padded benches. The Preston's only modern convenience was a VHF radio and an anemometer. In the ceiling above the wheel are the hand cranks that position the Preston's two spot lights, mounted on the roof of the pilot house. Please proceed back down to the main deck via the PORT side ladders around the forward end of the boiler to view the fore deck snagging gear.

The tour finishes on the forward (main) deck.

Snagging Gear

For her snagging and dredging operations the Preston is outfitted with a 70-foot wooden boom on her bow that has a 30-ton snagging lift or a 15-ton bucket lift capability. The boom has a 57-foot lift and was powered by a two-cylinder donkey steam engine. A second engine rotated the crane turntable. Both engines were built in 1913 for the Swinomish. As previously noted, the Preston's anchors were actually two vertical steel shafts located forward and aft. These obelisk-shaped "spuds" could spike the boat to the bottom of the river in up to 20 feet of water, so that she could hold position adjacent to a sunken object. The spuds were raised and lowered through openings in the hull by means of cables attached to a steam powered winch.

The Preston was officially retired in October, 1981, and came to Anacortes in March, 1983 after it was purchased from the Army Corps of Engineers. It is the largest artifact in the collection of the Anacortes Museum. In 1989, she was designated a National Historic Landmark.

Welcome Aboard the Snagboat W.T. Preston

Self Guided Tour

We are happy you have decided to visit the W.T. Preston today and ask you to keep in mind a few points as you walk through the boat.

- Keep to the designated tour path.
- The starboard-side ladders are for going up; port-side ladders are for going down.

Enjoy your visit to the W.T. Preston.

Be safe!

Watch your step throughout the boat. All the thresholds are high, so step up and over as you move from one section of the boat to another. The stairways (called ladders) are steep and narrow. Use the hand rail and take your time going up and down the steps. Stay within the confines of the tour. Some areas of the boat are not intended for the public. Supervise your children throughout the tour, and please, no running. Be especially careful on the ramp as you leave the boat.

The W.T. Preston is the noble descendant of a long line of snagboats that worked the Puget Sound and its tributary rivers, clearing the waterways of navigational hazards. Until her retirement in 1981, the Preston was the only large, active sternwheeler remaining in the Sound. The Preston operated as far north as Blaine and south to Olympia and Shelton. Working all year round near large population centers distinguished the snagboat as one of the best-known vessels to navigate these waters.

The first settlements in heavily timbered areas of Washington were along rivers, which in the 18th and 19th centuries were the primary means of inland transportation. Often, boat passage was blocked by log jams. In the late 19th century, one such jam completely blocked the Skagit River. Although the Army Corps of
Engineers (then the U.S. Engineer Department) had cleared waterways in Oregon since the early 1870s, no work was done in Washington territory until Congress appropriated $2,500 to open the Skagit River to navigation in 1880. A log raft was built, equipped with a derrick and hand-operated capstan for lifting snags from the river. In 1882, Congress allocated $20,000 for construction of a self-propelled snagboat to work on Puget Sound and its tributaries. In 1884, the first of these boats, the Skagit, began operation. Outfitted with a new hull in 1896, the Skagit served until 1914 when she was replaced by the Swinomish. In turn, the Swinomish was succeeded in 1929 by the wood-hulled W.T. Preston. In 1939, the Preston was fitted with a new steel hull and upper structure, or "house." As you walk through the Preston, note how much equipment on board is a legacy from these earlier snagboats.

The snagboat was named for William T. Preston, one of the Army Corps of Engineers' most outstanding civilian engineers. He worked on such early coastal fortifications as Fort Lawton, Lake Washington Ship Canal and Hiram M. Chittenden Locks in Seattle. From 1896 to 1919, he was chief engineering assistant in the Corps' Seattle District and was the only civilian ever to serve as Seattle District Engineer.

The tour begins in the engine room on the main deck looking forward from the engineer's station.

**Engine Room**

Immediately to your left is the main electrical panel (#1), and further to port is one of two 150-horsepower engines (#2). Steam entered through a valve moving the piston which pushed the Pitman arm to turn the paddle wheel. Used steam exited through another valve and was recycled to preheat water entering the main boiler before being exhausted through the stack.

Continue on up to the Texas Deck.

**Smokestack**

As you come onto this deck you will notice the Preston's smokestack and steam whistles. The domed whistle and the smokestack are from the Swinomish and the flat-topped whistle is from the Skagit, of 1885. Each sternwheeler had a distinctive signature whistle sound.

**Captain's Office**

Forward of the smokestack is the Captain's office. The Captain's responsibilities were not only to master the vessel and her operation while underway, but to deal with the necessary paperwork as well. As you look into the office notice the furniture. Both the roll top desk and arm chair are from the Swinomish and date from approximately 1914.

Walk along the rail toward the bow of the ship and you will see the snagging equipment. Immediately above and behind you is another legacy from the Swinomish -- the ship's bell. A rope connects it to the pilot house where it could be rung by the officer in the pilot house to get the crew's attention. Climb the short ladder forward of the Captain's office to view the pilot house.

**Pilot House**

From this room the Captain directed all of the ship's activities using engine telegraphs, voice tubes, steam whistles, bells and even shouting. Notice the lack of modern navigational equipment. Navigation was done by sight or by using charts and a compass. The compass and compass light are immediately forward of the wheel. Charts and maps were kept in the large chest between the
wenches which were deemed “too puny to be rated in horsepower.” This slang term now refers to any small auxiliary engine or boiler.

**Crew Quarters**

When operating, the *Preston* had a crew of up to 14 men: captain, 2 mates, chief engineer, assistant engineer, 4 firemen, a donkey operator, 2 cooks, and 2 deck hands. Since snagging operations often called the *Preston* far from home, the men ate and slept aboard ship. The firemen, donkey operator and deck hands shared quarters here on the main deck. They ate in the crew's mess. The meals were prepared on the deck above by the cook who sent the food down to the crew through a dumbwaiter. As you pass the crew quarters on your right notice that the men slept two per room and had little extra space. Although the bunks may look small, they are actually 6 feet long.

**Main Boiler**

Forward of the donkey boiler, this locomotive-type boiler was built in 1939 and was the main source of power for the *Preston*. Inside the boiler are 149 fire tubes. Water surrounding these tubes was heated by burning diesel fuel. Four firemen, working rotating shifts, kept the boiler fired 24 hours a day, 7 days a week. On your right, you will see the starboard ladder. To continue your tour, proceed up the ladder and walk along the gangway toward aft end of the cabin deck.

**Diesel Fuel Tank and Life Boat**

Notice the large rectangular diesel fuel tank mounted over the aft skylight. This tank was added in 1967 when the *Preston* was converted to diesel-powered electrical generators. The tank stored fuel for the generators which were mounted in the steering room immediately below. The life boat is to starboard.

Proceed to your right — to the port side — around the tank and aft to the splash shield at the stern.

**Auxiliary Wheel, Aft Wheel, Aft Spud, Paddle Wheel and Rudders**

Used only in emergencies, the auxiliary steering wheel was a back-up system to the main helm station in the pilot house. Looking forward, note the tall, square aft spud. By dropping the fore and aft spuds, the boat could lock herself into the river bottoms while working. A glance over the splash shield will give you a good view of the paddle wheel. Reminiscent of a Mississippi riverboat, the *Preston's* paddle wheel is one of her most prominent features. The forged steel shaft is 18 feet in length and has 48 buckets, or paddles, attached to a 17-foot diameter wheel that was transferred from the *Swinomish*, built in 1914. The paddles, called buckets, were made of fir and were easily replaced if necessary. The buckets were staggered to reduce vibration. The *Preston* was easy to maneuver on the rivers. By reversing her sternwheel and turning the five rudders (three main transom rudders forward of the paddle wheel and two monkey rudders located aft), she could turn in her own length. But with her flat bottom and high deck house, she was notoriously difficult to handle on open water in any kind of wind.

Proceed back along the starboard side to the entry to the Officers' Mess.

The tour continues on the Cabin Deck.
These engines, originally built for the Preston's predecessor the Swinomish, were in operation from 1914 to 1981. To port and aft of the electrical panel is the Engineer's tool room and, further aft, the steering room.

On your right (starboard), notice the steam throttle for the main engines, the telegraph and voice tube (#3).

Navigation commands from the Captain in the pilothouse were transmitted to the chief engineer by means of this engine room telegraph connected by a system of cables and chains. As you will see, the Captain had similar telegraphs in the pilot house. When the Captain moved the brass lever on his telegraph to indicate the speed he wanted, “full stop” for example, the engineer's telegraph moved to a corresponding position. The engineer acknowledged the command by moving his telegraph to “full stop” and then carried out the command by closing the throttle bringing the engines to a stop. The Captain and engineer could also speak to each other through the voice tube located to the right of the engineer telegraph. Proceed past the telegraph and voice tubes toward the starboard main engine and then toward the bow of the boat. As you walk by, notice the starboard Pitman arm aft of the engine and then the steam pumps and DC generator arranged across the engine room. The pitman arms carry the force from steam piston rods to the crank driving the sternwheel. The steam-powered pumps provided water to the fire and washdown stations, fresh water spigots, toilets, and the main boiler. The 120-volt DC generator provided electrical power throughout the boat until 1967 when it was replaced by two diesel-powered generators mounted in the steering room.

Donkey Boiler

When the main boiler was shut down, the crew would fire up this auxiliary boiler, which burned wood to provide steam for the high pressure pump, the DC generator and radiators to heat the boat. The term "donkey" came from the early days of steam-powered