U.S. COAST GUARD



The Coast Guard & the Greenland Patrol

by John A. Tilley

In 1940, most Americans who knew that Greenland existed thought of it as a nondescript white blob near the tops of their world maps. That the place might have any military significance to the great powers had occurred to scarcely anyone - least of all to the people who lived there. But in the next five years Greenland was to become a small but significant theater of war, and was to confront the U.S. Coast Guard with some of the most arduous duties it had ever been called upon to perform.

Greenland is a largely deserted island of about 827,000 square miles, most of which lies above the Arctic Circle. Scientists believe that the interior is covered by mountains and steep gorges, but since prehistoric times they have been buried under a mass of ice that covers 80 percent of the land area. (If the Greenland ice cap ever melted, the world's oceans would rise by about 20 feet.) In the winter, the arctic winds blow unimpeded for hundreds of miles over the ice cap, covering it with snow and driving the temperature as low as 90 degrees below zero.

The coastline is penetrated by hundreds of narrow fjords, some of them jutting 90 miles inland. For most of the year Greenland is virtually surrounded by a 20- to 30-mile-wide belt that the Eskimos call the storis, a mass of floating icebergs ranging from a few yards to several city blocks wide. During the winter Greenland is almost isolated from the rest of the world; only ships equipped for breaking ice can force their way into the fjords. Few have reason to try.

In the spring and summer the climate of southern Greenland is relatively congenial, with temperatures warming to the 50s as chunks of glacial ice rumble down the fjords on their way out to sea. The storis, propelled by the current, drifts westward around Cape Farewell, the southern tip of the island, and eventually disappears. As the snow melts and the wind dies the little settlements take on a pleasantly rustic look, with bright red and yellow buildings adding color to the rocky landscape. There are few trees, but enough grass grows along some of the fjords to sustain herds of sheep, and the combination of warm air and high humidity produces frequent drizzle and mists. Summer visitors to Greenland are surprised by the swarms of mosquitoes.

In 1940, most of the 20,000 or so inhabitants lived in villages along the southwest coast, paying casual homage to a handful of uniformed bureaucrats representing the foreign ministry of Denmark. The Danes had been governing Greenland as a colony for several hundred years, supplying the Greenlanders with manufactured goods and foodstuffs in

exchange for seal oil, animal skins and fish. The Danish government maintained a strict monopoly on exports and kept visits by foreigners to a minimum. The justification for that policy was that the Eskimos had no immunity to European diseases, and were almost totally ignorant of 20th-century business practices.

The principal reason for the modern world's interest in Greenland lay at the village of lvigtut, half a mile up Arsuk Fjord just west of Cape Farewell. A big corrugated iron building and a collection of cranes on lvigtut's waterfront sat on top of the world's only known sizeable deposit of cryolite, a soft, translucent mineral that looks like quartz.



The cryolite mine at lvgtut, Greenland, summer, 1940 (Yoka donation)

In the 19th century two researchers, one working in France and the other in Ohio, had discovered simultaneously that molten cryolite, subjected to an electric charge, could function as an electrolyte for extracting metallic aluminum from the natural alumina found in bauxite ore. The Hall-Heroult process became the standard means of producing industrial aluminum. By the 1920s the mine at Ivigtut was a key element of the American aircraft industry, and cryolite shipments to the United States and Canada accounted for 98 percent of Greenland's exports.

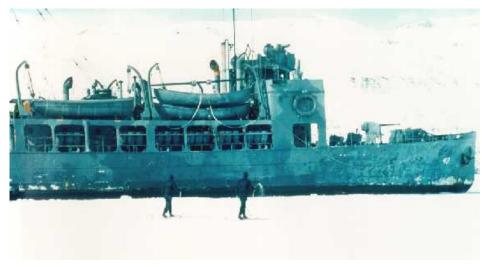
On April 9, 1940, Hitler's war machine turned on Denmark. The Danes, utterly unprepared for war and threatened with an air assault on Copenhagen, capitulated on the same day. The fall of Denmark precipitated a burst of nervous activity in the U.S. State Department.

Since the beginning of the war the United States had been playing a delicate diplomatic game with the nations of Europe, perceiving the danger posed by Germany and Italy but hoping to keep any of the European powers from expanding their influence in the western hemisphere. When the British and Canadian governments hinted at a concern over the defense of Greenland, the United States responded with grumpy references to the Monroe Doctrine. The State Department, adopting the position that the Danish ambassador to Washington, Dr. Henrik de Kauffmann, was still the legitimate representative of his country, agreed to sell weapons to the Greenland authorities for protection of the cryolite mine.

On May 20, 1940, the cutter *Comanche* picked through the melting storis into the harbor of lvigtut and discharged the James K. Penfield, first United States consul in Greenland, and his vice consul, George L. West. After they inspected the cryolite mine the *Comanche*

transported Penfield and West up the coast to Godthaab, where the new American consulate was to be established. Godthaab had no buildings to spare for the purpose, but the local Danish doctor courteously moved into his hospital and turned his house over to the Americans.

Over the next few weeks three larger cutters, the 327-foot cutters *Campbell* and *Duane* and the 250-foot *Cayuga*, turned up in Davis Strait and Baffin Bay, taking soundings and making preliminary charts of the coastline. (Most of the extant charts of Greenland were in German-occupied Copenhagen.) The *Campbell* landed a 3-inch gun and an assortment of smaller weapons at lvigtut; 14 Coast Guardsmen accepted discharges to provide the nucleus of a civilian armed guard at the mine.



(Left: USS *Northland*, CG; Frazier donation)

Orders went out to the Northland, which had spent the past several years in Alaskan waters, to transit the Panama Canal and proceed to New York for duty off Greenland. The Northland, built in 1927, was an odd-looking vessel with a diesel engine, a cork-insulated

steel hull and a cutaway bow that was intended to break ice. The original equipment had included a towering two-masted sail rig, but the unusual bow configuration had made the ship almost impossible to steer when under sail. By 1940, the masts had been cut down to accommodate modern radio gear and a hefty boom to handle an SOC-4 "Seagull" aircraft. The *Northland* had not proven particularly successful, but was the only vessel in American service specifically designed for operations in the arctic. [Click here to read more about this remarkable cutter.]

On arriving at New York, the *Northland* was placed under the command of CDR Edward H. Smith, who was something of a legend in the Coast Guard. "Iceberg Smith," holder of a Ph.D. in oceanography from Harvard, had considerable experience in Greenland waters; he had made several cruises with the International Ice Patrol, and had commanded the *Marion* during an extensive study of water temperatures and currents off Greenland and northeastern Canada in 1926. Smith took the *Northland* on a four-month cruise along the western and eastern coasts of Greenland, compiling enough data to publish a set of detailed sailing directions.



(Left: CAPT Edward "Iceberg" Smith)

Greenland in Allied Strategy

Early in 1941, under intensifying pressure from the British and the Canadians, a meeting of representatives from the State, War and Navy Departments decided that the United States should participate actively in the defense of Greenland. Geography had given it a significant role to play in the war that was taking form in Europe.

American factories were about to disgorge a stream of aircraft to be sent to Britain under the Lend-Lease Act, and the fastest way for an airplane to get to England was under its own power. The Army Air Forces worked out a route that aircraft could fly in short hops; the great circle track from Nova Scotia to Scotland ran over southern Greenland. Another strategic factor was the value of Greenland as a site for weather stations. Data collected in Greenland helped meteorologists predict the weather for western Europe.

In March 1941, the South Greenland Survey Expedition, consisting of diplomats, naval and army officers, and an observer from the Royal Canadian Air Force, sailed from Boston in the *Cayuga* to locate suitable sites for air bases, weather stations, and other military installations. The Americans were ordered to avoid any unpleasant confrontations with the Greenlanders. The secretary of state, Cordell Hull, warned the Secretary of the treasury, Henry Morgenthau, that "German propaganda has already made much of the assertion that the contact of Greenlanders with Americans will result in the enslavement, miscegenation and ultimate extinction of the native population." On April 9, Hull and the Danish ambassador signed the Hull-Kauffmann Agreement, giving the United States the authority to build and operate air bases and other defensive facilities in Greenland.

The survey expedition spent several months in Greenland, assisted by the *Cayuga*, the *Northland* and the latter vessel's lone airplane, that proved invaluable in scouting the terrain and the movements of the ice. In May, the *Northland* was ordered back to Boston for a refit, to be relieved by the 240-foot *Modoc*, which had just made a trip to Ivigtut bearing Mr. Charles Davies, a representative of the Pennsylvania firm that imported cryolite.

On May 18 the two cutters rendezvoused at sea for an exchange of mail bags and a conference between Iceberg Smith and the *Modoc's* commanding officer, LCDR Harold G. Belford. A few hours later they received an urgent radio message that a convoy had been attacked by a German wolfpack off Cape Farewell, with the loss of several merchant ships. The Coast Guard cutters were ordered to look for survivors, though the frigid water and stormy weather offered little cause for optimism.

'More or Less On a Hair Trigger'

The *Northland*, announcing the humanitarian nature of its mission with lights, oversized flags and hourly radio broadcasts, proceeded to the site of the convoy fight, but found only a collection of floating debris and empty rafts. The *Modoc*, with Smith's approval, ran down a weak radio signal identified as coming from the lifeboats of a steamer named the *Marconi*, which had been torpedoed about a hundred miles to the south. The smaller *General Greene*, diverted from an oceanographic survey off Newfoundland, joined in the search.



USS Modoc, CG

At 7:30 p.m. May 24, the lookouts on board the *Modoc* saw the shape of an enormous gray warship suddenly materialize out of the mist almost dead ahead. The cutter's crew, swarming onto the weather decks to stare at the apparition, were even more startled when eight ancient-looking biplanes wearing British markings dropped out of the clouds almost directly overhead. The *Modoc* had stumbled into the midst of HMS *Victorious*' air attack on the German battleship Bismarck. The signalman on the *Modoc's* bridge flashed a recognition signal; he got no response, but the Germans apparently recognized the white-hulled, buff-funneled cutter for what it was. Belford ordered a pair of American ensigns spread out on the forecastle and fantail. The aviators scored one torpedo hit on the *Bismarck*, braving a barrage of anti-aircraft fire that came frighteningly close to the *Modoc's* bow.

As the aircraft disappeared into the overcast on the way back to their carrier, three British warships, the battleship *Prince of Wales* and the cruisers *Norfolk* and *Suffolk*, appeared, obviously on the trail of the German ship. The *Prince of Wales* almost fired a salvo of 14-inch shells at the *Modoc* before the British admiral realized his mistake.

Neither the *Modoc* nor the *Northland* ever found any survivors from the convoy, though the *General Greene* picked up two lifeboats and 29 men from the *Marconi*. Iceberg Smith commented, in his report on the incident, that "it is fortunate that there were no accidents and mistaken identities when all parties were more or less on a hair trigger."

The Greenland Patrol

In June and July 1941, the American naval forces congregating around Greenland were organized officially into the Greenland Patrol. The Northeast Greenland Patrol, with Iceberg Smith in command, consisted of the *Northland*, the wooden-hulled former survey ship *North*

Star [click here to read her full history] and an old friend of the Coast Guard now flying a Navy pennant, the USS Bear.

The *Bear*, a former seal catcher built in 1875 and used by the Revenue Cutter Service for years on the Bering Sea Patrol, now sported a modernized superstructure and an aircraft. The South Greenland Patrol, under LCDR Belcher of the *Modoc*, included the cutter *Comanche*, the Coast Guard icebreaking tug *Raritan*, and the Navy auxiliary schooner *Bowdoin*. In October, the two commands were consolidated under CDR Smith as the Greenland Patrol, designated Task Force 24.8 under the jurisdiction of the U.S. Atlantic Fleet.

A memorandum from ADM Harold Stark, the Chief of Naval Operations, outlined the mission of the Greenland Patrol:

- "1. Naval operations will be required in Greenland ... for two purposes. The first purpose is to support the Army in ... establishing in Greenland airdrome facilities for use in ferrying aircraft to the British Isles.
- 2. The second purpose is to defend Greenland and specifically to prevent German operations in Northeast Greenland."

Iceberg Smith was, as Samuel Eliot Morison, the Navy's operational historian, put it after the war, being ordered "to do a little of everything - the Coast Guard is used to that."

The Army, on the basis of the information obtained by the South Greenland Survey, identified 13 sites, codenamed "BLUIE bases," that it thought could be turned into military installations. The most promising of these was located on a glacial moraine a few miles from the village of Narsarssuak.

In June 1941, a steady traffic of Army freighters and troop transports began steaming from Argentia, Newfoundland, to Narsarssuak, accompanied by Coast Guard cutters to protect them from U-boats and break up the storis in their paths. By September, the Army engineers had constructed 85 buildings and three miles of access roads; the jeeps that were flown in were Greenland's first automobiles. Shortly a civilian contractor's force arrived to begin work on the airfield itself. BLUIE West 1 was to become the major U.S. Army, Navy and Coast Guard base in Greenland. Thousands of aircraft would stop there for refueling on their way to Britain.

Arctic Warfare

The Americans stationed at the BLUIE bases led a strenuous and monotonous existence. Most never saw a Greenlander; the Army, in keeping with the Danes' prewar policy, declared all Greenland settlements off-limits to American personnel. The U.S. consul, Penfield, assured the American public, via the *National Geographic*, that "our arctic soldiers live in model camps in a womanless world ... Nearly all barracks, comfortably insulated against the cold, have running water and toilet facilities. Like other American camps, this one boasts a motion-picture theater, barber shop and an excellent library. I saw newsreels of last Saturday's football games almost as soon as I would have at home."

The facilities were indeed reasonably sanitary, but neither the Army nor the contractors could do anything about the weather. In the winter the buildings could be buried under the snow, and the winds at BLUIE West 1 reached 120 mph; men had to crawl from building to building. One officer, stepping casually out of his hut, was hurled against a wall 20 feet away and broke both his arms. Not the least of Iceberg Smith's worries was the possibility that the Germans might be operating in Greenland as well.



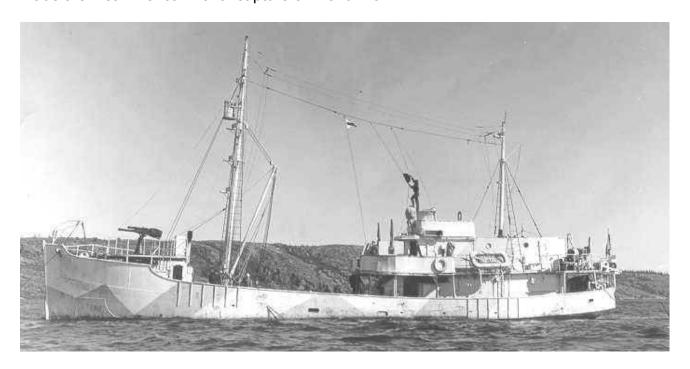
USS North Star, CG

Intercepted radio signals indicated that weather stations hidden among the coastal mountains were sending reports of developing storm patterns to Berlin, and to U-boats operating in the North Atlantic. The Germans were rumored to be planning a large-scale landing on the east coast. While the BLUIE bases were under construction the only aircraft available were the single-engine floatplanes attached to the *Northland*, USS *Bear*, and *North Star*. Smith sent his three planes on countless long, lonely flights over the fjords and the mountains searching for signs of enemy activity. He also was largely responsible for the creation of the Greenland Sledge Patrol, a contingent of intrepid Eskimos and Danish hunters who, recruited by the Greenland government and supplied by the U.S. Army, spent the war patrolling the coastal regions on dog sleds. The Northland, with two Danish-speaking interpreters on board, became the nerve center for the Sledge Patrol's operations.

On Sept. 4, 1941, a U-boat torpedoed the U.S. destroyer *Greer*, which was passing through Greenland waters carrying a shipment of mail to the newly-established American military base in Iceland. On Sept. 11, President Roosevelt delivered a radio address denouncing the behavior of the Germans in the North Atlantic and warning that "from now on, if German or Italian vessels of war enter the waters, the protection of which is necessary for American defense, they do so at their own peril."

A few days earlier the Sledge Patrol had reported to the *Northland* that a suspicious-looking party of men had landed near the entrance of Franz Joseph Fjord. On Sept. 12, the Northland spotted a fishing trawler flying Norwegian colors in MacKenzie Bay, some 500 miles to the south. The boarding party Smith sent aboard the ship, whose name was the *Buskoe*, found a sophisticated radio set. Questioning of the *Buskoe*'s crew established that it had indeed dropped off a party of men and a radio transmitter.

That night one of the *Northland's* officers, LT Leroy McCluskey, went ashore with a party of 12 armed men. They found a supposed hunter's shack and surrounded it while McCluskey kicked in the door. Inside were three surprised but not particularly belligerent German radiomen, who promptly surrendered, offered McCluskey a cup of coffee, and started building a fire to heat it. He confiscated a German codebook just before it went into the flames. The *Buskoe* and its crew were sent to Boston for internment. The *Northland* had made the first American naval capture of World War II.



USS Aklak, CG

New Ships for the Arctic

Iceberg Smith's experiences of 1941 convinced him that he needed more ships. During the winter, with the approval of the Coast Guard's Commandant, ADM Russell Waesche, he acquired 10 sturdy New England fishing trawlers that could operate in the shallow waters in support of the navigation aids parties. Smith gave his new commands names from the Eskimo language: Aivik, Aklak (see above photo), Alatok, Amarok, Arluk, Atak, Arvek, Nanok, Natsek, and Nogak. Nine were commissioned by young Coast Guard LTs and ENSs, three of them Academy graduates and the others from the recently expanded Coast Guard Reserve. In the latter category was LTJG Thomas S. LaFarge, a marine artist and photographer. He apparently drowned when his ship, the Natsek, disappeared in the Gulf of St. Lawrence in December 1942, probably a victim of icing (see photos below).





Above two photos: USS Natsek, CG, lost with all hands off Greenland, December, 1942

The *Nanok* was commanded by LT Magnus G. Magnusson, a native of Iceland with 30 years of seagoing experience. In 1940, Magnusson had been serving as Danish consul to Boston; upon the German invasion of Denmark he resigned his position and joined the Coast Guard. After the war he summarized life on board a converted trawler of the Greenland Patrol:

"Cold weather, ice, fog, snowstorms and plenty of hard work were far worse than any of the expectations of my crew of 'green,' potential sailors. But there they were, cooped up in that little tub month after month, in bad weather, wet to their skins, regardless of whether they were on the lookout watch or in their sacks. I saw those kids stand in water up to their armpits, in water that had a temperature of 34 degrees, working from six in the morning to

almost midnight, floating and rolling oil barrels ashore. I saw them work all day and well into the night, unloading tons of shark meat whose odor could be smelled for miles; their hands torn and bleeding from the sharp needles on the shark skin. I saw them hang on with one hand and break ice with the other, 20 out of 24 hours, in a 65-mph gale, with the ship on her beam ends, and the temperature at 5 degrees below zero. Cold, hungry, tired and sleepy, but they worked with a grin on their faces, not for one day but for three days."



USS Storis, CG

By the fall of 1942, the naval architects were incorporating the experiences of the Greenland Patrol into a new generation of ships. The 230-foot tender *Storis*, commissioned on Sept. 30 of that year, was designed specifically to serve as a supply ship for the BLUIE bases. The *Storis* combined a hull strengthened for ice breaking with a light anti-submarine armament, sonar, the gear to handle a seaplane and a capacious cargo hold. In mid-1943 three of the new 180-foot tenders of the *Cactus* class, the *Citrus*, *Evergreen*, and *Laurel*, were assigned to the Greenland Patrol. These versatile little ships, built on the Great Lakes, had been designed primarily as buoy tenders. In Greenland waters they became freighters, light ice breakers and convoy escorts.

Aids to Navigation

The establishment of the BLUIE bases brought more seagoing traffic to Greenland than it had ever seen. Prior to the war the Danes had operated one light station in Greenland; the only other extant aids to navigation were heaps of rocks on prominent points and posts on which kerosene lamps could be hung. The complicated and hastily charted geography created at least as great a danger to shipping as the U-boats did. Late in 1941, the Coast Guard undertook to establish a system of aids that would make the fjords and coastal waters of Greenland tolerably safe for navigation. In a more temperate climate the installation of such equipment would have been a simple matter; in wartime Greenland it turned into a minor epic.

Iceberg Smith placed LT Frank P. Ishmael, LTJG Carl W. Rom and LT Joseph W. Havlicek in command of three working parties. (Ishmael's, with nine men, was the largest.) In the course of two years they set up range lights, shore markers, and radio beacons at more than 50 sites, pausing only for the worst of the winter weather in January and February. (Right: LT J. W. Havlicek)

Conditions were primitive in the extreme. The Coast Guard ships, always in demand for convoying and transport duties elsewhere, deposited the working parties on shore and left them to their own devices. They had to build their own living quarters, frequently consisting of tar paper-covered wood shacks with sleeping bags inside, and cook for themselves, placing their faith in ingenuity and undiscriminating palates. (Havlicek's recipe for "snow ice-cream": "Take two bowlfuls of snow, add sugar to taste, then throw in a dash of fruit juice or extract for flavor. The result isn't bad.") Even more challenging was the task of setting up the equipment where it belonged. Steel girders, sacks of concrete, electrical generators and gasoline drums got hauled up cliff faces by hand-cranked winches, and shoved over the ice on sleds.

In November 1942, the *Northland* landed a party of 41 officers and men and 30 tons of equipment on Jan Mayen, a Norwegian-occupied island north of Iceland, to set up a high-frequency direction finder station. The Coast Guardsmen set up a small battery of anti-aircraft machine guns, leading the Norwegian inhabitants to nickname the installation "New Chicago."

At the time the United States entered the Second World War a team of electronics experts was working on the details of a new long-range aids-to-navigation system, called loran. In late 1942, the Navy began setting up a chain of loran stations running across the North Atlantic. Geography decreed that one transmitter be located in Greenland. An aerial survey established that the best site would be near an Eskimo village called Fredericksdaal on the southwest coast.

The strategic importance of loran demanded a battle with the elements at the worst time of the year; the joint Army-Navy-Coast Guard construction team arrived at Fredericksdaal Nov. 11, 1942. The party attempted to set up housekeeping in canvas tents, which promptly were scattered by a Greenland gale. By New Year's Eve the Army engineers had erected an impressive collection of sturdy-looking wooden buildings; that night the wind rose to 165 mph and, as the LT commanding the Coast Guard contingent reported, "when last seen, buildings were headed in the general direction of Boston, Mass." The solution turned out to be a row of metal Quonset huts, imbedded in a 6-foot-deep trench and buried under several tons of sand, which had to be extracted from the frozen beach with dynamite. The Greenland loran station went on the air on March 11, 1943.

On Nov. 21, 1943, Iceberg Smith, who in the spate of wartime promotions had attained the rank of RADM, was placed in command of the Navy's Task Force 24, with jurisdiction over Iceland as well as Greenland. Commodore Earl G. Rose was given command of the Greenland Patrol.

The Loss of the Northland's Plane

On Nov. 28, 1942, the *Northland*, now under the command of CDR Francis C. Pollard, received a message that the Army had made contact with the crew of a B-17 Flying Fortress that had gone down on the ice cap about 40 miles inland. The cutter had recently exchanged its obsolescent SOC-4 floatplane for a Grumman J2F-5 Duck amphibian, flown by LT John A. Pritchard Jr. Despite a heavy fog, Pritchard and his radioman, ARM1c Benjamin Bottoms, took off and managed to locate the crashed B-17.

The land around it was badly crevassed, but there was a smooth field covered with snow four miles away. Pritchard carefully set his Duck, with its landing gear retracted, down on the snow.







Radioman First Class Benjamin A. Bottoms

Leaving Bottoms in the plane to maintain radio contact with the Northland, Pritchard set off on foot in the direction of the B-17. The Army flyers, who had been on the ice cap for two weeks, were practically frozen and on the verge of starvation, but they gave him an enthusiastic welcome. Three of the men were injured; Pritchard decided to escort them back to his plane and fly them to the *Northland*, returning later for the others.

The Coast Guard pilot and the wounded Army aviators walked back to the Duck, but under the circumstances it could not get off the ground with more than three people on board. One of the Army men had to remain behind as the plane rose from the snow. By the time Pritchard reached the coast darkness had set in, but Pollard ordered the *Northland's* searchlights turned on to serve as a beacon. The cutter's crew lined the rails and cheered as the Duck taxied alongside.

Early the next morning, Pritchard and Bottoms took off again to pick up another load of survivors from the B-17. Shortly after the Duck disappeared from view the weather closed in, and Pollard ordered Pritchard back to the ship. A few minutes later the cutter's radio picked up Bottoms' message that the Duck had landed on the ice cap again. As the weather grew worse the signals from the plane grew weaker and faded out.

On Dec. 4, five volunteers from the *Northland* landed and began to search for Pritchard's J2F, as well as for the B-17. After more than a month of fighting the Greenland winter they gave up and returned to the ship. An Army aircraft spotted the wreckage of the Duck four months later, but Pritchard and Bottoms were never found. Both were awarded the Distinguished Flying Cross posthumously. The remaining survivors from the B-17 were eventually rescued by PBYs.

Convoy Duty

Greenland was on the edge of the Battle of the Atlantic, the fight to the death between the German U-boat force and the American shipbuilding industry. American and British designers developed an arsenal of weaponry that eventually would help turn the tide radar, improved sound-detection equipment, more powerful depth charges, and improved depth charge-throwing equipment. The first ships equipped with the new gear were the big Navy destroyers; the Coast Guard cutters were given low priority. The 327-foot Treasuryclass cutters, with their roomy hulls and hospital facilities, turned out to be good escorts and were put on the transatlantic runs. The duty of escorting the convoys to and from Greenland fell to the older, smaller cutters that had been built in the 1920s and '30s for search-and-rescue work and law enforcement. As the Coast Guard prepared for war, the navy yards loaded them down with additional guns, depth charges, sound gear and men in the hope that the cutters could function as miniature destroyers. At best they made adequate escorts. The North Atlantic slammed the little ships around like corks, spilling gear out of lockers and men out of bunks. When the weather conditions were right, freezing spray could coat the superstructure of a rolling ship with tons of ice, creating stability problems the naval architects had never envisioned. Below decks, steam heating systems made ships and crews sweat; men found themselves sliding across decks that were soaked with condensation. Arthur Turek, a machinist's mate on board the *Modoc*, swore he saw footprints on the ship's engine room bulkheads.

Breaking ice in the paths of the convoys had its special set of hazards. A "lead" that seemed to stretch for miles could close up in minutes, suddenly subjecting the cutter's hull to tons of pressure from shifting ice. When the ice did crack, it got sucked into propellers, bending and breaking blades. A ship with a damaged screw could head to Boston for repairs only when time and duty allowed; more than one crew had to tolerate a nerve-fraying pattern of hull vibrations that lasted for weeks. Nervous tension, seasickness and lack of sleep were combined with a rarely-mentioned but always present sense of fear, for every Coast Guardsman knew how vulnerable his ship would be to a German torpedo. At the beginning of the war most of the cutters had the portholes in their hulls welded shut, but their designers had not bothered with watertight compartmentation.

The escorts were fighting an ominous, rarely seen enemy who usually announced his presence by blasting the bottom out of an unsuspecting merchant ship - and could only be detected in the form of vague sounds in the earphones of a sonar operator. The defects of 1940s sound detection gear were exacerbated by the murky arctic water, with icebergs, temperature layers, whales, and schools of fish complicating the echoes.

The convoy fights came to follow a depressing pattern: A merchantman would suddenly explode, the escorts would dash to the scene and rescue a few waterlogged survivors, the sonar operators would pick up an echo that they hoped represented a U-boat, the cutters would drop depth charges, and all hands would try to convince themselves that the echo's disappearance meant the submarine had been sunk. Occasionally someone saw or smelled an oil slick that might have come from a damaged U-boat, but no one could be sure. No vessel of the Greenland Patrol was ever officially credited with sinking a U-boat.

In water whose temperature often actually dropped below 32 degrees, a human being's limbs began to go numb in a matter of minutes. The crew of a cutter that arrived at the scene of a sinking with ropes and cargo nets trailing in the water would watch helplessly as men drowned and froze to death, unable to grab the lines that were waiting to pull them to safety. When the Army transport *Dorchester* was torpedoed, Feb. 3, 1943, the escorting cutters *Comanche* and *Escanaba* thought themselves lucky to save 299 of the 904 men on board.

On June 13, 1943, the *Mojave*, *Tampa*, *Storis*, and *Escanaba* and the tug *Raritan* were escorting a convoy from BLUIE West 1 to Newfoundland. At 5:10 a.m. the men on the *Storis*' bridge saw a cloud of yellow and black smoke gush up from the *Escanaba*. There were no sonar contacts and no radio signals from the *Escanaba*, but the 165-foot cutter sank in three minutes. The *Storis* and *Raritan* picked up two survivors, neither of whom had any idea what had happened. The rest of the *Escanaba's* crew of 103, including its commanding officer, CDR Carl Peterson, were lost.

Eventually the Coast Guard worked out the "retriever system," whereby a volunteer in a rubber suit would jump overboard with a rope and tie it around the survivor's torso. When the Army freighter *Nevada* was sunk Dec. 16, 1943, the *Comanche* was able to rescue 29 men - about half of its crew.

Patrol Bombing Squadron

The little floatplanes attached to the Greenland Patrol's ships had demonstrated the value of the airplane in arctic search-and-rescue work. On Aug. 6, 1943, Patrol Bombing Squadron 6, a Navy unit manned entirely by Coast Guardsmen, began operating from BLUIE West 1 and Argentia. Bombing 6, commanded by Coast Guard CDR D.B. McDiarmid, was to earn a reputation as one of the busiest and most effective in Coast Guard aviation history.



A Coast Guard PBY of VP-6 at Bluie West 1, Greenland; note the Quonset huts in the background and the steel matting that served as the tarmac and runways on this isolated Arctic base.

Like every other Coast Guard unit in Greenland, Bombing 6 had to "do a little of everything." Its 12 PBY-5A Catalinas searched for U-boats and German weather stations, escorted convoys, delivered mail, reported on the movements of the ice, and, on several dozen occasions, guided rescue parties to crashed Army and Navy aircraft. By November 1944, Bombing 6 had flown 638,998 miles in 6,325 flying hours, searching more than 3 million square miles of ice cap and ocean.

On the afternoon of Feb. 13, 1944, LCDR John J. McCubbin's Catalina, on a routine flight just west of Cape Farewell, happened upon a British Navy trawler, HMS *Strathella*. The little ship had been disabled by a damaged shaft bearing in a storm on the North Atlantic convoy run a month earlier, and its radio had burned out; the *Strathella*'s crew had almost

died of thirst and starvation.

McCubbin contacted the cutter *Modoc*, which took the stricken trawler in tow for Greenland. When the British crewmen sighted the *Modoc* they sent a semaphore signal: "We one and all owe our lives to you. You did a masterpiece of work. Someday, perhaps we will be able to show our appreciation."



The War Against German Weather Stations

(Left: USS Northland, CG, in Greenland)

The German high command apparently never seriously considered launching a full-scale offensive in Greenland, but did continue to value it as a weather station. The convoys occasionally sighted long-range German aircraft, and the American officers blamed several Allied plane crashes on bogus radio signals emanating from enemy transmitters hidden in the coastal mountains.

In the spring of 1943, the Sledge Patrol encountered a small party of German soldiers on the east coast. A Danish member of the patrol managed to overpower one of the German officers and, after a month-long journey of 300 miles over the ice, delivered him into U.S. custody. The *Northland* and *North Star*, with 26 Army commandos, three Danish guides, 40 sled dogs and a considerable quantity of dog food on board, were given orders to locate the German party's base and destroy it.

The expedition, with *North Star's* captain, Carl C. von Paulsen, in command, set out with high hopes but accomplished little. The wooden-hulled *North Star* got damaged in the ice, and the task force had to make a detour to the Navy repair facility in Iceland. Von Paulsen shifted his flag to the *Northland*. After an extensive patrol along the east coast it was established that the German party had tried to take over the Sledge Patrol station on Sabine Island, but that a force of American bombers had destroyed it and the Germans had been evacuated by air. The American landing party captured one German officer who claimed he was a doctor; von Paulsen suspected that the man was in fact a Gestapo agent.



A Coast Guard landing team dines on captured German rations at an abandoned Nazi weather station

In July 1944 the *Northland* and the *Storis* embarked a force of Army troops and set out to destroy a German weather station that the Sledge Patrol had found on the east coast near Shannon Island. Once again the Germans fled before the Coast Guard arrived. The Americans found a small, meticulously camouflaged building, a stockpile of gasoline drums, food, and ammunition, and components of a long-range radio transmitter. Wedged in the ice about four miles from the shore station was an abandoned German trawler, apparently named *Coberg*, which obviously had been there for some time; its hull had been damaged by fire and holed by an explosion, and two anti-aircraft guns had been removed from the ship's deck and set up on the ice.





German prisoners of war taken captive, without bloodshed, by the U.S. Coast Guard

At dawn on Sept. 1, 1944, the *Northland*, patrolling off Great Koldewey Island, spotted a trawler that refused to respond to recognition signals. The cutter's captain, LCDR R.W. Butcher, called his crew to battle stations and gave chase. Butcher was worried that his quarry might make for open water, where the sluggish Northland probably would be unable to keep up, but the German captain chose instead to try to lose the Coast Guard cutter in the ice.

There ensued a three-hour chase over some 70 miles, with the *Northland's* forward 3-inch gun firing at the trawler whenever it appeared between the ice floes. Just as the gunners were finding the range the German vessel was suddenly rocked by a pair of explosions and quickly sank, scuttled by its crew. The *Northland* picked up three lifeboats, containing eight officers and 20 enlisted men. The senior German officer, a navy commander, ceremoniously handed his sword over to Butcher, who hung it in the *Northland's* wardroom.



Eastwind Captures Nazi freighter

(Left: USS *Eastwind*, CG in foreground & USS *Storis*, CG, in background)

In the autumn of 1944 the new ice breakers, Eastwind and Southwind, designed by the famous naval architecture firm of Gibbs and Cox, joined the Greenland Patrol. The "Wind"-class vessels represented the latest icebreaker technology. They were relatively small, tubby ships, with a length of

269 feet and a beam of 63 feet 6 inches, but their diesel power plants generated a respectable 12,000 horsepower. A removable propeller at the bow was intended to clear ice, though that innovation proved impractical in service. "Heeling tanks," equipped with powerful pumps, could rock the hull back and forth. Their wide beam enabled the ships to carry a substantial armament: two twin 5-inch dual-purpose gun mounts, three quadruple 40mm anti-aircraft mounts, six 20mm anti-aircraft guns, two depth-charge tracks, six Y-guns and a Hedgehog anti-submarine weapon.

The designers also found room for a J2F aircraft and a pair of derricks to handle it. The *Eastwind*, *Southwind*, *Storis*, and *Northland*, with the designation Task Unit 24.8.5 and the *Eastwind's* CAPT Charles W. Thomas in command, were ordered to destroy the German weather stations on the east coast. (Right: CAPT Charles W. Thomas)

On Oct. 2 the Eastwind's aircraft sighted what its observer called "a big



ship" about a 100 miles north of Shannon Island. A day later the same plane, flying on patrol over North Little Koldewey Island, spotted a pile of what appeared to be building materials on the beach. The *Eastwind* headed for the latter site and, having broken through 12 miles of pack ice under cover of darkness, put a landing party under LTJG Alden Lewis ashore. The Coast Guardsmen captured a dozen German military personnel, several tons of food and munitions, some elaborate radio and meteorological equipment, and several kerosene-soaked secret documents that the German commander was about to burn.



The armed German Naval Auxiliary vessel Externsteine

Thomas then turned his attention to the ship his plane had spotted. The vessel, a 183-foot trawler named *Externsteine*, was finally located, frozen solid in the ice off Shannon Island, Oct. 14. The *Eastwind*, with the *Southwind* providing support, rammed through the ice until its 5-inch guns were within range. After three salvoes from the *Eastwind*'s forward gun mount landed alongside the trawler, a blinker signal flashed, "we give up." The *Eastwind* proceeded to within 200 yards of the German ship and sent over a prize crew of 32 men. They took the *Externsteine*, which they unofficially renamed *East Breeze*, to Iceland. The Navy gave the ship - the only German surface vessel taken at sea by American forces during the war - the more prosaic name *Callao*. [Click here to read more about this capture.] The campaign against the weather stations marked the end of American actions against the Germans in Greenland.

Additional Reading

The most comprehensive account of the Coast Guard's operations in Greenland is *Greenland Patrol*, the second of the 30 monographs in the unpublished series *The Coast Guard at War*, prepared by the Coast Guard's historical section shortly after the war. The *Greenland* volume was written by Pauline de Brodes. The monograph series was the basis for the standard published source on the Coast Guard's wartime activities, Malcolm F. Willoughby's *The U.S. Coast Guard in World War II* (Annapolis, Md.: Naval Institute Press, 1957/1989). The subject is placed in its broader historical context in Robert Erwin Johnson's *Guardians of the Sea: History of the United States Coast Guard, 1915 to the Present* (Annapolis: Naval Institute Press, 1987). Two articles in the *National Geographic*, "Greenland Turns to America" by James K. Penfield, the first U.S. consul in Greenland (vol. 82, no. 3, September, 1942, pp. 369-383) and "Americans Stand Guard in Greenland," by Andrew H. Brown (vol. 90, no. 4, October 1946, pp. 457-500), provide a useful, if heavily censored, contemporary perspective. The specifications and careers of individual ships are detailed in Robert L. Scheina's *U.S. Coast Guard Cutters and Craft of World War II* (Annapolis: Naval Institute Press, 1982).

The Army's campaign in Greenland is covered in *Guarding the United States and Its* Outposts, by Stetson Conn, Rose C. Engleman, and Byron Fairchild, a volume in the series The United States Army in World War II (Washington: Department of the Army, 1964); The Battle of the Atlantic. September 1939-May 1943, the first volume in Samuel Eliot Morison's History of United States Naval Operations in World War II, includes a narrative of the operations in Greenland waters, as does War In the Outposts, by Simon Rigge, a volume in the Time-Life Books series World War II (Chicago: Time-Life, 1980). The Modoc's unintentional brush with the *Bismarck* is detailed in most accounts of that episode, most notably Ludovic Kennedy's Pursuit: The Chase and Sinking of the Bismarck (New York: Viking, 1974). The early history of Greenland is covered in Henry Rink's Danish Greenland: Its People and Its Products (London: Henry S. King and Co., 1877). The most comprehensive account of the Coast Guard's operations in Greenland is Greenland Patrol, the second of the 30 monographs in the unpublished series The Coast Guard at War, prepared by the Coast Guard's historical section shortly after the war. The Greenland volume was written by Pauline de Brodes. The monograph series was the basis for the standard published source on the Coast Guard's wartime activities, Malcolm F. Willoughby's The U.S. Coast Guard in World War II (Annapolis, Md.: Naval Institute Press, 1957/1989). The subject is placed in its broader historical context in Robert Erwin Johnson's Guardians of the Sea: History of the United States Coast Guard. 1915 to the Present (Annapolis: Naval Institute Press, 1987). Two articles in the National Geographic. "Greenland Turns to America" by James K. Penfield, the first U.S. consul in Greenland (vol. 82, no. 3, September, 1942, pp. 369-383) and "Americans Stand Guard in Greenland," by Andrew H. Brown (vol. 90, no. 4, October 1946, pp. 457-500), provide a useful, if heavily censored, contemporary perspective. The specifications and careers of individual ships are detailed in Robert L. Scheina's U.S. Coast Guard Cutters and Craft of World War II (Annapolis: Naval Institute Press, 1982).

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