

**The Great Lakes Naval Memorial and Museum welcomes you to**

**a self guided tour of**

## **USS SILVERSIDES SS-236**



### **WARNING:**

Many systems onboard SILVERSIDES are operational. Please do not move any knobs, switches, dials, buttons, levers, or wheels.

### **VITAL STATISTICS:**

Length: 312 feet

Width: 27 feet at the beam

Displacement: 1,525 tons surfaced; 2,410 tons submerged

Standard Complement: 8 officers and 72 enlisted men

Keel laid: November 4, 1940

Launched: August 26, 1941

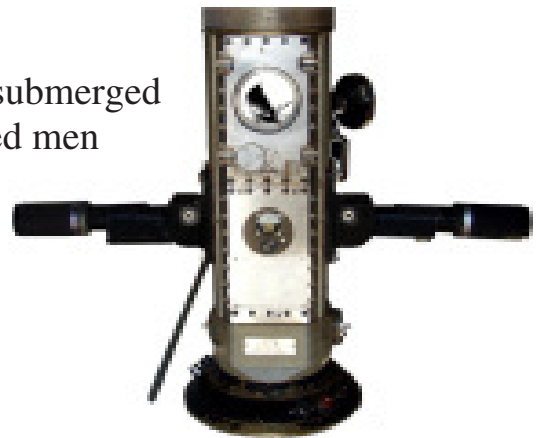
Commissioned: December 15, 1941

Decommissioned: April 17, 1946

Stricken from Naval Register: June 30, 1969

Declared a National Landmark: 1986

Relocated to Muskegon: 1987



*Periscope in conning tower*

### **POINTS OF INTEREST:**

USS SILVERSIDES is the most famous surviving submarine of WWII.

She sunk more ships (30 Japanese vessels and damaged 14) and took down more tonnage than any other surviving WWII submarine.

She Rescued 2 American pilots and laid 16 mines on separate patrols.

The very first appendectomy ever performed on a submarine by a Pharmacist Mate was performed in the ward room of SILVERSIDESs and was depicted in the movie *Destination Tokyo*, starring Cary Grant. The movie *Below* was filmed onboard SILVERSIDES.



*Graphic depiction of SILVERSIDES  
under a depth charge attack*

## TOPSIDE

### DECK

The deck was outfitted with a 4 inch 50 caliber deck gun (range: 16,200 yards), a 40-mm anti-aircraft gun (range: 22,800 feet) and a 20-mm anti-aircraft and a surface to surface gun (range: 4,800 feet and 10,000 feet).

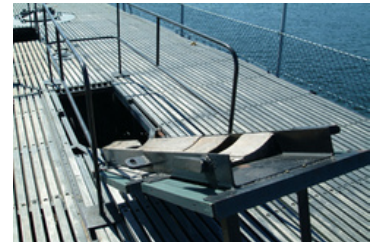
SILVERSIDES has 2 periscopes. A larger gray periscope, located forward, was used for target acquisition, while a smaller aft periscope, which created less wake, was used as the attack periscope. A large wooden ramp on the forward deck is the torpedo-loading skid and a hatch forward of the ladder is that of the escape trunk.



*Four-inch 50 caliber gun*



*Target & attack periscopes*



*Torpedo loading skid*



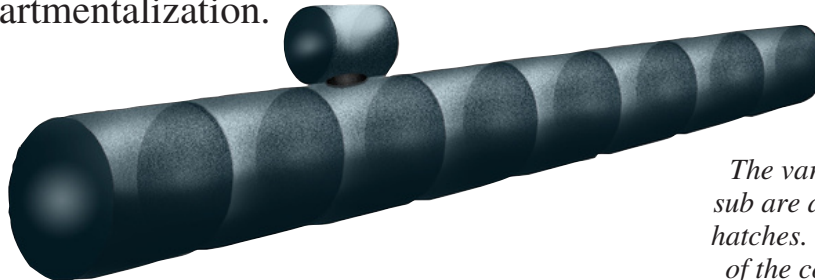
*Sail armaments*



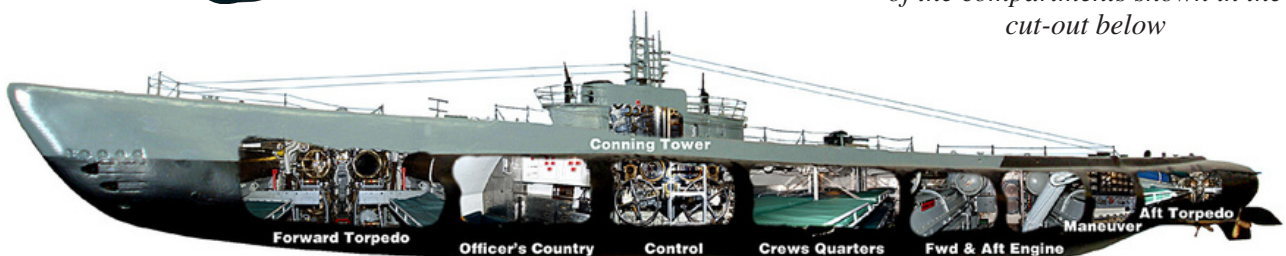
*Escape trunk hatch*

## BELOW

Nine water tight compartments exist onboard SILVERSIDES. Each compartment is isolated from the next by a water tight hatch. The graphics below depict this compartmentalization.



*The various compartments in the sub are all isolated with water tight hatches. You will pass through most of the compartments shown in the cut-out below*



## FORWARD TORPEDO ROOM

The first compartment, the forward torpedo room, contains six polished brass torpedo tubes located in the forward end. Behind the tubes are racks for the 22 foot long Mark XIV torpedoes. The escape chamber, a small separate pressure-tight compartment through which crewmen may escape a few at a time from a sunken sub, is located overhead in the middle of this compartment. Behind this is the loading hatch through which the torpedoes are loaded into the compartment from the deck above. The active sonar heads, (the ones that “ping”) are located on either side of the hatch to the next compartment. This compartment housed 16 men and included the officer’s head (toilet) and shower.



*Forward torpedo room looking forward*



*Officers shower and head*



*Active sonar heads on either side of hatch to “Officers country”*

## FORWARD BATTERY COMPARTMENT

Unofficially named Officers’ Country, this compartment contains the pantry, ward room, officers staterooms, and ship’s office. The ward room was the area where an appendectomy was performed. One of the two wet-cell Exide batteries of 126 cells was housed under the entire compartment.



*Hallway*



*Pantry*



*Wardroom table where appendectomy was performed*



*Actual photo during appendectomy*



*Captain's quarters*



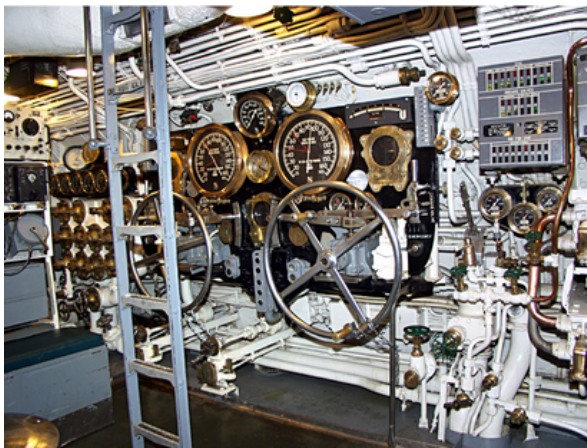
*Ship's office*



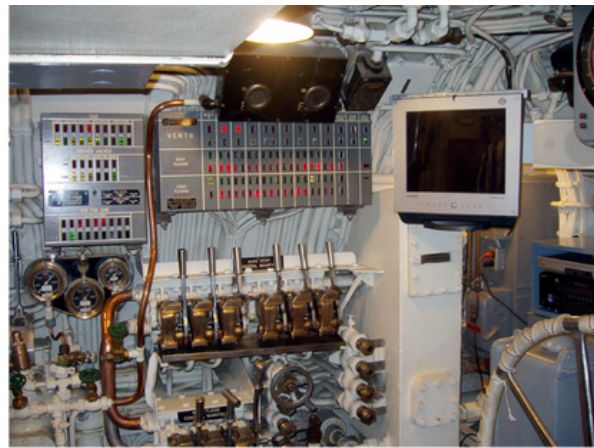
## CONTROL ROOM

A mass of instruments, gauges, switches and valves are seen throughout the control room and are used to control most of the ship's functions. The large wheel located forward is used to steer the ship. Just port of this is the dive center with its valves and valve and vent status indicator panel often referred to as the christmas tree because of its many green and red indicator lights. The two large wheels on the port side are the Bow and Stern Plane wheels used for controlling the depth and the angle of the boat. The trim valves are located on the port side at the rear of the compartment. On the starboard side in the rear is the surface center. The electrical panels are located on this side at the forward end of the compartment. The periscope wells are located in the center of the compartment. There are a series of alarms located on the side of the periscope wells: (1) red for collision, (2) yellow for call to battle stations, and (3) green for diving and surfacing. You may actuate these switches to activate the alarms.

*alarm switch*



*Bow and stern plane wheels and trim station*

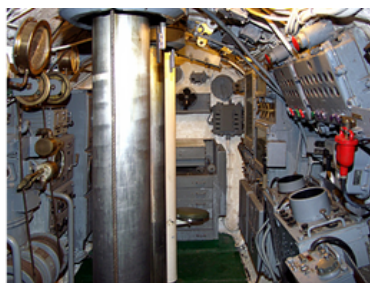


*Dive station showing christmas tree*

The **Conning Tower** is located above the Control Room and is accessed via the ladder in the center of the control room. This is the attack center of the boat where the captain and officers function during battle. The torpedo data computer is located in this area. Access to the conning tower is denied to the general public for safety reasons. A *video description* of the conning tower as well as the control room is available by pressing the desired **buttons** on the video control panel located just to the right of the monitor screen between the steering wheel and christmas tree.



*Looking forward: TDC, radar, trigger and main steering wheel*



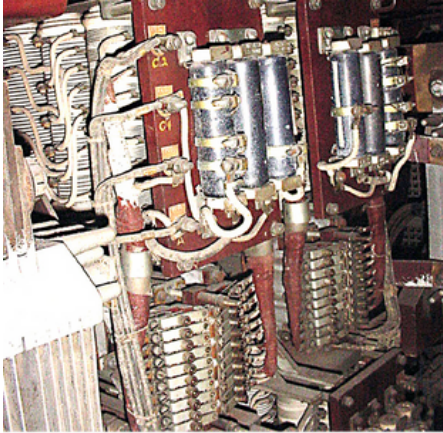
*Looking aft: map table in rear*



*Torpedo data computer (TDC)*

## MANEUVERING ROOM

The maneuvering room is the smallest compartment in the submarine. As you enter this room, you will see a large wire cage immediately in front of you. This cage is surrounding copper buss ducting, thereby protecting a person from receiving an electrical shock. It was possible to send 4 million watts of power through this buss ducting when the ship was operating at full power. Two electricians were on duty and controlled the propulsion of the boat when underway. The General Electric motors connected to the propeller shafts are located below this compartment.



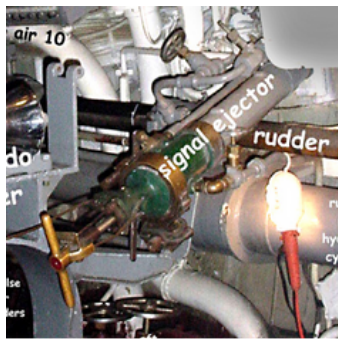
*4 million watts can pass through this cage    This panel controls the ship's propulsion when underway*

## AFTER TORPEDO ROOM

This is the smaller of the two torpedo rooms and contains 4 torpedo tubes. There is room for only 8 torpedoes in this room, 4 in the tubes and 4 in the skids. Like their counterparts forward, they are made of bronze, but they are approximately 2 feet longer for the torpedos to clear the underwater rudder, propellers and stern planes. A Mark XVIII electric torpedo is located on the upper skid. These torpedoes were smaller and slower, but did not leave a wake because they were electric. A signal ejector is located in the after port side of this compartment and was used to eject materials while submerged. There were four berths for an additional 13-15 men in this compartment.



*Electric torpedo does not leave a visible wake*



*Signal ejector*



*13-15 men were berthed in this compartment*



## AFTER BATTERY COMPARTMENT

The crew entered and exited the ship via the access trunk in this compartment. The after battery compartment, which contains the second of two wet-cell Exide batteries of 126 cells under the compartment is unofficially called the crew's mess and quarters. The mess hall sat 24 men at a time. The mess staff included 2 cooks and 1 baker. Food was plentiful. A typical menu included: potatoes, fresh bread, fruit, vegetables, turkey, ham, meat, fish, etc. The crew's major berthing area providing accommodations for 36 men is located aft of the mess area. The bathroom facilities for the enlisted men are located beyond the berthing area.



*Galley*



*Crew's mess, seats 24*



*Crew's quarters*

## FORWARD and AFTER ENGINE ROOM

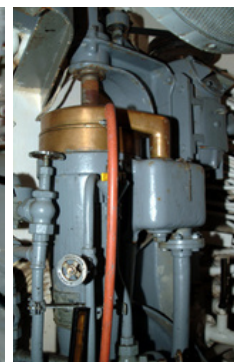
The engine rooms contain 4 Fairbanks and Morse 1600 horsepower diesel engines which are fully operational today. They ran on 116,000 gallons of diesel fuel and 4,600 gallons of lubricating oil, providing a 12,000 mile 75 day range. With all four engines on propulsion, the top speed was 21 knots. The diesel engines were used to turn the shafts of the electric generators which in turn developed 1,100 kw of electrical power operating the ship's motors and charging the ship's batteries. The forward Engine Room contains 2 fresh water evaporators. These machines were used to change salt water into fresh water. The only difference between the Forward Engine room and the After Engine room is the size of the auxiliary diesel engines located below the decks and the location of the fresh water evaporators.



*Forward engine room looking forward*



*After engine room looking after*



*Water purifier*

**The Great Lakes Naval Memorial and Museum welcomes you to  
a self guided tour of  
The USCGC MCLANE W - 146**



**WARNING:**

Many systems aboard the McLANE are operational.  
Please do not move any knobs, switches, dials, buttons, levers, or wheels.

**VITAL STATISTICS:**

Built in 1927 by American Brown  
Bover Electric Company  
Commissioned: April 8, 1927  
Length: 125 feet  
Width: 24 feet in the beam  
Draft: 8.5 feet



Displacement: 220 tons  
Cruising Speed: 11 knots  
Top Speed: 13 knots  
Standard Complement:  
26 enlisted men, 4 officers

**PATROL ASSIGNMENTS**

1928 - 1931: San Pedro, California  
After 1931: Unalaska, Alaska  
1941 - 1945: Ketchikan, Alaska  
1960's: Brownsville, Texas



**GENERAL INFORMATION**

McLANE's class, Buck and a Quarter, consisted of 33 ships that were authorized by President Calvin Coolidge's administration as part of this country's efforts to enforce the Volstead Act (Prohibition). After Prohibition, McLane was used for search and rescue, as well as law enforcement duties.

Even as late as the 1920s there were many traditionalists who thought that a ship was not really a ship unless it had sails. Therefore, even though McLANE has always been diesel-powered she was outfitted with an auxiliary sail rig.

During World War II, McLANE was used to patrol the Bering Sea off the coast of Alaska to protect against enemy contact. During the war McLANE was outfitted with a one pound cannon, a 50 caliber machine gun, and depth charge racks.

On July 9, 1942 while working in tandem with a Coast Guard manned Navy patrol craft, McLANE established sonar contact with a Japanese submarine that was known to be in the area. After a day long chase during which McLANE dropped numerous depth charges, a large oil slick appeared on the surface and no further contact with the enemy sub was to be had. Although some of the records are contradictory, many sources indicate that the Japanese submarine RO-32 was lost in the area during this time, and McLANE is generally credited with the sinking.

One of McLANE's most famous exploits occurred on February 3, 1943, when McLANE conducted a search and rescue for survivors from a Lockheed plane owned by the Morrison Knudsen Construction Company which had crashed on a nearby Alaskan island.

Unlike the bunks in the main berth today, the crew slept in hammocks, which were put up before use and taken down afterwards.

The engine room contains: a pair of General Motors two cylinder diesel generators, twin 400 horsepower Cleveland eight cylinder diesel engines, portable water, and fire pumps.

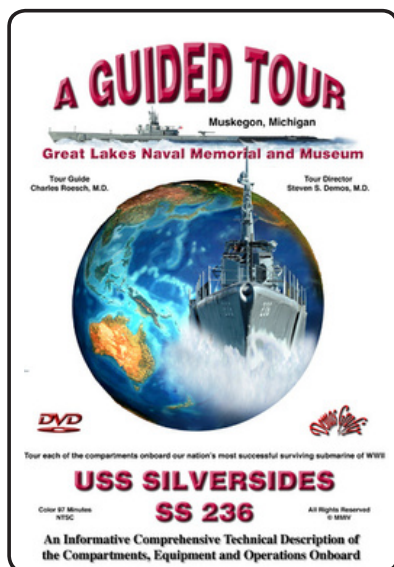
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We hope that you enjoyed your walk through tour of  
USS SILVERSIDES and USCGC McLANE.

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**Available in the Museum Store**

## **A GUIDED TOUR DVD**



**“A Guided Tour” is a 97 minute color educational DVD which provides an informative, comprehensive, technical description of the compartments, equipment and operations onboard the USS SILVERSIDES.**

Two physicians, Steven S. Demos, M.D., retired cardiac surgeon and Major in the U.S. Army Medical Corps. during the VietNam War, and Charles Roesch, M.D., anesthesiologist, with an extensive knowledge of the Silversides, collaborated to produce this video. Both have an intense interest in the SILVERSIDES.

The format is that of a walk through tour.

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*This is a one of a kind item and may be purchased in the gift shop following your tour.*

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