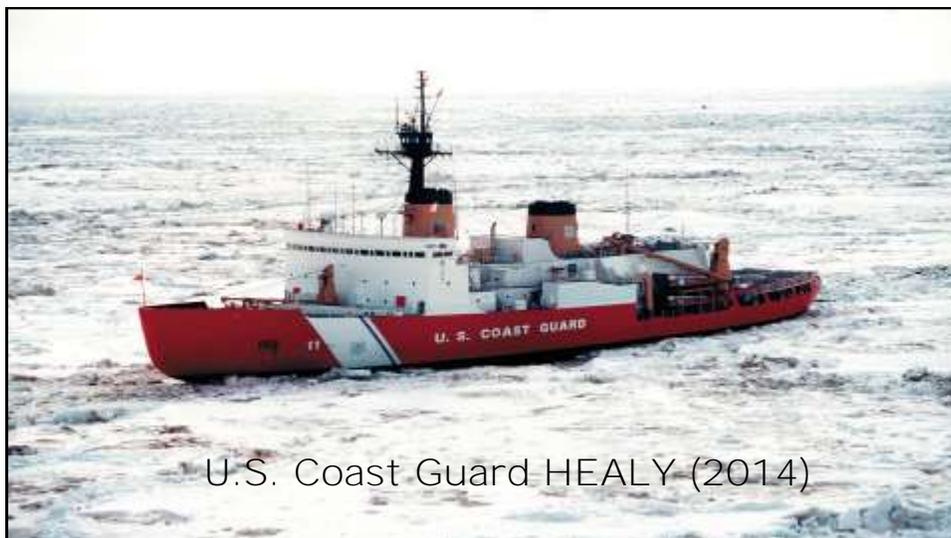


Across the Arctic

CURRENT ACTIVITIES AND THE HISTORY OF
ICEBREAKERS ALONG WITH THE STORY OF THE FIRST
SHIP TO NAVIGATE THE NORTHWEST PASSAGE

By Phil Jaffe



U.S. Coast Guard HEALY (2014)

Includes over 50 Color Photographs

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Preface

This book is about the United States Coast Guard in the Arctic. It also talks about the Icebreaker *Northwind*, in 1954, which was the first vessel to open a corridor to Northwest Passage. I was fortunate to be a member of the crew in 1954 and this is my story.

I took the majority of the photos of the ice pack and they have great meaning today as due to global warming this scenery no longer exists. The ice pack in the Arctic has shrunk and the thickness of the ice is far less than what I faced over a half of a century ago. Also included in this book are copies of newspaper and magazine articles that describe the historic adventure.

In addition there is information concerning the U.S. Navy submarine *Nautilus* which was, in 1958, the first submarine to pass under the Northwest Passage. The charts made by the *Northwind*, in 1954, through the McClure Strait helped pave the way for the *Nautilus* and later opened the window for future ships to cross the Arctic.

Phil Jaffe

The Northwest Passage

The waters surrounding the North Pole are governed by the same international laws that apply to all other oceans. As the ice begins to melt the water above the seabed will remain international waters. It is estimated that since 1981 that over 20,000 square miles of ice has been lost. There is no doubt that the most dramatic changes in the Arctic region are related to the climate. Many experts believe that the permanent ice cover may be gone as early as 2020. Under the terms of the 1982 United Nations Convention of the Law of the Sea, all countries have the right to resources such as oil, gas, minerals and anything that exists on the bottom of the ocean beyond 200 nautical miles off their coasts.

OIL RESERVE IN THE ARCTIC

The Arctic is estimated to hold more than 10 percent of world's undiscovered oil reserves, nearly one third of undiscovered gas reserves, and remains a strategically critical area for the United States. The single most important vessel of access to the Arctic is the icebreaker, and Russia retains the most extensive fleet of icebreakers anywhere in the world. A few years ago, two German ships followed a Russian icebreaker to complete the first commercial shipment across the Arctic. Japan is now interested in the Arctic because it has impact on the change in weather patterns in the Northwest Passage may make a corridor possible for trade between Asia and Europe. Russia is planning to have 40 icebreakers in the next decade. Finland has contracted 380 million dollars to build three new icebreakers. These icebreakers will be capable of carrying out rescue operations and recovering oil spills, while they can also be used for moving cargo and fuel. Japan, China and Sweden also has icebreaker research in the Arctic Ocean. They are collecting information about navigation routes; study the effect of changing climate on wildlife and generally gaining a better understanding of the region's unique weather pattern and geography.

RUSSIA VS. THE UNITED STATES IN THE ARCTIC

The war between United States and Russia over the Arctic **and its abundant resources is definitely a cold one, but it's as real and harmful of a threat as any facing U.S. security today.** The presence of U.S. and Russian 6,000 military forces in the Arctic means that in times of conflict and stress elsewhere, the Arctic regions could become involved. In short, the North Pole region is in a state of massive transformation. There are also two trends increasing the strategic importance of the waters around the North Pole. First, Russia has been building improved a submarine to carry nuclear missiles. Second, if the United States feels threatened by North Korea it needs to strengthen its anti-ballistic missile systems. The U.S. is already in the progress of adding more interceptors because of these recent actions of North Korea.

NEW SHIPPING LANES IN THE ARCTIC

Since 2008, 118 percent of Arctic ice has melted. Melting ice means traffic has increased in Bering Strait, between Russia and Alaska. Due to climate change, the U.S. Coast Guard is expected to see sea lanes staying open longer, allowing for more frequent and increased vessel traffic. Arctic shipping would substantially reduce transport costs. The distance from Shanghai to Hamburg along the Northern Sea Route over Russia is approximately 30 percent shorter than the comparable route through the Suez Canal. Such a reduction in shipping time and distance will yield large savings **on fuel and increase China's export potential to Europe.** In 2013, 71 vessels sailed the Northern Sea Route, moving 1,355,897 tons. This is a substantial increase over the four vessels that did so in 2010. China hopes to send 15 percent of its international shipping through the Arctic by 2020.

Ice operation is one of the U.S. Coast Guard's most important missions. The Coast Guard currently have three polar icebreakers assigned in the Arctic. They are the, *Polar Star*, *Polar Sea*, and the *Healy*. Only two are active. The *Polar Sea* is in non-operational status and is docked in Seattle. In 2012, \$57 million was spent to refit the *Polar Star*. This gave the icebreaker an additional seven to ten more years of service. Now it is estimated to update *Polar Star* and *Polar Sea*, it would cost upward to 100 million dollars. Congress has not, to date, approved a budget to fix them. The *Healy* is really the only active in the Arctic.

Review **WHAT'S NEXT IN THE ARCTIC**

Important is the Arctic Council made up with members from Canada, Norway, Denmark, Greenland, Finland, Iceland, Norway, Russian Federation, Sweden and United States. They are a high level intergovernmental forum to provide a means for promoting cooperation, coordination and interaction among the Arctic States. There is a large amount of activity in the Arctic and only time what will decide what direction in will go.

What is the Northwest Passage?



The Northwest Passage is a sea route through the Arctic Ocean, along the northern coast of North America via waterways through the Canadian Arctic connecting the Atlantic and Pacific Oceans.

The various islands of the area are separated from one another and the Canadian mainland by a series of Arctic collectively known as the Northwest Passages or Northwestern Passages.

Until 2009, the Arctic pack ice prevented regular marine shipping throughout most of the year, but climate change has reduced the pack ice, and this Arctic shrinkage made the waterways more navigable.

However, the contested sovereignty claims over the waters may complicate future shipping through the region: The Canadian government considers the Northwestern Passages part of Canadian Internal Waters, but the United States and various European countries maintain they are an international strait and transit passage, allowing free and unencumbered passage.

A Brief History of Arctic Icebreakers

For years the Arctic has been a place of mystery and the unknown. Sailors traveling north from Europe found it was so cold that the ocean froze forming a barrier where ships could not get through. In the 1800s many explorers traveled to the Arctic in

CUTTER BEAR



looking for a route where ships could travel from Atlantic to the Pacific Ocean and back. This route was called the Northwest Passage. Over the years the U.S. Coast Guard has been the main operator of heavy icebreakers in the Arctic.

1884 - Probably the U. S. Coast Guard most famous cutter was the *Bear*. Although she was not a true icebreaker her hull was reinforced for operations in light ice as a whaler. The *Bear* was driven by three masts and served in Alaskan water for over 40 years. The *Bear* also spent some time in World War II. It ultimately sank while under tow in 1963.

1927 The U.S. *Northland* was also not a true icebreaker. It was designed to replace the *Bear* and operate in Alaskan waters. Her hull was extensively welded what permitted movement in light ice conditions. She was rigged with two masts to give auxiliary power in the event of damage to her single propeller. The masts were eventually removed in 1936. The *Northland* is known as the forerunner of today's icebreakers.



USCG Northland

The *Northland* is known as the forerunner of today's icebreakers.

1944— The Wind Class icebreakers were built as a line of diesel electric-powered icebreakers. Their hull was very strong with a top speed of 16.8 knots and they were capable of moving up to 13 feet of ice. There was the *Staten Island*, *Northwind*, *Eastwind*, *Southwind*, *Westwind* and the U.S. Navy *Burton Island* and the *Edisto*. In addition the *Labrador* was built by the Canadians..

1948—The U.S. *Northland* was decommissioned and sold to the underground Israeli and was renamed *Matzpen*. It became the first warship for new Israel Navy. She saw action against Egyptian forces that had attacked Israel by the sea. The *Matzpen* was decommissioned from the Israel Navy in February, 1962 and sold for scrap.

1957—The *Mackinaw* was the only U.S. Coast Guard icebreaker assigned to the Great Lakes. In addition to heavy icebreaking she also was capable to service buoys, search & rescue, law enforcement and the ability to deploy an oil skimming system to respond to oil spill situations.

1976—The Polar Class icebreakers were built for the U.S. Coast Guard to replace the aging Wind Class icebreaker fleet. The *Polar Star* and the *Polar Sea* were designed to break 6.5 feet. They had several mission in the Arctic, but until recent years most of the missions of the Polar Class icebreakers were in the Antarctic.

2014—The *Sikuliaq* (see-KOO-lee-**auk**) meaning “young sea ice” is not considered an icebreaker but it is ice capable research ship. It is owned by the National Service Foundation. The *Sikuliaq* can operate in extreme ecosystems and will provide opportunities for educators and students to learn firsthand about the arctic environment

The First Ship, West to East, to Conquer the Northwest Passage



1954—On August 21st the icebreaker U.S. Coast Guard *Northwind* sailed on a classified mission, west to east, and navigated through McClure Strait, and became the first ship to ever make the Northwest Passage. It was accompanied by the U.S. Navy icebreaker, *Burton Island*. After these two ships conquered the McClure Strait, they met with the Canadian icebreaker *Labrador* going east to west. After meeting the *Northwind* and the *Burton Island*, the *Labrador* continued her journey down the west, through the Panama Canal and became the first ship to circumnavigate North America.

USCGC Icebreaker Healy



The Coast Guard Cutter *HEALY* (WAGB - 20) is the United States newest and most technologically advanced polar icebreaker.

The *Healy* is designed to conduct a wide range of research activities, providing more than 4,200 square feet of scientific laboratory space, numerous electronic sensor systems, oceanographic winches, and accommodations for up to 50 scientists. She is designed to break 4-1/2 feet of ice continuously at three knots and can operate in temperatures as low as -50 degrees F. The science community provided invaluable input on lab lay-outs and science capabilities during design and construction of the ship. At a time when scientific interest in the Arctic Ocean basin is intensifying, the *Healy* substantially enhances the United States Arctic research capability.

As a Coast Guard cutter, the *Healy* is also a capable platform for supporting other potential missions in the polar regions, including logistics, search and rescue, ship escort, environmental protection, and enforcement of laws and treaties.

How Icebreakers Break Ice

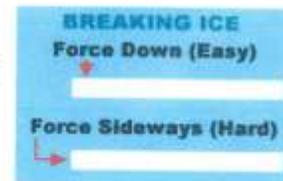
Icebreakers are designed with sloping bows, heavy construction (lots of weight for their size), and lots and lots of power.

The hull is very strong and the bow is specially reinforced to handle the force of the ship hitting the ice at speed.



But icebreakers don't try to plow through the pack ice - they use their power and momentum to push the sloping bow up onto the ice. The great weight of the ship then pushes down on the ice, letting gravity do the heavy work.

The force, coming down on the ice with nothing to support it but the water, causes it to break off in chunks. It's then pushed out of the way by the hull, and it's on through the Arctic Ocean to the North Pole!

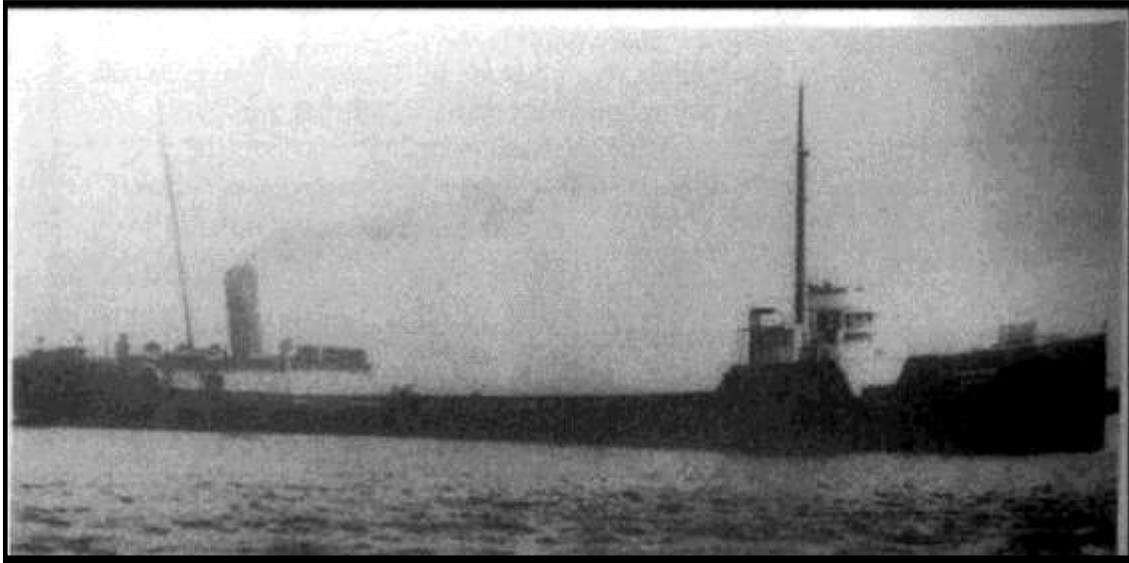


[z://www.athropolis.com/arctic-facts/fact-icebreaker-break.htm](http://www.athropolis.com/arctic-facts/fact-icebreaker-break.htm)



An Iceberg is 7/8 under the water

The First *Northwind* of Record



Northwind — Built in 1888

The first *Northwind* of record was built in Cleveland, Ohio in 1888 and stationed in the Great Lakes. She was not built as an icebreaker but still cruised in icy waters. The vessel was 299 feet long with a beam of 41 feet and a draught of 21.5 feet. It was a unique vessel as in 1917 she was cut in half and taken down the seaway to see six years of service on the Atlantic before returning to the Great Lakes.

In 1926 the first *Northwind* of record struck Robinson Rock in the north channel of Georgian Bay, in the Great Lakes, and slid into 120 feet of water. Fortunately no lives were lost. The bow is still pointing upwards and is just 80 feet below the surface. The wreck is currently intact and, because the water is very cold and dark, is a wonderful experience for trained wreck divers to explore.

USCG Cutter Icebreaker Northwind WAGB 282

Statistics

Length – 269 feet

Beam – 63'6"

Draft – 25' 9"

Two electric motors driven by six Westinghouse DC generators driven by six Fairbanks Morse diesel 10,000HP engines

Three screws (two aft, one forward)

Maximum sustained speed—16.8 knots.

Economic speed — 11.6 knots

Range - 32,485 miles

Fuel - 514,954 gallons

Displacement - 6,515 tons

Capable of making fresh water

Complement: 21 Officers and 225 enlisted men



The US Coast Guard Cutter Northwind II
“A Cut Above Them All”

History

The *Northwind* was built at Western Pipe & Steel, San Pedro, CA.

It carried two helicopters and two track wheeled vehicles called weasels. The helicopters were used to search for openings in the ice and the weasels were for shore parties and patrols. The ships armament, in 1953 **and 1954, consisted of two 5"-38 guns, four 40mm guns, six 20mm guns, six Y-guns and one hedgehog.**

The CGC *Northwind* **was the last "Wind-Class"** Icebreaker taken out of service and was decommissioned on January 20, 1989. She was moored in the James River Reserve Fleet at Ft. Eustis, Virginia until 2000, when she was towed to Brownsville, Texas and scrapped.

The Coast Guard Cutter *Northwind's* (WAGB 282) keel was laid on July 10, 1944. The ship was launched on February 25, 1945 and was commissioned on July 28, **1945. This vessel was the second "Wind-Class"** icebreaker to bear the name *Northwind*. The first icebreaker *Northwind* (WAGB 278) was transferred to Russia in 1944 in a lend-lease program and renamed *Serveryn Veter*. When it was returned to the United States Coast Guard in 1966 it was renamed the *Staten Island* (AGB 5).

There were a total of seven "Wind-Class" vessels built between 1942 and 1946 at Western Pipe and Steel in San Pedro, CA. They were the *Northwind I/Staten Island* (WAGB 278), *Northwind II* (WAGB 282), *Eastwind* (WAGB

279), *Westwind* (WAGB 281) and *Southwind* (WAGB 280), *Burton Island* (AGB 1) and *Edisto* (AGB 2/WAGB 284).) The *Southwind* was, also sent to Russia and later, when returned to the U.S., was renamed the *Atka*, (AGB 3),

The *Eastwind* and *Westwind* were stationed on the Great Lakes, the *Southwind* (*Atka*) and *Staten Island*, were stationed on the East Coast. The *Northwind II* was based out of Seattle. The *Burton Island* was based at San Diego, and the *Edisto*, was based at Boston. Both the *Burton Island* and *Edisto* were built for the Navy but transferred to the Coast Guard in 1966. All seven ships have been decommissioned and scrapped.

During the 1970s, the Coast Guard commissioned the *Polar Star* (WAGB 10) and the *Polar Sea* (WAGB 11). In 1999 the Cutter *Healy* was commission. The *Healy* is 420 feet long with a beam of 82 feet and is the largest and heaviest Cutter/Ice Breaker ever designed. All three are based out of Seattle.

Chapter I

Destination Nome Winter 1954

Winter in the Arctic

In 1953, I was in my second year as a student at the University of Southern California (USC), in Los Angeles. I was also a member of the Coast Guard Reserve and was activated to full time duty during my summer break. I tried to get out of going in the service while I was still at the university but a young Coast Guard recruiter talked me into accepting the notice. He assured me that it would **be a great opportunity to “see the world”**. He was right as after twelve weeks of basic training at the Coast Guard base in Alameda, California I was sent to Seattle where I was assigned to the U.S. Coast Guard Cutter, *Northwind*.

I was 19 and it was the first time I had lived so far away from home. It was lucky to have been assigned to the Icebreaker *Northwind*, as several of my fellow boot camp buddies were stationed at remote lighthouses or on buoy tenders. I was told that the most difficult duty was to be assigned to a buoy tender. This assignment takes a great deal of muscle along with working in the cold outdoors where Northwest weather conditions were not favorable.

When I was assigned to the *Northwind* during the fall of 1953, I had no knowledge of icebreakers or their purpose. From my college fraternity days I thought an icebreaker was a tool one used to chop ice to chill a keg of beer. I soon found out that an icebreaker was one of the finest ships in the Coast Guard and that it was a real honor to serve aboard such an important vessel. It was difficult getting used to living aboard ship. The sleeping quarters

were very small, the bunks were stacked three high, and the toilets were a line of open commodes. There were a few sinks and a row of open showers. It definitely took a **lot of adjustment after living in my parent's comfortable home.**

Fortunately I was not alone as there were others assigned to the ship that shared the same feelings. We all adjusted quickly, however, as we had no choice but to accept this new way of life. My first assignment was a member of the deck crew. This was a good job when the weather was nice but, as I will explain later, it was not the best duty once the ship arrived in ice country.

We had two months before our first cruise so a few of us pooled our money and rented a houseboat on Lake Union near downtown Seattle. It was a great place to kick back and party. We usually had two or three nights and maybe a couple of days liberty every week. The houseboat gave us a place to go and sleep off the ship. I have many memories about my experiences on the houseboat but **that's another book. Seattle was and still is a great place** to have a good time. It did not take long for me to get accustomed to the rain and colder weather conditions and as I prepared for my first adventure at sea on the *Northwind*.

Towards the end of January 1954 we started our winter cruise to the Arctic. Our commanding officer was Captain W.L. Maloney. He was very friendly and knowledgeable and was well respected by the whole crew. His nickname was Pat, but he was always known to the officers and crew as Captain Maloney.



Shipmates share the houseboat on Lake Union.

We first went to San Diego where we picked up our Navy Underwater Demolition Team (UDT), better known in **those days as “frogmen”, four scientists along with some** scientific equipment and supplies. The UDT was aboard to dive under the ice and blast trails for the *Northwind* to travel. The trip to San Diego was as rough a sea as you can imagine.

An icebreaker has a wide beam and a round bottom, similar to a bathtub, and when the ship gets into turbulent waters it is capable of taking rolls up to 45 degrees. The entire crew could barely stand up much less

sit or sleep. Eating was almost out of the question. The metal trays we ate from would slide from side to side on the dining tables and bang into the guy next to you. Our food was spilled all over the table and deck. It was difficult to hold a tray and eat at the same time so we just sat there and held on the best we could. Most of us did not really like eating anyway as with all the rocking and rolling stomachs were very upset. I recall that almost everyone aboard got sea sick, even Captain Maloney. The worst time was when we passed the Columbia River outlet into the Pacific Ocean off the coast of Oregon where we did take 45° rolls.

This was definitely not a lot of fun. Our duty watch was four hours on and four hours off. The seas were so rough at times we had to tie, untie and retie ourselves to the rails as we moved around the outside decks of the ship. This was not easy, as one slip and you were overboard. Sleeping during the four hours in between duty time was almost impossible. Due to our constant rolling from side to side we had to hold on to the small rails of our bunk or we might fall out. I was assigned to the top bunk and fell off a few times.

After a few days of loading supplies and preparing for

The Northwind was capable of taking rolls up to 45 degrees.

the trip north we left San Diego and began our trip to as far as we could go in the winter ice. The seas going back along the California and Oregon coast were much calmer and it was a very pleasant voyage.

When we arrived at the Strait of Juan de Fuca, which is the entrance to Puget Sound and Seattle, the waters were unusually quite calm. Our first stop was Esquimalt, which is a navy base located on Vancouver Island, near Victoria, British Columbia. I was able to get some time off the ship during our stay and enjoyed visiting the



Strong seas and heavy winds off the Columbia River caused most of the crew to get seasick.



More rocking and rolling off the Oregon coast.

beautiful city of Victoria.

We left Esquimalt and traveled through the Inside Passage toward the Gulf of Alaska. On the way we passed through the San Juan and Gulf Islands along Vancouver Island. I had never seen anything so beautiful. The mountains came right down to the waters edge and large trees were lining the shores. The sky was as blue as I had ever seen and the sunsets were magnificent.

When we arrived in the Gulf of Alaska conditions changed and temperatures dropped to 16 degrees. There was a very strong wind and sea conditions were rough. It was so cold that the rails of the ship froze solid. The heavy ice caused the ship to be overweight and this created problems maneuvering. The *Northwind* was getting heavy and the ice was not melting. The deck crew had to use baseball bats or whatever hard tools they could find to break the ice and get it overboard. A few **times we shot off our large 5" guns. The impact of the** blasting helped loosen some of the ice. This was very cold duty and a lot of hard work. I decided I was not meant for deck detail and requested to be transferred to some other job, preferably indoors, where it was warmer.

Luck was on my side and my wish was soon granted. **I was assigned to the duty of Chiefs' Steward. There were** about ten Chiefs aboard. It was my job to serve their food, clean up after meals, maintain their sleeping quarters, make up their bunks and keep their toilets and showers spotless. There were no watch assignments with this job so when I was not on duty I more or less had the run of the ship and in port I always had time off.

Each day I would rise about five in the morning and set **the Chiefs' breakfast table, serve their food and wash the dishes and clean up the their "mess area."** I would make up their bunks, clean their quarters, even hang up their clothes. After their inspection I had free time until the noon meal. Lunch was a similar routine and my afternoons were free to roam the ship. I would check in now and then in case one of the Chiefs needed something, otherwise I pretty much did what I wanted

until the evening meal. I ate with the crew, but I always **had goodies left over from the Chiefs' deserts. They also had their own refrigerator full of snacks and soft drinks and, when they weren't looking, I had access.**

While in the Gulf of Alaska we made a brief stop at the Naval Air Station on Kodiak Island to pick up supplies.

We did not see one, but Kodiak is the home of the Kodiak Bear which is the largest carnivorous animal in the world. On February 3rd we went through Unimak pass through the Aleutian Islands to the Bering Sea. Soon after we entered the Bering Sea we saw our first ice flow. It was a nice sunny day and the surface of the ice was beautiful. The crew of the helicopter was prepared take off and look ahead for the winter pack of ice. The first ice pack we entered appeared to be about two feet thick. Arctic ice shows just 1/8th above the water line.



Glaciers along the way.



The cold, wet wind in the Gulf of Alaska caused the ships rails and guns to freeze and collect ice. Below is the deck crew trying to break through the ice that froze on the rails. This is when I decided to get off the deck crew and work inside.





Looking ahead to the first signs of ice.

This indicated that we were heading into solid ice.

We still had about six to eight inches of ice on some of the decks and rails. However as we entered the ice pack this did not stop us from backing down and ramming forward to break the thick ice as we moved further north. To back down our forward propeller would go to work. The bow of an icebreaker is shaped so the ship, when ramming, rides up on the ice and then smashes down to crack or break the ice. This made a very loud noise and at first was very scary.

From time to time we stopped at small Eskimo villages and dropped off food and medical supplies. Several times we invited the local Eskimo tribe aboard. We would give



Big Guns



*The Northwind was one of the few Coast Guard ships to **have 5"138 guns. These were added during the Korean War.** After the war the guns were later removed.*

them a hot meal and entertain them with an old movie. **The ship's doctor would also examine and help the sick.** The crew was allowed to trade cigarettes for Eskimo art work. I traded for a carved walrus tusk which was made into a cribbage board. Walruses are now an endangered species so today this carved piece of ivory is considered a



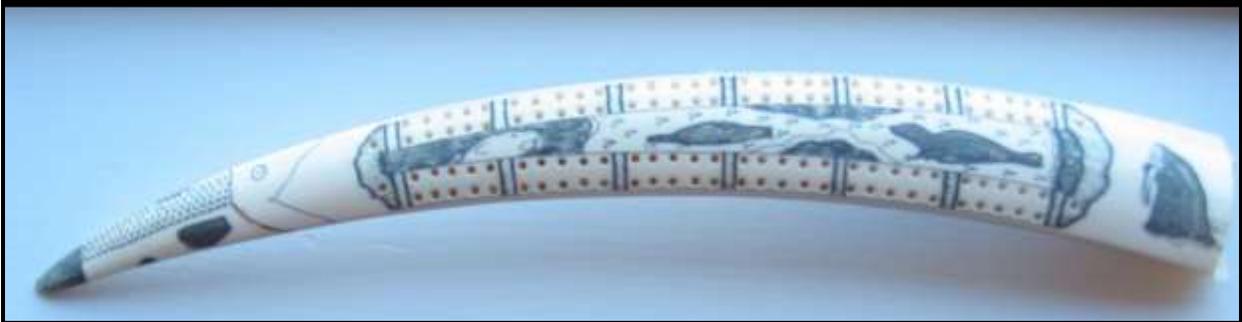
This is in the Gulf of Alaska when the 5" guns were frozen solid due to the strong cold wind and high seas.

valuable collectors item.

At this point we started to see a variety of ice formations made by the wind, currents and tides. No two were alike. Ice formations are caused by wind and sea and can be bright white, crystal clear or have shades of blue. The bright blue color comes from the reflection of the sun shining on the various water pools and ice breaks. It was **truly one of nature's wonders and something one can only** really appreciate by seeing it first hand. We also saw other reflections from the glare of the sunbeams bouncing off



This one of the carved pieces of ivory that I purchased from an Eskimo boy for a pack of cigarettes. It shows penguins resting on a large rock. The sculpture is 2 inches high and all the little penguins are carved out of this one piece. This ragged piece of ivory comes from the walrus tusk where it grows within the jaw.



This Ivory carving was made from a walrus tusk, and is used as a cribbage board. It is thirteen inches long and is beautifully carved with a brilliant shiny surface that looks the same as the day I traded it for a pack of cigarettes..



The helicopter is our lookout.

(Note the Navy Icebreaker Burton Island following behind.)

the natural sculptures of ice. This created a variety of bright rainbow-like colors. I am very fortunate that my photos taken almost 50 years ago stayed intact. Due to global warming these past years, my record of these beautiful and unusual ice formations may never be seen again by the naked eye.

As we went further north the ice became thicker. We were getting close to the international dateline and about twelve miles from Siberia. In those days this was dangerous as it was during the Korean War plus Russia and the U.S. were not friendly nations. Some days the ice was very flat and solid. At times we needed to shut down our engines and move with the ice flow. It was very silent when this happened and at times it felt like we were not



*The ice gets thicker and starts to form into solid masses.
Only 1/8 of the total ice thickness is above the surface.*

moving at all. But, in fact we were moving quite swiftly with the speed of the ice flow.

I became friends with several of the Chiefs and enjoyed my new assignment. I felt more like a tourist rather than a young salt. I recall the Chief Boatswains mate as being a really nice guy. I wish I could remember his name. He took me under his wing, taught me about the sea, and helped me become a better sailor. I then realized how privileged I was to be in the Coast Guard and how lucky I was to be assigned to the *Northwind*.

While attending the University of Southern California, I was a member of the Sigma Chi Fraternity. I found three



This view through the rails shows the density of the ice.

other Sigma Chi brothers aboard from various universities. We became good friends and formed our own onboard fraternal organization. One of the Sigma Chi brothers was Lieutenant Boyse. He was the educational officer on the *Northwind* and advised me how I could earn extra college credits while I was in the service. He also let me visit his stateroom where I was able to use a typewriter. I wrote letters home and I kept a diary of my adventure. This was a real privilege, as normally officers are not permitted to be friendly with enlisted men. Another Sigma Chi was John McKown. I don't recall the name of the fourth Sigma Chi.



The four Sigma Chi brothers.

At night the crew would play bingo, see an old movie, talk about home or girl friends and dream about what we were going to do when we got back to Seattle. The days were busy and interesting. We would occasionally see some wildlife. I recall seeing a polar bear running across the ice and occasionally we would see walrus resting on the ice or along the shore line. At night we would shut down our engines, as we could not see. In the morning we would occasionally find ourselves



This shows some cracks in the made by the Northwind as it cut its way threw the ice. pack.

further back than where we started the previous day. This is because at night we moved with the southerly ice flow. Occasionally, this flow would carry us 100 miles backwards while we rested.

As we got into the thicker and heavier ice we would back up and go forward banging away to make headway. This pounding is difficult to visualize. Just imagine a ship that weighs 6,156 tons ramming ahead full force as the bow hits and rides on top and cracks the ice. We also had the capability to rock from side to side by pumping fuel and water from one tank to another. This helped get

A Look at the Bow



The bow of wind class icebreaker is designed to ride up on the ice and crash down to break through the ice. This action, combined with rolling the ship by pumping water from side-to-side, allows the ship to move forward through the ice field.

us get through some of the thicker layers of ice. The constant ramming and rocking would sometimes go on all day long. When needed the UDT guys would dive under the ice and blast us out of tight situations. I enjoyed the nights listening to the quiet. It was very nice – except for all the guys snoring!

From time to time the ship would stop during the day so the scientists could make tests of the ice. This would also allow the crew to go on the ice and get a little exercise. To keep the blood flowing, we would have snowshoe races. To



*As the ice melts, or after we crush through the ice,
beautiful pools are formed.*



*The Scientists and Navy Underwater Demolition Team
(UDT) “frogmen” make tests in the ice.*

get off the ship we would drop a rope ladder over the side and walk down to the ice. It was interesting to know that there was a huge sea of water beneath the frozen ice pack.

At this point of the trip it was white in all directions and as far as the eye could see. It was early February. Some days were sunny, but still very cold. The sun was so bright at times that it took awhile to see clearly when we went indoors. As we traveled further north on the Bering Sea the ice would get thicker and many days we would not make much headway. We were slowly getting closer to Nome, which was our final winter destination before we were to turn around and head for home. Every



Snowshoe races on the surface of the ice.

few weeks a Navy plane would deliver and pick up our mail. They would fly overhead and drop large mail sacks by parachute and then members of the crew would go out on the ice and rescue the bags. After they dropped the mail they would fly back and pick up our outgoing mail. Our mailbags were hung from a long stretched rope or cable that was connected to two poles. The plane dragged a large hook on the end of a rope and flew low to grab the sacks of mail.

We reached Nome on February 12th. We had accomplished our goal and may have been the first ship to get this far in the winter. I remember this day as it was near my birthday and I missed being with my family. When the ship settled, we climbed down rope ladders to the ice and walked about a mile across the ice to Nome. We were warned not to get too close to the Eskimo women. The crew was advised that if we got an Eskimo pregnant we would be required to live with them for at least seven



Waiting to debark off the rope ladder for a walk to Nome.

years. This obviously kept the us away from hustling the women in Nome. There were, however, no rules on how much beer we could drink.

Knowing this was our last stop we made good use of the day. As we staggered back to the ship I could only think about going home. Some of the guys sneaked bottles of liquor aboard which made the trip back home a little more enjoyable. There was a large rope storage locker room three stories below the main deck and some of the guys would go below late at night and have a sip or two. This is **were I learned why they really call the UDT guys “frogmen”** as they used to drink shaving lotion in place of alcohol.

Our trip home took about a month and was uneventful. All we wanted to do is to get back to Seattle and our nice little houseboat. The ice was starting to melt so the trip was much smoother going south. *When we arrived in Seattle the Northwind was immediately put into dry dock and made ready for our summer trip to McClure Strait.*



Walking across the ice to Nome.



An Eskimo fishing in the ice with Nome in the background.



Walking back to the ship after our day in Nome.



The Northwind in dry dock at Seattle getting ready for the historic summer patrol to McClure Strait.



The Northwind's stern in drydock.

*(Note the size of the worker compared to the size
of the ship's prop.)*

Chapter II

An Historic Trip to the Top of the World

The First Ship Ever To Make the Northwest Passage

In 1845, Sir John Franklin sailed from England with two ships and a crew of 128 men to find the Northwest Passage. He sailed over the north side of Baffin Bay and vanished. However, he has been credited with finding the east entrance to the Northwest Passage. In 1850, Robert McClure sailed around the north coast of Alaska and found his way to the west end of the Northwest Passage. For three years he set up camp on Banks Island, from where he set off on foot to find the midpoint of the Northwest Passage, where he died.

“The McClure Strait is an arm of the Beaufort Sea. It is 170 miles long and 60 miles wide above the Northwest Territories of Canada. It extends west from Viscount Melville Sound between Melville and Eglinton Islands and is located on the north side of Banks Island. In 1954 a U.S. Icebreaker cut through the strait for the first time, opening the last obstacle to the shortest water route across the Canadian **Arctic region.**”

Columbia Encyclopedia, 6th edition

On August 10, 1954, the *Northwind* nosed her way cautiously into McClure Strait. On the silent, shimmering and often fogbound shore, the crew saw polar bears, seals and musk oxen. Sometimes the ice pressed so closely it seemed she would become hopelessly corralled



Remains of McClure's 1853 Camp

Photo from Life Magazine,

November 29, 1954

but the ship sailed steadily eastward. On the 14th she **sighted the lonely remains of McClure's camp.** A week later the *Northwind* emerged from the strait and was the first ship ever to make the passage.

-Life Magazine, November 29, 1954

The Historic Adventure of the Coast Guard Cutter *Northwind*

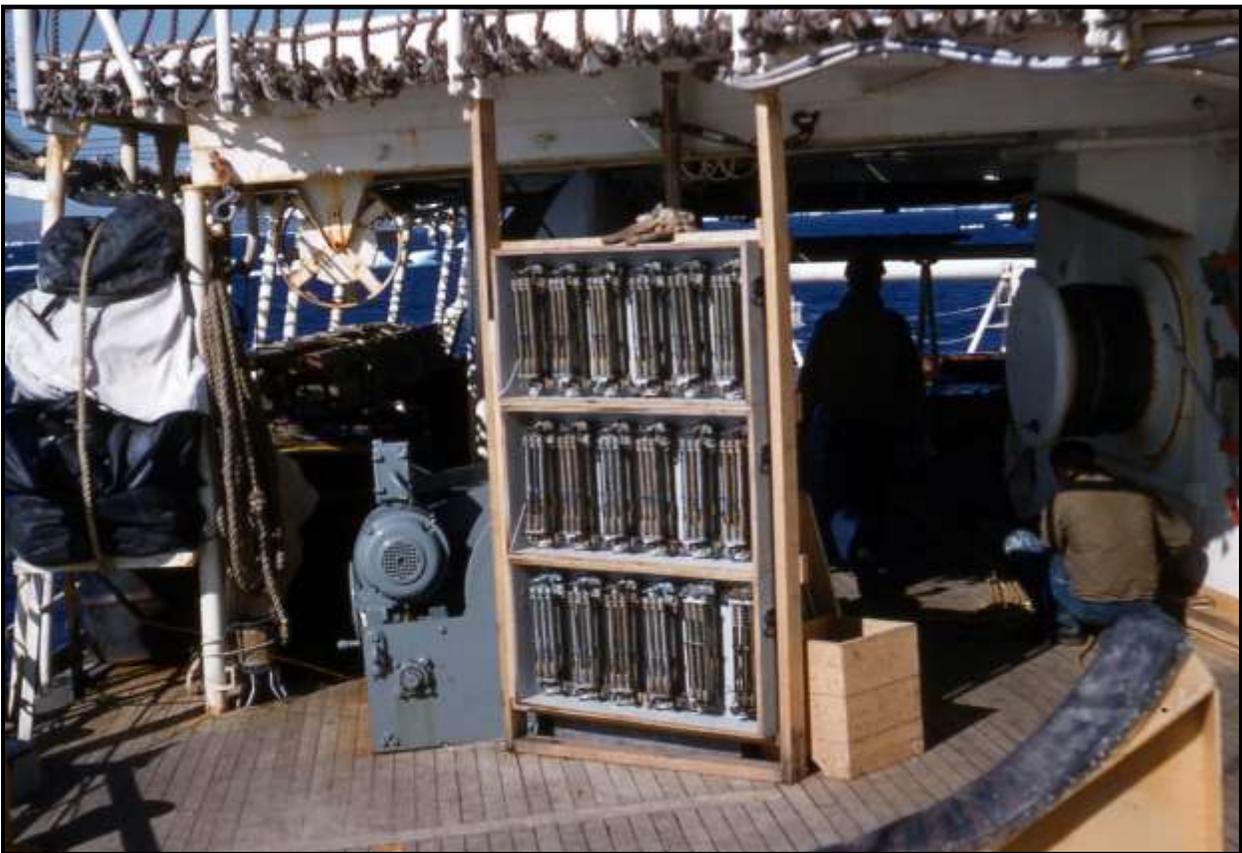
(Taken from my diary written and
photographed by me in 1954.)

On July 5, 1954, after five years of planning, the Coast Guard Cutter *Northwind* led a mission to the “**Top of the World**” This historic adventure was known as the Beaufort Sea Expedition. The purpose of this top secret expedition was to travel places where no ships had gone before, study ice conditions in far regions of the north, take scientific experiments and explore uncharted waters above the Arctic Circle. The goal of the journey was to chart a path through McClure Strait and open a west-to-east route through the Northwest Passage. The *Northwind* had several Canadian scientists aboard along with a Navy Underwater Demolition Team (UDT) to conduct experiments of ice and sea conditions along the way. The U.S. Navy Icebreaker *Burton Island*, sister ship to the *Northwind*, joined in the expedition to assist as needed. The *Northwind* was selected to be the lead ship because her commanding officer, Captain W. L. Maloney, was the senior officer of the two ships.

The expedition started at Pier 91 in Seattle, Washington. The first stop was San Diego where the *Northwind* picked up the Underwater Demolition Team and joined up with the *Burton Island*. The two ships left San Diego on Monday, July 11th and proceeded north to

Esquimalt, Canada. Esquimalt is located on Vancouver Island and is the home of a Canadian naval base. The ships stopped there for two days to pick up fuel and additional scientific equipment and supplies.

After leaving Esquimalt the two ships traveled through waters that were something out of a storybook. The scenery along the Inland Passage, between Vancouver Island and British Columbia, was a constant picture of splendor and beauty. It was much different from our winter patrol as the trees on the sloping edge of the high mountains were now green. The seas were calmer. The two ships left a rippled wake that slowly traveled to the rocky shores on both sides of passage. The melting of the



Some of the scientists testing equipment.

winter snow left many waterfalls along the way. This was by far the most beautiful country I had ever seen.

On July 22nd, after a pleasant trip across the Gulf of Alaska we arrived again at Kodiak, Alaska. The scenery in Kodiak was also very different from what we had seen in the winter. The various shades of green were entirely different from the bland white landscape we saw on our winter cruise. After two days in Kodiak we passed through the Aleutian Islands and cruised up the Bering Sea towards Nome.

It was much nicer than our winter trip as the ice had melted and all we could see was blue water. We did not stop at Nome but kept on moving to Cape Prince of Wales. This was a small U.S. Army base, located on the mainland south of Little Diamede Island and near the Arctic Circle. The scientists aboard made a few tests and we left supplies for the local Eskimos and military personnel. From Prince of Wales we traveled between Little and Big Diamede Islands. Little Diamede is U.S. territory and Big Diamede belongs to the Russians and is part of Siberia. This was not the safest place to be immediately after the Korean War and the crew was concerned about their safety. However, all went well and we continued our journey north.

On August 2nd we crossed the Arctic Circle. It was exciting to know we had come this far and had actually **entered the gateway to the “Top of the World”**. Members of the crew whom had previously crossed the Arctic Circle were called Blue Noses and were citizens of the Auroral Arctic Empire. Those of us who were crossing for the first

time were known as Red Noses. There was a traditional initiation for members of the crew who were not Auroral citizens. Part of this special initiation included an Arctic ice bath. After the initiation we became Blue Noses and were all awarded a certificate that indicated we were officially citizens of the Auroral Arctic Empire. This meant **that we now had all rights and prerogatives of the “Silent Realm”**. **The certificate was signed by Boreas Rex, Emperor and was attested by Davey Jones, His Majesty’s Scribe.**

Our next stop was the U.S. Army base at Point Barrow where we dropped off supplies. Point Barrow is the most northerly point of Alaska and is located on the shores of the Arctic Ocean. As we neared Point Barrow we started to see the first traces of ice. The scientists conducted more tests and we picked up mail that had been forwarded to us. Soon after leaving Point Barrow we entered the summer ice pack. The formations were different from winter as the climate was warmer and not as windy. The ice floe was not solid but was like a million small icebergs. There were shades of blue, green and white all around the ship. The sun was out most of the time and the reflection from the sky made the ice pools glow with bright colors of blue.

Our next stop was Burton Island where the scientists continued their tests of the Arctic ice conditions. They also took depth soundings along the way as this part of the world had never been officially charted. The main purpose of our mission was to make accurate navigation charts for other ships to follow in the future. From Burton Island we headed across the Amundsen Gulf to



The Order of the Top of the World was given to each ship-mate after we crossed the Arctic Circle and after our test and graduated from a being a Red Nose to a Blue Nose. I became a citizen of the Auroral Artic Empire on August 2, 1954.

the southwest side of Banks Island. The sun is very bright in the Arctic and even with sun glass the glare from the ice makes it hard to see what is ahead. This glare also made it difficult to navigate, especially thorough uncharted waters. The helicopter pilots did their job as they flew ahead of the ship and helped guide



This is how the ice pack looked in the Arctic Sea.

us through the bright and thick ice pack.

At Banks Island we dropped anchor and took our side boat to shore to pick up two Northwest Mountain Police that lived and patrolled the island. Other than Eskimos, the Mounties were the only two people there. A few of the scientists set up camp and stayed on Banks Island.

On Friday the 13th we entered McClure Strait on the northwest side of Banks Island. The ice started to form into larger masses. The brief sunsets we had were gorgeous and became more beautiful the further north we traveled. The ice was not very thick along the upper shores of Banks Island. There were a few spots of scattered ice but nothing heavy. The island looked very brown and desolate and showed no sign of life. The water was bright blue and the ice formations we did see soon became more beautiful. We fulfilled our mission and were the first ship in history to conquer McClure Strait and

chart a corridor through the Northwest Passage.

We continued south around Banks Island. On the northeast side, between Banks Island and Victoria Island, some of the ice was over 15 feet thick, with only one-eighth of that thickness showing above the surface of the sea. For several days we backed down and rammed forward as we cracked through this great wall of ice. When we rammed forward the ship would tremble from stem to stern. The ice formations started to look like a giant field of toad stools. As the ship broke through the ice the water rushed up anxiously as though it had been imprisoned for centuries.



A beautiful picture of the ice floating in deep blue water.

The intensity of the blue and green coloring beneath the water line presented many illusions of vastness and depth. This experience showed me first hand the titanic power of nature. As the ice pack began to gather, it looked like small icebergs stuck to each other. Our helicopter would go ahead to try and find an easy path to follow. A couple of times our UDT guys would dive under the ice and blast a hole in the heavy ice. The darkness of the night was now gone and we had sunlight around the clock. In the Arctic, during the middle of summer, the sun does not fully set and that is why this part of the world is known as the land of the midnight sun. The brief sunsets were gorgeous and became more colorful as the ice formations became thicker.

About every three to four weeks we would get a mail drop. These mail drops were a highlight of our trip as this was the only communication the crew had with the



The scientists aboard set up camp on Banks Island.

outside world. During one of our mail drops the container broke when it hit the ice and the mail was scattered in all directions. Many letters were lost and many of those that were salvaged became wet or damaged. This was obviously very disappointing as everyone looked forward to a word from home. We continued on as the *Northwind* continued to crush its way through the ice. Our strong forward movement sculptured the ice into many strange and interesting shapes. My pictures show how it looked, but they do not capture the feeling you get inside when you see it with the naked eye.

We pulled in to a small bay on Banks Island, which was the sight of McClure's original camp, and dropped our anchor. We were then taken ashore on the ship's tenders. To celebrate the occasion the crew was treated to



The Northwind entering McClure Strait

a beer and steak fry. The enlisted men challenged the officers to a baseball game and we all had a good time. It was hard to walk or run on the soft ground or tundra, as it was called, as it was like being on a bunch of large marshmallows. The ground was not flat but made up of a many small hills and valleys left by the winter ice. Trying to play baseball was not easy.

I planted a beer can atop a small hill and put a note inside declaring this to be Jaffe Point. When we returned to the *Northwind* late that night we were all very happy with the recreation of the day – especially the cold beer.



At the site of McClure's old camp, shipmates and buddies Dean Davis and Dale Smith with cans of beer give a toast to Robert McClure and our successful adventure across the "Top of World".



The Midnight Sun



The Arctic ice reflects the blue sky.

From this point the ice started to form very fast and the days and nights became cooler. During late August and early September the first traces of winter begin to take shape. The ice floats down from the North Pole and patches of ice start to freeze together. The weather conditions made it more difficult to continue on our journey. Time started to stand still as the ice floe only allowed us to travel a few miles a day. Sometimes ice floe would push us backward and we would have to start all **over again. When winter starts to move in on the “top of the world”, it does not waste time. We started to see** many changes in the landscape. Small hills along the shoreline formed as large mounds of dirt were pushed to the side by the ice floe. It looked like pyramids with their



tops chopped off.

More history was recorded when the newly commissioned Canadian icebreaker *Labrador* arrived from the east coast. The *Burton Island* joined us at Collinson Inlet at Victoria Island. This was the first meeting in history, in the Northwest Passage, of ships from the east and west. It was only a brief encounter and soon the three ships went their separate ways.

The results of these tests later furnished the world with new maps and charts. In addition, several new islands and uncharted areas that had never been charted. I will never forget the feeling I had of being part of history in the making.

The nights started to form and we enjoyed a few hours of darkness as we approached September. The Arctic sunsets were gorgeous this time of the year. This change

in seasons helped take away some of the loneliness of being so far from home. The historic adventure of being the **first to cross “the Top of the World” from west to east** was over. From here we would go from place to place and sit sometimes dock or anchor for a week while the scientists did their thing. We rarely got off the ship and the crew started to get a little jumpy. Rumors started that we would soon be heading home and this made the days even longer.



This is me laying claim to Jaffe Point.

The excitement of the adventure was starting to fade **as thoughts of home to Seattle were on most of the crew’s** minds. It had been over three weeks since we had received any mail and this further aggravated our loneliness. Although it was an exciting and memorable adventure, the thoughts of what we were going to do when we returned to Seattle occupied our mind. Most of the guys were young, and several were recently married, so their loneliness for home and family was more noticeable. The final days passed slowly as we started to move south. We witnessed a few days of heavy ice floe and some days we only progressed a few thousand yards.

On the 5th of September we were joined again with the

the Panama Canal and became the first ship in history to circle the North American Continent.

After an 84-day scientific expedition to the arctic, we arrived in Seattle on September 12, 1954, where we were treated like heroes. There were many ships in Elliott Bay with flags flying and colors showing. Fire boats were shooting water into the sky and the 11th Coast Guard District band was at Pier 91 to greet us. Families, wives and girl friends were on the dock and it was a very festive occasion. I was very privileged to have been part of this historic adventure aboard the *Northwind* and I am proud that served my country as a member of the United States Coast Guard.



A last look at the Arctic sunset.

Burton Island and the *Labrador*. The three ships tied up side by side and the crews of all three ships celebrated their triumph aboard the *Labrador*. The *Labrador* shared some of their rum rations as Canadian ships carry rum aboard and the crew gets a taste now and then. That day, Life Magazine sent a plane with a photographer and a journalist to take aerial and ground photos for a story on our historic adventure.

The *Labrador*, being a recently commissioned ship, had new and modern equipment and electronics aboard. Their living conditions were superb. They left us to continue their journey down the west coast and through



A Heroes Welcome

A festive homecoming in Elliott Bay at Seattle, WA.



A view of West



Many ships came to greet us

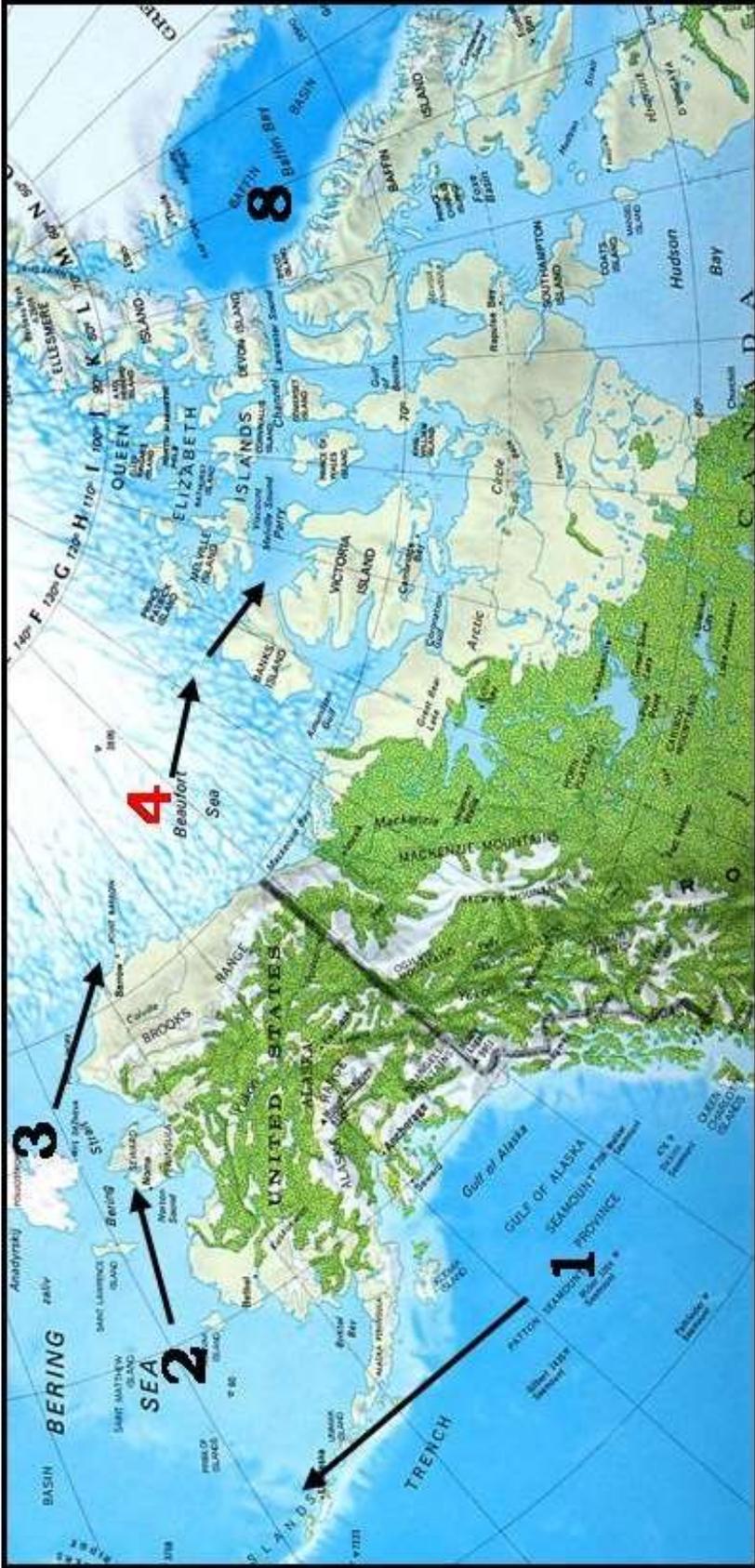


Captain Maloney

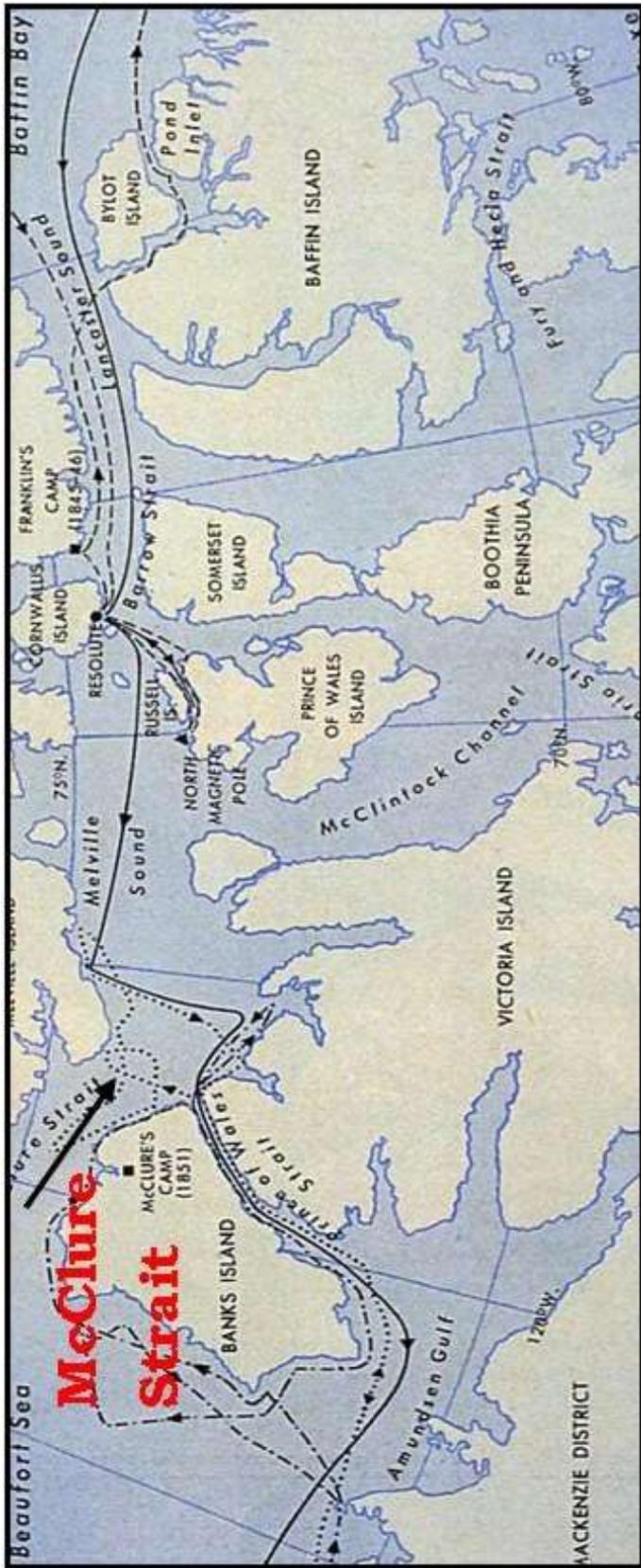


The Route of the First Ship to Conquer the Northwest Passage





The 1954 expedition took the Northwind through the (1) Aleutian Islands, (2) into the Bering Sea to Nome, (3) through the Bering Strait to Point Barrow,(4). The Northwind is recognized as first ship in history to pass through McClure Strait and conquer the Northwest Passage.

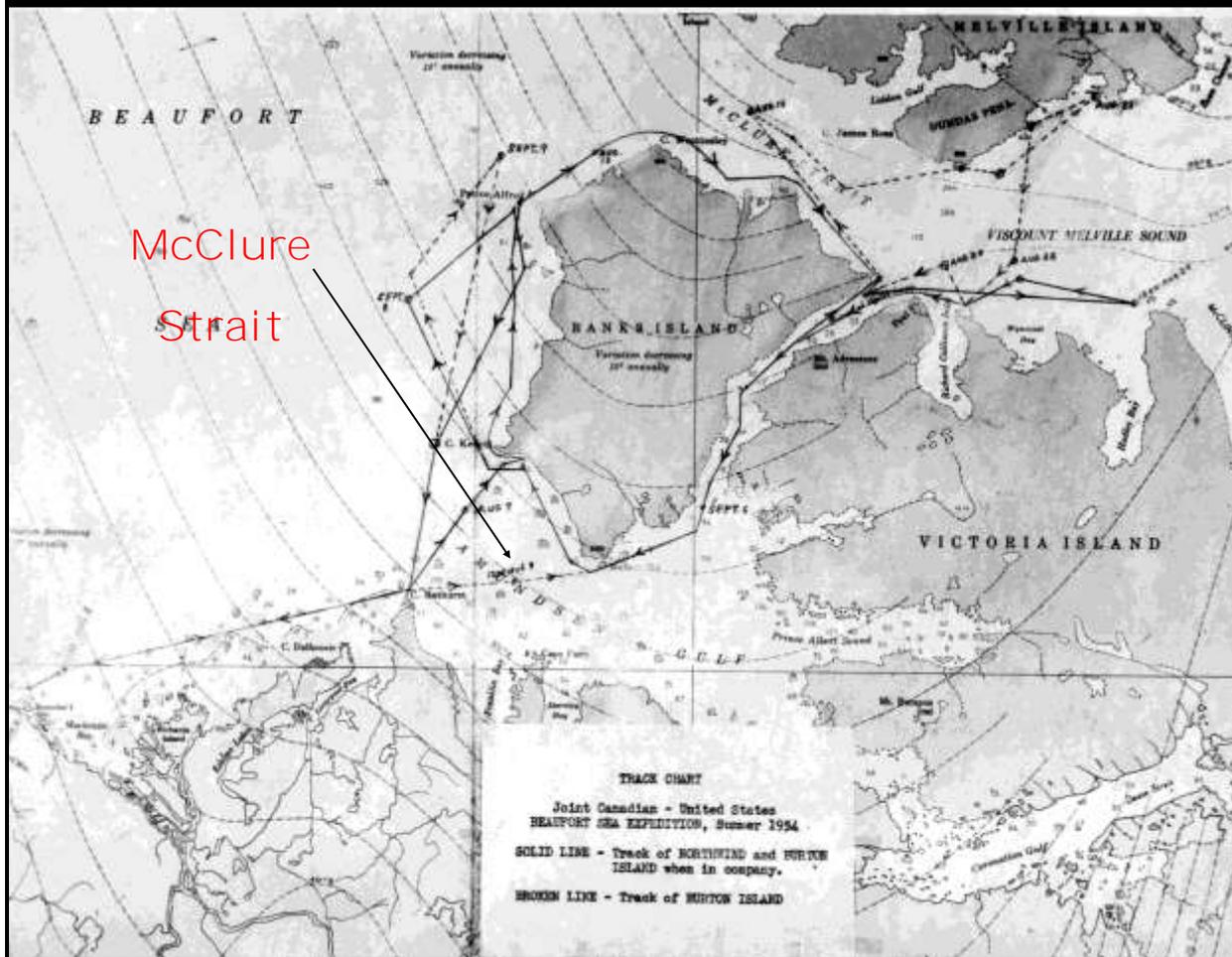


The dash/dot line above shows the route of the Northwind. The solid line shows the route of the Canadian Icebreaker Labrador. The Labrador was the first ship to cross the Northwest Passage from east to west and continued on to be the first ship to circle the North American Continent.

OFFICIAL COAST GUARD TRACK CHART

The solid line shows the path of the *Northwind*.

The broken line is the path of the *Burton Island*.



(NOTE: the submarine *Nautilus*, which was the first submarine to cross the “Top of the World” under the ice, later used these charts.)

Life Magazine story
issue dated
November 29, 1954



COMPLETE PASSAGE was made by *Labrador*. The area in the square is shown mapped below.

FORCING A NORTHWEST PASSAGE

Professionals and amateurs probe long-unexplored waters

The lonely, ice-packed Northwest Passage—once probed but never conquered by explorers like Cabot, Frolicher and Hudson—had what amounted almost to a first traffic jam last summer. From Alaska came two U.S. icebreakers, the Coast Guard's *Northwind* and the Navy's *Burton Island*. From Halifax came Canada's *Labrador*. To add to the traffic the fishing boat *Monte Carlo* showed up with a crew of schoolboys.

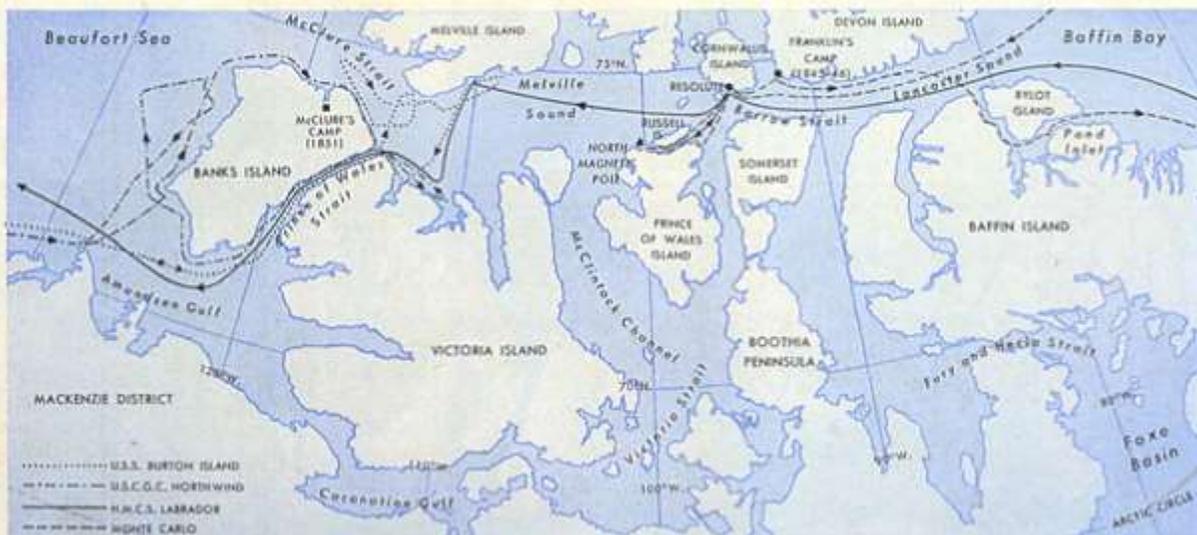
With the growing strategic importance of the region the jamup was not surprising. The icebreakers were sent to survey the area, for its straits and gulfs are still largely unsounded and inaccurately mapped. It was over

300 years after Cabot's voyage before Lancaster Sound (see map below) was entered. There, in 1845-46, Sir John Franklin wintered, then vanished with more than 100 men. Searching for them, another Briton, Robert McClure, attempted the passage from the west, discovered the strait now named for him. Finally, in 1905-06, Roald Amundsen made the first successful passage, forcing his way south of Victoria Island. Not until 1941 was Prince of Wales Strait navigated. This summer it was sailed again by the *Burton Island* while the *Northwind*, nosing into McClure Strait, attempted a voyage no ship had ever made before (following page).



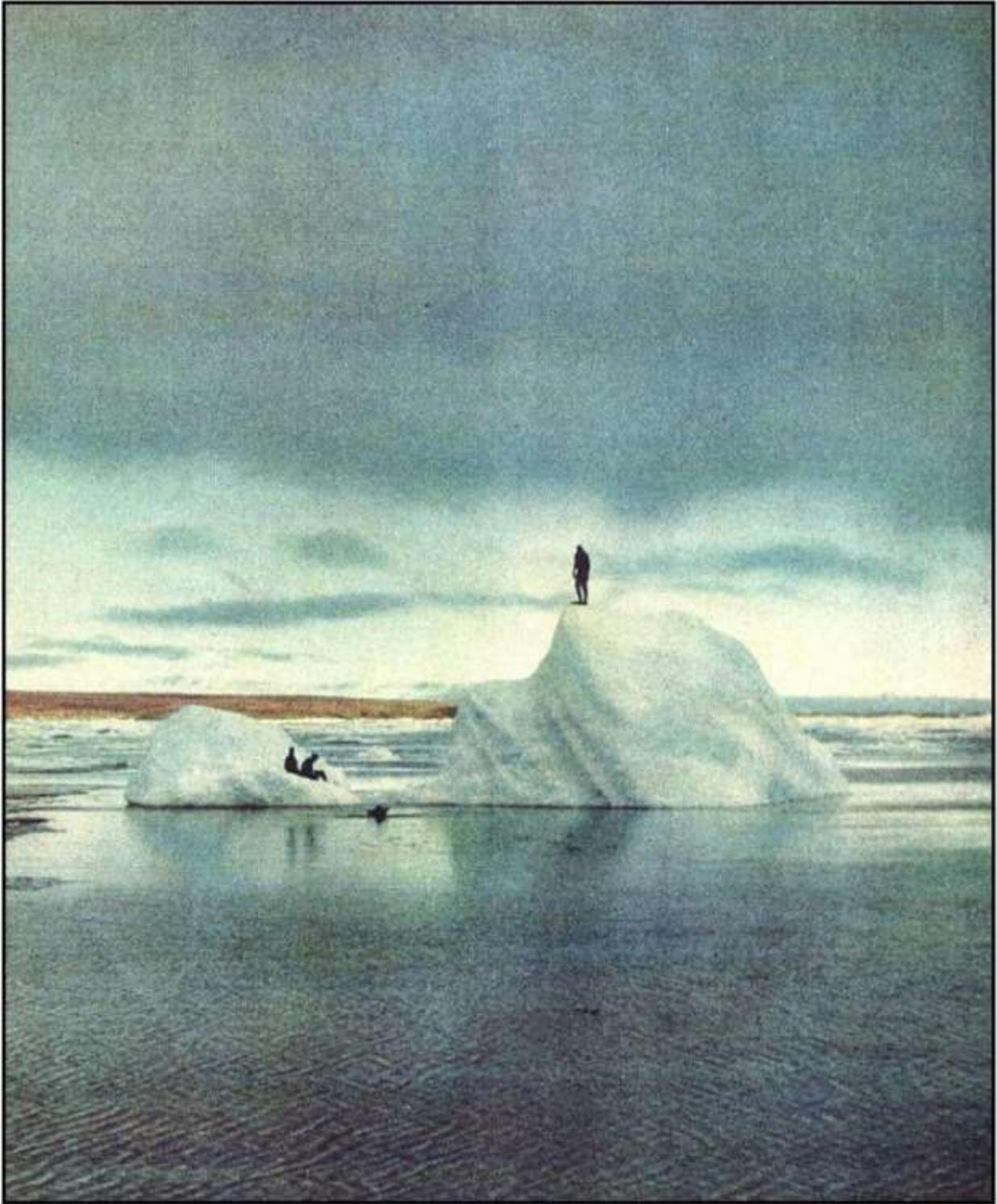
IN ICY SEAS frogmen of the *Burton Island* swim. They could only tolerate the water for six minutes.

REACHING A FLOE, the frogmen climb on it for a rest. They dynamite ice too heavy for ship's bow.



ROUTES OF THE SHIPS are shown above. The *Northwind* and the *Burton Island* entered Beaufort Sea from the west and separated, the former sailing north to McClure Strait, the latter into Prince of Wales Strait. Reaching Melville Sound, the *Burton Island* headed into McClure Strait and zigzagged back and forth taking

soundings. Then the icebreakers met the *Labrador* which entered Melville Sound from the east. Together the three ships sailed southwest through Prince of Wales Strait and back to Alaska. Meanwhile the *Monte Carlo* had entered Lancaster Sound, sailed on to the Magnetic Pole, then turned and headed homeward again.



Members of the Underwater Demolition Team take a rest on an iceberg.



ALMOST OBSCURED BY 20-FOOT CHUNKS OF ICE, THE "NORTHWIND" APPROACHES MERCY BAY ON McCLURE STRAIT WHERE EXPLORER McCLURE WAS TRAPPED BY ICE IN 1851

CRACKING A FLOE, the *Northwind* pushes her way through toward open water beyond. Though ice was sometimes 15 feet thick, it was only loosely packed.



ICE-PACKED PORTRAIT of *Northwind* is taken by crew member. Icebreakers are broad and stubby, have reinforced hulls for riding up on ice and cracking it.





AND LATER FORCED TO ABANDON SHIP. THOUGH THE "NORTHWIND'S" CREW SOMETIMES HAD TO DYNAMITE FLOES, THE SHIP GOT THROUGH WITHOUT ANY SERIOUS TROUBLE

UNCHARTED WATERS, MOUNTAINS OF ICE

On Aug. 10 the *Northwind* nosed her way cautiously into McClure Strait as her helicopters searched out a watery path among the floes. On the silent, shimmering and often fogbound shore the crew saw polar bears, seals and musk oxen. Sometimes the ice pressed so closely it seemed she would become hopelessly corralled (*above*) but the ship sailed steadily eastward. On the 14th she sighted the lonely remains of McClure's camp (*right*). A week later the *Northwind* emerged from the strait, the first ship ever to make the passage. In Melville Sound she joined the *Burton Island* and the *Labrador*, which reported having met up with the *Monte Carlo* (*next page*). For three weeks they cruised in Melville Sound, observing ice drift, charting channels and mapping shore lines. In mid-September, with a wealth of new and classified arctic information, they turned westward through Prince of Wales Strait and began the voyage home.

McCLURE'S CAMP SITE was found by *Northwind* helicopter. After more than a century, the materials were well preserved in the Arctic's cold, dry climate.



Newspaper Stories
About the ***Northwind's***
Historic Adventure.



ICY MISSION: Members of the crew of the Coast Guard icebreaker Northwind crowded around the bow as the vessel pushed her way through heavy ice off Cape Prince Alfred, Banks Island, during a history-making scientific

expedition in the Arctic Circle. The Northwind and a sister ship, the Burton Island, returned to Seattle yesterday. The expedition marked the first time ships have passed through McClure Strait, some 800 miles south of the North Pole.

Two Coast Guard icebreakers—first vessels of any kind to pass through McClure Strait in the Arctic Circle—arrived in Seattle yesterday afternoon after an 84-day scientific expedition to the North.

The ships were the cutters Northwind, commanded by Coast Guard Capt. William L. Maloney, of New York, and the Burton Island, commanded by Navy Comdr. Everett A. Trickey, of Long Beach, Calif.

Official title of the joint Canadian-United States venture was the Beaufort Sea Expedition. Accompanying the two cutters was a Canadian Navy icebreaker, the Labrador, commanded by Capt. O. C. S. Robertson.

Purpose of the trip was to make hydrographic and oceanographic surveys of the ice-bound waters around Banks Island, at the northern tip of Canada, for military and scientific purposes.

Teams of civilian scientists worked with military men to gather secrets of an area which before has been inaccessible to ships. With charts prepared

from information gathered on the trip, future exploratory missions to the area can be accomplished in just a few days, Captain Maloney said.

The area in which the three ships operated lies about 600 miles north of the Arctic Circle, and about 840 miles south of the geographic North Pole.

"Actually, we were in the ice from August 9 to September 12," Captain Maloney said. "If it wasn't for the three vessels working together, we couldn't have done it."

Helicopters, two each aboard the Coast Guard ships, were used to transport men and supplies from ship to shore and in reconnaissance. Their aid was invaluable, Capt. Maloney said.

Civilian scientists aboard the vessels were directed by Dr. W. K. Lyon of San Diego, and Dr. W. M. Cameron, Canada.

Little trouble was encountered on the expedition. Two appendicitis cases among crew members, however, caused consternation. One man was operated upon successfully in Nome, and the other underwent

surgery aboard the Burton Island, about three days ago, halfway across the Gulf of Alaska.

Captain Maloney said the expedition was prepared for by five years of study. All calculations pointed to the past summer as being the most ideally suited for the trip.

A definite factor in the expedition's success was the thinness of the ice. Though 15 feet thick in the worst places, it still was thinner than it had been for many years. Lowest temperature recorded by the expedition was 30 degrees above zero; highest was 60.

Inspections held yesterday ascertained that neither American ship suffered undue damage on the trip. Minor dents in propellers and hulls were found.

A break in the journey's monotony was afforded when a large ice island was seen floating north through the Prince of Wales Strait. Upon landing on the island, crew members erected a sign pointing south which read:

"The Northwind was here. This way . . . Seattle."

From the Seattle Times

ICEBREAKERS VISIT



HOME AT LAST: Norm Brothers, 21-year-old Coast Guard fireman, got a warm welcome from his fiancée, Marge Feckley, 11030 14th Av. S. W., when he returned to Seattle yesterday from a cold voyage. Brothers was a member of the crew of the Coast Guard icebreaker

Northwind, which returned here yesterday with the icebreaker Burton Island after making history as the first vessels to pass through McClure Strait in the Arctic Circle during an 84-day scientific expedition. Brothers and Miss Feckley will be married October 15.

From the Seattle Times

CLIFF

BY HERMAN STEINER



IN LAND OF ICE—The U.S. Coast Guard cutter Northwind shown in uncharted areas of Northwest Passage beyond Arctic Circle, during expedition.

SC Student Details Trip North of Arctic Circle

Coast Guard Cutter Rams Way Through Ice Packs of Uncharted Territory

History in the making when a U.S. Coast Guard cutter battered its way through ice packs to force a northwest passage for the first time in certain areas north of the Arctic Circle, was described by a member of its crew, Phil Jaffe, a University of Southern California student.

In writing of his experiences aboard the USS Northwind to Dr. Albert F. Zech, counselor of men at SC, Jaffe said that his voyage to an area where no other man has ever been was exciting.

"Here on top of the world where a ship often had difficulty in making a few miles a day, backing up and ramming forward to crack walls of ice often 15 feet thick, the sun was hot when it came out," he wrote.

Jackets Often Discarded

"Frequently the men wore no jackets when we went outside. However, sun glasses were an important part of our uniforms. It was on a Friday the 13th when I had the privilege of being one of the first men to enter McClure Straits.

"We celebrated the distinction of being the first ship to make the passage by going ashore on Banks Island. We had a steak fry and a baseball game.

"The ground was soft and it felt like walking on marshmallows because of small formations made by the winter ice.

"I planted a flag on top of a small hill and dedicated it to myself."

Intense Colors Cited

Jaffe described the intense blue and green of the water which was surrounded by areas of white icebergs. Reflections of brilliant sunsets on the ice gave the world vivid colorings of red and orange.

Ice shapes formed to look like giant fields of mushrooms, creating the illusion of peace and harmony, according to the SC student.

The Northwind, 280 feet long with 235 men and officers, carried two helicopters for searching passageways in

the Burton Island, and a Canadian ship, the Labrador.

Unknown Islands Charted

The combined joint cruise in Melville Sound provided new information on charting unknown islands and mapping shorelines. Straits and gulf were accurately recorded for the first time in this area and soundings taken in new areas of the Arctic for possible use by submarines.

Fishing Boat Joins

An independent fishing boat, the Monte Carlo, joined the fleet for a brief period during its studies of movements of the magnetic pole and ice drifts.

"Two months seemed quite a spell to be north of the Arctic Circle, especially when winter began to bring a lot of ice from the North Pole," Jaffe wrote.

"It froze together and made progress slow. One day we made only a few thousand yards. However, it was a thrill knowing that we contributed much scientific data and new information to navigation. I will be glad to be back at SC."

Reprinted from the
LA Times

Alum Relates Trip To 'Top of World'

History in the making, when a U.S. Coast Guard cutter battered its way through ice packs to force a northwest passage for the first time in certain areas north of the Arctic Circle, was described by a member of its crew, SC student, Phil Jaffe.

In writing of his experiences aboard the U.S. Northwind to Dr. Albert F. Zeeh, Counselor of Men, Jaffe said that his voyage to an area where no other man has ever been was exciting.

"Here on top of the world where our ship often had difficulty in making a few miles a day, backing up and ramming forward to crack walls of ice often 15-feet thick, the sun was not when it came out. Frequently the men wore no jackets when we went outside. However, sun glasses were an important part of our uniform. It was on a Friday the 13th when I had the privilege of being one of the first men to enter McClure Straits," wrote the SC serviceman.

"We celebrated the distinction of being the first ship to make the passage by going ashore on Banks Island. We had a steak fry and a baseball game. The ground was soft and it felt like walking on marshmallows because of small formations made by the winter ice. I planted a can on top of a small hill and dedicated it to myself," the letter said.

Jaffe described the intense blue and green of the water which was surrounded by areas of white

icebergs. Reflections of brilliant sunsets on the ice gave the world vivid colorings of red and orange. Ice shapes formed to look like giant fields of mushrooms, creating the illusion of peace and harmony, according to the SC student.

The Northwind, 280 feet in length with 225 men and officers aboard, carried two helicopters for searching passage ways in the ice fields. The vessel was joined during a three-weeks period of the expedition by the Navy's sister ship, the Burton Island, and a Canadian ship, the Labrador. The combined joint cruise in Melville Sound provided new information in charting unknown islands and mapping shore lines. Straits and gulf were accurately recorded for the first time in this area and soundings were taken in new areas of the Arctic for possible use by submarines. An independent fishing boat, the Monte Carlo, joined the fleet for a brief period during its studies to movements of the magnetic pole and ice drifts.

"Two months seemed quite a spell to be north of the Arctic Circle, especially when winter began to bring a lot of ice from the North Pole. It froze together and made progress slow. One day we made only a few thousand yards. However, knowing that we contributed much scientific data and new information to navigation was a thrill. I will be glad to be back at SC," concluded Jaffe.

Article for the USC Daily Trojan

Photo Gallery of
Memorable Moments
Aboard the *Northwind*.



The Author, Enjoying the Adventure

My buddies, John McKowen and Dean Davis, below, get ready to enjoy the products of the Nome Liquor Store. This was a day we all enjoyed.



Good Friends and Shipmates



Northwind's mascot, Rosie, playing
in the snow.

Two of Northwind's scientists on
snow shoes check ice conditions.





Preparing to Leave Port

The crew is excited as *Northwind* prepares to leave Seattle on the historic adventure. They knew the trip would be long, but all looked forward to visiting a part of the world that is rarely seen.



A beautiful winter view of the Inside Passage between British Columbia and Vancouver Island. Note how the **tree lined mountains come right down to the water's edge**. The snow-capped mountains in the background were seen in many places along the way as we cruised through these beautiful waters. I was fortunate to later cruise these same waters in my own ship, also named the Northwind, in honor of the *Coast Guard Icebreaker Northwind*.



*Lieutenant Eric Wall takes a sunshine break from our celebration at **McClure's camp on Banks Island.***



Lookouts on the bridge watch for breaks in the ice.



Ice Sculpture

This is a typical Arctic scene showing how large chunks of ice float. This type of sculpture may not be seen today as global warming these past 50 years has caused the waters in the Arctic to be much warmer, resulting in less ice formation. This ice is four to five feet above the water line, which means that it is about 30 to 40 feet thick overall — **thus the expression, “the tip of the iceberg.”**



Track of the Northwind.

This is a beautiful view of our track through the ice. As we cut through the ice pack on a sunny day, the water would be the deepest blue one can imagine, especially when viewed in contrast to the vividly white ice. Several times we saw animals moving on the ice as they sought to keep dry.



Lifeboat at the ready.

Several of *Northwind's* lifeboats were used to take people back and forth to various Eskimo camps and U.S. Army lookout stations along the way. This boat is rigged and ready to be lowered. The ice in this photo is sparse, with plenty of open water for the scientists to test and to allow lifeboat exploration of this unknown arctic territory.



Looking ahead as Northwind approaches the ice floe.



The ice closes in behind the icebreaker as it punches its way through the floe.



Military Base North of the Arctic Circle

Point Barrow is located at the top of the Alaskan mainland. In 1954, and during the Korean War, it was the site of a U.S. Army base. While at anchor, the crew dropped off needed supplies. Some of the personnel assigned to the base came aboard and shared stories with the crew, and we gave them a good *Northwind* welcome.



Northwind's helicopter prepares for takeoff.

An icebreaker moves forward by using its powerful engines to drive its rounded bow up onto the ice sheet. Many times the ship would rock side-to-side to open up a passage. Rocking was accomplished by pumping water between huge tanks on each side of the ship. Once out of **the water, the ship's massive weight breaks the ice sheet** and the ship is once again afloat. When we encountered ice too thick to break, such as the flow shown in the picture, Captain Maloney would order the helicopter aloft to search for thinner ice or open water. In 1954, there were no available charts of the region. The helicopter was our airborne lookout.



A Coating of Ice

This picture shows the way that the *Northwind's* bridge was covered with ice in the Gulf of Alaska during the first winter trip. When the ice got too thick, we would shoot our five-inch guns. The shock of the guns firing would shake the ice loose. There was no means of melting this ice. The only way to remove it was to hit it with baseball bats and try to break it up. Keeping the rails clear required a lot of hard work. The coating of ice made the ship very heavy and caused us to move ahead much more slowly. Eventually, after a few sunny days, the ice melted.



Looking Ahead For Signs of Ice



Sea gulls follow the ship through the inside passage, waiting for the garbage to be dumped overboard.



Scientists walk on the ice as they perform their tests. Once off the ship, it was not difficult to walk on the ice, which was very hard and mostly flat. However, snow shoes were a necessity. The large chunks of ice were created as the Northwind forced its way through the ice.



In the photo above, the ice has closed in behind the ship.



Summer Comes to the Arctic

As *Northwind* heads home, the ship re-enters the Arctic Ocean south of Point Barrow. The summer sun has done its job and the ice is breaking up. However, in a few months this will be all solid ice!



Winter Scene in the Bering Sea near Nome, Alaska.

Each night, *Northwind* would heave to (shut down) and wait for the return of the morning sun. Often, the flow of the solid ice would push the ship backwards **farther than the day's progress.** **The picture shows** winter ice near Nome. It also shows how the ice appears after the ship had cut its way through.

A Proud Warhorse



USCGS Northwind afloat in 1954



Coast Guard Icebreaker Northwind on the ice near Nome in 1954.

In later years the guns were removed and the hull was painted red so it could be better seen in the ice. The Northwind made more trips to the Arctic and several expeditions to the Antarctic, but none as historic as the 1954 adventure across the Top of the World.



A different look after the ship was painted red so that it could better be seen on the ice.

The following black and white photos were taken in 1954 by
the ship's photographer.





Lots of Ice Ahead!



Lots of Ice to Port!
(And only one-eighth of the ice is visible above the surface.)

The End of an Era

July 28, 1945 - January 20, 1989

The *WAGB 282 Northwind* was the last of the “Wind-Class” icebreakers to be decommissioned.

Port of Brownsville, Texas

2000





A proud ship meets its end.

About the Nautilus



The *Nautilus* SSN571 was the first nuclear-powered submarine in the world was launched on January 21, 1954. The *Nautilus* was 320 long and had a crew of 11 officers and 100 crew members. It had an underwater travel range of 100,000 miles powered by a nuclear mass the size of a baseball.

In 1958, the submarine *Nautilus* sailed from Honolulu to

Portland, England passing under the Arctic ice cap. It was under the polar ice cap for 95 hours and traveled 1,830 miles. This all was made possible by the charting done by the Coast Guard Cutter *Northwind's* crew during the summer of 1954.



*The Nautilus a now National Historic Landmark and is open to the public in Groton, Connecticut, where many submarines including the Nautilus, have been built since **the early 1930's.***

Creed Of the United States Coast Guardsman

I am proud to be a United States Coast Guardsman.

I revere that long line of expert seamen who, by their devotion to duty and sacrifice of self, have made it possible for me to be a member of a Service honored and respected, in peace and in war, throughout the world.

I will never, by word or deed, bring reproach upon the fair name of my Service, not permit others to do so unchallenged.

I will cheerfully and willingly obey all lawful orders.

I will always be on time to relieve, and shall endeavor to do more, rather than less, than my share.

I shall always be at my station, alert and attending to my duties.

I shall, so far as I am able, bring to my seniors solutions, not problems.

I shall live joyously, but always with due regard for the rights and privileges of others.

I shall endeavor to be a model citizen in the community in which I live.

I shall sell life dearly to an enemy of my country, but give it freely to rescue those in peril.

With God's help, I shall endeavor to be one of His noblest Works.....

A UNITED STATES COAST GUARDSMEN



Day in the life of the Coast Guard

Every day the United States Coast Guard goes to work to make a difference in America. In fact, at the end of any average day, the Coast Guard has:

- Saved 14 lives
- Assisted 328 people
- Saved \$8 million in property
- Conducted 180 search-and-rescue missions
- Responded to 32 oil spills or hazardous chemical releases
- Boarded 90 large vessels for Port safety checks
- Kept \$7 million worth of narcotics from hitting American streets
- Conducts 128 Maritime Law Enforcement boardings
- Services 150 Aids to Navigation
- Stopped hundreds of illegal migrants from setting out on the ocean, and compassionately enforced American law for those who have set out.

SO IN A YEAR, that's 4,380 people saved, 65,700 rescue missions, \$2.6 billion worth of narcotics, 11,680 environmental cleanups or responses to pollution, and tens of thousands of illegal migrants stopped.

"We are a humanitarian/military service in the business of doing good things for America."

Admiral James M. Loy
The Twenty-first Commandant
United States Coast Guard

THE 1954 historic ARCTIC ADVENTURE OF THE Northwind

Credits and Appreciations

Life Magazine

Fred's Place

Historical Naval Association

Worldbook Encyclopedia

Readers Digest Atlas

United State Coast Guard

Seattle Times

Los Angeles Times

USC - Daily Trojan

Sue & Kevin Ryan

Susanne Jaffe

Michael McCollum

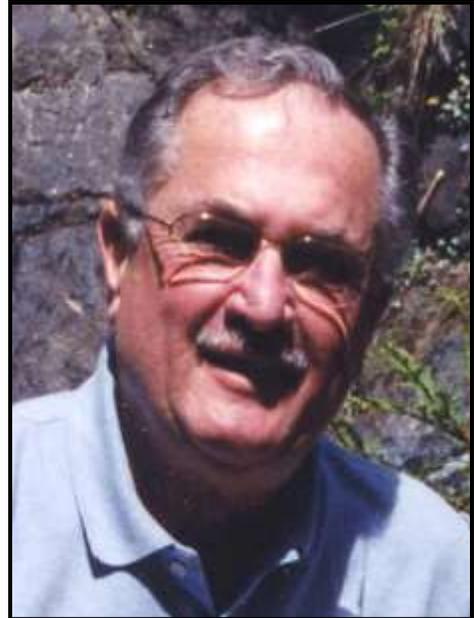
John H. Leinhard

Dr. P.J. Capelotti, Ph.D.

Captain Peter Joseph, USCG Retired
Captain Robert A. Moss, USCG Retired
Captain James Sink, USN Retried
Captain Roy Kraft, USN Retired
MK2 William Brown USCGR
Ross Hatch, Glacier Society Historian

About the Author

Phil Jaffe studied journalism and printing at Beverly Hills High School in California. In 1951 he graduated from Beverly Hills High and entered the University of Southern California (USC). At USC he continued to study journalism and business administration. He was a member of the Coast Guard Reserve and was activated to full time duty in 1953. After 14 weeks in boot camp Phil was assigned to the icebreaker *Northwind*. In 1955 he completed his tour of duty and returned to USC where he continued his education.

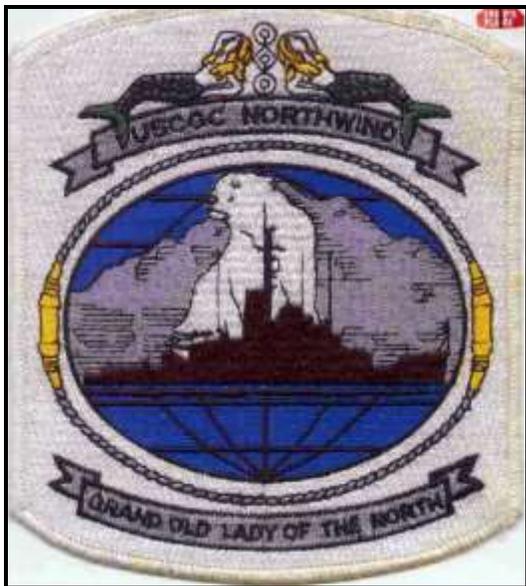


During his professional years he owned a printing company in Los Angeles where Phil printed and published a variety of magazines, books and travel guides. One of his accounts was the Los Angeles Lakers. During six years with the Lakers he had an opportunity to write and publish books with and about basketball legends Wilt Chamberlain and Jerry West. Phil also assisted in publishing a book written by coaches John Wooden and Bill Sharman called *A Guide to Winning Basketball*. His friend Jerry West **once told Phil that one of his best assets was that “he**

helped make good things happen”. This stuck through the years as Phil was very active in many civic activities including the Chamber of Commerce and Rotary Club, and various fund raising projects. He also served for 10 years on the board and was an officer of the Printing Industries Association of southern California.

His publishing and printing career extended over 45 years. During the last 15 years of his career Phil was publisher of the *Mountain News* newspaper at Lake Arrowhead, CA. He retired in 1998 and in 2000 moved to Port Ludlow, WA. where he and his wife Susanne enjoy living on the waters of Puget Sound. They spend their summers cruising local and Canadian waters through the Inside Passage, and their boat is named *Northwind*. Phil still enjoys writing and **photography and continues to “help make good things happen”.**

For reorders or additional copies of this book, go to <http://3mpub.com/jaffe> on the INTERNET.



*Official patch worn on the
final patrol of the
Northwind
1987 - 1989*