

Shortly after dawn, enemy air activity in Cavalla's vicinity had increased to a fever pitch. Kessler radioed headquarters and reported the position. Shortly before noon on June 19, while surveying the swarming planes from periscope depth, Cavalla's sound man reported heavy screws approaching. Rushing to meet the planes was a battle group of one carrier, two cruisers, and a destroyer. It was the enemy aircraft carrier Shokaku, one of six carriers that attacked Pearl Harbor.

Kessler and his crew plotted a ninety-degree attack approach on their first target. Shokaku was at the center of countless aircraft circling and landing. Cavalla closed the range to 1200 yards. At 1118 hours, Kessler fired all six of his bow torpedoes. As the torpedoes streaked towards the carrier, a nearby destroyer spotted the wakes and wheeled to attack. Cavalla dove deep to evade retribution. Three of her torpedoes found their mark. The Shokaku rocked with the explosions of her munitions and fuel reserves. In four hours the Shokaku sank. Cavalla had taken out one of the largest vessels in the world. A heroic escape ensued after Cavalla's success.

Enemy destroyers drove Cavalla under her designed 300 feet of seawater maximum depth. The Cavalla maneuvered away from a massive attack from two enemy destroyers in pursuit of Cavalla. The sound gear was knocked out of commission and the hull ventilation system was damaged. Kessler managed to allude enemy destroyers and three hours later after a 105 depth charges were dropped on his boat. Kessler radioed Pearl Harbor:

"HIT SHOKAKU CLASS CARRIER WITH THREE OUT OF SIX TORPEDOES . . . RECEIVED 105 DEPTH CHARGES DURING THREE HOUR PERIOD . . . HEARD FOUR TERRIFIC EXPLOSIONS IN THE DIRECTION OF TARGET TWO AND ONE HALF HOURS AFTER ATTACK . . . BELIEVE THAT BABY SANK."

Hours prior to Cavalla's sinking of the Shokaku, the submarine USS Albacore SS-218 along concentrated air power by the US Navy's Hellcat pilots sank enemy carrier Taiho. The Cavalla dealt the crippling blow causing the Imperial Navy to abandon their defense of the Marianas Islands and retreat. The Cavalla's sinking of Shokaku changed the course of World War II in the Pacific Ocean.

105 depth charges in 3 hours! The crew must have been shaken to bits. It's amazing any of them were still sane. Sinking that carrier was a major turning point of the war against Japan.

USS Stewart



WWII Service

• USS Stewart began her service as a "school ship" training student officers.

Allied Losses

36,200 sailors
36,000 merchant seamen
3,500 merchant vessels
175 warships

German Losses

30,000 sailors
783 submarines

- She escorted President Roosevelt's yacht to rendezvous with USS Iowa for his 1943 mission to Egypt and Tehran.
- She made 30 Atlantic crossings supporting convoy operations, with occasional enemy submarine and aircraft encounters. Heavy seas and icing conditions were frequent.
- The Stewart moved to the Pacific theater in mid 1945, and conducted training exercises out of Pearl Harbor until the end of the war.

USS Stewart (DE-238)

- Designed with guns, radar, sonar, hedge-hog mortars and depth charges to protect convoys from enemy submarines and aircraft
- Built in 1942 at Brown Shipyard, Houston
- Commissioned May 1943
- Length 306 Feet
- Beam 36 Feet
- Draft 10 Feet
- Complement: 8 Officers, 201 Enlisted
- Maximum Speed 21 knots on surface
- Range 9,100 nautical miles @ 12 knots
- Decommissioned January 1947

Battle of the Atlantic

The Battle of the Atlantic was one of WWII's longest continuous military campaigns.

German U-boats were pitted against Allied convoys transporting military personnel, equipment and civilian supplies across the Atlantic to Great Britain and the Soviet Union.

It involved thousands of ships and stretched across a vast, perilous ocean.

"...the only thing that ever really frightened me during the war was the U-boat peril."

Winston Churchill



Epilogue

The advent of convoys guarded by Destroyer escorts like the USS Stewart, hedgehog mortars, radar equipped long-range bombers, and aircraft carriers defeated the U-boat threat in time to enable the 1944 D-Day Landings.

"Stewart was a good and gentle ship. No lives were lost aboard the Stewart and there was only one unfortunate serious injury."

Lt. Cmdr. A. C. Wilson, Jr.

Stewart Captain

WELCOME ABOARD

You have just stepped on the deck of the USS Stewart, DE238. As you look from left to right, you may have some of the same thoughts that went through the heads of about 200 very young men who boarded her for the first time after she was built in 1943 at the Brown Shipyards in Houston. For most of these young men, she was to become "home" for many months.

DE stands for Destroyer Escort. The Stewart (and 562 others just like her) were designed and built in the first years of World War II. The mission of the DE's? To break the back of the submarine blockade Adolph Hitler had placed around Europe.

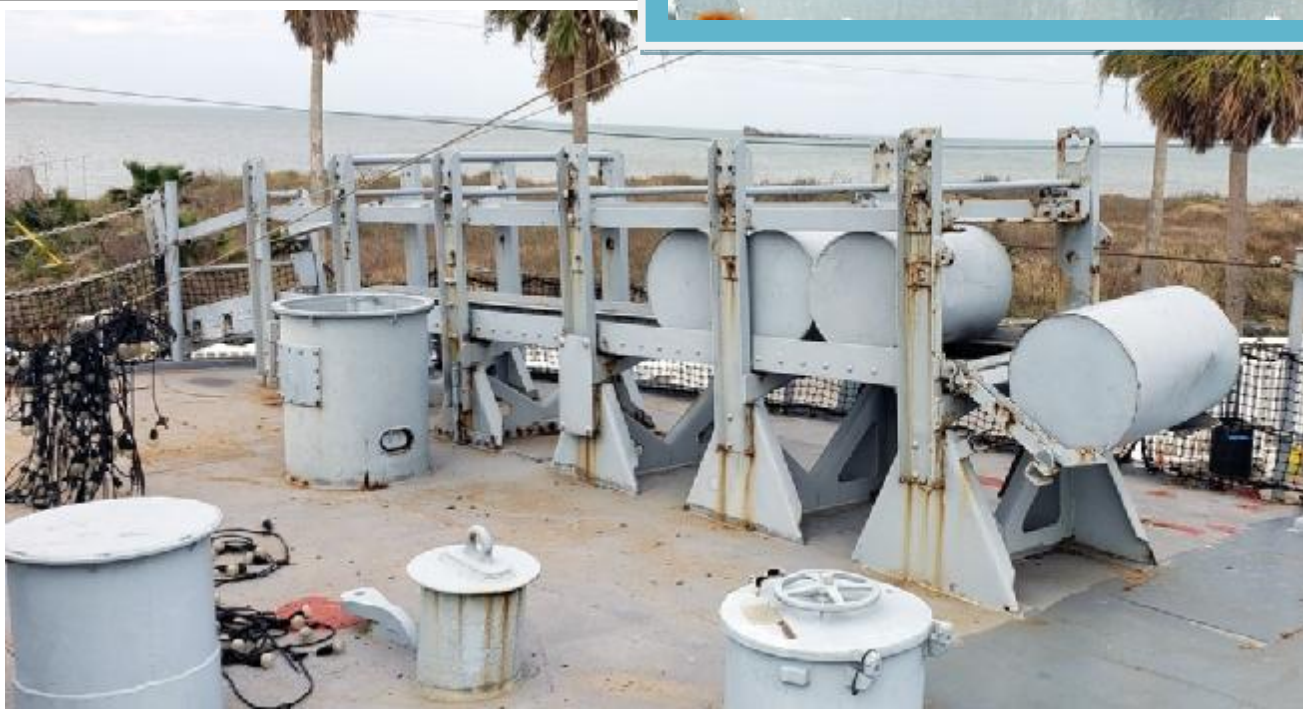
The Stewart is an Anti-Submarine Ship, and she was "state of the art" when she was built. Only two World War II DE's still remain in the United States. Galveston's Seawolf Park is proud to have one of them..

Restoration of the USS Stewart is being undertaken by the Cavalla Historical Foundation - the same group which has been so successful with the Submarine USS Cavalla, alongside. Only private funds are being used. Your continued interest and contributions will be of great help

DEPTH CHARGES

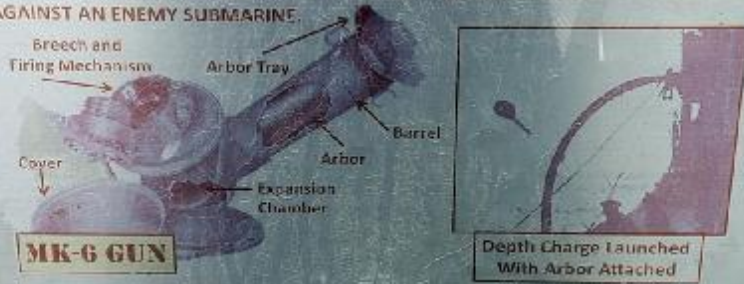
THE MARK 6 CYLINDRICAL DEPTH CHARGE CONTAINED ABOUT 300LBS OF TNT. THEY WERE EITHER ROLLED OFF THE RACKS AT THE STERN OF THE SHIP OR FIRED FROM "K" GUNS TO EITHER SIDE. DEPTH CHARGES WERE DETONATED BY A SPRING-LOADED FIRING PIN RELEASED BY WATER PRESSURE. DEPTH CHARGES USED ON DESTROYER-ESCORTS WERE NORMALLY SET TO EXPLODE AT DEPTHS BETWEEN 30 FT AND 600 FT. THEIR PURPOSE WAS TO RUPTURE THE SUB'S HULL OR DISRUPT ITS OPERATION. BECAUSE DEPTH CHARGES EXPLODED WHETHER OR NOT THEY "HIT" A TARGET, THEY CAUSED LOTS OF TURBULENCE IN THE WATER AND "BLINDED" SONAR TRACKING, ALLOWING SUBMARINES TO SLIP AWAY.

DESTROYER-ESCORT
RELEASING DEADLY
PATTERN OF DEPTH
CHARGES



“K” GUNS

THE MK-6 GUN OR “K” GUN WERE USED TO PROJECT DEPTH CHARGES TO EITHER SIDE OF A MOVING SHIP. THE DEPTH CHARGE WAS ATTACHED TO AN “ARBOR” WHOSE END FIT INTO THE BARREL OF THE “K” GUN. WHEN FIRED, DEPTH CHARGES WERE PROJECTED OUT INTO THE WATER BY A POWDER CHARGE PLACED IN THE BREECH AT THE BASE OF THE GUN. THE ARBOR SEPARATED FROM THE DEPTH CHARGE BEFORE HITTING THE WATER. THE DEPTH CHARGE SANK TO A PRE-SET DEPTH BEFORE EXPLODING. THE “K” GUN EFFECTIVELY INCREASED THE NUMBER AND SIZE OF DEPTH CHARGE PATTERNS THAT COULD BE DEPLOYED AGAINST AN ENEMY SUBMARINE.



MK-6 GUN

Depth Charge Launched With Arbor Attached

It took me three tries to get this shot, no pun intended. I was the only person on the ship and I'd left the tripod in the RV. I had to balance the phone on the top of a pipe, get the angle right, hit the shutter release, then I had 10 seconds to run over and climb into position. I think it turned out rather well, if I do say so myself. I have been on other battleship type ships before also, this is the first time I was allowed to sit in the hot seat. It was kinda cool.





Oh boy, if you had a shy bladder when you joined the navy, it could not have lasted very long. One more urinal to the right, and two more toilets to the left. Under the toilet is just a trough. Guess what the fish had to swim through.

Of course these guns pale in comparison to the ones on the USS Iowa or the Midway, but they still amaze.



Each of these shells is about 3' long.

CAPTAIN'S QUARTERS

The ship's captain was responsible for all activities of the ship and crew. As the final authority on the ship, he was provided a private stateroom with bunk, desk, toilet and shower.

Part of his time was devoted to active command of the ship while it was engaged in battle or otherwise in peril. He also did administrative work such as planning, communicating with superiors, maintaining morale and keeping detailed reports.

The Captain carried out most of his duties through a staff of Officers and Chief Petty Officers, each of whom was highly skilled in the various aspects of the operation of the ship.



If you ask me, and nobody did, it seems a battleship captain has a little more room to move around than a submarine captain, about 15 times more.

WHEEL HOUSE (PILOT HOUSE)

Situated on the Navigating Bridge, this space houses the controls used to operate the ship while it is moving (underway). At this station, the Officer Of The Deck (OOD) issues the orders controlling direction, speed, and purpose of the vessel. Some of the controls housed here are: the ship's steering wheel, the engine order telegraph, the gyrocompass, the back-up magnetic compass (in its binnacle), the P.A. system (called the 1-MC), voice radio systems, voice tubes and interior communications (sound powered telephones).



A nice panoramic

COMBAT INFORMATION CENTER (CIC)

THIS AREA HOUSED THE MEN AND EQUIPMENT THAT WAS USED TO TRACK AIR, SURFACE, AND SUB-SURFACE CONTACTS THAT WERE THEN ANALYZED, EVALUATED, AND PASSED ON TO THOSE COMMANDING THE SHIP. THIS INFORMATION WAS GATHERED BY THE USE OF RADAR, SONAR, AND RADIO CONTACTS. PLOTTING OF THE CONTACTS COULD BE USED TO DETERMINE COURSE, DIRECTION, AND SPEED RELATIVE TO THE SHIP'S MOVEMENT, AND AID IN PLANNING ATTACKS OR EVASION. THIS INFORMATION WAS ALSO USED IN THE NAVIGATION AND "STATION KEEPING" OF THE SHIP.





The forward guns



The crew's mess



Crew quarters.
Description
below.

FWD. CREW QUARTERS

THIS COMPARTMENT IS EQUIPPED WITH 12 BUNKS FOR ENLISTED MEN. EACH STACK OF BUNKS HAS THREE LOCKERS BELOW, ONE FOR EACH SAILOR.

THERE ARE ALSO SOME MESS DECK TABLES TO ACCOMMODATE OVERFLOW FROM THE CREW'S MESS DECKS

A DECK MOUNTED HATCH IN THIS SPACE LEADS DOWNWARDS TO THE "REEFER FLATS", WHERE THE SHIP'S WALK-IN FREEZER AND REFRIGERATOR, AND ICE MAKING MACHINE ARE LOCATED. AN ELECTRICAL STOREROOM IS ALSO IN THAT SPACE.



HEDGEHOGS

AN ANTI-SUBMARINE WEAPON WITH 24 SMALL MORTAR BOMBS FIRED FROM THEIR SPIGOTS BY CHARGES WITHIN THE BOMBS. THE BOMBS CARRIED ABOUT 30LBS. OF TNT AND EXPLODED WHEN CONTACTING A SUBMARINE. THE HEDGEHOG LAUNCHED BOMBS ABOUT 250 YDS FORWARD AND TO THE SIDE OF THE SHIP, IN AN ELLIPTICAL PATTERN. THE FIRING SEQUENCE WAS ALIGNED TO ENSURE ALL BOMBS HIT THE WATER AT THE SAME TIME. UNLIKE DEPTH CHARGES, THERE WAS NO EXPLOSION OR TURBULENCE UNLESS A BOMB HIT ITS TARGET. SHIPS COULD MAINTAIN CONSTANT SONAR CONTACT WITH THE SUB AND TURN BACK TO FIRE ANOTHER ROUND OF HEDGEHOGS IF THEY MISSED THE FIRST TIME. FOR THIS REASON, THE HEDGEHOG WEAPON SYSTEM HAD A HIGHER "KILL" RATE THAN DEPTH CHARGES DURING WWII.


HEDGEHOG PATTERN



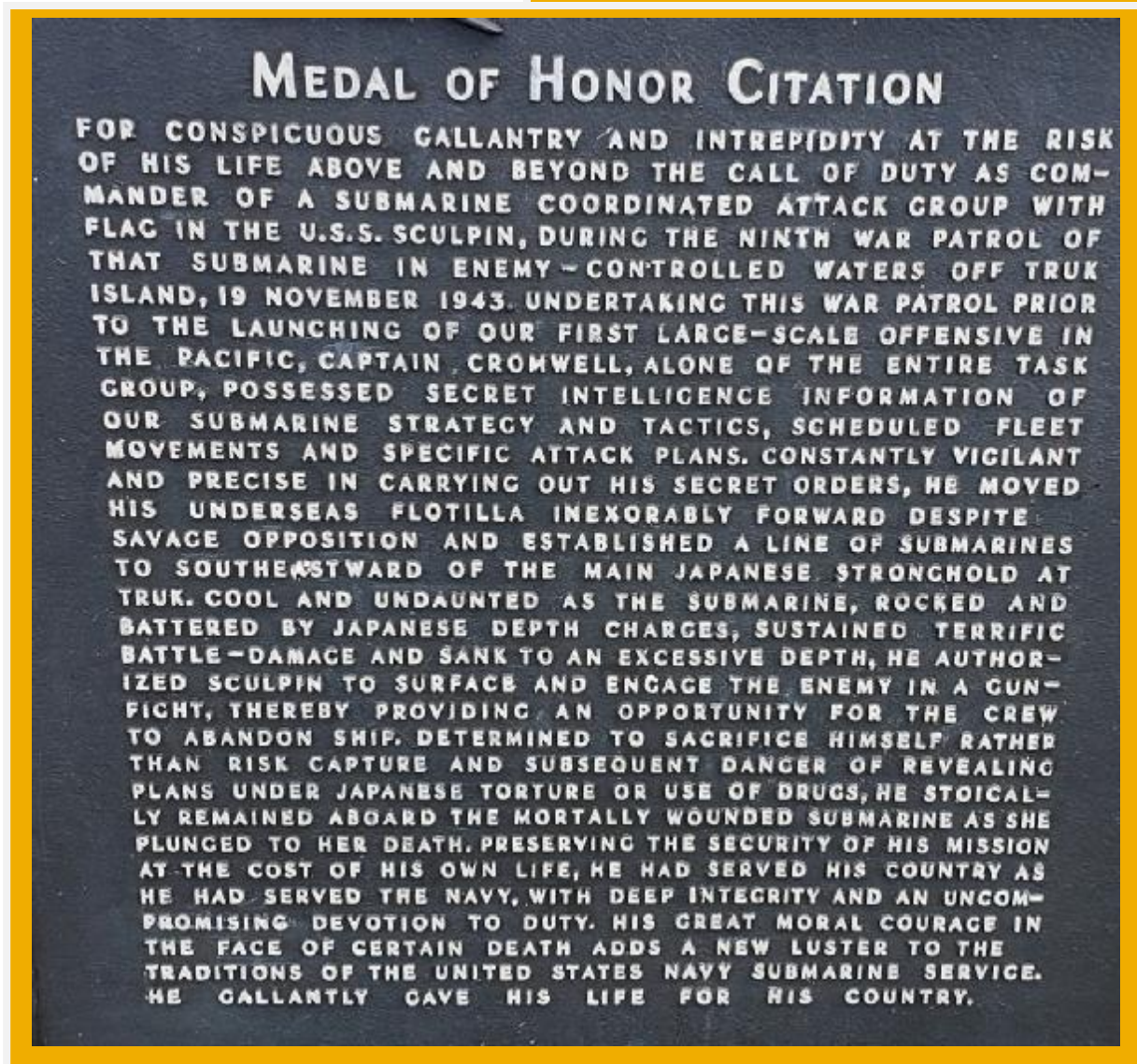
I had never heard of these before today



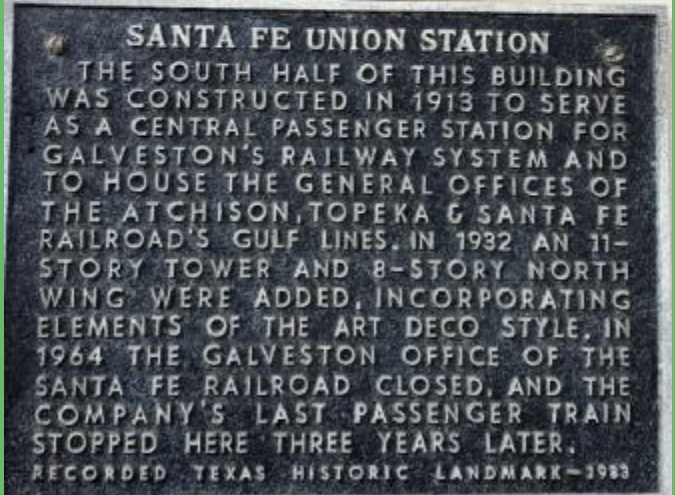
SUBMARINE MEMORIAL PLAZA
DEDICATED
IN MEMORY OF
THE MORE THAN
3,500 SUBMARINERS
WHO GAVE THEIR LIVES
IN SERVICE TO OUR
COUNTRY
MEMORIAL DAY 2004



I did not spend much time in this memorial plaza since I visited the WWII National Submarine Memorial – West in Seal Beach, CA last year. That one was much better. But there is a story below you should read, and I did include the “Still on Patrol” plaque.



Oh, look. The Galveston Railroad Museum. That building must be 10 stories high. Think of all the train memorabilia in there. Ha ha ha ha ha!



This was a step back in time. As an original train station this was great; the divided chairs, a bank of telephone booths, information desk, ticket windows, high ceilings, art deco design, then they added the statues all in white. It was fantastic.



I realize not everyone is a train fan, and you have all suffered through my visits to plenty of model layouts and museums (the model layout here is closed due to covid), so I'll just hit the highlights here. Not to mention I am already over 100 photos today.

I saw this statue, turned to the ticket lady and asked, "is that supposed to be WC Fields?" She answered, "I don't know who it's supposed to be." Seriously? Who do you think it is?

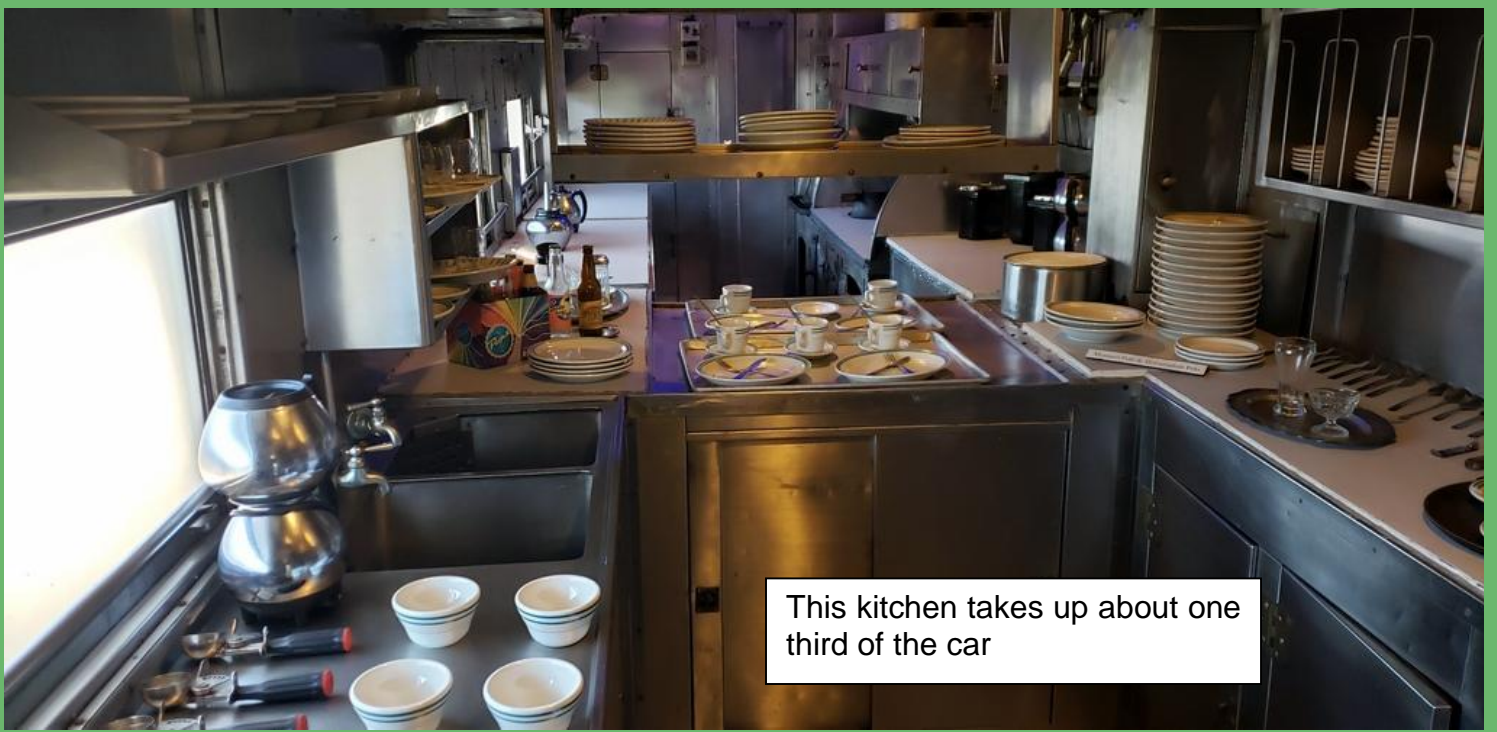


**ILLINOIS CENTRAL RAILWAY
POST OFFICE CAR #100**



Southern Dining Car #3305





This kitchen takes up about one third of the car

Bunk closed for daytime travel.....Bunk open for nighttime sleeping



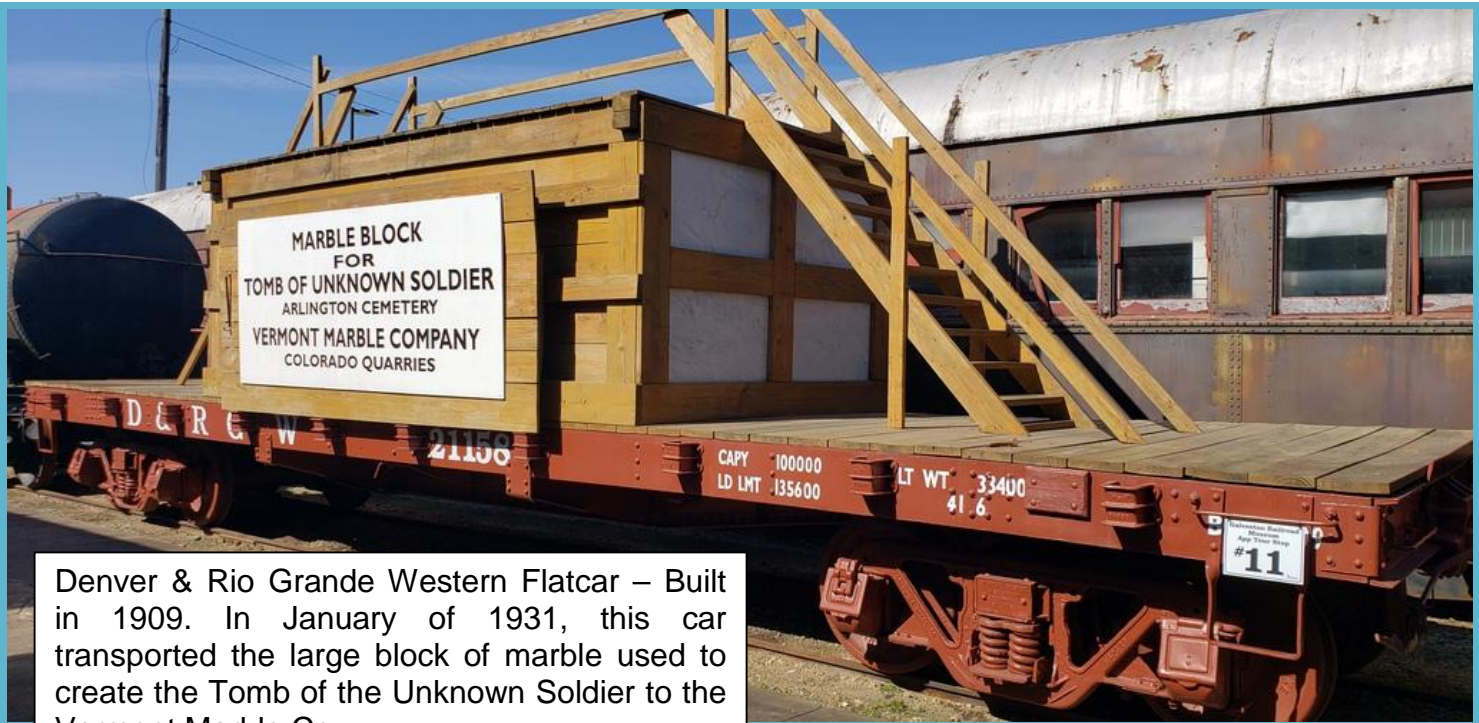
A little different configuration in this sleeping car, but those bunks fold up during the day



"BIG HOOK" 1904 STEAM CRANE

Builder: Brown Industrial Hoist, for the Chicago Rock Island & Pacific Railroad. 120 ton capacity. This crane was primarily used to clear wrecks from the track.





Denver & Rio Grande Western Flatcar – Built in 1909. In January of 1931, this car transported the large block of marble used to create the Tomb of the Unknown Soldier to the Vermont Marble Co.

This is a power assembly from an EMD 645-16. A 645-16 is a 16 cylinder engine, each cylinder assembly displaces 645 cubic inches for a total of 10,320 cubic inches. This is the same engine that is in the museum's F-7 Warbonnet locomotives. These engines produce 2000 horsepower at 800 rpm.

I thought this was fairly interesting. You can't read the sign, but it says that the small piston and connecting rod hanging from the chain is from a 350 cubic inch Chevy V8.

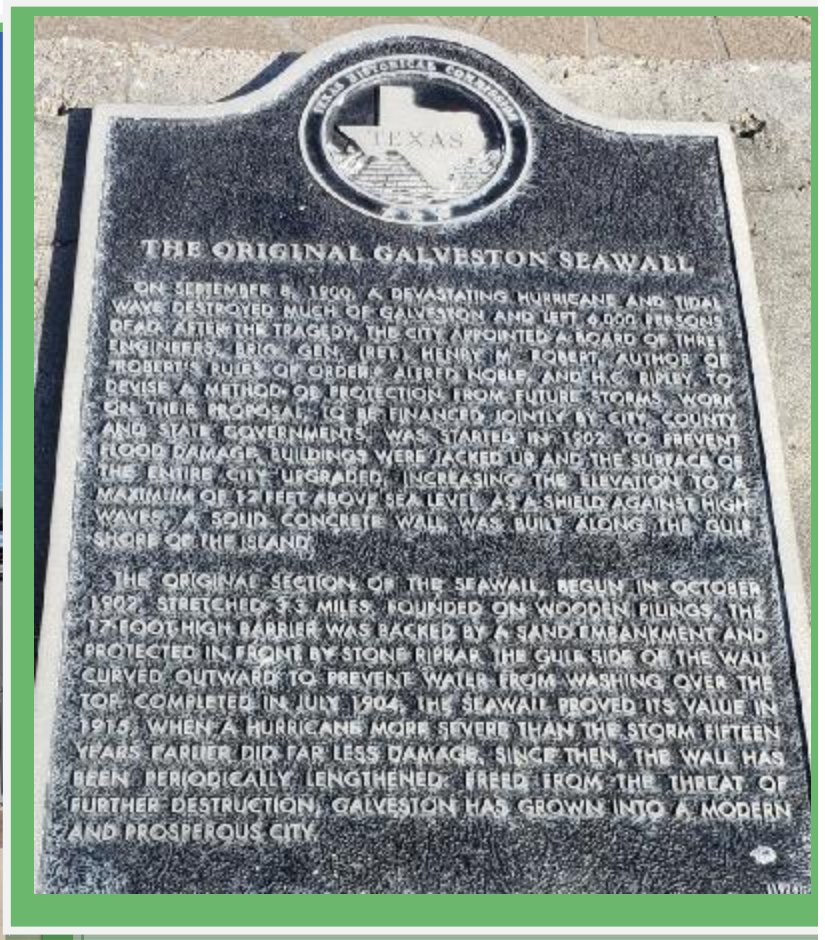


The Galveston Historic Seaport, with the Tall Ship ELISSA is closed until tomorrow. The Ocean Star Museum, the oil rig to the right, is closed until Thursday. Oh well, Covid strikes again. Maybe a little walking tour of Historic Downtown Galveston. Not sure if it's Covid, or just that time of year, but I only saw maybe, a half dozen shops open for business. I did see many architectural gems on my walk, a couple of them are pictured below.





One of the Galveston items on my itinerary was a bike ride along Seawall Blvd, so I found a parking place, oiled up the bike, connected the battery, and away I went.





Just a view of the beach and Gulf. I have no idea what the statue is about. A plaque told of Clara Barton and the Red Cross providing relief after the 1900 hurricane, so I assumed it had something to do with that.

Here's a good look at the seawall.



Sorry Morgan, I couldn't help myself. I rode past it once, then passed again on my way back, decided I needed a break, and had an afternoon ice cream. Cherry Garcia and Mint Chocolate Chunk. MMM I was so absorbed in my ice cream I missed the Oscar Mayer Weiner Mobile as it drove by.

I put on about 10 miles on the bike then waved goodbye to Galveston and headed south. And what to my weary eyes should appear? The Oscar Mayer Weiner Mobile. I was able to grab a photo this time.





Oddly enough, a pirate fought a battle here with Indians, but it felt very peaceful and serene.

Next stop is "The Kettle House". I put the address, 14106 Miramar Dr in the GPS and it took me to this house. Doesn't exactly look like a 'kettle' does it? I drove past and double checked the address. I had it right. Then I spotted the 'real' Kettle House next door.



This house is made from the bottom section and the top cover from an old water tower. The water tower stood near where the house is now. By the late 1980s the water tower was cut down and the tank was lying on its side. In the early 1990s the straight cylindrical section was cut up for scrap and all that was left was the bottom and the top cover. It sat upright with just the bottom of the tank. Later the top cover was installed. Thanks Roadside America. It is also worth noting that The Kettle House is an Air BnB member.





I know, difficult to read. You should have tried it looking into the sun. This was the best angle I could get.





Here I am again, 1:00 a.m. and still typing. I guess I'll have to stop filling my days with so much fun stuff to see, NOT!

I really did pack it in today, 128 photos. That's got to be a record for me. I could have spent another day in Galveston and visited the Oil Rig at least, but I didn't feel like driving back to where I was last night, I'd rather keep going forward.

I want to say how much I enjoyed the Naval Museum, especially the submarine, I guess it was worth the \$13 bucks.

Another oddity, which I don't mind at all, is that I had the submarine to myself, I saw a couple on the battleship for about 2 minutes, then I had it to myself, I saw another couple at the railroad museum, otherwise I had it to myself. Take my time, don't worry about a mask or social distancing, don't have to wait for other people to finish before I can see or read about it. Call me a loner, but I like it.

I find it, not strange, but somehow, ironic, that yesterday Morgan and I spent hours looking into the future prospect of a first trip to Mars, and then today I immerse myself in the history of World War II. It kind of plays with your mind.

Anyways, I am camping free just north of Surfside Beach. That's my spot pictured above. Not bad for free, right?

Until next time.....