

Project Yukon



The San Diego Oceans Foundation

Promoting ocean stewardship since 1984.....



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Project Yukon

Probably the most ambitious project ever undertaken by the San Diego Oceans Foundation was the acquisition, preparation, and sinking of the decommissioned Canadian warship HMCS YUKON. Working in cooperation with the Artificial Reef Society of British Columbia, SDOF brought the YUKON to San Diego from Canada, stripped it of toxic and hazardous materials, and placed it on bottom to serve as an artificial reef offshore from Mission Beach.



Large holes were cut into her side to allow proper water flow throughout the ship!

The volunteer effort to prepare the ship for sinking can not be overstated. Without the persistent hard work of numerous members of the San Diego diving community and others, this Herculean task could never have been completed. Our goal was to make the ship safe for divers by removing entanglement hazards and creating numerous openings for easy egress, and to make it safe for the environment, as well. The point, after all, was to enhance the habitat, not pollute it! SDOF has striven to set the standard for responsible artificial reef creation in the United States, and is in the process of preparing a

manual for other organizations to follow when converting ships to reefs.

The HMCS Yukon is the largest ship ever sunk on the West Coast as an artificial reef. She is resting on her port side in 100 feet of water just 1.85 miles west of Mission Beach.



...As an Active Ship

She is in a location that is accessible for both divers and fisherman, which makes her a favorable recreational area. Sunken warships are not that unique because most are spontaneously placed by an act of war or weather. In many cases ships are sunk too deep for any person to visit. Because of her ideal location and easy access, the Yukon has already become a popular attraction. Dive shops in the Beach and Bay area have seen a dramatic increase in sales since the sinking. Dive enthusiasts from around the country have said that the sinking of the Yukon has made San Diego the premier dive site on the West Coast, no where else can you find such diving diversity.



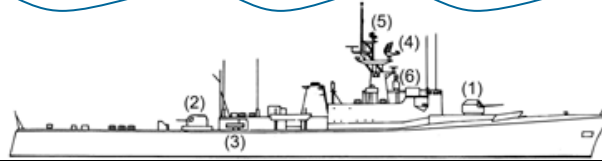
The Yukon rests in 100-ft of water off Mission Beach





Project Yukon

HMCS Yukon Statistics



Type	Canadian Mackenzie class destroyer
Builder	Burrard Dry Dock & Shipbuilding
Laid Down	25 Oct 1959
Launched	27 July 1961
Commissioned	25 May 1963
Length	366 feet
Height	70 feet + signal mast
Beam	42 feet
Decks	8
Displacement	2380 tons
Main Machinery	2 English Electric geared turbines; 30000 shp; 2 shafts. 2 Babcock and Wilcox water tube boilers
Speed, knots	28
Range, miles	4750 at 14 knots
Complement	210 (11 officers)
Guns	2 Vickers 3 in (76 mm)/70 Mk 6 mounting (twin)(1) 90 degree elevation; 90 rounds/minute to 17 km (9 nm) weight of shell 7 kg. 2 FMC 3 in (76 mm)/50 Mk 33 mounting (twin) (second mounting fwd in Qu'Appelle) (2); 85 degree elevation; 50 rounds/minute to 12.8 kn (7 nm); weight of shell 6 kg.
Torpedoes	6-324 mm Mk 32 (2 triple) tubes (3) Honeywell Mk 46; anti-submarine; active/passive homing to 11 km (6 nm) at 40 knots; warhead 44 kg.
Countermeasures	ESM: WLR 1; radar warning.
Fire control	GFCS Mk 69. GFCS Mk 63. Litton ADLIPS; automated tactical data handling; Links 11 and 14.
Radars	Air search: Raytheon SPS 10 (4); D band;range 119 km (65 nm) Surface search: Raytheon SPS 10 (5); G band. Fire control: SPG 48 (6); I/J band. SPG 34; I/J band
Sonars	Westinghouse SQS 505; combined VDS and hull-mounted; active search and attack; medium frequency. SQS 501; hull-mounted; bottom target classification; high frequency
Programmes	Officially classified as DD
Modernisation	All modernised at Esquimalt by Burrard/Yarrow Inc under Delex (Destroyer Life Extension Programme) 1982-85 including improved sonar and communications to SPS 12 radar. Extension until 1990-93.





HMCS Yukon History

1963 Built by Burrard Drydock Co., Ltd., of North Vancouver, *Yukon* was commissioned on 25 May 1963. She was the third of her class and first ship of that name to join the Royal Canadian Navy.

1963 On July 16th 1963, she sailed for Halifax, stopping on the way in San Diego Calif. for 3 days, in Manzanilla Mex for 6 hours, Acapulco Mex. for 3 days, Balboa Pan. for 3 days, and Kingston Jamaica for 5 days.

1963 Arrived in Halifax at 10:00 hrs August 16th, 1963.

1963 August 26, 1963 started workups.

1963 October 2, 1963 the ship was scheduled to sail for Charleston N.C. for workup program with HMCS Provider but was cancelled for an unknown reason.

1964 April, 1964 sailed for Bermuda and painted ship for 9 days, then to Boston Mass for 4 days, then home.

1964 May 22, 1964 sailed for Portsmouth Eng., Amerstam Holland, Londenderry Ireland. (An interesting story here, more details later). Then on to the Canary Islands to Port La Luze (Spanish shore patrol gave *Yukon* a beating).

1964 July 24, 1964 @ 13:30 arrived back in Halifax.

1964 October 15th, 1964 sailed for P.E.I. to escort Queen Elizabeth and H.M.Y. Bri-

tannia to Quebec city for 4 days.

1965 January 4, 1965 salied for Victoria via Panama canal for transfer of *Yukon's* crew to HMCS Ottawa.

1965 February 2, 1965 arrived in Victoria

1970 On 4 May 1970, *Yukon*, in company with Mackenzie and Provider, departed Esquimalt and headed west.

1970 The two destroyers arrived in Hakodate on 22 May while Provider went to Yokosuka. During the voyage the ships carried out exercises with units of the Australian, New Zealand, Japanese and American navies. Between exercises the ships visited Kobe, Osaka and Sasebo before heading for home.

1975 February 1975 *Yukon* started her mid-life refit, following which she became a member of Training Group Pacific, taking on the role of instructing officers.

1984 She began her DELEX refit on 28 May 1984, returning to the fleet on 16 January 1985.

1986 In 1986 she was one of three RCN ships to visit Australia and take part in the RAN's celebration of its 75th birthday.

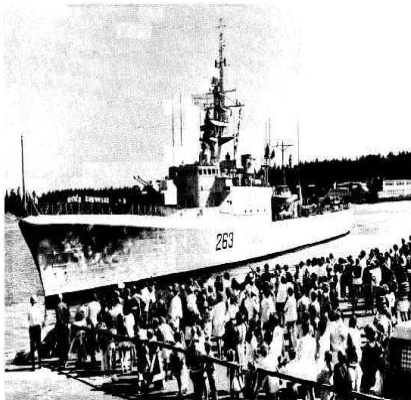
1999 The San Diego Oceans Foundation acquires the *Yukon*

2000 The *Yukon* is sunk off San Diego's coast as an artificial reef on July 14, 2000.





Project Yukon



During her service life, *Yukon* steamed 792,181 nautical miles and visited ports in some 30 countries. She was paid off on 3 December 1993.





Choosing the Sinking Site

★ Overview



A detailed review of the surrounding area was conducted by the Naval Ocean Systems Center (NOSC) in the late 1950's for the construction of the NEL Tower. The studies included the bottom from approximately 60 feet in depth to the edge of the continental shelf. Data was obtained using bottom coring samples and acoustic soundings to determine the depth, composition and thickness of bottom layers.

★ Bottom Composition

Mapping around the tower showed recent marine sands overlying an older sediment layer from the San Diego River. This sediment layer tapers and ends midway to the proposed sinking site. The sinking site is composed primarily of fine sand that is approximately 30 feet thick, this layer was deposited during the Holocene period as the glaciers melted. The uppermost parts have been modified by present day currents and wave action. Under this layer is several feet of weathered conglomerate which sits on top of the subsurface bedrock. The bedrock is thought to be composed of cretaceous sandstone and shale, like those cropping out on nearby Point Loma. Exact composition of this bedrock was not determined by coring, but by using explosive sounding data that determined substrate densities. True granitic bedrock does not occur until past 6,000 feet in depth.

★ Sand Movement



Long term observations in the area using scuba and television recordings identified cyclic variations in ripple mark heights corresponding to seasonal variations in waves, currents, and animal populations. In winter ripple heights are highest at about 6 to 8 inches. They gradually reduce to 2 to 3 inches in summer due to decreasing water motion and increased activity of marine organisms. Actual sand depth does not vary to any degree during these cycles. Sand movement around a structure on the bottom would be influenced by the position of the structure relative to the current or surge direction. Sand would tend to pile up on the lee of the structure much as a snow drift. This drift would then be scrubbed when currents and wave action change direction.



Support Artificial Reefs

Let your congressperson and senators know you support artificial reefs!

In 1995 Congress mandated the disposal of 400 ships that have been in storage for decades, some since World War II. The U.S. Navy recently adopted a report from the Rand Corporation citing that "reefing" these ships instead of scrapping them is the most ecologically responsible and economically feasible thing to do. The sinking of the HMCS Yukon in San Diego demonstrated this could be done while meeting all the environmental and permitting requirements. Reefing these ships will save the taxpayers \$1.5 billion dollars while creating jobs for many Americans.



Contact your congressperson and senator to voice your support for turning these ships into artificial reefs.

Here is a sample letter you can modify and print to mail to your representatives. Paper mail may be taken more seriously than e-mail, but you may also wish to send your letter electronically.

E-mail to members of congress is handled through www.house.gov/writerep

< Date >>
<< Congressman Name >>
<< Address >>
<< City, State, Zip Code >>

RE: Ships to Reefs

Dear << >>,

In 1995 Congress mandated the disposal of 400 ships that have been in storage for decades, some since World War II. The U.S. Navy recently adopted a report from the Rand Corporation citing that "reefing" these ships instead of scrapping them is the most ecologically responsible and economically feasible thing to do. The sinking of the HMCS Yukon in San Diego demonstrated this could be done while meeting all the environmental and permitting requirements. Reefing these ships will save the taxpayers **\$1.5 billion dollars** while creating jobs for many Americans.

I am writing you to express my enthusiastic support for this solution and encourage you to ensure the proper funding as this approach occurs.

Could you please look into this situation and let me know your position on the matter?
Sincerely,
<< Name >>



Project Yukon Sponsors

Thank you to these companies and organizations that provided tremendous support for the sinking of the HMCS Yukon.



Southwest Diver





Project Yukon Honor Wall Members

Honor Wall plaques (14"x19") are made of a specially-designed, high-tech material that is expected to last for centuries. Each plaque was engraved and installed on the Yukon, by Kai Schumann.



The Beard Family

LF & Jane Beard
Ed & Martha Beard
Wendell & Janet Beard
James Milton Beard
James & Laura Beard
Jessep Beard
Noelle Beard
Megan Beard
Dinah E. (Bea) Beard

Barnacle Busters Gay & Lesbian Scuba Club

J Rex Theobald

Dive Animals Scuba Club

10 Members @ \$100 each
Stanley S. Wruble
Chris Miller

Dive N' Surf Dive Team

Rachelle Deal
Chris Gini
Deb Hiles/Dykstra
Bill & Shanna Mary Mahler
Lucianna Molinari
Jim Pugliese
Susan & Sam Sapienza
The Selk Family
The Foley
The Fischer
The Steinmetz Family

Diving Locker Nautilus Club

Diving Locker Staff
David Russina
Flossie L'Estrange
Lee Olsen
John & Matt Hannum
Kevin Daily

Hydrodiver

Tom Gerlinger

Sharpshooters U/W Photo Team

Dave Stirling
Peter J & Shannon M Markovic
Brian Nelson
Immersed Magazine
John Griffiths
Sandra Hughey
Susan Pollard
Debra Rackear
Frances & Kristina San Clemente
C Scott Johnson
Gary & Lynn Newell
Greg & Darlene Stone

Lois Ann Dive Charters

Larry & Lois Cochrane
Jonathan Leo, PhD
R Moore
Randy Rice
Gary C Stein

Ocean Explorers Society

Marwan Sinno
Eileen Monzon
Steve Goldstrom

Mark & Elaine Clausen
The David Ambrose Family
Kevin D Douglas
Tony V & Deborah L Huff

San Diego Bug Divers

E. Lance
D. Grenne
M Lilly
D Norris
H Gruenhagen
R Gladden
J Anderson
K Barnes
J Thomas
R Caldarone
Tech EquipmwnT Services
J Beyster
J Stanley

San Diego Free Divers

San Diego Sea Dogs

Ken Robinson

Sports Chalet Dive Club, Inland Empire

Sports Chalet Dive Club, S. Orange County

Sports Chalet Dive Club, San Diego

Angelina Petschek
Derell Finefrock
Mike & Peggy Petschek
Susan G Canney



Paul & Sandi Schankin
James B Campbell
Wynona Hawkins
Stephen R & Etherl Speiser
Michael & Gayle Rolan
Michael Ray Mogel
Anotonio Blas
James M Burrows
Dennis Haines
Jeff Maglidt
MC & Lorna McMurray

The Bottom Bunch Dive Club

The Lost Patrol Dive Club
Water Education Training
Fred & Bonnie Guinaugh
Jerry E. A Cronkhite
Greg Stone
Darlene Stone
Richard Sillanpa

Individual Honor Walls

American Cetacean Society
Robin Konstatin
Gary W. Cornell
Michael Kames Pechtel
Charles & Alnora Bishop
Steve Pozza
Robert & Judy Lera
Marine Marketing & Consulting
Kai Schumann
M. Grosz/B. Thompson
Frank & Janine Portillo
Jay Murray
Timothy J Kohrs
Al & Esther Duke
Phil Matticola
E. Michael & Diane C Pidgeon
The Barley Family (donated printing)
Steven W. Vincent Trust
William D Jamison

Ray Caldarone
Bill J Reedy
Boll Moses Family of Neward
Bob & Marie Meese
John & Jennifer Carpenter
James Richer
Daniel P Dennies
Edward & Joanne Gootman
Gene Ruecker
Stephen G Benavides
Terry Holben (Artist-donated work)
Chuck Le Blanc
Stephen D Pahl
Crhistpher Wyer
James M Knutsen
Irene Grigoriadis
John S Benya
Joseph B Dohn Trust
George M Foster
George W Singer, Jr
Annabelle Quan
Harold Penn & Donna Monsen
Kathryn & Daniel Oftedahl
Alan Gerstein
Jason O'Rourke
Jerry Pentin
Gary LeBlanc
Cheri Stiger
Paul M Giesinger
TJ McCann
Christopher L Lundquist
Michael H Kane
Scott Wentworth
John M Harvey
Santa Maria Dive Club
Charles W Tu
Peter M Scherer
California Wreck Divers Inc
McCarthy Family Foundation
Sources International
J.M. Rubschlagler
Jerry Hemme

Jan Hemme
Donald Hartley
Ticketmaster California In
Chiller Services Inc
Larry Fromwiller
Robert G Bernstein
Perry Armor
Antonia Barnhart
David & Siobhan Garceau
Grace "King" Schick
Ocean Odyssey, Inc
Teleque Industries, Inc
(donated bkkpg services)
Erik Bengtsson
Richard P & Rickie M Kean
Peninsula Bank
Sorooptimist International of
La Jolla
James M Beard
Stephen C Anderson
Corriere Family Partnership
Jay. M Schwartz
Jphn G & Beverly Taylor
William & Wendy Jacoway
Robert C Watts
Horizon Charters
Citicorp Foundation
(Matching Funds)
Willis & Jane Fletcher foundation (Grant)
Project A.W.A.R.E Foundation Inc (Grant)
Diving Unlimited International
Ocean Enterprises, Inc
Belly-Up Tavern
Paul Brooks & Jpyce a Haak
R Moore
Ed & Mary Fletcher Foundation (Grant)
National Steel & Shipbuilding Company
Fred N & Alicia H Hallett

Oceans Foundation seeks a marine habitat plan

Groups says increased resource enhancement benefits tourist industry

BY PAT BRODERICK
Staff Writer

Unity. That's what the San Diego Oceans Foundation says is needed in the establishment of a master plan for a Regional Ocean Enhancement Program for San Diego-area waters.

"We as a region, with our talents and resources, have the ability to do tremendous things," said Al Bruton, chairman of the Habitat Enhancement Program, during a briefing last week of the foundation's plans.

According to the foundation, a nonprofit volunteer group, the program is needed to help counter the impact of coastal development.

"Increased pressure from coastal development and its effects on the overall ocean environment has resulted in a net loss of marine habitat and associated marine life," the foundation said in a statement. "Further stress is added from the increasing numbers of harvesters of the region's fisheries.

"These trends are expected to continue unless there is comprehensive intervention to better manage marine resources."

Bruton said he intends to get feedback from as many interest groups as possible during the next two months.

"The Ocean Foundation doesn't represent any one faction," he said. "We are unbiased.

"We want you to go back and talk to your organizations, get input and gather information. We want to know what your interests and concerns are. We want all of you to be



A former U.S. Coast Guard cutter sunk off Mission Bay in 1987 is the type of marine habitat enhancement the San Diego Oceans Foundation believes will benefit the local tourist trade.

involved in the process."

He said he expects to have gathered enough feedback by the first of the year to begin drafting a regional plan that would incorporate four elements:

- Designation of specialized zones for long-term scientific study.

According to the foundation, "Having specific, hands-off study zones will allow the marine science community the freedom to conduct long-term studies of varied factors and provide a body of knowledge for future generations."

- Designation of specialized zones for economic development.

These would generate community income from charter services, hotels, restaurants, the diving and fishing industries, the tourist industry and other related services, the foundation said.



"When you factor in the hotels, meals, transportation and tourism, there is a lot of money to be made," Bruton said. "When you factor in the diving and fishing opportunities, the revenue enhancement efforts, phases could exceed what the foundation, if 10,000 people visit San Diego because of increased diving and fishing opportunities, would expect."

quire, prepare and place appropriate resource materials in the enhancement zones.

According to the foundation, any solid waste suitable for ocean disposal — concrete rubble, for instance — can be used to build habitat enhancement structures (artificial reefs), decreasing local landfill use.

- Development of an educational program related to enhancement program uses and benefits.

The specialized zones will fall within San Diego waters, from the U.S.-Mexico border north to the San Onofre Nuclear Generating Station.

It is anticipated that a number of specialized zones would be planned, including part of the current Mission Bay Artificial Reef.

According to the foundation, with the cooperation of the California Department of Fish and Game, the current artificial reef permit has recently been renewed for the addition of 19,000 tons of available habitat-enhancement resource materials.

Development of the regional plan is expected to take 12 to 18 months. This will be followed by permit acquisition, which should take another eight to 12 months, the foundation said.

During both phases, the committee will be looking for funding and resource materials, and developing a financial base for the continuation of the program, according to the time table.

"With a regional approach, the funding will become available," Bruton said. "Once the plan is in place, the funding will be easier to tap into."

A regional approach also will reduce the review and permit process involving municipal, state and federal agencies, he said.

"We have to have the enthusiasm of everyone," said a member of the briefing audience. "We can't do it alone."

PROJECT YUKON BENEFITS DIVERS, REEF ENVIRONMENT, ECONOMY



The San Diego Oceans Foundation (SDOF), a nonprofit organization dedicated to responsible stewardship of the oceans, plans to sink the HMCS *Yukon* in 114-foot-/35-m-deep waters off San Diego's Mission Beach. The 2,890-ton decommissioned Canadian Mackenzie-class destroyer stands 70 feet/21 m tall and is 366 feet/112 m long by 42 feet/13 m wide. The ship's mast will rise to about 30 feet/9 m, shallow enough for novice divers to explore. More experienced divers can venture into the vessel's interior.

SDOF has purchased the ship from the Artificial Reef Society of British Columbia (ARSBC), which over the last eight years has developed a procedure for preparing ships for sinking, salvaging valuable materials and scuttling them. The ARSBC has successfully sunk several other ships, including the HMCS *Mackenzie* in Sidney, British Columbia, and the HMCS *Saskatchewan*, sunk near Snake Island, British Columbia, on June 14, 1998.

To ensure environmental safety, all engines, special instruments and toxic materials will be removed from the *Yukon*. To ensure diver safety, interior bulkheads will be removed, eliminating small, confined spaces. The ship will be gutted of electrical wiring that could entangle divers. Several 4-by-4-foot/1.2-by-1.2-m holes will be made in the hull to provide escape routes and allow visibility into the vessel from 30 to 40 feet/9 to 12 m away. The boiler room will be sealed. All of the decks (there are six), including the fuel and water tanks at the bottom, will be open.

The *Yukon*, scheduled for sinking in the summer of 1999, will be the fifth of its kind in the world — and the first in U.S. waters — to be put down as an artificial reef. Once underwater, the ship will become a haven for marine life, a research source for oceanographers and a world-class diving attraction in San Diego. Prior to sinking, the ship will be docked in San Diego for a minimum of two months, during which time thousands of visitors are anticipated. Over 2,000 boats are expected to be on hand when the ship is put down. Sensors, cameras and transmitters will be hooked up to the vessel to provide Internet browsers a firsthand education about the creation of an artificial reef.

The area in which the ship will be sunk is known as "Wreck Alley," which currently hosts four other wrecks under the control of the California Department of Fish



and Game. The *Yukon* will be owned by the city of San Diego, and SDOF will maintain two or three large mooring buoys, as well as a navigation buoy.

While the city of San Diego will have to accept limited liability of the *Yukon* as a recreational facility, SDOF is doing its part to ensure safety. The organization has promised to provide specialized rescue training and equipment to local lifeguards. SDOF is also working with training organizations to encourage wreck diving certification for instructors and students. To date, no diver fatalities have occurred in Wreck Alley.

Though there may be minor risk to the local government, there's little question that the *Yukon* will be an economic boon to the area. As evidence, the SDOF points to a kelp cutter sunk off Mission Beach over 10 years ago that generates \$1 million annually in new tourist dollars. The organization has conducted an economic impact study that suggests the *Yukon* will bring several million dollars a year in additional revenue to the area. In addition to its potential to aid the diving and fishing industries, supporters say the vessel will attract TV and movie producers seeking authentic-looking sets for underwater adventure scenes. In fact, *Baywatch* producers have reportedly expressed an interest in a show centered around the sinking of the *Yukon*.

According to Dick Long, chairman of SDOF, "There are lots of shipwrecks around the world, but not many of them are in shallow waters and easily accessible — especially not warships, which are a favorite among divers. Many of the divers this wreck attracts will stay in San Diego to visit other attractions, so the economic benefit extends to all businesses, not just the diving industry."

Four leading dive companies — ScubaPro, PADI International, SeaQuest and Aqua Lung — have promised

their support. Dick Long's dry suit manufacturing company, DUI, has donated \$10,000 and loaned \$30,000 to Project Yukon. In addition, many Southern California dive clubs and individuals have donated funds. Notable among them is Ocean Enterprises, which has donated \$5,000 to the cause.

Project Yukon is part of SDOF's Master Habitat Enhancement Plan, designed to increase economic development for scuba diving and tourism, and provide positive value to the oceans. In another phase of the plan, 550 tons of concrete were laid as the foundation for a kelp bed.

SDOF hopes to use the information gained from the sinking of the *Yukon* and other vessels to convince the U.S. government to prepare and donate several of its 1,000 retired vessels — currently targeted for disposal — for sinking as artificial reefs. Long's goal is to see 200 ships sunk in the next five years. "If we succeed in doing this," he says, "we will have converted a taxpayer liability into a taxpayer asset."

For more information about Project Yukon, or to donate funds, time or materials, call SDOF at (619) 523-1903, e-mail sdoceans@sdoceans.org, or visit SDOF's Web site at www.hmcs-yukon.org.



Interior Pictures of the Yukon



Touring deck 3F



Deck 3-MP



View of the top aft



Laundry area



Operations room



View of the top bow



Heads



Welded plate over starboard side of aluminum hoist



Communication center



Preparing the Yukon



Welding

Faded warship gets hero's welcome; next stop is sea bottom

By Terry Rodgers
STAFF WRITER

The old warship was a ghost of its former glory.

Its faded gray-green hull was stained with coffee-colored rust, from stem to stern.

Its masts had been severed like the tusks of a bull elephant.

All 366 feet of the Yukon, a retired Canadian destroyer tender, looked downright dumpy.

But judging by the hoopla that accompanied the ship's arrival yesterday in San Diego Harbor, you'd think this grande dame was a jeweled princess.

As the Yukon entered the harbor under tow from a huge tugboat, a fire boat shot rainbows of spray from its water cannons.

The rocket-red glare of fireworks exploded overhead. A flotilla of pleasure boats sounded their horns.

Dick Long, who'd spent nearly two years to bring the Yukon to San Diego, was as happy as a clam at high tide.

Long is a businessman and volunteer for the San Diego Oceans Foundation, the nonprofit group spearheading the project.

"We had all these naysayers saying we couldn't do this, and now it's here," said Long, beaming with pride.

"A lot of people worked awfully hard to get this ship here."

If all goes as planned and permits are issued by local and state agencies, the Yukon will have one final voyage.

Sometime this fall, the ship will be towed 1.8 miles offshore from Mission Beach and be carefully sunk so it rests upright on the ocean floor. It will join two other sunken ships in the same vicinity.

The idea is for the Yukon to become the star of San Diego's "wreck alley" and the cornerstone of an underwater playground for scuba divers from around the world.

If the sponsors carry out their plans, the ship also will be made into

a nursery for fish. To do that, the ship must be perforated with enough holes to allow nutrient-rich currents to flow through. It also must be outfitted with enough cubbyholes so that little fish can hide from predators.

Long wants the sinking of the Yukon to be more than a made-for-television spectacle. He'd like it to become a model project that could be copied in the future to help the United States dispose of more than 600 mothballed warships stored in various harbors around the country.

The San Diego Oceans Foundation has never done anything this big. It wants to raise \$1 million to convert the former warship into a viable artificial reef and sink it in 100 feet of water off Mission Beach.

So far, the foundation has raised about \$168,000.

Aside from the formidable fundraising challenge, the sponsors also must clear numerous regulatory hurdles. An Environmental Impact Report must spell out how the project will enhance rather than hurt the ocean ecosystem.

The state Coastal Commission also must give its approval.

But the bureaucratic maze that awaits the Yukon seemed an abstract concept as the thick hawser lines were thrown ashore and the ship was tied up at the Embarcadero, across from the County Administration Building.

On this postcard-perfect sunny day, an old friend appeared at the dock to greet the ship.

Lt. Gene Fedderly, 35, a Canadian naval officer who learned his basic seamanship during a four-month stint aboard the Yukon in 1986, watched with keen interest as the ship was parallel-parked along the wharf by two tugboats.

Fedderly said he just happened to be visiting San Diego this week.

"This is probably more of a fitting ending for one of these ships," he said. "It's better than the alternative, which is to be taken apart for scrap metal."



The Yukon pulls into San Diego Bay.



San Diego fire boat welcomes the Yukon.



Fireworks were lit as the Yukon announced its arrival.



View of the HMCS Yukon docked at the Embarcadero.





SCUBA LOG

April 2000

The Yukon's Call *by Randy Harvey*

I'd never before seen a warship with so many holes in it, still afloat! I was raised in San Diego and was long used to seeing the mothballed fleet tied up at the navy piers in National City. Now, here was this newcomer: a decommissioned 366-foot Canadian destroyer with holes in its hull (above the waterline) big enough to drive a car through! In addition, there were dozens of chattering girlscouts inside, busily painting nautical murals on the inner bulkheads. At the same time other volunteers were busy stripping the ship of excess parts and cleaning what was left.

In a few weeks, this vessel is to be towed from its berth



Continued from p. 1

to a position just off the entrance to San Diego's Mission Bay. There it will be sunk to become an artificial reef home for marine life, and a new, premiere destination for scuba divers.

On Saturday, March 18th Gordon, Barbara, my 86-year old mother and I gathered at the foot of 24th street, at a gate to the Marine/Navy base to meet Gene Broome, member of the San Diego Oceans Foundation and head of Project Yukon. Gene is an amiable sort, a southern gentleman, about six feet tall, burly with rust-red hair. His sense of humor, patience, enthusiasm, courtesy and concern for our safety were constant during his personal two-and-a-half hour tour of the ship for our Lost Patrol contingent.

Wait. What was that about my 86-year old mother? Oh yes, when she heard what Gordon, Barb and I were going to do, she asked if she could join us (she lives in nearby Chula Vista), and that she did; climbing, ducking, squeezing and bending into every nook and cranny on the ship. Stem to stern we visited the Map Room/Wall of Honor for the project's supporters, (where a plaque will hold the Lost Patrol's name among many others); we visited bunk rooms, the galley, various "heads", ammo rooms, generator rooms, the brig, laundry room, engine room, bilges, and command tower. We entered the fore and aft gun turrets and stood on the bow and stern. Throughout, large holes had been cut in the sides, decks, bulkheads and inner floors to facilitate sinking and provide entry points for both marine life and scuba divers. When sunk, the vessel's topmost mast will be in only 28-feet of water, while the bottom of the ship will be in excess of 100-feet.



Ex-warship nestles next to Star of India

By Terry Rodgers, STAFF WRITER

With two burly tugboats nudging it along, the retired warship Yukon slipped across five miles of San Diego Bay yesterday on its next-to-last voyage.

The former Canadian destroyer escort was moved from a remote dock in National City to a more glamorous, high-profile wharf at the downtown Embarcadero next to the Star of India.

The public can visit the ship for \$6 a person from July 1 to 13, while final preparations are made for its scuttling.

On July 15, an as-yet-unnamed youngster will press a button, igniting charges that will sink the 366-foot-long, 2,890-ton ship in 100 feet of water about 1.8 miles off Mission Beach.

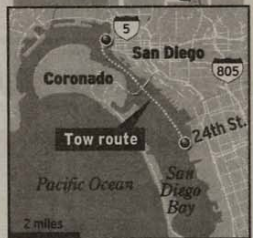
The San Diego Oceans Foundation, which purchased the ship for \$245,000 for the express purpose of sinking it, be-



A tugboat helped move the Yukon, a former Canadian navy destroyer escort, away from its National City berth to the Embarcadero. John Gibbins / Union-Tribune

SEE **Yukon** ON PAGE B-6

FRIDAY
June 30, 2000
B
THE SAN DIEGO
UNION-TRIBUNE



PETE CHENARD / Union-Tribune



HMCS Yukon at the Embarcadero in San Diego



View of downtown San Diego from the radar tower of the Yukon



The HMCS Yukon with the Star of India in the background



Milt selling Yukon T-Shirts



Major sponsors of Project Yukon

lieves the warship will make San Diego a must-see destination for scuba divers worldwide.

The ship was towed from British Columbia last year, arriving at the San Diego Embarcadero on May 5. After three weeks, the ship was moved to the 24th Street Terminal in National City.

During the 75-minute trip yesterday, the old gray-green warrior slid across the turquoise water as silently as a sloop under sail. Think of it in terms of moving a 24-story building on its side.

"It's a dead move — there's no propulsion involved," said Eric Ireland, a port pilot in charge of the operation. "You have to make sure you watch the forces being applied (by the tugs), the wind and the currents. Other than that, it's pretty straightforward."

Normally, cargo ships travel across the harbor at 10 knots, or 11.5 mph. But the Yukon, having been stripped of 50 tons of machinery, wiring and steel, rode high in the water as it nudged its way north at half that speed.

Ship supervisor Douglas Goepfert, a sort of acting captain for the ship, said he'd made sure there was enough weight in the bottom of the ship to keep it stable.

"We're in no danger of capsizing," Goepfert said.

During its yearlong stay at the industrial dock, volunteers donated more than 7,000 hours cleaning the ship of oils, greases and other toxic wastes. More than 80 holes were cut in the decks and the quarter-inch-thick steel hull to make sure divers can't get trapped.

Volunteer Bob Willey was in charge of cleaning the forward gun turret that houses a pair of 70mm cannon.

"We didn't think it was going to be as horrible as it was," he said, noting that the housing for the automated guns was oozing with gallons of oils, grease and antifreeze.

Despite all the activity, at least three pairs of birds made nests on high parts of the ship and fledged their hatchlings

while it was docked in the South Bay.

The ship was moved a few times for fund-raising events. The Navy also borrowed it for a week and blew off a few hatches while testing the effectiveness of explosives designed for anti-terrorist operations.

Inside the ship, dozens of colorful murals depicting cartoon-like sea creatures have been painted on the bulkheads.

There's a crab lifting weights, a clown-like starfish and hula-dancing anemones. But the most noticeable alterations are a pair of dolphin-shaped holes cut out of the ship's bow.

"The others are just square holes, but those dolphins are my pride and joy," said James "Milt" Beard, an Oceans Foundation volunteer and an expert with a blowtorch.

Now that it is at rest along the Embarcadero, volunteers will be sleeping aboard the ship as security guards to keep trespassers out.

Oceans Foundation President Dick Long said he's spent about \$250,000 of his own money and most of his time awake for the past year to get the ship in shape for its sinking.

Said Long: "It's been all-consuming. This thing owns my soul."

California Diving News

July 2000

Yukon Sinks Early

West Coast divers now have a new fantastic dive site even though the sinking did not go exactly according to plan. The 366 foot long Canadian destroyer escort *Yukon* quietly slipped beneath the surface in the dark at 12:30 a.m. the morning of Friday, July 14, some 30+ hours ahead of schedule. The planned sinking time was to have been Saturday, July 15 at approximately 9 a.m. when explosives were to have been detonated just below the waterline.

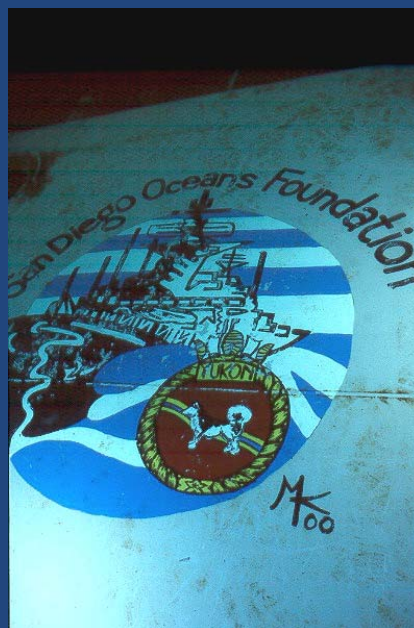
The *Yukon* was towed to the planned sinking position on Wednesday, July 12. On Thursday night at about 11 p.m. she began taking on water. The pump aboard could not keep up and the three crew members on board had to abandon ship. The ship now sits on her port side in 100 feet of water off Mission Beach. The shallowest part of the wreck is 55 feet down.

The ship underwent extensive preparations in the previous months which included the cutting over 100 holes in the ship to allow for safe diver explorations. Some of these large holes were close to waterline but its unclear how they contributed to the premature sinking.

The unspent explosives were removed from the ship and then plans proceeded as normal in spite of the early sinking. Hundreds of divers participated in the "First to Dive" (sponsored by the local dive charter boats) and "First to Night Dive" (sponsored by NiteRider) benefit dives that took place Saturday, July 15. Superlatives such as "fantastic" and "incredible" were common comments from divers.

The *Yukon* is the latest artificial reef to be added to San Diego's famous "Wreck Alley" off Mission Beach. Other wrecks nearby include the *Ruby E* and *El Rey*. As the largest ship ever sunk as an artificial reef off the West Coast of the U.S., the *Yukon* is expected to provide a habitat for thousands of fish and other marine life. Hundreds of divers are expected to visit her weekly, making her one of the most popular dive sites on the West Coast.

Funding for the acquisition, preparation and sinking of the ship was provided by the non-profit San Diego Oceans Foundation as well as from contributions from many individuals and companies. Much of the preparation was done by volunteer labor. Funds are still needed to offset the cost of the sinking. For more information call (619) 523-1903.



The HMCS Yukon



California's newest wreck dive turns San Diego's

Wreck Alley into a must-see destination. ~ by John Francis



The Mystery: Why the Yukon Sank Early

Organizers planned to sink the *Yukon* in a blaze of glory. Spectators would watch as demolition charges would punch the final access holes into the hull, sending her sailing upright to the bottom. The ship was towed into place and all was set for a Saturday morning ceremony. But fate had other plans. During the night, swells caught the ship on its side and started it rolling. Access holes cut at No. 4 deck, normally just a few feet above the waterline, started scooping water until the *Yukon* slipped under the waves, coming to rest on her port side. (See graphic, pg. 47)

In a larger sense, not much went wrong. The cleaning and preparation of the ship for diving was completed. The ship sank at the correct location. And although port access holes are blocked, the starboard holes now admit more light to the interior. Access holes planned for No. 5 deck by blasting as the ship sank were not made, but may be cut out in the future. Most important, the *Yukon's* opportunity to prove an artificial reef can enhance marine life, and tourism is unimpaired.

Hey, look! somebody yelled, pointing down at the water. "You can see it!" Sure enough, a blue-green glow stretched away to the southeast—sunlight reflected off the light-gray topsides of the *HMCS Yukon* 60 feet below us. "Boy, it's big!"

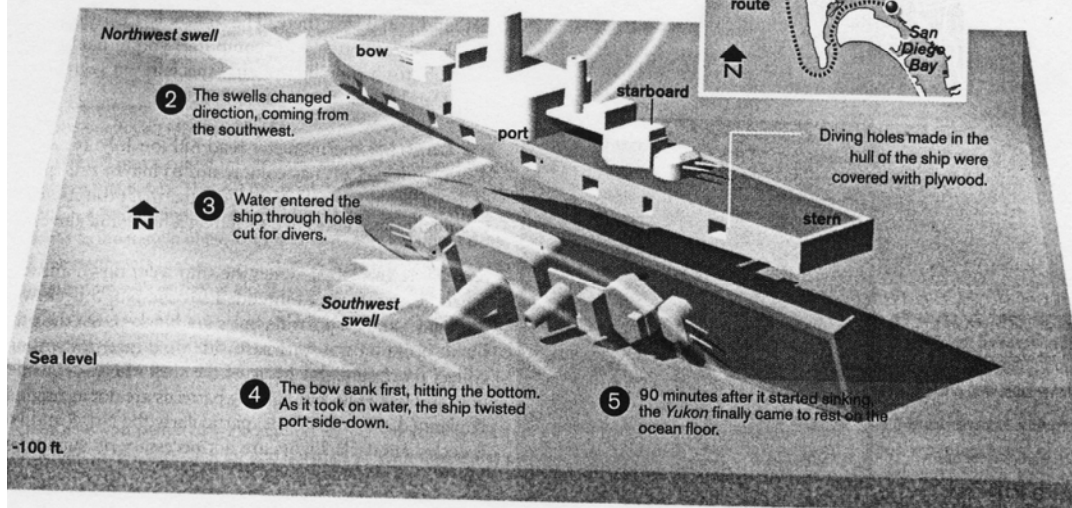
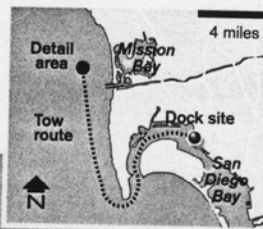
The *Yukon* was a Canadian destroyer escort, 366 feet long, 40 feet wide, with six decks and over 100 compartments. Now it's America's newest and maybe best underwater playhouse. It was sunk on July 14, more or less on purpose, in San Diego's "Wreck Alley" only two miles west of the Mission Beach roller coaster. Overnight, Wreck Alley changed from a local attraction to a dive destination worth a long trip. There were divers on our boat from Canada and Brazil, climbing over each other in the rush to be among the first divers to visit the wreck.

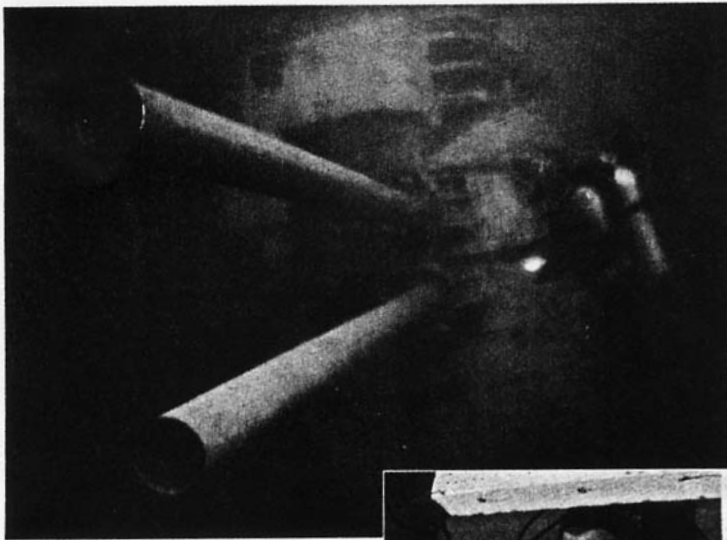
NOVEMBER / DECEMBER • 4

How the Yukon Sank

Because the *Yukon* came to rest on her port side, vertical passages are now horizontal and vice versa. However, divers can still follow wide, sun-lit passageways into the ship's interior.

- 1 The destroyer was towed to the sink site. It was last positioned pointing into northwest swells.





A first look at the *Yukon*: The intact wreck of the Canadian destroyer escort contains much of the original hardware, including the forward gun turret. The wreck has been carefully mapped out so that divers can follow stairs, hallways and access holes to key attractions in the ship.



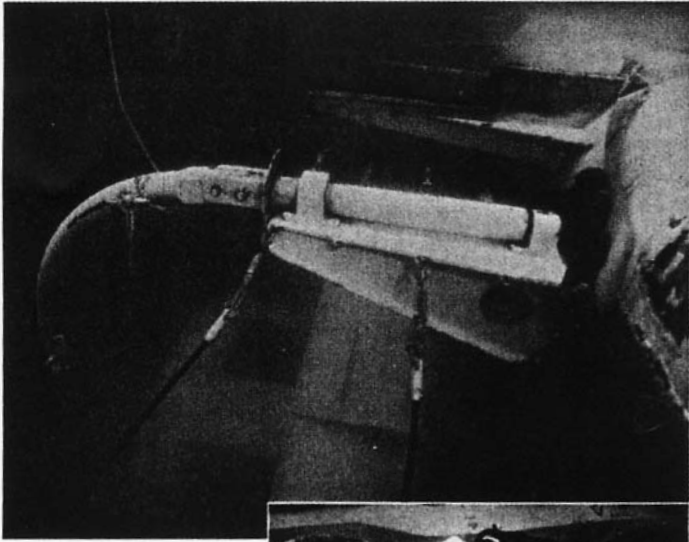
Mission Accomplished

The ship's new mission is simple: generate excitement about San Diego diving and demonstrate how a growing stockpile of old ships can be turned into thriving marine habitats. As the first of what the San Diego Oceans Foundation hopes will be many similar projects around the world, the *Yukon* could be the flagship of a new generation of wreck dives (see: "400 More Yukons?" pg. 52).

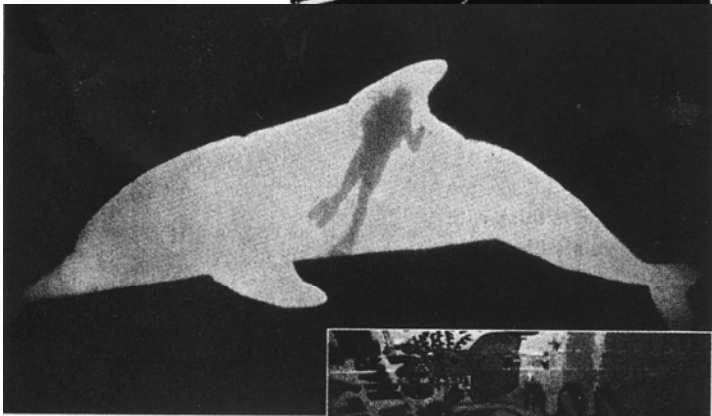
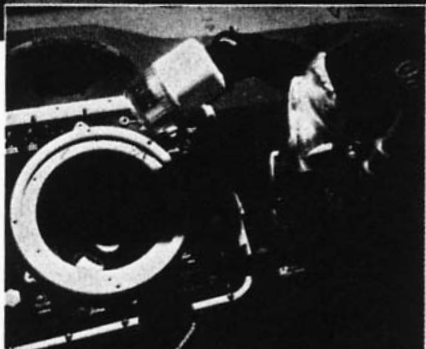
In addition to size, the vessel boasts an intact superstructure including her bridge, deck gear and twin three-inch gun turrets. Inside, the *Yukon* is a brightly lit maze of tunnels and passageways. Dozens of access holes have been cut into the hull, many interior bulkheads have been removed and hatchways have been enlarged in a process called "Swiss-cheesing." The goal was for a diver never to be more than 30 feet from an exit. As a result, ambient light floods wide interior passageways. Still, there's enough complexity that you can get temporarily lost, or at least imagine that you are lost. This is the playhouse aspect of the *Yukon*. It reminded me of being a small kid crawling through big cardboard boxes.

Also inside are some special attractions that reward divers for fully exploring the massive ship—a task that Project Yukon organizer Dick Long estimates will take 30 dives, at least.





Although the wreck was thoroughly cleaned of all contaminants, workers left much of the ship's structure intact. Here, a diver examines a radar console in the ship's bridge.



Added touches make the wreck extra diver-friendly. On the bow, this dolphin-shaped hull breach allows water and light to flow into the wreck. Deep inside the wreck, Keeline Cove includes murals painted by a local artist.



Let's Be Careful Down There

Although much was done to render the *Yukon* safe for divers, it still deserves respect. Because the wreck came to rest on its side, not upright as planned, the wreck is a bit more advanced than intended.

It's Deep. It starts at 60 feet, but you'll go at least to 80 feet, and you'll stay there. The *Yukon* is a classic "square profile" dive. Watch your computer: you're likely to run out of bottom time before air, especially on your second dive. Depth to the bottom is 100 feet.

It's Cold. My thermometer read 62F on July 16. At that depth, your wetsuit has compressed to maybe one-quarter of its surface thickness. Wear more thermal protection than you might think necessary, including a hood and gloves.

It's Dark. In places. When the ship went down ahead of schedule, access holes intended for the No. 5 deck were not made, and all portside holes are blocked. On the other hand, holes on the starboard side now face upward and collect more sunlight. Most of the ship receives considerable ambient light, but lighting patterns are not as originally planned and some areas, particularly the No. 5 and No. 6 decks, are dark. Lights are not necessary on sunny days for most of the ship, however.

It's Surgey. Currents are sometimes strong along Mission Beach. Current accelerates through openings and around large structures like deckhouses. In some cases, you can be sucked through unexpectedly and thrown against sharp, hard edges.

It's Disorienting. Inside the ship your world is sideways; floors are walls. It's easy to forget which way is up, let alone fore and aft. Be cautious about penetrating, even though there is ambient light. A slate printed with a diagram of the ship is available from local dive shops, and most openings are numbered and keyed to the diagram. For example, opening "3S5V" is on No. 3 deck, starboard side, fifth back from the bow, and vertical. (Though vertical is now horizontal.) Plan your dives carefully and accordingly.

It's Busy. On summer weekends the surface over the *Yukon* buzzes with boat traffic, not only dive boats but sportfishers, outboard skiffs and jet skis. Be careful ascending, and break the surface as close to your boat's dive platform as possible.

Yukon Highlights

Some of the "must-see" attractions are intrinsic to the ship; others have been added:

Engine Room. Both engines are in place, and were partly opened up for cleaning. Large reduction gears are visible, for example. Many pipes and ducts cross the two-

deck-high space. Access directly through hull opening 4S4. Or go “down” the large boiler room air intakes located on No. 2 deck just behind the stack. A Scubapro logo tells you you’re in the right place. At No. 3 deck, find a nearby access hole to No. 4 deck and the engine room.

Rudder Room. The place from which the ship was actually steered, on orders from the bridge. It’s located near the stern

on No. 4 deck. Go through access holes 4S7 or 4C1.

Operations Room. On an American ship, this would be called the combat information center. Here is the chart table, and the honor wall with plaques recognizing donors to the *Yukon* project. It’s just below the Bridge, on No. 1 deck. Enter through 1S1 or 1S2.

Captain’s Cabin. Just aft of the opera-

tions room, the captain’s cabin contains one of two bathtubs on the ship. Enter through BP2V, BS2V or 1S2.

“Burma Road.” A colloquial term for a nearly straight passage that runs most of the length of the ship. It gives an unusually long view inside the ship, and easy access to many compartments. It’s on No. 3 deck. There’s good access through 3S5 and 3S6.

“Keeline Cove.” This compartment on No. 5 deck was artist Mike Keeline’s canvas for a number of paintings. It’s billed as the “world’s first underwater gallery.” Unfortunately, it’s pretty dark unless and until the planned hull openings 5S2 and 5S3 are made. You can reach it from the lower part of the Engine Room, by swimming aft. Or go “down” through 4C5V or 4S2V from No. 4 deck above.



400 More Yukons?

Supporters of the *Yukon* project hope it's the first of many ships to be turned into diver-friendly artificial reefs. The U.S. Navy and merchant marine have about 400 obsolete ships in “mothballs” waiting for disposal. Normally, they would be sold for scrap, but the cost of removing toxins like PCBs is high and the price of scrap steel is low, so the ships have no buyers. Meanwhile, they cost \$20,000 each per year to store, and some are beginning to leak oil into the water.

An artificial reef program offers a “win-win” solution, says Dick Long, president of the San Diego Oceans Foundation, which brought the *Yukon* to Wreck Alley. Salvage of valuable equipment and metals from the ship can largely pay for cleaning it and making it safe for divers. Sinking the remaining hulk is cheaper than cutting it up, while providing a haven for new marine life and a tourist attraction.

An artificial reef conference was held in San Diego in conjunction with the sinking to spread information on how to turn a ship into a reef. The proceedings of the conference will be published. For a copy, contact the Marine Technology Society, Box 371348, San Diego, CA 92137.

For more information on Project Yukon and the San Diego Oceans Foundations, visit the web site at www.hmcs-yukon.org or www.sdoceans.org.



The Rest of Wreck Alley

Ruby E

The big wreck at Wreck Alley until the *Yukon* arrived, the *Ruby E* began life as a Coast Guard cutter. Then named the *Cayne*, she was 156 feet long and 40 feet wide. It was later converted to a fishing vessel, then a salvage vessel, when it acquired its present name. In the late 1980s, it was donated to the artificial reef program, cleaned, salvaged and sunk. It lies upright in 85 feet of water about one mile off Mission Beach.

The *Ruby E* was opened up for diver safety, though not as extensively as the *Yukon*. Though there are not as many access holes, there is a large one on the port side of the hull that gives good access to the middle of the ship, and several in the upper deck. But all compartments receive some outside light. Highlights include the engine room with its pair of big diesels, and the props.

After 11 years on the bottom, the *Ruby E* is covered with life, including many big white anemones and purple gorgonians. "It reminds me of a Rose Parade float," says one diver.

El Rey

Once a self-propelled barge equipped for kelp harvesting, the 100-foot long *El Rey* was cleaned and donated to the artificial reef program in 1987. It sits upright in about 80 feet of water. Much of its superstructure has collapsed, so its original appearance is difficult

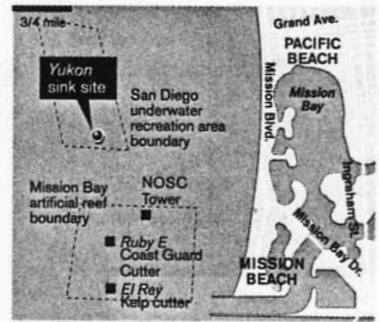
to imagine. But, like the *Ruby E*, it is thick with invertebrate life. Some say it attracts bigger fish.

NOSC Tower

It looked like an oil platform, but NOSC Tower was a research station built by the Naval Ocean

Systems Center until it collapsed in a storm in 1988. Today, it's a tangle of girders and beams from 30 to 60 feet, a more open structure than a ship's hull. "It's like a jungle gym," says Jay Ferland, a Mission Bay dive boat operator. On the other hand, because the tower is a "natural" wreck, it has more entanglement hazards in the form of dangling cables and tight corners. Broken beams jut out, a collision hazard especially when surge is high.

With 10 years on the bottom, the tower is thickly covered with filter feeders like strawberry and yellow anemones, purple and brown gorgonians, hydrocorals, mussels, sponges and urchins. Here too are many schooling fish like jacks and anchovies.



Underwater sightseeing

Sunken ship creates a boom in local dive tourism business

By Terry Rodgers
STAFF WRITER

A sunken ship is as good as buried treasure when it comes to perking up interest and tourism spending from scuba divers.

San Diego charter boat operators say bookings have ballooned since July 14, when a retired Canadian warship, the Yukon, sank two miles off Mission Beach to serve as an attraction for divers.

"It's been wonderful," said Lois Cochrane, co-owner of Lois Ann Dive Charters in Mission Bay. "We've had the busiest summer we've ever had in the 12 years we've been in business."

Cochrane estimates that her business has increased a third since the Yukon went down.

"We've have a number of customers coming back numerous times to dive it," she said. "They

really love it."

The Yukon's popularity with divers has soothed the sting of disappointment for leaders of the San Diego Oceans Foundation, which bought the vessel for about \$235,000 to turn it into a divers' Disneyland.

The 366-foot-long destroyer escort accidentally sank the day before it was supposed to be scuttled with incendiary charges. Experts were hired to ensure that the ship would settle on the ocean floor in an upright position.

Instead, the ship foundered in choppy seas and went down while anchored about two miles west of Mission Beach, disappointing thousands who planned to watch the spectacle. The vessel rests on its side.

Those involved with the project said the accidental sinking was caused by a combination of lousy luck and human error, such as having only one pump available when the ship began taking on water.

Volunteers for the Oceans Foundation worked for a year preparing the ship to be scuttled. They

removed toxins, primarily oil and grease, and cut more than 80 escape holes in the ship's six decks and hull so divers could avoid becoming lost or trapped.

When it went down, the 70-foot-tall ship settled on its left side at an angle of 75 to 80 degrees.

If the vessel had gone down as planned, the ship's mast would have been just 30 feet below the surface — an easy dive even for a beginner. Instead, a diver must descend approximately 58 feet before reaching the closest part of the ship.

Organizers of the project initially were concerned that the Yukon might be too deep for beginning divers and too dangerous for intermediate divers to poke around inside. But the depth of the sunken ship has not proved to be such a formidable obstacle after all.

"Everybody who's a diver is real jazzed about it," said Phil Matticola, president of the San Diego Council of Divers.

Business is especially brisk on weekends, with

SEE Yukon, B7



Fredrik Uggeldahl (right) of Stockholm, Sweden, made final preparations for a dive from the charter boat Lois Ann to the sunken warship. John Gibbins / Union-Tribune

YUKON

CONTINUED FROM PAGE B1

Warship sank the day before it was scheduled to be scuttled

bookings selling out among most of the diving charter services.

"Private boats are tying up to each other end to end," Matticola said. "At times, there's so many divers and so many bubbles that people are saying it's like diving into a jacuzzi. It's just packed."

He estimated that 70 percent to 80 percent of those diving to the Yukon are from outside the San Diego area.

Sport anglers also have been trying their luck, hoping to hook into lunker bass and other fish attracted to the wreck. Divers have noticed pieces of monofilament fishing line snagged on deck.

Much of the hull is covered with a greenish brown algae, which have provided a chalkboard of sorts upon which divers have written their names and assorted graffiti.

Over time, the Yukon will become so encrusted with marine life that it will resemble a float in the Rose Parade, divers

say. Oceans Foundation President Dick Long hopes to find a university willing to study how the ship affects sea life and how it compares to nearby reefs.

To help monitor the metamorphosis of the Yukon from sunken warship into an artificial reef, Long said, he will encourage divers to volunteer as fish census takers.

"We want people to become fish watchers just like other people are bird watchers," he said.

Despite its premature sinking, the ship settled on the ocean floor in 100 feet of water at the exact spot where it was supposed to land.

"To go inside you really need to be an advanced diver and have specialized training," said Bob Watts, an Oceans Foundation board member.

The foundation labeled each deck and the interior compartments with plastic locator maps, but the tilt of the ship has made it difficult to read them.

"Private boats are tying up to each other end to end . . . there's so many divers and so many bubbles that people are saying it's like diving into a jacuzzi."

Phil Matticola

The foundation does not have the \$200,000 to \$500,000 it would cost to pull the ship into an upright position. The group must still repay more than \$125,000 in loans and outstanding debts from the project.

Charter boat operator Jim Sticker said many divers prefer that the ship is tilted on the bottom and they don't want it to be fiddled with.

Said Sticker: "One of the things they like about it is the fact it didn't go down straight. It has more of a feeling of diving on a real wreck. They like the challenge."





Yukon Diver's Map

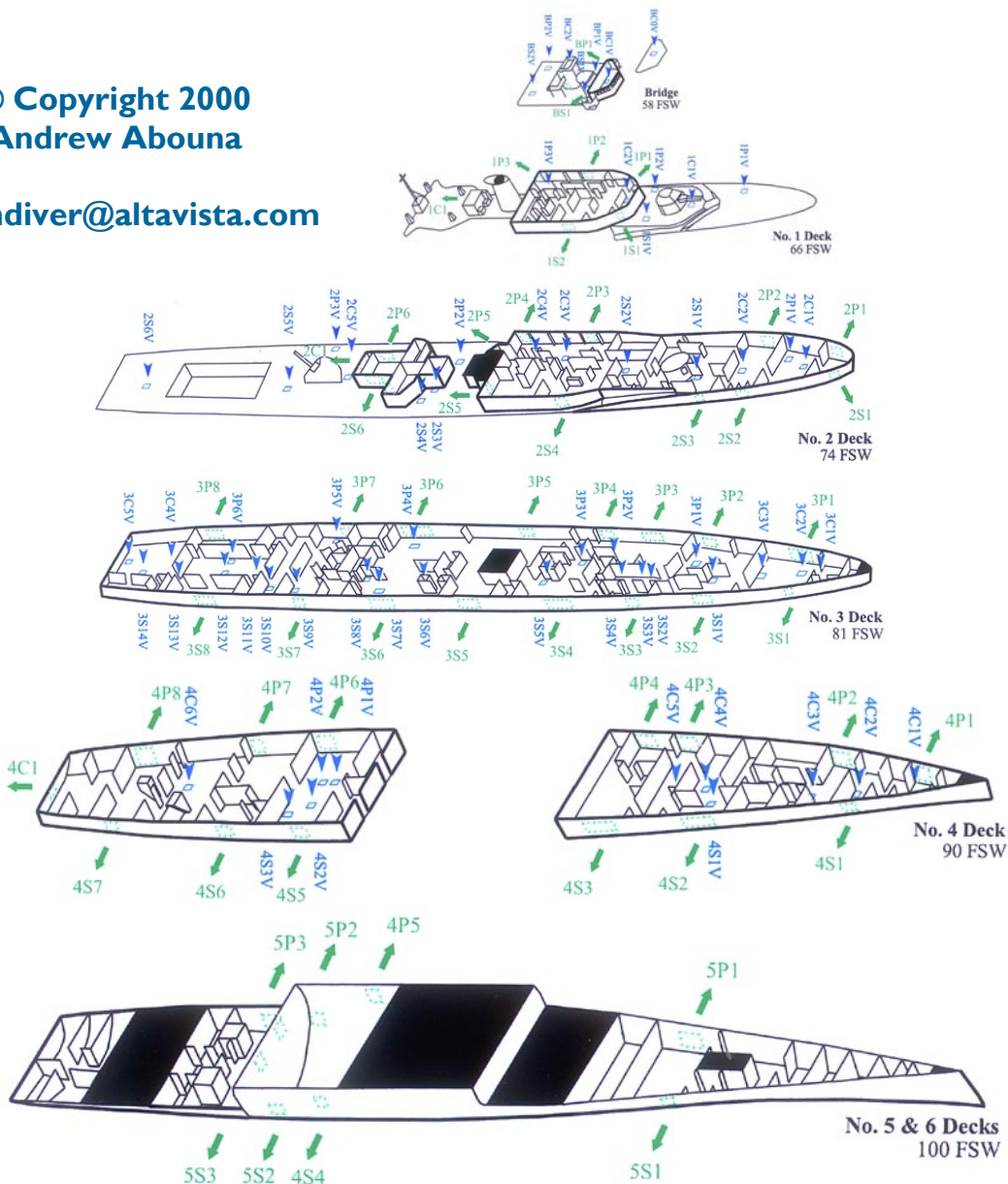
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Andrew Abouna

yukondiver@altavista.com





HMCS Yukon Servicemen

These are just a few of the men who experienced the HMCS Yukon during it's 30 years of service. Email addresses may no longer be accurate.

Last Name	First Name	City	ST	email	Rank	Title	Served
Alexander	L.Ross	Warton	ONT	alexers@beyondtv.net	P.O. 1st Class	Chief Electrician	4/10/78 - 6/18/81
Allan	Jock	Orleans	ONT	jallan@istar.ca	Rear Admiral RCN (Ret'd)		
Allard	Bernard	Ottawa	ONT	allardb.s@intranet.ca	Lieutenant Commander	Deck Officer	9/1969 - 10/1971
Arriaga	Gonzalo	Santa Cruz de Tenerife	Spain	garriaga@ole.com	NCDT	Mars II Trainee	7/92 - 9/92
Badiuk	Alex			alexbadiuk@aol.com			1965-67 & 1983-86
Bailey	Richard			rbailey@husky.on.ca			
Becevel	Michael L	Victoria	BC	leveceb@spring.com	PO2	Senior Communications Technician	12/81-12/83 & 85-88
Berreth	Terry	Chase	BC				
Boivin	Neil	Victoria	BC				
Bradbury	James	Victoria	BC	james-bradbury@home.com	Lt Commander	Engineer	1978 - 1981
Brand	Norbie	Bamfield	BC	fdengler@home.com	sub-lieutenant		9/74 - 4/75
Butler	Jeremy	Roche Harbor	WA	jere-myb@rockisland.com	Nav. Officer	Deck Officer	12/1967-5/1969
Caithcart	Brian	Saskatoon	SK		Able Seaman	Radar Plotter (NCI OP)	1/87 - 7/88
Carr	Gordon J	Edmonton	AB	grace-car@telusplanet.net	Leading Seaman	Radar Plotter	1965-1968
Catala	Jimmy	Vancouver	BC				
Cawley	Brent	Nanaimo	BC	b_cawley@hotmail.com	Ordinary Seaman	Boatswain	1981 - 1983
Chatigny	Al	Pt Coquitlam	BC	achatigny@home.com	Master Seaman-PO2	Storesman (MSST)	12/1979 - 1/1982
Chess	Sandy	Saanichton	BC	kimtuk@sprint.ca	Lieutenant (N)	Decommissioning Deck Officer	
Cheverie	Paul	Calgary	AB	detchevery@home.com	Ordinary Seaman	Weaponsman	3/77 - 12/77
Chick	Courtney	Ottawa	ONT	court_62@yahoo.com		Signalman	33604 - 12/1993
Clarabut	David	Campbell River	BC	dclarabu@wcb.bc.ca			
Cocks	Bob	Mahone Bay	NS		Commander	Captain	5/25/63 -
Cond	Tony	Victoria	BC	tcond@access.victoria.bc.ca	Sub-lieutenant	Engineering Officer	9/77 - 12/78
Cormier	George	Halifax	NS		CPO2	Chief Electrical Technician	31594 - 32356
Cossey	Ken	Ladysmith	BC	kcossey@seaside.net	Able Seman	Storesman	1976 - 1979
Cotaras	Constantine	Toronto	ONT				
Coyle	Dan	New Westminster	BC			Sonarman	
Dash	Ted	Langley	BC		Able Seaman	Stoker	May 68 - Dec 69
Dash	Dalton	Duncan	BC	daltodash@home.com	Able Seaman	Fire Controlman	8/15/71 - 10/25/71
Devers	Wayne	Comox	BC				
Dierick	Morris	London	ONT				
Downing	John	San Diego	CA	john@trainingcity.com	Lieutenant		1988
Duncan	Bruce RR#3	Windsor	NS				
Fitzgerald	Dan				Commander	Skipper	
Frederick	Roussel				OS	Mar eng mech 312	23151 - 12/1993
Freeman	David J	Victoria	BC	dfreeman@inetex.com	Lt Commander	Advisors Ships' Names Committee	





HMCS Yukon Servicemen

Last Name	First Name	City	ST	email	Rank	Title	Served
Gallagher	Frank	Waasis	NB	yukon1@nbnet.nb.ca			
Gertsen #120	Cary	Richmond	BC	carager@netcom.ca	OS AB AW1	Administrative writer	6/65 - 6/67
Girard	Stephane	Victoria	BC	sgrambo@sprint.ca			
Grady	Mike	Portland	OR	mgrady@cnnw.net	MSNESOP		
Guay	Jack	Dartmouth	NS		PO	Weapons	5.25.63 - 1965
Guenther	Gerald Wayne	70 Mile House	BC	marik@telus.net	LS to P1	Marine Engineer	'68-'72 & '74-'79
Gunning	Bill			wgunning@sprint.ca	Lieutenant	Weapons officer	
Hall	Ian	Nanaimo	BC				
Hamilton	Don	Victoria	BC	vic-stanker@pacificcoast.net		Electrical Technician	25750 - 26146
Hammond	John	Vancouver	BC	jmhammond@telus.net			
Harrison	Dave	Abbotsford	BC				
Harrison	Wayne	Kelowna	BC				
Hatten	Gordon	New Westminster	BC			Engine Room Artificer	1964 - 1965
Heffernan	John			heff@sprint.ca			Jan '83 - Dec '83
Henry	Hank				Petty officer		23156 - 23769
Hutchings	Derrek	Victoria	BC	derrek@coastnet.com	P2ER		'80-'85 & '87-'91
Irwin	Ernest	Truro	NS		Petty Officer 1st Class		10/63 - 1/65
Jansen	Peter	Richmond	BC	pete_jansen@telus.net	Able Seaman	Radio Operator	9/77 - 1/78
Johnson	G			sjhono@infinet.net	Able Seaman	Weapons Tech	2/19/1985 - 1987
Jones	Harvey	Nanaimo	BC			Chief Radarman	1/65 - 5/65
Keeping	Louis	Halifax	NS			Seaman	1960's
Kelly	Michael	St Albert	AB				
Kent	Dennis	Abbotsford	BC	denniskent@home.com		Radioman	1969 - 1970
Kinsman	William			wil-liam_g.kinsman@bc.sympatico.ca			
Kinzel	Wayne	Toronto	ONT				
Klopp	Roy	Clinton	BC				
Lee	Ken	Abbotsford	BC				
Lee	Randy	Abbotsford	BC	chummie@uniserve.com			
Macfarlane	Keith				Master Seaman	NESOP	3/2/93 - 12/2/93
MacIvor	Ian	Edmonton	AB	shwing@home.com	Seapup		
May	Michael	Victoria	BC				
McDougall	Keith	Victoria	BC	wa956@victoria.tc.ca	Petty Officer 1st Class		8/76 - 1982
McLean	Tom				LSWU3		2/4/81 - 2/4/88
McLeod	Scotty						
Mitchell	Robert	Victoria	BC	r-mitchell@home.com	PO1	Sr Naval Electronics Technician	7/15/85 - 12/1/87
Moller	Conrad	Victoria	BC	cmoller@pacificcoast.net			
Norman	Kirk	Victoria	BC				
O'Leary	Bernie	El Cajon	CA				1977 - 1981
Orrick	Bob	Richmond	BC	cys@intergate.bc.ca		Sr Communicator	8/1966-1/1968
Orton	Ron	Vancouver	BC			Electrician	1968 - 1971
Paar	Vic	Aldergrove	BC	vicpaar@home.com			
Paquette	Ed	Victoria	BC	stokes@rslnet.net	OSER	Stoker	1990-1992
Park	Kenneth	Barrie	ONT	kpark@bconnex.net			
Peters	Art			s_peters@bc.sympatico.ca		Cook	1965 - 1967
Phelps	James	Calgary	AB	jp48454h@hotmail.com			1960's





HMCS Yukon Servicemen

Last Name	First Name	City	ST	email	Rank	Title	Served
Phillips	Wilf	Nanaimo	BC		Able Seaman	Mar Eng Tech	2/54/68 - 1983
Phillipson	John	Aldergrove	BC		ABEM1		1/27/65 - 8/65
Picard	Pierre	Esquimalt	BC	picard_pierre@hotmail.com			'84 - '87
Pilcher	Tom			jamesle-wellyn@home.com	Petty Officer 1st Class	Sr. Naval combat information officer	1986 - 12/3/1993
Plant	Hugh	Lunenburg	NS		Executive Officer		1963 - 1965
Reeves	Frank	Portland	OR	freeves@teleport.com	Chief Petty Officer 2nd Class	Operation Division CPO	1989/1990
Roberge	Ray	Pt Coquitlam	BC				
Ross	David	Borden	ONT			Ships Photographer	1985-1989
Sanborn	Richard	Alert Bay	BC	asanborn@island.net			
Schley	Bev	Victoria	BC		Petty Officer 1st Class	Sr Weapons U/W Supervisor	1972 - 1974
Shaw	Collin	Victoria	BC	chpshaw@home.com	Captain RCN, Ret	Commanding Officer	9/1969 - 1971
Shirran	Rick	Paget, Bermuda		rshirran@hotmail.com	Petty Officer 2nd class		
Simpson	Ron	Pt Alberni	BC				
Sinclair	Dave	Victoria	BC	davesinc@home.com	Coxswain		1974 - 1977
Smith	William	Victoria	BC				1967 - 1969
Smith	Robert	Delta	BC				
Sproule	Hugh			wind-chim@islandnet.com			
Stanker	Vic	Victoria	BC	vic-stanker@pacificcoast.net		Electrical Technician	24898 - 26146
Stone	Gary Paul	Dartmouth	NS	gpstone@sprint.ca	Leading Seaman	Signalman Sea	'75-'80 & '82-'85
Thomas	Tommy	W Vancouver	BC	tthomas@direct.ca	L-CDR	Executive Officer	1967 - 1969
Tillapaugh	Lyle	Nanaimo	BC	tilly@pacificcoast.net			
Tinnion	John S				CPO1	Coxswain	1978 - 1981
Tkachuk	Mark	N Vancouver	BC	ethan2@home.com			
Todd, Sr	Reginald	East Sooke	BC	toddrf@pacificcoast.net	Petty Officer 2nd class	Able Seaman, cook, trade group 2	'63-'65 & '76-'80
Tomblin	Dave	Errington	BC	cvolks@home.com		Stoker	'82-'84 & '89-'92
Truscott	Bob	Victoria	BC	bobsboats@home.com		Radar Plotter 271	July 1978 - May 1983
Van Doorn	Gerry			van_doorn@email.msn.com		Senior radioman / Combat Chief	5/87 - 12/93
Vinette	Jean Jacques	Victoria	BC		Able Seaman	Steward	Fall 1978 - 1980
Waldron	Ken	Vancouver	BC				
Wassing	Rick	Victoria	BC	taz.cpl.are@home.com	OS / Leading Seaman	Marine Electrician / Electrical Tech	July 87 - Oct 87
Westwood	Lee	Victoria	BC	westburg@sprint.ca		OS Signalman	3/22/94 - 3/22/95
Williams	Ian	Hope	BC				
Wills	Al	Victoria	BC	alwills@home.com	Firecontrolman	FC Maintainer	1983 - 1984
Wood	Frederick	Coldbrook	NS				
Wood	Frederick	Apollo Beach	FL	jstevevo@juno.com	Chief Petty Officer 2nd Class	Engineering Branch	4/71 - 1973



The following stories and comments were submitted by former crew and servicemen that spent time aboard the Yukon.

I was one of King Neptune's mermaids. I went to a second hand store to buy a bra that would fit me. My wife sewed a port and starboard nipple on me with red and green sequins. She sewed a tail from waist down and I had to be carried to the stage. When the sun came down I had a sunburn outlining the bra straps.

If the bulkheads could talk, they would tell the stories about our trips up the Columbia River to the Portland Rose Festival. It was a long haul, but residents there put in for a draw who would go for the ride. There was lots of cold beer and patronizing. In 1972 they got rid of the Tot of Rum-a British tradition and carry over from the Royal Navy. We used to get a daily ration of two beers, and two and a half ounces of really dark rum. It was good stuff. But then they put bars on the ships and we were rationed just two cans of beer instead-except when we went up the Columbia to the Rose Festival!

I made two trips to Australia, one to South America, Peru, and to Skagway and White Horse, Alaska. We made numerous trips to San Diego. In fact, all of our Victorian fleet used to tie up at the foot of Broadway. We would go to a neighborhood bar called Bernie's for a last wet before leaving port. When they leveled the bar, the Bernie's sign found its way on board the Yukon. We hung it at the stern for Christmas decoration. Our electricians wired up the lights.

One time while tied up in Victoria, we watched a farmer tear down a cedar fence. We put all those boards on the walls in 3 mess lounge on 2 deck. It looked like the inside of a log cabin down there. Cook gave us his pastry bags and we put plaster in them to caulk the logs. We painted a false window with a snow scene, had a wolf skin, snow shoe, moccasins, deer antlers. . . even had an outhouse door and blue moon painted on the bulkhead. We got away with that for two years before an inspection.

We had a lot of good times on the Yukon, and some not-so-good ones. When a sailor lost a relative while on board the ship, I would run phone patches through the radio circuits for people to call home. This was in the day before staellite communications.

I was a sparker, or radioman-and a barber. I had the best time in my whole naval career aboard the Yukon-the best of shipmates. I still work in the Navy Dock Yards, and run into old ship mates all the time. We feel sad thinking about the ship going under, but her life isn't over.

~ Michael L. Becevel

Petty Officer and Radioman aboard HMCS Yukon

December 1981 - December 1983 and again in 1985 - June 1988



~ Paul "Cheve" Cheverie

I attended the decommissioning ceremony for another ship I served on. We took a day sail, disembarked on a jetty in three ranks. . . not a dry eye on the rock. It was like a funeral. I imagine watching the Yukon going down would be the same feeling. She was a good ship, but I can't think of a better way for a warship to end her life (above water). Nice to know it'll be a place for fish to grow.

I took my first big trip in the Navy aboard 263. I liked the job I was doing (Weaponsman), but there were too many rules-too many outdated traditions. Everybody's favorite, certainly, was the Crossing the Line ceremony (crossing the equator). We were called tadpoles, and tried to escape King Neptune's pill by hiding in the ship someplace. the pill was a mix of whatever rotten stuff the shell backs could find-I remember old putrified canned fish. We had to put our whole bodies in buckets of the stuff. Once you crossed the equator, you were known as a shell back. I still carry my card in my wallet. Ah, the Yukon. Great ship, great crew, great trip.

~ Unknown

Just a short note to add to YUKON'S history. She saved the James Sinclair from sinking off Vancouver Island in 1985 (can't remember the date) it was quite a scary night as I recall. The Sinclair was a brand new Canadian Fisheries patrol boat at the time, and named after ex-Prime minister Trudeau's wife's (Margaret) father. She went aground and Yukon was called to the rescue, we used divers with mattresses to plug the holes in her side and sent people over with pumps to keep her afloat until she got to a port not far away (can't remember which one BAMFIELD maybe). Ironically a few months later Yukon went a ground off the San Juan Islands @0400 one morning enroute to Seattle.(the officer of the watch got us off course and wouldn't listen to the radar people so we grazed a reef and tore off the sonar dome.)

Anyway she was a GREAT SHIP and I have may happy memories (and some I don't remember after a night on the town at Bernies). Losing a ship you sailed on for so long is like losing a loved one, and you actually cry a little knowing she's gone for good. But the bright side is that she will be used for something good and not razorblades. I actually have an original commissioning book of her from 1963.

~Dave Tomblin PIER (retd)

April 07, 1999

I was with the Yukon from '82-84 and again from '89-92. I served as a stoker and although I am nowhere near the longest serving member, I was wondering who might be. Frank Coveney told me hew was with 10 years. CPO2 (Paddy) Dunn who is still serving (possibly in Fleet School Esqyumalt Damage Control Division) may also be a candidate..



~ **Brendan Coyle**

My brother served on Yukon in the late 60's as a Sonarman. He recalled that while on patrol in the North Pacific with the U.S. 7th fleet, and the Canadian warships Mackenzie and Qu'appelle they had caught a Soviet submarine in American waters and had chased it all the way into Soviet territorial waters. The Soviets came out to "meet" them and it got pretty tense - such were the "battles" of the Cold War!

Another incident happened while showing the flag. Yukon was in El Salvador when a military coupe of the government occurred. All crew returned to the ship and were put on alert - weapons issued from the armoury stores in case the locals attempted to storm the ship for weapons. The ship quietly left port, armed.

~ **Brent Cawley**

I was onboard when the USS Kitty Hawk just about rammed us off the coast of Vancouver. I would like to know if you have any information on the results of the inquiry, and what happened to our captain, Commander Crow.

~ **Lieutenant Commander Allard**

My time spent in Yukon was probably the best period of my Naval career. The ship's company both Officers and Men was by far the most friendly that I had the pleasure to serve with during my 35 years in the Navy. Participated in Expo 70 in Japan. Not only did I serve in Her but my daughter Francine was baptized in Her and had her name inscribed on the Bell. Wouldn't mind being brought to San Diego for Her sinking in 99.

~ **Shaw H. Collin**

Following refit fall 1969 worked up in San Diego area early 1970. Yukon was 1 of 3 ship Canadian group visit to Japan for Expo 70. During return voyage, took part in RIMPAC out of Pearl Hbr. Took Yukon to San Diego several times. My ship's company always enjoyed a SD port visit.

~ **George Cormier**

This will be approximately the third destroyer I have served on that's become a reef. Fortunately this has occurred only after the vessel has been retired. I will look forward to hearing from those I have served with but lost touch with over the years.

~ **Rick Shirran**

I was with the crew that took her to the west coast in the 70's. One of the best ships I've ever served on



~ **G. Johnson**

The crew was great and we had lots of great times on board her. We spent lots of time out at sea training the young officers coming on board. Needless to say we played a lot of pranks on the officers. I got to see her go out for her last trip while still commitioned and she had one long ships penant flying off the mast head that trailed aft and out onto the water, it was that long.

~ **Ian MacIver**

I served aboard from April 1988 to June 1988. I was billeted out for Yukons deployment overseas, to Japan, Korea, and Hawaii. It was a short stay with her, but exceptionally enjoyable. I served in the capacity of a Seapup. That is, I was in the Sea Cadets, like the kind you have there. I was just shy of 18 when we went to sea. Eye opening. I decided then, that I was grateful for the opportunity to serve, but also decided against a full military career, though I did join the Reserves. While aboard for the deployment, I kept a journal for the entire cruise, and have many pictures. I also have a fair list of the crew at the time, if you are interested. I am also in the process of obtaining some of the Ship's Log from that time, to round out my "collection". Originally, I was dismayed at the thought of scuttling her, but, better that than cutting her into razor blades... So, let me know if you are interested in anything I have, from photos, to architectural drawings, to whatever.

~ **Tom Pilcher**

Supervisor in charge of operations room, crew on Yukon's final cruise to Hawaii in 1993

~**Reginald T. Todd Sr. CD, UNFICYP (retrd.)**

Welcomed back on board for final sail and decommissioning on Dec. 1993

~**Tommy Thomas**

The Yukon was a great ship with a great crew. Known in navy circles as a happy ship.

~ **Al Wills**

Only sailed a few times on her as I was on special duty as the 1984 Olympic Archery Coach

~ **Keith Macfarlane**

My first ship and the best, isn't the first always. My first time away from home, off to San Francisco diego, Hawaii and many places in between.



HMCS Yukon Stories

~ **Ken Cossey**

I got into the fleet as a young OS Signaller. I decommissioned her as well. I do know a lot of people that have sailed in Yukon and I would be happy to pass on information that you have. It is nice to see that people still remember that ship.

It always seemed to me that whenever we travelled anywhere it was always in circles. I trust it had nothing to do with the MARS IV navigational styles. For a while I was bunked in Mess 34 and then for some strange reason the Stores Branch and the other support services branches were moved into Mess 32. In typical style the stewards always seemed to know before it became official.

~**Alexander L Ross**

Of all the ships I served in during my 26 year career Yukon was one of the most enjoyable. For some reason she was always a happy ship with a good crew. I am left with many fond memories of her. I noticed many names on the crew list of many old friends & acquaintances. Good luck in all your endeavours.



THE
Commissioning
OF
HMC5 YUKON

MAY 25, 1963

AT BURBARD DRY DOCK CO. LTD., NORTH VANCOUVER



The commissioning of HMCS *Yukon* is a proud event for the Royal Canadian Navy.

The *Yukon* will add new strength, new vigour, and a new name to the fleet. I know that this fine ship will bear the name proudly and, like the great northern river that she is called after, will take an honored place in Canada's heritage.

I would like to congratulate the men who designed and the men who built HMCS *Yukon* on a job well done.

To her Captain, officers and men, God-speed, and best wishes for a very successful commission.

H. S. RAYNER
Vice-Admiral, RCN
CHIEF OF THE NAVAL STAFF

— THE TASK



Within the framework of national defence policy, the Royal Canadian Navy is charged with the responsibility for ensuring that Canada, in concert with allied and friendly nations, has unrestricted use of the seas in peace and war.

The prime threat at sea today is the submarine. It is for this reason that the Royal Canadian Navy has specialized in anti-submarine operations and has developed, in partnership with Canadian industry, a series of ships especially designed for anti-submarine warfare. Latest of these ships is HMCS *Yukon*.

The *Yukon* carries anti-submarine equipment and weapons which embody numerous products of science and technology contributing to her fighting efficiency. Yet for all this ship's sophisticated systems and technical innovations, it is upon the officers and men who sail her that her effectiveness ultimately depends.

Far from diminishing the role of the sailor, modern equipment, weapons and tactics impose heavier demands upon the human element than was ever the case in the past.

Today's sailor must be a skilled technician. He must be resourceful and intelligent. He has to be educated and alert, with a capacity to assimilate and translate into action the knowledge required of him in the discharge of his duties. Every man on board a warship must know his job intimately and thoroughly and be prepared to act instantaneously and correctly.

A CANADIAN ACHIEVEMENT

HMCS *Yukon* is the third ship of her class to be commissioned. Name ship and first of the class commissioned was HMCS *MacKenzie*. Three other "MacKenzie's" are now building in Canadian shipyards.

The *Yukon* was laid down at Burrard Dry Dock Company Limited, North Vancouver, B.C., in October, 1958, and launched on July 27, 1961. She was sponsored by Mrs. Douglas Harkness, wife of the then Minister of National Defence.

The ship will commission with 17 officers and 234 men. She has an overall length of 366 feet, a beam of 42 feet and a mean draught of 13.5 feet. Her displacement is 2,900 tons. Her twin screws are powered by geared steam turbines. She has a designed speed of 28 knots. A high degree of manoeuvrability is provided by twin rudders.

The *Yukon* is insulated and air-conditioned for both the fighting efficiency and comfort of her personnel. Her rounded lines will counter ice formation and facilitate the washing down of radioactive contamination. Her anchors are housed in recessed chambers, equipped with manually operated doors, to reduce ice-forming spray. The cupstair, usually located on the fore'st'le, is below decks.

As in the earlier *St. Laurent* and *Restigouche* class destroyer escorts, the commanding officer of the *Yukon* will "fight" the ship from the operations room. Here, although he is not in visual contact with the sea or the tactical situation, complex sonar, radar, direction-finding and other equipment enable the captain to take his ship into combat. The wheelhouse is on the main deck, two decks below the bridge for reduced vulnerability during action.

CONSTRUCTION

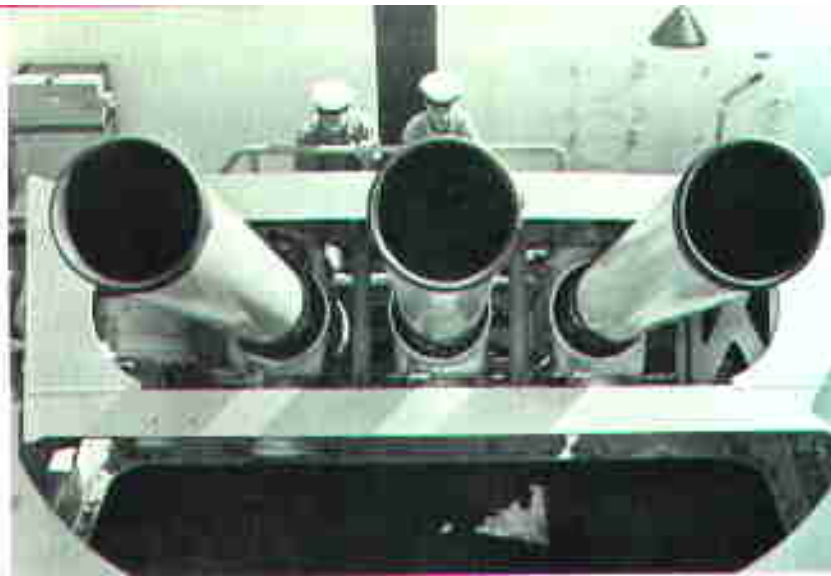
The unit construction technique, developed in Canadian shipyards, has been employed in building this ship. Instead of building from the keel up, in the conventional manner, separate units are prefabricated, then carried to the building ways to be positioned for final welding.

This unit method makes possible the construction of the vessel by sections under cover, where the work is protected from the weather. The system also allows movement of each section within the fabrication shed in such a way as to ensure the most efficient attitude for erection and welding.

This method also makes it possible for several structural steel manufacturers to be working simultaneously on different components of the ship. Drawings are such that reference to the shipbuilder would, in these circumstances, be unnecessary. The sections could be shipped to the shipyard which would, in effect, become an assembly plant. A high production rate could thus be achieved if required.

The *Yukon* is nearly all welded, and the welds are X-ray tested to disclose hidden defects. A large quantity of aluminum has been used in the ship's interior and superstructure, improving stability through weight reduction.





WEAPONS

Anti-submarine weapons are the principal armament. They include two "omni-directional" three-barrel mortar mountings capable of firing high explosive projectiles with great accuracy.

The mortar is controlled by means of electronic apparatus which locates and tracks the submarine and fires the mortar at the correct moment. The ship is also equipped with homing torpedoes which can track and strike an enemy target regardless of its evasive action.

Other weapons include one twin 3-inch 70 calibre radar-controlled gun forward and one twin 3-inch 50 calibre aft, each with an extremely high rate of fire. Primarily anti-aircraft weapons, they can also be used effectively in surface action.

PROPULSION MACHINERY

The ship is powered by two main steam turbines geared to twin shafts. Hardwood and ground gearing has been used, reducing substantially both the gearing weight and housing dimensions. The main engines are rated at 30,000 shaft horsepower.

Auxiliary machinery is turbine, diesel or electric-powered.

The two water-tube boilers are of extremely compact design, with steam maintained at a constant high pressure and temperature. Remote and automatic controls are used to an extent rarely found in a warship.

ELECTRICAL EQUIPMENT

The *Yukon* has electronic and electrical systems more extensive and complex than those carried in Second World War ships twice her size.

Her generators can produce enough power to supply light, heat and power to a city of 18,000 population.

Most functions of the ship, including armament, navigation, cooking, ventilation, air-conditioning and communications depend on electrical power. About 300 motors and motor generators provide the motive force for a wide variety of equipment. The ship's main electric power is alternating current.



ELECTRONICS:

The *Yukon* has facilities for transmitting and receiving on low, medium, high, very high and ultra-high frequencies. She is also equipped with direction-finding equipment and radio teletype.

The ship has radar systems for gunnery fire control, navigation, surface warning, air warning and air early warning. The several sonar sets are of advanced design and embody certain important Canadian developments.

For internal communications she has 12 separate telephone systems, including lines for docking ship, damage control, radar maintenance and fuelling at sea, and 12 sound broadcast systems. The equipment enables the commanding officer to be in direct contact with every part of the ship. The system is similar to a public automatic telephone service.

A Canadian-designed remote control system makes it possible to broadcast or receive from any of 28 positions in the ship.

DAMAGE CONTROL AND DECONTAMINATION

The *Yukon* has an extensive damage control system with its centre linked by a special telephone switchboard to strategic points in the ship.

To reduce danger of flooding and to prevent contamination of the air-conditioning system by gas, bacteria or atomic fall-out, the hull has been built without scuttles. Those on the superstructure are sealed and have light-weight aluminum deadlights for blackout purposes. A bilge suction main runs throughout the ship with suction taken in hold and lower deck compartments. The bilge suction is operated by eductors which are driven by four main pumps. These pumps also provide pressure for a fire main which supplies fire hydrants throughout the ship. Portable pumps are also provided at strategic points in the ship. Paint is fire resistant.

The ship can be sealed against atomic, biological or chemical attack, with provision for recirculation of air within the ship through the air conditioning plants. Personnel who have been exposed can be decontaminated in either of two compartments, one located forward and one aft.

The ship is equipped for hosing down contaminated surfaces on the weather and upper decks.

All compartments where men might be trapped have emergency escape scuttles with jumping ladders, supplemented by kick-out panels, as an alternate means of escape.

All damage control features of this ship are based on the particular hull form characteristic which provides her with positive stability under all conditions of damage which she can survive. This means that the ship will not under any conditions founder by capsizing and will retain positive stability throughout damage.

LIFE SAVING AND MEDICAL EQUIPMENT

Carley floats and wooden rafts formerly used in most other ships have been replaced with inflatable rubber rafts. These 20-man rafts inflate automatically on release into the sea. In addition to emergency rations, each raft carries survival gear, collapsible bailers, sea anchor, floating sheath knife and plastic whistle. The rafts have a canopy to shelter the men from wind, sun and weather.

The sick bay is comparable in size to that of a cruiser. There are four berths, a bathroom, an operating table with the latest type operating light, well-stocked drug and medical lockers and diagnostic facilities.

HABITABILITY

The Yukon's men sleep in bunks with foam rubber mattresses, pillows and individual reading lamps. Aluminium clothes lockers and additional drawer space for personal belongings are provided, as are mirrors and electric shaving outlets. Each living space has a recreational area for off-duty hours. In addition, a separate area has been allocated for games, movies and other recreational activities of the men.

The officers' cabins, which also serve as offices, are arranged for single and double occupancy, except for one accommodating four junior officers. The commanding officer's quarters consist of an office and living quarters.

There is provision for cafeteria-style messing from a centrally located electrically equipped galley. The galley contains a bakery; sections for handling pastry, meat and vegetables; a dairy with ice cream and milk machinery; a dish-washing machine and garbage disposal unit.

The main dining area can also be used for recreational purposes in the evenings. Lighting is fluorescent. The chief and petty officers have a separate dining space nearby.

The ship has storage for 90 days' frozen provisions, compared with that for 14 days in Second World War escort ships.





aptain J. S. Ross, CD, RCN



Captain J. C. Gray, CD, RCN



Cdr. O. Masock, CD, RCN

THE NAVAL OVERSEERS

Throughout the construction of HMCS *Yukon* it has been the responsibility of the Principal Naval Overseer, West Coast, and his staff to ensure by inspection and trial that everything in the ship met the requirements specified by the Navy.

During the initial portion of the time the *Yukon* was building, the Principal Naval Overseer, West Coast, was Captain J. S. Ross, CD, RCN. After Captain Ross retired from active duty in the Navy in the summer of 1962, this position was assumed by Captain J. C. Gray, CD, RCN.

The Principal Naval Overseer, West Coast, is responsible for overseeing work on all naval shipbuilding, ship conversions and some refitting by commercial shipyards on the coast. His office was moved from Victoria to North Vancouver during the summer of 1962. Prior to that time, a Resident Naval Overseer maintained control of the naval work in the Vancouver area. This position was held by Commander O. H. Masock, CD, RCN.

Other members of the overseeing staff in the Vancouver area are Lieutenant-Commander E. V. Dear, CD, RCN, Engineer Overseer; Lieutenant-Commander A. D. Caisin, CD, RCN, Hull Overseer; Lieutenant G. M. McDonald, RCN, Electrical Overseer; and Commissioned Officer G. S. Waddell, CD, RCN, Supply Overseer.



BURRARD DRY DOCK COMPANY LIMITED, NORTH VANCOUVER

THE BUILDERS

The commissioning of HMCS *Yukon* is another milestone in the proud history of Burrard Dry Dock Company Limited.

Founded in 1895, and established on its present site since 1902, Burrard has been closely connected with the development of Western Canada and the Port of Vancouver. Starting with the construction of small wooden fishing vessels, hundreds of new ships have left its yards in peace and war, ranging from stately sailing ships to large cargo vessels and warships of many types.

Burrard takes pride in its association with the Royal Canadian Navy and its record of naval construction which included during the Second World War the conversion of passenger vessels to armed cruisers and troop transports, the conversion of United States aircraft carriers to British Admiralty standards and the building of corvettes and minesweepers. In addition to these, 109 Victory Ships were built during the war years.

HMCS *Yukon* is the fifth destroyer escort to be built at Burrard, a tribute to the ability of the company's craftsmen and engineers.

The company maintains the largest integrated shipbuilding and ship repairing organization on Canada's West Coast and in addition its Industrial Division produces a variety of engineering products for industries of the western provinces.



HON. C. WALLACE, CBE,
President
Burrard Dry Dock Co., Ltd.



H. A. WALLACE,
Vice-President
Burrard Dry Dock Co., Ltd.



J. W. HUDSON,
Executive Vice-President
Burrard Dry Dock Co., Ltd.



DAVID E. WALLACE,
General Manager
Burrard Dry Dock Co., Ltd.

PROGRAMME

1445—United States Station
1450—Guest of Honour and Official Party arrive.
1500—Commissioning Ceremony.
1545—Guest of Honour and Official Party leave the Ship.
Endowed by British Empire
1600—Reception.

THE COMMISSIONING CEREMONY ORDER OF SERVICE

Introduction by Captain J. C. Gray, CD, RCN, Principal Naval Officer, West Coast.
Address by the Chief of the Naval Staff (or his representative).
Address by Colonel The Hon. Clarence Walker, CBE, President, Burrard Dry Dock Co., Ltd.
Address by Guest of Honour.
Assistance of the ship by Rear-Admiral I. B. Caldwell, MBE, CD, RCN, Chief of Naval Technical Services.
Commissioning Service conducted by the Rev. C. H. MacLaren, CD, Chaplain (P), RCN.

HYMN: Tune—"Eternal Father, Strong to Save"
O Father, King of Earth and Sea,
We dedicate this ship to Thee.
As thou we send her on her way,
In faith to Thee we humbly pray—
O bear from heaven our sailors' cry,
And watch and guard her from on high.
AMEN.

- PSALM 137 (Verses 23 to 31, 43) to be sung responsively.**
23. They that go down to the sea in ships, that do business in great waters;
 24. These see the works of the Lord, and His wonders in the deep;
 25. For He commanded, and raised the stormy wind, which lifted up the waves;
 26. They ascended up to the Heavens, they ran down again to the depths: their soul is melted because of trouble;
 27. They reel to and fro, and stagger like a drunken man, and are at their wits' end;
 28. Then they cry unto the Lord in their trouble, and He brings them out of their distress;
 29. He maketh the storm a calm, so that the waves thereof are still;
 30. Then are they glad because they be quiet: so He bringeth them unto their desired haven;
 31. Oh that men would praise the Lord for His goodness, and His wonderful works for the children of men.
 43. Whoso is wise, and will observe these things, even they shall understand the loving-kindness of the Lord.

P R A Y E R S

O Thou, that stand above the waters flood, and under the rousing of the sea, accost, we beseech Thee, the supplicants of Thy servants for all who in this ship, now and hereafter, shall becomest their first unto the ports of the deep. It all their ways trouble them, teach and guide to serve Thee, and by their Christian lives to set forth Thy glory throughout the earth. Watch over them in their going forth, and their coming in, that no evil befall them, nor mischief come nigh to hurt their souls. And so through the waves of this troublesome world, and through all the changes and chances of this mortal life, bring them by Thy mercy to the safe haven of Thine everlasting Kingdom, through Jesus Christ Our Lord, Amen.

The Naval Prayer

Intercession

The Lord's Prayer

Her Majesty's Canadian Ship Yukon commences
Commanding Officer, Commodore R. W. Gault, CD, RCN, speaks for the ship's company.
Ship's company concludes in the ship.
Commanding Officer is piped on board and stands by to receive the Guest of Honour, Official Party and Invited Guests.

Commissioning Service conducted by the Rev. J. H. Whonly, Chaplain of the Fleet (RCD), RCN.

RESPLECTIO NAVALIS

V. Admirantibus navibus in nomine Domini.
R. Qui Teut cadunt et terrant.
V. Dominus voluimus.
R. Et cum spiritu tuo.

Orations:

Profratres. Domine, supplicatioribus nostris, et bene et sic invenit deorum nos suavia et omnia qui in ea voluntate, vultu, dignitate et benevolentia existit. Nos amantem in altissimo portu est. Dominus, deus boni fructu, non potestati tuorum pro subditis super mare: in solis salutem Angulorum tuum de caelis, qui libere, et sapienter eam semper in periculis nostris, cum compassione que in ea erant, et famulans tuam, respicere advertebat. pro tu semper optabili, coram te immolatio tuorum, transmissis, et modo perfectis ingratia amabile, fructu tuorum ad omnia cum vultu gloriose resuscite dimitte. Qui vult et regere et servare servatorem.
R. Amen.

MESSING OF A SHIP

V. Our help is in the name of the Lord.
R. When trouble becometh great.
V. The Lord be with you.
R. And with thy spirit.

Let us pray.

Be attentive, O LORD, to our supplications, and bless us, this ship and all who sail therein, as thou wast wont to bless Noah's Ark in the Deluge. Miraculously thy hand be there, O Lord, as thou didst remain out to Peter when he walked upon the sea. Send thy holy angel from heaven to watch over it and those on board, and keep it safe in all times from every disaster. And when threatened perils have been removed, consist thy servants with a calm voyage and the desired harbour. And having successfully transmitted their business, recall them again when the time comes to the enjoyment of country and home. Those Who: (read and rejoice fervently).
R. Amen.

PRAYER FOR SAILORS (10 St. Matthew)

St. Matthew, named "Patron of Seafarers," help those who fight our battles on the waters. You were intently called "God's Voyager," because you guided His Gospel by land and dangerous, voyages and gave that Gospel of salvation to many. As our fathers were brought through the Red Sea and carried in safety through the overwhelming waters, so grant that through your intercession our sailors, mariners and those who guard our nation's coasts may be preserved from all dangers of the sea, may be protected on their course and come safely into port. Amen.

THE YUKON

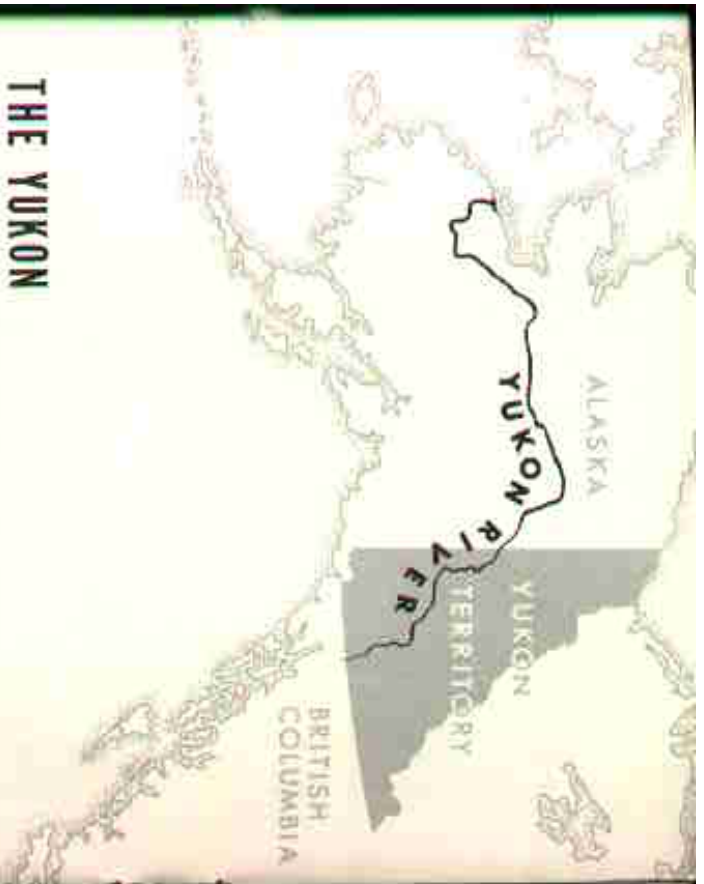
The word "Yukon" conjures up in the minds of Canadians—and countless others—an image of a rugged land where men and women, some brave, some foolishly, fished all to gain sudden wealth in the great gold rush of 1898. Such names as Klondike, Kate, Hootness Jimmy and Diamond Tossie Gentle are part of the legend of the region.

The story of gold brought fame, but its lure has now been eclipsed by the mining of silver, zinc and copper. The modern mines that have been developed in the Yukon have given this fabulous land new security and the promise of a bright future.

The Yukon Territory comprising 207,176 square miles, is situated in the extreme northwestern part of the mainland of Canada. On the north is the Arctic Ocean, to the east is the Mackenzie District of the Northwest Territories, on the south, below the arctic parallel, is British Columbia; and on the west is the United States. A northward extension of the Cordillera the Yukon is a part of one of the two great mountain-bearing regions of the North American continent. While plateaus exist between the forested mountain ranges. Sub-arctic in climate, winters can be extremely cold—a temperature of 81 degrees below zero was recorded in 1947. Summers are pleasantly warm, with long hours of daylight. It is still a land that can make or break a man. One must who knew this full well was the poet Robert Service, who wrote in his famous poem *Law of the Yukon*:

This is the law of the Yukon, that only the strong shall survive;
That surely the weak shall perish, and only the fit survive.

The Yukon River is the chief river of the Territory. The fifth largest in North America, it is fed in Canada by four principal tributaries—the Tahn, Yelly, White and Stewart rivers. Beyond one of its southwestern sources, Summit Lake in northern British Columbia, the Yukon flows north and northwest through the Yukon Territory



for 637 miles, then enters Alaska to follow a great westward arc of 1,365 miles before emptying into the Bering Sea. The river is navigable for steel steamers from Whitehorse, Y.T., to its mouth, a distance of 1,277 miles.

The name Yukon, meaning "the great river", is a Kutchin Indian word and was first applied to this huge northern river by John Bell, a trader in the employ of the Hudson's Bay Company. In 1884, Bell set out from the post at Fort MacPherson near the Mackenzie River delta to explore the Perovskoy River, separated from the Mackenzie by a range of mountains. Bell followed this river westward until he arrived at a place where it flowed into a much larger river, known to the Indians as the Yucoun or Yukon. Two years later the Hudson's Bay Company established Fort Yukon at this point.

The early history of the Yukon is largely the story of a lucrative fur trade and adventurous miners. The game in the Yukon's forest regions brought many men hunting furs, as miners came searching for minerals. On August 17, 1896, a strike was made on Bonanza Creek that was to make the Klondike world-famous. Soon after, thousands crowded the Yukon, some travelling by boat down the Yukon River to the mouth of the Klondike, others taking primitive mountain passes. Settlements, such as Dawson City, sprang up; in a short two-year period Dawson grew to a city of 25,000. By the spring of 1899 all creeks of any importance in the Klondike area had been mined. Between 1897 and 1904 more than \$100,000,000 in gold was taken.

In the years since the Gold Rush, minerals have remained of vital importance to the economy of the Yukon. But gold has been largely replaced by silver. Now Canada's major silver producer, the Yukon in 1962 produced more than \$1,750,000 worth of silver. Other minerals mined include lead, copper, zinc and cadmium. Extensive areas for new mineral development are being constantly explored, and in 1962 more than 2,000 mineral claims were recorded. One of the most significant discoveries was made recently in the Snake River area where iron ore reserves discovered are estimated conservatively at more than 20 billion tons.

The Yukon is cradling tourist economy, famous for its big game hunting and sports fishing. For trapping is still a mainstay of the Yukon's Indian population, and of other trappers, in 1961 more than \$105,031 worth of pelts furs were produced. The Yukon's arable land has been estimated at from 250,000 to 500,000 acres, but at present only a small portion is being cultivated. The territory's forest potential has been estimated to include 45,000 square miles of forest.

The Yukon is served by water, rail, air and highway transportation. The all-weather Alaskan Highway and territorial road connect main communities with British Columbia and Alaska. Airports at Whitehorse, Mayo and Dawson City connect with Vancouver, Edmonton, Seattle and Fairbanks. A narrow gauge railway links Whitehorse communities with points in northern Canada and the United States.

Tourism is growing fast and ranks as an increasingly important industry, thanks in large part to the energetic tourist promotion program of the territorial government. Visitors travel northward by the majestic scenery and the chance to savour the atmosphere of the Klondike days. The Dawson City Gold Rush Festival brought visitors from many distant points; more people visited the Yukon in 1962 than at any time since the original Gold Rush days.

The Yukon is governed by a resident Commissioner appointed by the Federal government, and an elected seven-man Council which sits at Whitehorse, the territorial capital. The population is close to 15,000. A Member of Parliament represents the Yukon in the House of Commons in Ottawa.

Many changes have taken place since the colourful days of the Gold Rush. But the Yukon will always be a land of legend and romance. You may leave the Yukon but, once known, it never quite leaves you.

In *The Spell of the Yukon*, Robert Service wrote, "There's a land—eh, it beckons and beckons, and I want to go back—and I will."





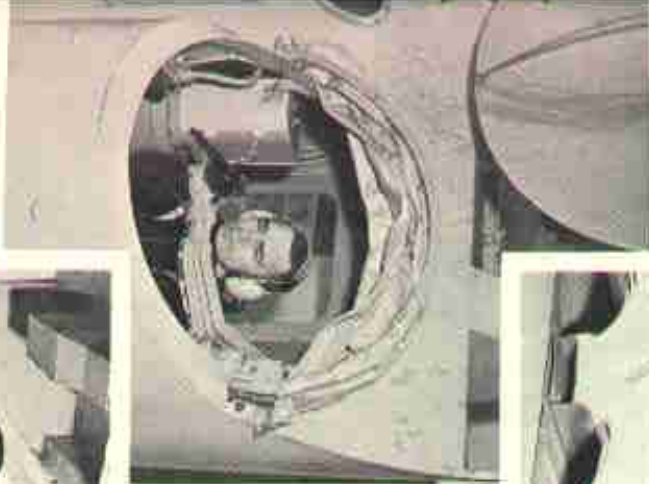
The main switchboard



An electronic computer



A section of the engine room



The supply office



The gun director



A torpedo launcher





Commander R. W. J. Cocks, CD, RCN
Commanding Officer

THE SHIP'S COMPANY

OFFICERS

Cdr R. W. J. Cocks	Commanding Officer
Lt-Cdr H. H. W. Mann	Executive Officer
Lt R. D. Speed	Operations Officer
Lt J. Allan	Weapons Officer
Lt J. W. Alexander	Asst Weapons Officer
Lt D. G. Fairbridge	Navigating Officer
Lt H. G. Ashcroft	Engineering Officer
Lt K. R. Campbell	Supply Officer
Sub-Lt H. T. Richardson	Training Duties
Sub-Lt L. M. Mitchell	Training Duties
Sub-Lt J. V. E. Christie	Training Duties
Sub-Lt J. L. Reut	Training Duties

MEN

Chief Petty Officer C. R. Crickelshank

Crosswalk

DECK DEPARTMENT

Petty Officer	J. Souderton	Able Seaman	R. Brooks
Petty Officer	W. Wright	Ordinary Seaman	E. Kenny
Leading Seaman	G. Moriarty	Ordinary Seaman	P. Young
Leading Seaman	R. Briggs	Ordinary Seaman	E. McNeill
Leading Seaman	D. Allan	Ordinary Seaman	D. King
Able Seaman	J. Carroll	Ordinary Seaman	G. Laar
Able Seaman	D. Begon	Ordinary Seaman	K. Turf

OPERATIONS DEPARTMENT

Petty Officer	G. Andrews	Able Seaman	D. Bouchard
Petty Officer	J. Miffing	Able Seaman	D. Dennison
Petty Officer	J. Schindler	Able Seaman	W. Blunnie
Leading Seaman	L. Freshhorn	Ordinary Seaman	D. Seeholt
Leading Seaman	V. Malandine	Ordinary Seaman	P. Gosselin
Able Seaman	J. Savage	Ordinary Seaman	W. Montgenery
Able Seaman	H. Bourdages	Ordinary Seaman	D. Horvick
Able Seaman	A. Cox	Ordinary Seaman	D. Peirayson
Able Seaman	J. McNeil	Ordinary Seaman	J. Wirtel
Ordinary Seaman	K. Seb	Chief Petty Officer	J. Fren
Ordinary Seaman	C. Leclair	Leading Seaman	D. Stewart
Ordinary Seaman	D. McLaughlin	Leading Seaman	W. Murrel
Ordinary Seaman	P. Colston	Able Seaman	K. Stevens
Ordinary Seaman	B. Beyette	Able Seaman	D. Nolan
Ordinary Seaman	W. Turibe	Able Seaman	V. Sideroff
Ordinary Seaman	T. Chapman	Able Seaman	K. King
Ordinary Seaman	W. Caldwell	Able Seaman	W. Yamba
Petty Officer	A. Griffith	Ordinary Seaman	B. Miller
Petty Officer	C. Hill	Ordinary Seaman	D. McGregor
Leading Seaman	G. Sharford	Ordinary Seaman	W. McKenna
Able Seaman	M. Moore	Ordinary Seaman	J. Low
Able Seaman	J. Oliver	Ordinary Seaman	G. Lafleur

WEAPONS DEPARTMENT

Chief Petty Officer	W. Crumner	Able Seaman	J. Underhill
Petty Officer	P. Pichette	Able Seaman	H. Dewell
Petty Officer	B. Smith	Able Seaman	R. Crain
Petty Officer	J. Glover	Ordinary Seaman	E. Ashure
Leading Seaman	G. Belanger	Ordinary Seaman	D. Croze
Able Seaman	G. Larivige	Ordinary Seaman	D. Landrain



Ordinary Seaman	W. Ureling
Ordinary Seaman	H. Allen
Ordinary Seaman	W. McLaren
Ordinary Seaman	F. LaFlour
Chief Petty Officer	J. Callaghan
Petty Officer	C. Downey
Petty Officer	J. Clauy
Petty Officer	C. Downer
Leading Seaman	D. Slocum
Leading Seaman	M. Kilby
Leading Seaman	K. Jennings
Leading Seaman	D. Davies
Able Seaman	P. McPhail
Able Seaman	G. Dillaly
Able Seaman	T. Mitchell
Able Seaman	W. Rooblow
Ordinary Seaman	L. Robinson
Ordinary Seaman	W. Foster
Ordinary Seaman	A. Boulton
Ordinary Seaman	D. Pyle
Ordinary Seaman	G. Melchani
Ordinary Seaman	C. Everingham
Ordinary Seaman	W. Lagalya
Ordinary Seaman	R. Aron
Chief Petty Officer	G. Slinger
Petty Officer	J. Anderson
Petty Officer	D. Vainackis
Leading Seaman	I. Lawrence
Leading Seaman	E. Green
Leading Seaman	J. Siley
Able Seaman	N. Kinber
Able Seaman	M. Condonbe
Able Seaman	D. Murray
Able Seaman	H. Thornton
Ordinary Seaman	D. Meyer

Ordinary Seaman	G. Emscott
Ordinary Seaman	W. MacDonald
Ordinary Seaman	W. Palenham
Chief Petty Officer	J. Yotko
Petty Officer	R. Shweller
Petty Officer	P. Brunwell
Leading Seaman	G. Wisard
Leading Seaman	J. Strachan
Leading Seaman	J. Feener
Leading Seaman	A. Keyvula
Able Seaman	J. Price
Able Seaman	W. Hartin
Able Seaman	G. Laidlaw
Able Seaman	A. Young
Able Seaman	J. Grady
Able Seaman	J. Tait
Able Seaman	M. Paulmann
Able Seaman	M. Garbuck
Able Seaman	J. Bryson
Able Seaman	D. Lewis
Able Seaman	D. Cowling
Ordinary Seaman	G. Bailey
Ordinary Seaman	D. Lamb
Ordinary Seaman	T. Bourne
Ordinary Seaman	J. Boyle
Ordinary Seaman	R. Gaudier
Ordinary Seaman	S. Gaudier
Ordinary Seaman	K. Aulder
Ordinary Seaman	R. Howe
Ordinary Seaman	W. Malwood
Chief Petty Officer	W. Young
Petty Officer	K. Brett
Petty Officer	F. Gowandock
Petty Officer	C. Tripp
Leading Seaman	R. Leigh

ENGINEERING DEPARTMENT

Chief Petty Officer	E. Grant
Chief Petty Officer	T. Davita
Chief Petty Officer	L. Garngain
Chief Petty Officer	A. White
Chief Petty Officer	A. Ferguson
Petty Officer	G. McPhailen
Petty Officer	D. Sharlock
Petty Officer	C. Hawkins
Petty Officer	W. Currie

Petty Officer	B. Henry
Petty Officer	J. Macklinton
Petty Officer	E. Hiller
Petty Officer	R. Beckat
Petty Officer	H. Skirton
Petty Officer	W. Curweal
Petty Officer	E. Kohla
Leading Seaman	P. Irwin
Leading Seaman	E. Branssen

Leading Seaman	R. Reanah
Leading Seaman	W. Howland
Leading Seaman	R. Crutkist
Able Seaman	D. Peterson
Able Seaman	H. Willam
Able Seaman	L. Anderson
Able Seaman	F. Roatok
Able Seaman	G. Murray
Able Seaman	W. Hoover
Able Seaman	W. Dyer
Able Seaman	J. Nichols
Able Seaman	V. Seckold
Able Seaman	D. Russ
Able Seaman	L. Maurice
Able Seaman	J. Goyer
Able Seaman	D. Calvert
Able Seaman	E. Coerrard
Able Seaman	E. Hayes
Ordinary Seaman	L. Keeping
Ordinary Seaman	J. Strahan
Ordinary Seaman	P. Sherven
Ordinary Seaman	R. Wylie
Ordinary Seaman	J. Fould
Ordinary Seaman	T. Shaw

Ordinary Seaman	H. Coffin
Ordinary Seaman	R. Plourde
Ordinary Seaman	G. Loxs
Ordinary Seaman	G. Schendel
Chief Petty Officer	B. Howlun
Petty Officer	G. Dunbar
Petty Officer	J. Foster
Leading Seaman	E. Ruelie
Leading Seaman	K. Springs
Leading Seaman	K. Toy
Able Seaman	R. Moular
Able Seaman	G. Sertes
Able Seaman	P. Martin
Ordinary Seaman	W. Muehlin
Ordinary Seaman	W. Parth
Chief Petty Officer	R. Weaver
Petty Officer	H. Millern
Able Seaman	J. Martin
Able Seaman	R. Spick
Able Seaman	M. Howe
Ordinary Seaman	K. Petersn
Ordinary Seaman	H. Innas

SUPPLY DEPARTMENT

Chief Petty Officer	G. Soovy
Chief Petty Officer	M. Gerrier
Petty Officer	A. Goodwin
Petty Officer	A. Welton
Petty Officer	J. Nibbel
Petty Officer	D. Baker
Petty Officer	C. Carrie
Petty Officer	J. Doherty
Leading Seaman	J. Kearney
Leading Seaman	H. Tessier
Leading Seaman	S. Danna
Leading Seaman	T. Ryan
Leading Seaman	R. Darbin
Able Seaman	H. Mieran
Able Seaman	G. Bass

Able Seaman	D. Shaab
Able Seaman	A. Niefarth
Able Seaman	C. Nidel
Able Seaman	G. Rioux
Able Seaman	R. Todd
Able Seaman	L. Jesse
Able Seaman	J. Mathissen
Able Seaman	K. Rouchard
Ordinary Seaman	M. Johnston
Ordinary Seaman	F. Labone
Ordinary Seaman	R. Ruberge
Ordinary Seaman	K. Lallo
Ordinary Seaman	W. Grant
Petty Officer	W. Murray



THE SHIP'S BADGE

BLAZON: Gules, a bend wavy Or charged with a like bendlet Azure, and over all a Malamute Sled Dog, proper.

SIGNIFICANCE: The Malamute Sled Dog is derived from the Crest in the Arms of the Yukon Territory.

The wavy diagonal in blue and gold is a reference to the River Yukon along the borders of which great Gold deposits once existed.

SHIP'S COLOURS: White and Red.

