

WELCOME ABOARD



HMCS ST. LAURENT

DDH-205

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HMCS ST. LAURENT

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| KEEL LAID | NOVEMBER 22, 1950 |
| LAUNCHED | NOVEMBER 30, 1951 |
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HMCS ST. LAURENT DDH 83 – 1945

A PROUD TRADITION

HMCS ST. LAURENT is the second ship in the Canadian Armed Forces to bear the name, and from her predecessors she inherits a proud record of battle honours, won in the North Atlantic and in the waters off Normandy during the Second World War.

Formerly the 1375 ton British destroyer CYGNET, the First ST. LAURENT was commissioned into the R.C.N. at Chatham, England, on 17 February, 1937.

When war broke out in September, 1939, the ST. LAURENT and a sister ship HMCS FRASER were on their way to Halifax from Esquimalt, B.C. The day after her arrival on 15 September, the ST. LAURENT and HMCS SAGUENAY took convoy HX-1 to sea. It was the first of hundreds of Halifax-to-Britain convoys to cross the Atlantic throughout nearly six long years of war.

For the ST. LAURENT, it marked the beginning of a distinguished war record, which was to bring glory to her name and honour to those who served in her.

She ploughed the weather ridden Atlantic on anti-submarine duty in the winter and spring of 1939-40; she was present at Dunkirk, then went back to the Atlantic to fight through the weary, heartbreaking months when the U-boats all but severed the lifeline to Britain; then to the English Channel again for the return of Allied might to Normandy. But her chief battleground was the Atlantic, and to it she returned to finish out the war.

The ST. LAURENT exchanged her first fire, and that of the R.C.N., with the enemy in June 1940 while evacuating English troops from near Dunkirk, when she successfully drew off the fire of a German shore battery from her sister ship Restigouche.

In July, 1940, she rescued 857 survivors of the torpedoed SS ARANDORA STAR, bound for Canada with over 1,200 enemy alevins, mostly Italians. The ship had been sunk by the German U-boat ace Kapitän Leutnant Prien, who earlier had made the brilliant attack on the British Home Fleet at Scapa Flow.

In December, 1940, she attacked and damaged an Italian submarine, one of several that sank ten merchant ships from Convoy HX-90 and the armed merchant cruiser FORFAR. The ST. LAURENT's messdecks were crowded with weary survivors. But the darkest days were yet to come.

She was with Convoy ONS-154 during its nightmare crossing from England to North America in December, 1942. Twenty U-boats fell upon the convoy and sank fourteen ships. This time the ST. LAURENT shared in the kill of a U-boat.

In March, 1944, she shared in the sinking of a U-845, and took aboard five survivors. Earlier in the day, a volunteer firefighting party from the ST. LAURENT had put out a fire on a merchant ship after an eighteen hour battle.

Later in 1944, while serving with an anti-submarine 'Hunter-Killer' group in the English Channel, the ST. LAURENT sustained a near miss from a glider bomb which knocked out her gyro compass, circulating pump, and boiler fan. She continued on patrol however, and five days later picked up eight officers and sixty-four men from U-270, sunk by aircraft of the Royal Australian Air Force.

The ST. LAURENT concluded her war operations in the far reaches of the North Atlantic. Based at Iceland, she was part of a blockading force on the lookout for U-boats attempting to break into the Atlantic from Norway.

On 10 October, 1945, the ST. LAURENT was paid off for the last time but the glories of her exploits, will not die, for the present ST. LAURENT is her proud inheritor.



AN HISTORIC BADGE

HMCS ST. LAURENT carries one of the Canadian Armed Forces most colourful badges, depicting as it does the rich historical and legendary backgrounds of the mighty river from which she has taken her name.

The diagonal wavy strips of the field are in reference to River St. Lawrence. These strips or 'bends' are made gold and blue alternately in respect to the King of France in whose name Jacques Cartier discovered and explored this great waterway. The Arms of France then were three gold Fleurs de lys on a blue field.

The legends surrounding the River St. Lawrence are many, but Henry Beston in his work on the St. Lawrence (1942) stated that the tutelary or protective spirits of this great river is the White or Arctic Whale. So this splendid mammal is depicted traversing the waters, and to identify him with the particular river, he is charged on the shoulder with the grid of Saint Lawrence.

When Cartier first entered the waters of the St. Lawrence it was on the anniversary of the death of that courageous deacon of the Roman Church who, it is said, was put to death on the orders of Emperor or Valerien by being roasted on a grid. This is supposed to have occurred on 10 August in the year 258. It was on this date in 1535 that Cartier sailed into this river and gave it the name St. Laurent. The grid appeared in one of the two unofficial 'badges' used by the first ST. LAURENT during the Second World War – and as a secondary reference it is here shown on the whale.

The ships colours are blue and gold.



HMCS ST. LAURENT – DDH 205

THE HELICOPTER DESTROYER

The present HMCS ST. LAURENT is the name ship of seven of her class built for the Royal Canadian Navy. All were designed and built in Canada, and all are named after famous and historical rivers.

This Destroyer-Escort was built by the shipbuilding firm of Canadian Vickers Ltd., in Montreal, Quebec, and was commissioned on October 29, 1955. The ship was attached to the Atlantic Command of the R.C.N. until the spring of 1959 when she was transferred to the Pacific Command – with Headquarters at Esquimalt, B.C.

HMCS ST. LAURENT is the second ship of her class to undergo major refit and conversion to helicopter and variable depth sonar capabilities. The conversion job, which started in October 1962, was handled by Burrard Dry Dock Co. Ltd., North Vancouver, B.C. The work included installation of the flight deck and hangar for a long-range Anti-Submarine helicopter, addition of Variable Depth Sonar on the stern, for detection of submarines at great depths and in variable temperature layers, and the fitting of improved-type stabilizing equipment.

With the fitting completed, ST. LAURENT was re-commissioned at HMC DOCKYARD, Esquimalt, B.C., on October 4, 1963. A series of workups and trials prepared the warship for a round the world cruise in 1964. On completion of this cruise the ship was based at Halifax, Nova Scotia – Headquarters of the RCN's Atlantic Command.

During a recent refit in Saint John Shipbuilding and Drydock Co. Ltd., at Saint John, New Brunswick, during the summer of 1968, ST. LAURENT completed the second phase of conversion with addition of the Bear-Trap Haul-Down System – an ingenious method of hauling down and trapping the CHSS-2 'Sea King' helicopter on the deck, in rough weather.

In January 1969, a Helicopter Air Detachment (Helairdet) joined the ship along with a CHSS-2 'Sea King' Anti-Submarine helicopter from HS-50 Squadron of CFB SHEARWATER, Dartmouth, N.S.

STATISTICS

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| Displacement | – 2900 tons |
| Length | – 365 feet |
| Beam | – 42 feet |
| Weapons (ship only) | – Twin 3"50 anti-aircraft mounting – Triple anti-submarine mortars – Homing Torpedoes |
| (Helo only) | – Homing torpedoes – Depth bombs |
| Complement | – 24 Officers |
| including Helairdet | – 250 Men |

THE SHIP

BASIC DESIGN

The lines of ST. LAURENT are a drastic departure from those usually associated with ships of her function and have been likened to those of the menace she is designed to encounter – the modern submarine.

Her flared rounded bow, conical mast, steamlined funnels, low superstructure and high hangar immediately catch the eye, and despite her low clean lines, her freeboard is greater than many ships of her type. Her rounded hull, recessed anchor pockets, and cable deck below the weather decks all act as a counter against ice formation and radio-active fallout.

Her wheelhouse is two decks below the main decks and hence less vulnerable during attack, and during action the Captain directs the ship from the operations room abaft the bridge.

She is insulated and air-conditioned in those portions of the ship where such measures are desirable for the comfort and fighting efficiency of officers and men.

WEAPONS

Since she is primarily an anti-submarine ship, her principle weapon is the three-barrelled Mortar MK 10 mounting, aft of the flight deck, which is capable of firing three projectiles in a triangular pattern extremely accurately. These mortars are directed by the ship's complex firecontrol systems. The ship is also armed with two three-tube torpedo mountings on both sides of the ship, which will launch acoustic homing torpedoes.

Her other weapons include a twin 3 inch 50 calibre anti-aircraft mounting with a high rate of fire, controlled by a radar tracking and locking computer; as well as the CHSS-2 'Sea King' helicopter, which by virtue of its speed and endurance, can extend the range of the ship's A.S.W. capabilities for miles. It is armed with depth bombs and acoustic torpedoes.

ELECTRICAL EQUIPMENT

An electrical 'wonderland' ST. LAURENT carries extensive and complex electrical and electronic equipment, which provides power to almost every function on the ship including armament, navigation, cooking, ventilation, communications and so on. She carries more than 50 miles of electrical cable with 440 volt alternating current.

She has five generators capable of producing 1400 kilowatts – enough power to light up a city of 20,000 people.

PROPULSION

ST. LAURENT differs from the other ships of her class in that her prototype machinery was built in the United Kingdom, while Canadian industry was tooling up for the ships to follow.

Her twin steam turbine system consists of two water-tube boilers of extreme compact design, which provide steam to two main turbines and two cruising turbines, geared down to two shafts of 15,000 shaft horsepower each. The gearing on the ship was the first hardened and ground gearing used in Canada, the United States, and the United Kingdom, with the advantage of reducing both its weight and dimensions over conventional gearing.

Practically all auxiliary machinery is powered by turbines or diesels, with the main circulating turbine operating at a remarkably high speed of 18,000 R.P.M.

HABITABILITY

A far cry from the living conditions of World War II vintage ships, ST. LAURENT introduced to the Canadian Navy a new concept in habitability with its concern for the health, comfort and efficiency of its men.

Each man has his own foam-rubber bunk with reading lamp and locker, and mirrors and electric shaving outlets were not forgotten. Each mess throughout the ship has its own recreational area for off-duty relaxation.

The officers cabins are primarily single or double cabins, except for three cabins designed for four officers. The Wardroom has dining, recreation, and lounging areas as well as its own steam operated pantry, with a well stocked bar.

The Captains Cabin is also equipped with office, bedroom, washplace, dining and lounge areas, as well as a separate pantry.

Ship's company is fed on the cafeteria system which is serviced by a steam and electric galley with its own bakery and pastry, meat and vegetable departments, as well as dishwasher, steam pressure cookers, ice cream and milk machinery.

The hands dining space also serve as a cinema and snack bar in the evenings, with the Chiefs and Petty Officers rationed in their own pantry served cafeteria on the same deck.

The ship is capable of storing for 90 days with ample refrigeration, and laundry services consist of washing machines, spin dryers, pressers and hanger facilities.



CHSS-2 (SEA KING) ANTI-SUBMARINE HELICOPTER

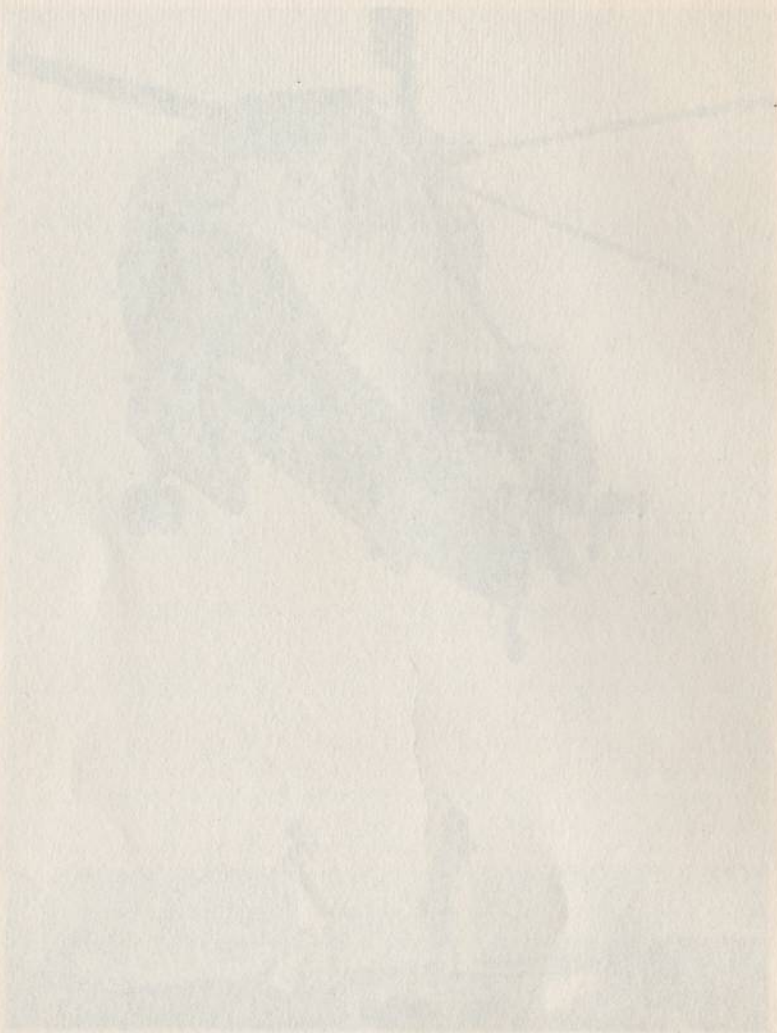
An outstanding feature of the Sea King helicopter is its all-weather, day-and-night capability. Other characteristics include an automatic tail-folding device, winch-down equipment, hull-shaped fuselage, high speed and an automatic hovering capacity. It is equipped with detection, navigation and weapons systems which enable it to search for, locate and destroy any modern submarine.

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| Crew: | 4 (two pilots, two sonarmen) |
| ASW Endurance: | 4 hours or 500 miles |
| Speed: | 120 knots (cruising) |
| Gross Weight: | 19,000 lbs. max. |
| Dimensions: | Fuselage length 54'9", width 7'1", height over-all 16'8" |
| Engines: | 2 General Electric T-58-GE-8B twin turbines |
| Detection Equipment: | Sonar-ranging set and self-contained navigation system. |
| Armament: | Homing torpedoes and depth bombs |

With the anti-submarine warfare equipment removed, the CHSS-2 can transport up to 25 troops internally or up to 4,000 lbs. externally.



A Sea King helicopter demonstrates the "Beartrap" system for landing helicopters on the flight deck of a Maritime Command helicopter destroyer. The hovering helicopter lowers a thin wire which hauls back a heavier cable from the deck. The slack is taken up and the helicopter begins its descent as the cable is reeled in by the landing control officer on the deck. When the helicopter touches down, steel jaws clamp around the probe to secure the helicopter against any motion caused by rough seas.



A Sea King helicopter demonstrates the "Geering" system for landing helicopters on the flight deck of a warship. Common helicopter downrigger. The hovering helicopter lowers a thin wire which holds back a heavier cable from the deck. The cable is taken up and the helicopter begins its descent as the cable is reeled in by the landing control officer on the deck. When the helicopter touches down, stow jaws along the cable guide to secure the helicopter against any motion caused by rough seas.

