

1 Paddlewheel

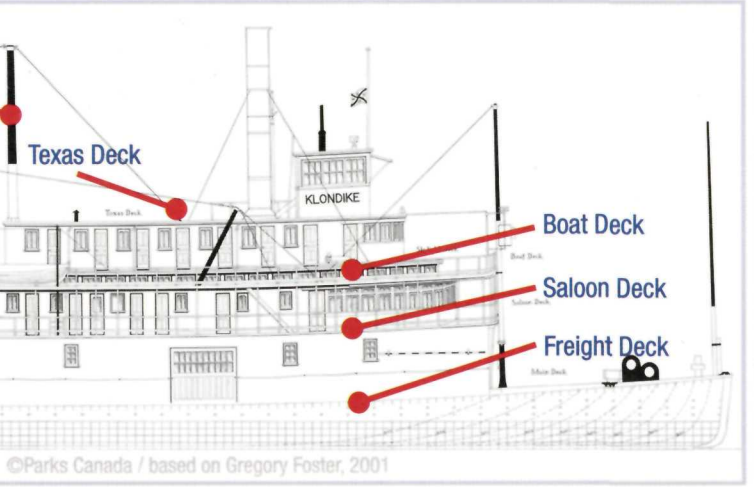


Before you go on board, walk back to the paddlewheel.

The paddlewheel's location makes the *Klondike* a 'sternwheeler' – as opposed to a 'side-wheeler'. This puts the paddlewheel in a less vulnerable position for operating on fast-flowing, shallow, winding rivers such as the Yukon. Multiple shallow rudders, rather than one larger one, are another adaptation for shallow water.



Parks Canada/F. Mueller



The *Klondike*, including her paddlewheel, is 73 m (240 ft) long; and could carry 270 tonnes (300 tons) of cargo with a draught of only 1 m (40").

2 Hull

The best view of the hull is from the trail by the river.

The *Klondike* is designed for the river: her hull is box-like, flat bottomed, and with a strongly flaring prow to channel water underneath. Having no central keel further increases her buoyancy and maneuverability but compromises her structural strength. Reaching high above the decks, the hog chain system provides strength. Steel rods, known as "chains", are fastened into the ends of the hull timbers and supported by large wooden "hog posts". Like the cables of a suspension bridge, the chains hold up the bow and stern to prevent the hull from sagging, or "hogging".

To board the boat: go around the bow and up the stairs to the gangplank.

S.S. Klondike II Specifications

- Launched:** Whitehorse, May 1937
- Owner:** British Yukon Navigation Company (White Pass & Yukon Route)
- Port of Registry:** Dawson City, Yukon
- Official No:** 156744
- Length:** 64 m (210')
- Width:** 12.5 m (41.9')
- Molded Depth:** 1.5 m (5.75')
- Loaded Draught:** 1 m (40")
- Gross Tonnage:** 1226.25 tonnes (1362.5 t)
- Registered Tonnage:** 918.45 tonnes (1020.5 t)
- Cargo Capacity:** 270 tonnes (approx 300 t)
- Crew:** 23 (in 1940)
- Passengers** (1st & 2nd class): 75
- Engines:** 2 compound jet-condenser type producing 525 H.P.
- Boiler:** Locomotive type (fire tube) manufactured at the Polson Iron Works Toronto 1901. Previously used in the steamer *Yukoner* & S.S. *Klondike I* (working pressure 129.4 kg/cm² or 184 lb/in²)
- Travel Time:**
(Whitehorse - Dawson) 1.5 days with 1 wood stop
(Dawson - Whitehorse) 4-5 days with 5-7 wood stops

Yukon River Sternwheeler Routes

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S.S. Klondike

A Self-Guided Tour

This self-guided tour features 12 stops and should take from 15 to 45 minutes depending on your pace.



Parks Canada/Cyril Doherty Collection #12

Welcome

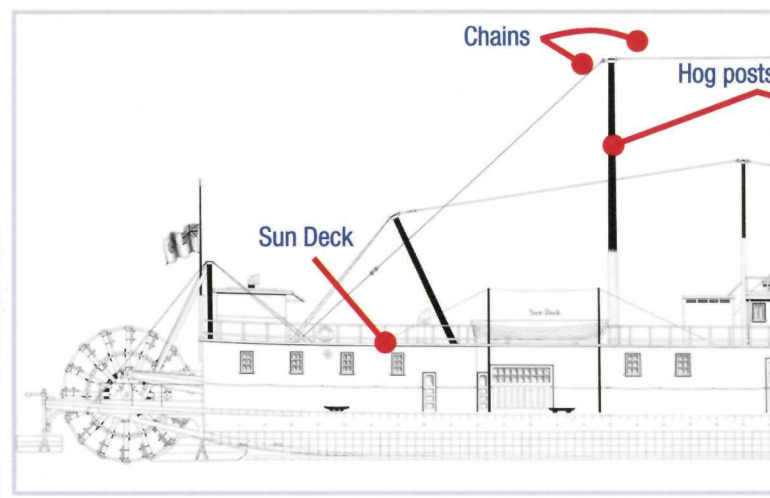
The S.S. *Klondike* has been carefully restored, and retains many original features. For your safety, and to protect this national historic site for future generations, please:

- Do not touch any artifacts or exhibits
- Children under 14 must be accompanied by an adult
- Stay back from the railings
- Watch your step: decks are slippery when wet
- No smoking
- No pets
- No food and drink

Introducing the S.S. Klondike

S.S. Klondike National Historic Site

The S.S. *Klondike* was the largest sternwheeler on the upper Yukon River and the flagship of the British Yukon Navigation Company fleet. Built in Whitehorse in 1929 as an ore hauler, she was holed and sank in 1936. Rebuilt the following winter using the original superstructure and machinery salvaged from the wreck, she was re-launched in the spring of 1937, and continued carrying passengers and cargo until 1955 – the last Yukon River sternwheeler in active service.



In 1966 the *Klondike* was skidded from the Whitehorse shipyards (now Shipyards Park) to her current location and restored to her 1937-40 appearance. In 1967 she was designated a national historic site to commemorate the era of steam-powered riverboat transportation on the upper Yukon River.



Sternwheelers were first used on the lower Yukon River in the late 1860s, working upriver from St. Michael, Alaska, on the Bering Sea, with supplies for trading posts. Sternwheeler numbers rapidly increased after 1897 to serve the *Klondike* Gold Rush; and at this point sternwheelers were put into service on the headwater lakes and upper Yukon River.



In 1900, the completion of the White Pass & Yukon Route (WP&YR) railway between Skagway and Whitehorse confirmed the upper river as the main supply line for the new Yukon Territory. WP&YR established a river division, the British Yukon Navigation Company (BYN) which soon controlled shipping on the upper river. For the next half century, before the advent of roads, the BYN sternwheeler fleet based in Whitehorse was the backbone of the transportation system that linked the Yukon to the outside world.

3 Steam Boiler



Yukon sternwheelers were powered by wood-fired boilers. The *Klondike's* was a locomotive-style fire-tube boiler. It held 15,000 litres (4000 gallons) of water, and operated at a pressure of 129.4 kg/cm² or 184 lb/in².



At the forward end of the boiler is the firebox and the stokehold where the fireman worked. It was hot and heavy work as the *Klondike* burned, on average, a cord (4'x 4'x 8') of wood per hour. At the aft end is the flue where the exhaust gases vented up the stack. Here, you can see the fire-tubes that pass through the water tank, heating the water to produce steam. The large pipe on the ceiling behind the boiler takes the steam to the engine room.

4 Freight (starboard side)



Before the advent of roads, the settlements and mining camps in the Yukon were totally dependent on the BYN sternwheelers to bring in the food and equipment needed to work and survive. Supplies would have to be sufficient to last through the winter and spring, as the Yukon River is frozen for 7 1/2 months of the year. Each fall, the boats



were hauled out of the water and overwintered on skidways in the Whitehorse Shipyards.

Deckhand loading cordwood, ca. 1935. Parks Canada/G.D. Bissell Collection #232

Mayo District silver mining was a mainstay of the Yukon economy. Ore coming out of the Mayo District was carried down the Stewart River by smaller sternwheelers such as the *S.S. Keno* (now dry-docked in Dawson City). At the mouth of the Stewart, ore was transferred onto larger sternwheelers and carried upriver to Whitehorse. Here it was transferred onto the WP&YR railway bound for the port of Skagway and shipment south. By the time the ore reached the smelter in Kellogg, Idaho, each ore bag had been handled up to 18 times.



Ore bags stockpiled in Mayo. Parks Canada/John Dunn Collection, 200027

5 Engine Room



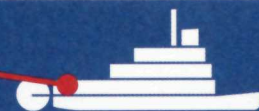
This is where the steam was put to work. Large steam pipes on the ceiling lead from the boiler to the engines, one on each side of the engine room, which worked in tandem to rotate the paddlewheel. They are compound, jet-condensing engines rated at 525 horsepower each. Steam first entered the smaller, high-pressure cylinder then exhausted into the larger, low-pressure cylinder, driving the pistons. The movement of the pistons pushed, then pulled, the "pitman arms" which cranked the paddlewheel like bicycle pedals. The other equipment, also powered by steam, operated various systems on the boat and provided shipboard amenities including electric lights.



The speed and direction of the engines was controlled by the engineer as directed from the wheelhouse via the ship's telegraph, augmented by bells and a voice tube.

John Scotland, Chief Engineer, 1929 to 1944. © Ian Ashdown

6 Crew's Quarters



The crew's quarters are towards the stern. The deckhands, who worked under the mates, loaded and unloaded freight and kept the firemen supplied with wood. They bunked in the starboard cabin. The firemen slept in the port-side cabin. As officers, mates and engineers enjoyed more comfortable accommodations up on the boat deck.

7 Ore bags (port side)



These ore bags are the reason that the *Klondike* was built big – to move large amounts of the ore coming out of the silver mines in the Mayo District without having to push a barge – saving time, energy and money. Other BYN sternwheelers pushed barges (such as the *Atlin*, dry-docked in front of the *Klondike*) to increase their freight capacity. On her upriver trip from Dawson, the *Klondike* would stop at Stewart Landing and take on 4500 bags of ore, each weighing 56 kg (125 lb).

Please be careful climbing the stairs, as they may be slippery. Please don't lean on the deck railings.

8 Observation Lounge



Watch your step as you enter the door – there is a raised edge on the floor.

This is where passengers travelling first class could relax and enjoy a view of the river. The office next to the safe on the starboard side was the purser's. He was the BYN business agent who took care of paperwork, ensured that mail and cargo were delivered at the right stops, and that passengers were properly looked after. He was on call 24 hours a day – hence the bunk in his office.



Parks Canada/F. Mueller

In 1937, when the average salary for a Canadian worker was \$25/month, a second class ticket from Whitehorse to Dawson was \$25; a first class ticket was \$35.

9 Dining Room



First class passengers and officers took their meals in the dining room. It was very formal, with seating at assigned tables and service by stewards clad in white shirts, bow ties and white waiter's jackets. The *Klondike* could carry 32 first class passengers, requiring two sittings for each meal. By all accounts the food was excellent – check out the menu on the bulletin board!



The staterooms on this deck were for first class passengers, as well as female second class passengers and some crew. Male second class passengers slept on bunks secured to structures on the freight deck.

10 Sun Deck



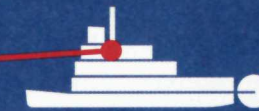
On the sun deck, passengers caught a breath of air or enjoyed diversions such as shuffleboard, quoits (ring toss) or badminton. While first class passengers had the run of the boat, second class passengers were confined to the freight deck and the sun deck. The crew's mess and ship's galley open onto the sun deck, with a vegetable locker,

Closed to the public.

icebox and coal box outside. A screened-in meat locker is located aft, where spray from the paddlewheel could keep the contents cool.



11 Boat Deck



Officers' cabins are on the boat deck. Master and pilot occupied the forward cabins on either side, giving them a view of the river ahead even when off duty. The master's is on the port side, adjacent to the companionway (stairs) for quick access to the wheelhouse. The two engineers occupied the rear cabins, closest to the engine room via the rear stairs.



12 Wheelhouse



The wheelhouse – or "Monkey Island" as it was affectionately referred to by the crew – was the domain of the master and the pilot. Situated on the Texas deck, well forward and high above the water, it gave them an unobstructed view of the river. The wheel, though impressive, was only used to steer in the event that the hydraulics failed; the hydraulic tiller is located in the centre of the control panel aft of the wheel.



It required an intimate knowledge of the river and great skill gained only after years of experience to manoeuvre a vessel the size of the *Klondike* down the Yukon River, with its strong current, narrow channels, rapids, constantly shifting sandbars and the ever-present danger of running aground.

Charles Coghlan, Master, 1929 to 1946. Parks Canada/Claude Hogg Collection, 201758

The ship's bell, located at the bow, was used by the chief steward to announce meals.

If you wish, give it a GENTLE ring and take a photo.