



HMCS Cobalt

Cobalt's Namesake
Goes to War

Charles
Dumaresq

Copyright Charles Dumaresq, 2024

This document may be distributed or shared for personal use free of charge without the author's permission. Please credit the author when distributing or citing this document.

Please do not reproduce materials in this document, in whole or in part, for commercial purposes, without the written permission of the author. While I am happy to make this free for personal use, this book represents hundreds of hours of research and writing. If you want to use any of this content for commercial purposes, please give me credit.

About the Cover

The cover art was created by digital artist Sage Minard based on black and white photos of the gunshield art on HMCS Cobalt and versions of the artwork in the collections of the Cobalt Mining Museum in Cobalt, Ontario, and the Crow's Nest Officer's Club in St. John's, Newfoundland and Labrador. Many thanks to Sage for bringing this wonderful example of Second World War gunshield art to life!

The blue and green shapes at the bottom of the cover page represent a camouflage scheme applied to the Cobalt and many other Canadian ships on convoy escort duty during the Second World War, known as Western Approaches. The colours used are Western Approaches Blue and Western Approaches Green, based on colours from Sovereign Hobbies, a UK-based company that has done extensive research to produce accurate paints for model makers.

The colour used for the title on the cover page and in headings throughout the book is dark blue grey referred to as B15, another colour commonly used in camouflage schemes during the Second World War, again based on colours from Sovereign Hobbies. The dark grey colour used for text throughout the book is G5, also based on colours from Sovereign Hobbies. Both of these colours may have been used in HMCS Cobalt's late war camouflage scheme, although the author has not been able to confirm this.

Acknowledging Sources

The author has tried to accurately credit sources for information in this book to the extent possible. However, this book is the outcome of a project that stretches back over 15 years, to the author's first version of a history of HMCS Cobalt written in 2006. The book also reflects a lifetime's accumulation of knowledge about Canadian military history, and an interest in the history of mining in Cobalt, Ontario that extends back over 30 years. Thus, the author acknowledges that not all sources have been properly credited.

Contact the Author

If you have additional information about HMCS Cobalt or her crew, or if you have found any errors or inaccuracies in this book, please contact the author at [**HMCS Cobalt@gmail.com**](mailto:HMCS Cobalt@gmail.com)

Foreword

Cobalt – a small mining town in northern Ontario that most Canadians today have never heard of. It's hard to believe that the Royal Canadian Navy once named a warship after this tiny town whose population now stands at less than 1,000 people. Then again, it would perhaps be even more incredulous to most Canadians that the hockey team from this tiny town, the Cobalt Silver Kings, was the first team that the fabled Montreal Canadiens ever played. Just as unbelievable – that this town was known around the world, was the catalyst for riots on Wall Street, hosted opera houses and a stock exchange, and made a few people very, very rich while others saw their dreams shattered in the back-breaking work in the mines. Hard to believe an era when Toronto was the place you went ... to catch the train to Cobalt!

Silver was discovered in Cobalt in 1903 during the construction of a railway. A trickle of prospectors became a rush, and by 1906, Cobalt and its rich silver deposits were making headlines around the world. The town grew out of nothing and experienced explosive if haphazard growth. Through fires, epidemics, labour strife, and complete disregard for health, safety, and the environment, the mines produced their riches and generated the knowledge, experience, and money that drove Canada to become a mining superpower. Cobalt is considered the birthplace of hardrock mining in Canada.

Of course, the boom didn't last, and Cobalt fell out of the headlines. By the outbreak of the Second World War, the town was much more established, although smaller than it had once been. But the stories of Cobalt had not yet been forgotten and a few mines were still running, producing both silver and soon cobalt to help in the war effort. Cobalt was still a mining town, and it was still on the map. It was not the town that it is today, so it was not so unbelievable then that when the Royal Canadian Navy built a class of convoy escort ships and named them after towns across Canada, one of the first ships built was named after Cobalt: His Majesty's Canadian Ship (HMCS) Cobalt.

I am not a historian, I am a geologist. I first went to Cobalt in 1986 when I followed in the footsteps of many others and went to Cobalt to learn my trade. The geology department at Carleton University ran a field school in Cobalt for many years. I was one in a long line of students to go to that camp and learn about the geology and a bit of the history of Cobalt, to sit around the fire at night and sing The Cobalt Song as the train of the Ontario Northland Railway whistled in the distance and the call of loons echoed across Gillies Lake.

A few years later, I was back in Cobalt to study the environmental legacy of decades of mining as part of my master's degree. I completed that work and have gone on to build a career in environmental work related to mining. But there was more to Cobalt than geology, mine tailings, and water pollution. The stories of the silver boom in Cobalt captivated me. I studied the environmental impacts of the mining, but I learned more and more about the history of Cobalt. It drew me in, and my graduate thesis included an appendix on the history of Cobalt. I had been bitten by a bug – a passion for Cobalt – that hasn't left me.

Growing up, I was surrounded by an interest in history, especially Canadian military history. My father served in the Royal Canadian Navy in the early 1950s and he has a passion for naval history that continues to burn. That rubbed off, and by my teens, I was well-versed in the story of Canada's role in the Second

World War. Regular trips to the Canadian War Museum in Ottawa are fondly remembered and fed that passion.

In Cobalt, my passions converge. The science, the history, and, with HMCS Cobalt, military history too. In 2006, I launched a website about Cobalt to tell some of the stories of Cobalt, both the history and the environmental aspects. My website included a page about HMCS Cobalt. Unexpectedly, that led to contacts with family members of men who had served aboard the Cobalt, and I learned more about the ship and her crew.

This book started as an update to my webpage about HMCS Cobalt, but the material I had outgrew the website. Over the years, I have pulled together a large collection of photos of the Cobalt and her crew, many from the collection of the Cobalt Mining Museum, and from other sources as well, including family of crew members. I also searched the archives of the Department of National Defence and Library and Archives Canada. Newspaper articles of the time, particularly from local newspapers in North Bay and New Liskeard, added another important dimension to the story, about the relationship between the town and the ship and her crew. I also went through wartime-era municipal records from the Town of Cobalt and reached out to the Cobalt Historical Society and the two museums in town – the Cobalt Mining Museum and the Bunker, a small military museum.

The goal of this book is to tell the story of HMCS Cobalt and her crew and share as many photos as possible of the ship and her crew during the Second World War. However, telling the story of the Cobalt in isolation from the broader story of the Battle of the Atlantic and Canada's role in that epic battle would make the story of HMCS Cobalt less meaningful for readers not familiar with that story. As a result, I have described the historical context to fill in those blanks: the leadup to the Second World War, the Battle of the Atlantic, and the introduction of Flower class corvettes like HMCS Cobalt to escort convoys of merchant ships across the Atlantic Ocean, protecting them from attacks by German submarines.

In telling the story, I have tried as much as possible to use photos of HMCS Cobalt. However, this would leave blanks in a story that photos are so important to help tell. I have used photos of other Canadian corvettes¹ and HMCS Sackville, a corvette that is now a museum ship in Halifax, Nova Scotia, to help fill in those blanks where photos of the Cobalt have not been found.

The book is divided into four parts:

- The Short Story, which provides a summary of the story of HMCS Cobalt and her role in the Second World War.
- The Full Story, which provides a much more detailed telling of the story of HMCS Cobalt, including specific actions she was involved in, as well as the broader context of the Battle of the Atlantic and the role of Flower class corvettes.
- Photos Galleries, providing additional photos of HMCS Cobalt and her crew.

¹ Many of the photos are from an excellent website called For Posterity's Sake (www.forposterityssake.ca), a website "dedicated to the men and women of the Royal Canadian Navy and the ships they lived and served in." If you are interested in Canadian naval history, I cannot recommend this website enough. The collection on the website continues to expand, so if you have information about any Canadian ships and the sailors that served aboard them, I encourage you to share photos and stories with the website.

- Appendices that provide extra details about HMCS Cobalt, including:
 - A list of the more than 100 convoys that HMCS Cobalt helped to escort, as well as other important milestones in her service.
 - Technical information about HMCS Cobalt, including the weapons and sensors that she carried as well as her various upgrades throughout the war.
 - A list of officers that served aboard HMCS Cobalt.
 - Newspaper articles related to HMCS Cobalt.

This book is dedicated to the men who served aboard HMCS Cobalt, playing their own small role in defeating Nazi Germany. Theirs is an important story to keep alive, lest they fade from memory.

The book is also dedicated to the people of Cobalt and the neighbouring Township of Coleman. An area so rich in stories that Cobalt has been named Ontario's Most Historic Town. Yet just like HMCS Cobalt, the stories of the silver rush in Cobalt – the good, the bad, and the ugly – also risk fading from memory. The link between this little ship and her crew and this rugged northern Ontario mining town should not be forgotten.

Charles Dumaresq

January 2024

Lest we Forget

Contents

The Short Story	1
The Full Story	6
1 Setting the Scene	7
2 The Battle of the Atlantic	10
3 Enter the Corvette	25
4 A Corvette named Cobalt	29
5 Corvette Crews.....	38
6 Life Aboard the Corvettes	46
7 A Top Secret Start	72
8 Cobalt on Convoy Escort Duty.....	74
9 Cobalt to the Rescue	82
10 Man Overboard!	91
11 Friendly Fire?	94
12 HMCS Cobalt – the Cobalt Connection	97
13 War's End	126
Bibliography	133
Photo Galleries	135
Crew Gallery	136
HMCS Cobalt Gallery	154
Wartime Colour Photos	166
Extra Details: Appendices	171
Appendix 1: Canada's Naval Memorial - HMCS Sackville.....	172
Appendix 2: Convoys Escorted by HMCS Cobalt and Other Significant Milestones in the Ship's History	184
Appendix 3: Battle of the Atlantic Monthly Summary of Ship Sinking and U-boat Losses	189
Appendix 4: More Detailed Information about HMCS Cobalt	192
A4.1 Size	192
A4.2 Propulsion, Speed, and Range	192
A4.3 Crew and Accommodations.....	193

A4.4	Camouflage.....	193
A4.5	Radar	203
A4.6	ASDIC	210
A4.7	Armament	215
A4.8	Minesweeping Gear	237
A4.9	Cables and CATS – Protecting the Corvettes.....	240
A4.10	Communications.....	245
A4.11	Boats, Life Rafts, and Life Vests	256
A4.12	Summary of Improvements to HMCS Cobalt: January 1941 to May 1945	261
A4.13	Flags and Battle Honours.....	263
A4.14	Gunshield Art.....	269
A4.15	Training and Workups	278
Appendix 5: Officers that Served Aboard HMCS Cobalt		284
Appendix 6: Newspaper Articles Related to HMCS Cobalt		288



The Short Story

In early 1939, war with Germany was increasingly seen as inevitable. While many still hoped for peace, others were preparing for the worst.

Great Britain has long been dependent on trade across the sea to obtain resources and goods. In the First World War, Germany had threatened to starve Britain into defeat by strangling the trade upon which Britain depended. Food, lumber, minerals, fuel, manufactured goods, and most importantly in wartime, weapons, and soldiers – all arrived in Britain from other countries, including Canada, by ship. Sink the ships carrying those supplies, and Britain's people, factories, and soldiers would starve.

During the First World War, the United Kingdom's Royal Navy was the most powerful in the world and Germany knew that it could not use surface ships to starve Britain. Instead, Germany unleashed a still relatively new weapon – submarines. German submarines, known as *Unterseeboot*, or U-boats, prowled the waters off Britain in search of targets. In the end, the German efforts to starve Britain by the U-boat campaign failed, but the U-boats sank many ships.

One of the keys to beating the U-boats in the First World War was the introduction of convoys. Before this, merchant ships had crossed the Atlantic Ocean alone, and usually with no warship to protect them. Unless they were very fast, lone merchant ships were easy prey for the U-boats. By grouping merchant ships in convoys and protecting them with an escort of warships equipped to attack submarines, the odds of surviving a U-boat attack improved. After convoys were introduced, more merchant ships were able to arrive safely in Britain.

Unfortunately, as war loomed again in 1939, the Royal Navy did not have enough ships to escort convoys in the event of war - cuts to defense spending had left the navy unprepared to fight the U-boats. A stop-gap measure was needed to bring escort ships into service quickly since there was not enough time to design and build purpose-built naval escort ships in sufficient numbers.

A class of ships called corvettes was built to fill this gap. Corvettes were based on a whaling ship design and could be built quickly and cheaply in civilian shipyards. The first group of corvettes was ordered by the Royal Navy in July 1939, just weeks before the outbreak of war. In January 1940, the first order was placed with Canadian shipyards.

With the outbreak of war in September 1939, the tiny pre-war Royal Canadian Navy (RCN) began a very rapid expansion. At the beginning of the war, the RCN was even less prepared than the Royal Navy, with just 10 ships and 3 smaller vessels. From that tiny start, the RCN grew to become one of the largest navies in the world by the end of the war, with 278 ships, 150 smaller vessels, and over 95,000 men and women in uniform. That growth, particularly in the early years of the war, was built on the backs of RCN corvettes and the men from across Canada who served on board these rugged little ships in the fight against the U-boats, known as the Battle of the Atlantic.

So, what does all of this have to do with Cobalt, a mining town in northern Ontario far from the Atlantic Ocean?

Canadian corvettes were named after small towns and cities across Canada. This was done to help involve residents of those towns in the war effort, giving them a sense of connection with the ships and their crews. Cobalt was to be one of the first towns in Canada so honoured.

His Majesty's Canadian Ship (HMCS) Cobalt was one of the first corvettes built for the RCN. She was built in Port Arthur, Ontario, and was commissioned into the RCN in November 1940. She immediately sailed to Halifax and in January 1941, she was ready for active service.

HMCS Cobalt was armed with a 4-inch gun that could be used to attack submarines on the surface or to defend herself if Cobalt was attacked by surface ships. For protection from attack from aircraft, she was armed with an anti-aircraft gun and smaller machine guns.

The Cobalt was also equipped with two key tools to protect convoys and do battle with U-boats. The first was sonar, known in the Royal Navy and the RCN as ASDIC, which was used to detect submarines under water. The second was a weapon known as a depth charge.

Depth charges were barrels filled with explosives and fitted with a pressure-sensitive fuse set to detonate at a specific depth below the surface. Depth charges were rolled off the stern of the ship using rails or launched over the side of the ship. They would explode behind the ship, and if they exploded close enough to a U-boat, they would sink the U-boat or cause serious damage. Originally, the Cobalt had two rails for launching depth charges off the stern and a pair of launchers to fire depth charges to the side of the ship. Later, a second pair of launchers was added, enlarging the coverage when a "pattern" of depth charges was fired and increasing the chance of a successful attack.

Later in the war, two new tools were added, increasing Cobalt's effectiveness. One was radar, which helped to detect U-boats or other ships on the surface. The other was a new weapon, known as the hedgehog, which was a type of mortar that fired bombs in front of the ship. These bombs would only explode if they hit a submarine, but a single hit could be lethal.

Corvettes like HMCS Cobalt were not large and they were not glamorous, but they were vital. Just over 200 feet long, and with a crew of up to 85 men, corvettes were not built for comfort. They were originally intended for offshore escort work, not for the open ocean, and in the heavy seas of the North Atlantic the ships and their crews could be thrown around like corks.

This made for miserable conditions for the corvette crews. The constant rolling of the ships left many of their crew seasick. To make matters worse, the crew spent most of their time at sea wet. Men at action stations on deck were routinely drenched with spray, and the crew on the open bridge were completely exposed to the weather. Those below deck, either off-duty or at workstations, got little relief. Conditions below deck were cramped, and water regularly entered as a result of spray coming in through open hatches. Modifications later in the war helped to reduce the amount of water and thus the misery of the crew, but as the armament and other equipment increased, the crews got bigger, making for even more cramped conditions. Only the engine room offered any relief from the cold, wet conditions, but those serving in the engine room were often the least likely to survive if their ship was torpedoed.

Despite the discomfort, the cold, the wet, and the dangers, or perhaps because of those things, there was a camaraderie amongst the crew of the Cobalt, as is common in most military units. On active duty, the crew typically worked in 4-hour shifts, followed by 4 hours off to eat, sleep, or relax by playing cards, writing letters home, or reading. Time in port brought the opportunity for some shore leave and a chance to relax a bit from the stresses of convoy duty. From the daily rum ration to ship's mascots, the crews found other ways too, to relax and escape the stress.

The crews of corvettes like HMCS Cobalt were drawn from across Canada, but they often personalized their ships to strengthen the ties with the towns and cities for which they were named. On many corvettes, the metal shield around the 4-inch gun was painted with artwork depicting something about the ship and the town for which it was named. The gunshield of the Cobalt featured an angry-looking bumblebee wearing a miner's helmet. The bumblebee was brandishing a stick of dynamite and the prospector's hammer with one pair of arms and smashing a swastika with a small jackhammer with the other set of arms. Thus, Cobalt's mining heritage was put to sea in the war against the U-boats.

The career of HMCS Cobalt got off to an unusual and secret beginning. She found herself involved in trials of a type of camouflage to make it harder to see ships at night.

In wartime, ships at sea traveled with their lights out to make it more difficult for submarines or surface ships to see them at night. However, the night sky is rarely completely black, and a ship would appear as a dark silhouette against the night sky. HMCS Cobalt was used in the initial trials of a type of lighting called "diffused-lighting camouflage" which would illuminate ships slightly, making them harder to see against the night sky. For this trial, in January 1941, the Cobalt was fitted with lights mounted on temporary supports on one side of the ship's hull. The brightness of the lights was controlled manually, and observers on another ship communicated by radio with the crew of the Cobalt so that the intensity of the light could be adjusted to make the Cobalt as difficult to see as possible.

These first trials with the Cobalt were successful enough that the development continued, although the Cobalt was no longer involved.

The rest of Cobalt's wartime service was typical of Canadian corvettes fighting in the Battle of the Atlantic. In May 1941, she joined the Newfoundland Escort Force based in St. John's and served for six months escorting convoys between St. John's and Iceland. South of Iceland, the escort was taken over by ships based out of the United Kingdom.

In May 1942, the Cobalt began serving as part of the Western Local Escort Force. This Force was established after the United States entered the war in December 1941, during a period of intense U-boat activity along the east coast of North America. HMCS Cobalt and other ships of the Force, primarily Canadian, escorted convoys between New York, Boston, and Halifax, and as far south as the Caribbean. They escorted convoys as far east as a point south of Newfoundland, where other escort ships took over.

The Cobalt remained part of the Western Local Escort Force for the remainder of the war, and while she was not credited with sinking any U-boats, she did do valuable service.

In August 1943, HMCS Cobalt came to the aid of a tanker loaded with gasoline that was burning as a result of a collision with another ship. Gasoline was vital to the war effort, and under the command of Acting Lieutenant-Commander Ronald Judges, the Cobalt went into action to save the tanker and its cargo. The Cobalt drew alongside the burning tanker, and a group of volunteer crew members boarded the tanker. Facing intense heat, the boarding party succeeded in putting out the fire and saving much of the tanker's precious cargo.

Sadly, they were too late to save the crew. Only five men from the tanker's crew survived, having jumped into the water moments after the collision. In total, 99 men on the two ships involved in the collision were killed – a tragic night.

For this action in salvaging the ship, HMCS Cobalt's commanding officer, Ronald Judges, was mentioned in dispatches. Mate Alfred Bett, who led the boarding party, was awarded the George Medal. The two other members of the boarding party who bravely fought the flames, Engine Room Artificer Fourth Class James Werely, and Signalman Michael Fitzgerald, were awarded the British Empire Medal.

HMCS Cobalt survived the Second World War. Like most corvettes, its service with the RCN ended just a few weeks after the war in Europe was over. She was later sold and like several other corvettes, she converted to a whaling ship - appropriate considering the origins of the corvette design. From 1953 to 1961 she was called the Johanna W. Vinke. In 1961, her boiler exploded, and she could not be repaired. She was scrapped in South Africa in 1963.

All that remains of HMCS Cobalt is her brass bell, which is now part of the collection of The Bunker, a military museum in Cobalt. In addition, there are two versions of her gunshield artwork, one in the collection of the Cobalt Mining Museum, and the other at the Crow's Nest Officer's Club in St. John's, Newfoundland and Labrador.



The Full Story

1 Setting the Scene

In early 1939, war clouds were looming in Europe. Germany, led by Adolf Hitler's National Socialist German Workers Party, better known as the Nazi Party, was becoming increasingly belligerent and bold in its territorial claims. While many still hoped for peace, others saw war as inevitable and were preparing for the worst.

Great Britain, as an island with limited natural resources, has long been a trading nation, dependent on trade across the sea to obtain resources and goods. In the First World War, Germany had tried to starve Britain into defeat by cutting off the maritime lifelines upon which Britain depended. Food, lumber, minerals, fuel, manufactured goods, and most importantly in wartime, weapons, and soldiers – all arrived in Britain from other countries, including Canada, by sea. Sink the ships carrying those supplies, and Britain's people, factories, and soldiers would starve.

In the First World War, Britain's Royal Navy was the most powerful in the world, and British ships imposed a blockade on trade with Germany that cut supplies of food, fuel, raw materials, manufactured goods, and other goods essential to the German war effort. Despite a naval arms race in the years before the war, the German navy was not strong enough to break the British blockade – the Royal Navy was too strong. So, while the British and German surface fleets played a dangerous game of cat and mouse for most of the war, the German navy unleashed a relatively new weapon to blockade the British Isles and starve the Allies into surrender – submarines. German submarines, known as *Unterseeboot*, or U-boats, prowled the waters off Britain in search of targets. The U-boats sank many ships and were a major threat. By 1917, they had sunk 30% of the world's merchant ships. However, the U-boats did not prevail, and Germany surrendered to the Allies on November 11, 1918, bringing the war to an end.²

After the First World War, the peace treaty signed in 1919 imposed many conditions on Germany by the victorious Allies, including Canada. One of these conditions was that Germany was forbidden to build or operate any U-boats. However, after Hitler took power in 1933, the development of new and improved U-boats began. Even before that, Germany had begun secretly training sailors to serve aboard U-boats. By 1939, the growing German U-boat fleet was no longer a secret. The Royal Navy knew that if war came, Britain would be faced with another U-boat campaign, and again faced with the threat of starvation.³

One of the keys to defeating the U-boats in the First World War was the introduction of convoys, in which groups of merchant ships traveled together, escorted by warships. Before this, merchant ships had crossed the Atlantic alone, and usually with no warship to protect them. Unless they were very fast, lone merchant ships were easy prey for the U-boats, even if the merchant ships were armed. By grouping merchant ships in convoys and protecting them with an escort of warships equipped to attack submarines, the odds of making it safely across the Atlantic improved. After convoys were introduced, more merchant ships were able to arrive safely in Britain.⁴

² <https://www.theworldwar.org/learn/about-wwi/unrestricted-u-boat-warfare>

³ <https://uboat.net/men/training/preparations.htm>

⁴ <https://www.iwm.org.uk/history/voices-of-the-first-world-war-the-submarine-war>

Convoy forming in Bedford Basin in Halifax in 1941. (Credit: <https://www.facebook.com/RoyalCanadianNavy/photos/a.389503118078096/842490629446007/>)



Convoy at sea, seen from an escorting aircraft. (Credit: Library and Archives Canada Photo, MIKAN No. 5671742)



Unfortunately, in 1939 the Royal Navy did not have enough ships to escort convoys in the event of war. Canada, Britain's ally across the Atlantic, was in almost no position to help. The Royal Navy was still the largest and most powerful in the world. However, the more limited funds available to the Royal Navy in the period since the end of the First World War had been committed mainly to larger ships – particularly destroyers which could also be used as escorts, and to larger cruisers un-equipped for anti-submarine warfare. At the outbreak of war, the Royal Navy had 66 cruisers compared to just 45 escorts and patrol ships. These escorts were capable of anti-submarine warfare, but most of these ships lacked the fuel capacity needed for long-range convoy escort duty and were restricted to operations close to Great Britain.⁵ In comparison, Germany had 57 U-boats, with many more under construction, including newer U-boats that were better equipped and able to attack anywhere in the North Atlantic.⁶

Simply put, in 1939 the Royal Navy was unprepared for the battle against the U-boats that was about to begin. More ships were needed to be able to escort convoys across the Atlantic if war broke out.

On September 1, 1939, Germany invaded Poland. On September 3, Great Britain declared war on Germany, and Canada followed on September 10. The war, and the battle to control the Atlantic Ocean, had begun.

⁵ <https://www.naval-history.net/WW2CampaignRoyalNavy.htm>

⁶ <https://uboat.net/fates/losses/>

2 The Battle of the Atlantic

The Battle of the Atlantic was the battle for control of the Atlantic Ocean during the Second World War. It involved the German navy and air force as well as some submarines of the Italian navy, pitted against the Allied navies and air forces of the United Kingdom, Canada, and the United States, forces from countries in occupied Europe, particularly France, Poland, the Netherlands, Belgium, and Norway, as well as other allies such as Brazil and South Africa.

In trying to seize control of the Atlantic, each side aimed to restrict the flow of supplies to the other. As in the First World War, the Allies imposed a blockade on Germany, and the Germans used both surface ships and submarines to try and cut off the flow of materials to Britain.

The Battle of the Atlantic was uniquely massive in scale. Often, the length of battles is measured in days or weeks, sometimes even just hours, and battles are fought over areas of tens or hundreds of square kilometers. Not so the Battle of the Atlantic. This was the longest battle of the Second World War – 2,075 days – fought over the entire length of the war itself (excluding the war against Japan in the Pacific), from September 3, 1939, to May 8, 1945. It was fought over one of the largest battlefields in history, from Great Britain to North and South America, from the Arctic Ocean in the north to the southern tips of Africa and South America - an area of over 100 million square kilometers!⁷

The Battle of the Atlantic is most often remembered as a battle between German U-boats and Allied convoys, but the Germans also used surface ships to try to disrupt convoys and sink Allied warships and merchant ships. Most famously, in 1941, the German battleship the Bismarck was sunk almost 600 km off the coast of France after being pursued by the Royal Navy for several days across the expanses of the North Atlantic. The Germans had planned to use the Bismarck to sink Allied merchant ships.

In the Canadian context though, the Battle of the Atlantic was mainly a battle against German U-boats in the North Atlantic and the Caribbean.

The character of the Battle of the Atlantic ebbed and flowed throughout the war, but Allied ships were never fully safe from the risk of attack by German submarines. In September of 1939, U-boats sank 53 ships, and in April 1945, the last full month of the war, they sank 23 ships, demonstrating the continued threat the U-boats posed throughout the war.⁸ During the war, U-boats sank 3,065 ships while 765 U-boats were lost, either sunk by Allied action or lost through accidents, collisions, and other causes.⁹

⁷ <https://www.iwm.org.uk/history/what-you-need-to-know-about-the-battle-of-the-atlantic>

⁸ https://uboat.net/allies/merchants/losses_year.html

⁹ <https://uboat.net/fates/losses/chart.htm>

A German submarine, U-190, after surrendering to the RCN at the end of the Second World War in May 1945. It is being escorted by three RCN Fairmile motor launches. This was a Type IX U-boat, a long-range U-boat armed with four torpedo tubes in the bow and two in the stern as well as anti-aircraft guns for defence against air attack. (Credit: Library and Archives of Canada / PA 116940, www.forposterityssake.ca. Photo has been digitally restored by the author.)¹⁰

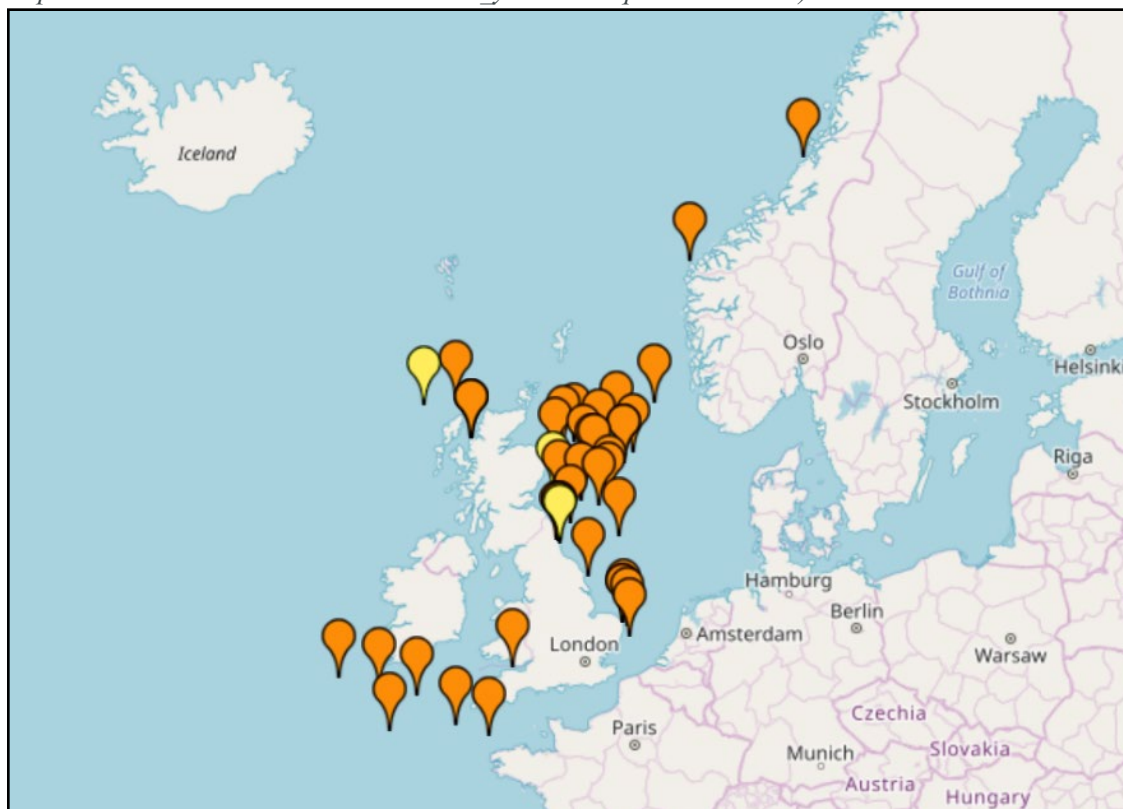


In terms of German U-boat activity, the battle was initially fought mainly in the eastern Atlantic in waters off the coast of Great Britain, as illustrated in the map below which shows locations of ships sunk by U-boats in December 1939.¹¹

¹⁰ Some of the photos in this book have been digitally restored by the author. This process included converting sepia toned images to black and white, enhancing image contrast to show details better, removing dust marks, scratches and other blemishes from the photos, and removing artefacts from the process of scanning the photos, such as white spots on the images due to dust on the scanner. All photos that have been restored are labelled as such.

¹¹ https://uboat.net/allies/merchants/losses_year.html?qdate=1939-12

Map of locations of ships sunk or damaged by U-boats in December 1939. (Credit: https://uboat.net/allies/merchants/losses_year.html?qdate=1939-12)



However, German U-boat crews soon expanded their area of operations. In addition, new types of U-boats were introduced with longer ranges, and the Germans used larger U-boats as well as ships to refuel and resupply U-boats at sea, allowing them to operate much further from their bases in Germany and from new bases that the Germans built in France and Norway after successfully invading both countries in early 1940.

Throughout late 1940 and through 1941, the U-boats operated further and further west in the Atlantic, with ships first sunk near Greenland in April 1941 and near Newfoundland in June 1941. Later in 1941, the U-boats also ranged further south, with the first sinkings off the coast of South America in September 1941.

The biggest change in the Battle of the Atlantic, and one which had a major impact on the Royal Canadian Navy (RCN), was the entry of the United States into the war after the Japanese attack on Pearl Harbor in Hawaii in December 1941. The US Navy initially refused to take the advice of the Royal Navy and RCN and introduce a convoy system off the east coast of the US, even though the US Navy and Coast Guard had actually been helping with convoy escort duty as far east as Iceland for several months before the US entered the war. With the new enemy in the Pacific Ocean, the resources of the US Navy were stretched thin, and they felt that the resources needed to implement convoys were not worth it.

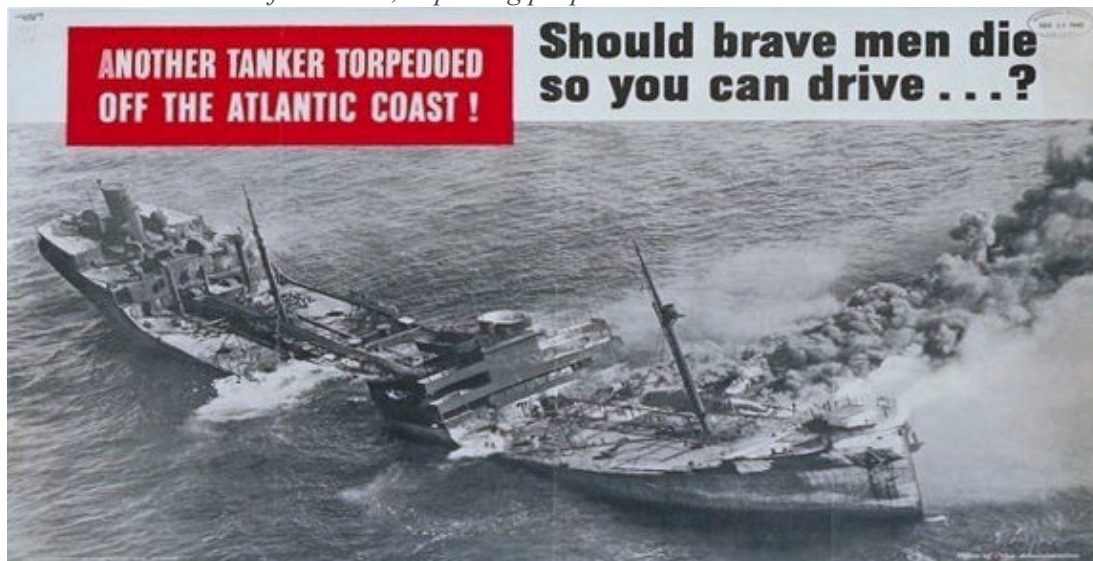
Strategically, some in the US Navy also felt that convoy escort was too defensive – it was better to go on the attack and hunt down the U-boats and leave the merchant ships to cross the Atlantic on their own.¹²

The US also did not impose a blackout in coastal areas, as had been done in Canada and Newfoundland since the start of the war.¹³ This meant that cities and towns all along the US coast remained brightly lit at night for several months in early 1942.

The U-boats immediately capitalized on this. A German U-boat sank a ship off Cape Sable, Nova Scotia in early January 1942 and then continued south towards the US, one of five U-boats sent to the western Atlantic. They found many easy targets off the US east coast, where city lights at night provided excellent illumination to sink ships, and the lack of defences meant the U-boats could surface and sink ships using guns mounted on their decks, saving their precious torpedoes for another day. In one example, on the evening of April 10, 1942, a U-boat sank the unescorted tanker SS *Gulfamerica*. The tanker was backlit by the lights of a busy amusement park in Jacksonville, Florida, and after hitting the ship with a torpedo the U-boat surfaced and sank the ship by gunfire. The sinking happened so close to shore that people on the beach tried to rescue some of the crew. The U-boat brazenly surfaced about 100 yards from the shore and the captain later recalled seeing people on the beach and running from their hotels.¹⁴

In a 2011 article in *Legion Magazine*, Canadian historian Marc Milner stated that “In February 1942, more ships were sunk by U-boats off the American east coast than had been sunk globally in any previous month of war” Milner goes on to state that “The carnage that was subsequently inflicted on Allied shipping traveling in the American zone in 1942 – some 6.1 million tons of shipping, nearly three times the previous yearly averages since 1939 – makes this failure one of the great military blunders in history, and one of the greatest Allied catastrophes of the war.”¹⁵

Texaco advertisement from 1942, imploring people to drive less.



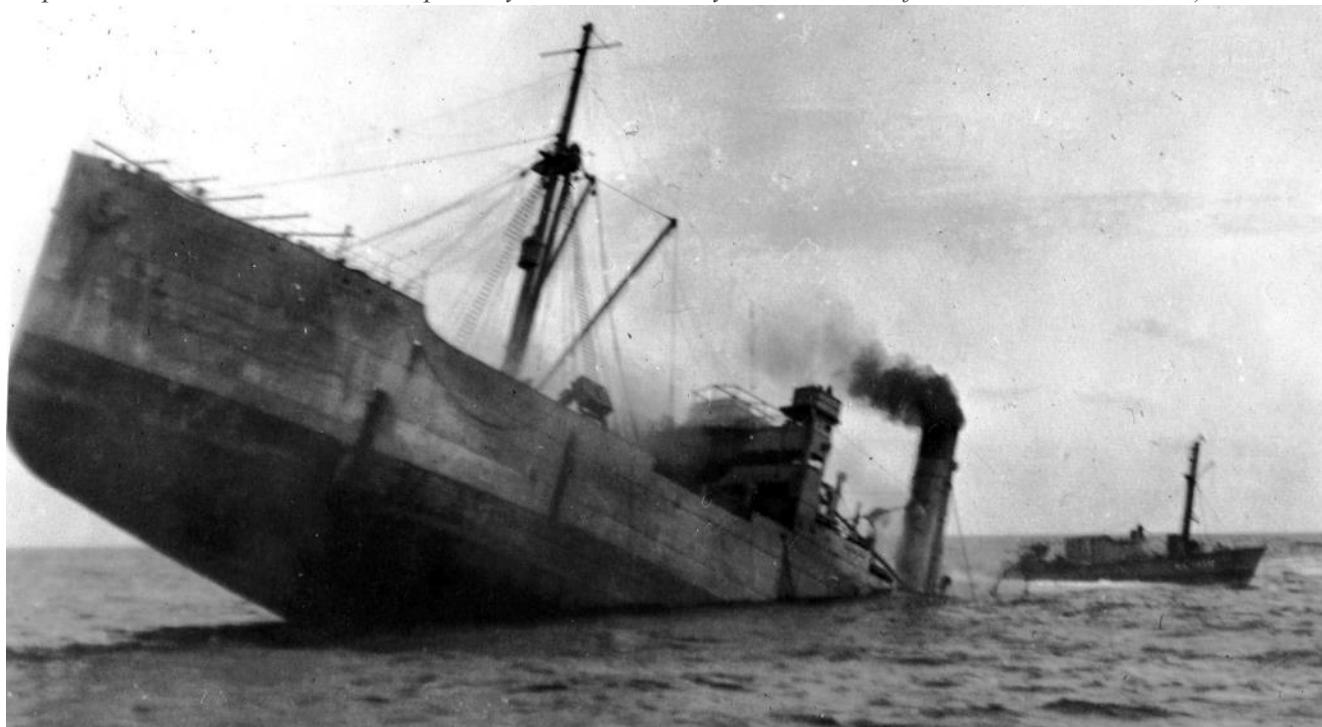
¹² <https://legionmagazine.com/en/an-american-blunder-navy-part-43/>

¹³ At that time Newfoundland as an independent country. Newfoundland did not become part of Canada until 1949.

¹⁴ <https://www.beachmuseum.org/75th-anniversary-sinking-ss-gulfamerica/>

¹⁵ <https://legionmagazine.com/en/an-american-blunder-navy-part-43/>

A British merchant ship sinking off the coast of Newfoundland. (Credit: Robert Chasse photo, <https://www.silverhawkauthor.com/post/royal-canadian-navy-in-the-battle-of-the-atlantic-1939-1945>)



In response, the RCN and the Royal Navy began escorting ships along the US east coast and into the Caribbean, where U-boats were on the hunt for tankers bringing oil from Venezuela as well as other vital supplies.¹⁶

The U-boats also pressed into the Gulf of St. Lawrence and the St. Lawrence River, sinking ships almost as far west as Rimouski, Québec, less than 300km sailing distance from Québec City. The RCN, already stretched to the limit, had to transfer escort ships to the St. Lawrence and start sending merchant ships in convoys from Québec City to Sydney, Nova Scotia, and a naval base was established in Gaspé, Québec.¹⁷

¹⁶ <https://legionmagazine.com/en/operation-drumbeat/>

¹⁷ <https://legionmagazine.com/en/the-battle-of-the-st-lawrence/>

Map of locations of ships sunk or damaged by U-boats in May 1942. (Credit: https://uboat.net/allies/merchants/losses_year.html?qdate=1942-05)



Eventually, the tide began to turn. The Battle of the Atlantic was very much a battle of technology and tactics. The Germans continued to improve their U-boats throughout the war, increasing the range and the number of torpedoes they could carry, and introducing new types of torpedoes that could home in on the sound of ships' propellers. Late in the war, they introduced revolutionary new U-boats that could operate fully submerged all the time. The Germans also introduced improved tactics, including having U-boats operate in groups called wolf packs and improving communications to be able to bring multiple wolf packs into the attack once a convoy was located.

For the Allies, many factors led to ultimate victory in the Battle of the Atlantic. One was sheer numbers. The Germans simply could not build and crew enough U-boats to defeat the ever-increasing numbers of Allied warships and merchant ships. Allied technology improved considerably too. One important factor was that the Allies were able to break the German secret code used to send messages to ships and U-boats, giving the Allies important information on U-boat movements. But Allied intelligence extended far beyond that. Allied ship movements were tracked in precise detail, and intercepted German radio signals were used to locate and track the movements of U-boats relative to the known positions of Allied ships. Convoy routes were carefully planned, and intelligence gathered was used to route convoys away from U-boats and the wolf packs. So successful was naval intelligence, and so challenging was it for German U-boats to even find Allied ships in the huge open spaces of the North Atlantic, that the vast

majority of convoys made it safely to their destination without encountering any U-boats or losing any ships due to enemy action. This is illustrated in the record of convoys that HMCS Cobalt escorted during the war (Appendix 2). Of the 116 convoys escorted by the Cobalt during the war, 100 did not lose any ships, and in some cases when ships were lost, they were not lost due to enemy action but rather to collisions in the fog (a significant hazard with ships sailing so close together in convoys), accidents, bad weather, or other factors.

However, when wolf packs did succeed in converging on a convoy they outnumbered the escorts, and the results could be devastating. Nothing demonstrates this more than the wolfpack attack on convoy SC 7 which departed from Sydney, Nova Scotia on October 5, 1940, bound for Liverpool in the UK. This convoy consisted of 35 merchant ships and five Royal Navy escorts. As the convoy approached UK waters on October 17, it was sighted by a U-boat. Over the next three days, until the survivors finally reached Liverpool, the convoy came under sustained attack by eight U-boats. A convoy from Halifax arrived in the area too, adding more targets for the U-boats. In 48 hours, the U-boats sank 28 ships from the two convoys, including 7 by the U-boat U-99. Only 15 of the 35 merchant ships that had departed Sydney on October 5 with SC 7 reached Liverpool. For the Allies, it was the worst two days in the entire Battle of the Atlantic. No U-boats were sunk.¹⁸

¹⁸ https://en.wikipedia.org/wiki/Convoy_SC_7

Photo from HMCS Cobalt or HMCS Saskatoon sailing in foggy conditions and with the ship encrusted in ice. Both fog and ice were significant hazards to convoys. (Credit: Collection on Ronald Judges, courtesy of Chanin Graham, personal communication with the author. Photo has been digitally restored by the author.)



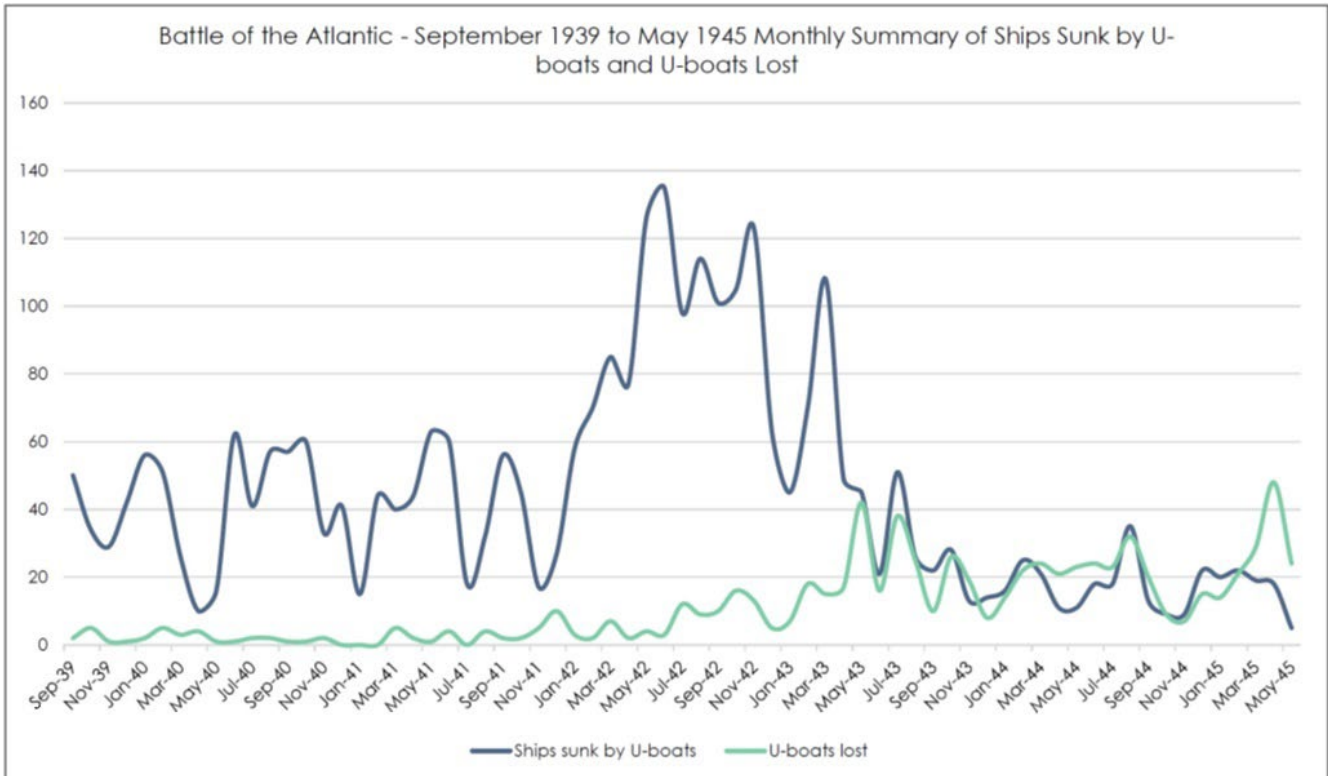
Icebergs – another potential hazard in the cold North Atlantic. Taken from HMCS Saskatoon late in the war. (Credit: Collection of Desmond Bolin, www.forposterityssake.ca. Photo has been digitally restored by the author.)



Allied air power also played a pivotal role in winning the battle against the U-boats. Early in the war, aircraft were only able to patrol a short distance from land, and convoys were left unescorted by any aircraft throughout most of the Atlantic. As the war progressed, the range of Allied patrol aircraft steadily improved, until the gap of aircover over the Atlantic was completely closed, with Allied aircraft operating from Britain, Iceland, Newfoundland, Canada, the US, and the Caribbean. Aircraft also began to carry radar, allowing them to detect submarines on the surface far beyond the range of visual observers in the aircraft. The Allies also converted some merchant ships into small aircraft carriers. The ships continued to carry their cargo, but the flight deck allowed each to carry three or four aircraft that could patrol ahead of the convoy on the lookout for U-boats.

Convoy escort ships were the last line of defence if the U-boats were able to locate and attack a convoy. These escorts became not only much more numerous but also much more effective as the war went on, with new systems like radar, improved ASDIC (sonar), and new weapons, as well as improved tactics (Appendix 4).

All of these factors contributed to bringing the U-boat threat under control. Losses dropped, but the threat remained, and U-boats continued to take a toll until the end of the war. A month-by-month summary of ship sinkings and U-boat losses throughout the war is provided in Appendix 3 and illustrated in the graph below which shows that the U-boat threat could never be dismissed.



A Merchant Aircraft Carrier (MAC ship) in harbour. The location is unknown, but the person who took the photo served on RCN minesweepers based in Halifax and St. John's. This was likely taken in Halifax. The MAC ship has three or four Fairey Swordfish aircraft on deck. Although primitive looking, these biplanes were highly effective aircraft, particularly when out of range of enemy fighter aircraft, and they served throughout the war. They were ideally suited to the small decks of the MAC ships and were equipped with radar and depth charges or rockets. This MAC ship was a converted oil tanker and still carried a cargo of oil when crossing the Atlantic. In some cases, depending on the type of fuel carried, these MAC ships could also be used to refuel other ships at sea. (Credit: Collection of William Connor, www.forposterityssake.ca. Photo has been digitally restored by the author.)



Royal Air Force (RAF) B-24 Liberator patrolling over a convoy in 1943. Liberators were American-made heavy bombers that played a very important role in the Battle of the Atlantic. Armed with depth charges and equipped with radar and powerful searchlights that allowed them to attack submarines day or night, they sank or helped sink 93 submarines. They were flown by the RAF, the Royal Canadian Air Force, and the US Navy from bases in the United Kingdom, Iceland, Newfoundland, Canada, the US, the Caribbean, and the Azores Islands.¹⁹ One Liberator variant, the Very Long Range (VLR) Liberator, had armour removed and extra fuel tanks added, giving it a range of 2,300 nautical miles (4,260 km) which allowed them to stay aloft up to 11 hours and patrol over any part of the North Atlantic. (Credit: Library and Archives of Canada, PA-107907).



¹⁹ <https://documents.techno-science.ca/documents/CASM-AircraftHistories-ConsolidatedB-24Liberator.pdf>

From its tiny start in 1939, and through many challenges as the RCN grew massively from about 3,000 sailors in 1939 to almost 100,000 in 1945, Canada made very important contributions to the Battle of the Atlantic. The RCN only destroyed 30 German U-boats as well as three Italian submarines, but despite this, Canada's role was invaluable. The primary role of convoys, after all, was to ensure that the merchant ships arrived safely to their destination. If the escorts sank U-boats attacking convoys, that was a bonus. But breaking up an attack and ensuring that no merchant ships were lost, even if no submarines were sunk, was almost as good. Even better was being able to evade the U-boats entirely and cross the Atlantic with no contact with U-boats.

The growing size, ability, and experience of the RCN in the Battle of the Atlantic also translated into growing responsibility. The ships of the RCN took over more and more of the escort duties in the North Atlantic. In April 1943, Canadian Rear-Admiral Leonard Murray became Commander-in-Chief, Canadian Northwest Atlantic Command, and continued in this role until the end of the war. He was the only Canadian to command a theatre of war during the Second World War and he had command of all Allied escort ships, not just RCN ships, in an area from Baffin Island in the north to the Gulf of Maine in the south, and east to the mid-Atlantic roughly from Greenland south.

By the end of the war, the RCN had helped ensure that over 25,000 merchant ships safely reached their destinations. They helped to ensure the delivery of almost 165 million tons of supplies to Britain and to the Allied armies and air forces fighting in Europe.

The RCN lost 30 ships and smaller boats during the war including 13 sunk in U-boat attacks. During the war, 1,990 RCN sailors lost their lives, mostly in the North Atlantic. In addition, about 12,000 Canadians who served aboard merchant ships also lost their lives.²⁰

²⁰ <https://www.warmuseum.ca/learn/dispatches/the-royal-canadian-navy-and-the-battle-of-the-atlantic-1939-1945/#tabs>

Colourized photo of the German U-boat U-889 after surrendering to the RCN off Shelbourne, Nova Scotia, May 13, 1945. (Credit: www.forposterityssake.ca.)



Map of the main areas of operation of the RCN corvettes during the Second World War, showing the areas covered by the Newfoundland Escort Force (NEF), the Mid-Ocean Escort Force (MOEF), and the Western Local Escort Force (WLEF) as well as main convoy escort routes, the locations of RCN corvettes sunk during the war, and the locations of U-boats sunk by RCN corvettes. (Credit: Macpherson, Ken and Milner, Marc. 1993. Corvettes of the Royal Canadian Navy 1939-1945. Vanwell Publishing)



3 Enter the Corvette

Back to 1939. To win the battle against the U-boats, the Royal Navy and the RCN needed escort ships. The ideal convoy escort ship would be built to modern naval standards and would be fast and appropriately equipped with the latest sensors and weapons to take on the U-boats, while having the range and sea-keeping characteristics to be able to cross the stormy North Atlantic in reasonable comfort. However, such ships took time to design, order, and build, and they needed to be built in shipyards with experience in building warships. With war almost inevitable, the Royal Navy knew that it could not afford to wait until the "ideal" escort ships were available in sufficient numbers – the war could be lost by then. The ideal escort ships would have to wait – they needed something else, and fast!

This urgent need for ships to escort convoys led to the birth of the corvette. The design for the corvette was based on a whaling ship, and the ships could be built quickly and cheaply in civilian shipyards that had no experience building warships, using the same methods and materials used to build merchant ships. The first group of corvettes was ordered in July 1939, just weeks before the war started in September.²¹

The first corvettes were known as the “Flower-class” since the corvettes in the Royal Navy were all named after flowers. The British had not originally intended to give these ships names, just numbers, as was common for smaller ships in the Royal Navy. However, the British corvettes ended up being named after flowers at the suggestion of Winston Churchill who was at that time First Lord of the Admiralty²² (he became the British Prime Minister in May 1940). Churchill, with wry British humour, thought it would be amusing and good public relations to be able to report that a U-boat had been sunk by a ship with a most un-warlike name, like Buttercup or Petunia.²³

The first orders were placed with shipyards in Britain, and in January 1940 the first order was placed with Canadian shipyards, mainly along the St. Lawrence River and the Great Lakes, and on the west coast.²⁴

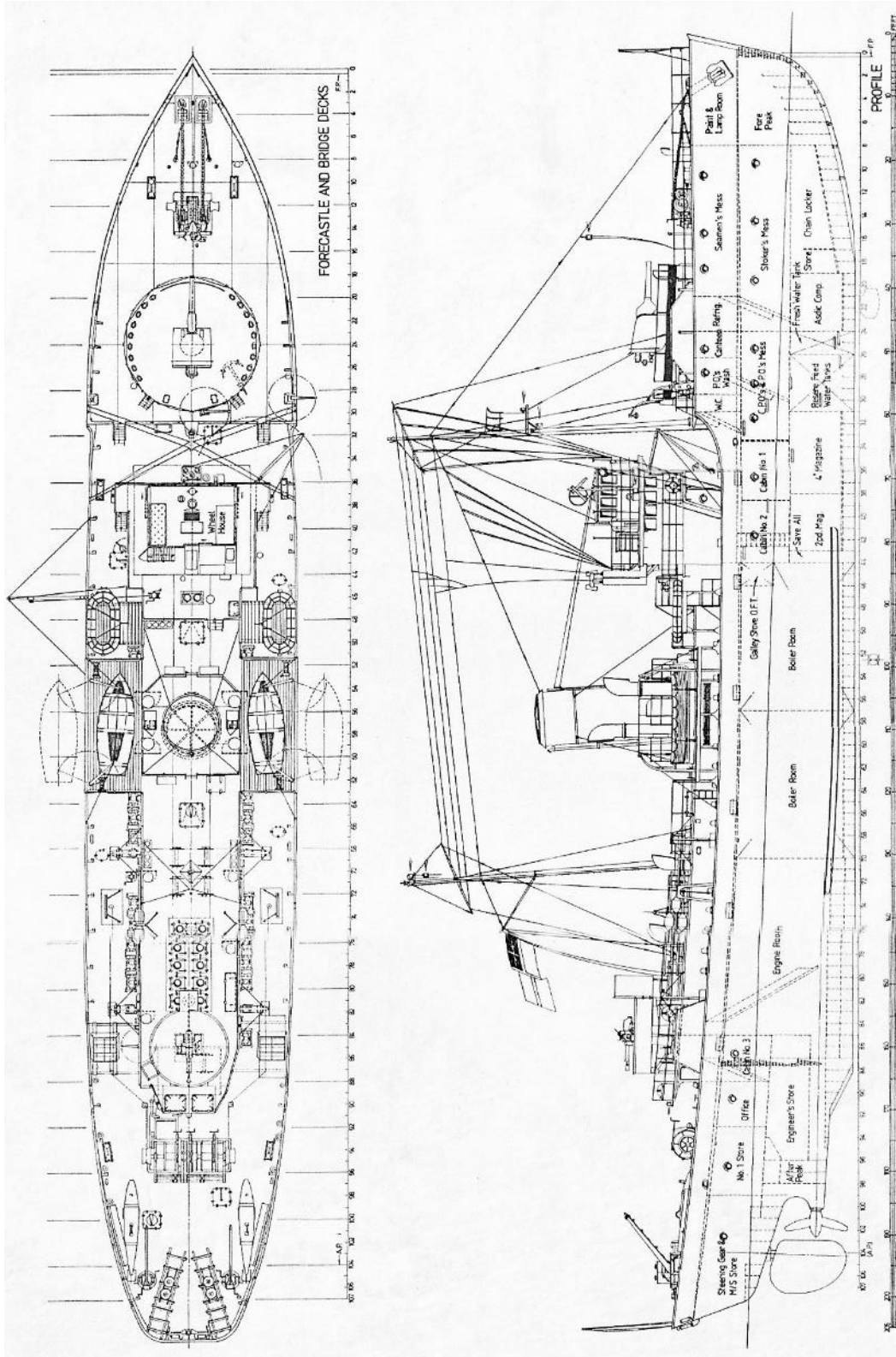
²¹ McKay, John and Harland, John. 2010. *The Flower Class Corvette Agassiz (Anatomy of the Ship)*. Conway Maritime Press

²² The First Lord of the Admiralty was the cabinet minister responsible for the Royal Navy.

²³ <https://legionmagazine.com/en/the-humble-corvette-navy-part-27/>

²⁴ Macpherson, Ken and Milner, Marc. 1993. *Corvettes of the Royal Canadian Navy 1939-1945*. Vanwell Publishing

Drawing of a Canadian Flower class corvette showing the ship's layout as originally built. (Credit: Drawing by John W. McKay in *Corvettes of the Royal Canadian Navy 1939-1945* by Ken MacPherson and Marc Milner, 1993, Vanwell Publishing, www.forposterityssake.ca)



Eventually, 294 corvettes were built in the UK and Canada and they made a huge contribution to the war effort, living up to the nickname given them by Churchill: cheap and nasties.²⁵ They were the most numerous class of ship ever to serve in the RCN and they were the most numerous class of warship ever built.²⁶ The Royal Navy (140) and the RCN (123) were the largest operators of Flower class corvettes, but these ships also served during the war in the navies of:²⁷

- United States Navy (25)
- Free French Naval Forces (9)
- Belgium (2)
- The Netherlands (1)
- Norway (6)
- Greece (4)
- India (3)
- New Zealand (2)
- Yugoslavia (1)²⁸

Four even served with the German navy, having been under construction in French shipyards at the time of the German invasion in 1940, captured incomplete, and finished by the Germans as escort ships.²⁹

With Canada's entry into the war in September 1939, the tiny pre-war Royal Canadian Navy began a very rapid expansion. At the outbreak of the war, the RCN was even less prepared than the Royal Navy, with just 13 warships, 6 of which were ocean-going ships, and 366 officers and 3,477 ratings, including those in the naval reserves.³⁰ From that tiny start, the RCN grew to become one of the largest navies in the world by the end of the war, with almost 100,000 men and women in uniform and 434 commissioned vessels of all sizes, from cruisers and destroyers to escort ships like frigates and corvettes, smaller auxiliary vessels for coastal duties, landing craft, etc.³¹



1942 Canadian postage stamp depicting HMCS La Malbaie under construction.

As the size and capabilities of the RCN grew it played an increasingly important role in the Battle of the Atlantic. That growth, particularly in the early years of

²⁵ <https://www.immortalwordsmith.co.uk/churchill-corvette-cheap-nasty/>

²⁶ LeCren, Bruce. 2020. *The Flowers of Canada - The Royal Canadian Navy's Corvettes in World War II*. Originally published in the Nautical Research Journal Spring 2020. <http://www.forposterityssake.ca/RCN-DOCS/Flowers-of-Canada-LeCren.pdf>

²⁷ The total number adds up to the more than the total number built because some corvettes were transferred to other navies during the war. For example, some corvettes, originally serving with the Royal Navy, were transferred to the US Navy and the Free French Naval Forces.

²⁸ https://en.wikipedia.org/wiki/List_of_Flower-class_corvettes

²⁹ <https://uboat.net/allies/warships/class/42.html>

³⁰ <https://www.silverhawkauthor.com/post/royal-canadian-navy-in-the-battle-of-the-atlantic-1939-1945>

³¹ <https://natoassociation.ca/9-little-known-facts-about-canadas-contribution-in-ww2/>

the war, was built on the backs of corvettes and the men from across Canada who served on these rugged little ships.

A 1941 poster from the Wartime Information Board, Ottawa, featuring artwork by famed Canadian artist, Alex Colville. (Credit: Maritime Museum of the Atlantic)



4 A Corvette named Cobalt

What does all of this have to do with the mining town of Cobalt, Ontario, so far from the Atlantic?

Except for ten Canadian corvettes originally built for the Royal Navy, Canadian corvettes were not named after flowers. Instead, they were named after towns and cities across Canada. This was done to help involve residents of those towns in the war effort, giving them a sense of connection with the ships and their crews. As Rear Admiral Percy Nelles, Canada's Chief of Navy Staff said, "Flowers don't knit mittens!"³²

Cobalt was one of the first Canadian towns so honoured. His Majesty's Canadian Ship (HMCS) Cobalt was one of the first batch of 64 corvettes ordered for the RCN. She was built in a shipyard in Port Arthur, Ontario, now known as Thunder Bay. Construction of the Cobalt began in April 1940, and true to the intention that corvettes be built quickly, she was launched on August 17, 1940, and commissioned into the RCN on November 25, 1940 – the fifth of 104 Canadian-built corvettes. She left immediately for Halifax before the Great Lakes and St. Lawrence River froze for the winter, which would have left her stuck in Port Arthur until spring, useless to the war effort. She stopped in Montreal to have some radio equipment installed and have her radio direction-finding equipment calibrated.³³ She then sailed on to Halifax where the final work was completed. In January 1941, HMCS Cobalt was ready to go to war.³⁴ A significant accomplishment in a country with little experience building warships.

HMCS Cobalt had the identification number K124. This number, known as a pennant number, was painted on the hull of the ship. The ship's name was not painted prominently on the hull for security reasons, although there was a plaque aboard the ship with her name on it.

³² <https://legionmagazine.com/en/the-humble-corvette-navy-part-27/>

³³ Details of the stop in Montreal determined based on a Naval Message sent from Naval Service Headquarters in Ottawa to the Resident Naval Overseer Port Arthur on November 26, 1940. Source: Library and Archives Canada

³⁴ http://www.forposterityssake.ca/Navy/HMCS_COBALT_K124.htm

HMCS Cobalt is launched at the Port Arthur Shipbuilding Company in Port Arthur, Ontario, on August 17, 1940. (Credit: Thunder Bay Museum. Photo has been digitally restored by the author.)



HMCS Cobalt in Halifax, April 24, 1941. Her anti-aircraft gun still has not been installed. (Credit: CFB Esquimalt Naval and Military Museum Photo. Photo digitally restored by the author.)



HMCS Cobalt was armed with a 4-inch gun on the forward part of the ship that could be used to attack submarines on the surface or to defend herself if attacked by surface ships. For protection from attack from aircraft, she was initially armed with machine guns. Later in the war, as heavier, more capable weapons became more available, her anti-aircraft weapons were improved to include two 20mm cannons on the bridge and a gun near the stern that fired heavier shells weighing 2 pounds each. See Appendix 4 for more information on the Cobalt's armament and other equipment.³⁵

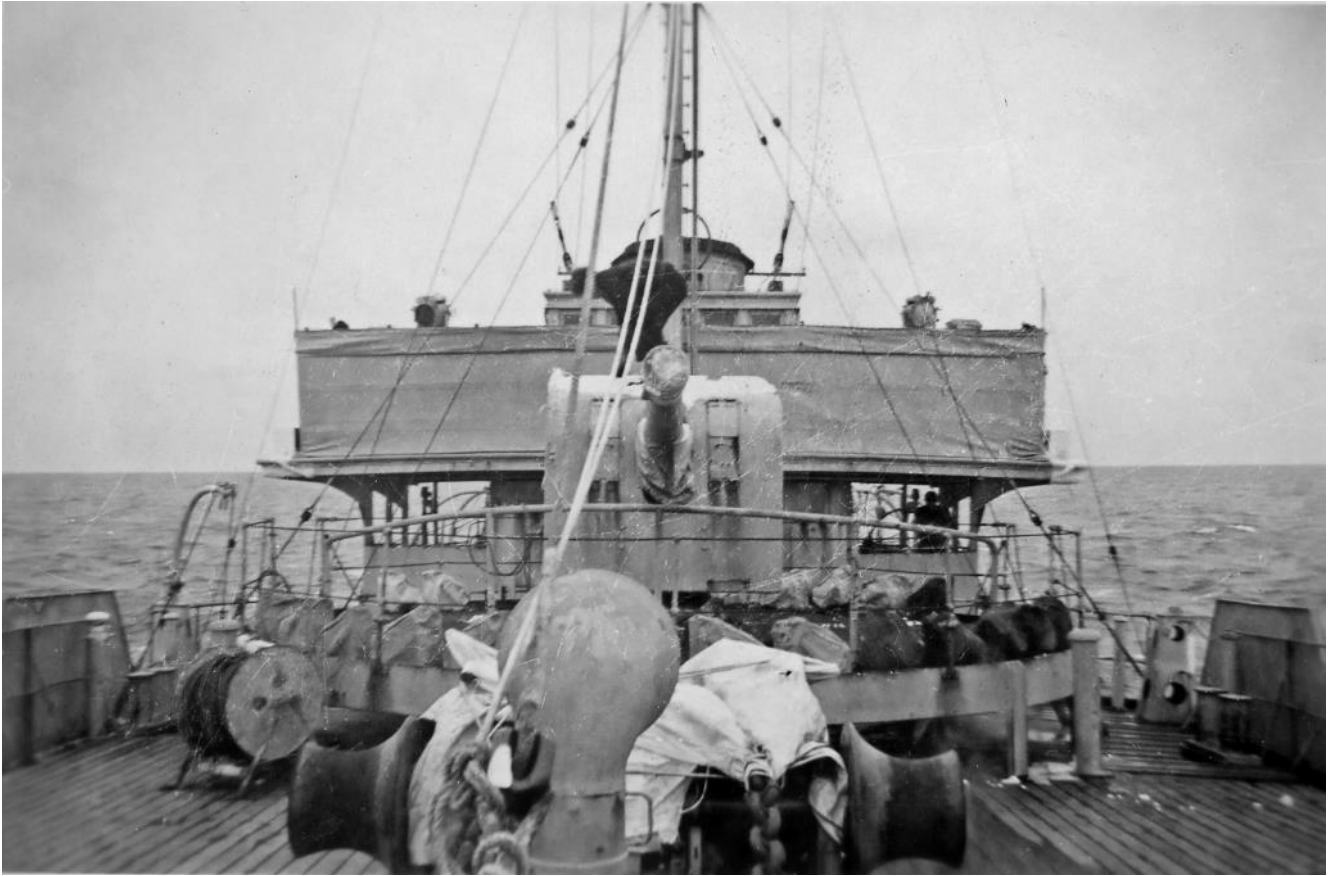
Apart from the 4-inch gun, the Cobalt was equipped with two key tools to protect convoys and do battle with U-boats. The first was sonar, known in the Royal Navy and the RCN as ASDIC, which was used to detect submarines under water. The second was a weapon known as a depth charge. Depth charges were barrels filled with explosives and fitted with a fuse set to detonate at a specific depth below the surface.³⁶

Depth charges were stored on the deck of the ship and could be rolled off the stern using rails or launched over the side of the ship. Depth charges would explode behind the ship, and if they exploded close enough to a U-boat, they would cause internal damage to the U-boat or damage the hull. Originally, the Cobalt had two rails for launching depth charges off the stern and a pair of launchers to fire depth charges over the side of the ship. Later, a second pair of launchers was added, enlarging the coverage when a "pattern" of depth charges was fired and increasing the chance of a successful attack. As the war progressed, corvettes also carried larger numbers of depth charges to help ensure that they would not run out during prolonged attacks on U-boats.

³⁵ McKay, John and Harland, John. 2010. *The Flower Class Corvette Agassiz (Anatomy of the Ship)*. Conway Maritime Press

³⁶ Same reference as above.

The Cobalt's main gun, viewed from the bow, taken some time between January 1942 and March 1943. (Credit: Cobalt Mining Museum. Photo has been digitally restored by the author.)



Firing the main gun of HMCS Sherbrooke. This photo was taken late in the war, and the gunshield has rails attached to it to fire rockets that would provide illumination at night. (Credit: Library and Archives Canada / PA-184185.)



Depth charge rails on the stern of HMCS Lethbridge. The crew are laying a smoke screen using a smoke float. (Credit: Collection of Joseph Roberts, www.forposterityssake.ca. Photo has been digitally restored by the author)



Crew on the stern of HMCS Midland enjoying some fiddle music by one of the crew. Depth charge rails can be seen and the men in the foreground are sitting/leaning on a rack for storing additional depth charges. (Credit: From the collection of Harold W. Bee, www.forposterityssake.ca. Photo has been digitally restored by the author.)



Two of Cobalt's crew members, R. Bishop and J. Pearce, share a laugh beside one of the depth charge launchers in 1943. (Credit: Cobalt Mining Museum. Photo has been digitally restored by the author.)



Depth charge being fired from HMCS Pictou. (Credit: Library and Archives Canada—PA116838.)



ASDIC operators aboard HMCS Cobourg. (Credit: Department of National Defence.)



Later in the war, two new tools were added to the toolkit, increasing Cobalt's effectiveness in the Battle of the Atlantic. One tool was radar, which helped to detect U-boats or other ships on the surface. The other, added in 1944, was a new weapon known as the hedgehog, which further increased the odds of a successful attack on a U-boat. The hedgehog was a type of mortar that fired a pattern of 24 bombs about 250 meters in front of the ship. These bombs, which had much less explosive than the depth charges, would only explode if they hit a submarine, and a single hit could be fatal. In 1944, the Cobalt's ASDIC was improved as well.³⁷

³⁷ McKay, John and Harland, John. 2010. *The Flower Class Corvette Agassiz (Anatomy of the Ship)*. Conway Maritime Press

Loading rounds on the hedgehog mortar aboard the corvette HMCS North Bay. (Credit: Library and Archives Canada PA-114737.)



Hedgehog rounds being fired from the corvette HMCS New Westminster. (Credit: Collection of Hector Trotter, www.forposterityssake.ca.)



5 Corvette Crews

As described in Section 2, the RCN was tiny when the war started in 1939, with just 309 officers and 2,967 ratings (the naval equivalent of enlisted personnel in the army), of whom just 129 officers and 1,456 ratings were full-time professionals with the RCN.³⁸ The others were split between the RCN Reserve (RCNR)(127 officers as of October 15, 1939) and the RCN Volunteer Reserve (RCNVR)(183 officers as of October 15, 1939).³⁹

The RCNR consisted mainly of men who were sailors by day such as fishermen in the Maritime provinces or on the west coast. They received some naval training every year or two in Halifax, Nova Scotia, or Esquimalt, British Columbia. At least all of the men in the RCNR were used to the sea and life aboard ships. The same could not be said for the almost 1000 men in the RCNVR at the start of the war. These men had no professional experience related to ships and the sea and were in reserve units mainly in inland Canada. They helped raise the profile of the navy in these parts of the country, and received training, including summer training in Halifax or Esquimalt, but had limited experience.⁴⁰

This was the foundation from which the RCN grew to have almost 100,000 members just six years later when the war ended. Although the Navy was able to call up retired personnel who had previously served in the RCN or the Royal Navy to help out, there were a lot of growing pains along the way!

In the early years of the war, Canada was able to build new ships like corvettes faster than crew could be trained. Thousands of young men from across Canada enlisted and joined the RCNVR. By May 2, 1940, the number of officers and ratings on active service had already almost tripled,⁴¹ and thousands more would enlist in the coming months. Many of these new sailors had never seen the ocean before and perhaps had never sailed on anything larger than a canoe or a rowboat. They had a lot to learn. Many recruits came from the Prairie Provinces, far from any ocean. Interestingly though, the wide-open spaces of the prairies made some of them better suited to life at sea than those who had grown up in the mountains to the west or the forests to the east. In fact, in early 1943, 40% of the sailors in the navy (up to about 52,000 by then) were from Manitoba, Saskatchewan, Alberta, and British Columbia, which only made up 28% of Canada's population at the time.⁴²

³⁸ Douglas, W.A.B., R. Sarty, M. Whitby. 2002. *No Higher Purpose – The Operational History of the Royal Canadian Navy in the Second World War, 1939-1945*. Volume II, Part 1. Vanwell Publishing.

³⁹ Department of National Defence, *The Canadian Navy List*, Corrected to 15th October, 1939

<https://navalandmilitarymuseum.org/wp-content/uploads/2019/06/CFB-Esquimalt-Museum-Navy-List-1939-October.pdf>

⁴⁰ Same reference as footnote 38.

⁴¹ Same reference as footnote 38.

⁴² Globe and Mail, March 27, 1943. http://www.warmuseum.ca/cwm/exhibitions/newspapers/canadawar/royalnavy_e.html

Globe and Mail cartoon from March 27, 1943. (Credit: http://www.warmuseum.ca/cwm/exhibitions/newspapers/canadawar/royalnavy_e.html)



Recruits went through basic training similar to recruits in all branches of the military, but the RCN was short of absolutely everything needed, from instructors, to training facilities, to proper accommodations and food, to uniforms and equipment.⁴³ Given the desperate state of affairs in the North Atlantic and the need to get the newly built ships out into the convoys, many recruits got most of their training “on the job”.

Even before the new corvettes could enter service, a range of smaller vessels from fishing trawlers to civilian yachts were pressed into RCN service. Thus, the lack of crews was already a serious problem when the *Cobalt* and her newly built sisters started entering service. In addition, in September 1940, Britain completed a deal to get 50 old destroyers from the US Navy in exchange for allowing the US to establish military bases in Newfoundland and the Caribbean. The Royal Navy passed 10 of these destroyers to the RCN – a blessing and a curse. The RCN had 10 more ships, but it needed to find crews for them.⁴⁴

⁴³ Douglas, W.A.B., R. Sarty, M. Whitby. 2002. *No Higher Purpose – The Operational History of the Royal Canadian Navy in the Second World War, 1939-1945*. Volume II, Part I. Vanwell Publishing.

⁴⁴ Same reference as above.

HMCS Columbia seen from the Cobalt, with another corvette in the background, likely in 1941. The Columbia was one of the old US Navy destroyers. (Credit: Cobalt Mining Museum. Photo has been digitally restored by the author.)



When the newly built corvettes like the Cobalt went to sea they were crewed by a handful of experienced sailors from the RCN and RCNR. Everyone else was green – new to the sea, new to ships, and inadequately trained no matter their role – communications, gunnery, engine room, cook. Fortunately, in 1940 and early 1941 the German U-boats were operating mostly in the eastern Atlantic and the new Canadian ships and their rookie crews were operating mostly in the western Atlantic (see Appendix 2). That gave them a little bit of breathing room to learn, but not for long. By late spring 1941, the U-boats were operating closer and closer to Canadian and Newfoundland waters. In addition, in 1940 and 1941, the Cobalt and other Canadian escort ships operated in Canadian coastal waters, with shorter times at sea (see the record of the Cobalt's convoy escort duty until May 20, 1941, in Appendix 2). In 1941, Lieutenant Commander Jim Prentice, in charge of the newly formed Newfoundland Escort Force, warned that:⁴⁵

"The majority of the RCN corvettes have been given so little chance of becoming efficient that they are almost more of a liability than an asset to an escort group. The commanding officers have apparently been given no instruction in convoy work and little chance to train their officers, most of who are without sea experience of any sorts. It is as though we were attempting to play against a professional hockey team with a collection of individuals who had not even learned to skate."

Prentice worked the crews of the Newfoundland Escort Force hard as he taught them to skate and play hockey with the professionals.

⁴⁵ <https://www.cbc.ca/history/EPISCONTENTSE1EP14CH1PA2LE.html>

As crew members gained experience, they were shuffled between ships. That was not good for crew cohesion and esprit de corps, but over time, the ships had more and more experienced crew members and fewer recruits. For example, the corvette HMCS Chambly had more than 250 different men serve aboard her in a two-year period.⁴⁶

As the need for trained crews continued to grow, and the battle intensified, especially in 1942 when the U-boats brought the battle to the shores of Canada and the US, the Canadian crews were stretched almost to the breaking point of exhaustion. The Royal Navy said bluntly to the RCN that “A grave danger exists of breakdown in health, morale and discipline.”⁴⁷

Over time, the training also improved so that recruits were not as raw when they were first assigned to ships. Eventually, the training gap was closed, and the Cobalt and other ships had well-trained and experienced crews, making them far more effective in their role.

As originally built, the Cobalt and the other corvettes had a crew of 4 officers and 48 ratings:⁴⁸

Officers:

- 1 lieutenant commander as the ship’s captain or commanding officer, RCN or RCNR (in the Cobalt’s case, the first commanding officer was RCNR)
- 1 lieutenant, either RCN or RCNR
- 2 lieutenants or sub-lieutenants, either RCNR or RCNVR

Ratings (mix of RCNR and RCNVR):

- 1 Chief Petty Officer
- 3 Leading Seamen
- 12 Able or Ordinary Seamen
- 1 Leading Telegraphist (communications)
- 1 Telegraphist (communications)
- 1 Telegraphist Signaller (communications)
- 1 Signaller (communications)
- 1 Engineer Officer, or Chief Engine Room Artificer (engine room crew)
- 3 Engine Room Artificers (engine room crew)
- 3 Stoker Petty Officers (engine room crew)
- 6 Leading Stokers (engine room crew)
- 10 Stokers (engine room crew)

⁴⁶ <https://winstonchurchill.org/publications/finest-hour/finest-hour-159/churchill-proceedings-canada-and-the-battle-of-the-atlantic/>

⁴⁷ Same reference as above.

⁴⁸

<http://jproc.ca/rrp/corvette.html?fbclid=IwAR1TAFUN2vVpnoCOs9xBgtUM4PjuN4JWbw6jjQDFvsLBKVKDrMz3kbznDdA>

- 1 Petty Officer Victualler or Leading Victualling Assistant (victuallers were responsible for ensuring that the ship had food and other supplies)⁴⁹
- 2 Cooks
- 2 Stewards

HMCS Cobalt's original crew, taken in Halifax early in 1941. In the centre of the front row is the ship's first commanding officer, Acting Lieutenant Commander Robert Baird (RCNR). The other four officers, a lieutenant, and three sub lieutenants, are all RCNVR, as indicated by the wavy rather than straight stripes on the cuffs of their jackets indicating their rank (the RCNVR was nicknamed the wavy navy because of these stripes). The fact that four of the five original officers of the Cobalt were with the RCNVR gives a good indication of just how inexperienced the crew was. Other crew identified in the photo are Greg Cainen (front Row 2nd from right) and William Killam (2nd row, 2nd from right). (Credit: Collection of William E. Killam, www.forposterityssake.ca. Photo has been digitally restored by the author.)



⁴⁹ Gow, S. 2016. "Pusser Grub? My God but it was awful!" Feeding the Fleet During the Second World War. *Canadian Military History* 25, 2 (2016) <https://scholars.wlu.ca/cgi/viewcontent.cgi?article=1828&context=cmh>

Engineering department from the Cobalt's original crew. In the middle of the front row is the ship's Chief Petty Officer, with four other Petty Officers seated beside him. The only crew member identified in the photo is William Killam (seated, 2nd from right). (Credit: Collection of William E. Killam, www.forposterityssake.ca. Photo has been digitally restored by the author.)



As the war went on, and the corvettes were refitted and modernized with new equipment added like radar and Hedgehogs, the crew size increased. By the end of the war, corvettes like the Cobalt had crews of up to 85, a significant increase.⁵⁰

A list of HMCS Cobalt's officers throughout her service is provided in Appendix 5.

⁵⁰ McKay, John and Harland, John. 2010. *The Flower Class Corvette Agassiz (Anatomy of the Ship)*. Conway Maritime Press

HMCS Cobalt's crew, likely taken after the completion of the ship's March-April 1943 refit. (Credit: Queen's County Museum, Liverpool, Nova Scotia, www.forposterityssake.ca. Photo has been digitally restored by the author.)



Crew photo taken in Halifax in July or August 1944, after completion of the Cobalt's final refit. (Credit: source unknown)



6 Life Aboard the Corvettes

"What a miserable, rotten hopeless life. I cannot imagine a more miserable existence than this of being caught on a corvette in the Atlantic. An Atlantic so rough that it seems impossible that we can continue to take this unending pounding and still remain in one piece. Ones joints ache and ache from the continuous battle of trying to remain upright."

Those are the words of Winnipeg native Frank Curry who served aboard HMCS Kamsack.⁵¹ Many who served aboard corvettes would likely echo his thoughts.

Corvettes were not large, and they were not glamorous like the sleek, fast destroyers, or the much larger cruisers, battleships, and aircraft carriers. But ships like the Cobalt were vital. They were just over 200 feet long and they were not built for comfort. They were originally intended for escort work in the coastal areas around Great Britain, not for the open ocean, and some joked that they would roll on wet grass. Needless to say, in the heavy seas of the North Atlantic the ships and their crews were thrown around like corks. This made for miserable conditions for the corvette crews. The constant rolling of the ships left many of their crew sea-sick, particularly the newer recruits who were not yet used to life at sea.

To make matters worse, the crews spent most of their time at sea wet. Men at action stations on deck were routinely drenched with sea spray in all but the calmest of seas, and the crew on the open bridge of corvettes were completely exposed to the weather. Those below deck, either off-duty or at their workstations, got little relief. Conditions below deck were cramped, and water regularly entered as a result of spray coming in through open hatches and air vents. Even the toilets allowed water in since they drained by a pipe straight into the ocean. Modifications later in the war extended the uppermost deck further back on the corvettes and helped to reduce the amount of water and thus the misery of the crew. The Cobalt had this modification completed in July 1944. However, the increased armament such as the hedgehog and the addition of radar resulted in bigger crews and even more cramped conditions. Only the engine room offered any relief from the cold, wet conditions, but those serving in the engine room were often the least likely to survive if their ship was torpedoed.⁵²

In January 1945, the Cobalt departed St. John's in a severe storm and gale-force winds. The commanding officer, Acting Lieutenant Commander Ralph Wallace, later reported that the ship took a terrific pounding in the gale, with the stern rising 15 feet out of the water and then down again with each wave. About two hours out of St. John's, the port side depth charge rails were severely damaged, and seven depth charges were lost.⁵³ Fortunately, all had their primers set to safe so none detonated, or the situation could have been far worse since the ship was going quite slowly and exploding depth charges could have damaged the stern of the ship.⁵⁴ An investigation was not able to determine if the damage was due to a design flaw

⁵¹ <https://www.cbc.ca/history/EPISCONTENTSE1EP14CH1PA2LE.html>

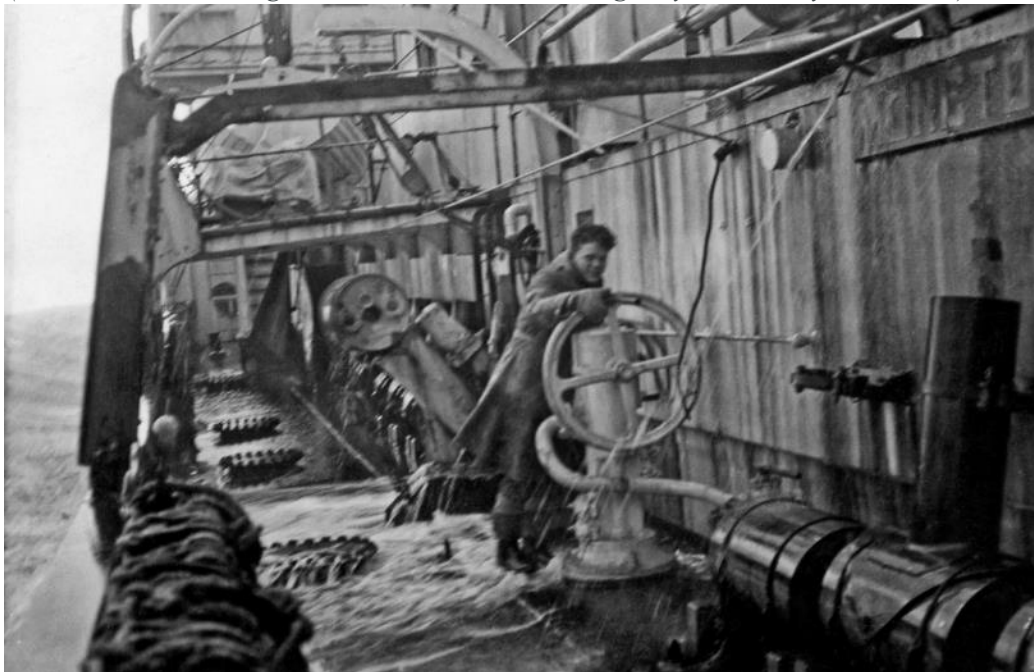
⁵² Douglas, W.A.B., R. Sarty, M. Whitby. 2002. *No Higher Purpose – The Operational History of the Royal Canadian Navy in the Second World War, 1939-1945*. Volume II, Part 1. Vanwell Publishing.

⁵³ Memo from the Commanding Officer, HMCS Cobalt to Captain "D", Halifax, January 15, 1945. Library and Archives Canada, RG24, Volume 11559

⁵⁴ Naval Message from HMCS Cobalt. January 9, 1945. Library and Archives Canada, RG24, Volume 11559

in the rails, or due to faulty installation.⁵⁵ However, this demonstrates that rough seas were not just hard on the crews, they were hard on the ships too.

*A sailor aboard HMCS Moncton holding on as he walks along the deck in rough seas.
(Credit: Cobalt Mining Museum. Photo has been digitally restored by the author.)*



*View from the wheelhouse of the Cobalt. (Credit: Collection of William Killam,
<https://www.rcnhistory.org/killam-cobalt.htm>. Photo has been digitally restored by the author.)*



⁵⁵ Memo from the Commodore Superintendent, Halifax, to the Commander-in-Chief, Canadian Northwest Atlantic, March 21, 1945. Library and Archives Canada, RG24, Volume 11559

Two photos of HMCS Wetaskiwin in rough seas. (Credit: Ken Macpherson / Naval Museum of Alberta, www.forposterityssake.ca)



Spectacular photo taken from the bridge of HMCS Woodstock as it plows into the waves. (Credit: Collection of Harry Harold Palatnick, www.forposterityssake.ca. Photo has been digitally restored by the author.)



Forward mess of HMCS Sackville which is now a museum and memorial in Halifax, Nova Scotia. Note the edging around the tables to help prevent dishware and other objects from sliding off the table. The crew slept in hammocks suspended from the black metal frames attached to the ceiling. (author's photo)



“Crew member” asleep in a hammock aboard HMCS Sackville, with a “kitten” curled up on his blanket. (author’s photo)



Captain’s quarters aboard HMCS Sackville. Note the voice tube above the captain’s bed and the telephone beside the bed, so that crew on the bridge could contact him in the event of an emergency. (author’s photo)



Petty Officer's quarters aboard HMCS Cobalt. (Credit: Collection of William Killam, <https://www.rcnhistory.org/killam-cobalt.htm>)



Quarters for the ratings aboard HMCS Cobalt. (Credit: Collection of William Killam, <https://www.rcnhistory.org/killam-cobalt.htm>)



Open bridge of HMCS Lethbridge while at sea on a fairly calm day. (Credit: Collection of Joseph Roberts, www.forposterityssake.ca. Photo has been digitally restored by the author.)



HMCS Cobalt before and after she was modified to extend the uppermost deck further back. The bottom photo was taken in Liverpool, Nova Scotia in July 1944, right after the refit was completed. (Credit for top photo unknown. Credit for bottom photo: Collection of Edmund Ferris, www.forposterityssake.ca)



Another photo of the Cobalt, freshly painted, while she was in Liverpool in July 1944. RCN corvettes rusted very quickly due to the type of steel used to build them. They rarely looked this good! (Credit: Collection of Edmund Ferris, www.forposterityssake.ca)



Inside the engine room of HMCS Sackville. (author's photo).



Winter added to challenges for the corvette crews operating on the cold North Atlantic. Water from the sea spray froze on the railings, cables, guns, and other exposed surfaces of the ships. This made it dangerous to move around on deck, could make weapons unusable, and the weight of the ice could cause the ship to become unstable and capsize. Crews needed to use axes and other tools to remove the ice. In March 1944, the Cobalt's commanding officer sent a memo to the senior officer in Halifax, recommending the use of hot salt water and wooden clubs to remove ice, rather than axes and hammers, noting that this method worked well and caused less damage to the paint. It is not known if this recommendation was adopted.

Ice buildup on the Cobalt, January 1943. (Credit: Cobalt Mining Museum. Photos have been digitally restored by the author.)






Crew removing ice from HMCS Cobalt, January 1943. (Credit: Cobalt Mining Museum. Photos have been digitally restored by the author.)



March 24, 1944, memo from HMCS Cobalt's commanding officer, recommending alternate methods of removing ice. (Credit: Library and Archives Canada, RG24, Volume 11358)


CANADA

File

Department of National Defence
Naval Service

IN REPLY PLEASE QUOTE
NO. 107-1B

March 24th 1944

FROM: Commanding Officer,
H.M.C.S. Cobalt.

TO: Captain (D) Halifax,
H.M.C. Dockyard,
Halifax, N.S.

Methods of ice removal - File D. 5-8-0

SUBMITTED: During the last winter on several occasions when ship became badly iced, hot salt water from deck service was used to great advantage.

2. The use of wooden clubs rather than axes or chipping hammers was found satisfactory and greatly saved the paintwork.

3. In high places where it was difficult to spray hot water, a steam hose and wooden clubs worked very well.

C.D.H.
C.D. Heward,
Lieutenant, R.C.N.V.R.,
Commanding Officer,
H.M.C.S. "Cobalt".

Corvettes were often at sea for many days. Typically, a single escort group did not provide escort the whole way across the Atlantic, but even if an escort group only went partway across, they would then rendezvous somewhere in the middle of the ocean with a convoy going in the other direction, after a quick stop to refuel and take on supplies in Newfoundland or Iceland. The Cobalt's longest time escorting a single convoy was 13 days in April 1942 when she crossed the Atlantic to Londonderry, Northern Ireland. But looking at her schedule of convoy duty in Appendix 2 indicates that there were times when she may have been at sea even longer than that, for example escorting an east-bound convoy to the mid-Atlantic, then joining a west-bound convoy a day or two later.

Such long times at sea could be an exhausting ordeal for the corvette crews, even if no U-boats were encountered. As a final insult, there was not enough space or refrigeration capacity on the corvettes to store more than a few days worth of perishable foods, so the crew members who could keep their food down were often treated to canned food three meals a day.

The galley of HMCS Sackville. (author's photo)



Crew aboard HMCS Collingwood peeling potatoes on a sunny, calm day at sea. (Credit: www.forposterityssake.ca)



Sailor aboard HMCS Sackville cutting a slice from a loaf of rather stale bread! (Credit: Collection of Patrick Onions, www.forposterityssake.ca)



Despite the discomfort, the cold, the wet, and the dangers, or perhaps because of those things, there was a camaraderie amongst the crews of the Cobalt and other corvettes, as is common in most military units. On active duty, the crew worked in 4-hour shifts, followed by 4 hours off to eat, sleep, or relax by playing cards, writing letters home, reading, or whatever. From the daily rum ration⁵⁶ to ship's mascots, to making music, the crews found other ways to relax and escape the stress, discomfort, and the monotony of convoy duty.

Off-duty crew of HMCS Arvida relaxing on deck. (Credit: Collection of Ivan Bennett, www.forposterityssake.ca. Photo digitally restored by the author.)



⁵⁶ The daily ration of rum for sailors was a Royal Navy tradition that dated to the early 1800s and was adopted by the RCN when it was formed in 1910. Each sailor received a “tot” of 2½ ounces of navy rum mixed with water. The tradition continued in Canada until 1972. <https://readyayeready.com/tradition/tot-history.php>

Off-duty crew of HMCS Lunenburg enjoying some sunshine on a bright summer day. (Credit: Collection of Leonard Hare, www.forposterityssake.ca. Photo has been digitally restored by the author.)



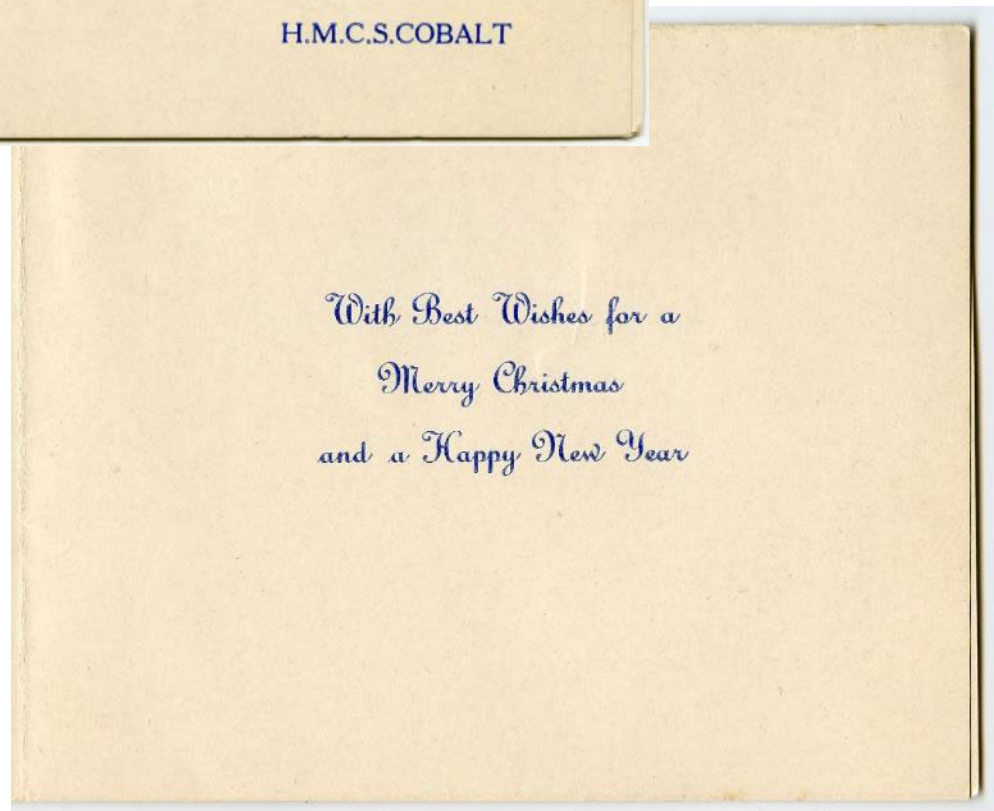
Crew aboard HMCS Kamloops. Dress requirements were often quite relaxed when they were at sea, although this depended on the ship's commanding officer. (Credit: Collection of Kenneth Medford, www.forposterityssake.ca. Photo has been digitally restored by the author.)



Sailors aboard HMCS Arvida receive their daily rum ration in July 1943 while in port in St. John's. (Credit: Library and Archives Canada / PA-142439, www.forposterityssake.ca)



HMCS Cobalt Christmas card. Many ships produced Christmas cards, which crew could purchase to send home to family and friends.⁵⁷ This one is likely from Christmas 1940 since the photo used in the card is actually a 1940 photo of HMCS Windflower, not the Cobalt.⁵⁸ (Credit: Cobalt Mining Museum)



⁵⁷ <https://tridentnewspaper.com/holiday-traditions-navy/>

⁵⁸ http://www.forposterityssake.ca/Navy/HMCS_WINDFLOWER_K155.htm

Close-up of the photo of the Cobalt's original crew in 1941, showing the Cobalt's first mascot, a parrot. (Credit: Cobalt Mining Museum. Photo digitally restored by the author.)



Unfortunately, it looks like the parrot did not survive the war, and it was given an appropriate burial at sea. (Credit: Collection of William Killam, <https://www.rcnhistory.org/killam-cobalt.htm>)



Another photo of the ship's crew, taken sometime between January 1942 and March 1943. One of the ship's mascots, a kitten, is poking its head out of the barrel of the main gun. (Credit: Cobalt Mining Museum. Photo has been digitally restored by the author.)



More ship's mascots, two puppies, sharing a bone from the galley. (Credit: Rick Adam, personal communication with the author)



Haircut at sea aboard HMCS Camrose, while a sailor in the background strums his guitar. (Credit: Collection of William Welsh, www.forposterityssake.ca. Photo has been digitally restored by the author.)



Sometimes though, things went too far. In June 1943, the Senior Naval Officer in Pictou, Nova Scotia submitted a complaint to Captain “D” Halifax.⁵⁹ There was a shipyard in Pictou, and while the Cobalt was in Pictou, some sailors were seen throwing raw potatoes at women working on a ship under construction. The women had to be removed from the ship to prevent them from getting injured. The author did not find any documentation on the response to the complaint or any possible disciplinary action against the sailors involved.⁶⁰

The previous year, in May 1942, the Flag Officer Newfoundland Force sent a memo to Captain “D” Newfoundland, highlighting concern about discipline issues with HMCS Cobalt’s crew, including two warrants and 83 minor offences, which was far above average for corvettes. Offences ranged from improper leave to neglect of duty, to deserting their post, to being drunk aboard the ship, and exhibiting insolent behaviour. The memo recommended an investigation and with the Cobalt being transferred to the Western Local Escort Force, the memo also recommended that Captain “D” Halifax be warned.⁶¹ Captain “D” Halifax responded that one-third of the offences were due to four ratings, two of whom had left the ship, and also noted that there had been a large decrease in offences. The Cobalt’s commanding officer, Lieutenant Colin James Angus, was satisfied with the conduct of the crew and was told to watch for trends in offences.⁶²

Time in port brought the opportunity for some shore leave and a chance to relax, while also helping to do repairs and maintenance and preparing the ship for her next trip to sea, from helping to load supplies to painting. Painting is the perpetual job of any sailor since metal ships and salt water don’t mix well. The Canadian-built corvettes were particularly prone to rust due to the process used to make the steel plates for their hulls and they were being repainted almost constantly.

Shore leave could last from a few hours to a few days, perhaps longer if a ship was in refit or if the crew were granted a longer leave. Many organizations set up facilities and events for sailors on shore leave, such as the YMCA. There was everything from dances to sports events, reading rooms, and even camping near St. John’s. For officers, the Crow’s Nest Officer’s Club in St. John’s provided a refuge from the stresses of life and leadership at sea, in the company of the only other people who could really understand - the officers of other naval and merchant ships sharing the hardships and challenges of life on convoy duty in the North Atlantic.

Sometimes, all did not go according to plan on shore leave. Sadly, in January 1943, a crew member of the Cobalt, Acting Leading Seaman James Graham, was killed while on shore leave in New York City,

⁵⁹ Captain “D” was a senior officer, in this case based in Halifax. He had administrative and tactical control over the flotilla of escort ships. <https://legionmagazine.com/the-training-gap-navy-part-31/>

⁶⁰ Memo from the Senior Naval Officer, Pictou, Nova Scotia to Captain “D” Halifax, HMC Dockyard, Halifax, Nova Scotia, June 11, 1943. Library and Archives Canada, RG24 Volume 11569.

⁶¹ Memo from the Flag Officer Newfoundland Force to Captain “D” Newfoundland, May 24, 1942. Library and Archives Canada, RG 24 Volume 11569.

⁶² Memo from Captain “D” Halifax to Captain “D” Newfoundland, May 29, 1942. Library and Archives Canada, RG24 Volume 11569.

struck by a subway train.⁶³ Graham is buried in his hometown of Goderich, Ontario. He was one of only two crew members of HMCS Cobalt to die while on active duty.⁶⁴

In another case, the Cobalt's commanding officer had to request that a crew member be removed from the crew, stating that "in port he is frequently under the influence of liquor without being so affected as to give reason for a charge. He causes much dissatisfaction among personnel."⁶⁵ Given the reputation of sailors for imbibing from time to time, one can only imagine the trouble this crew member must have caused for the captain to request his removal!

The end of shore leave sometimes resulted in frantic telegrams to the ship's commanding officer, explaining why a crewman was delayed (everything from a delayed train to a wife recovering from childbirth) to ensure that they were not reported as absent without leave. All had to be approved by the commanding officer – one of his many administrative/management responsibilities aside from the stereotypical role of military commander portrayed in movies. The movies don't bother to show other aspects of the job, like approving the monthly pay for the crew, providing updates to naval command on next of kin information, approving crew members for training, recommending crew for promotions, overseeing refits, overseeing onboard training (e.g., during workup periods following refits), and many other less glamorous but essential roles.⁶⁶

A celebration in the forward mess - a birthday perhaps? Quite likely in port, since the beer is flowing. (Credit: Cobalt Mining Museum. Photo has been digitally restored by the author.)



⁶³ Memo from the Commanding Officer of HMCS Cobalt to the Naval Service Headquarters in Ottawa, January 14, 1943. Library and Archives Canada, RG24, Volume 11358.

⁶⁴ The other crew member of HMCS Cobalt to die on active duty was 51-year-old Chief Engine Room Artificer George Randall. Randall died on April 17, 1942, while the Cobalt was at sea. Cause of death was suicide. <http://www.forposterityssake.ca/JPGs/PHOTO-DIR/CTB-PHOTOS-27000/CTB028160.jpg>

⁶⁵ Memo from the Commanding Officer of HMCS Cobalt to the Drafting Commander, RCN Barracks, Halifax, October 10, 1942. Library and Archives Canada, RG24, Volume 11358.

⁶⁶ Various documents in Library and Archives Canada, RG24, Volume 11358

The sailor's other job – painting, here aboard HMCS Drumheller. (Credit: Collection of Bernard (Bunny) Brewster; www.forposterityssake.ca. Photo has been digitally restored by the author.)



Two of Cobalt's crew enjoying a little time ashore. (Credit: Cobalt Mining Museum. Photo has been digitally restored by the author.)




Ad for a famous burlesque dancer in New York City, popular with some of the Cobalt's crew during their trips to the Big Apple when escorting convoys to and from Halifax. (Credit: Collection of Ken Adam, courtesy of Rick Adam, personal communication with the author.)

*Appearing Nightly
at the
Famous Door*

ZORITA'S DANCE

**The Consummation of the
Wedding of the Snake**

Many thousands of years ago, there was a handsome young warrior, who was in love with the village chieftian's daughter, ZORITA. Minerva, a powerful goddess, had seen the young warrior and was infatuated with him, but her love he spurned. On the eve of his wedding to ZORITA, Minerva in her wrath, changed him into the form of a snake. ZORITA sees him only in his original handsome form. As she consummates her marriage, her eyes are opened, she is horrified. She appeals to the goddess who lets her die to join her lover. This beautiful interpretive dance is taken from Greek mythology.



7 A Top Secret Start

The career of HMCS Cobalt got off to an unusual and secret beginning. She found herself involved in trials of a type of camouflage to make it harder to see ships at night.⁶⁷

In wartime, ships at sea, both warships and merchant ships, traveled with their lights out to make it more difficult for submarines or surface ships to see them at night. However, the night sky is rarely completely black, and a ship could still appear as a dark silhouette against the night sky. A professor at McGill University in Montreal proposed a type of lighting called "diffused-lighting camouflage" to illuminate ships slightly, to make them harder to see against the night sky. The professor approached the RCN with his idea. After some laboratory tests showed that the concept had potential, it was decided to take the experiment to full scale.

In January 1941, the Cobalt was fitted with lights mounted on temporary supports on one side of the hull, and the brightness of the lights could be controlled. The trials were conducted near Halifax. Observers on another ship a short distance from the Cobalt communicated by radio with the crew of the Cobalt so that the brightness of the light could be adjusted to make the Cobalt as difficult to see as possible.

These first trials with the Cobalt were successful enough that the development of this type of lighting continued, although the Cobalt was no longer involved. The Royal Navy and US Navy also conducted trials. Ultimately, the widespread adoption of radar made the use of this camouflage method less relevant, and it was not adopted. But it meant a unique start to the Cobalt's service in the RCN.

⁶⁷ Musee Naval du Quebec. 2008. Diffused lighting and its use in the Chaleur Bay
https://web.archive.org/web/20130522231113/http://www.navy.forces.gc.ca/navres/NMQ_MNQ/researches_recherches/diffusedLighting_camouflageLumineux/index-eng.asp

HMCS Kamloops, used in the final trial of diffused lighting in the fall of 1941. In the first photo, lights for the system can be seen installed on the funnel and in at least one location on the bridge. The second photo provides a closer view of the lights installed in the funnel. (Credit: first photo collection of George John Sedgwick, www.forposterityssake.ca. Second photo: unknown)



8 Cobalt on Convoy Escort Duty

The rest of HMCS Cobalt's wartime service was typical of Canadian corvettes fighting in the Battle of the Atlantic. From March through late May 1941, she escorted several convoys headed to Britain from Halifax, staying with the convoys for one to two days before returning to port. A good start for her green crew.

In May 1941, she joined the newly formed Newfoundland Escort Force based in St. John's, Newfoundland. To better prepare the crew of novice sailors, the ships of the Newfoundland Escort Force had nine weeks of intensive training – likely more than most other new RCN crews at that stage in the war. This included doing patrols and anti-submarine sweeps around the entrance to Halifax harbour, as well as training to use the weapons mounted on board the ships. A submarine of the Royal Netherlands Navy operating out of Halifax provided a live target to help train the ASDIC operators and improve their ability to recognize and track submarines and distinguish them from other objects such as whales or schools of fish.⁶⁸

Three Canadian corvettes of the Newfoundland Escort Force in Halifax in May 1941. From closest to furthest are HMC Ships Collingwood, Cobalt, and Chambly. In the background, a British merchant ship is leaving the harbour to join a convoy. (Credit: Department of National Defence. Photo has been digitally restored by the author.)



⁶⁸ Marc Milner (2009). The Training Gap: Navy, Part 31. Legion Magazine. <https://legionmagazine.com/en/the-training-gap-navy-part-31/>

Ships of the Newfoundland Escort Force on May 24, 1941, heading for St. John's Newfoundland. The photo was taken from HMCS Chambly, and the closest two ships are HMCS Orillia and HMCS Cobalt. (Credit: Library and Archives Canada—PA037447)



The Cobalt and her crew still had a long way to go to be a fully effective warship in the fight against the U-boats, but this was a good start. The Cobalt went on to serve for six months escorting convoys between St. John's and Iceland. Beyond Iceland, the escort duties were taken over by ships based out of the United Kingdom.

At the end of her time with the Newfoundland Escort Force, the Cobalt was sent to Liverpool, Nova Scotia for three months for a refit to repair damage from her first year of service and make various upgrades. The refit was completed in January 1942 and the Cobalt then made two crossings to Londonderry in Northern Ireland – the only two times that the Cobalt would go all the way across the Atlantic to the United Kingdom.

Approaching St. John's, taken from the Cobalt, likely in 1941. The tower atop Signal Hill on the north side of the harbour entrance provides a distinctive landmark. In the left foreground is one of the old US Navy destroyers, possibly HMCS Columbia since she was also part of the Newfoundland Escort Force. On the right is another corvette. (Credit: The Bunker military museum in Cobalt, Ontario. Photo has been digitally restored by the author.)



Colourized photo taken as the Cobalt was entering the harbour in St. John's Newfoundland. (Credit: Collection of Edmund Ferris, www.forposterityssake.ca. Photo was digitally restored by the author and colourized using www.palette.fm)



Three corvettes in St. John's harbour, likely early in 1942. (Credit: Collection of Lt W. Ralph Moxley, www.forposterityssake.ca)



*HMCS Cobalt in Iceland in November 1941. (Credit: Source: Imperial War Museum Official Admiralty Collection
Photographer: Lt C.H. Parnell. Photo has been digitally restored by the author.)*



An officer on the deck of HMCS Cobalt, likely in Iceland. (Credit: Cobalt Mining Museum. Photo has been digitally restored by the author.)



HMCS Cobalt in Liverpool, Nova Scotia for refit in early 1943. (Credit: Cobalt Mining Museum. Photo has been digitally restored by the author.)



In May 1942, the Cobalt began serving as part of the Western Local Escort Force, based in Halifax. This Force was established after the US entered the war in December 1941, during a period of intense U-boat activity along the east coast of North America, particularly off the coast of the US but also Canada, including the Gulf of St. Lawrence. HMCS Cobalt and other ships on the Force, primarily Canadian, escorted convoys between North American ports such as New York, Boston, and Halifax, and as far south as the Caribbean. They also escorted the convoys as far east as Newfoundland, where ships of the Mid-Ocean Escort Force took over.

The Cobalt remained part of the Western Local Escort Force for the remainder of the war. Throughout the war, the Cobalt was involved in escorting more than 100 convoys (Appendix 2). While she was not directly involved in sinking any U-boats, the Cobalt and the men who served aboard her did valuable service.

Colourized photo of a convoy at sea taken from HMCS Cobalt. (Credit: Cobalt Mining Museum. Photo has been digitally restored by the author and colourized using www.palette.fm)



Merchant ship at sea taken from HMCS Cobalt. A US Navy blimp flies over. Blimps were used to detect and attack submarines. (Credit: Cobalt Mining Museum. Photo has been digitally restored by the author.)



Nova Scotia native Leonard Gaudet served aboard HMCS Cobalt after enlisting in 1943, and recalled his time in a 2019 interview with the Saltwire:⁶⁹

“You were out there on a ship, an easy target and you knew there was somebody looking for you and you just went on to whatever you were assigned to do and if you were attacked, you knew what to do about it.” Gaudet added that “You were looking for a black pipe sticking out of the water, or anything as far as that goes. In pitch dark, you still had to do it.” Reflecting on being under attack by U-Boats, Gaudet stated that “We didn’t know. We just waited for the boom. We didn’t know who was going to get it.”

Joseph Leonard Gaudet, 1924 to 2021. (Credit: www.forposterityssake.ca. Photo has been digitally restored by the author.)



⁶⁹ Saltwire Network. October 30, 2019. South Nictaux veteran recounts risky Second World War missions.

9 Cobalt to the Rescue

The dangers of convoy escort duty were made very clear in August 1943, when the Cobalt was escorting convoy HX 252 from Halifax bound for the UK. On the night of August 18/19, the convoy of 56 merchant ships and 4 escorts was about 600 miles east of Halifax when the Steam Ship (SS) J.H. Senior and the SS J. Pinckney Henderson collided in dense fog. The J.H. Senior was a tanker loaded with aviation fuel, with aircraft and aircraft parts stowed on her deck. The J. Pinckney Henderson was carrying a cargo just as dangerous: 10,000 tons of cotton, magnesium, magnesite, glycerine, resin, wax, oil, and other combustibles. Intense fire broke out almost immediately after the two ships collided.⁷⁰ In the ensuing chaos, as other ships in the convoy struggled in the fog to avoid the two stricken ships, there were 15 other collisions and the Norwegian ship SS Santos also sank with 37 survivors.^{71,72}

One of the Danish crew of the SS J.H. Senior who survived the conflagration later described the incident:⁷³

“Sometime after 10 p.m., I was in the messroom playing cards with Messman Eskild Lundsgaard, Able Seaman Sixten Johansson and Junior Engineer Levi Eliassen. I felt a terrific jar. Someone said the ship was on fire, so I ran to my room, grabbed a life jacket and went up on the poop deck ... the galley and messroom were ablaze ... I forced myself through the fire and jumped overboard on the port side, aft.”

“The flames were like a torch and burning oil had spread on the water to 100 feet or so from the vessel's side. I swam underwater away from the flames, coming to the surface only to breathe. I was severely burned about the face and hands, but I continued swimming around in the water. Then I ran into Junior Engineer Frank Freundlich, who was badly burned, and we stayed together. Second Engineer Harry Sondergaard finally drifted along on a small life raft and picked us up. Later, one of the lifeboats passed by with Navy gunner Walter A. Gawlick, S1c, and Fireman Sture Wihlborg. I jumped from the raft and they pulled me in.”

⁷⁰ Details of this account are from an RCN press release available in the archives of the Department of National Defence.

⁷¹ United States Federal Maritime Board. 1951. Report of the Federal Maritime Board and Maritime Administration. Washington, D.C.

https://books.google.ca/books?id=2_BGAQAIAAJ&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false

⁷² Notes on Convoy HX 252 and Commodore Rear Admiral R. M. King's Narrative.

<http://www.warsailors.com/convoys/hx252narrative.html>

⁷³ *Ships of the Esso Fleet in World War II*, an official history of the wartime tankers operated by the Standard Oil Company of New Jersey. <https://www.armed-guard.com/ag77.html>

Five survivors from the SS J.H. Senior and four from SS J. Pinckney Henderson were picked up by the Rescue Ship Bury and taken to St. John's for treatment of severe burns.^{74,75}

Moments after the collision, the Cobalt's ASDIC operator reported hearing a torpedo "whiz down the side" and then picked up an ASDIC contact. The Cobalt carried out four depth charge attacks and was joined by the Bangor-class minesweeper HMCS Lachine on the orders of the senior officer of the convoy escort, aboard HMS Montgomery. The Cobalt and Lachine continued their attacks for over 24 hours, leaving the Cobalt with just 10 depth charges.⁷⁶ During the battle, the still-burning and crewless tanker was left abandoned.

Acting Lieutenant Commander Ronald Judges, the commanding officer of the Cobalt, later said that:

"By mid-afternoon [on August 20], it appeared that we had driven off the U-boats for the time being or put at least one out of action. At any rate there were no new [ASDIC] contacts and we decided to have a look at the tanker."

Judges concluded that the tanker "looked salvageable" and sent a boarding party of three volunteer crew members to the tanker with firefighting equipment. The boarding party was led by Mate Alfred Bett who said:

"We found the loading hatches blazing, but once we got the extinguishers going we made steady progress. In two hours, we had the fires out. Everything above the main deck was burned out, but when the fires were out we discovered that we had saved more than 80 percent of the cargo of gasoline and by the time we left the ship she was ready to be towed into port."

⁷⁴ Many convoys included a dedicated rescue ship, whose role was to pick up survivors of sinking ships while the rest of the convoy and its escorts continued onwards. Frequently, these were converted merchant ships, chosen to have enough space to accommodate large numbers of survivors. The Bury was fitted with platforms to help bring survivors on board and she had two motorized lifeboats that could be launched to help recover survivors. There was a sick bay with two surgeons, and the ship carried supplies of blankets and clothing. During the war, the Bury rescued 237 survivors.

https://en.wikipedia.org/wiki/SS_Bury

⁷⁵ *Ships of the Esso Fleet in World War II*, an official history of the wartime tankers operated by the Standard Oil Company of New Jersey. <https://www.armed-guard.com/ag77.html>

⁷⁶ Notes on Convoy HX 252 and Commodore Rear Admiral R. M. King's Narrative.

<http://www.warsailors.com/convoys/hx252narrative.html>

Sadly, the boarding party also found the remains of 10 members of the tanker's crew who had been trapped in the galley and unable to escape the flames. In total, 68 merchant sailors from the two ships were killed. In addition, each ship carried a complement of US Navy Armed Guard who manned guns mounted on each of the ships. In total, 31 from the US Navy Armed Guard were also killed. A tragic night indeed.^{77,78}

The SS J.H. Senior was successfully towed back to Bay Bulls, Newfoundland. She was subsequently towed to Halifax where her cargo was recovered, and then she was towed on to New York. She was eventually repaired and returned to service in 1950.^{79,80}

For this action, the commanding officer of HMCS Cobalt, Acting Lieutenant Commander Ronald A. Judges, was mentioned in dispatches, and the following was published in the *Canada Gazette* on January 8, 1944:

"Acting Lieutenant Commander Judges, as Commanding Officer of HMCS Cobalt showed a fine fighting spirit and great skill and determination in the handling of his ship, laying it alongside a blazing tanker with a cargo of gasoline. It was due to his inspiration, leadership and bravery that he and his ship's company were able to save this valuable ship from total loss by putting out the fires."

Only 9 on 2 Ships Survive Collision

All but nine members of the crews of the Liberty ship J. Pinckney Henderson and the tanker J. H. Senior perished in fires and explosions when the two ships collided at sea in a dense fog, setting off flames and blasts that burned and detonated for three weeks, it became known yesterday.

The Henderson was loaded to capacity with combustibles of the highest inflammability, including glycerine, resin, wax, oil, bales of cotton, and tons of magnesium and magnesite. The Senior was carrying high octane aviation gasoline.

Only three of the seventy-two merchant seamen on the Liberty ship survived, for it was impossible even to lower a lifeboat. Six men escaped from the Senior and were rescued. The hulk of the Henderson has been returned to New York Harbor. None of her welding showed any cracks in spite of the holocaust, Todd Shipyards Corporation announced.

The New York Times

Published: March 13, 1944
Copyright © The New York Times

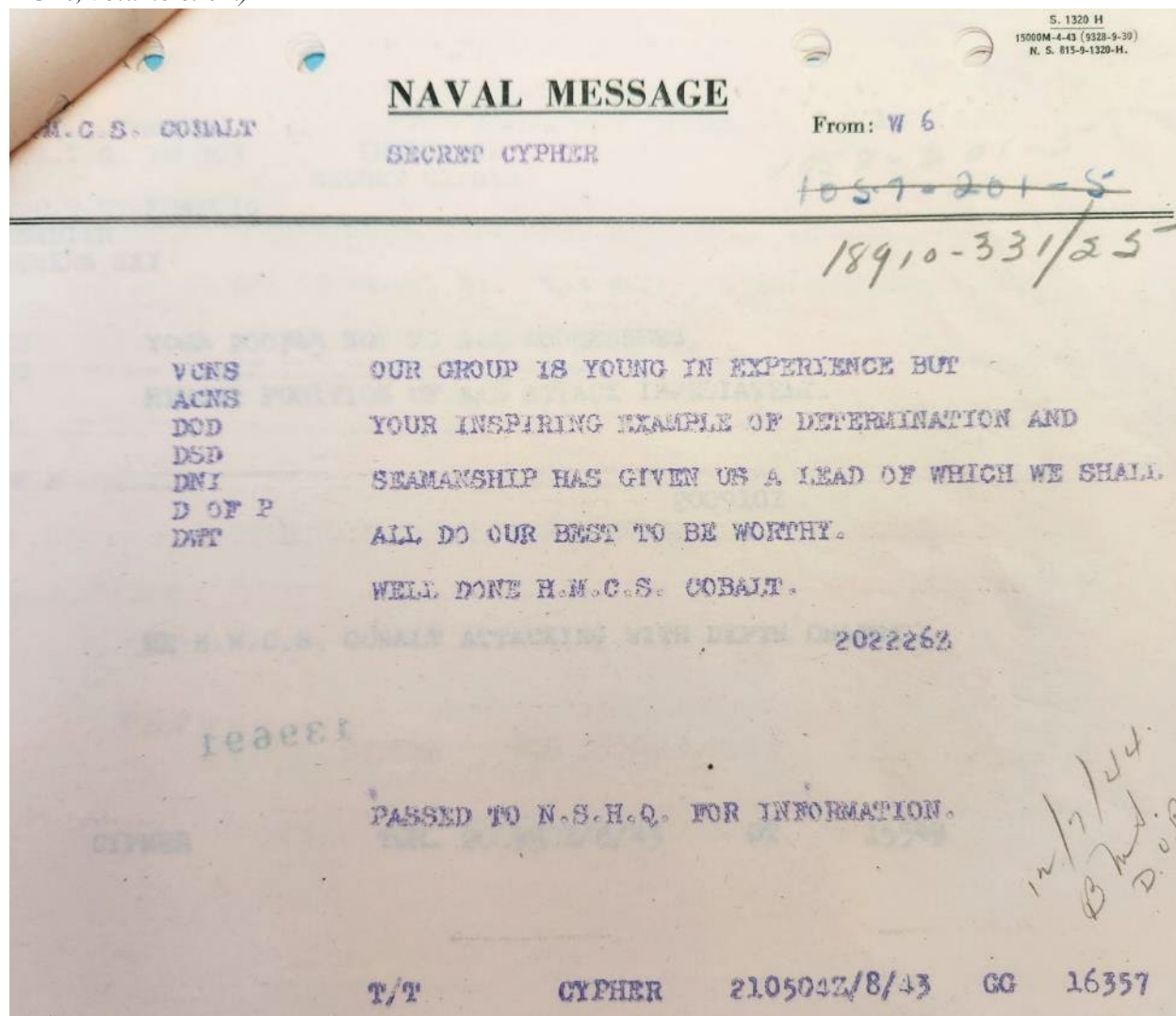
⁷⁷ <https://www.armed-guard.com/ag77.html>

⁷⁸ <http://www.dvrbs.com/monuments/lindenwold/LindenwoldWW2-GeorgeWDemarest.htm>

⁷⁹ <http://www.aukevisser.nl/inter/id1184.htm>

⁸⁰ <http://www.aukevisser.nl/inter/id154.htm>

Message sent to HMCS Cobalt after the salvage of HMCS Cobalt. (Credit: Library and Archives Canada, RG24, Volume 6901.)



Mate Alfred Bett who led the boarding party, and who would later serve as commanding officer of the Cobalt, was awarded the George Medal.⁸¹ The citation in the *Canada Gazette* said:

"This Officer led a volunteer boarding party to S.S. J.H. Senior, an American tanker with a full cargo of gasoline, which was stopped and heavily afire after collision in fog on 18 August 1943, in order to save this very valuable ship and her cargo, this Officer and his party fought the fires for over two hours with hand extinguishers, although they knew the ship was in danger of blowing up at any moment. During this time, he showed complete

⁸¹ The George Medal was granted to recognize "acts of great bravery". It was introduced in 1940 by King George VI as a way to recognize acts of bravery by civilians such as fire fighters and ambulance drivers during the German bombing of Britain and Northern Ireland. It could be given to civilians who did not qualify for military medals and to members of the military in cases where their actions would not qualify for military honours, such as actions that were not related to combat or to enemy action. Since the collision of the ships was an accident and not the result of enemy action, Betts was awarded this medal for his act of bravery.

disregard for his own safety, and his leadership was an inspiration and example of bravery and devotion to duty in keeping with the highest traditions of the service."

Engine Room Artificer Fourth Class James Werely and Signalman Michael Fitzgerald were both awarded the British Empire Medal.

An RCN press release from March 22, 1944, recounting the story and announcing the citations, is provided in Appendix 6, along with other newspaper articles related to the Cobalt.



Acting Lieutenant Commander Ronald A. Judges. (Credit: Collection of Ronald Judges, courtesy of Chanin Graham, personal communication with the author.)

CENTRAL CHANCERY OF THE ORDERS
OF KNIGHTHOOD.

St. James's Palace, S.W.1.

1st January, 1944.

The KING has been graciously pleased, on the advice of His Majesty's Canadian Ministers, to approve the award of the George Medal to:—

Temporary Mate Alfred William Bett, Royal Canadian Naval Reserve. 6

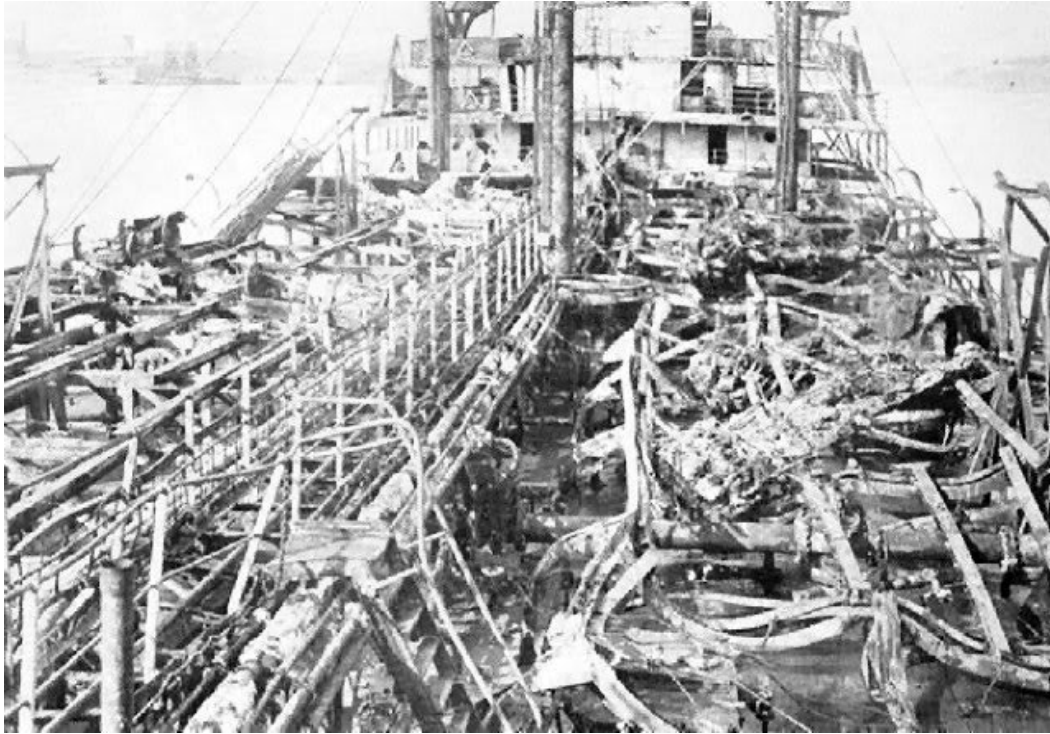
Photo of the burning tanker, the SS J.H. Senior, taken from HMCS Cobalt before the firefighting crew boarded her. (Credit: Department of National Defence. Photo has been digitally restored by the author.)



The J.H. Senior being towed to Newfoundland after the fire was put out. (Credit: Department of National Defence. Photo has been digitally restored by the author.)



The fire ravaged deck of the SS J.H. Senior after she had been towed back to New York in the fall of 1943. (Credit: <http://www.aukevisser.nl/inter/id154.htm>)



The other ship that was involved in the collision, the Liberty Ship SS J. Pinckney Henderson, drifted in the Atlantic for two weeks before the still-burning hulk was found by HM Rescue Tug (HMRT) Griper.⁸² The crew of the Griper managed to attach a tow line, and the ship was towed to Sydney, Nova Scotia where she continued to burn. There were concerns among residents about a serious explosion like the one that had devastated Halifax in December 1917. However, the ship's cargo, while highly flammable, posed a low risk of a major explosion. The decision was made to try to salvage the ship and some of its cargo and to recover the remains of sailors who had died aboard the ship.⁸³ There was little left by the time the fires had finally burned themselves out - marine surveyors who inspected the ship said it was the most completely gutted hulk they had ever seen.⁸⁴

In September 1943, a ceremony was held in Sydney for the burial of the remains of 34 sailors who were recovered from the SS J. Pinckney Henderson.⁸⁵ A memorial marker was erected that read "U. S. Liberty Ship J.P. Henderson, September 3, 1943. Here lie the remains of officers and crew members, naval and merchant, who lost their lives while serving their country. All members buried with full naval honors."

⁸² Ian Dear. 2016. *The Tattie Lads – The untold story of the Rescue Tug Service in both wars and its battles to save ships, lives and cargoes.* Bloomsbury Publishing, London.

https://books.google.ca/books?id=_WQdDAAAQBAJ&pg=PA178&lpg=PA178&dq=convoy+hx+252&source=bl&ots=eUMrneYynu&sig=ACfU3U30bERggVibXxWEyyLPFm3N6RMErg&hl=en&sa=X&ved=2ahUKewij_u-V_O6BAxXeFFkFHSVAA684FBDoAXoECAIQAw#v=onepage&q=convoy%20hx%20252&f=false

⁸³ The Saltwire. Liberty ship had been on fire for six days. October 2, 2017. <https://www.saltwire.com/cape-breton/opinion/liberty-ship-had-been-on-fire-for-six-days-20430/>

⁸⁴ <https://www.armed-guard.com/ag77.html>

⁸⁵ <https://img1.wsimg.com/blobby/go/1b1a5d7a-b5df-4d9c-a035-9a3b8205312f/downloads/Derick%2C%20Robert.pdf?ver=1644851016422>

In 1949, the remains were returned to the US and we re-interred at the Jefferson Barracks National Cemetery in St. Louis, Missouri. In the 1960s, the memorial marker was returned to the US, and it now stands at the US Merchant Marine Academy in Kings Point, New York.⁸⁶

Following the war, the Government of Canada made a claim for salvage services for the salvage of the J.H. Senior's cargo. The claim was made on behalf of HMCS Cobalt and her crew. The last correspondence on this matter that the author was able to obtain, dated June 17, 1948, stated that this matter was still under consideration.⁸⁷

There is no further information on the fate of the Canadian claim. However, Ronald Judges ended up receiving a cheque from the government for \$67 for his actions regarding the tanker rescue ... in 1965! When he received it, he didn't even know what the money was for – he only found out later that it was a reward. He used the money to pay for his daughter and her boyfriend (and future husband) to go to dinner and a Montreal Alouettes football game.⁸⁸

There is a record of a second member of the Cobalt's crew also receiving a reward. Frank DeMoor from Wallaceburg, Ontario, was a cook aboard HMCS Cobalt. In 1951, he received a cheque for \$9.95 his share of the reward for helping to save the tanker.⁸⁹

Although the author cannot confirm this, it is possible that the money received by both Judges and DeMoor was part of a settlement finally reached by the Government of Canada associated with the salvage of the J.H. Senior's cargo. If so, it is very odd that they apparently received their rewards 14 years apart!

As a result of the chaos that night, a post-incident investigation was conducted by the Commodore First Class H.E. Reid, RCN, the Flag Officer, Newfoundland, to understand the cause of the many collisions that occurred, and to determine whether or not German U-boats had attacked the convoy. This investigation included interviews with survivors of the J.H. Senior and two other ships involved in collisions, and crew members of HMC Ships Cobalt and Lachine, as well as examination of radio data. Clearly, the commanding officers of both ships thought that the convoy had been under attack. The Senior Officer of the convoy, aboard HMS Montgomery, shared this view and had ordered the Lachine to join the attack. Frank DeMoor of HMCS Cobalt also related a story of having been under attack that night, recalling that "The tanker caught fire and could be seen for miles. It just so happened that HMCS Cobalt picked up the sound of a torpedo heading towards their ship. The Captain manovere [*sic*] the ship out of

⁸⁶ <http://southerngreens.blogspot.com/2008/09/they-tried-to-bury-this-memorial.html>. This article states that "Canadian sailors who recovered the bodies from the burning ships were also the burial party."

⁸⁷ Library and Archives Canada, RG12, Volume 1235.

⁸⁸ Chanin Graham, granddaughter of Ronald Judges and daughter of the couple who enjoyed their night out, personal communication with the author.

⁸⁹ <https://www.gatheringourheroes.ca/hero/demoor-frank/>

harms was [*sic*] and for a time the U-Boat was being attacked.”⁹⁰ The convoy commodore, Rear Admiral R.M. King of the Royal Navy, also thought the convoy had been under attack.^{91,92}

However, Commodore Reid concluded that “On the whole, it is felt the evidence points to the fact that no submarine was in the vicinity, and the whole occurrence was the unfortunate result of a series of collisions in very low visibility at night.”^{93,94} His report also stated that “In all the circumstances, the Senior Officer Escort cannot be blamed for assuming that the convoy had been attacked. As far as he was concerned everything pointed to this, except that no explosions were heard until the corvettes [Cobalt and Lachine] started attacking.” That said, Reid also stated that “The matter of A/S [anti-submarine] fighting efficiency of the two corvettes is being dealt with by separate submission.” Clearly, there were some lessons to be learned.

Ultimately, the events that happened to convoy HX 252 were a case of the fog of war, both literally and figuratively, with tragic consequences.

⁹⁰ <https://www.gatheringourheroes.ca/hero/demoor-frank/>

⁹¹ Notes on Convoy HX 252 and Commodore Rear Admiral R. M. King's Narrative.

<http://www.warsailors.com/convoys/hx252narrative.html>

⁹² Each convoy had a commodore who was in charge of the overall conduct of the merchant ships in the convoy. Convoy commodores were typically retired senior naval officers. Most were with the Royal Navy or the Royal Navy Reserve, although there were a few Canadians. Although usually retired naval officers, convoy commodores were not responsible for the escort ships. https://en.wikipedia.org/wiki/Convoy_commodore

⁹³ <http://www.warsailors.com/convoys/hx252page4.html>

⁹⁴ After the war, a review of German records confirmed that no U-boat attacks were reported on the dates in question, August 19 and 20, 1943. <http://www.warsailors.com/convoys/hx252page4.html>

10 Man Overboard!

During one convoy escort duty Able Seaman Milton Whymark from Oakwood, Ontario jumped overboard to avoid being pinned by one of the Cobalt's boats that was swinging in the rough seas. Fortunately, Whymark was wearing one of the excellent life jackets supplied to crews of Canadian ships. Unfortunately, it was very foggy.

The ship's boat was launched in the hopes of rescuing Whymark, crewed by the ship's second in command, referred to as No. 1. Roland Judges, who was still the Cobalt's commanding officer at the time, said that:

“We'd never have found the chap but for the whistle attached to his life belt. There's a whistle on every belt, and we all wear life belts when we're at sea, all the time. The man kept blowing his whistle, and the No. 1 kept blowing his, and the man was located fairly quickly – even though you couldn't see your hand in front of your face. They got back safely to the ship, finding it by our siren, and the only casualty was the sea boat. It got battered in and was no use salvaging.”

Whymark later told a reporter with the Toronto Telegraph, “The guy who thought of putting whistles on life belts is tops with me. I was in the water maybe half an hour, long enough to find out it was darned cold. But I was lucky.”

Sadly, Milton Whymark did not survive the war. He later transferred to the corvette HMCS Shawinigan.⁹⁵ Early in the morning of November 25, 1944, the Shawinigan was in the Cabot Strait between Sydney, Nova Scotia, and Port-aux-Basques, Newfoundland, when she was torpedoed and sunk by a German U-boat. There were no survivors.⁹⁶

⁹⁵ Kawartha Lakes Public Library. <https://vitacollections.ca/kl-digitalarchive/2482372/data?n=89>

⁹⁶ http://www.forposterityssake.ca/Navy/HMCS_SHAWINIGAN_K136.htm

Milton Whymark posing by the ship's gunshield, wearing his life belt and showing off the whistle that helped save his life. (Credit: Department of National Defence. Photo has been digitally restored by the author.)



Headline of an article from the Toronto Telegram, published on November 20, 1943. (Credit: Department of National Defence)



11 Friendly Fire?

On the morning of December 13, 1944, the Cobalt sailed from St. John's with HMC Ships Galt and Lethbridge, heading out into the North Atlantic to take over escort of convoy ONS 037 which had left Belfast on November 29, bound for Halifax and New York City.^{97,98} The Cobalt only made it about 50 miles before she had to return to St. John's for a minor repair. She left again shortly after midnight on the morning of the 14th only to have to return shortly after leaving the harbour when a young local boy was discovered stowed away on a Fairmile motor launch that was accompanying the Cobalt. For the third time, the Cobalt departed St. John's, now heading out to sea at full speed to catch up with the Galt and the Lethbridge.

Soon after leaving the harbour, the Cobalt's radar operator picked up a contact at a range of about 8,000 yards. Although the operator noted that the contact might be another escort ship, the Cobalt's captain, Acting Lieutenant Commander Ralph Wallace had not been notified of any other escorts in the area but was aware that a submarine had been reported in the area a couple of days before. As the contact closed to about 4,000 yards, Wallace decided it was time to take action. It was a clear night with no fog, unusual to be sure, but it was very dark with almost no moonlight (the new moon was the next night), and observers peering into the night could not see anything in the direction of the contact.

In the meantime, not far away was the minesweeper, HMCS Burlington. The Burlington's radar operator has also picked up a contact. As the contact came closer, the crew of the Burlington on watch saw the flash of an explosion and then, moments later, the sound of a gun firing boomed out across the water. Seconds later, a lookout at the stern of the ship saw the splash of a shell landing in the water about 150 yards astern of the ship. The Burlington was under fire! Action stations were called and the ship's captain, Lieutenant John Richardson raced to the bridge. By the time he arrived, a second flash of gunfire had been seen. Moments after he got to the bridge, there was a bright flash as a star shell exploded over the Burlington. Star shells are used to illuminate a battlefield at night.

Back in St. John's the next day, Richardson would report that the Burlington had come under fire from high explosive shells before the star shell was fired.

Back on the bridge of the Cobalt, Wallace had ordered star shells to be fired. The first two appeared to have failed to explode. He ordered three more star shells fired in the direction of the contact. These ones exploded as intended, lighting up the night sky. The silhouette of a ship, not a submarine, appeared out of the dark. Moments later, a star shell exploded over the Cobalt, bathing the ship in light.

⁹⁷ This information, and the balance of the account of the events of December 13 and 14 is based on the Minutes of the Proceedings of Board of Inquiry Held on Board H.M.C.S. Coaticook, Halifax, at 1030 on the 3rd of January 1945. Library and Archives of Canada – RG24, Volume 11111.

⁹⁸ <http://www.warsailors.com/convoys/onsconvoys.html>

HMCS Burlington. (Credit: www.forposterityssake.ca)



The Cobalt then used its signal lamp to send a message challenging the other ship – a standard procedure to identify friendly ships at night. The ship – the Burlington – responded appropriately. There was no enemy submarine. Two Canadian escorts had blundered across each other in the pitch-black darkness, the Cobalt rushing to catch up with the Galt and the Lethbridge, and the Burlington, patrolling outside the harbour entrance (minesweepers like the Burlington were also equipped to detect and attack submarines).

A few more messages were exchanged by signal lamps, and then the Cobalt accelerated back to full speed and rushed off into the night. She finally caught up with ONS 037 and helped shepherd the convoy safely to New York, arriving on December 21.

Back in St. John's, Richardson was livid, believing he had come under fire from the Cobalt. He immediately filed a report. By December 16 his report had made it up the chain of command, and the Flag Officer for Newfoundland, Commodore Cuthbert Taylor, sent a terse message to Rear Admiral Leonard Murray, the Commander in Chief, Canadian Northwest Atlantic.⁹⁹

Based on Richardson's account of the apparent friendly fire incident, Taylor did not mince words. His message to Murray said that Wallace "has shown himself unfit for command and a definite menace on the high seas". He added, clearly for effect, that "I would strongly recommend his immediate relief and appointment to a Naval Division no closer to the sea than Winnipeg."¹⁰⁰ Ouch!!

Murray wisely ordered a Board of Inquiry to get to the bottom of what happened in the dark that night. The Inquiry was held in St. John's on January 3, 1945, aboard HMCS Coaticook, with the Board

⁹⁹ Murray was the only Canadian to command a theatre of war during the Second World War. He had command of all Allied ships within the northwest Atlantic, not just Canadian ships.

¹⁰⁰ Letter from Commodore C.R.H. Taylor to Rear Admiral L.W. Murray, dated December 16, 1944. Library and Archives of Canada – RG24, Volume 11111.

consisting of the commanding officers of the Coaticook as well as HMC Ships Fort Erie and Belleville. They called as witnesses the commanding officers of both the Cobalt and the Burlington, as well as the Cobalt's gunnery officer and gun crew, radar operator and others who were on the bridge, as well as the Burlington's radar operator and crew who had been on lookout at various positions around the ship.

It soon became apparent to the Board that the Cobalt had not fired on the Burlington. The Cobalt's gun crew had fired five star shells to identify the contact. However, for unexplained reasons, the first two star shells had failed to explode, and one landed in the water close enough to the Burlington for the splash to be seen by observers on watch. It was the unexploded star shell that the crew of the Burlington thought was a high explosive round.

The Board concluded that "under the circumstances of the radar contact, H.M.C.S. Cobalt was ill-advised to illuminate with star shell, because of the range at which the contact was established, because of the classification as a possible escort by the radar operator, and because a proper challenge, justifiable under the circumstances, would have identified the target as friendly."

Wallace and the Cobalt got some level of vindication for the original comments by Commodore Taylor in April 1945, when the Cobalt was inspected by Lieutenant Commander A. Moorhouse. Moorhouse was the commanding officer of HMCS Sault Ste. Marie and was the senior officer of the escort group that the Cobalt was part of. This inspection was an outcome of the Board of Inquiry and was ordered by Rear Admiral Murray, "with particular attention being paid to his [Wallace's] suitability for retention in his present command."¹⁰¹

Speaking of Wallace, Moorhouse concluded that "In my opinion a good Commanding Officer and I am inclined to think he is the best in W-7 Group. May be a shade erratic but this is offset by his obvious willingness; for instance, if a situation arises which requires some action Cobalt can usually be relied upon to be on his way to assist before a signal can be got out ordering him to do so." In the report to Rear Admiral Murray, Captain Puxley added that "Report from the Tactical Unit ... describes the ship and the officers as 'well above average'."¹⁰²

Ultimately, a message from June 4, 1945, states that no disciplinary action against the Cobalt's commanding officer was contemplated.¹⁰³ So much for "an appointment to a Naval Division no closer to the sea than Winnipeg."

But of course, by then it was a moot point. The war in Europe was over, and two weeks after that message was issued, the Cobalt was decommissioned in Sorel, Quebec. For the ship and most of her crew, the war was over. Acting Lieutenant Commander Ralph Wallace may never have been sent to a naval posting no closer to the sea than Winnipeg, but he may well have returned to his pre-war job as a florist in Saskatoon.

¹⁰¹ Letter from Rear Admiral Murray to Acting Captain W.L. Puxley, Captain (D) Halifax, April 4, 1945. Library and Archives of Canada – RG24, Volume 11111.

¹⁰² Report of inspection by Lieutenant Commander A. Moorhouse to Rear Admiral Murray, April 13, 1945. Library and Archives of Canada – RG24, Volume 11111.

¹⁰³ Memorandum to Rear Admiral Murray, June 4, 1945. Library and Archives of Canada – RG24, Volume 11111.

12 HMCS Cobalt – the Cobalt Connection

In the fall of 1940, the town of Cobalt was informed that the ship would be named after the town. The commanding officer of the Cobalt, Lieutenant Commander R.B. Campbell wrote a letter to Cobalt's mayor, H.W. Rowdon. This letter, which was read to the Town Council on November 1, stated that the ship was almost complete and ready for duty. Campbell's letter said that it would be "a happy gesture" if representatives of Cobalt could be present "before the ship proceeded into active service". Records of the Town Council meeting state that Campbell requested "the Mayor and Council to be present at the launching of this ship."¹⁰⁴ Undoubtedly, Campbell (or the person recording the minutes of the Town Council meeting) meant commissioning of the ship, since the ship had already been launched, but the invitation was clear. Mayor Rowdon responded, offering his good wishes on behalf of the town to HMCS Cobalt and all who would sail in her, and noted that the Cobalt would be a "useful addition" to Canada's naval strength.¹⁰⁵

Neither the mayor nor any of the town councilors from Cobalt were able to make the journey to Port Arthur for the commissioning. However, just a few weeks before, the Algonquin Regiment had arrived at the Current River Barracks in Port Arthur for training.^{106,107} The Algonquin Regiment was an infantry unit that drew members from across northern Ontario, including Cobalt. Thus, there were several Cobalters on strength with the regiment who were just a short distance from where HMCS Cobalt was soon to be commissioned. A happy coincidence that set the stage for Campbell's "happy gesture".

Mayor Rowdon wrote to Captain A.R. (Bob) Herbert, an officer with the regiment from Cobalt, asking if Herbert and other Cobalters in the regiment could represent the town at the commissioning of HMCS Cobalt later in November.¹⁰⁸ Represent they did.



The soldiers of the Algonquin Regiment hosted the ship's crew for a banquet, as approved by Cobalt Town Council at their November 15 meeting.¹⁰⁹ To reciprocate, the Cobalters went aboard HMCS Cobalt for a short cruise on Lake Superior, followed by some social time. The Cobalters treated the crew to a

¹⁰⁴ Minutes of the meeting of the Municipal Council for November 1, 1940.

¹⁰⁵ Temiskaming Speaker, November 7, 1940.

¹⁰⁶ Charlie Angus and Brit Griffen. 1996. *We Lived a Life and Then Some: The Life, Death, and Life of a Mining Town.* Between The Lines. Toronto, Ontario

¹⁰⁷ Ontario Ministry of Natural Resources (2012). Thunder Bay Native Fisheries Rehabilitation – Chronology of Development of the Current River.

¹⁰⁸ Temiskaming Speaker, November 7, 1940

¹⁰⁹ Minutes of the meeting of the Municipal Council for November 15, 1940. The motion stated that "the action taken by the Mayor authorizing Captain Herbert in entertaining the crew of H.M.C.S. Cobalt with a banquet be ratified." The minutes do not mention whether the town paid for the banquet.

rousing rendition of “The Cobalt Song”.¹¹⁰ And thus, the link between HMCS Cobalt and the town of Cobalt was forged. The ship was commissioned into service on November 25 with some of the Algonquins present.

Some of the Cobalters from the Algonquin Regiment, including (centre) Captain A.R. (Bob) Herbert. Herbert served with the Algonquins throughout the war and after returning to Cobalt after the war he entered politics. He was on Cobalt town council and then served three terms as a member of the provincial legislature for Temiskaming. (Credit: photo is from the Cobalt Mining Museum and has been digitally restored by the author. Thanks to Maggie Wilson of the Cobalt Historical Society for confirming the identification of Herbert in the photo and providing additional biographical details.)



¹¹⁰ Temiskaming Speaker, November 28, 1940

When the Cobalt headed east to Halifax, she also carried a little piece of Cobalt with her. The Mayor and Council had decided to gift the ship with a souvenir. On behalf of the town, the Cobalters from the Algonquin Regiment presented Lieutenant Commander Campbell with a desk pen set with a large piece of polished ore attached to it with an inscription that said “Luck charm of silver-cobalt-nickel ore from the La Rose Mine; presented to H.M.C.S. Cobalt by the Town of Cobalt, Ontario, Canada; November, 1940”.¹¹¹ A few years later, in a 1943 article in the Toronto Telegram about the Cobalt and her then commanding officer, Acting Lieutenant Commander Ronald Judges from Toronto, the article mentioned that the pen set was on the desk in Judges’ cabin.¹¹²

Soon after the Cobalt was commissioned, the town was provided with a large photo of HMCS Cobalt to hang in the council chamber in the Cobalt town hall. Captain Herbert from the Algonquin Regiment also sent photos of the ship being launched.¹¹³

In April 1942, a letter was sent to Mayor Taylor of Cobalt, informing him that another photo was on the way, and informing the mayor of how to obtain additional information about the ship.¹¹⁴

Article from the Haileyburian, November 28, 1940, From the War Diary of the Algonquin Regiment, November 1, 1940 to November 30, 1940. Library and Archives Canada, RG24, Volume 14997.

**Cobalt Algonquins
Have Lake Trip on
New Naval Vessel**
28-11-40 THE HAILEYBURIAN
Corvette Named for Silver Town
Now in Commission; Camp --
Presents Luck Charm

H.M.C.S. Cobalt, one of the latest additions to the Canadian navy, is now in commission on the Great Lakes and men of the Algonquin Regiment, now stationed at Port Arthur, who have their homes in the famous silver camp have been for a trip on the new ship, according to a report to the home town by Capt. A. R. Herbert, officer commanding the headquarters company of the regiment.

The town had been advised some weeks ago of the impending launching of the vessel and had arranged for the soldiers to represent the municipality in any ceremonies that might be held in that connection. Capt. Herbert and Lieuts. Cassidy, Robertson and McLeod did the honors on the trip, it was learned, and all others members of the regiment from Cobalt were invited. The army and navy spent a social time following the trip and all thoroughly enjoyed the unusual entertainment.

In the meantime, the town of Cobalt has in course of preparation a present for the officer commanding the ship. This is in the form of a desk pen set mounted on a piece of ore, which bears the following inscription, suggested by Mr. A. A. Cole, mining engineer for the T. & N.O. Railway: “Luck Charm of Silver-Cobalt-Nickel from LaRose Mine, presented to H.M.C.S. Cobalt by the Town of Cobalt, Ontario, Canada, November, 1940.” It is being made up in Toronto, where Hugh Sutherland of the LaRose is looking after the work on behalf of the town.

¹¹¹ Temiskaming Speaker, November 28, 1940

¹¹² Toronto Telegram, November 20, 1943. From the archives of the Department of National Defence.

¹¹³ Temiskaming Speaker, December 12, 1940. The photos of the launch must have been official photos from the shipyard or the navy that were provided to Captain Herbert. The Algonquin Regiment was not in Port Arthur at the time that the ship was launched in August 1940.

¹¹⁴ Library and Archives Canada, RG24, Volume 5829

April 2, 1942, letter to Mayor Taylor of Cobalt. (Credit: Library and Archives Canada, RG24, Volume 5829)

April 2, 1942

Dear Mr. Mayor:

Upon the instructions of the Hon. Angus L. Macdonald, Minister of National Defence for Naval Services, there is being forwarded to you under separate cover a picture typical of the corvette, H.M.C.S. "COBALT", and one which you and the Council of Cobalt might care to hang in your Council Chamber or in such place as appears suitable to you.

Any information regarding H.M.C.S. "COBALT" may be obtained by addressing a letter to the undersigned.

Sincerely,

W.G.

(Walter Gilhooly)
Naval Information Officer

C.H. Taylor, Esq.,
COBALT, Ontario.

Town of Cobalt response to receiving the photo from the RCN, April 15, 1942. (Credit: Library and Archives Canada, R112, Volume 33976)

The Corporation of the Town of Cobalt Ontario.

D. A. CRICHTON
CLERK AND TREASURER

COBALT

Cobalt, Ont.,
April 15th, 1942.

N.S.172-1-1

450-11-46

Mr Walter Gilhooly,
Naval Information Officer,
Dept. of National Defence Naval Service
Ottawa, Ont.

Dear Sir;

This will acknowledge, with thanks, your letter dated April 2nd, 1942, addressed to Mayor C H Taylor, of Cobalt, for which he has asked me to reply, regarding the Corvette, "H.M.C.S." Cobalt."

Mr Taylor and members of the Council wish me to express to you their sincere appreciation of the fine picture of this corvette, and it will hang in our Council chambers, as a memento of the fine work these corvettes are doing for the war effort.

Very truly yours,



Clerk-Treasurer.



Although this is speculation on the author's part, this letter may have been intended as a gentle "nudge" from the RCN to the Town of Cobalt. In December 1941, the Town of Cobalt donated \$20 to the Cobalt and Coleman Branch of the Red Cross Society as a contribution to broader support being provided to the ship by the Red Cross (see below). However, in reviewing municipal records for the balance of the war, the author did not find any record of other decisions by the Town Council to make contributions to HMCS Cobalt, financial or otherwise. A document prepared on behalf of the commanding officer of HMCS Cobalt in late 1943 or early 1944 regarding sponsorship of the ship indicates that the commanding officer had not had any contact with the mayor.¹¹⁵

It is not surprising that the Town of Cobalt itself was not able to make significant contributions to HMCS Cobalt and her crew. The town likely couldn't afford it and could at best make token contributions. In 1941, Cobalt only had a population of 2,376, and neighbouring Coleman Township had a population of just 708.¹¹⁶ By 1943, the population of Cobalt had dropped below 2,000.¹¹⁷ In comparison, at the peak of silver mining in 1911, the census put the official populations at 5,638 and 3,131 for Cobalt and Coleman, respectively, with unofficial estimates being higher.¹¹⁸

Wartime Cobalt had a much smaller population than many other communities with corvettes and other ships named after them – an inherent limitation in how much support the Town of Cobalt could provide. Cobalt was not the only town with a population of under 5,000 with a ship named after it – others like Camrose, Alberta, and Copper Cliff and Arnprior in Ontario were small too. But many others had populations of greater than 10,000 and some towns and cities were much larger, including major cities like Vancouver, Calgary, and Halifax, all of which also had corvettes named after them.

Cobalt was somewhat unique though – a place known around the world for its fabulous riches that made many people very wealthy – and yet largely destitute. The Town of Cobalt never made any money from the silver mines. Few mines were located within the town boundary, which was quite small, and those that were never paid any taxes to the town.¹¹⁹ And Cobalt was very much a working-class town. Those who managed to make good money lived elsewhere. Many of the mine managers lived away from the noise and mud of Cobalt along "Millionaires Row" in Haileybury, with views not of the mines but of the tranquility of Lake Temiskaming.

Cobalt had also been hit hard by the Great Depression. Many of the mines had closed even before the crash in 1929, and more closed within the next few years. Cobalt's population declined sharply through the 1930s as people left in search of work, many going north to the gold mines in Timmins and Kirkland

¹¹⁵ Library and Archives Canada, R112, Volume 33976

¹¹⁶ Canada: Dominion Bureau of Statistics. Eight Census of Canada, 1941. Volume II, Population by Local Subdivisions. https://publications.gc.ca/collections/collection_2017/statcan/CS98-1941-2.pdf

¹¹⁷ Douglas Baldwin. 2016. *Cobalt: Canada's Forgotten Silver Boom Town*. Indigo Press. Charlottetown, Prince Edward Island.

¹¹⁸ Fifth Census of Canada, 1911. Volume II, Religions, Origins, Birthplace, Citizenship, Literacy and Infirmities, by Provinces, Districts and Sub-Districts. https://publications.gc.ca/collections/collection_2016/statcan/CS98-1911-2.pdf

¹¹⁹ Charlie Angus and Brit Griffen. 1996. *We Lived a Life and Then Some: The Life, Death, and Life of a Mining Town*. Between The Lines. Toronto, Ontario

Lake. By 1937, about one in five Cobalters were on “relief” as the Great Depression’s precursor to Employment Insurance was known.¹²⁰ Cobalt’s always small tax base had grown ever smaller.

When war broke out in 1939, many men in Cobalt enlisted, eager for a steady wage after the difficult years of the Depression. Sending home their paycheques helped put food on the table but didn’t leave much to spare.¹²¹ There was some revival of mining as cobalt, a metal associated with the silver ores in Cobalt, became strategically important for the war effort. However, it is little surprise that the Town of Cobalt, always strapped for cash, did not have much to support HMCS Cobalt and her crew.

Despite the Town of Cobalt’s limited financial resources to support HMCS Cobalt, the people of Cobalt and the Tri-Town area (composed of Cobalt and the neighbouring towns of Haileybury and New Liskeard) came through for HMCS Cobalt and her crew, living up to Rear Admiral Nelles’ statement that “Flowers don’t knit mittens.”

For Christmas 1941, the Cobalt and Coleman Branch of the Red Cross Society sent parcels to the crew.¹²² Earlier in November, the Red Cross Society had sent a letter to the Naval Division of the Department of National Defence in Ottawa, requesting information about the size of the ship’s crew so that the parcels could be sent. In a remarkable display of the efficiency of the Department and the 1940s postal service, a response to that letter, sent to a generic address in Ottawa, was on its way back to Cobalt just eight days later!¹²³

HMCS Cobalt was officially adopted by the Old Timers of Cobalt.¹²⁴ One document indicates that many who donated to the Old Timers of Cobalt were former mine managers, some living in Toronto. It is not clear when this group was formed, but a December 24, 1941, article in the *Temiskaming Speaker*, the newspaper in New Liskeard, stated that HMCS Cobalt Club had been formed to adopt the ship and support the crew. The article goes on to state that cigarettes and radios were provided for the crew and subscriptions were set up for six magazines to have copies delivered to the crew when the ship was in port. Arrangements were also made to get fruit to the crew, although the ship’s commanding officer indicated that it was “scarcely feasible to have this particular comfort, since the corvette is at sea for considerable periods”.¹²⁵ Minutes of the Cobalt Town Council meeting of February 6, 1942, refer to a letter from the Cobalt Club that was turned over to the Kiwanis Club which was quite active in fundraising during the war.¹²⁶

HMCS Cobalt Club and the Old Timers of Cobalt were either the same group or HMCS Cobalt Club evolved into the Old Timers of Cobalt. An August 26, 1943, article in the *Temiskaming Speaker* refers to the Old Timers and describes the appreciation of the crew. In the article, Lieutenant John Home of

¹²⁰ Douglas Baldwin. 2016. *Cobalt: Canada’s Forgotten Silver Boom Town*. Indigo Press. Charlottetown, Prince Edward Island.

¹²¹ Charlie Angus and Brit Griffen. 1996. *We Lived a Life and Then Some: The Life, Death, and Life of a Mining Town*. Between The Lines. Toronto, Ontario

¹²² Minutes of the meeting of the Municipal Council for December 5, 1941.

¹²³ Library and Archives Canada, RG24, Volume 5829

¹²⁴ Library and Archives Canada, R112, Volume 33976

¹²⁵ *Temiskaming Speaker*, December 24, 1941

¹²⁶ Minutes of the meeting of the Municipal Council for February 6, 1942.

HMCS Cobalt spoke of the Old Timers saying, “You may rest assured that if ‘Cobalt’ is efficient (and it would take a brave man to tell us she is not!), credit must be given to your group in large measure for maintaining morale.” In the same article, the commanding officer of the Cobalt at the time, Ronald Judges, is quoted as stating that:

“I found that H.M.C.S. ‘Cobalt,’ through the kindness and efforts of yourself and others, is extremely well taken care of, and I am quite sure it would not be an overstatement if I said it was the best taken care of ship that is has been my pleasure to serve on since commencement of the war.”

A November 20, 1943, article in the Toronto Telegram also referred to the support from Cobalt. The article states that:

“The Town of Cobalt and its citizens have ‘adopted’ the ship and her company and have given them special radios which can be used at sea without danger of detection by the enemy, gramophone and records, toasters, iron, cigarettes and comforts and goodies galore.”

The article also quotes Judges as saying:

“We’re certainly well looked after. Between the people of Cobalt, the Navy League and the Red Cross we’re properly spoiled. We are well supplied with woollens and, believe me, we really need them out there. Especially when you get wet. Then you need a complete change.”

The collection of Library and Archives Canada includes several pieces of correspondence between the RCN and the Old Timers of Cobalt, from 1943 through to the end of the war. Some of these documents are provided on the following pages.¹²⁷ These documents provide interesting insights into the important role played by the Old Timers.

¹²⁷ Library and Archives Canada, R112, Volume 33976

November 18, 1941, letter from the Cobalt and Coleman Branch of the Red Cross Society to the Department of National Defence. (Credit: Library and Archives Canada, RG24, Volume 5829)

Cobalt, Ont. Nov. 18, 1941.

The Department of National Defense
Naval Division
Ottawa, Ont.

DEPT.
NATIONAL DEFENCE
NOV 19 1941
NS. 172-1-1
(NFW)

3

Dear Sir:-

The Cobalt and Coleman Branch of the Red Cross Society wish to send Christmas parcels to the members of the crew of the Corvette of the Royal Canadian Navy, which has been named after the town of Cobalt. In order that we may be able to do so, we should be very greatly obliged if you could furnish us with information as to the number of men and the address to which the parcels could be sent.

Very truly yours,

Frances Donegan

Mrs. C.J. Donegan
Secretary, Cobalt and Coleman Branch, Red Cross
Society

Cobalt, Ont.

D.N.P.
What is the complement
of the "Cobalt" pls.
J. W. Sec
20-11-41

6 Officers
50 Ratings
C.O. Annex COBALT
Address
C/o 2nd Mail Office
Halifax N.S.

March 11, 1943 letter from the Naval Service Headquarters in Ottawa to the Old Timers of Cobalt. (Credit: Library and Archives Canada, R112 Volume 33976)

450-11-46

Carleton Chambers,
74 Sparks Street,

11th March, 1943.

President,
The Old Timers of Cobalt,
Box 570 New Liskeard, Ont.

Dear Sir:

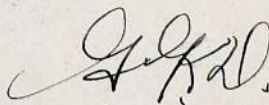
Recently, Naval Service Headquarters circularized the ships of this Service in an attempt to find out what organizations have adopted ships and also to find out what approved amenities were needed. The Commanding Officer of H.M.C.S. "COBALT" replied stating that your organization has, in the past, very generously supplied certain amenities.

Perhaps you would be interested in the attached list which shows the equipment which the Commanding Officer would like to have at present. May this office be advised whether or not you could undertake the supplying of any or all of this additional equipment.

The correct mailing address when mailing amenities is to the Commanding Officer, H.M.C.S. "Cobalt", c/o The Special Services Officer, 306 National Harbours Board Building, Halifax, N.S.

It is desired to express the appreciation of this Department for the comforts that you have given the men of this Service.

Yours truly,



Lieut.,

for/
(J.P. Connolly) Captain,
Director of Special Services (N).

GKD/JM

March 26, 1943 response from the Old Timers of Cobalt. (Credit: Library and Archives Canada, R112 Volume 33976)

R. S. TAYLOR
NEW LISKEARD
ONTARIO

Mar. 26, 1943.



Lieut. Gordon Daley,
for/Capt. J.P. Connolly,
Director of Special Services (N)
Dep't National Defence,
Naval Service,
Carleton Chambers,
74 Sparks St.
Ottawa, Canada.

Your Ref: 450-11-46

Dear Sir ;

I have your letter of Mar. 11th referring to comforts for the H.M.C.S. "COBALT".

Please be advised that an express shipment is being made to-day of two electric irons, toasters, 80 pkgs. razor blades. This shipment has gone forward prepaid to the address included in your letter.

I am looking into the possibility of securing a phonograph and I presume if one is supplied, a quantity of records would also be necessary. These machines are not very plentiful but I may be able to pick one up either new or second hand.

Noting that magazines and books are checked as desirous, it might be noted that our "Cobalt Corvette Fund" is supplying some 15 or more periodicals in duplicate to H.M.C.S. "Cobalt." These were supplied thru the entire year of 1942 and were renewed in Dec. 1942 for the year 1943.

Yours very truly,

R.S. TAYLOR/JL.

March 29, 1943 response from the Naval Service Headquarters, expressing appreciation for the support provided by the Old Timers of Cobalt. (Credit: Library and Archives Canada, R112 Volume 33976)

Carleton Chambers,
74 Sparks Street.

29th March, 1943.

Mr. R.S. Taylor
New Liskeard, Ont.

Dear Sir:

Receipt is acknowledged
of your letter of the 26th of March re
adoption of H.M.C.S. "Cobalt".

It is desired to express
the appreciation of the Department and of
the crew of the H.M.C.S. "Cobalt" for the
many comforts they have received and will
receive as a result of your efforts.

Yours truly,



Lieut.,
for/
(J.P. Connolly) Captain,
Director of Special Services (N).

Letter from the Old Timers of Cobalt, detailing the comforts supplied to HMCS Cobalt. The date is unknown, and the naval made requests for such listings at least three times, in 1943, 1944, and 1945. Note the number of cigarettes per month! (Credit: Library and Archives Canada, R112 Volume 33976)

400
Ottawa, Canada.

Dear Sir ;

In reply to your query of Feb. 7th, the following is a fairly complete list of comforts supplied by "OLD TIMERS" of Cobalt for the H.M.C.S. "COBALT."

✓ Every month 10,000 cigarettes.

✓ Two subscriptions to about 12 or 14 magazines.

✓ Radios - Phonograph - Records

✓ Toasters,

✓ Irons,

✓ Games - all kinds.

✓ Baseball gloves, mitts, etc.

✓ Washing Machine - electric.

✓ Curtains, drapes, etc. for the various wardrooms

RE: ADOPTION OF H.M.C.S. "COBALT"

An impressive contribution to the welfare of service personnel has been made by sponsors in the program to date. In order to assess completely the extent of donations thus made, we request your assistance with the request that you submit a list of the articles which have been donated since you first undertook the sponsorship. This information will be used to keep up to date by means of the newly instituted system of freight notices. It is hoped that this will not occasion you undue inconvenience.

The two subscriptions each to the 12 or 14 magazines are renewed by us each year or as they expire. The cigarettes are sent every month from Overseas League Tobacco Fund, Toronto, they cost us \$25. for 10,000. Opportunity is taken to express appreciation for your efforts on behalf of the comfort and welfare of sea-going personnel. Please note that this Fund is sponsored by former Cobalt residents now living in Toronto - and is separate entirely from what is donated by the Town of Cobalt.

Yours truly,

Most of the men donating to this "Old Timers" Club are former mine managers, etc.

Old Timers of Cobalt
New Liskeard, Ontario

If you want more detailed information I will be glad to submit it to you.

SECRETARY, NAVAL BOARD.

Yours very truly,

(Miss) Jennie L. Low.
Treasurer, "OLD TIMERS" Fund
for HMCS "COBALT."
BOX 823, NEW LISKEARD, Ont.

H.C. 1919
560M-5-43 (7833)
N.S. 8117-7-1019

RECEIVED
2021
REC'D. CENTRAL
SINCE
CHARGE
JAN 11 1945

March 27, 1944 letter from the navy to the Old Timers, thanking them for updated information on comforts provided. (Credit: Library and Archives Canada, R112 Volume 33976)

OTTAWA, 27th March,

NS 4052-331/25

Madam:

Thank you for your recent letter regarding comforts for H.M.C.S. "Cobalt" and for the information contained therein.

Please accept the Department's thanks for your kind efforts on behalf of the crew of H.M.C.S. "Cobalt".

Your letter dispatched by
PERSONNEL NAVAL
MAR 29 1944
SECRETARY, NAVAL BOARD.

Miss Jennie L. Low, Treasurer,
"Old Timers" Fund for H.M.C.S. "Cobalt",
Box 823,
NEW LISKEARD, Ontario.

June 15, 1944 letter to the Old Timers, requesting another update on the comforts provided. Presumably, since the comforts were sent directly to the naval dockyard in Halifax (the Cobalt's home port), the naval headquarters in Ottawa was not apprised of each shipment, so these periodic requests for updates were sent. (Credit: Library and Archives Canada, R112 Volume 33976)

N.S. 450-11-46 FD437
Pers (N)

15th June, 1944.

Sir: ATTENTION: MR. R.S. TAYLOR

Recently circularized to ascertain her current requirements in the way of comforts, H.M.C.S. "Cobalt", whose sponsorship the Old Timers of Cobalt have so generously undertaken, has requested several items. A copy of the completed form is enclosed. If the Old Timers would care to provide any or all of the articles indicated, the Department as well as the crew of H.M.C.S. "Cobalt" would be most appreciative.

The opportunity is taken to convey the appreciative thanks of the Department for the continued interest of your organization in providing for the comfort and welfare of the crew of H.M.C.S. "Cobalt".

Yours truly,
PERSONNEL NAVAL

JUN 16 1944

SECRETARY, NAVAL BOARD.

Old Timers of Cobalt,
New Liskeard, Ontario.

J. P. Connolly
CAPTAIN, R.C.N.V.R.
Director of Special Services (N)

Update on the status of the adoption of HMCS Cobalt, provided by the commanding officer. The document is not dated, but Lieutenant Heward, who signed the document, was second in command of HMCS Cobalt between August 1943 and May 1944 (see Appendix 5). (Credit: Library and Archives Canada, R112 Volume 33976)

From: The Commanding Officer,
H.M.C.S. *Cobalt.* S 500555

To: The Secretary, Naval Board,
Department of National Defence,
Ottawa, Ontario.

1. Name of Ship *H. M. C. S. COBALT.*
2. Base *HALIFAX N.S.*
3. Type of ship *CORVETTE*
4. Complement of ship *90*
5. Has this ship been adopted? *YES.*
6. If so, by what organization? *OLD TIMERS OF COBALT.*
C/O MR. R. S. TAYLOR. NEW LISKEARD ONT
7. President or Secretary of Organization
MR. R. S. TAYLOR. NEW LISKEARD ONT
8. This ship is named after *Town of COBALT.*
9. The Commanding Officer has been in touch with the
----- of -----
Mayor, Reeve City or Town
with a view to having this Ship adopted.
10. The reaction of this official was -----

11. Woollen and perishable goods will be distributed by
Supply Officers. Application for such comforts must
be made to these Officers.
12. (1) Has anything been received from Welfare organi-
zations for this Ship in the past? *yes.*
(2) The articles of equipment listed in 13A have
been supplied to this ship in the past.
13. This ship could use the articles listed in 13B for the
welfare and comfort of the men *yes.*

	A Have been supplied	when Rec'd	B Equipment Requested
Phonograph	✓		
Ash Trays			✓
Carpets or Mats			✓
Seamen's Jackets			
Helmets			
Mitts			
Darts			
Cribbage Boards	✓		
Checkers	✓		
Dominoes	✓		
Cards (Playing)	✓		
Sets of Bingo			
Ring Board			
Chinese Checkers			
Croquinole Boards and Checkers			
Jigsaw Puzzles	✓		
Monopoly			
Ludo (English Game)			✓
Candy			
Fudge			
Nut Bars			
Razor Blades			
Writing Material	✓		
Magazines	✓		
Cigarettes	✓		
Laundry Soap			✓
Facial Soap			
Records (Phonograph)	✓		
Picture of King and Queen			✓
Combs			
Nail Files			
Crest of City			
Scrubbing Brush			
Scrubbing Basin			
Scrubbing Boards			
Chess			
Electric Percolator			✓
Coffee Pot			✓
Thermos Bottle			✓
Coat Hangers			
Sewing Kits			
Hot Plate			
Waterproof Flashlight			✓
Curtains			
Food (Luxuries)			
Soup			
Apples			
Fruit			
Sports Equipment			
Volley Ball net			
Punch Bag			
Soccer Ball			
Basket Ball			✓
Baseball			✓

	A Have been supplied	When Rec'd	B Equipment requested
Boxing Gloves-----			
Musical Instruments-----			
Mouth Organ-----			✓
Accordion-----			✓
Banjo-----			✓
Guitar-----			

All electrical equipment should be 110 DC volts.

NO MONEY CURRENCY CAN BE GIVEN DIRECT TO COMMANDING OFFICERS OF SHIPS.

14. It is requested that an Organization be appointed to adopt this ship and that the items mentioned above in 13B be supplied.....

15. It is suggested that the following Organizations might be interested in the adoption of this ship:
.....

16. The Organization named in #6, as having adopted this ship, is not able to take care of the adoption of this ship adequately, and it is requested that a different Organization be named.....

17. It is requested that you write the Organization named in article 6, requesting that they supply the amenities listed in 13B.....

18. The following articles in addition to the above are considered essential for the welfare and comfort of the crew of this ship.

... Clocks for six messes

C. D. Heward Lieut V.R.
H. M. C. S. Cobalt.

(COMMANDING OFFICER)

March 7, 1945 letter from the navy to the Old Timers of Cobalt. (Credit: Library and Archives Canada, R112 Volume 33976)

Department of National Defence

Naval Service

Ottawa, Canada.

OUR FILE.....

YOUR FILE.....

7th March, 1945.

Dear Sirs:

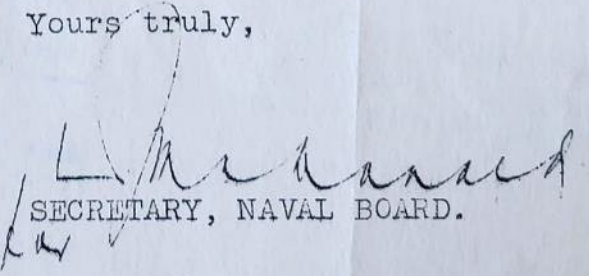
RE: ADOPTION OF H.M.C.S. "COBALT"

An impressive contribution to the welfare of service personnel has been made by sponsors in the ship adoption programme to date. In order to assess completely the extent of donations thus made, the Department solicits your assistance with the request that you submit a list of the articles which have been sent to the crew of this ship since you first undertook the sponsorship. This information will enable the Department to check its back records which will then be kept up to date by means of the newly instituted system of freight notices. It is hoped that this will not occasion you undue inconvenience, as this information is of considerable importance to the Department.

The opportunity is taken to express appreciation for your efforts on behalf of the comfort and welfare of sea-going personnel, and to thank you for your co-operation.

Yours truly,

Old Timers of Cobalt,
New Liskeard, Ontario.


SECRETARY, NAVAL BOARD.

June 4, 1945 letter from the navy to the Old Timers of Cobalt, informing them that, with the war now ended, HMCS Cobalt was to be decommissioned and that their sponsorship was no longer required. (Credit: Library and Archives Canada, R112 Volume 33976)

NS 4052-331/25 Pers (N).

4th June, 1945.

Sirs:

For three years or more you have generously provided for the welfare of the officers and men of H.M.C.S. "Cobalt". This corvette is now to decommission, and will, therefore, require no further sponsorship.

Without wishing to impose on your generosity, it is suggested that if you would care to carry on your periodic donations to R.C.N. personnel, such shipments as you may make in future may be addressed to the Senior Special Services Officer, 23 North Street, Halifax, N.S. This officer will be responsible for placing the comforts on board ships most in need of such gifts.

The Department of National Defence for Naval Services has appreciated your excellent efforts on behalf of the crew of H.M.C.S. "Cobalt" and would be glad to know of your decision with respect to the continuation of these gifts for the comfort and welfare of the officers and men throughout the Service.

Yours truly,
LETTER PERSONNEL, NAVAL BOARD.
JUN 7 1945
SECRETARY, NAVAL BOARD.

Old Timers of Cobalt,
New Liskeard, Ontario.

J. P. Connolly
CAPTAIN, R.C.N.V.R.
Director of Special Services (N)

Apparently separate from the Old Timers of Cobalt and HMCS Cobalt Club was the Cobalt Club of Port Arthur, which also provided ‘comforts’ to RCN sailors, including knitted woolens, cigarettes, magazines, and ‘ditty bags’. The club was named after HMCS Cobalt, which was the first corvette built in Port Arthur, and it also provided comforts to the crews of other corvettes built in Port Arthur: Kenogami, Rosthern, Weyburn, Oakville, Morden, and Algoma. The Cobalt Club was affiliated with the Navy League of Canada, and comforts that were produced, collected, or donated by the Club were distributed by the Navy League. The Navy League also supplied wool for knitting projects, since wool was in short supply during the war.^{128,129}

The Temiskaming Speaker and the North Bay Nugget from the wartime period feature many articles about the work of the Navy League and the Red Cross. In addition to raising money, these organizations helped to mobilize women in Cobalt, New Liskeard, North Bay and indeed across Canada to support sailors in the RCN as well as Canadian soldiers and airmen by knitting. And not just mittens either. Women across Canada knit thousands of items for the men and women in uniform: mittens, socks, tuques, sweaters, vests, long underwear, and more specialized woolens to help the troops keep warm while being able to safely handle their equipment and do their jobs. The Canadian Red Cross Society published a book of knitting instructions that could be used to make the whole array of woolens needed.¹³⁰

In their book, *We Lived a Life and Then Some*, authors Charlie Angus and Brit Griffin quote Cobalter Vivian Hylands, who was a child growing up during the war:¹³¹

“Then of course there was the knitting. A tremendous amount of knitting was done for the war effort. We had piles of knitting books and knitted all the strange garments needed for the war: balaclavas, different kinds of things that went under the steel helmets, gloves with one or two fingers out for gunners, socks, everything. There was knitting for the air force, the navy, and the infantry. You didn’t have to be a boy to know how they fought the war.”

¹²⁸ Port Arthur Daily News Chronicle, October 14, 1961

¹²⁹ Thunder Bay Museum, Series E 68/1/1: correspondence received by the Cobalt Club between 1941 and 1946.

¹³⁰ <https://wartimecanada.ca/sites/default/files/documents/Knitting%20instructions%201940.pdf>

¹³¹ Charlie Angus and Brit Griffin. 1996. *We Lived a Life and Then Some: The Life, Death, and Life of a Mining Town. Between the Lines*. Toronto, Ontario.

An ad from *The Star Weekly*, Toronto, May 23 ---- (year is not legible). (Credit: <https://www.elinorflorence.com/blog/wartime-knitting/>)

12 The Star Weekly, Toronto, May 23, 1941

KNITTED GARMENTS OUR SAILORS LIKE TO WEAR



CANADIAN WOMEN who want to know what they should knit for the boys in the navy can get some hints from these pictures of the crew of a Harwich minesweeper. A group of British women got together a bunch of woollies, and took them on board and had the men try them on. "They're fine," said the delighted recipient. Above, a seaman with his pair of gloves

SOME DO'S FOR the navy knitters: Biggest requirements are gloves, sweaters, sea-boot stockings, knitted caps and pullovers. Some don't's: Avoid mittens and wristlets; be careful not to make the sweaters too big. A sloppy fit in a knitted garment lets in the cold. Above: A pair of stockings.

THE DESIGN of this sweater was worked out by Mrs. Winston Churchill, and this Harwich sailor evidently appreciates it, as well as his knitted cap. Gaudily colored caps with pom-poms on top are very popular. Men on the minesweepers, in fact, in every branch of the navy, work under rigorous conditions, need comforts.



A sailor aboard HMCS Wetaskiwin climbing on deck from the engine room wearing a hand-knit tuque and turtleneck sweater. (Credit: Collection of John Cornwell, www.forposterityssake.ca.)

The sample of ore sitting on the desk of the Cobalt's commanding officer was not the only reflection of Cobalt's mining heritage aboard HMCS Cobalt.

The crews of corvettes like HMCS Cobalt were drawn from across Canada, but they often tried to personalize their ships to strengthen the ties with the towns and cities for which they were named. The corvettes had a 4-inch gun on the forward part of the ship, and on many corvettes, the metal shield around this gun was painted with artwork depicting something about the ship and the town for which it was named.¹³²

The gunshield of the Cobalt featured artwork depicting an angry-looking bumblebee wearing a miner's helmet. The bumblebee was brandishing a stick of dynamite and a prospector's hammer with one pair of arms and was smashing a swastika with a jackhammer with the other set of arms. Thus, Cobalt's mining heritage was put to sea in the war against the U-boats.



The gunshield art was inspired by Cobalt's mining heritage but, like the gunshield art on many corvettes as well as much of the nose art that was painted on many Allied aircraft, it was based closely on a Disney creation. In 1942, the US Army Air Force placed an order with the Beech Aircraft Corporation. Beech commissioned Walt Disney to create a company mascot to encourage productivity and morale of the company's workers on the production line. The Beechcraft Busy Bee featured a bee on a background of an aircraft blueprint in the shape of a beech tree leaf, and holding tools used on the production line.¹³³ The inspiration for the Cobalt's gunshield is clear! Appendix 4 has more information on this.



Interestingly, there seem to have been two different versions of the Cobalt's gunshield art. The artwork in the photo in Section 10 of Milton Whymark posing by the gunshield is different than in the photos below. In the photos below the artwork is reversed (jackhammer pointing to the right), the artwork is larger (it extends under the railing around the gunshield), and it is painted directly on the gunshield. In the

¹³² T.G. Lynch and J.B. Lamb (1984). Gunshield Graffiti. Nimbus Publishing

¹³³ <http://2719hyperion.blogspot.com/2011/04/what-character-beechcraft-busy-bee.html>

photo of Whymark, the artwork is painted on a sheet of metal or some other material that is riveted or bolted to the gunshield. This version of the gunshield art was likely applied after the Cobalt's refit in Liverpool, Nova Scotia, in March/April 1943, since it appears in photos taken after a new radar unit was installed, most likely as part of that refit (see Appendix 4). Oh, to know what happened to this version of the artwork, since it could have been removed later!

Later in the war, as corvettes were upgraded, rails were installed on the gunshields to launch rockets to provide illumination when fighting at night. As a result, the gunshields no longer provided a ready canvas for this kind of artwork. In many cases, the artwork was replicated on the front of the bridge or in other locations on the ship. The author has not been able to confirm if this happened in the case of the Cobalt, but it would be nice to think that the crew of the Cobalt preserved this link to "the best old town I know".

A version of the gunshield art painted by the same artist was given to the Town of Cobalt. The Cobalt Town Council minutes from March 5, 1943, refer to a replica and a picture of HMCS Cobalt that were donated to the town.¹³⁴ Two photos taken in the Town of Cobalt council chambers show this artwork on the mantle of a large fireplace in the chambers. This artwork is now part of the collection of the Cobalt Mining Museum. Interestingly, in this artwork, the bumble bee's wings and a few other details are missing.

As further described in Appendix 4, a version of the gunshield art also hangs in the Crow's Nest Officer's Club in St. John's, Newfoundland and Labrador. This club was established for naval and merchant marine officers during the Second World War and has an extensive collection of ships' gunshield art and other ships' badges and crests from the war and the post-war period.

¹³⁴ Minutes of the meeting of the Municipal Council for March 5, 1943.

Cobalt's gunshield, probably soon after the artwork was completed, judging by how fresh the paint looks. This is the only known photo of the gunshield that shows the artist's signature, "Watson", in the shaded area near the bee's left foot (see inset). There is no information on why this signature is not present in other photos of the artwork, but it provides further evidence that this photo was taken very soon after the artwork was first completed. (Credit: Roger Litwiller Collection, courtesy Ross Milligan, RCNR. (RTL-REM172). Photo has been digitally restored by the author.)



Embroidered jacket patch based on the Cobalt's gunshield art that could be worn on civilian clothing but not as part of the official RCN uniform. (Credit: Glen Bahry, son of a Cobalt crew member; personal communications with the author.)



Photo taken inside the Town of Cobalt council chamber, showing a painting of the Cobalt's gunshield art in the top left corner. (Credit: Maggie Wilson, Cobalt Historical Society, personal communication with the author)



Version of the Cobalt's gunshield art, given to the Town of Cobalt in 1943 and now in the collection of the Cobalt Mining Museum. Photographed in the Bunker, a military museum in Cobalt with the ship's bell from HMCS Cobalt. The bell is part of the Bunker's collection. This was taken in September 2023, shortly after the artwork was found in the collection of the Mining Museum. Before the artwork was found in August 2023, there was no information on where the artwork was located or if it even still existed. The author wishes to thank the staff of the Cobalt Mining Museum for finding the artwork, and the staff of both museums for providing the opportunity for the author to "reunite" these two artifacts of HMCS Cobalt. (author's photo)



When the RCN began selecting town names to use for names of new ships being built early in the war, the process was somewhat haphazard. Apparently, towns were picked based on the font size used for the town names in an atlas.¹³⁵ If the font was large enough then the towns were candidates! From that candidate list, it is possible that Cobalt's past fame helped bring it to the top of the list. We may never know for sure how Cobalt was one of the first towns in Canada with a ship named after it.

By 1941, the process had become somewhat more rigorous, with navy officials compiling a list of all towns with populations of over 3000. Of course, not all names could be used. For example, some were

¹³⁵ LCdr David J. Freeman. 2000. Canadian Warship Names. Vanwell Publishing Limited. St. Catherines, Ontario.

the same as or too similar to ships already in the Royal Navy or other Commonwealth navies (e.g., HMS Hull precluded naming an RCN ship after Hull, Quebec, and the ship named after Verdun, Quebec was called HMCS Dunver to avoid confusion with the HMS Verdun).¹³⁶ But this approach still gave the RCN a good list of towns to work with.

As more ships were commissioned, having a ship named after it became a point of pride for communities across Canada, and some communities not yet in the “club” began to lobby to have “their” ships. For example, after it was announced that Stormont County in eastern Ontario was going to have a ship named after it, the neighbouring county of Glengarry approached the navy since they felt that they should have a ship too. By this time, it was getting late in the war and there were not many ships left to be built and named. The ensuing controversy went all the way up to the King, since it was the King who ultimately approved all ship’s names. In the end, the people of Glengarry never got their ship, although the local infantry regiment, the Stormont, Dundas, and Glengarry Highlanders, was commonly referred to as “the Glens” so perhaps that evened things out a bit.¹³⁷

Closer to Cobalt, where there had always been a rivalry between the various towns across northern Ontario. It was mostly a friendly rivalry, although on the hockey rink and in the bars the rivalry could turn a ‘little’ rougher at times. But it seems this rivalry extended to ships too, with some of the other northern communities apparently being a bit envious of Cobalt and wanting to have ships of their own.

On December 19, 1940, The Porcupine Advance featured an article titled *Timmins Still Awaits H.M.C.S. Named in Honor of the Town* and the article began,

“Some time ago when Cobalt, “the best old town”, was given the honour of having one of the new ships of the Canadian Navy named in its honour, The Advance suggested that it would be a pleasing and warranted gesture if a similar honour were given to Timmins.”

What the author of the article could not have known at the time was that construction of HMCS Timmins had begun just a few days before and the Timmins was commissioned on February 10, 1942.

Meanwhile, to the south, North Bay wanted in too. The North Bay Daily Nugget had a regular feature titled *In The Service*, and in the April 12, 1941 edition, it was clear that North Bay was in the running for a ship too, although bureaucracy seemed to be getting in the way.

“Whatever happened [to sic] that suggestion from naval headquarters that one of the trim, sleek new corvettes about to join the fighting services of the Royal Canadian Navy be named “The North Bay” in honor of this city? Since the suggestion was first received in the city some weeks ago, many persons have been waiting to hear what official action would be taken on the proposal ... but to date, nothing seems to have developed.

¹³⁶ LCdr David J. Freeman. 2000. *Canadian Warship Names*. Vanwell Publishing Limited. St. Catherines, Ontario.

¹³⁷ Same reference as above.

The offer to name one of the fast new naval vessels in honor of our city was made about 10 weeks ago at a meeting of the North Bay Board of Trade. Members of that organization's board of directors held up action on the matter until it was ascertained whether or not the naval authorities had contacted the North Bay city council. Until this was known, the board thought it better not to place the matter before the council on their own initiative."

The corvette HMCS North Bay was commissioned on October 25, 1943.

New Liskeard waited patiently for its ship, and an October 21, 1943, article in the Temiskaming Speaker said that:

"It is quite likely that ere too long a time elapses New Liskeard will be represented among the ranks of Canada's navy with a ship bearing the name of the town. Needless to say the townspeople are fully aware of the honor being bestowed upon them and fully appreciate the responsibility to the crew of the vessel that goes hand in hand with the honor. When fuller details have been received as to the nature of the vessel to bear the name of Temiskaming's banner farming town plans will be made to see that the boys who sail her are taken care of with comforts, etc. The honor has undoubtedly been given to New Liskeard by the authorities in appreciation of the fine effort the citizens of the community have made in contributing so magnificently to the war loans."

The minesweeper HMCS New Liskeard was commissioned on November 21, 1944.

Other northeastern Ontario towns with ships named after them were Sudbury, Copper Cliff, Algoma, Kirkland Lake, Kapuskasing, and Sault Ste. Marie.

13 War's End

HMCS Cobalt survived the Second World War. Like most corvettes, her service with the RCN ended just a few weeks after the war in Europe was over in May 1945, since the Flower-class corvettes were not suitable for action in the Pacific in the continuing war against Japan. The ship left Halifax for the last time in June 1944, sailing to Sydney, Nova Scotia where ammunition, weapons, and specialized equipment were removed. The ship then sailed on to Sorel, Quebec, where she was decommissioned from RCN service and taken over by the War Assets Corporation for disposal.

The Cobalt and other corvettes may not have been very old, but they were obsolete. New German U-boats that entered service late in the war were a harbinger of things to come in submarine warfare. Able to operate fully submerged all the time, they were much faster underwater than the previous generation of U-boats. The corvettes had done invaluable service in the Battle of the Atlantic, but they were too slow, and too small to be outfitted with the latest in anti-submarine weapons. Their time as warships was done.¹³⁸

With the end of the war in Europe and the decommissioning of HMCS Cobalt, most of the Cobalt's crew returned to civilian life, except for a few who may have been assigned to further duty in the war against Japan in the Pacific, and those that opted to stay in the navy after the war. Serving in the war had changed all of them, often in good ways, but sometimes in bad ways. For many sailors, like their counterparts in the army and the air force, the return to civilian life was difficult. They had experienced things that few except fellow veterans could understand. Many had been wounded, physically or psychologically, by the war. In an era with much less understanding of mental health issues and challenges like post-traumatic stress disorder (PTSD), they were left to figure it out on their own. While the government put in place many supports to help with re-training and reintegration, it was often not an easy transition for men and women who had served their country but often returned home very different people than they had been years before when they left to enlist.

¹³⁸ On May 8, 1945, the day of the German surrender, the RCN had 113 corvettes in service. By the end of 1945, just 8 remained, and those were newer, larger Castle class corvettes. By the end of the year, the total number of RCN ships had shrunk from 278 on May 8 to just 53, and many more were decommissioned in 1946. Rob Stuart, 2009. *Was the RCN ever the Third Largest Navy*. Canadian Naval Review, Volume 5, Number 3.

Corvettes To "Boneyard"

Three Steam Away For De-Storage

HALIFAX, June 19.—Three more Canadian corvettes. Parry Sound, Hawkesbury and Merritonia, have steamed out of Halifax Harbor, headed for de-storage at Sydney, N.S., and then a trip to Sorel, Que., for final disposal by War Assets Corporation.

NAVAL PERSONNEL

The vessels arrived from the United Kingdom during the weekend, each carrying between 50 and 60 naval personnel from Newfoundland and overseas as passengers. They stopped here only long enough to discharge their passengers, and then headed for Sydney, where the vessels of the "boneyard fleet" are being stripped of their armament now that their convoy job is done and they no longer are needed.

TEN OTHERS

Ten other corvettes have left Sydney during the last few days on their way to Sorel for final disposal. They were the Matapedia, Edmundston, Wetaskiwin, Dawson, Cobalt, Longbranch, Chambly, Dauphin, New Westminster and Galt.

H.M.C.S. Chambly, better known as the Battling Bulldog, was the first ship of this or any other war to sink an enemy U-boat. She also was in on another probable sinking and helped damage a third German sub. Her present captain is Lt.-Comm. J. B. B. Shaw of Victoria, a former well-known newspaperman in Vancouver, Ottawa and China.

Windsor Star, June 19, 1945

Final entries in the ship's log for HMCS Cobalt. (Credit: Department of National Defence)

W 7 SHIP will ~~not~~ now be deammunitioned ~~xx xxxxxx~~ only.
W 7 SHIP (SO) DAUPHIN WETASKIWIN DAWSON to Sydney. All ships to
jettison ammunition in given position.
PCS? ETA Syeny 2045/3, DAWSON WETASKWIN DAUPHIN in company.
W 7 to Sydney.
From St. John's in co for destoring. SHIP DAUPHIN WETASKIWIN DAWSON.
Intend paying off SHIP 15th June.
Re equipment removed.
To Sorel for final disposal. ETA Father Point 1200/16.
P. .S. 0900/15 ETA Father Point 1230/16
ETA Quebec 2310/16. LONGBRANCH in company.
Passed Quebec inbound to Sorel 2320/16. ETA 1200/17.
SHIP turned over to War Asset Corp 17th June
Your 09h517 re stencilling of A/E cover plates SHIP sailed Sydney
before action could be taken.

Canadian escort ships in Sorel, Quebec, awaiting disposal after the war; including HMC Ships St Lambert, Camrose, Kamsack, Lunenburg, and Mimico seen from HMCS Merritonia. Dozens of ships made their way to Sorel within weeks of the end of the war in Europe, as the RCN went through an extremely rapid de-mobilization and force reduction. (Credit: www.forposterityssake.ca. Photo has been digitally restored by the author.)



“Graveyard, Sorel, P.Q.” a 1945 painting by Commander Tony Law who served as a naval officer and was an official war artist. The painting depicts decommissioned RCN ships in Sorel and evokes the sadness that many sailors felt as these once proud warships were “put out to pasture”. (Credit: Canadian War Museum, 19710261-4075)



The Cobalt was eventually sold and like several other corvettes, she was converted to a whaling ship - appropriate considering the origins of the corvette design. From 1953 to 1961 she was operated by a Netherlands-based company as the Johanna W. Vinke. In 1961 her boiler exploded, and she could not be repaired. She was scrapped in South Africa in 1963.

The former HMCS Cobalt, rebuilt as the whaling ship Johanna W. Vinke. (Credit unknown)



During the Second World War, there were more than 200 RCN ships named after towns and cities across Canada. Not all of these ships were decommissioned after the war since some of the more modern and better-equipped ships remained in service. However, like the Cobalt, dozens of these ships were decommissioned soon after the war ended.

During the war, close relationships had been established between these communities and the ships named after them. Crews were thankful for the support provided by the communities. As a gesture of thanks to these communities and their citizens, the bells of many of these ships were given to these communities after the war.

Ship's bells are an important symbol of the ship. They serve a practical purpose, being used to mark the time and other occasions. But engraved with the name of the ship, they became a tangible link to the ship that remains once the ships have passed from service to the scrap yard or non-military uses. For many of the RCN ships that served in the Battle of the Atlantic, their bells are all that remain.

On September 28, 1945, Naval Service Headquarters (NSHQ) in Ottawa issued an order that “inscribed ship bells and plaques from ships declared surplus are to be removed and forwarded to NSHQ.”¹³⁹ Between then and late 1947, bells were given to communities across Canada. In many cases, ceremonies

¹³⁹ Naval Message from Naval Service Headquarters, September 28, 1945. Library and Archives Canada, RG24, Volume 11120.

were held with naval officers present, during which the bells were handed over to the mayors of the communities, representatives of service clubs, or local sea cadet units. The author compiled media articles from newspapers across Canada, documenting these events. For example, on May 22, 1946, a ceremony was held in Sudbury to turn over the bells of HMC Ships Sudbury and Copper Cliff. The mayor of Copper Cliff and the wife of the mayor of Sudbury received the bells from the RCN officers present at the ceremony.^{140,141}

The author has not been able to find any information to document any such ceremony in Cobalt. Minutes of the Cobalt Town Council meetings from the end of the war through to August of 1947 make no mention of the ship or the bell. No documents or photos related to such an event have been found in the collections of the Cobalt Mining Museum and the Cobalt Historical Society. Media, including articles from the Temiskaming Speaker and the North Bay Nugget, make no mention of such an event. However, the bell definitely found its way to Cobalt soon after the war.

On August 5, 1947, a major fire hit Cobalt, leaving 60 people homeless. A relief fund was established, and with the war still very fresh in everyone's memories, HMCS Cobalt's bell featured in some of the fundraising efforts.¹⁴² A photo taken in the town council chambers sometime after the war also shows the bell on the mantle of the fireplace. Today, the bell remains in Cobalt, as part of the collection of The Bunker, a military museum in town.

Cobalt Appeals For Aid For Fire Victims



Recovering from disastrous fire last August, which left 60 homeless, Cobalt has sent out a call for help. Here Anita St. Laurent sounds the bell from H.M.C.S. Cobalt, announcing the appeal to northern communities for aid for the victims.

¹⁴⁰ Great Sudbury and the Canadian Navy – H.M.C.S. Sudbury And H.M.C.S. Copper Cliff. <https://pub-greatersudbury.escrimeetings.com/filestream.ashx?documentid=25576>

¹⁴¹ North Bay Daily Nugget, Thursday, May 23, 1946.

¹⁴² The Fort William Daily Times-Journal, September 19, 1947

Photo taken in the Cobalt Town Council chambers in 1952. The ship's bell is visible on the table on the left, and the gunshield artwork is hanging above the fireplace mantle. (Credit: Collection of John Hunt, posted to the Haileybury/ New Liskeard/ Cobalt/ Coleman Photos Facebook Group.)



Ship's bell from HMCS Cobalt, now part of the collection of The Bunker, a military museum in Cobalt. (author's photo)



Bibliography

The author grew up in a household steeped in military history, surrounded by books about the Royal Canadian Navy and the Second World War, and began working on this history of HMCS Cobalt in 2006. Thus, it has been challenging to attribute specific sources to all information provided in this history. However, the following books and websites are all valuable references on Flower class corvettes that have, in one way or another, influenced what is written here.

Books and Articles

Lambert, John and Brown, Les. 2015. *Flower Class Corvettes*. Seaforth Publishing

LeCren, Bruce. 2020. *The Flowers of Canada - The Royal Canadian Navy's Corvettes in World War II*. Originally published in the Nautical Research Journal Spring 2020.
<http://www.forposterityssake.ca/RCN-DOCS/Flowers-of-Canada-LeCren.pdf>

Lynch, Thomas. 1981. *Canada Flowers: History of the Corvettes of Canada, 1939-1945*. Nimbus Publishing

McKay, John and Harland, John. 2010. *The Flower Class Corvette Agassiz (Anatomy of the Ship)*. Conway Maritime Press

Macpherson, Ken and Milner, Marc. 1993. *Corvettes of the Royal Canadian Navy 1939-1945*. Vanwell Publishing

Articles from Legion Magazine, published by the Royal Canadian Legion

<https://legionmagazine.com/en/the-first-convoys/>

<https://legionmagazine.com/en/the-humble-corvette-navy-part-27/>

<https://legionmagazine.com/en/the-rush-to-expansion/>

<https://legionmagazine.com/en/the-newfoundland-escort-force/>

<https://legionmagazine.com/en/the-training-gap-navy-part-31/>

<https://legionmagazine.com/en/scrappy-little-corvettes-navy-part-37/>

<https://legionmagazine.com/en/the-sheep-dog-navy-navy-part-39/>

<https://legionmagazine.com/en/an-american-blunder-navy-part-43/>

<https://legionmagazine.com/en/shaped-by-crisis-building-new-corvettes-navy-part-56/>

<https://legionmagazine.com/en/five-u-boat-kills-in-five-weeks/>

<https://legionmagazine.com/en/distracting-the-pack/>

<https://legionmagazine.com/en/operation-drumbeat/>

<https://legionmagazine.com/en/running-ragged-the-north-atlantic-run/>

<https://legionmagazine.com/en/the-battle-of-the-st-lawrence/>

Websites

<https://readyayeready.com>

<http://www.forposterityssake.ca/RCN.htm>

<https://www.naval-history.net/xDKEscorts20Cor-FlowerRCN02.htm>

<https://www.tapataalk.com/groups/theflowerclasscorvetteforums/>

<https://uboat.net/>



Photo Galleries

Crew Gallery

In this section are additional photos of the Cobalt's crew throughout the war. Unfortunately, most are unlabelled, particularly those from the collection of the Cobalt Mining Museum, so there are no names provided for most of the crew in these photos. In addition, it is possible that some are not actually from the Cobalt. There are a handful of other photos in the Mining Museum's collection that are mislabelled as HMCS Cobalt, so a few of these may be too.

Crew members about the Cobalt, sometime between January 1942 and March 1943. (Credit: Cobalt Mining Museum. Photo has been digitally restored by the author.)





An officer aboard HMCS Cobalt in port, likely St. John's. (Credit: Cobalt Mining Museum. Photo has been digitally restored by the author.)

Two crew members sitting on the bandstand for the anti-aircraft gun near the stern of the ship. (Credit: Cobalt Mining Museum. Photo has been digitally restored by the author.)



Crew sitting on depth charge storage racks near the stern, taken after standing down from action stations. The sailor on the left is Ken Adam. (Credit: Collection of Ken Adam, courtesy of Rick Adam, personal communications with the author. Photo has been digitally restored by the author.)



A group of crew members ashore in Londonderry, Northern Ireland. (Credit: Collection of Ken Adam, courtesy of Rick Adam, personal communication with the author. Photo has been restored by the author.)



Crew members in the ratings quarters. Left to right are Price, Hewling, Dobson, and Ken Adam. (Credit: Collection of Ken Adam, courtesy of Rick Adam, personal communication with the author. Photo has been digitally restored by the author.)



Ship's officers of HMCS Cobalt in 1943, posed in front of the ship's main gun and bridge. Seated (left to right): Lieutenant C.D. Heward, Acting Lieutenant Commander R.A. Judges (commanding officer of the Cobalt), and Mate A.W. Bett. Standing (left to right): Sub-lieutenant N.M. MacMillan, Sub-lieutenant N.J. Russel, unknown. (Credit: Department of National Defence. Photo has been digitally restored by the author.)



Petty Officer William E. Killam. (Credit: Collection of William Killam, www.forposterityssake.ca. Photo has been digitally restored by the author.)



Petty Officer William E. Killam (centre) with an unidentified petty officer (left) and an unidentified chief petty officer (right). (Credit: Collection of William Killam, <https://www.rcnhistory.org/killam-cobalt.htm>. Photo has been digitally restored by the author.)



William E. Killam after promotion to chief petty officer. (Credit: Collection of William Killam, <https://www.rcnhistory.org/killam-cobalt.htm>)



Crew of a corvette, likely HMCS Cobalt, on parade, led by Acting Lieutenant Commander R.A. Judges. (Credit: Collection of Ronald Judges, courtesy of Chanin Graham, personal communication with the author. Photo has been digitally restored by the author.)



FRANK DEMOOR

He joined the navy on August 10, 1942. His naval training took him from British Columbia to Nova Scotia where in Halifax he was assigned to the HMCS Cobalt. Their job was to escort and protect the convoys of merchant ships across the mid Atlantic which was a life line to England. Once out in the mid Atlantic the "Black Hole" as it was called, there was no air protection and that is where the German subs were waiting for them. He was discharged on Dec.13,1945.

Crew member in the bandstand for the anti-aircraft gun. Date and location unknown. (Credit: Cobalt Mining Museum. Photo has been digitally restored by the author.)



Sailor on the quarterdeck of the Cobalt. (Credit: Cobalt Mining Museum. Photo has been digitally restored by the author.)



One of the Cobalt's officers, posing mid-way up the ship's funnel. (Credit: Cobalt Mining Museum. Photo has been digitally restored by the author.)



Four of Cobalt's crew looking out from the bridge sometime between January 1942 and March 1943. (Credit: Cobalt Mining Museum. Photo has been digitally restored by the author.)



Crew aboard HMCS Cobalt sometime between January 1942 and March 1943. (Credit: Collection of William Killam, <https://www.rcnhistory.org/killam-cobalt.htm>. Photo has been digitally restored by the author.)



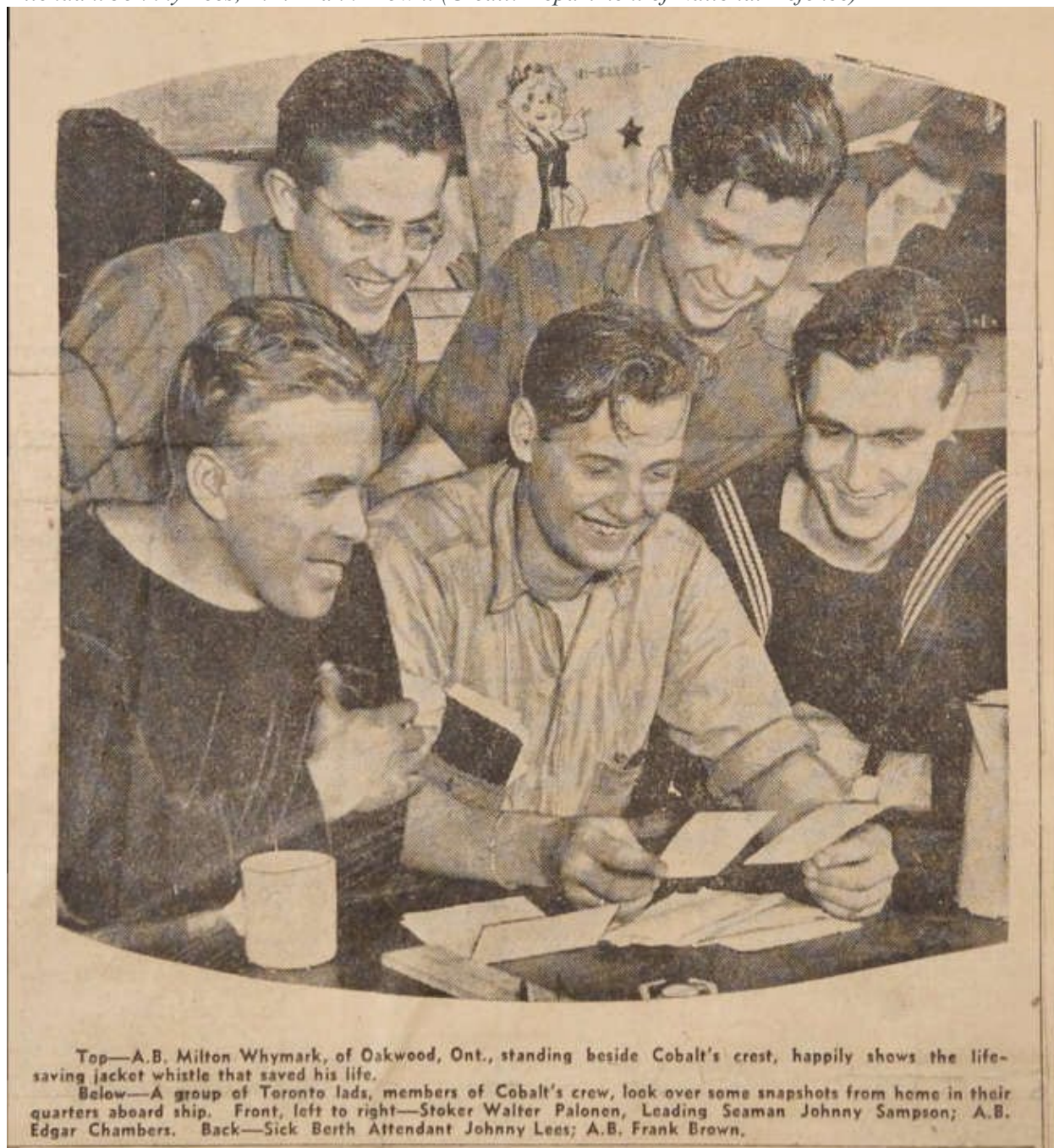


Bill Pitcher and George William Mills in 1944. (Credit: James Haines, personal communication with the author. Photo has been digitally restored by the author.)



George William Mills and a sailor named Williamson in 1943. (Credit: James Haines, personal communication with the author. Photo has been digitally restored by the author.)

From the Toronto Telegram, November 20, 1943: A group of Toronto lads, members of Cobalt's crew, look over some snapshots from home in their quarters aboard the ship. Front, left to right – Stoker Walter Palonen, Leading Seaman Johnny Sampson, A.B. [Able Seaman] Edgar Chambers. Back – Sick Berth Attendant Johnny Lees, A.B. Frank Brown. (Credit: Department of National Defence)



The Cobalt's gunshield was a popular backdrop for photos, as shown in these photos from the collection of the Cobalt Mining Museum. All have been digitally restored by the author.







William Poshtar (Credit: Collection of Donald Douglas, www.forposterityssake.ca. Photo has been digitally restored by the author.)

William Poshtar (left) and Donald Douglas (right). Douglas was a sick bay attendant. (Credit: Collection of Donald Douglas, www.forposterityssake.ca)



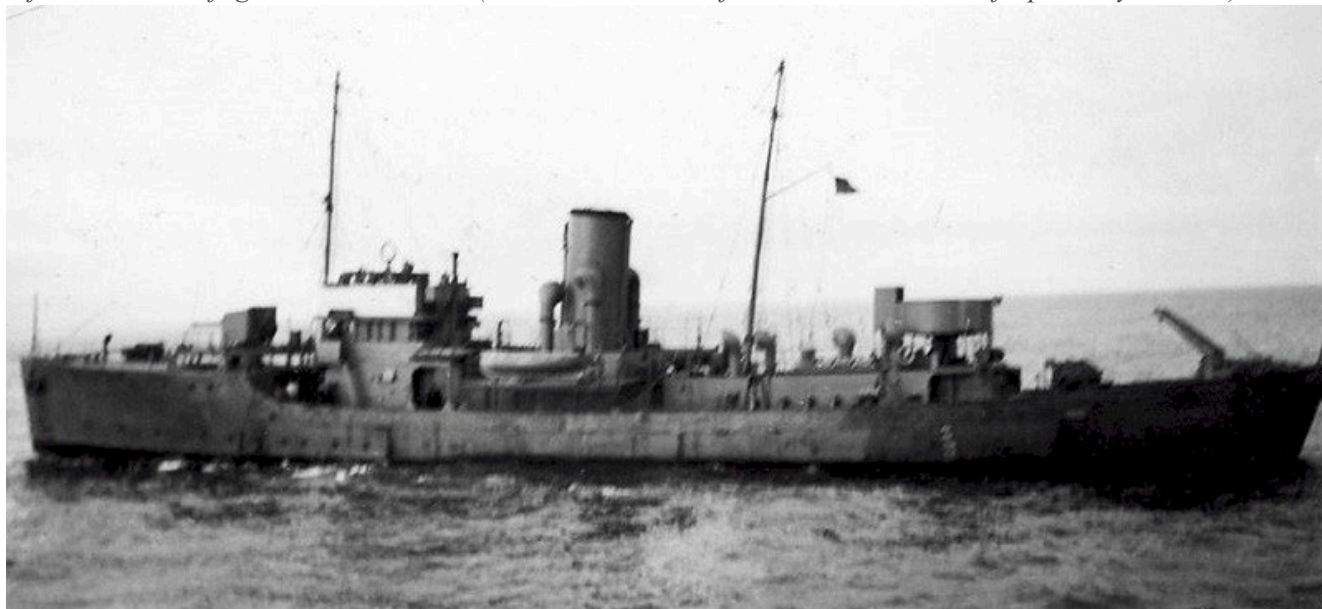
HMCS Cobalt Gallery

This gallery presents photos of HMCS Cobalt not used elsewhere in this book. Unless otherwise noted, these photos are from the collection of the Cobalt Mining Museum and have been digitally restored by the author. Dates are estimated by the author based on the appearance of the ship and equipment fitted.

Photo from the Department of National Defence of a corvette labeled as HMCS Cobalt. This was an official photo taken at the time of commissioning. Despite the label and the source, the author believes that this is actually HMCS Chilliwack. An almost identical photo of the Chilliwack is on the website www.posterityssake.ca. The best evidence that this is not the Cobalt is that a canvas sun awning has been fitted over the bridge - not something the Cobalt needed leaving Port Arthur in late November destined for Halifax. However, the Chilliwack left Vancouver in May 1941 destined for Halifax by way of the Panama Canal and the Gulf of Mexico. On that route, the bridge crew would certainly have appreciated the awning to protect them from the sun. The moral of the story – always cast a critical eye, regardless of the information source. (Credit: Department of National Defence. Photo has been digitally restored by the author.)



An early photo of HMCS Cobalt, taken before her pennant number (identification number) had been painted and before anti-aircraft guns were installed. (Credit: Collection of William Killam, www.forposterityssake.ca)



HMCS Cobalt in 1941. (Credit: www.forposterityssake.ca)



Taken between January 1942 and March 1943



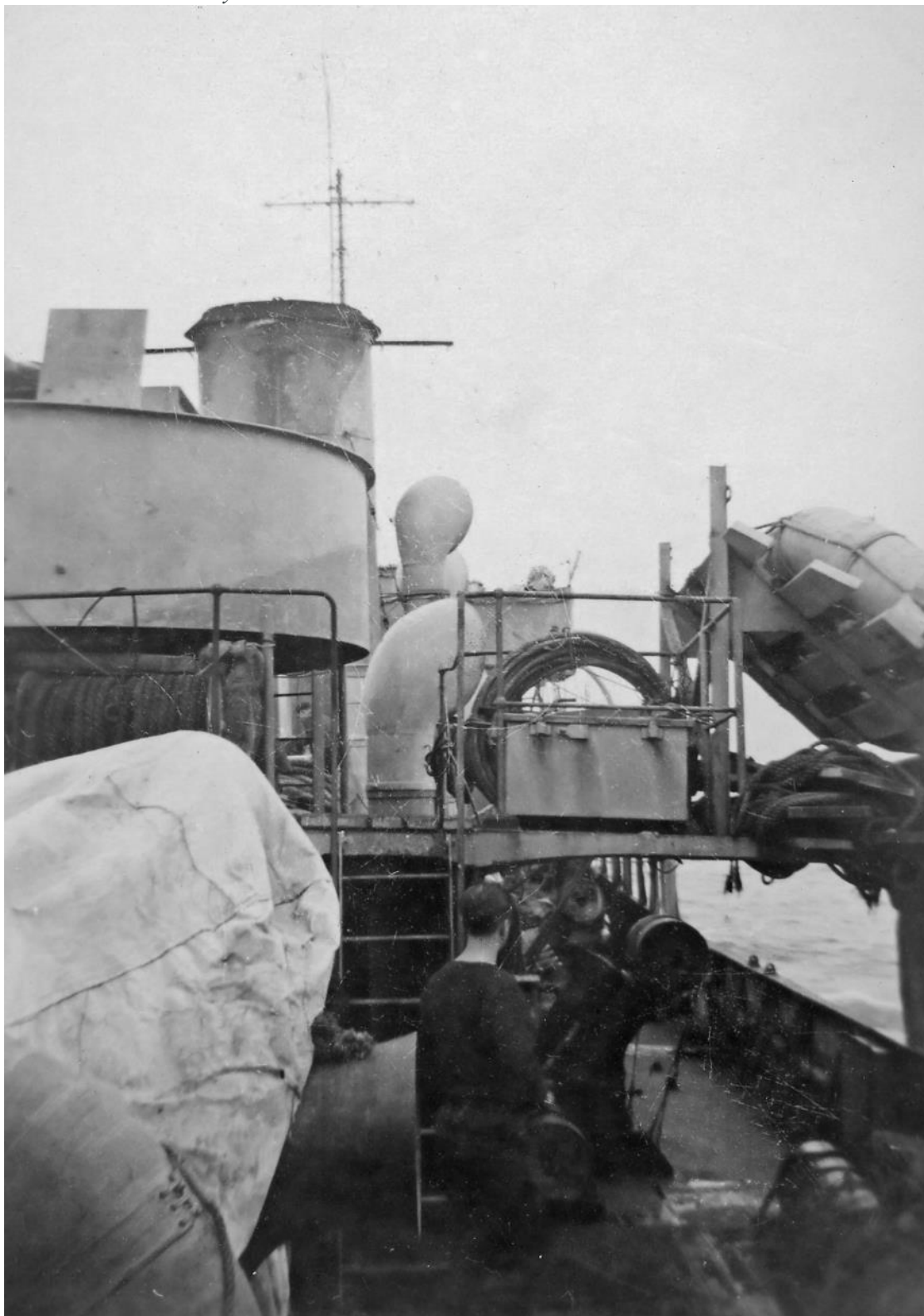
Taken early in 1941.



Taken after January 1942.



Taken between January 1942 and March 1943.



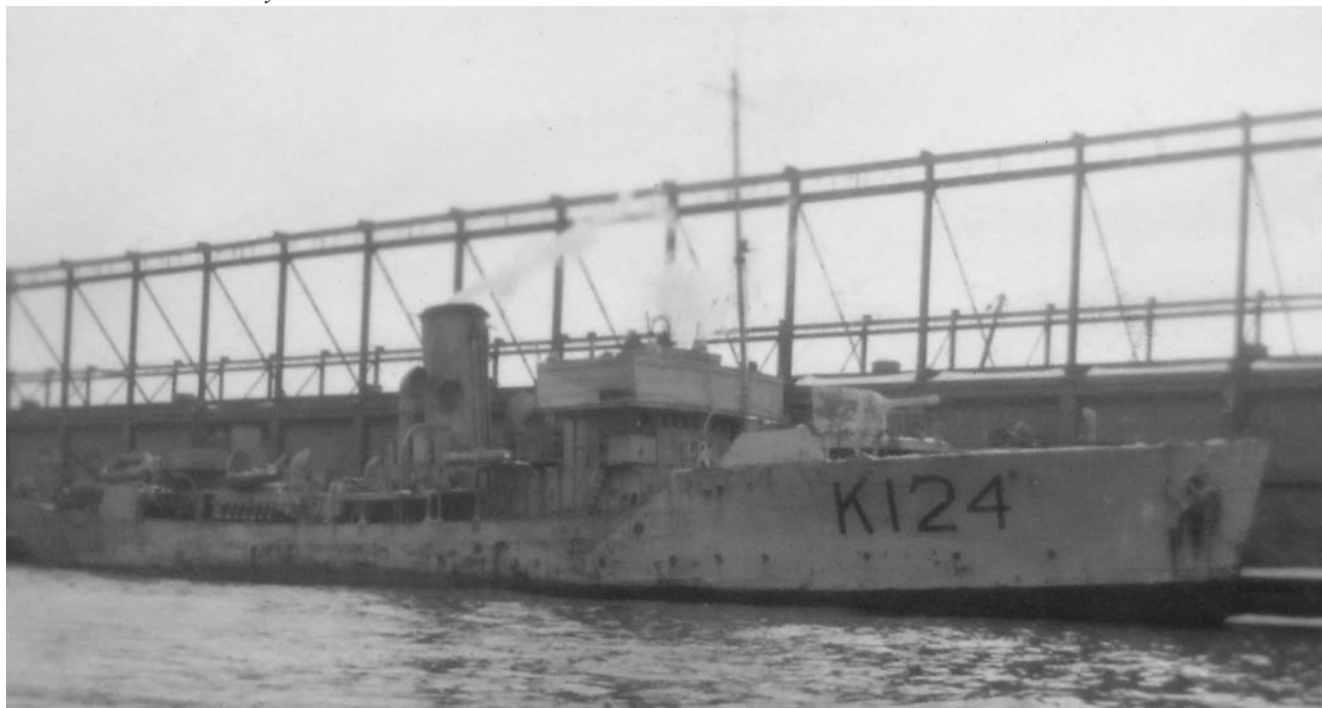
HMCS Cobalt in the foreground in Liverpool Nova Scotia for refit, either between March and April 1943, or between April and July 1944.



Taken between January 1942 and March 1943, location unknown.



Taken between January 1942 and March 1943 in Boston.



HMCS Cobalt between June 1943 and April 1944. The photo was taken while supplies or personnel were being transferred from one ship to another using a line fired from one of the ships. In the photo, crew members of the Cobalt can be seen in front of the main gun, holding the line. (Credit: Collection of Ronald Judges, courtesy of Chanin Graham, personal communication with the author. Photo has been digitally restored by the author.)



HMCS Cobalt underway after her final refit was completed in July 1944. Given the number of people on deck and how casual they look, as well as the fact the ship's wooden boat, normally stowed on the starboard side, is missing, this was likely taken as she was leaving Liverpool. (Credit: Collection of Edmund Ferris, <https://www.rcnhistory.org/ferris-cobalt.htm>. Photo has been digitally restored by the author.)



Taken between July 1944 and the end of the war in May 1945. (Credit: Department of National Defence. Photo has been digitally restored by the author.)



Taken between July 1944 and the end of the war in May 1945, and likely after the photo above. (Credit: Department of National Defence. Photo has been digitally restored by the author.)



Taken between July 1944 and the end of the war in May 1945. (Credit: Department of National Defence. Photo has been digitally restored by the author.)



Taken between July 1944 and the end of the war in May 1945. (Credit: Unknown. Photo has been digitally restored by the author.)



Wartime Colour Photos

Colour photos of corvettes operating during the Second World War are rare, but they help bring these ships, the Cobalt included, to life in a way that neither black and white photos, nor photos of a museum ship like HMCS Sackville can. Below are colour photos of Canadian corvettes taken during the war.

HMCS Arrowhead. (Credit: Royal Canadian Navy)



HMCS Regina. (Credit: National Defence - Canadian Navy Heritage website. Image Negative Number CT-252)



HMCS Weyburn. (Credit: Royal Canadian Navy)



HMCS Midland in 1942 or 1943, being repainted in port, likely Halifax. It looks like the communications personnel have been busy doing laundry since all of the signal flags have been put out to dry. (Credit: Collection of Bill Gard, www.forposterityssake.ca)



HMCS The Pas. (Credit: Collection of William McLean, www.forposterityssake.ca. Photo has been digitally restored by the author, but edits were limited to the removal of dust marks, scratches, and blemishes. Colours and exposure of the original scan were not altered.)



HMCS Kamsack. (Credit: Collection of Alan E. Hardwick, www.forposterityssake.ca. Photo has been digitally restored by the author, but edits were limited to the removal of dust marks, scratches, and blemishes. Colours and exposure of the original scan were not altered.)





Extra Details: Appendices

Appendix 1: Canada's Naval Memorial - HMCS Sackville

One of the Cobalt's sister ships, HMCS Sackville, still survives as the last example of the Flower class corvettes. Like the Cobalt, the Sackville was part of the first group of corvettes ordered for the RCN. She was on active service escorting convoys, much like the Cobalt, until the summer of 1944 when one of her boilers was damaged. She returned to Halifax and was used for a short time as a training ship for naval officers. She was then rebuilt for a new role, laying submerged cables on the seabed that were used to detect passing submarines.¹⁴³

Ironically, it was the damage to the boiler and the conversion to this new role that likely saved the Sackville. Unlike other Canadian corvettes that were decommissioned within weeks of the war ending, the Sackville remained in service in her new role until the spring of 1946 and was then retained by the navy. She was recommissioned as a depot ship in 1950 as the RCN was gearing up for a new role in the Cold War. In 1953, she took on yet another role, as a Canadian Naval Auxiliary Vessel used for conducting oceanographic surveys in the Gulf of St. Lawrence and in the Arctic near Baffin Island and Greenland. She was extensively modified again in 1968 and became a research ship operated by the Department of National Defence on behalf of the Bedford Institute of Oceanography in Dartmouth, Nova Scotia, at the time part of the federal Department of Mines and Technical Surveys. The Sackville continued service as a research ship until 1982.^{144,145}

When she was finally decommissioned after her long and varied career, it was recognized that the Sackville had outlived all of the almost 300 Flower class corvettes that had been built and served during the war. Her historical importance was recognized and rather than being sold for scrap, she was transferred to the Canadian Naval Corvette Trust in 1983. She was then restored to her 1944 appearance. She became a museum ship in Halifax and in 1985 was designated as Canada's Naval Memorial. For more information about the Sackville and the museum, go to: <http://canadasnavalmemorial.ca/> or follow HMCS Sackville on Facebook.

The author has had the opportunity to visit the Sackville several times, and except as noted, all of the photos in this section were taken by the author.

¹⁴³ <https://www.canada.ca/en/navy/services/history/ships-histories/sackville.html>

¹⁴⁴ Same reference as above.

¹⁴⁵ http://www.forposterityssake.ca/Navy/HMCS_SACKVILLE_K181.htm

HMCS Sackville in 1944. (Credit: Collection of Dan L. Dunbar, www.posterityssake.ca. Photo has been digitally restored by the author.)



HMCS Sackville after she had been converted to her new role as a cable layer. (Credit: Collection of Patrick Onions, www.forposterityssake.ca)



HMCS Sackville's long career comes to an end in December 1982. (Credit: www.forposterityssake.ca. Photo has been digitally restored by the author.)



Newspaper article about the effort to save HMCS Sackville. Despite her historical value, saving the ship was going to take a lot of money, and the navy did not hand over the ship until a group had come forward with enough money. (Credit: Collection of Leonard Hare, www.forposterityssake.ca)



Recently retired corvette HMCS Sackville ploughs through Atlantic in 1943 photograph.

Ex-sailors bid to save last corvette

HALIFAX (CP) — The sole survivor among Canada's fleet of 123 corvettes from the Second World War has been taken out of service by the Canadian navy, but retired naval officers are moving ahead with plans to ensure preservation of the Sackville.

The Flower-class corvette was launched in Saint John in May, 1941, and used on convoy escort duty in the North Atlantic virtually from day one.

Although other corvettes were sold after the war, the Sackville was retained, having been converted near the end of the war to lay submarine-sensing loops in East Coast harbors. She was converted again to a survey ship in 1953 and underwent extensive modification in 1968 to reflect her new status as a research ship.

Her final assignment in September — testing new anti-submarine sonars —

was somehow fitting for a ship credited with sinking an unidentified German U-boat off Newfoundland on Aug. 3, 1942, and damaging a second one the same day.

Despite more than 41 years of service, Sackville "is in exceptionally good condition — clean and unruined," Verne Howland, a retired navy captain, said.

Mr. Howland is a member of a committee from the Maritime Museum in Halifax and the Naval Officers Association of Canada that wants to acquire the Sackville and restore her to wartime form.

The Canadian Forces has given the group until the end of 1983 to come up with the necessary money and the association is establishing a national foundation to receive donations for the estimated \$1-million cost of acquisition and

restoration.

"We hope to make her look like a typical Canadian corvette of 1942-43 ... not necessarily to recreate the Sackville as she was," Mr. Howland said.

Target date for completion is May of 1985, the 75th anniversary of the Royal Canadian Navy. Mr. Howland hopes the Sackville could receive an honorary recommission and go on permanent display in Halifax.

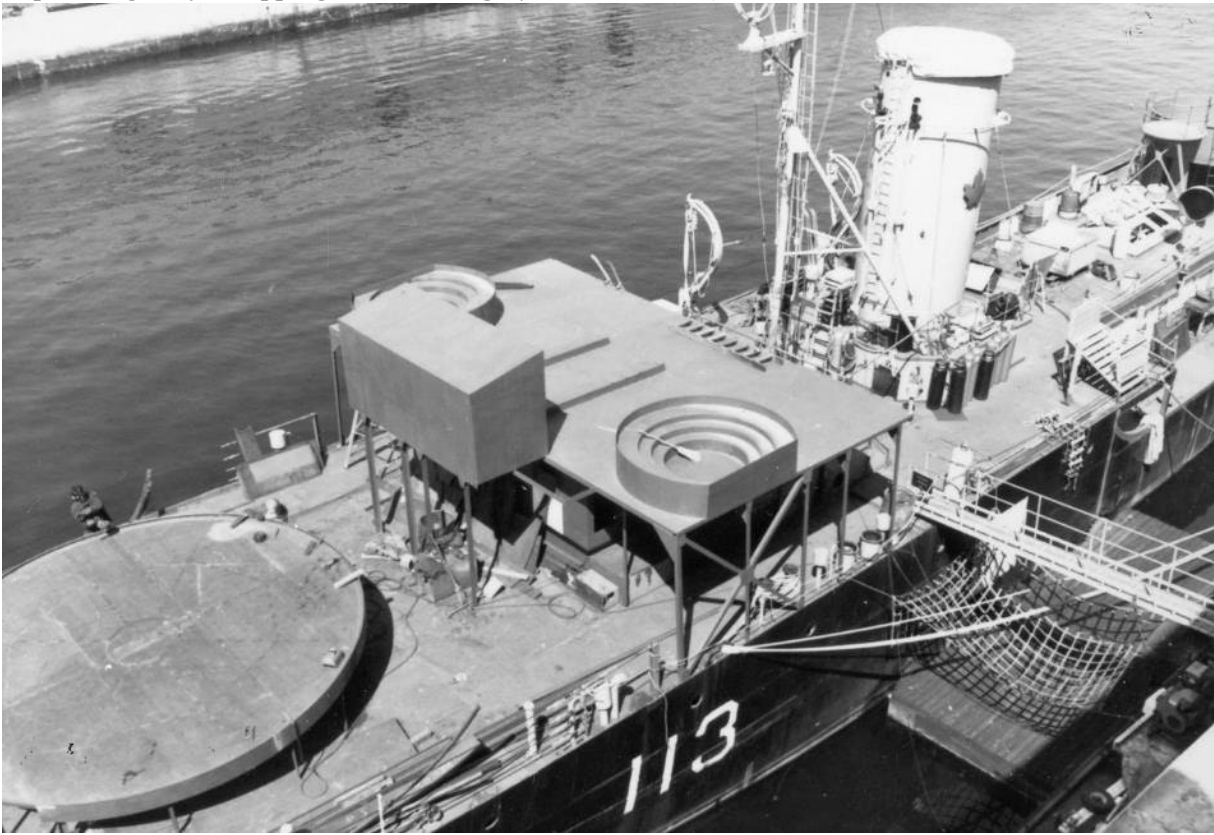
A. H. (Gus) Rankin of Halifax, who commanded the Sackville in 1943 and 1944, said he always felt one Canadian corvette should be preserved.

"The battle of the North Atlantic was a corvette war and corvettes represented 90 per cent of the Canadian Navy," Mr. Rankin, who retired as a navy lieutenant-commander, said. "Sackville is the last one and if she goes, part of our history disappears."

The Town of Cobalt contributed to the fundraising effort to save the Sackville. In recognition of the contribution, this certificate was provided to the town (Credit: Town of Cobalt municipal office)



HMCS Sackville undergoing restoration. (Credit: Collection of the Maritime Museum of the Atlantic, <https://blog.halifaxshippingnews.ca/category/hmcs-sackville>)











Inside the ASDIC hut



The tuck shop, where crew could buy cigarettes, magazines, sweets, and other personal items.



The sick bay. Corvettes like the Cobalt did not have a doctor on board – they were too small. However, they did have a sick berth attendant, an officer with training to provide basic emergency medical care.



Donald Albert Douglas, who served as a Sick Bay Attendant aboard HMCS Cobalt. (Credit: www.forposterityssake.ca)



Appendix 2: Convoys Escorted by HMCS Cobalt and Other Significant Milestones in the Ship's History

This appendix lists all of the convoys that were escorted at some point in their crossing by HMCS Cobalt. Trans-Atlantic convoys were rarely escorted by a single group of ships throughout their crossing. Early in the war, they would have crossed part of the Atlantic unescorted due to the shortage of escorts. Later, they would have transferred from the protection of one escort group to another during their crossing.

This is reflected in this appendix. For those convoys crossing the Atlantic, the Cobalt was never with the convoy for the entire crossing. The table provides the dates when each convoy departed and arrived at its destination and the dates during which the Cobalt participated in the escort of that convoy.

Each convoy was given a two or three-letter code indicating the port the convoy departed from and the destination. In the table below convoys are colour-coded, with east-bound convoys in green and west-bound convoys in blue.

Eastbound convoys (highlighted in Western Approaches green)

SC – Halifax slow to the United Kingdom

- 177 convoys throughout the war with a loss of 211 ships

HX – Halifax to the United Kingdom

- 377 convoys throughout the war with a loss of 206 ships

BX – Boston to Halifax

- 206 convoys throughout the war with a loss of 5 ships

Westbound convoys (highlighted in Western Approaches blue)

OB – Liverpool (UK) outbound to the Americas or Africa

- 345 convoys throughout the war with a loss of 213 ships

ON – Liverpool (UK) to New York Fast

- 307 convoys throughout the war with a loss of 162 ships

ONS – Liverpool (UK) to Halifax Slow

- 51 convoys throughout the war with a loss of 19 ships

XB – Halifax to Boston

- 196 convoys throughout the war, data on losses not located

Convoy number	Date convoy sailed	Date Cobalt joined the convoy	Date Cobalt left the convoy	Number of days Cobalt was with the convoy	Date convoy arrived	Number of merchant ships in convoy/ number sunk
1940						
1940/04/01 – The Cobalt was laid down in Port Arthur						
1940/08/17 – The Cobalt was launched						
1940/11/25 – HMCS Cobalt was commissioned into the Royal Canadian Navy in Port Arthur						
1940/11/25 – Acting Lieutenant Commander Robert Baird Campbell, Royal Canadian Navy Reserve, takes command of the ship						
1940/12/24 – HMCS Cobalt arrived in Halifax						
1941						
1941/01/22 – HMCS Cobalt participated in trials of diffused lighting camouflage near Halifax						
SC 026	1941/03/20	1941/03/20	1941/02/20	1	1941/04/08	23/10
HX 119B	1941/04/06	1941/04/06	1941/04/70	2	1941/04/22	19/0
HX 120	1941/04/10	1941/04/10	1941/04/10	1	1941/04/29	37/0
SC 029	1941/04/19	1941/04/19	1941/04/19	1	1941/05/08	42/0
HX 123	1941/04/25	1941/04/25	1941/04/25	1	1941/05/13	34/0
SC 030	1941/04/29	1941/04/29	1941/04/30	2	1941/05/20	28/1
HX 124	1941/04/30	1941/04/30	1941/04/30	1	1941/05/20	36/0
HX 125A	1941/05/06	1941/05/06	1941/05/06	1	1941/05/22	40/0
SC 031	1941/05/09	1941/05/09	1941/05/10	2	1941/05/30	32/0
SC 032	1941/05/19	1941/05/19	1941/05/20	2	1941/06/07	28/0
1941/05/20 – Lieutenant Colin James Angus, Royal Canadian Navy Reserve, takes command of the ship						
1941/05/23 - Left Halifax for St. John's with Newfoundland Escort Force						
HX 132	1941/06/10	1941/06/15	1941/06/23	8	1941/06/28	34/0
SC 034	1941/06/10	1941/06/16	1941/06/23	7	1941/06/29	34/0
OB 339	1941/06/26	1941/07/02	1941/07/10	9	1941/07/12	52/0
SC 037	1941/07/12	1941/07/15	1941/07/23	8	1941/07/28	41/0
HX 138	1941/07/11	1941/07/16	1941/07/23	7	1941/07/27	47/0
ON 001	1941/07/26	1941/07/31	1941/08/09	10	1941/08/09	54/0
HX 146	1941/08/21	1941/08/24	1941/09/02	9	1941/09/06	62/0
ON 012	1941/09/01	1941/09/07	1941/09/10	4	1941/09/14	43/0
SC 046	1941/09/24	1941/09/27	1941/09/05	9	1941/10/10	53/0
ON 023	1941/10/04	1941/10/10	1941/10/19	10	1941/10/19	26/0
SC 052	1941/10/29	1941/11/02	1943/11/03	2	1941/11/05	34/5
ON 029	1941/10/22	1941/11/04	1941/11/05	2	1941/11/05	31/0
ON 036	1941/11/13	1941/11/18	1941/11/25	8	1941/11/25	41/0
HX 162	1941/11/27	1941/11/27	1941/11/29	3	1941/12/11	31/0
Refit in Liverpool, Nova Scotia						
1942						
HX 176	1942/02/19	1942/02/19	1942/02/22	4	1942/03/06	24/0
SC 071	1942/02/22	1942/02/27	1942/03/10	12	1942/03/10	23/0
ON 076	1942/03/15	1942/03/16	1942/03/26	11	1942/03/31	27/0
SC 078	1942/04/05	1942/04/09	1942/04/21	13	1942/04/22	12/0
ON 090	1942/04/28	1942/04/29	1942/05/11	13	1942/05/15	47/0

Convoy number	Date convoy sailed	Date Cobalt joined the convoy	Date Cobalt left the convoy	Number of days Cobalt was with the convoy	Date convoy arrived	Number of merchant ships in convoy/ number sunk
1942/05: Assigned to Western Local Escort Force (WLEF)						
SC 085	1942/05/29	1942/05/29	1942/05/31	3	1942/06/12	60/0
ON 099	1942/05/29	1942/06/07	1942/06/12	6	1942/06/12	28/0
ON 105	1942/06/19	1942/06/28	1942/06/28	1	1942/06/30	36/0
BX 027	1942/07/02	1942/07/03	1942/07/04	2	1942/07/04	32/1
BX 027B	1942/07/03	1942/07/03	1942/07/05	3	1942/07/05	15/0
SC 091	1942/07/10	1942/07/10	1942/07/13	4	1942/07/24	39/0
SC 093	1942/07/24	1942/07/26	1942/07/26	1	1942/08/07	41/0
ON 114	1942/07/19	1942/07/30	1942/08/04	6	1942/08/04	32/0
BX 032B	1942/08/06	1942/08/06	1942/08/08	3	1942/08/08	18/0
XB 035	1942/08/23	1942/08/23	1942/08/25	3	1942/08/25	18/0
BX 035	1942/08/26	1942/08/26	1942/08/28	3	1942/08/28	51/0
XB 036	1942/08/30	1942/08/30	1942/09/01	3	1942/09/01	17/0
BX 036	1942/09/02	1942/09/02	1942/09/04	3	1942/09/04	44/0
HX 207	1942/09/13	1942/09/13	1942/09/16	4	1942/09/25	36/0
ON 128	1942/09/05	1942/09/18	1942/09/22	5	1942/09/24	22/0
HX 209	1942/09/24	1942/09/27	1942/09/29	3	1942/10/09	34/2
ON 132	1942/09/19	1942/10/04	1942/10/07	4	1942/10/08	37/0
SC 105	1942/10/11	1942/10/15	1942/10/18	4	1942/10/31	50/0
ON 137	1942/10/11	1942/10/22	1942/10/26	5	1942/10/29	38/0
ON 138	1942/10/11	1942/10/31	1942/11/03	4	1942/11/03	57/1
SC 109	1941/11/09	1942/11/09	1942/11/12	4	1942/11/30	45/2
HX 215	1942/11/11	1942/11/13	1942/11/17	5	1942/11/25	42/0
ON 144	1942/11/07	1942/11/20	1942/11/25	6	1942/11/27	28/5
ON 147	1942/11/17	1942/12/02	1942/12/04	3	1942/12/04	29/0
SC 113	1942/12/12	1942/12/12	1942/12/16	5	1943/01/02	54/0
SC 114	1942/12/19	1942/12/22	1942/12/26	5	1943/01/07	31/0
1943						
ON 155	1942/12/19	1942/12/30	1943/01/02	4	1943/01/06	24/0
1943/01/04 - Lieutenant Maurice Faulkman Oliver, Royal Canadian Navy Reserve, takes temporary command of the ship						
ON 154	1942/12/18	1943/01/07	1943/01/12	6	1943/01/12	46/14
HX 223	1943/01/14	1941/01/14	1941/01/17	4	1943/02/02	48/2
ON 158	1943/01/02	1943/01/20	1943/01/23	4	1943/01/23	35/1
1943/02/06 - Lieutenant Colin James Angus, Royal Canadian Navy Reserve, resumes command of the ship						
HX 226	1943/02/08	1943/02/08	1943/02/11	4	1943/02/24	43/0
SC 120	1943/02/13	1943/02/15	1943/02/20	6	1943/03/05	56/0
ON 167	1943/02/14	1943/02/28	1943/03/06	7	1943/03/08	27/2
ON 170	1943/03/03	1943/03/18	1943/03/18	1	1943/03/20	51/0
Refit in Liverpool, Nova Scotia						
1943/05/06 – Acting Lieutenant Commander Ronald Alfred Judges, Royal Canadian Navy Volunteer Reserve, takes command of the ship						

Convoy number	Date convoy sailed	Date Cobalt joined the convoy	Date Cobalt left the convoy	Number of days Cobalt was with the convoy	Date convoy arrived	Number of merchant ships in convoy/ number sunk
1943/06/05 – Acting Lieutenant Commander Colin James Angus was mentioned in dispatches. The citation read: "While serving in command of one of HMC corvettes (HMCS Cobalt) for considerable periods in the North Atlantic, this officer has displayed zeal, efficiency and devotion to duty."						
HX 246	1943/06/30	1943/07/02	1943/07/03	2	1943/07/14	63/0
HX 247	1943/07/08	1943/07/08	1943/07/12	5	1943/07/22	71/0
ON 192	1943/07/09	1943/07/18	1943/07/21	4	1943/07/22	85/0
HX 249	1943/07/23	1943/07/25	1943/07/26	2	1943/08/06	62/0
ON 194	1943/07/24	1943/08/04	1943/08/07	4	1943/08/07	82/0
HX 252	1943/08/14	1943/08/14	1943/08/20	7	1943/08/28	52/0
ON 197	1943/08/14	1943/08/22	1943/08/25	4	1943/08/28	53/0
HX 254	1943/08/27	1943/08/30	1943/08/30	1	1943/09/12	81/1
HX 257	1943/09/16	1943/09/16	1943/09/22	7	1943/09/30	75/0
ON 202	1943/09/15	1943/09/25	1943/09/28	4	1943/10/01	42/5
SC 144	1943/10/11	1943/10/11	1943/10/15	5	1943/10/27	38/0
ONS 020	1943/10/09	1943/10/22	1943/10/26	5	1943/10/26	54/1
XB 080	1943/10/26	1943/10/26	1943/10/28	3	1943/10/29	34/0
SC 146	1943/11/06	1943/11/06	1943/11/09	4	1943/11/22	32/0
ONS 022	1943/11/04	1943/11/17	1943/11/22	6	1943/11/22	30/0
XB 084	1943/11/20	1943/11/22	1943/11/23	2	1943/11/23	24/0
SC 148	1943/12/02	1943/12/02	1943/12/06	5	1943/12/16	41/1
ONS 024	1943/11/30	1943/12/13	1943/12/18	6	1943/12/18	34/0
XB 088	1943/12/17	1943/12/18	1943/12/20	3	1943/12/19	33/0
1944						
SC 150	1943/12/30	1943/12/30	1944/01/03	5	1944/01/14	19/0
ONS 026	1943/12/29	1944/01/13	1944/01/18	6	1944/01/18	32/0
XB 092	1944/01/18	1944/01/18	1944/01/20	3	1944/01/20	23/0
ON 220	1944/01/15	1944/01/31	1944/02/03	4	1944/02/04	54/0
HX 278	1944/02/05	1944/02/05	1944/02/10	6	1944/02/20	51/0
ON 223	1944/02/07	1944/02/18	1944/02/21	4	1944/02/24	54/0
HX 281	1944/02/27	1944/02/29	1944/03/01	2	1944/03/15	37/0
1944/03/04 - Lieutenant A.A.R. Dykes, Royal Canadian Navy Reserve, takes command of the ship						
ON 225	1944/02/22	1944/03/05	1944/03/08	4	1944/03/08	59/0
HX 283	1944/03/13	1944/03/13	1944/03/16	4	1944/03/29	62/0
1944/03/22 – Arrived in Liverpool, Nova Scotia for the beginning of refit						
1944/03/31 - Lieutenant Alfred William Bett, Royal Canadian Navy Reserve, takes command of the ship						
1944/06/26 – Acting Lieutenant Commander Ralph Marcus Wallace, Royal Canadian Navy Volunteer Reserve, takes command of the ship						
1944/07/20 - Refit in Liverpool, Nova Scotia						
1944/07/21 – 1944/08/03 – Additional refit work completed in Halifax						
1944/08/07 – Sailed to Bermuda for workup and training on the new equipment installed						
1944/08/17- Anti-submarine exercise off Bermuda with a Royal Navy submarine, HMCS Runnymede, HMCS Joliette, and HMCS Nene						

Convoy number	Date convoy sailed	Date Cobalt joined the convoy	Date Cobalt left the convoy	Number of days Cobalt was with the convoy	Date convoy arrived	Number of merchant ships in convoy/ number sunk
1944/08/26 – Workup completed and HMCS Cobalt returned to Halifax						
HX 309	1944/09/16	1944/09/18	1944/09/19	2	1944/10/03	74/0
SC 158	1944/10/04	1944/10/04	1944/10/08	5	1944/10/18	72/0
ONS 033	1944/09/29	1944/10/09	1944/10/13	5	1944/10/14	53/0
HX 317	1944/10/30	1944/11/01	1944/11/04	4	1944/11/13	44/0
ON 262	1944/10/24	1944/11/05	1944/11/10	6	1944/11/10	49/0
HX 321	1944/11/19	1944/11/19	1944/11/24	6	1944/12/05	36/0
HX 323	1944/11/29	1944/12/01	1944/12/05	5	1944/12/23	40/0
ONS 037	1944/11/28	1944/12/14	1944/12/21	8	1944/12/21	41/0
XB 138	1944/12/20	1944/12/20	1944/12/22	3	1944/12/22	21/0
ON 271	1944/12/08	1944/12/24	1944/12/26	3	1944/12/28	69/0
ON 272	1944/12/14	1944/12/28	1944/12/30	3	1945/01/01	45/0
1945						
ON 275	1944/12/28	1945/01/08	1945/01/13	6	1945/01/13	40/0
HX 333	1945/01/18	1945/01/18	1945/01/21	4	1945/02/01	52/0
HX 334	1945/01/23	1945/01/25	1945/01/28	4	1945/02/06	74/0
ON 278	1945/01/12	1945/01/26	1945/01/26	1	1945/01/31	47/0
SC 167	1945/02/16	1945/02/16	1945/02/19	4	1945/03/02	31/2
ONS 042	1945/02/13	1945/02/28	1945/03/04	5	1945/03/05	36/0
BX 149	1945/03/08	1945/03/08	1945/03/10	3	1945/03/10	11/0
SC 170	1945/03/17	1945/03/17	1945/03/20	4	1945/03/31	27/0
ON 290	1945/03/11	1945/03/24	1945/03/29	6	1945/03/29	71/0
HX 348	1945/04/03	1945/04/03	1945/04/06	4	1945/04/20	80/2
SC 174	1945/04/28	1945/04/28	1945/05/01	4	1945/05/14	33/0
ONS 048	1945/04/21	1945/05/02	1945/05/06	5	1945/05/04	23/0
1945/05/07 – Germany surrenders and the war in Europe ends, ending the Battle of the Atlantic. The war in the Pacific against Japan was ongoing.						
SC 176	1945/05/16	1945/05/16	1945/05/20	5	1945/05/29	26/0
ONS 050	1945/05/11	1945/05/25	1945/05/29	5	1945/05/29	35/0
1945/06/03 – HMCS Cobalt arrived in Sydney, Nova Scotia to have all ammunition removed in preparation for decommissioning						
Sailed to Sorel, QC						
1945/06/17 – HMCS Cobalt arrived in Sorel, Quebec, and was decommissioned and turned over to the War Asset Corporation, ending her service with the Royal Canadian Navy						

References for this appendix:

<http://www.warsailors.com/convoys/index.html#ob>
<https://www.naval-history.net/xDKEscorts20Cor-FlowerRCN02.htm>
<https://www.wlb-stuttgart.de/seekrieg/konvois/hx-41.htm>
<https://www.wlb-stuttgart.de/seekrieg/konvois/on-41.htm>
<http://convoyweb.org.uk/hague/index.html>
https://uboat.net/allies/warships/ship/811.html#google_vignette
http://www.forposterityssake.ca/Navy/HMCS_COBALT_K124.htm

Appendix 3: Battle of the Atlantic Monthly Summary of Ship Sinkings and U-boat Losses

References for this appendix:

https://uboaat.net/allies/merchants/losses_year.html

<https://uboaat.net/fates/losses/chart.htm>

<http://www.forposterityssake.ca/RCN-LOSSES.htm>

Note: RCN ships sunk “not due to enemy action” were lost due to other causes, most commonly collisions with other ships, but also storms, fires, and other accidents. Similarly, the U-boats lost include those sunk by the Allies as well as those sunk in collisions, training accidents, weather, etc.

Year	Month	Ships sunk or damaged by U-boats		U-boats lost	Comments
		Sunk	Damaged		
1939					
1939	9	50	2	2	
1939	10	34	3	5	
1939	11	29	1	1	
1939	12	42	4	1	
1940					
1940	1	56	2	2	
1940	2	51	3	5	
1940	3	26	0	3	
1940	4	10	1	4	
1940	5	16	1	1	HMCS Ypres sunk in Halifax, not due to enemy action.
1940	6	62	4	1	HMCS Fraser sunk off the coast of France, not due to enemy action.
1940	7	41	2	2	First merchant ship sunk in the southern Atlantic
1940	8	57	9	2	First merchant ships sunk west of Iceland
1940	9	57	7	1	
1940	10	60	12	1	HMCS Bras D’or sank in the Gulf of St. Lawrence, not due to enemy action. HMCS Margaree sunk west of Ireland, not due to enemy action.
1940	11	33	3	2	
1940	12	41	9	0	
1941					
1941	1	15	0	0	
1941	2	44	3	0	
1941	3	40	10	5	HMCS Otter sunk off of Halifax harbour, not due to enemy action.
1941	4	44	4	2	Merchant ship sinkings start moving further west, towards Greenland
1941	5	63	3	1	Merchant ship sinkings continue to move west
1941	6	60	5	4	Merchant ship sinkings within a few hundred kilometers of Newfoundland
1941	7	18	3	0	
1941	8	32	1	4	
1941	9	56	4	2	HMCS Levis sunk off the coast of Greenland. First merchant ships sunk off the coast of South America.

Year	Month	Ships sunk or damaged by U-boats		U-boats lost	Comments
		Sunk	Damaged		
1941	10	45	6	2	Merchant ship sinkings moving closer to Newfoundland, first sinking by U-boat in the Mediterranean Sea.
1941	11	17	0	5	Merchant ship sinkings off the coast of Labrador
1941	12	27	1	10	HMCS Adversus sunk near Shelbourne, Nova Scotia, not due to enemy action. HMCS Windflower sunk off the coast of Newfoundland, not due to enemy action.
1942					
1942	1	58	8	3	Most merchant ship sinkings in the western Atlantic, from Newfoundland to South Carolina.
1942	2	70	12	2	HMCS Spikenard sunk south of Iceland. All but 3 merchant ships sunk and 1 damaged in the western Atlantic and the Caribbean.
1942	3	85	13	7	All but 18 merchant ships sunk and 1 damaged in the western Atlantic and the Caribbean, mainly off the US coast.
1942	4	77	12	2	All but 10 merchant ships sunk and 1 damaged in the western Atlantic and the Caribbean, mainly off the US coast.
1942	5	126	20	4	All but 14 merchant ships sunk and 1 damaged in the western Atlantic and the Caribbean. First merchant ships sunk in the Gulf of St. Lawrence, off the Gaspé Peninsula in Quebec. First merchant ships sunk in the Gulf of Mexico.
1942	6	135	11	3	All but 18 merchant ships sunk and 2 damaged in the western Atlantic and the Caribbean.
1942	7	98	11	12	Merchant ship sinkings begin to drop in the western Atlantic and the Caribbean.
1942	8	114	17	9	Fewer merchant ship sinkings off the coast of North America but increase in the Caribbean and off the coast of South America.
1942	9	101	15	10	HMCS Ottawa sunk in the North Atlantic. HMCS Racoon sunk off the Gaspé Peninsula. One merchant ship sunk in the St. Lawrence River, less than 100 km from Rimouski, Quebec. First merchant ship sinkings by U-boats off the coast of southern Africa and in the Indian Ocean.
1942	10	105	14	16	
1942	11	123	19	13	HMCS Charlottetown sunk in the St. Lawrence River about 11 km from Cap Chat, Quebec.
1942	12	63	13	5	
1943					
1943	1	45	4	7	
1943	2	70	18	18	HMCS Louisburg sunk in the Mediterranean, off the coast of Algeria. HMCS Weyburn sunk in the Mediterranean, east of Gibraltar.
1943	3	108	23	15	
1943	4	49	8	17	
1943	5	45	4	42	
1943	6	21	6	16	
1943	7	51	11	38	

Year	Month	Ships sunk or damaged by U-boats		U-boats lost	Comments
		Sunk	Damaged		
1943	8	26	4	25	
1943	9	22	3	10	HMCS Chedabucto sank near Rimouski, Quebec, not due to enemy action. HMCS St. Croix sunk south of Iceland.
1943	10	28	3	26	
1943	11	13	1	19	First time that U-boat losses exceeded convoy sinkings.
1943	12	14	1	8	
1944					
1944	1	16	4	14	
1944	2	25	3	22	One merchant ship sunk within about 60 km of Halifax, Nova Scotia.
1944	3	21	0	24	
1944	4	11	1	21	HMCS Athabaskan sunk in the English Channel.
1944	5	11	6	23	HMCS Valleyfield sunk off the coast of Newfoundland.
1944	6	18	4	24	U-boats concentrated attacks in the English Channel against the Allied fleet during the invasion of Normandy, France.
1944	7	18	7	23	Motor Torpedo Boats (MTBs) 460 and MTB 463 sunk in the English Channel
1944	8	35	2	32	HMCS Alberni sunk off the south coast of England
1944	9	13	2	20	HMCS Regina sunk off the southwest coast of England.
1944	10	9	1	9	HMCS Skeena sunk in Iceland, not due to enemy action. One merchant ship damaged by a U-boat in the St. Lawrence River, about 60 km from Matane, Quebec.
1944	11	9	2	7	One merchant ship damaged by a U-boat in the St. Lawrence River, about 15 km north of Matane, Quebec. HMCS Shawinigan sunk near Port-aux-Basques, Newfoundland.
1944	12	22	3	15	HMCS Clayoquot sunk less than 20 km from Halifax.
1945					
1945	1	20	4	14	One merchant ship sunk and one damaged within 50 km of Halifax.
1945	2	22	2	21	HMCS Trentonian sunk off the south coast of England.
1945	3	19	2	29	HMCS Guysborough sunk off the coast of France
1945	4	18	5	48	HMCS Esquimalt sunk within about 20 km of Halifax.
1945	5	5	1	24	

Appendix 4: More Detailed Information about HMCS Cobalt

A4.1 Size

The Cobalt was not a large ship. She was 205 feet long and 33 feet wide (known as the beam in nautical terms). She had a draft of 11.5 feet meaning that up to 11.5 feet of the ship would be submerged below the water line. She had a displacement of 925 long tons. Displacement is a measure of how much ships weigh.

Given the small size of Flower class corvettes like the Cobalt, they could be built in shipyards along the St. Lawrence River and the Great Lakes. Thus, in addition to being built in shipyards capable of building larger ships in eastern locations like Montreal, Quebec City, and Saint John and in shipyards on the west coast around Vancouver and Victoria, they were also built at shipyards in Ontario in Kingston, Collingwood, Midland, and Port Arthur. Almost half of all corvettes built in Canada were built in these shipyards. This allowed the RCN and the allied war effort to take advantage of ship-building capacity that would otherwise be idle.¹⁴⁶

Although the size of the corvettes could be a disadvantage in rough seas, they were also quite maneuverable. This stemmed from their origins in whaling ships but was just as advantageous when hunting submarines.

A4.2 Propulsion, Speed, and Range

The Cobalt had a single propeller driven by a simple, proven design of steam engine that was commonly used in merchant ships. This design was easier to construct and maintain than those commonly used in more advanced warships of the era. They were also very reliable.

The powerplant consisted of two fire tube Scotch boilers that produced steam to feed a 4-cycle triple-expansion reciprocating steam engine that drove the propeller shaft. The engine had an output of 2,750 horsepower.¹⁴⁷

One advantage of this design was that the Scotch boilers held a large reserve of steam which gave the corvettes good acceleration. Unfortunately, this system took up a lot of space, reducing the amount of fuel that Flower class corvettes could carry and therefore limiting their range.¹⁴⁸

This propulsion system gave corvettes a maximum speed of 16 knots (29.6 km/h). Not as fast as many other warships, but adequate to keep up with convoys and chase down submerged submarines.

Flower-class corvettes had a maximum range of 3,500 nautical miles (6,482 km) at 12 knots (22.2 km/h).

¹⁴⁶ Macpherson, Ken and Milner, Marc. 1993. *Corvettes of the Royal Canadian Navy 1939-1945*. Vanwell Publishing

¹⁴⁷ McKay, John and Harland, John. 2010. *The Flower Class Corvette Agassiz (Anatomy of the Ship)*. Conway Maritime Press

¹⁴⁸ <https://legionmagazine.com/en/the-humble-corvette-navy-part-27/>

A4.3 Crew and Accommodations

Flower class corvettes like the Cobalt initially had a crew of 4 officers and 48 ratings. However, as more weapons were added and more electronic systems like radar were added the crews increased to 85 or more men.¹⁴⁹ In February 1944, the Cobalt's crew was listed as 6 officers and 78 ratings.¹⁵⁰

Unfortunately for their crews, the accommodation capacity of the corvettes did not increase accordingly. Accommodations were mainly in the front third of the ships, with some additional space in the back third, the mid-section being occupied almost entirely by the boilers and steam engine. While more accommodation space was added, life aboard the ships became increasingly cramped as crew sizes increased.

On the plus side, the Canadian corvettes used steam from the boilers to heat the ships in the winter, a “luxury” missing on the early corvettes built in the UK.¹⁵¹

A4.4 Camouflage

Camouflage is intended to either conceal animals, people, or objects or to confuse the observer, such as a prey animal or enemy. Although camouflage is all around us in the natural world, it is mostly since the dawn of the 20th Century that militaries have made use of camouflage, with military methods of camouflage influenced by artists as much as by naturalists and other scientists.

Camouflage of naval ships is particularly challenging. It is one thing to conceal an infantryman in the forest, but quite another to attempt to conceal a large warship on the open ocean. During the First World War, Britain, the United States, and several other countries adopted “dazzle” camouflage for warships and merchant ships. Far from trying to conceal the ships, dazzle camouflage made the ships far more visible than if they had been painted the stereotypical “battleship grey”. Dazzle camouflage was designed to confuse using optical illusions – somewhat like a zebra on the savannah. In particular, the intent was to confuse German U-boats by using highly contrasting colours and shapes to make it more difficult to determine the speed and direction of the ships. The goal was to make it more difficult for U-boat commanders to aim accurately when firing torpedoes. It is difficult to assess how effective dazzle camouflage was since the Royal Navy adopted the convoy system at about the same time, but it certainly led to some unique-looking ships!¹⁵²

¹⁴⁹ LeCren, Bruce. 2020. *The Flowers of Canada - The Royal Canadian Navy's Corvettes in World War II*. Originally published in the Nautical Research Journal Spring 2020. <http://www.forposterityssake.ca/RCN-DOCS/Flowers-of-Canada-LeCren.pdf>

¹⁵⁰ HMCS Cobalt, “Fighting Equipment Report”, February 23, 1944. From the archives of the Department of National Defence.

¹⁵¹ McKay, John and Harland, John. 2010. *The Flower Class Corvette Agassiz (Anatomy of the Ship)*. Conway Maritime Press

¹⁵² <https://www.smithsonianmag.com/history/when-british-wanted-camouflage-their-warships-they-made-them-dazzle-180958657/>

Olympic with Returned Soldiers, 1919. The Olympic, sister ship to the RMS Titanic, was used as a troop carrier during the war, transporting Canadian and US troops to Europe and then bringing them home again after the war. Like most troop carriers late in the First World War, she sported a very outlandish-looking dazzle camouflage scheme. (Credit: Painted by Arthur Lismer. Beaverbrook Collection of War Art. Canadian War Museum 19710261-0343.)



After the First World War, naval ships quickly reverted to various shades of grey as camouflage. That remained the case when the Cobalt and other RCN corvettes built early in the war were commissioned. All were painted grey overall.

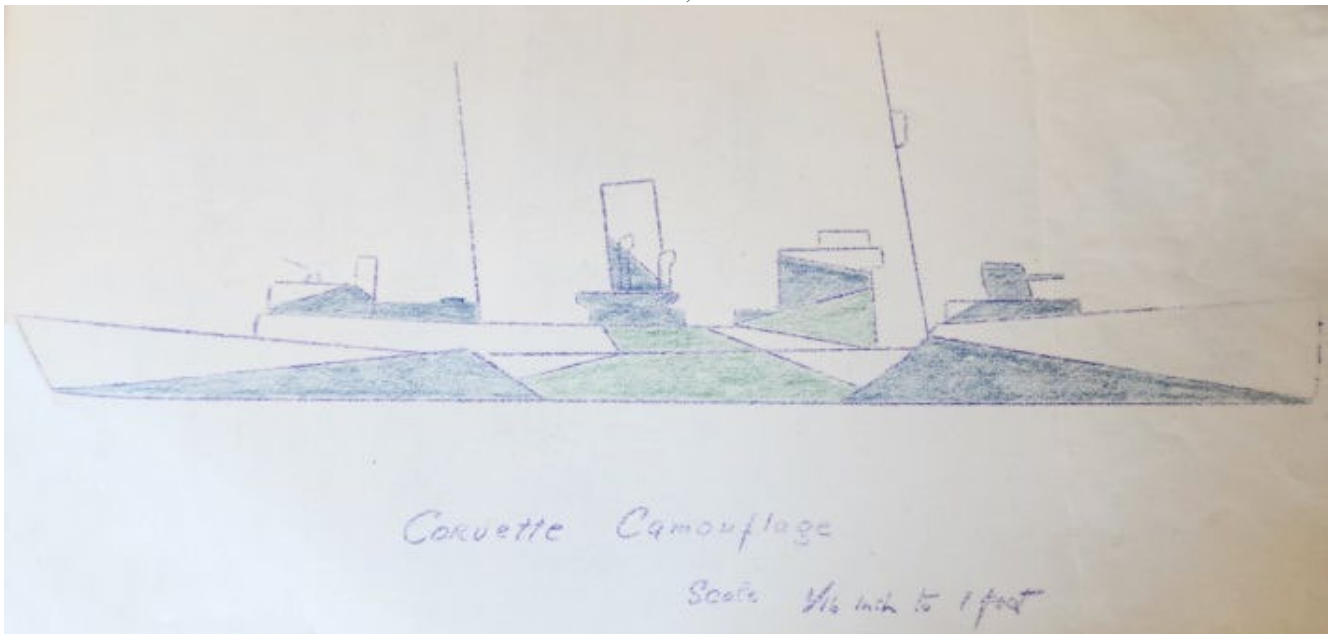
HMCS Kamsack looking pristine in an overall grey paint scheme. Like the Cobalt, the Kamsack was built in Port Arthur, and it is possible that this photo was taken on Lake Superior before the salt water of the Atlantic Ocean had a chance to cause the ship to start rusting. (Credit: source unknown)



In late 1941, the RCN followed the lead of the Royal Navy in adopting a new type of camouflage for use on ships on convoy escort duty. This type of camouflage became known as “Western Approaches”. Western Approaches was referred to as a type of disruptive camouflage scheme. Unlike the First World War dazzle camouflage schemes, Western Approaches was intended to be offensive rather than defensive, allowing a closer approach to U-boats on dark nights or in poor daytime visibility (e.g., overcast or foggy conditions, dawn or dusk). It was not effective on bright sunlit days or bright moonlit nights, although it was still an improvement over using a more traditional medium or dark grey. In the Western Approaches camouflage scheme, most of the hull of the ship was painted white. Patterns of pale green and pale blue were added to the hull and the upper part of the ship.¹⁵³

¹⁵³ Camouflage of Vessels Operating Against U-boats. Lieutenant Peter Scott, Royal Navy Volunteer Reserve. Library and Archives Canada, RG24-D-10, Volume number: 11115

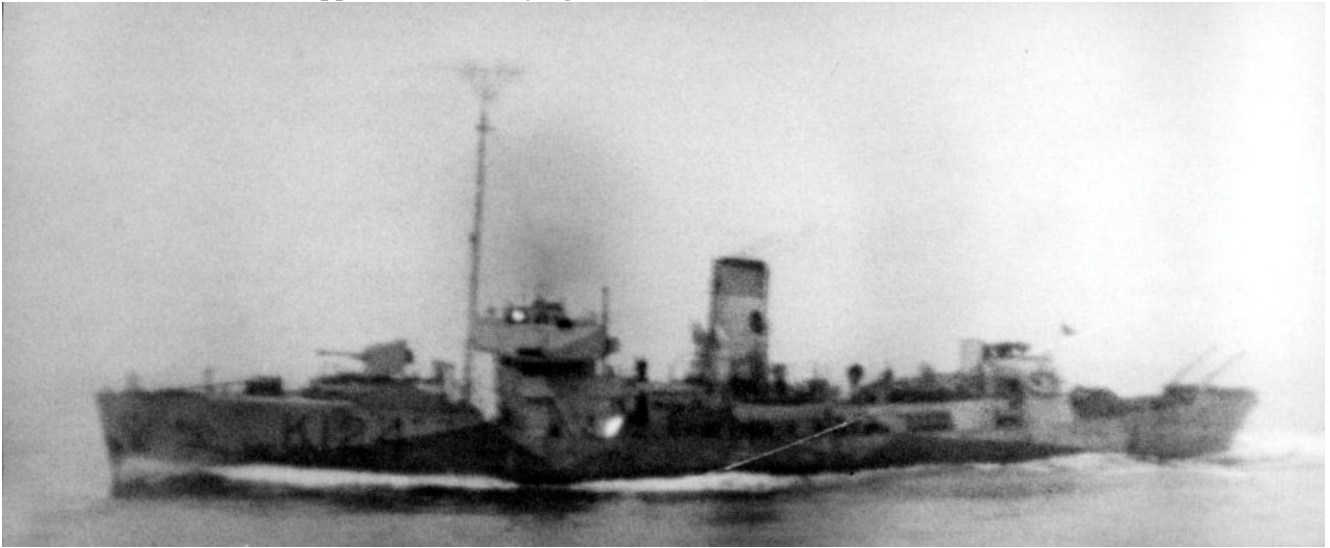
RCN painting instructions for applying Western Approaches camouflage to Flower class corvettes (Credit: Library and Archives Canada, RG24-D-10, Volume number: 11115)



RCN destroyer HMCS Restigouche in Western Approaches camouflage. (Credit: Canadian Navy Heritage website, image negative number CT-284)



HMCS Cobalt in Western Approaches camouflage in 1942. (Credit: source unknown)



HMCS Cobalt, likely in the winter of 1942/1943. The camouflage pattern is consistent with Western Approaches, but the colouring/tones appear to be reversed, with the darker tone on top. This is not the only photo showing this apparent reversal. It is not clear if this was intentional, or if it was due to deterioration of the paint. Some other corvettes did have a reversed scheme such as this, such as HMC Ships Trentonian, Buctouche, Orillia, and Chamby, but mostly later in the war. (Credit: Cobalt Mining Museum. Photo has been digitally restored by the author.)



HMCS Cobalt in a different variation of Western Approaches camouflage in early 1943, after her second refit. (Credit: (Credit: Department of National Defence. Photo has been digitally restored by the author.)



HMCS Cobalt between June 1943 and April 1944, with two dark geometric shapes superimposed on the Western Approaches camouflage scheme. Adding elements such as this was not uncommon. W6 is painted in a circle on the funnel. In June 1943, HMCS Cobalt joined escort group W6 of the Western Local Escort Force, indicating that this photo was taken between June 1943 and April 1944 when the Cobalt went for her final refit. (Credit: Collection of Ronald Judges, courtesy of Chanin Graham, personal communication with the author. Photo has been digitally restored by the author.)



Western Approaches proved very effective. There were even reports of challenges at times with escort ships sending messages via signal lamp due to having difficulty accurately aiming the signal lamp at the other ship. However, the scheme was not applicable in all circumstances. In particular, it was not suitable for ships operating in areas with a significant risk of air attack, such as in the English Channel or the Mediterranean Sea. An October 1942, report by a Royal Navy Reserve lieutenant stated that on a hazy day, a corvette in Western Approaches camouflage was spotted by a Coastal Command aircraft at a range of 20-25 miles. Even at 15 miles, the merchant ships in the convoy were just barely visible. In the Western Atlantic, where there was no threat of air attack, Western Approaches camouflage (or variants of it) remained in use for the balance of the war, although a duller off-white began to replace the white in late 1943.¹⁵⁴

When the Cobalt's third and final refit was completed in July 1944, she was given a distinctive camouflage scheme. The scheme used geometric patterns like those used in Western Approaches, but was much higher in contrast, with the pale green and pale blue of Western Approaches replaced by dark grey on the hull and a medium grey or blue grey on the main gun and other topside features such as the aft gun tub for the anti-aircraft gun. It is not clear why such a high contrast scheme was used for the Cobalt. Few, if any other corvettes used such a high-contrast variant of Western Approaches in the late-war period, making her final camouflage scheme somewhat unique.

¹⁵⁴ Memo from the Commanding Officer, "P553" to Captain (D) Halifax, October 23, 1942. Library and Archives Canada, RG24-D-10, Volume number: 11567, File number: D 0-29-3

HMCS Cobalt in Liverpool, Nova Scotia in July 1944, showing her new, high-contrast camouflage scheme. (Credit: Collection of Edmund Ferris, www.forposterityssake.ca)



Later in the war, the degree of contrast in HMCS Cobalt's camouflage scheme decreased as the white darkened. This may have been in part due to the degree of deterioration of the paint.¹⁵⁵ However, in October 1944, the RCN officially transitioned from using white to off-white (a dull, very light grey).¹⁵⁶ It is likely that as the Cobalt was repainted in the never-ending battle against rust, the white applied in July 1944 was replaced with off-white. A combination of the use of off-white, deterioration of the paint, and of course the inevitable rust all contributed to reducing the degree of contrast in the camouflage scheme.

Possibly the last known photo of HMCS Cobalt, April 1945, likely in Halifax. The reduced degree of contrast in her camouflage scheme compared to the previous photo in July 1944 is clearly evident. (Credit: Department of National Defence. Photo has been digitally restored by the author.)



¹⁵⁵ A naval message dated September 6, 1942, referred to the quality of paint and that dulling of the white paint was not required. "After one cycle paint no longer appears white." It is not clear what "one cycle" refers to, but it is evident that white paint did not stay white for very long in the harsh conditions of the north Atlantic. HMCS Cobalt's pristine white appearance in Liverpool in July 1944 didn't last very long. Library and Archives Canada. RG24-D-10, Volume number: 11567, File number: D 0-29-3

¹⁵⁶ Rear Admiral Murray. October 17, 1944. Ships' Camouflage Designs. Library and Archives Canada. RG24-D-10, Volume number: 11577, File number: D 03-36-4

It is unfortunate that there are not more colour photographs of RCN ships in the Second World War. Records of actual colours applied to individual ships, apart from the Western Approaches colours, are limited. However, black-and-white photos and other records provide ample evidence that a wide range of camouflage schemes and colours were used. While not the same riot of colour and patterns that ships featured late in the First World War, there is no doubt that the array of escort ships tied up in ports like Halifax and St. John's defied the stereotype of "battleship grey" and would have made for quite the sight.

In hindsight, the Second World War was likely the high point of innovation and variety in naval camouflage, given both the number of combatants and the array of naval battlefields which included all of the world's major oceans. Since the war, steady improvements in radar and other sensor systems have made naval camouflage obsolete. The challenge to modern navies is to make their ships less visible not to the human eye, but to radar and other sensors. As a result, in nearly all navies around the world, warships are painted shades of light or medium grey. Rather dull looking!

However, in recent years both the RCN and Royal Navy have re-introduced camouflage, not to hide their ships, but as a tribute to the sailors who fought and died in the Battle of the Atlantic. In 2019, HMC Ships Regina and Moncton were painted in disruptive camouflage schemes, in commemoration of the 75th anniversary of the end of the Battle of the Atlantic.¹⁵⁷

HMCS Regina. Late in the Second World War, several RCN destroyers including Saskatchewan, Ottawa, and Kootenay had a similar camouflage scheme applied. (Credit: Corporal Jay Naples, Copyright: ©2020 DND-MDN Canada.

<https://www.facebook.com/RoyalCanadianNavy/photos/a.388933424801732/1114811932213874/?type=3>



¹⁵⁷ <https://www.rogerlitwiller.com/2023/01/12/hmcs-regina-2/>



A4.5 Radar

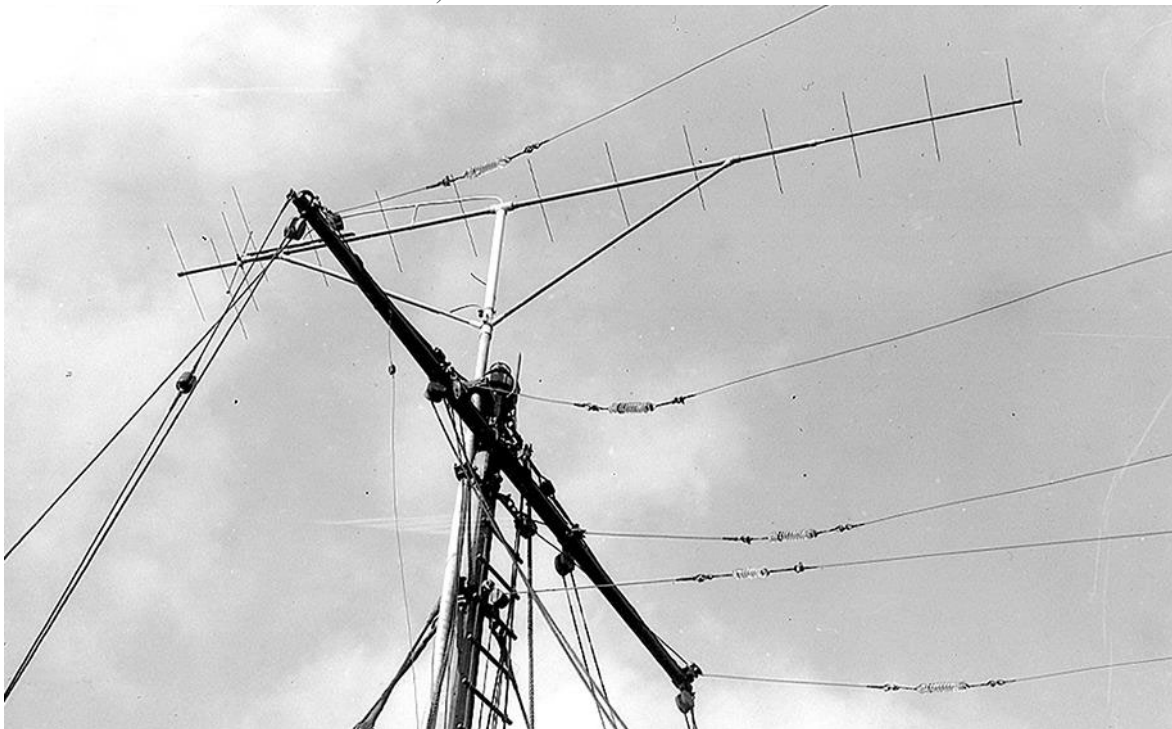
At the start of the war, radar was still in its infancy and there were no radar sets suitable for installation on the early corvettes built in the UK and Canada. However, radar technology improved very rapidly. Its potential value to escort ships like the corvettes was quickly recognized, since radar could be used to detect other ships, day or night, in any weather conditions. This would help avoid collisions in convoys and detect enemy surface ships. Just as important, radar could detect surfaced submarines and, as radar technology improved, radar could detect the periscopes of submarines and breathing apparatus for submarines introduced late in the war that allowed them to operate on their diesel engines and recharge their batteries without surfacing.

Work in Canada led to the first radars installed on Canadian corvettes, beginning in late 1941. This radar, known as Type SW1C (Surface Warning 1st Canadian), was not very effective, but it was a start.¹⁵⁸ This radar featured a distinctive antenna installed atop the ship's mast that was shaped a bit like a rake. It had to be turned by hand using a crank inside the operator's room to complete a "sweep" to look in all directions around the ship. In mid-1942, the improved SW2C radar was released and was installed on many corvettes.¹⁵⁹ This radar had an improved antenna that was different from the SW1C antenna, making it possible to identify the type of radar installed based on good-quality photos.

¹⁵⁸ More information on the SW1C and the improved SW2C radar is available here: <http://jproc.ca/haida/radar.html>

¹⁵⁹ <http://jproc.ca/haida/radar.html>

Antenna for SW1C radar atop the mast of Flower class corvette HMCS Drumheller in Halifax in November 1941. (Credit: <https://www.canada.ca/en/navy/services/history/naval-service-1910-2010/battle-atlantic-1939-1945.html>)



“X” shaped antenna for the SW2C radar atop the mast of HMCS Sackville (author’s photo)



In the meantime, work in the UK led to the introduction of a much more advanced radar, known as Type 271, into a few Royal Navy ships in 1941. Installations aboard Canadian ships began in 1942, but due to difficulties in acquiring the new radar from the British, who were prioritizing installation on Royal Navy ships, the RCN's transition to this much-improved radar was slower. There just were not enough of them for everyone.¹⁶⁰

Like the Type SW1C and SW2C, the Type 271 can be easily identified in photos. The radar had a large Perspex (plexiglass) cover to protect it from the elements. Due to its appearance, this was nicknamed "the lantern". The radar and lantern were installed on top of a small hut that housed the radar equipment and served as the office for the radar operator. The hut and lantern were installed on the aft part of the bridge and formed a very distinctive structure.

Type 271 radar installed on the Flower class corvette HMCS Collingwood. The "lantern" housing the antenna is visible atop the small hut where the radar office was located. (Credit: Library and Archives of Canada, www.forposterityssake.ca)



¹⁶⁰ <http://jproc.ca/haida/radar.html>

The author has not been able to find any written documentation confirming when each type of radar was fitted on HMCS Cobalt. However, given the distinct visual characteristics of the antennas for each type of radar, it is possible to use the many photos taken of the Cobalt during her career, as well as the dates when she went for major refits, to determine the timeframes when each type of radar was installed. The refit dates are important, since installing new radar systems, particularly SW1C and Type 271, required significant work on the ship's structure and electrical systems to install an operator's office, the associated equipment, and the antenna. This type of work could not be completed in a few days while a ship was in port between convoy duty, so it must have been completed during one of the Cobalt's three refits completed in Liverpool, Nova Scotia. The one possible exception to this is the upgrade from SW1C to SW2C. It is possible that this upgrade could have been completed in port, and operator training required to transition from SW1C to SW2C would likely have been more limited, potentially making this upgrade possible between major refits.¹⁶¹

SW1C: The author has concluded that SW1C radar was installed as part of HMCS Cobalt's first refit, completed between December 1941 and January 1942. By the end of 1941, 15 RCN corvettes had been fitted with SW1C, so that timing is consistent.¹⁶²

Type 271: The author has concluded that Type 271 radar was installed as part of HMCS Cobalt's second refit, completed in March and April of 1943. Several photos show her with the distinctive "lantern" for the Type 271 radar antenna that were taken before her third refit, completed between March and June 1944.¹⁶³ The ship's February 23, 1944, Fighting Equipment Report confirms that Type 271 was installed before her third refit.¹⁶⁴

During the 1944 refit, the Perspex cover originally installed on the Cobalt when the Type 271 radar was installed was replaced with a frameless design. Operational experience had shown that the wooden frame around earlier lanterns caused interference in the radar signal.

SW2C: It is less certain when HMCS Cobalt was upgraded to SW2C radar. In photos taken between her second and third refits, the SW1C radar antenna is visible. This includes one photo likely taken after June 1943 when the Cobalt joined Escort Group W6. However, this is contradicted by a "Report on Working Up" written in June 1943 to describe the state of the ship and her crew after a workup period following the completion of her second refit. That report states that SW2C is installed but makes no mention of Type 271.¹⁶⁵ Given the differences in the SW1C and SW2C antennas and the photographic evidence that the SW1C antenna was still installed after the Cobalt's second refit, it is not possible to definitively conclude when SW2C was installed without further documentation. It is not clear why the Type 271 radar is not listed in the Report of Working Up when there can be no doubt that it was installed during the Cobalt's second refit. Perhaps it was partially installed but not yet fully operational at the time of the

¹⁶¹ This is an "educated guess" on the author's part, based on the limited amount of information available about each type of radar. SW2C had a different antenna and different equipment in the radar office, but upgrading from SW1C to SW2C would not have required major structural work (e.g., building a new operator's office) or electrical work to facilitate the upgrade. Perhaps not something that could have been completed in a couple of days, but not something that required a month of two out of service as part of a major refit.

¹⁶² <http://jproc.ca/haida/radar.html>

¹⁶³ During her third refit, the Cobalt's forward deck or fo'c'sle (short for forecandle) was extended aft to improve seakeeping and crew comfort in rough seas. This was a major change that significantly altered the ship's appearance, making it very easy to distinguish between photos of HMCS Cobalt taken before and after her third refit.

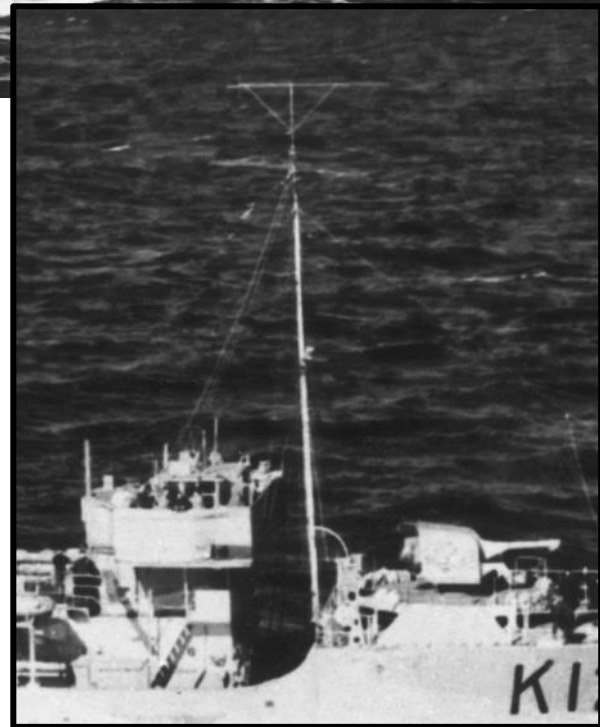
¹⁶⁴ Obtained from the archives of the Department of National Defence.

¹⁶⁵ Source: Library and Archives Canada, RG24, Volume 6909.

workup, pending the final installation of some components. Again, more documentation would be needed to be certain when Type 271 was operational aboard HMCS Cobalt.

The ship's February 23, 1944, Fighting Equipment Report states that, in addition to Type 271, the Cobalt also had SW2C at that time.¹⁶⁶ Despite the installation of the much-improved Type 271 radar, most Canadian escort ships retained the SW1C/SW2C until the end of the war. Although inferior, the SW1C/SW2C radars were "retained by the RCN for aircraft detection and a reserve set."¹⁶⁷

HMCS Cobalt with Type SW1C radar installed. The antenna is the distinctive T-shaped structure atop the mast. Taken between January 1942 and March 1943. (Credit: unknown. Photo has been digitally restored by the author.)



¹⁶⁶ Obtained from the archives of the Department of National Defence.

¹⁶⁷ <http://jproc.ca/haida/radar.html>

SWIC radar installed aboard the Flower class corvette HMCS Camrose in December 1941. The steering wheel was used to manually rotate the radar antenna. (Credit: <https://www.canada.ca/en/navy/services/history/naval-service-1910-2010/battle-atlantic-1939-1945.html>)



HMCS Cobalt with both Type SW1C and Type 271 radar. The antenna for the Type 271 radar is housed in the distinctive “lantern” just aft of the bridge, with the equipment and operator in the small hut immediately below the lantern. The date of this photo is unknown, but it was likely taken between taken between April and June 1943. (Credit: Department of National Defence. Photo has been digitally restored by the author.)



A4.6 ASDIC

ASDIC is known more commonly now as sonar. It was invented in the UK late in the First World War and is named after the Anti-Submarine Detection Investigation Committee (ASDIC).

As described by the Juno Beach Centre:¹⁶⁸

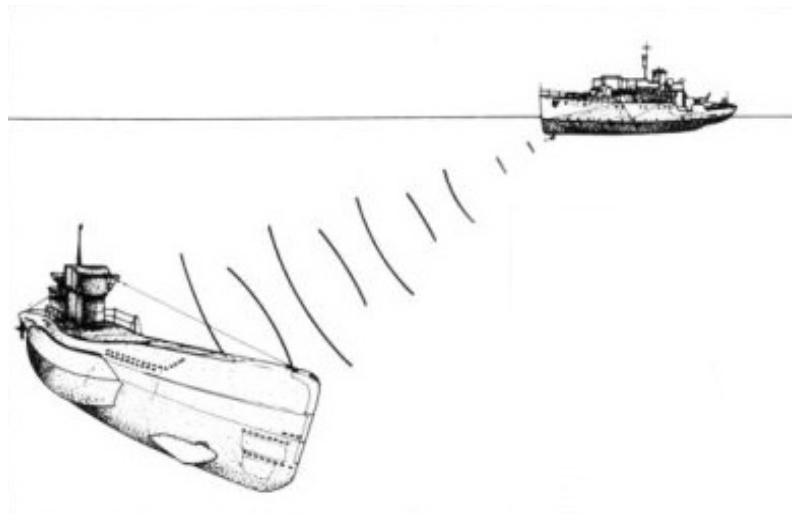
“The ASDIC emits a sound signal at regular time intervals. The sound waves travel through water and, when they hit a solid body, bounce back as an echo, which is intercepted, amplified and then heard by the operator. The return sound wave also sets in motion a stylus that records the echo on a chart. Position is estimated based on the direction of the echo, and distance based on the delay between emission and interception. The operator will immediately notify the bridge of any suspicious reading.

ASDIC sound impulses use a frequency between 14 and 22 kilocycles; the operator of each ship in a convoy must select a frequency different from that used by the neighbouring vessels; otherwise, he could intercept the original signal from another ASDIC, resulting in a very loud “ping”. The transmitter is located in a dome under the hull and the signal is sent forward. In 1940, ASDIC detection could locate a submarine, a whale or a school of fish at a distance of 2,000 metres.

The ASDIC system has its limitations: it is affected by the turbulence created by propellers or by the motion of ships; it becomes inefficient, therefore, once the submarine has succeeded in slipping inside the convoy. In addition, when there are layers of water of contrasting temperatures, the signal is deflected and readings are unreliable, as Canadian operators realized when tracking German submarines in the Gulf of St. Lawrence.”

Another limitation of ASDIC is that it could only “see” ahead of the ship. Once a ship passed over a U-boat and launched depth charges (see below), the submarine was in the ship’s blind spot. This could be overcome when ships worked in teams to detect and attack submarines.¹⁶⁹

Despite these limitations, ASDIC was an extremely important tool, as it gave convoy escorts like the Cobalt their only way to see below the surface of the ocean and know if a submarine might be nearby. Without ASDIC, the escorts would have been completely blind unless a submarine came to the surface.



ASDIC worked by transmitting a sound underwater, and the operators then used an underwater microphone known as a hydrophone to hear the reflections of the sound off of a contact, potentially a

¹⁶⁸ <http://www.junobeach.org/canada-in-wwii/articles/anti-submarine-detection/>

¹⁶⁹ Source for figure: <https://merchantships2.tripod.com/ian/ianfergusonshomepage2.html>

submarine. Those hydrophones could pick up many other sounds too, from whales to the sounds of ships' propellers, and the sound of submarines below the surface. They also picked up the sound of exploding depth charges – something that could be harmful to the hearing of the ASDIC operators. As a result, the hearing of ASDIC operators was tested periodically.

The ASDIC consisted of several components:¹⁷⁰

- A sound pulse generator mounted aboard the ship.
- A unit inside a protective dome that protruded below the underside of the ship's hull that transmitted sound and had hydrophones to detect underwater sounds.
- Equipment to allow operators to hear and record the sounds and determine the range, bearing, and depth of the contact. This equipment was housed close to the bridge due to the need for close coordination between ASDIC operators and the commanding officer and other crew on the bridge that would be directing actions if a submarine were detected.

The Cobalt was initially equipped with Type 123A ASDIC. Unfortunately, this type of ASDIC was already considered obsolete at the beginning of the war, but more modern types were not available in sufficient numbers to equip all of the new ships being built, particularly in Canadian shipyards far from the supplies in the UK.¹⁷¹

The Cobalt received a more modern and much more effective Type 144 ASDIC as part of her final refit completed in April to July 1944.¹⁷²

As important to detecting and combatting submarines as ASDIC was the type of compass installed on the ship. Both ASDIC and compass readings were needed to know the direction, relative to the ship (the bearing) of a submerged submarine. Early Canadian-built corvettes, including the Cobalt, had older magnetic compasses. More modern gyroscopic compasses were not available in sufficient numbers to equip the large number of ships being built in Canada in the early war period.

Magnetic compasses were not nearly as effective as gyroscopic compasses, especially on a moving ship that was constantly pitching in the sea. Gyroscopic compasses were electronically controlled and stabilized using a gyroscope to give an accurate reading of the ship's course regardless of how much the waves were tossing the ship around. In addition, with a gyroscopic compass system, repeaters could be installed in various locations, including the ASDIC hut, ensuring that both the crew on the bridge and the ASDIC operators had the same compass reading. In contrast, reading a magnetic compass was as much guessing the true direction as anything else, since the compass would never stabilize on a fixed reading due to all of the movement, even if the ship's course (forward direction) was steady. Once the person on the bridge had taken a compass reading, this was communicated verbally to the ASDIC operators, by which time the reading had already changed. This made it harder to maintain an accurate

¹⁷⁰ http://jproc.ca/haida/asdic_sonar_sys.html

¹⁷¹ <https://legionmagazine.com/en/the-humble-corvette-navy-part-27/>

¹⁷² More information on the Type 144 ASDIC is available at: http://jproc.ca/sari/asd_et2.html

course, especially at night – an important factor in convoys when ships sailed close together. It also made accurate attacks U-boats more difficult and more art than science.^{173,174}

HMCS Cobalt's magnetic compass was even more unreliable than most. A May 31, 1942, memo from the commanding officer stated that:

“The compasses of this ship have never worked satisfactorily and of recent months have been getting steadily worse. It has been observed that after adjustment they are quite satisfactory until the ship encounters heavy weather. Shortly after the ship begins to ship water they become so unreliable as to be useless. Even if by some fortuitous circumstance an azimuth can be observed, it is useless, as the error never remains constant for more than an hour or so. If in company, our only method of obtaining a true course is to line up with other ships, if alone the sounding machine and D.F. have to be relied on, both of which are liable to go wrong at any time.”¹⁷⁵

The Cobalt's faulty magnetic compass contributed to an incident on July 22, 1943. That morning, the Cobalt had departed Halifax in dense fog. The crew lost sight of the ship they were following through the narrowest portion of the harbour and were challenged to maintain an accurate course due to the compass problems. The mouth of Halifax harbour was protected from U-boats by a net suspended from cables. A pair of boats referred to as gate vessels opened the net to allow ships to enter and exit the harbour. As the Cobalt approached the gate vessels, it went off course and its propeller became tangled in the cable supporting the anti-submarine net. Fortunately, the engines were shut down before any damage could be done, but a floating crane was needed to disentangle the Cobalt, and she was taken back to port by a tugboat. She was inspected by divers before being cleared for duty. Both the fog and faulty compass contributed to the collision, as did the currents associated with the falling tide.¹⁷⁶

When the new ASDIC was installed on the Cobalt in 1944 a gyroscopic compass was also installed, vastly improving her ability to accurately attack submarines. The ASDIC and compass readings were also linked through a fire control system to the hedgehog, a new anti-submarine weapon also installed in 1944.

The new ASDIC equipment was installed in a new enclosed hut installed immediately in front of the bridge. This hut and the bridge itself, much enlarged and altered since built in 1940, gave the Cobalt and other corvettes a much warship-like appearance.

¹⁷³ LeCren, Bruce. 2020. *The Flowers of Canada - The Royal Canadian Navy's Corvettes in World War II*. Originally published in the Nautical Research Journal Spring 2020. <http://www.forposterityssake.ca/RCN-DOCS/Flowers-of-Canada-LeCren.pdf>

¹⁷⁴ <https://legionmagazine.com/en/trying-to-stay-ahead-of-the-pack/>

¹⁷⁵ Memo from Commanding Officer, HMCS Cobalt, to Captain “D” HMCS Sambro, Halifax. May 31, 1942. Library and Archives Canada, RG24, Volume 11569.

¹⁷⁶ Memo from the Commanding Officer, HMCS Cobalt, to Captain (D) Halifax. July 24, 1943. Library and Archives Canada. RG24, Volume 11569.

HMCS Shediac. The box-like structure on the front of the bridge is the ASDIC hut. (Credit: Ken Macpherson / Naval Museum of Alberta - Canadian Navy Heritage website. Image Negative Number MC-2935.)



Hearing test results for the Cobalt's ASDIC operators, March 17, 1945. The operator's service numbers have been removed to protect privacy. (Credit: Library and Archives Canada, RG24, Volume 11358)

H.M.C.S. COBALT

(73-B)

DATE: March 17, 1945

TO: THE EXECUTIVE OFFICER,
H.M.C.S. COBALT,
F.M.O. HALIFAX, N.S.

File

FROM: R.C.N. MEDICAL RESEARCH UNIT,
R.C.N. HOSPITAL ANNEX,
HALIFAX, N.S.

SUBJECT: Hearing Test results for Asdic Personnel

(Date: 16/3/45)

Name	Freq. Discrim. Minimum Range (#1)	Maximum hearing loss in decibels (#2)
------	--------------------------------------	--

Hutchison G.	22	15
Jervis F.	27	15
James C.W.	19	15
Harrison W.C.	22	15
Sweet V.	25	35
Rourke G.J.	11	15

#1. This is a measure of the smallest difference in frequency which can be recognized. The smaller the value the better in his Freq. Discrim. Values of 35 and under are a pass.

#2. This is a measure of the ability to hear. The value recorded is the maximum loss in the range of frequencies from 50 to 5,000 c.p.s. Values of 20 and under are a pass.

A4.7 Armament

Main gun

The Cobalt was armed with a 4-inch Mk IX naval gun. This gun was mounted on a platform in front of the bridge near the bow of the ship and could be used against submarines on the surface as well as surface ships. The gun fired a 31-pound (14.1kg) shell to a maximum range of 13,850 yards (12,660m). The Mk IX was from the First World War, and in the early shipbuilding in the Second World War, guns were taken out of storage for installation on small ships like corvettes and minesweepers.¹⁷⁷

The Mk IX differed from more modern guns in several ways. Perhaps the most significant difference was that it could not be elevated enough to be effective against aircraft. For most Flower class corvettes, operating in the western Atlantic where there was little risk of air attack, this was not a concern, but in other theatres of the war, this was a significant limitation. Later-built improved, extended endurance Flower class corvettes were fitted with newer QF or quick-firing 4-inch guns that could be elevated to a higher angle, making them more effective against aircraft. Older corvettes like the Cobalt retained their Mk IX guns throughout the war.¹⁷⁸

The other key difference was the ammunition. The more modern QF guns had fixed ammunition, similar in concept to a rifle bullet, but much larger. In fixed ammunition, the shell itself is fixed to a brass casing that holds the propellant. One-piece ammunition of this type makes it easier to reload the gun, increasing the rate of fire, hence the designation QF. In contrast, the Mk IX had separate shells, with propellant in fabric bags. There was no brass casing. Because the shells were separate, they could be stored in small racks around the perimeter of the gun platform. Propellant charges were stored in ready use lockers adjacent to the gun platform, with additional ammunition stored below decks in the magazine.

There was little in the way of a fire control system for the gun. The gun crew had to aim at a target using the gun sight ... on a moving ship pitching about in the waves. This differed significantly from the sophisticated fire control systems on larger ships which were also more stable gun platforms in rough seas. As a result, the accuracy of the gun was limited, except at very close range. It also didn't help that surfaced submarines were quite small targets to aim at.

¹⁷⁷ McKay, John and Harland, John. 2010. *The Flower Class Corvette Agassiz (Anatomy of the Ship)*. Conway Maritime Press

¹⁷⁸ Same reference as above.

Crew firing the 4" Mk. IX gun of a Flower class corvette while on work-up near Pictou, Nova Scotia.¹⁷⁹ Shells can be seen stored in the small racks around the perimeter of the gun platform. The sailor on the left is opening a leather case used to store the propellant charges. The case protected the fabric-encased explosive from sparks or other sources of ignition. In the right foreground is an empty leather case, perhaps from the round just fired. (Credit: Library and Archives Canada Photo, MIKAN No. 3396602, <https://www.silverhawkauthor.com/post/royal-canadian-navy-rcn-1-history-and-heritage-1939-1943>)



Some would argue the corvette's most effective weapon against a submarine on the surface was actually the bow of the ship itself and not the main gun. Given the maneuverability and acceleration of corvettes, they could chase down a surfaced submarine, particularly in poor visibility or if their camouflage worked long enough to get close enough that the submarine could not submerge in time. There are several documented cases of corvettes ramming submarines. While the corvette's bow would be damaged, a direct hit would do far more damage to the submarine and could either sink the submarine or damage it to the extent that it could no longer submerge, making it highly vulnerable to further attacks by surface ships or aircraft.¹⁸⁰

¹⁷⁹ This photo is sometimes captioned as having been taken aboard a Bangor class minesweeper. However, this is incorrect. Bangor class minesweepers also used the Mk. IX gun, but they did not have a raised gun platform like the Flower class corvettes.

¹⁸⁰ LeCren, Bruce. 2020. *The Flowers of Canada - The Royal Canadian Navy's Corvettes in World War II*. Originally published in the Nautical Research Journal Spring 2020. <http://www.forposterityssake.ca/RCN-DOCS/Flowers-of-Canada-LeCren.pdf>

The first U-boat to be sunk by the RCN was U-501 which was attacked by the corvettes HMC Ships Chambly and Moose Jaw in September 1941. The Chambly launched depth charges which damaged the submarine, forcing it to surface close to the Moose Jaw. The Moose Jaw's commanding officer opted to ram the submarine. While gunfire may also have contributed, the submarine was sunk by the combination of depth charges forcing it to the surface and then ramming by the Moose Jaw.¹⁸¹

Photo taken as the RCN destroyer HMCS Assiniboine rammed U-210. (Credit: Department of National Defence / National Archives of Canada, PA-037445)



Depth charges

Depth charges were first used against U-boats during the First World War. They were barrel-shaped and filled with high explosives. The Mark VII depth charge used during the Second World War weighed 410 pounds (186 kg) and contained 396 pounds (180 kg) of explosives.¹⁸²

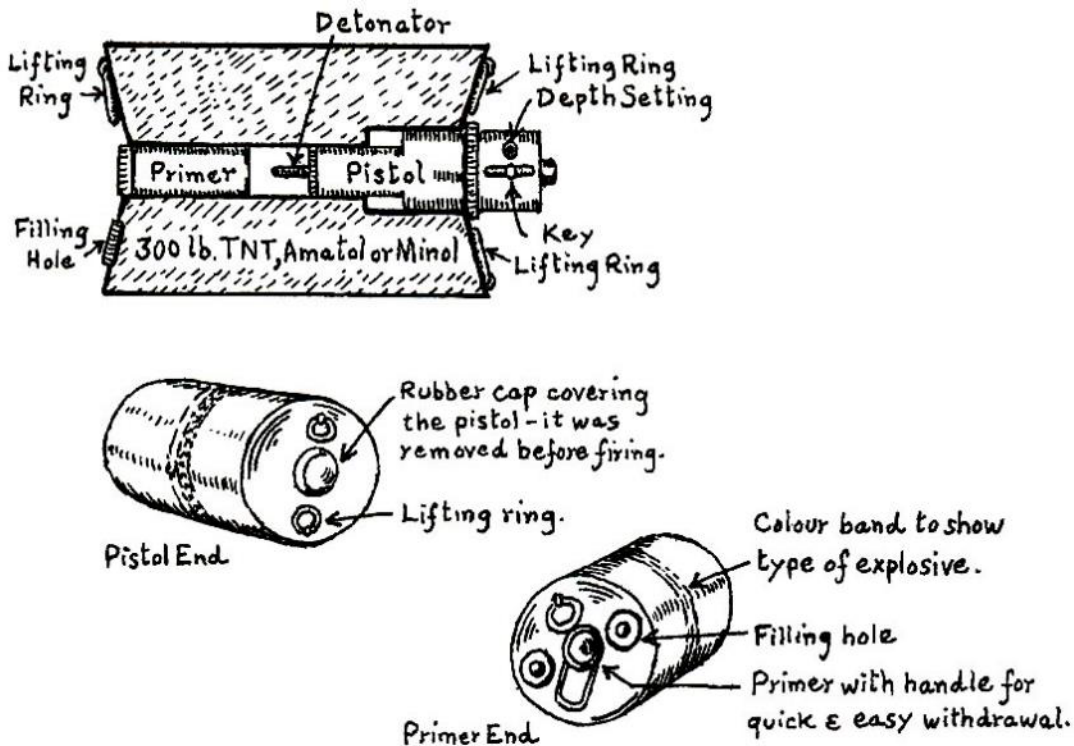
They were detonated by a fuse or “pistol” that was activated by water pressure. The pistol would be pre-set to explode at a certain depth. Early in the war the maximum depth was 150 feet, but later in the war depth charges could be set to explode as deep as 700 feet.¹⁸³

¹⁸¹ <https://thediscoverblog.com/2016/09/09/first-german-submarine-sunk-by-the-royal-canadian-navy/>

¹⁸² http://jproc.ca/haida/former_weapons.html

¹⁸³ <http://canadasnavalmemorial.ca/wp-content/uploads/2013/07/Episode-20-Chapter-6-part-2.pdf>

Parts of a depth charge (credit: drawing by Latham Jenson, http://jproc.ca/haida/former_weapons.html)



Depth charges were launched either by rails mounted on the stern of the ship or by depth charge throwers, a type of mortar that would launch the depth charges off the sides of the ship. Typically, a “pattern” of discharges would be launched using both rails and throwers to increase the likelihood of a successful attack. Weights could be added to the depth charges to make them sink faster, and the order of launching could be adjusted to make a more complex 3-dimensional detonation pattern, further increasing the odds of success.¹⁸⁴

¹⁸⁴ <https://legionmagazine.com/en/the-humble-corvette-navy-part-27/>

Depth charge launching rails on the stern of HMCS Sackville in Halifax. The small hoist between the rails is used to lift depth charges onto the rails. (author's photo)



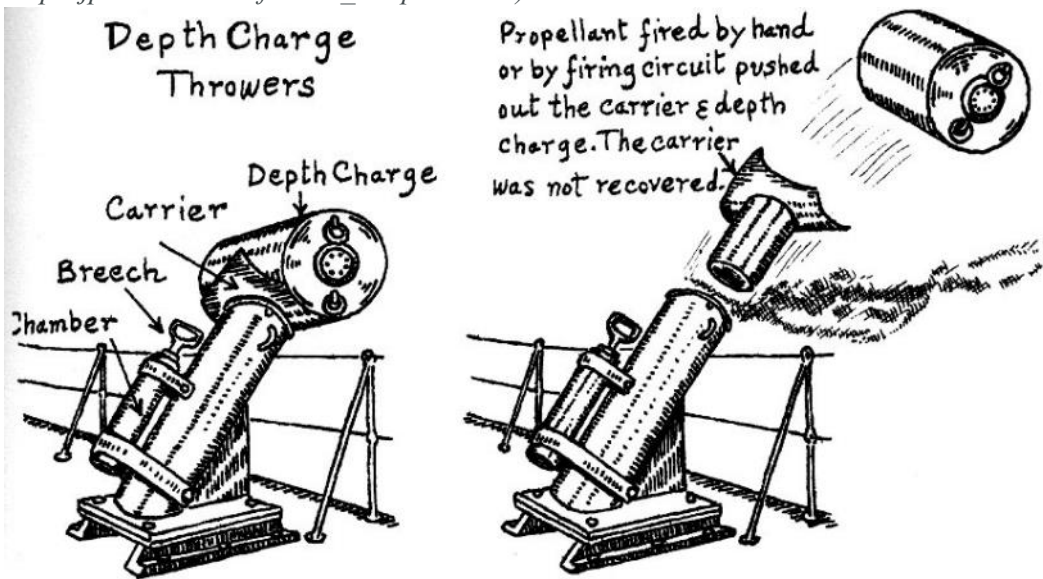
Loading the depth charge rails of the Royal Navy corvette HMS Dianthus. (Credit: <http://www.cbrnp.com/RNP/Flower/ARTICLES/Dianthus-1.htm>. Photo has been digitally restored by the author.)



A pair of depth charge throwers aboard HMCS Bittersweet. (Credit: Collection of Ross Maize, www.forposterityssake.ca. Photo has been digitally restored by the author.)



Depth charge thrower. (Credit: drawing by Latham Jenson, http://jproc.ca/haida/former_weapons.html)



Loading a depth charge thrower on HMCS Owen Sound. The crew first loaded the carrier into the main cylinder of the depth charge thrower; and now the depth charge is being hoisted into place in the curved bracket of the carrier. When ready to fire an explosive charge would be loaded into the breech at the top of the smaller cylinder atop the main cylinder (see the drawing above). (Credit: Collection of Dan L. Dunbar, www.forposterityssake.ca. Photo has been digitally restored by the author.)



Depth charge exploding astern of HMCS Cobalt. Given the number of people watching, including two cooks, it is likely that this photo was taken during an exercise and is not an actual attack on a U-boat. It may have been taken in August 1944, while the Cobalt was working up near Bermuda after her 1944 refit since the depth charge rails are a newer design installed during that refit. (Credit: Collection of Edmund Ferris, www.forposterityssake.ca. Photo has been digitally restored by the author.)



Typical types of depth charge attacks using depth charges launched from rails and throwers.
(Credit: <https://archive.hnsa.org/doc/firecontrol/parth.htm>)

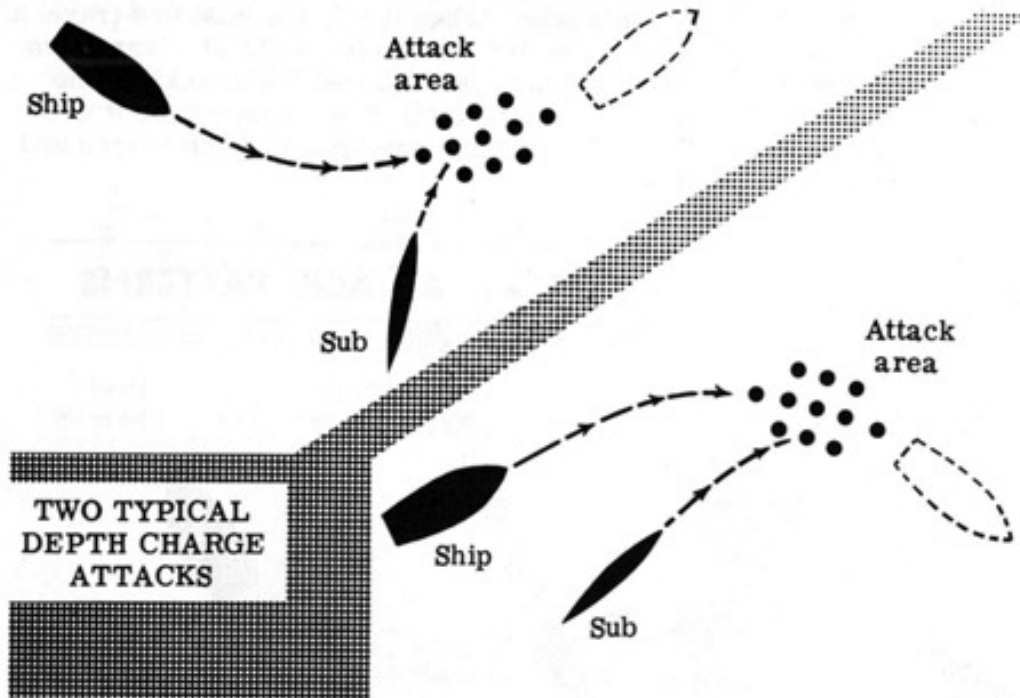
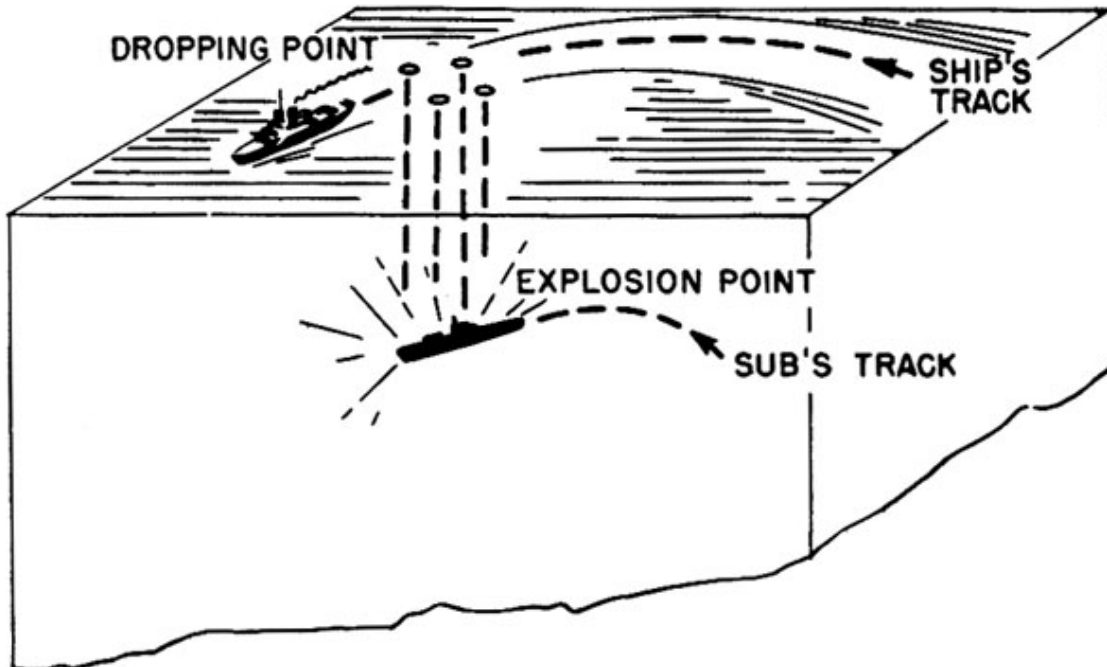


Illustration of a depth charge attack. (Credit: <https://www.ibiblio.org/hyperwar/USN/rep/ASW-51/ASW-11.html>)



When depth charges exploded, they created an underwater shockwave. If they exploded close enough to a U-boat, this shockwave would damage the hull, but their destructive radius was limited to about 7 yards.¹⁸⁵ Thus, while exploding depth charges may have looked spectacular, a single depth charge exploding would rarely be sufficient to destroy or seriously damage a U-boat. However, repeated depth charge detonations close enough to a U-boat could sink the U-boat or cause enough damage to force the U-boat to the surface. Sometimes, dozens or even hundreds of depth charges were launched during attacks.

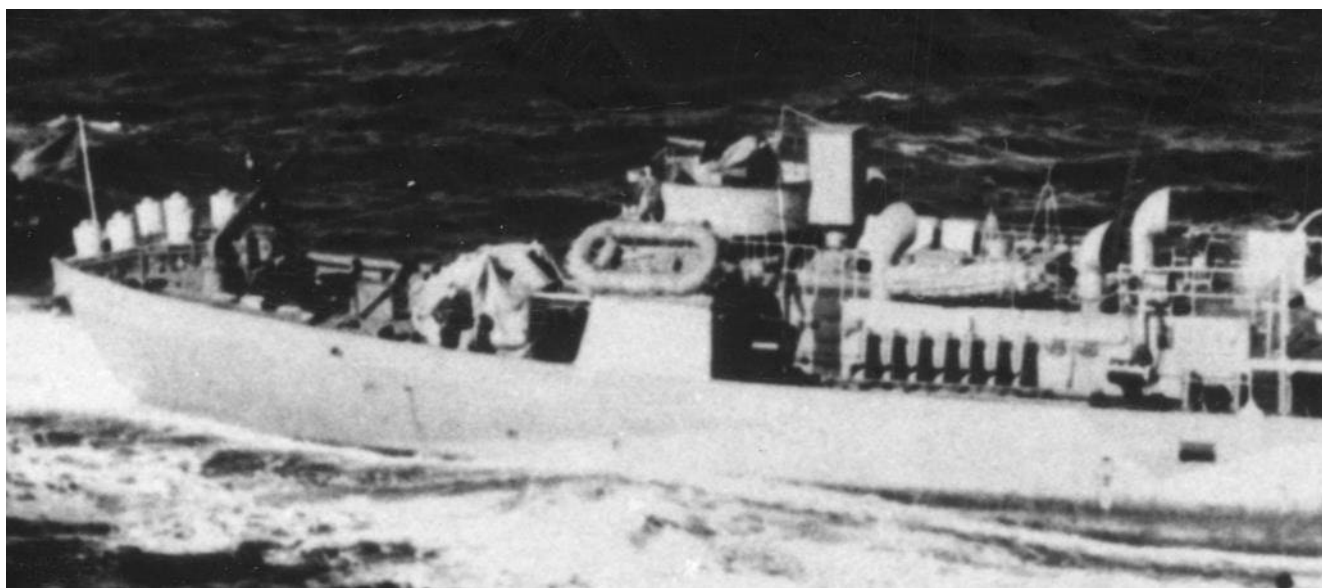
The Cobalt was originally fitted with a pair of depth charge rails, and two depth charge throwers, one on each side of the ship. During the December 1941 to January 1942 refit, two more depth charge throwers were added, increasing the number of depth charges that could be launched in each pattern.¹⁸⁶

The number of depth charges also increased significantly during the war. The maximum number of depth charges carried at different stages of the war and through various refits is not documented. However, when the two additional depth charge throwers were added, new racks were added along the sides of the aft cabin, increasing the density of storage and roughly doubling the number of depth charges available for the depth charge throwers. After the minesweeping gear was removed (see below) additional rails for storing depth charges were added where the mine sweeping winch had been located. Lastly, during the 1944 refit, new depth charge launching rails were installed that stored additional depth charges under the launching rails.

¹⁸⁵ <http://canadasnavalmemorial.ca/wp-content/uploads/2013/07/Episode-20-Chapter-6-part-2.pdf>

¹⁸⁶ Date of installation inferred based on photos take at different times in the Cobalt's history.

HMCS Cobalt, likely soon after her December 1941-January 1942 refit was completed. The enlargement shows the second pair of depth charge throwers installed, but she still has her minesweeping gear installed at the stern.
(Credit: unknown)



On the next two pages is a “Report of Attack on U-Boat” by HMCS Cobalt, carried out on May 19, 1942. In three separate attacks carried out over 30 minutes, the Cobalt launched 21 depth charges. As noted in the report, the attack was abandoned, and the presence of a submarine was not confirmed. (Credit: Library and Archives Canada, RG24, Volume 11358)

REPORT OF ATTACK ON U-BOAT

1. SHIP H.M.C.S. COBALT. Duty on which employed, or Convoy CL 40
 Convoy No. and Escort station Station Ahead.

2. SHIPS and AIRCRAFT in company Q 056, Q 057.

3. SIGHTING OR FIRST CONTACT { Date 19 May, 1942.
 Time 1840
 Zone Z 1 1/2

4. Position { Lat. 46 33 N
 Long. 57 25 W
 Reliability Good
 Depth of Water 180 Fathoms.

5. Wind N.W. Force 2 Sea 11 Weather bc Visibility 15 miles

6. Direction and Rate of Tidal Stream --- Knots Moon ---

7. REASON FOR ATTACK { Sighting—Asdic contact—H.E. contact Asdic Contact.
Q 056 had previous contact. Initial Range } 1700 Yds.
 { —Torpedo track—any other reason

DEPTH CHARGE ATTACKS.	1st ATTACK	2nd ATTACK	3rd ATTACK	4th ATTACK	5th ATTACK
8. TIME OF ATTACK ...	1850	1905	1920		
9. Nature of Contact {	(a) Inclination ...	Closing	Closing	Closing	
	(b) Hydrophone Effect or Whistle Effect. }	None	None	None	
	(c) Did target appear to move }	Yes	Yes	Yes	
10. Range at which contact was lost) ...	200	200	300		
11. Names of other Ships in contact) ...	Q 056				
12. Method of obtaining Time to Fire { Recorder—Log—Directing Ship—Stop Watch—Eye }	Stop Watch	Stop Watch.	Stop Watch		
13. Was Contact Re-established after attack) ...	Yes	Yes	Yes		
14. Asdic Conditions... ...	Good	Good	Good		
15. DEPTH CHARGES {	(a) Type used ...	Mk VII Light	Mk VII Light	Mk IX Heavy	
	(b) No. dropped and/or fired from throwers }	Four	Five	Twelve	
	(c) Depth Settings { Traps ... Throwers }	100	150	150	
		100	150	150	
(d) Failures ...	Two	None	Two		
16. Result of Attack (including air bubbles, oil or wreckage) ...	Nil	Nil	Small patches of oil believed to be from Depth Charges.		

17. **Commanding Officer's Opinion.**
 After third attack, extent of target appeared to grow too large, (25 degrees at 800 yards.)
 Range also jumped too rapidly.

Commanding Officer.

[Continued overleaf.]

18. **ATTACK BY GUNFIRE.**

- | | |
|----------------------------------|---|
| (a) Size of Gun | (e) No. of hits and their position |
| (b) Range on opening fire | (f) Were all shells which hit seen to burst or penetrate? |
| (c) Type of shell and fuze | |
| (d) No. of Rounds fired | |

19. **ATTACK BY TORPEDO.**

- | | |
|---|-------------------------------------|
| (a) No. fired | (d) Course and speed of enemy |
| (b) Depth set | (e) Ship's head on firing |
| (c) Course and speed of torpedoes | (f) Hits obtained |

20. **NARRATIVE.**—(Including sketch and description of U-Boat or wreckage. If hunt was abandoned, give reasons).

Convoy was proceeding on a westerly course. Cobalt stationed ahead, Q 056 on port beam, Q 057 on starboard beam. At 1750 Q 056 hoisted Black Pennant and reported by light that she was in contact with a suspected submarine. At this moment Cobalt's ASDIC broke down. Cobalt remained at about 2000 yards range while H.S.D.'s Pimlott and Frihaugen repaired the set. Meanwhile Q 056 carried out four attacks. At 1840 Cobalt's ASDIC was again operating, but the recorder was not marking and there was considerable interference in the phones in the form of crackle and whine. We obtained a good echo bearing 120 degrees, 1200 yards, extent 15 degrees, inclination closing. We ran across it and dropped a five-charge pattern medium depth. The ~~xxxx~~ thrower failed to fire and the second and third starboard charges dropped from the rails misfired.

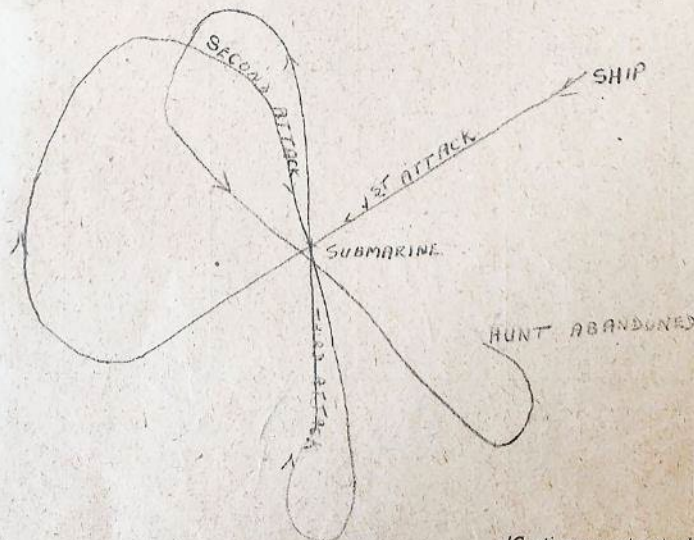
The echo was regained bearing 105 degrees. Range was opened to 1400 yards. Contact was attacked again with a deep five-charge pattern.

Range was opened to 1200 yards and was attacked again bearing 350 degrees with a ten-charge pattern set deep.

At this time the interference in the set became much worse. The contact was regained, but its extent appeared to be growing too large for a submarine—25 degrees at 800 yards. Also the range was now changing too quickly. Therefore the hunt was abandoned.

Following is a rough sketch of the ship's movements. There is no plotting organization on board.

All attacks were carried out by M.R.C.S. Table and Stop-Watch.



(Continue on separate sheet if necessary.)

NOTE.—Recorder Trace and Diagram of Attacks are to be attached to the original copy of this Report.

Hedgehog

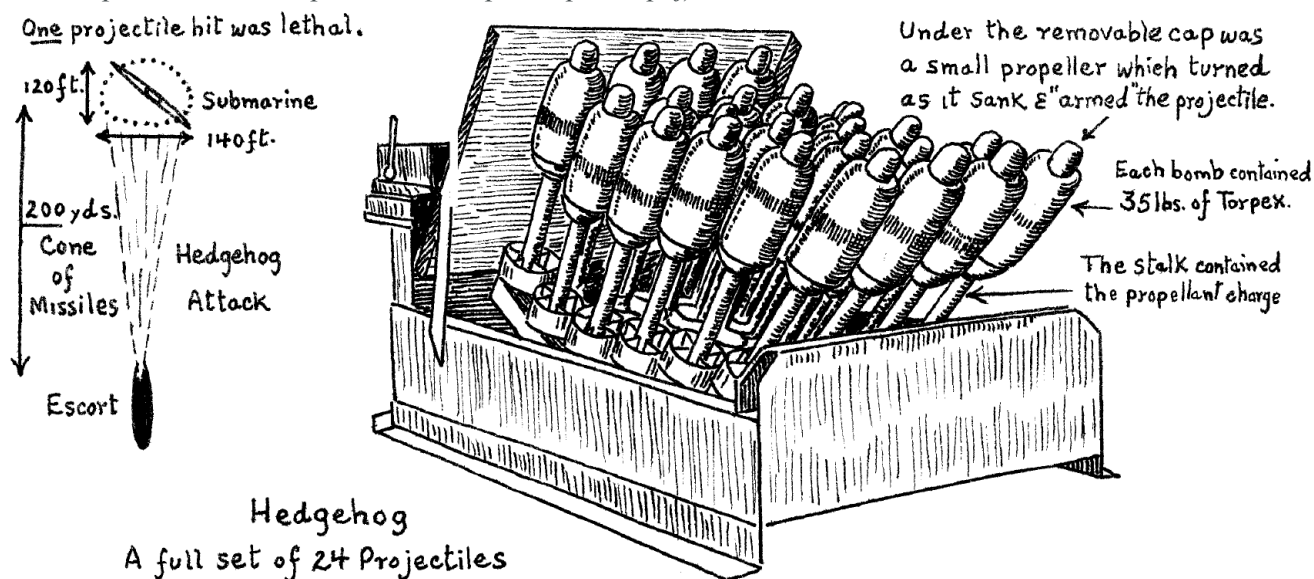
The Hedgehog was first developed in 1940 and entered widespread use in 1944. The Hedgehog was very different than depth charges and overcame the loss of ASDIC contact associated with depth charge attacks.

The Hedgehog was a type of mortar that launched up to 24 projectiles 200 to 300 yards (180 to 275m) in front of the ship. These projectiles were much smaller than depth charges, with just 35 pounds (16kg) of explosive but they would only explode if they came in contact with a submarine. If they did contact a submarine and explode, they could cause severe damage despite the much smaller amount of explosives.¹⁸⁷

Although Hedgehogs were limited in that they had to be fired directly in front of the ship, meaning the ship had to be pointed at the target, the Hedgehog was much more effective than depth charges. Combined with better ASDIC, the Hedgehog was a very potent anti-submarine weapon. During the Second World War, out of 5,174 British depth charge attacks, there were 85.5 kills, a ratio of 60.5 to 1. In comparison, the Hedgehog made 268 attacks for 47 kills, a ratio of 5.7 to 1.¹⁸⁸

The Cobalt's Hedgehog was installed during her April to July 1944 refit completed in Liverpool Nova Scotia.

Hedgehog launcher and a schematic of a Hedgehog attack. (Credit: <http://canadasnavalmemorial.ca/wp-content/uploads/2013/07/Episode-20-Chapter-6-part-2.pdf>)



¹⁸⁷ <http://canadasnavalmemorial.ca/wp-content/uploads/2013/07/Episode-20-Chapter-6-part-2.pdf>

¹⁸⁸ <https://www.silverhawkauthor.com/post/royal-canadian-navy-asdic-anti-submarine-sonar>

Anti-aircraft guns

Corvettes carried a range of weapons for defence against attacking aircraft. Due to a shortage of such weapons early in the war, and the very low risk of air attack in the western Atlantic, fitting out the Canadian corvettes with their intended anti-aircraft guns took time. The ships were all built with a platform or bandstand near the stern of the ship intended to mount a heavy calibre anti-aircraft gun. Initially though, this bandstand was used for lighter weapons.

Initially, the Cobalt did not carry any anti-aircraft guns, and the earliest photos of her in-service show this bandstand was empty. There may have been some light machine guns mounted on the bridge, but based on the photos available, it is impossible to confirm this.

Sometime in 1941, guns were mounted in the bandstand and by November 1941 when the Cobalt was photographed in Iceland, the guns were visible. However, in all photos available of the Cobalt that show this bandstand during the period that these guns were installed, the guns are covered in fitted tarps to protect them from sea spray, which was common practice.

Based on the shape, and guns known to be fitted to other Canadian corvettes during the same period, it is likely the anti-aircraft guns mounted in the Cobalt's bandstand were two twin-mountings of heavy Vickers machine guns firing a 0.5-inch round. If anti-aircraft guns were fitted on the bridge during that period, they would be single or twin-mounts for light Lewis machine guns firing a 0.303-inch round (same size as standard infantry rifles).

These guns would have been of limited use against aircraft except at very short range, and the Lewis guns in particular would have been of little use against a surfaced submarine. Fortunately, since the Cobalt operated mostly in the western Atlantic, her early lack of ability to defend herself against aircraft was not a problem.

Twin-mounted heavy Vickers machine guns in the bandstand of HMCS Drumheller. (Credit: Collection of LS Bernard (Bunny) Brewster, www.forposterityssake.ca. Photo has been digitally restored by the author.)



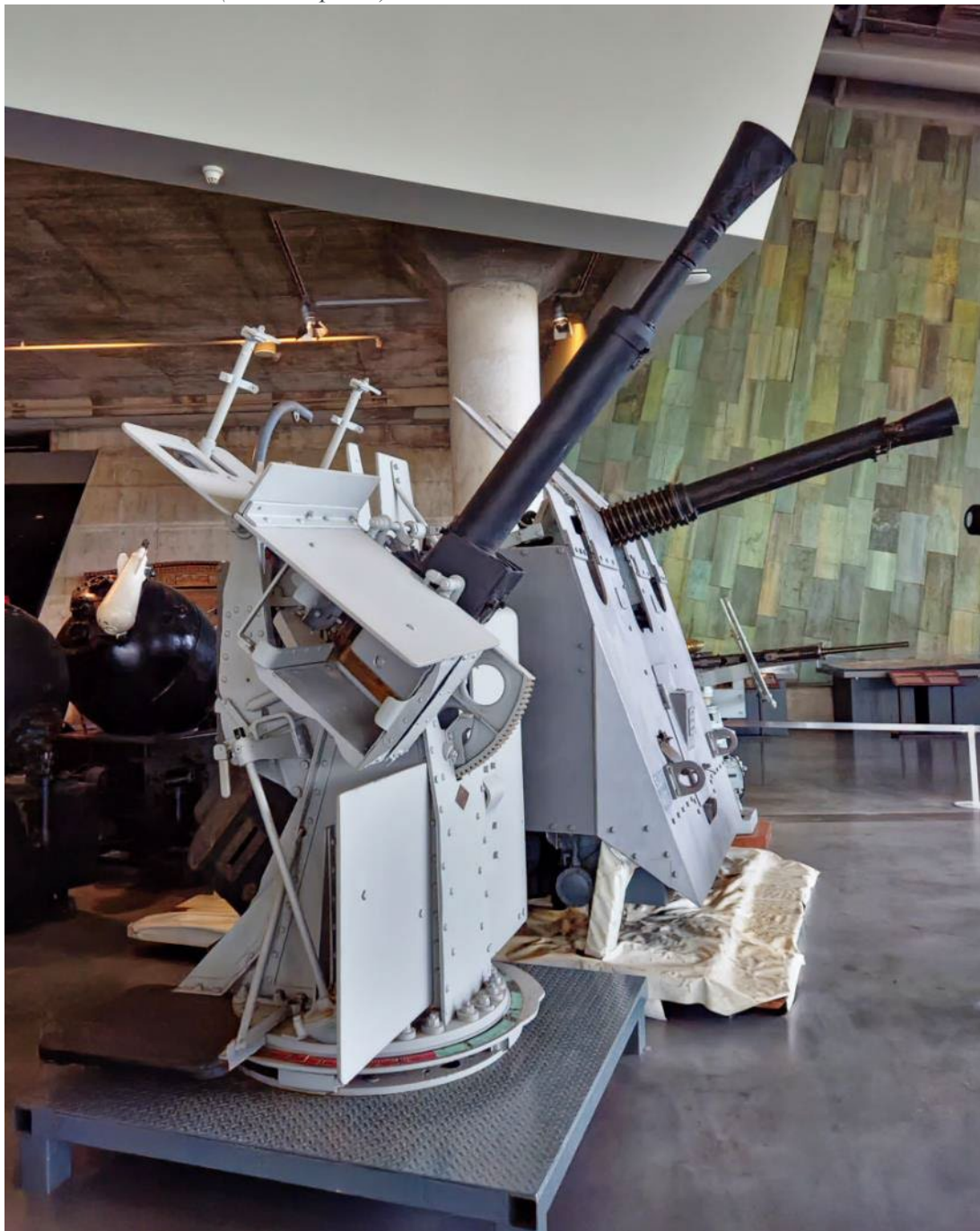
During her refit in Liverpool, Nova Scotia in March-April 1943, the machine guns were removed, and the Cobalt received a significant upgrade in her anti-aircraft weapons. The gun that the bandstand was originally intended for was finally installed.¹⁸⁹ This was a much heavier gun firing shells weighing two pounds at about 100 rounds per minute.¹⁹⁰ The gun, known as a pom-pom due to the sound made when firing, was much more effective against aircraft than the previous smaller calibre machine guns. However, like the 4-inch main gun, there was no fire control system – the gun was aimed by the gunner using the sights mounted above the gun. In addition, the mount was hand-operated for both traverse and elevation of the gun.¹⁹¹ This would have made accurate aiming at a fast-moving aircraft quite difficult. However, the pompom could also be used against surfaced submarines and at close range, fire from the pompom could be very effective.

¹⁸⁹ A report from the Cobalt's work-up period conducted after the 1943 refit was completed indicates that the pompom was part of the ship's armament at that time. This, combined with photographic evidence, confirms that the pompom was installed as part of this refit. Library and Archives Canada, RG24, Volume 6909.

¹⁹⁰ http://www.navweaps.com/Weapons/WNBR_2pounder_m8.php

¹⁹¹ <https://www.silverhawkauthor.com/post/royal-canadian-navy-qf-2-pounder-pom-pom-aa-gun>

QF 2-pounder Mark VIII pom-pom from the corvette HMCS Kamloops, at the Canadian War Museum in Ottawa. (author's photo)



QF 2-pounder Mark VIII pom-pom aboard HMCS Sackville. The sights for aiming the gun are clearly visible (author's photo)



During the Cobalt's December 1941 to January 1942, bridge "wings" had been added, enlarging the working space on the bridge. As part of the 1943 refit, another much more potent anti-aircraft gun was added to the bridge wings – a single 20mm Oerlikon cannon on each side of the bridge.¹⁹² The cannons fired a much heavier round to a much longer range than the previous machine guns and fired 250 to 320 rounds per minute.¹⁹³ The cannons could also be used against surfaced submarines.

¹⁹² As with the installation of the pom-pom, a report from the Cobalt's work-up period conducted after the 1943 refit was completed indicates that two 20mm cannons were part of the ship's armament at that time. This, combined with photographic evidence, confirms that the 20mm cannons were installed as part of this refit. Library and Archives Canada, RG24, Volume 6909.

¹⁹³ http://www.navweaps.com/Weapons/WNUS_2cm-70_mk234.php

20mm Oerlikon cannon on HMCS Sackville in Halifax. The platform around the pedestal was installed on some Canadian corvettes, allowing the gunner to stand higher and aim the gun lower, making it easier to shoot at a surfaced submarine. It is not known if the Cobalt had this type of platform. (author's photo)



The Cobalt may have also carried one other device to help protect it from air attack. Calling this a weapon could be a bit of a stretch. In 1940, when Britain was desperate for any way to protect itself from German air attack, rocket technology for launching rescue lines from land to stranded ships at sea was adapted for defensive purposes. The rocket was used to launch a long length of steel cable up to 2,000 to 3,000 feet into the air. When the rocket ran out of fuel, a small parachute deployed at the top of the cable, allowing the cable to slowly descend. The device was called a Parachute and Cable (PAC) system. The idea was that low-flying attacking aircraft could become entangled in the cable, damaging the aircraft and causing it to break off the attack or even crash. The rocket and cable were launched from a projector.¹⁹⁴ PAC systems were installed at some Royal Air Force airfields in early 1940 and some were also installed aboard smaller ships operating in coastal waters around Great Britain as well as on some larger ships.

¹⁹⁴ <https://www.kenleyrevival.org/content/new-contributions/parachute-and-cable-schermuly-not>

In the book *Anatomy of the Ship – The Flower Class Corvette Agassiz*, there is a reference to Canadian corvettes being equipped with PAC systems. Specific to HMCS Cobalt, the Department of National Defence archives include a form completed on February 23, 1944, titled “Fighting Equipment Report” which lists two PAC projectors among the equipment that the Cobalt carried at that time. By that time, PAC projectors would have been completely useless, especially with the much more effective anti-aircraft weapons that the Cobalt was armed with. Nonetheless, this substantiates that she did carry this odd device, although the device in the photo below may be for launching signal flares.

One of several photos of the Cobalt taken between January 1942 and March 1943 that shows what may be one of two PAC projectors mounted atop the bridge. The inset photo, from the January 1943 edition of Popular Mechanics, shows two Royal Navy sailors with a PAC projector. (Credit: Cobalt Mining Museum. Photo has been digitally restored by the author.)



On the next two pages is HMCS Cobalt’s “Fighting Equipment Report” from February 23, 1944, listing all of the weapons and other equipment fitted to and carried aboard the ship at that time, copied from the archives of the Department of National Defence.

Page _____

ENTERED
 F.E.C.A. KDX
 APR 4 1944
 MB

CANCELLED

"EQUIPMENT REPORT"

H.M.C.S. COBALT CLASS Corvette (Flower) 15124

This form is to be completed at the earliest possible moment, in triplicate, by this Ship's Administrative Authority, in accordance with COMO No 2/1 of the 12th February, 1944.

2. The first copy is to be forwarded to NMB immediately, one copy is to be returned to the ship, and one copy is to be retained by the Administrative Authority.

3. If any item of equipment on this form is not fitted, the space opposite the appropriate heading is to be left blank. Additional items for which there is not space on this form, are to be listed on a second form and attached hereto.

To: The Secretary, Naval Board, for F.E.C.A.
 Naval Service Headquarters, Ottawa

This report has been checked and is correct in every particular.

Date form completed 23/2/44 Admin Authority (Signed) I. D. PRENTICE TYPED BY /// CAPTAIN, R.C.N. CAPTAIN 'D' HALIFAX

ARMAMENT	TYPE & MARK OF GUN	REG. NO.	TYPE & MARK OF MTC.	REG. NO.	LOCATION
1 Main	a) 4" BL	Mk IX 2119	Mk 1	10 08	Forecastle.
	b)				
	c)				
	d)				
2 Close Range	a) Oerlikon	53407	Mk IV	42819	Bridge.
	b) Oerlikon	44076	Mk IV	51885	Bridge.
	c) PomPom	89547	2 Pdr Mk VIII	202	Aft. Deckgun.
	d) 2 Bren	3T9967 3T8035	Mk IM		
	e) 4 Sten	1L751 OL9159	Mk II		
	f)	OL8156 OL8212	Mk II		
	g)				
	h)				

DEPARTMENT OF NATIONAL DEFENCE

The classification of this document is controlled by the Director, Directorate of History

[Signature]
 for Director, Directorate of History

ITEM	QTY.	TYPE SIZE OR MARK	ITEM	QTY.	TYPE SIZE OR MARK
3 Main Arm Fire Cont.	2	Voice Pipe Phone	TORPEDO	--	
4 Close Rge. Fire Cont.	1	To D/C & PomPom	9 Tubes	--	
5 Rifles	6	No. 4 Mk I *27L4788	10 Torps normally carried	--	
Line Throwing Rifle	1	28L6721, 29L0988	11 MCCOC norm carried	--	
6 Pistols	6	29L0206, 28L8332	A.T.W.		
Smith & Wesson	6	28L8888, Ross 17854	12a) Hedgehog (--)		b) Squid (--)
7 P.A.C. Projectors	2	1000 73700	13 Control Gear	--	
8 Rocket Flares	2	30577 54351	DEPTH CHARGES	--	
	2	36380 13892	14 Firing Clock		
	2	1 Lb.	15 Throwers	4	Mk II
	2	Very Pistols			

Command 25/11/40

MAR 27 Rec'd
O.V.E.R

ITEM	QTY	TYPE SIZE OR MARK	ITEM	QTY	TYPE SIZE OR MARK
DEPTH CHARGES (contd.) 16 Auto Firing System			43 SEARCHLIGHTS	1	24" 500 Watt
17 Raile	2	9 charge ✓	44 W/T TRANSMITTERS	1	110 PV 500H Serial ✓
18 Trap	2	Mk I X ✓	a)		
19 Chovar			b)		
20 D/G s normally carried			c)		
a) On deck 70 ✓			d)		
b) Between decks			e)		
MINESWEEPING			f)		
21 Oropesa			45 W/T Receivers MSL5 ✓		Serial 513
22 L L			a) SMR 3 ✓		Serial 151
23 S A			MDF 5 ✓		Serial 108
24 Paravane			b) Transreceiver PR12 ✓		Serial 269
25 M/S Winch			46 SHIP'S BOATS	2	16' ✓
26 Davits					
27 TOWED NOISE MAKER			47 CARLEY FLOATS	6	20 men ✓
a) Box () n) Car (30 inch.) ✓					
SMOKER			48 GYRO		Nil
28 Flare - non-lit ✓	8		49 BOTTLE TRANSMITTER		
29 C S A Apparatus			50 LOCATION OF GYRO REPEATERS		
30 ASDIC	1	123D ✓	a) Wheelhouse		f) Tiller Flat
31 ECHO SOUNDING	1	756 Serial 359 ✓	b) Pelorus Bridge		g) Radar Cabin
			Bridge Starboard		h) Bridge Shelter
32 LOG	1	Walker's Trident	i) Bridge Port		
33 PLOT	1	Gladstone ✓	j) Chart Recess		
34 RADAR and I F F	2	271Q ✓ SW2C ✓	51 GENERATORS	QTY	KW
a)			a) Main	1	20KW
b)			b) Turbo	1	15KW
c)					
d)					
e)					
f)					
35 LORAN			52 SHIP'S a) Max Load 175/500 amps		b) Supply 110 volt
36 MF/DF	1	Serial 101 ✓	53 LOW POWER INSTALLED/Yes () No ()		
37 HF/DF			54 D/G External () Internal () Partially ()		
38 VHF/DF			55 NO. OF BINOCULARS CARRIED 3 x 750		4 x 630 ✓
39 LOUD HAIL	1	Type TEL29-B1-2	56 NORMAL COMPLEMENT		
40 S R E	1	Type 457 Serial	a) Officers 6 ✓		b) Ratings 78 ✓
41 SIGNALLING LAMPS	2	S5110D ✓ 10H AP 3860A ✓	SPECIAL EQUIPMENT		
42 SIGNAL PROJECTORS	2	Ser. 4497, 4498	a) 2 Portable Sig. Lantern Type 1038		
			1712 Night Flashing Torch Type 16001		
			a) 1 Box Lamp Type 4298 ✓		
			a)		
			Binoculars.		
			6 x 50 239667		6x30 5828-E
			267410		9066-C
			30223		9057-C
					6132-C

A4.8 Minesweeping Gear

Unlike Flower class corvettes built for the Royal Navy, those built for the RCN were originally intended to be multi-purpose ships. While the Royal Navy built their corvettes to be convoy escorts and anti-submarine ships, the RCN intended that they would operate in inshore areas and would be used for a range of roles such as patrolling the coastline, minesweeping, rescue work, and anti-submarine warfare.¹⁹⁵

As a result, they were equipped to take on submarines but were also equipped to sweep (remove) sea mines. Some German U-boats were equipped to lay mines, and if mines were ever laid outside a Canadian harbour such as Halifax, the corvettes could be used to remove (sweep) those mines.

Minesweeping gear consisted of two torpedo-shaped floats known as Oropesas (also known as paravanes). When minesweeping, these would be lowered into the water and towed behind the ship using a serrated wire which would cut the cables that moored sea mines to the sea floor. If the wire cut through a mine's mooring line, the mine would float to the surface and it could be destroyed with explosives or gunfire.¹⁹⁶

The minesweeping gear took up a lot of space. In addition to the two Oropesas and racks to store them on, there was a large winch and type cranes to lower the Oropesas and lift them out of the water again.

The role of Canadian corvettes changed almost as soon as they were commissioned. The war had changed, the threat of U-boats became much more serious than the RCN had anticipated, and the RCN's corvettes were needed to fulfill the same role as their Royal Navy sisters. As a result, the minesweeping gear was rarely if ever used.

In later refits, the minesweeping gear was removed from all Canadian corvettes that had it installed, including the Cobalt. Based on various photos of the Cobalt, it is likely that her minesweeping gear was removed during the March-April 1943 refit completed in Liverpool, Nova Scotia. Minesweeping gear is not listed in the above Fighting Equipment Report from February 1944.

Even after the minesweeping gear was removed, the Canadian corvettes were left with a distinctive look compared to the Royal Navy corvettes. To accommodate both minesweeping gear and depth charge rails, Canadian corvettes had a squared-off stern rather than a rounded one. In addition, to make room for the large winch needed for minesweeping, the galley on Canadian corvettes was moved forward to behind the wheelhouse, and the engine room casing (the cabin towards the stern of the ship) was shortened by about 7 feet compared to the British corvettes.¹⁹⁷

¹⁹⁵ <https://legionmagazine.com/en/the-humble-corvette-navy-part-27/>

¹⁹⁶ <http://www.minesweepers.org.uk/sweeping.htm>

¹⁹⁷ McKay, John and Harland, John. 2010. *The Flower Class Corvette Agassiz (Anatomy of the Ship)*. Conway Maritime Press

Launching the Oropesa from HMCS Alberni during a training exercise off the coast of British Columbia in March 1941. (Credit: Library and Archives Canada / PA-179942, www.forposterityssake.ca)



Crew operating the minesweeping winch aboard HMCS Alberni. (Credit: Library and Archives Canada / PA-179950, www.forposterityssake.ca)



Stern of HMCS Cobalt, showing the two cranes for the minesweeping gear (Credit: Cobalt Mining Museum. Photo has been digitally restored by the author.)



A4.9 Cables and CATS – Protecting the Corvettes

The Second World War was very much a war of competing technologies. As each side developed new weapons to try to get an edge, the other developed countermeasures or better weapons to outgun the other. The rapid development of radar during the war, improvements in ASDIC, and the introduction of new weapons like hedgehogs illustrate that. However, the Germans were also constantly innovating. One example was in mine warfare.

The minesweeping gear described in the previous section was intended to disable or destroy sea mines that floated below the surface of the water, held in place by cables with weights on the sea floor. These mines exploded on contact, and they are the type of sea mines commonly portrayed in movies – large balls with short spikes sticking out of them.

However, with the outbreak of the war in 1939, the Germans began laying a different kind of mine in the waters around the United Kingdom – magnetic mines.

The following description of how magnetic mines work, and how the countermeasure – degaussing cables – worked is based on a 1946 paper *The Defeat of the Magnetic Mine*, by Sir Charles Goodeve.¹⁹⁸ Goodeve was a Canadian scientist who became Deputy Controller for Research and Development, the Admiralty (Royal Navy). Goodeve was instrumental in the development of degaussing and also in the development of the hedgehog.¹⁹⁹

As steel ships move through the water, and through the earth's magnetic field, they become slightly magnetic and have the effect of locally concentrating that earth's magnetic field. As a result, the magnetic field becomes stronger in the water below the ship because of the way that the steel in the ship changes the magnetic field.

The British had developed the first magnetic mines, and while both Britain and Germany continued to develop improved magnetic mines between the wars, the Germans were the first to deploy them at the outbreak of the Second World War.²⁰⁰ Magnetic mines were laid in relatively shallow water, such as the estuary of the Thames River downstream from London, using either aircraft or submarines equipped to lay mines. They were difficult to detect, neutralize, or remove, and once German magnetic mines were known to be in a shipping channel, the channel needed to be shut down until it could be made safe, leaving ships waiting at sea and vulnerable to attack by German submarines or aircraft.²⁰¹

The mines had a detonator that used a magnetic needle, like that in a compass. When a ship passed over the mine, the disturbance in the magnetic field would cause the needle to move, aligning it with two electrical contacts and completing the circuit. When that electrical circuit was completed, the mine exploded, often with devastating results for the ship sailing above it.

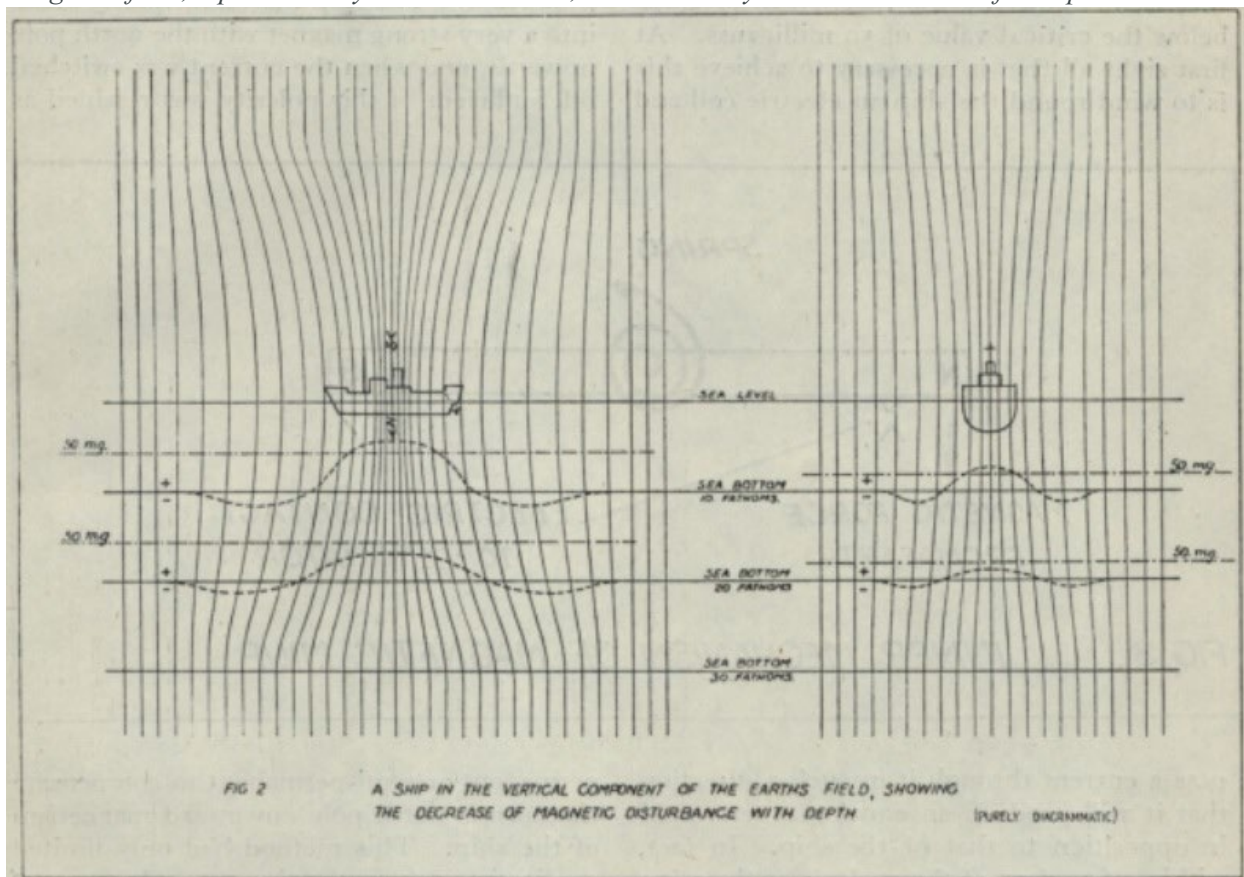
¹⁹⁸ C.F. Goodeve. 1946. The Defeat of the Magnetic Mine. *Journal of the Royal Society of Arts*, Vol. 94, No. 4708 (JANUARY 4th, 1946), pp. 81-90 (10 pages). https://www.jstor.org/stable/41362967?read-now=1&oauth_data=eyJlbWFpbCI6Imx1ZnR5eHhAZ21haWwuY29tIiwiaW5zdG10dXRpb25JZHMlOltLCJwcm92aWRlcil6Imdvb2dsZSJ9&typeAccessWorkflow=login&seq=1#page_scan_tab_contents

¹⁹⁹ <https://naval-museum.mb.ca/people/sir-charles-goodeve/>

²⁰⁰ <https://medium.com/war-is-boring/how-britain-beat-germanys-wwii-magnetic-sea-mines-bfec5558704c>

²⁰¹ Same reference as above.

Drawing from Charles Goodeve's paper, The Defeat of the Magnetic Mine, illustrating how the earth's magnetic field, represented by the vertical lines, is disturbed by the steel structure of a ship.



The British soon had a stroke of good fortune though. In November 1939, a German aircraft dropped two magnetic mines on tidal mudflats near the mouth of the Thames River. A soldier on shore saw them fall from the aircraft by parachute and reported the incident. The hunt for the mines was on, and Churchill wanted the mines found “at all costs”.²⁰² A couple of nights later, one of the mines was found at low tide. Royal Navy and British army crews were able to defuse the mine, recover it from the mudflats, and then analyze the mechanism used to detonate the mine. They were able to determine the strength and duration of the magnetic field that would trigger the mechanism.

Knowing how the mechanism worked allowed the British to develop a countermeasure, known as degaussing (gauss is a unit of measure of magnetism, hence degaussing, which was coined by Charles Goodeve). The main method of degaussing was to wrap an electrical coil, known as a degaussing cable, around the perimeter of the ship. An electrical current was passed through the cable that produced a magnetic field equal in magnitude to the disturbance created by the ship, but in the opposite direction (recall that magnets have poles and will be attracted or repelled based on the orientation of their poles). With this electrical field applied, the ship would no longer disturb the earth’s magnetic field and would not set off the magnetic mines. Essentially, it was a “cloaking device” that made the ship undetectable by magnetic mines.

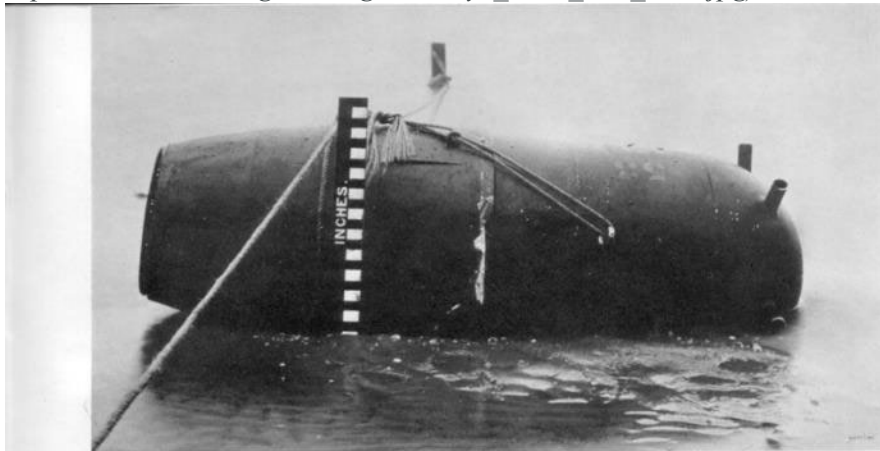
²⁰² <https://medium.com/war-is-boring/how-britain-beat-germanys-wwii-magnetic-sea-mines-bfec5558704c>

The first degaussing cables were installed within days of development, and hundreds of ships, including corvettes like the Cobalt, had degaussing cables installed. They proved highly effective and although the Germans developed newer magnetic mines to overcome the effectiveness of degaussing, this type of mine was far less successful than the Germans had hoped.

Although magnetic mines proved not to be a hazard along the east coast of North America, having the degaussing cables installed provided the necessary protection if HMCS Cobalt had ever encountered a magnetic mine.²⁰³

Recovery of a German magnetic mine from the Thames Estuary in November 1939. (Credit:

https://www.mcdoa.org.uk/images/Ouvrys_Mine_Nov_1939.jpg)



The first German magnetic mine before being rendered safe. Shoeburyness, 23rd November 1939.

Loading the mine into a lorry after rendering safe. Left to right - A.B. Vearncombe, Lieutenant Commander Lewis, C.P.O. Baldwin, and Lieutenant Commander Ouvry with back to camera.



²⁰³ Interesting side note: merchant ships operating in areas where magnetic mines had been laid during the war used degaussing cables for decades afterwards to protect them from any undetected and unexploded magnetic mines.

Stern of the corvette HMCS Midland. The four cables of the degaussing system, installed on the bulwark (the low wall around the outside of the ship) are clearly visible. (Credit: Collection of Harold W. Bee, www.forposterityssake.ca. Photo has been digitally restored by the author)



A second threat came in 1943 – a new type of torpedo. Until that time, torpedoes, launched from a submarine, surface ship, or aircraft, went through the water in a straight line. Thus, when firing from a submarine, the whole vessel had to be aimed and pointed ahead of the moving target ship so that the paths of the ship and the torpedo would converge, resulting in the torpedo hitting the ship. If ships under attack could see a torpedo coming, rapid changes in direction could help ensure that the torpedo missed its mark.

The new torpedo was called an acoustic torpedo. As it approached a target ship, sensors in the torpedo detected the sound of the ship's propellers and engine and were able to steer the torpedo towards the sound, hitting the ship near the stern. The U-boat captain still needed to aim the U-boat in the right direction since the acoustic torpedo could only "hear" the target ship from a few hundred yards away, but once within range, the torpedo was able to steer itself. This made acoustic torpedoes much more accurate.²⁰⁴

When the U-boats began deploying acoustic torpedoes, they had an immediate impact. At a time when the Allies had gained an upper hand in the Battle of the Atlantic, the Germans again thought that they had a game-changing weapon that would again give them the advantage.

HMCS St. Croix was one of the new torpedo's victims. The St. Croix was one of the old US Navy destroyers that had been given to the Royal Navy in 1940 and had subsequently been given to the RCN. On the night of September 20, 1943, the St. Croix was hit by an acoustic torpedo while operating as part of an anti-submarine strike group in the Bay of Biscay off the coast of France. More than 80 survivors of the St. Croix were rescued by HMS Itchen. Tragically, two days later the Itchen was also torpedoed and sunk. Only one man from HMCS St. Croix survived.²⁰⁵

²⁰⁴ <https://www.ibiblio.org/hyperwar/USN/rep/ASW-51/ASW-15.html>

²⁰⁵ http://www.forposterityssake.ca/Navy/HMCS_ST_CROIX_I81.htm

German success with the acoustic torpedo was relatively short-lived, however. One of the countermeasures that the Allies introduced was remarkably simple - put something in the water that made more noise than the ship, creating a decoy target for the torpedo. The Canadian Anti-Acoustic Torpedo (CAT) gear did just that.

The CAT gear was designed by scientists from the National Research Establishment (NRE) in Halifax. The prototype of CAT gear was designed within a day of NRE scientists being informed of the German use of acoustic torpedoes. Drawings were drafted, production began immediately, and within 17 days the first CAT gear was installed on RCN ships. The CAT gear consisted of a small device towed about 200 yards behind a ship. Two steel rods were held in a steel frame and as the device was towed, these rods clapped together, making enough noise that the acoustic torpedo would home in on the CAT gear rather than the ship itself.²⁰⁶

The US Navy adopted CAT gear and modified the design, and the Royal Navy introduced a similar noise-making device.²⁰⁷

However, CAT gear and other noise-making devices were not ideal. One problem was that towing the CAT gear limited the ship's maneuverability. Most significantly however, the noise of the CAT gear not only disrupted acoustic torpedoes – it also disrupted ASDIC operators. The sound of the CAT gear was so loud that it made it difficult for the operators to hear the sounds emitted by the ASDIC being reflected back by submerged submarines.²⁰⁸ Recognizing this problem, the NRE figured out how to stop the CAT gear from making noise by releasing the tension on the tow cable.²⁰⁹ With this and other refinements, CAT gear continued in use through to the end of the war.

CAT gear and other noise-making devices proved effective. Despite the initial success of German acoustic torpedoes before countermeasures were introduced, and despite the potential for these torpedoes to be much more accurate than conventional torpedoes, only 77 of over 700 German acoustic torpedoes fired hit their targets.²¹⁰

²⁰⁶ Cristina D. S. Tollefsen. 2018. Canadian Innovations in Naval Acoustics from World War II to 1967. *Acoustics Today*, Volume 14, Issue number 2. https://cradpdf.drdc-rddc.gc.ca/PDFS/unc313/p807003_A1b.pdf

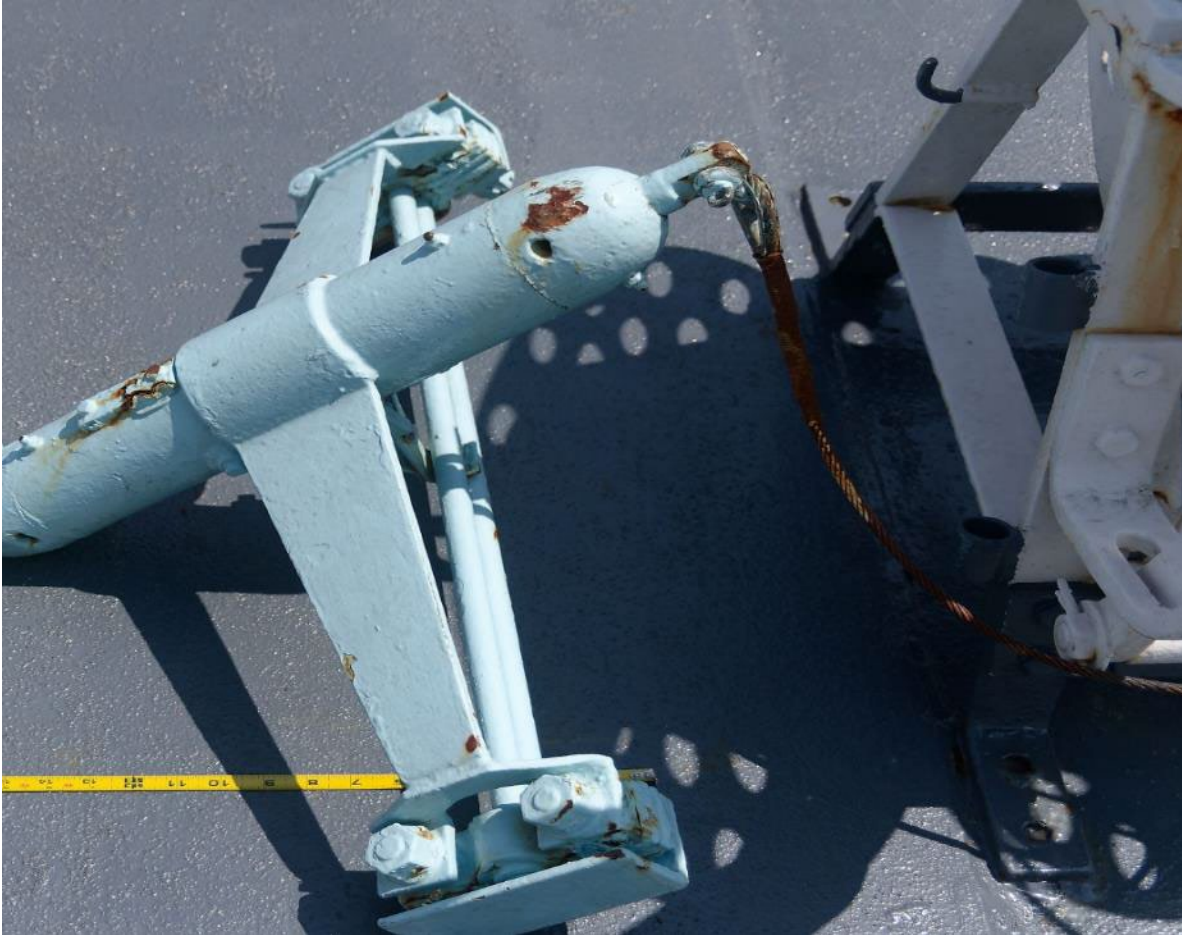
²⁰⁷ Same reference as above.

²⁰⁸ <https://www.ibiblio.org/hyperwar/USN/rep/ASW-51/ASW-15.html>

²⁰⁹ <http://jproc.ca/haida/torptube.html>

²¹⁰ Jak Showell. 2009. *Hitler's Navy: A Reference Guide to the Kriegsmarine 1935-1945*. Barnsley, UK: Seaforth Publishing.

CAT gear aboard HMCS Sackville. (author's photo)



A4.10 Communications

On Board Communications

On board ship, different methods were used to communicate, particularly to communicate orders from the commanding officer and others on the bridge, and to communicate information to the bridge crew.

The primary means of on-board communications was the use of voice pipes. This consisted of a set of metal tubes that originated primarily on the bridge and extended out to all parts of the ship, from the anchor winch at the bow to the depth charge launchers at the stern. Separate tubes were used for each line, leading to a complex system of tubes throughout the ship.

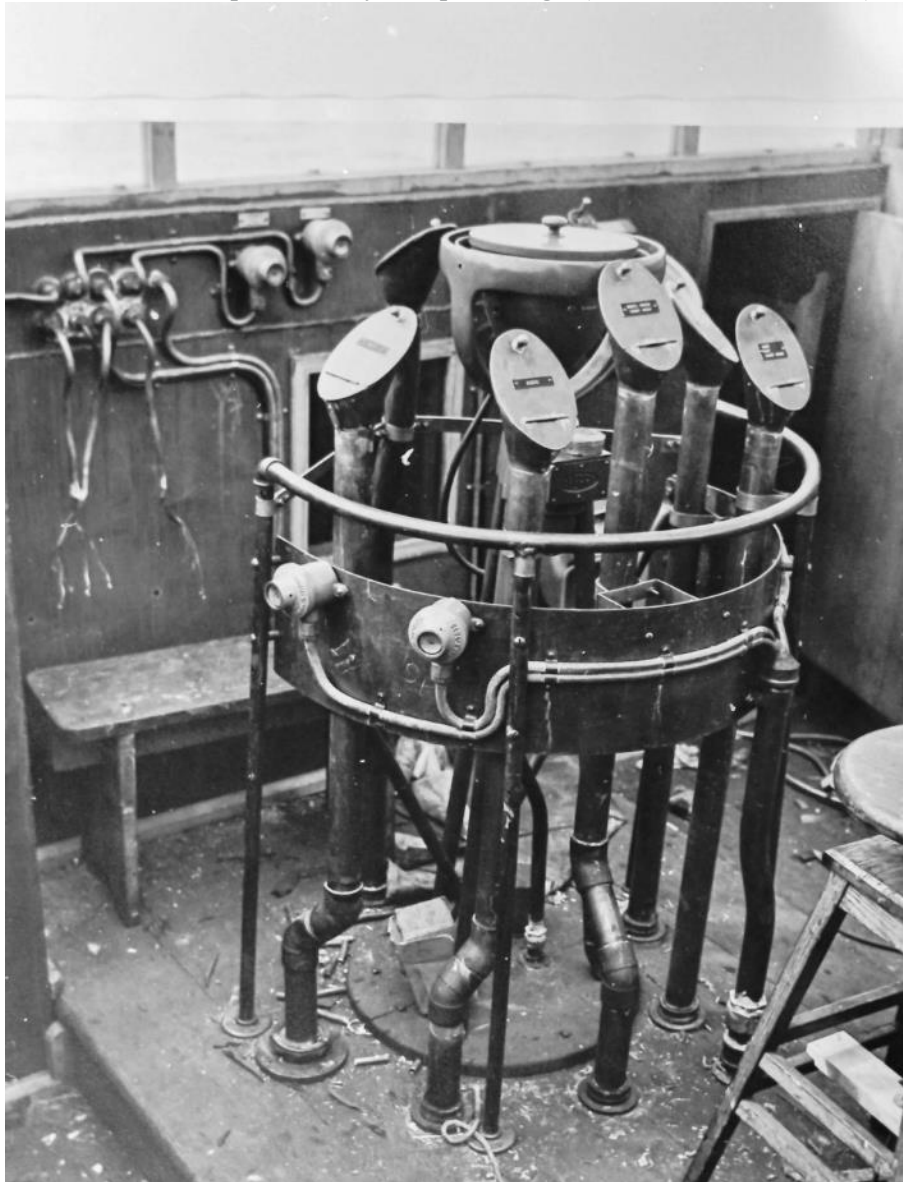
A cone at each end of the tube helped to amplify the sound, and in some cases, the tubes were insulated to increase the efficiency of the sound relay. Before speaking into the voice pipe, a whistle sound or light would alert the listener that someone was about to start speaking into the tube. The speaker would put his mouth in the cone, or horn, to speak, and the listener would bend to put their ear to the cone at the other end.

These tubes provided a reliable means of verbal communication throughout the ship, and the system worked even if the ship lost power.

Voice tubes are still used on some naval ships today, as a backup communication system, or as a means of communication that cannot be heard by the enemy. Apart from ships, they are often seen in children's playgrounds.

Later in the war, onboard telephone systems began to supplement voice tubes, with telephones installed on the bridge and in key locations, including the commanding officer's quarters and at the stern near the depth charge launchers.

The bridge of a corvette undergoing a refit, showing newly installed voice pipes clustered around the gyroscopic compass. Other voice pipes were located around the perimeter of the open bridge. (credit: source unknown)



Gerry Zaphe aboard HMCS Spikenard, standing beside one of the depth charge throwers. Two voice pipes can be seen curving out from the bulkhead (wall) behind him, one adjacent to each depth charge thrower. (Credit: Collection of Gerald Zaphe, www.forposterityssake.ca)



Gun crew aboard HMCS Agassiz, with one of the gunners wearing a flexible voice pipe for two-way communications. (Credit: <https://hmcssackville.ca/resources-2/educational-material/photos/>)



Cas (Ossie) Owsianski standing near the stern of HMCS Pictou, with a telephone just behind him. (Credit: Collection of Sid Dobing, www.forposterityssake.ca. Photo has been digitally restored by the author)



Ship-to-Ship and Ship-to-Shore Visual Communications²¹¹

On convoy duty, escort ships needed to communicate with other escorts, particularly in the event of actions against U-boats. They also needed to be able to communicate with merchant ships, such as to communicate changes in direction.

As further discussed below, all ships, including corvettes and other escorts, were equipped with radio systems that could be used to send and receive signals with other ships, and with shore stations. However, the use of radio to send messages could alert U-boats to the presence of the convoy. U-boats usually operated on the surface, especially at night, unless there was a convoy nearby or the threat of air attack. When running on the surface, U-boats could go much faster, and their crews had much better visibility. It was also essential for them since when submerged they ran using electric motors powered by batteries. When on the surface they ran their diesel engines and were able to recharge the batteries.

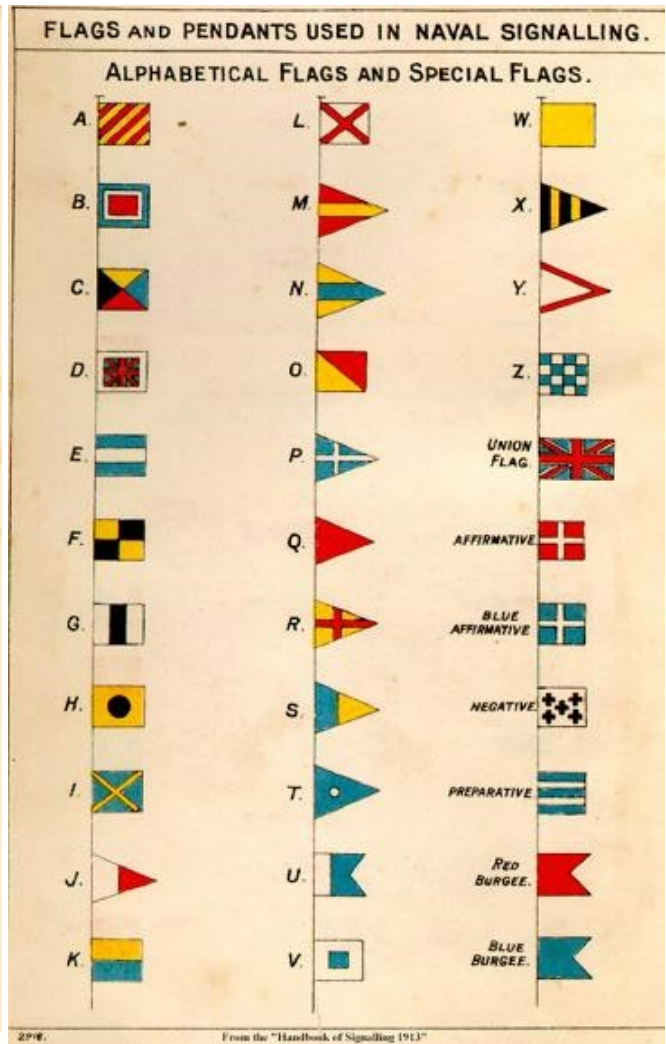
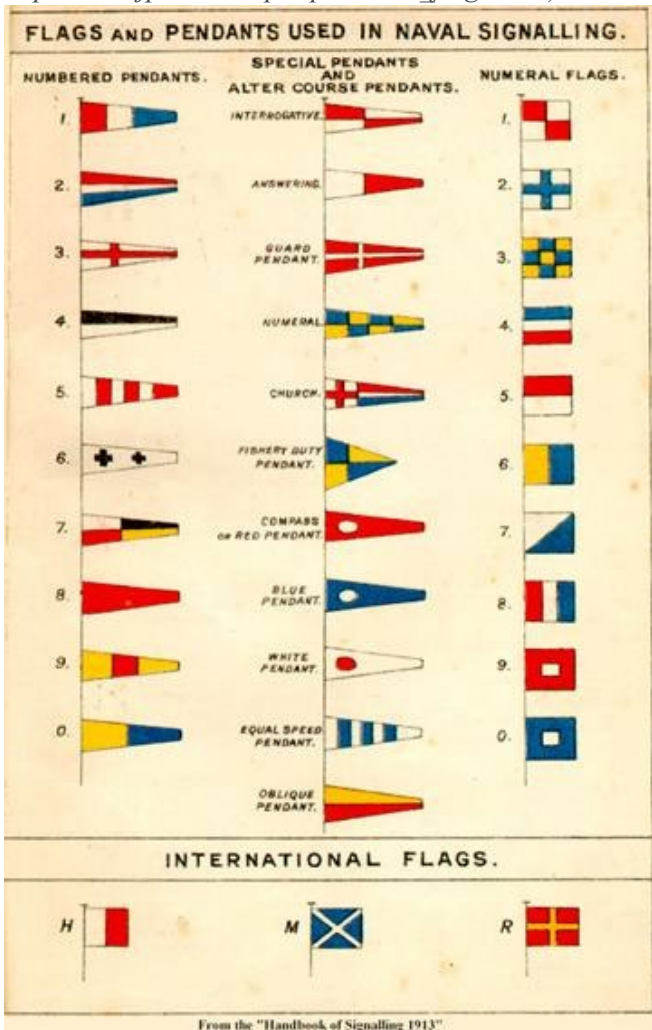
While on the surface, U-boats operated systems that allowed their crews to detect radio signals. Allied escorts used similar systems. Such systems couldn't be used to understand the messages unless the receivers happened to be tuned to the same frequency and the messages were not sent in code. However, if a convoy escort ship or merchant ship sent a radio message, detection of that radio signal would alert the U-boat to the presence of the convoy. If the signal was detected by several U-boats, this could allow them to determine the location of the convoy. As a result, radios were not used at sea unless a convoy was under attack. Even within harbour, before departing for convoy duty, radios were not to be used since an increase in radio traffic could alert U-boats to the impending departure of a convoy or an escort group.

To maintain "radio silence" ships at sea communicated with each other using visual signals, using one of two methods: signal flags, or signal lamps.

Signal flags would be hoisted above the ship's bridge. Some of these flags (also known as pendants) represented specific letters or numbers, while others represented words, such as affirmative or negative. Flags were stored in a locker on the bridge and were raised or lowered on orders from the officers on the bridge. Crews on other ships would use binoculars or telescopes to read the message communicated by the flags.

²¹¹ Information in this section is based on an excellent website on RCN communications by Jerry Proc. <http://www.jproc.ca/rrp/index.html>

Signal flags used by the Royal Navy and the RCN during the Second World War. (Credit: http://www.jproc.ca/rrp/rrp2/visual_flags.html)



Signalmen standing in front of the flag locker aboard HMCS Fredericton. (Credit: Collection of Charles Atkins, www.forposterityssake.ca)



HMCS Sackville “dressed overall” with all of her signal flags displayed. Ships dress overall in this manner for special occasions. In the case of the Sackville, she is typically dressed overall for Canada Day and also when she is being moved by tugboats to and from her summer berth on the Halifax waterfront and her winter berth in the naval dockyard. (Credit: HMCS Sackville Facebook page: <https://www.facebook.com/profile.php?id=100063613031668>)



Signal lamps were widely used at sea and could be seen from greater distances than signal flags, although rough seas could make it difficult to accurately send and receive messages. RCN corvettes were fitted with a pair of 10" signal lamps, one on each side of the bridge. These lamps projected a very narrow beam of light that could be seen up to 10 miles away in bright sunlight. The lamps were so bright that filters were sometimes used at night making them less bright. The lamps were fitted with slats, like the slats of Venetian blinds. By opening and closing these slats, a message was sent using Morse code. Messages could be sent at up to 8 words per minute, with the receiving ship sending an acknowledgment flash after each word.

Later in the war, corvettes, including the Cobalt, were also fitted with a 20" searchlight, installed on a platform connected to the aft platform for the 2-pounder pom pom gun. On some corvettes, depending on the type of light installed, this searchlight could also be used as a signal lamp.

Signal flags and lamps would also be used when within visual distance of shore, such as when entering and departing from harbours.

Signalman Jack Scott operating a 10" signal lamp aboard HMCS Sherbrooke in 1945. (Credit: Canada. Dept. of National Defence / Library and Archives Canada / PA-115354. www.forposterityssake.ca)



20-inch searchlight aboard HMCS Sackville. This one can also be used as a signal lamp. (author's photo)



Ship-to-Ship and Ship-to-Shore Radio Communications

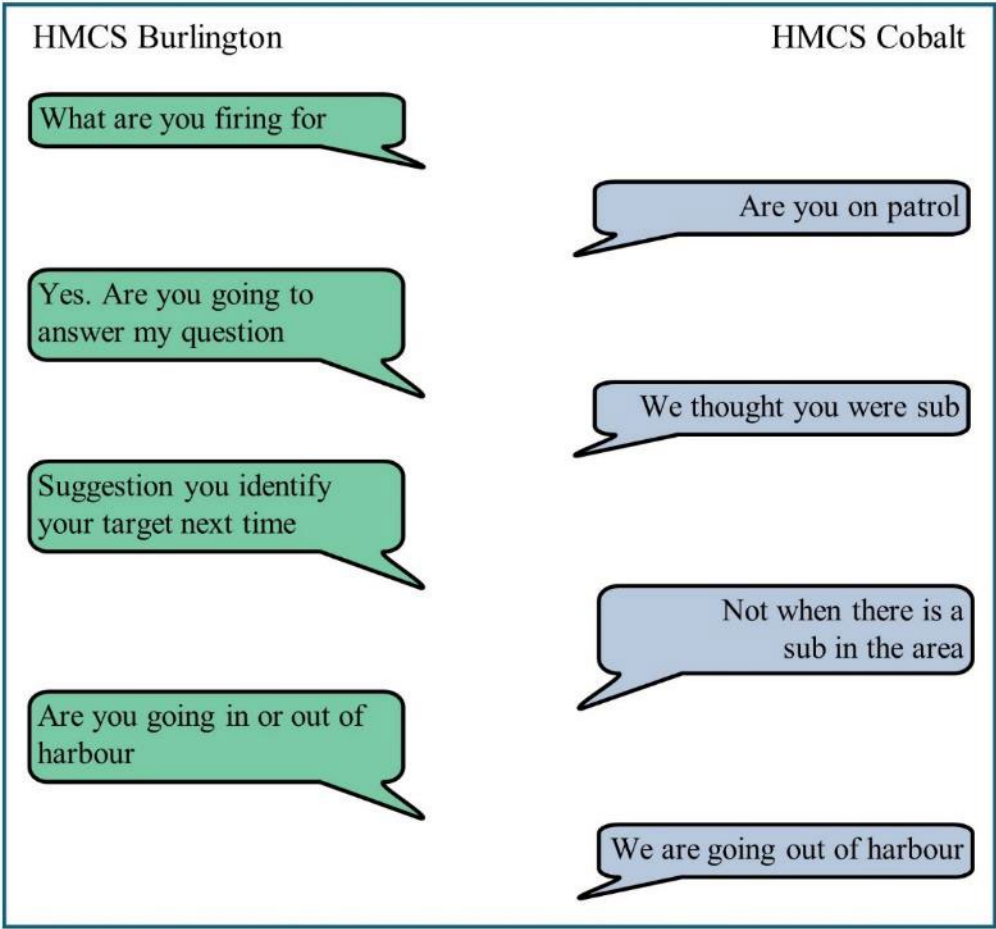
As noted above, naval ships like HMCS Cobalt were equipped with radio systems that could be used to send and receive signals with other ships, and with shore stations in Canada or the United Kingdom. These systems were housed in the radio office, which on corvettes was part of the bridge structure, located behind the wheelhouse.

Normally, messages were sent in Morse code, although voice was sometimes used when communicating with nearby ships. When sending secret messages in Morse code, the messages were encrypted so that, if intercepted by a U-boat or German shore station, the messages could not be understood.²¹² Separate from the radio office was a decoder's office, where outgoing messages would be encrypted before transmission, and incoming messages would be decrypted.

The Cobalt and other corvettes were equipped with various types of radios and encryption systems. Like other aspects of the ships, the communications equipment fitted was upgraded as the war progressed.

²¹² The Germans were successful in breaking the code used by the Royal Navy and the RCN, allowing them to decode Allied messages. This gave them information on positions of ships and routes of convoys. If messages could be decoded fast enough, this information could be used to put U-boats in better position to attack convoys. Eventually, the British realized that code had been broken, and introduced a new code that the Germans were not able to break before the war ended. Gene J. Pfeffer. 2010. *The Codebreakers' War in the Atlantic*. <https://warfarehistorynetwork.com/article/the-codebreakers-war-in-the-atlantic>

Example of visual communications. These are the messages exchanged by signal lamp between HMCS Burlington and HMCS Cobalt after the “friendly fire” incident described in Section 11, depicted as a modern text message exchange. (Credit: Library and Archives Canada, RG24. Volume 11559)



The mast aboard HMCS Sackville. The mast played a crucial role in communications. Hanging from the cross piece, known as the yardarm, are small pulleys supporting the ropes (halyards) used to raise and lower the signal flags. Also hanging from the yardarm but extending towards the back of the ship are four wires which are radio antennas. Other features on the mast include the crow's nest, midway up the mast, used to give the crew a higher vantage point when on the lookout for U-boats. Atop the mast is the antenna for the ship's SW2C radar. (author's photo)



A4.11 Boats, Life Rafts, and Life Vests

Corvettes carried both small wooden boats and life rafts. The wooden boats were used primarily for rescue operations if there was a man overboard, or if there were survivors from the sinking of another ship in the water. They could be used if the ship needed to be abandoned, but in many cases, this was not possible since sinkings often happened so quickly. For emergencies, the ships carried life rafts which could be released into the water much more quickly and easily.²¹³

For most of the war, the Cobalt and other corvettes carried two 16-foot-long wooden dinghies. These were mounted on either side of the ship. They had no motors, only oars, and could also be fitted with a small sail. The dinghies were raised and lowered using pulleys and a pair of small cranes referred to as davits.

One of the Cobalt's 16-foot dinghies can be seen in this photo, hanging from the davits used to lower the boat. When at sea, the davits were swung outwards so that the boat was hanging over the side of the ship making it easier to deploy in an emergency. (Credit: Collection of William Killam, <https://www.rcnhistory.org/killam-cobalt.htm>. Photo has been digitally restored by the author.)



During the Cobalt's final refit, from April to July 1944, the two dinghies were replaced by a larger single 27-foot-long wooden boat known as a whaler. Like the dinghies, the whaler had no motor and could be fitted with a sail.

²¹³ http://jproc.ca/haida/whal_cut_carley.html

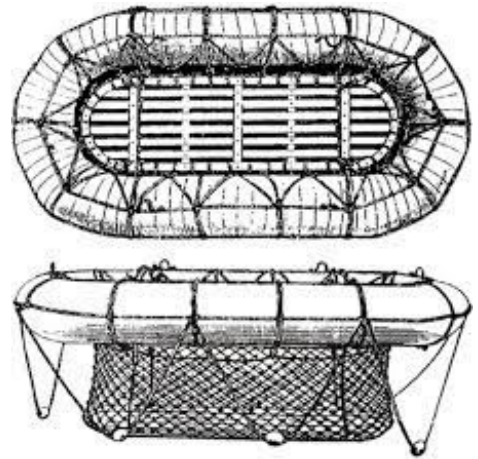
27-foot whaler aboard HMCS Sackville (author's photo)



Launching the whaler aboard HMCS Orillia, taken in the summer of 1944 while the ship was on workup in Bermuda after a refit in Liverpool, Nova Scotia. (Credit: Collection of Thomas Carson, www.forposterityssake.ca. Photo has been digitally restored by the author.)



The Cobalt carried life rafts known as Carley floats. These were very sturdy rafts built around a core of a metal tube 12 to 20 inches in diameter, divided into chambers for increased buoyancy. The tube was covered with a thick layer of cork and a layer of canvas. The float had a wooden floor attached by rope netting. The structure formed a rigid raft that could float equally well with either side on top and would continue to float even if damaged. Inside each Carley float were paddles, containers of water, food rations, and survival equipment. The outside of the float had rope netting to make it easier to hold onto.²¹⁴



Carley floats were built in various sizes. Early in the war, the Cobalt carried just two or three Carley floats. As her crew increased in size, so did the number of Carley floats. By the end of the war, the Cobalt carried six Carley floats that could carry up to 20 men each. The Carley floats were on three frames designed to quickly deploy the floats into the water in an emergency.

A sailor (Tim Moore) aboard HMCS Agassiz hitching a ride on a Carley float in rough seas. Not quite an amusement park ride but he appears to be having fun. A second pair of Carley floats is stored further aft. (Credit: Collection of Tim Moore, www.forposterityssake.ca. Photo has been digitally restored by the author.)



²¹⁴ http://jproc.ca/haida/whal_cut_carley.html

Corvettes and other RCN ships were originally equipped with life belts for crews to use in emergencies. The belts consisted of a waist belt that could be inflated by the sailor wearing the belt using a blow tube. The belt was held in place with shoulder straps.

Two crewmen at an anti-aircraft gun, likely aboard HMCS Sudbury. The sailor on the right is wearing his life belt and it has been inflated. The blow tube can be seen. (Credit: Collection on Ronald Judges, courtesy of Chanin Graham, personal communication with the author. Photo has been digitally restored by the author.)





In 1943 the RCN introduced a new design of life vest, envied by crews in allied navies. As described by the Canadian War Museum “The life vest's design incorporated improvements learned through bitter experience. A collar kept an unconscious wearer's head out of the water, while a small blinking red light, missing from this vest, helped rescuers locate survivors. A hook and line attached to the vest allowed survivors to attach themselves to floating objects like life rafts. A groin pad helped reduce injuries caused by explosions of depth charges.”²¹⁵ And as Milton Whymark attested, the life vests also had a whistle attached to them.

Crew members aboard HMCS Arvida showing off their life vests and caps with flashing lights to aid in rescue at night. (Credit: Collection of Ivan Bennett, www.forposterityssake.ca. Photo has been digitally restored by the author.)



²¹⁵ <https://www.warmuseum.ca/cwm/exhibitions/navy/gallery-e.aspx@section=2-E-2-c&id=20&page=0.html>

A4.12 Summary of Improvements to HMCS Cobalt: January 1941 to May 1945

The previous sections make it clear that HMCS Cobalt saw many changes and improvements from the time she was ready for service in January 1941 until the war ended in May 1945. By her last eight months of service, following her final refit in the summer of 1944, she was a vastly improved and far more effective warship.

However, it took time to get there. As with so many other aspects of the RCN's explosive growth, especially in the early years of the Second World War, getting ships refitted and better equipped was very challenging. There were a few reasons for this:

- Availability of equipment. Particularly early in the war, everything was in short supply, from ASDIC to anti-aircraft guns. Since most of this equipment was manufactured in the United Kingdom, and the Royal Navy's escorts operated primarily in the eastern Atlantic, where the U-boat threat was greatest, the corvettes and other ships of the Royal Navy tended to get new equipment before the RCN. As a result, RCN corvettes were often one to two years behind their Royal Navy sisters in terms of equipment. Considering the rapid evolution of technologies like ASDIC and radar and the introduction of new weapons like hedgehog, this was a big difference.
- Limitations of RCN corvette electrical systems. The corvettes built for the RCN were not originally fitted with electrical systems that could support gyroscopic compasses and other later equipment. This has a trickle-down effect since reliance on magnetic compasses meant that newer ASDIC types would be useless. ASDIC is linked to the compass, and newer types of ASDIC required a gyroscopic compass to accurately plot the speed and direction of submerged submarines. Upgrading the electrical system was a big job, and the RCN decided to defer upgrading the electrical system until refits when the corvettes fo'c'sles were being extended since this was such a major reconstruction of the ships. This delayed the installation of newer ASDIC. It also delayed installation of hedgehogs, since the fire control system for hedgehogs was linked to the upgraded ASDIC and the plots based on ASDIC information linked to readings from the gyroscopic compass. In addition, to make space for the hedgehog, the fo'c'sle extension was essential.
- Limited shipyard capacity. The Canadian shipbuilding industry had been very small before the war, and like the RCN itself, grew exponentially during the war. Canada built hundreds of naval and merchant vessels during the war, not just for Canadian use, but also for the United Kingdom and the United States. The capacity of major shipyards from the east coast to the Great Lakes to the west coast was consumed with the construction of new ships. Larger shipyards were also needed to repair damage to larger navy ships and merchant ships. This left few options for shipyards where corvettes could be refitted. The RCN turned to smaller east coast shipyards with little or no experience in building or refitting naval ships, such as shipyards in Liverpool, Shelbourne, Lunenburg, and Pictou in Nova Scotia. A few corvettes were also refitted in the US, in shipyards as far afield as Galveston, Texas. However, the bulk of the refits were refitted in these small Nova Scotia shipyards.
- Urgent demands of convoy escort duty. Refits took two to four months to complete, depending on the nature of the work to be done. Workup periods after refits took another few weeks. This took the ships away from their vital role of convoy escort. Particularly in the first half of 1942, when RCN escorts were pushed to their absolute limit taking on new escort duties as German U-boats pressed

home attacks along the east coast of North America, including far into the Gulf of St. Lawrence and the St. Lawrence River, the RCN could ill-afford to pull escorts from convoy duty for refits. As essential as refits were to maintain the ships in good condition and to upgrade their equipment, there were times when refits became a luxury that had to wait, and even essential maintenance and repair like cleaning ships' boilers was delayed.

Below is a summary of the major changes to HMCS Cobalt and her equipment from the time she entered service in January 1941 until the end of the war. The author has not located any records that document, in writing, the nature of the work done during each of the Cobalt's three refits, completed from December 1941 to January 1942, March to April 1943, and April to July 1944. There is also no record of changes or upgrades, if any, that were completed outside of these refits. This list is based on:

- A report completed for the work-up following HMCS Cobalt's second refit, the February 1944 Fighting Equipment Report, and a report completed for the work-up following her third and final refit.
- Photos of HMCS Cobalt taken throughout her service life.
- General information about upgrades to RCN Flower class corvettes during the Second World War.

Ship's structure:

- Bridge wings added (first refit)
- Structure added to support Type 271Q radar (second refit)
- Fo'c'sle extended (third refit)
- Bridge modified and enlarged (third refit)
- Interior space added behind the bridge (third refit)

Electronics:

- SW1C radar added (first refit)
- SW1C radar upgraded to SW2C (either second refit or between second refit and February 1944.)
- Type 271Q radar added (second refit)
- Electrical system upgraded to support gyro compass and other new systems (third refit)
- Type 123a ASDIC replaced by Type 144 (third refit)
- Gyro compass replaced magnetic compass (third refit)
- Electronic plotting system and fire control system added to support operation of hedgehog (third refit)
- Interrogation Friend or Foe (IFF) system added for aircraft identification (unknown but likely coincided with an upgrade to SW2C radar)
- Radio equipment upgraded; details unknown (unknown. This may have been incremental)

Weapons:

- Second pair of depth charge throwers added (first refit)
- Improved stern depth charge rails installed (third refit)
- The number of depth charges carried increased from 40 to more than 70 (incremental increases from the first to third refit, with the largest increase after the second refit when minesweeping gear was removed)
- Hedgehog added (third refit)
- Vickers heavy machine guns added (sometime soon after entering service)

- PAC projectors added (unknown)
- Lewis light machine guns replaced by 20mm cannon (unknown, but before the second refit)
- Vickers heavy machine guns replaced by 2-pounder pom pom (second refit)

Mine sweeping and other countermeasures

- Degaussing cables added (unknown)
- Mine sweeping gear removed (second refit)
- CAT gear added (between the second refit and February 1944. Likely soon after CAT gear was introduced in September 1943 since this was a simple upgrade that could be completed in port.)

Boats and life rafts

- Two 16-foot dinghies replaced by a single 27-foot whaler (third refit)
- Two Carley floats were added, which were missing in the earliest in-service photos. (unknown)
- The number of Carley float increased to six (incremental increases through successive refits, as the size of the Cobalt's crew increased)

Other changes

- 24-inch search light added in front of aft gun tub (second refit)
- Rocket rails added to the gunshield of the main gun to launch rockets for illumination at night (unknown. The rails were not installed as part of the work for the Cobalt's third refit completed in Liverpool, Nova Scotia. However, they are evident in later photos. After the work was completed in Liverpool, she went to Halifax where additional work was completed before going to Bermuda for work-up. The rails were likely installed in Halifax as part of her third refit)
- Mainmast (aftermost mast) removed (first refit)
- The forward mast moved to behind the bridge to reduce interference with the Type 271Q radar (third refit)

A4.13 Flags and Battle Honours

Like all Royal Canadian Navy ships from 1911 to 1965, the Cobalt flew a flag known as the White Ensign, known in Canadian service as the Canadian Naval Ensign.²¹⁶ This was the same as the flag flown by the Royal Navy as well as the navies of Australia and New Zealand. The White Ensign has a red cross of St. George on a white background, with the Union Flag in the upper left. The White Ensign is still flown by ships of the Royal Navy.

The location from which the White Ensign was flown aboard the Cobalt varied throughout her service life as she was altered in refits. Initially, the flag was flown from a large mast towards the back of the ship. After this mast was removed, the flag was flown from a staff at the stern of the ship. After her final refit in 1944, the White Ensign was flown from a staff attached to her funnel.

²¹⁶ <https://www.canada.ca/en/navy/services/history/naval-flags-uniforms/diplay-naval-flags.html>

The White Ensign



The Cobalt in Halifax in 1941, flying the White Ensign from her mast. (Credit: CFB Esquimalt Naval and Military Museum Photo)



The Cobalt in Liverpool, Nova Scotia in 1943, flying the White Ensign from her stern. (Credit: Collection of William Killam, <https://www.rcnhistory.org/killam-cobalt.htm>. Photo has been digitally restored by the author.)

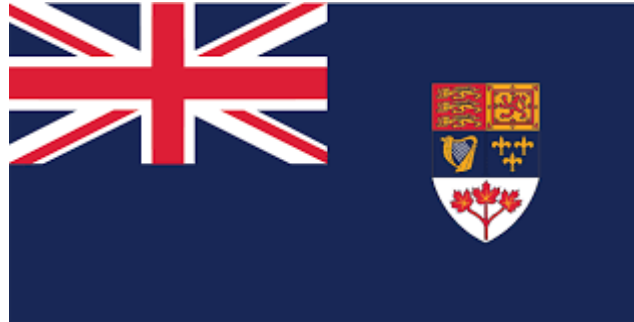


The Cobalt in Liverpool, Nova Scotia in 1944, flying the White Ensign from a staff on her funnel. (Credit: Collection of Edmund Ferris, <https://www.rcnhistory.org/ferris-cobalt.htm>)



The RCN also had a flag referred to as the Canadian Naval Jack. This was similar to the Canadian flag of that era, the Red Ensign, except that the Canadian Naval Jack had a dark blue background rather than red.

Canadian Naval Jack



Ships were equipped with a removable flag staff known as a jack staff, which was to be mounted at the bow of the ship to fly the Canadian Naval Jack. The jack would only ever be flown when in port.

In searching through hundreds of photos of Canadian corvettes, the author found just one photo of HMCS Sackville flying the Canadian Naval Jack, and a sequence of photos taken aboard HMCS Woodstock at the RCN base in Esquimalt, British Columbia. The Woodstock only arrived in Esquimalt in late November 1944, and she was decommissioned there on January 27, 1945, so it is quite possible that the photos of her flying the Canadian Naval Jack were taken at the time of her decommissioning. Since the sequence of photos also includes many group photos, photos of crew with the kit on shore leaving the ship, and also shows the crew walking off with the ship's nameplate, apparently as a souvenir, this supports the idea that she was flying the Canadian Naval Jack to mark her decommissioning.

Crew of HMCS Woodstock pose at the bow of the ship with the Canadian Naval Jack flying. In the background is the Bickford Tower, originally built as a signaling tower and still standing at Canadian Forces Base Esquimalt as a heritage building. (Credit: Collection of Harry Harold Palatnick, www.forposterityssake.ca. Photo has been digitally restored by the author.)



*Canadian Naval Jack flying from the jack staff at the bow of HMCS Sackville in Halifax.
(author's photo)*



Battle honours are awarded to “provide public recognition of and to record a combatant unit's active participation in battle against a formed and armed enemy.”²¹⁷ This includes units such as individual ships, air force squadrons, or army regiments.

HMCS Cobalt has a single, very well-earned battle honour: Atlantic 1941-45

Battle honours can be borne by successors, so if there was ever to be another HMCS Cobalt, it would be able to proudly display the Battle Honour Atlantic 1941-45

Plaque displaying Battle Honours aboard HMCS Sackville. (author's photo)



A4.14 Gunshield Art

During the Second World War, RCN ships did not have official crests or badges, as Canadian ships do today. A formal program to design and adopt crests or badges was only introduced after the war.²¹⁸ However, during the war, many ships had informal crests or badges, approved by the ship's commanding officer. Thus, wartime crews were on their own, with considerable artistic licence to shape their ship's identity in the form of crests or badges. They ranged from more “heraldic” type crests or badges to humorous and cartoon-like. In the case of corvettes like the Cobalt, the ship's crest or badge was often painted prominently on the gunshield of the ship's main 4-inch gun.

²¹⁷ <https://www.canada.ca/en/departement-national-defence/services/military-history/history-heritage/battle-honours-honorary-distinctions.html>

²¹⁸ <https://readyayeready.com/badges/crowsnest-dec-48/index.php>

The painting of artwork on gunshields was similar to the idea of nose art that was painted on many Allied aircraft during the war, particularly large bombers. As with ships, it was a way for the crew to personalize their craft. Artwork was painted on other types of ships too. Many German U-boats had artwork painted on their conning towers, and small patrol boats like US Navy PT Boats often had artwork.

However, the scale on which gunshield art was painted on RCN corvettes and other ships is somewhat unique, and something that distinguished Canadian corvettes from their Royal Navy sisters.

The “origin story” of RCN gunshield art is, in itself, a piece of Canadian history. In January 1942 the Seagoing Officer’ Club was opened on the top floor of an old warehouse on the waterfront in St. John’s, Newfoundland. It was a place for officers of warships and merchant ships to gather, relax, decompress from the stress of convoy duty, and share stories that would rarely if ever be shared in outside circles. It fulfilled a role similar to the Royal Canadian Legion for veterans, except that its members were on active duty. The club later became known as the Crow’s Nest Officer’s Club, or the Crow’s Nest for short, after an army officer, invited to the Club, commented on the climb to get there (59 rickety wooden steps) and cozy atmosphere inside. He called it a crow’s nest, after the small lookout platform high on the masts of ships. The name stuck.²¹⁹

On opening night, an officer from HMCS Georgian started to carve the ship’s name into the woodwork. The officer who had started the Club, anticipating the problems that this could cause but likely never anticipating where his solution would lead, put an end to the carving. Instead, he allowed each ship a 2’ x 2’ space on a wall of the club to display something regarding the ship. In an article about the Crow’s Nest, Gary Green from the Crow’s Nest Military Artefacts Association relates what happened next:²²⁰

“The officers from HMCS Wetaskiwin went back to their ship’s wardroom and removed ‘The Wet Ass Queen,’ a painting of a queen sitting in a puddle of water shaped like the island of Newfoundland, and brought it to the club. Within 24 hours, the officers from HMCS Trillium produced a still-wet painting of Donald Duck chasing a U-boat. In short order, other ships and shore units added their contributions, and the walls became covered with colourful representations of Churchill, Hitler, heraldic beasts, totem poles, bulldogs, Disney characters, Popeye, and anything else that portrayed the pride the crews had in their vessel or unit.”

It is the Club’s understanding that there was even a special ceremony when new ships joined the walls of the Club.²²¹



Soon after the artwork appeared in the Club, the “Wet Ass Queen” appeared on HMCS Wetaskiwin’s gunshield. Within short order, the crews of other corvettes followed suit, and artwork from the club was reproduced on many other gunshields. And thus, gunshield art was born. What started as a way to control graffiti inside the Crow’s Nest became an RCN tradition.

²¹⁹ Gary E.H. Green, The Crow’s Nest. Published in the Journal of Ocean Technology, 2010

²²⁰ Same reference as above.

²²¹ Gary Green, Crow’s Nest Military Artefacts Association, personal communication with the author.

Modern RCN ships carry on this tradition. For example, Canadian frigates display gunshield art on the access doors to their main guns, in some cases based on the gunshield art of their Second World War predecessors.

Gunshield art from the Second World War corvette HMCS Calgary and the modern frigate HMCS Calgary.
(Credit: www.forposterityssake.ca)



Modern gunshield art aboard HMCS Toronto, very much in the tradition of Second World War gunshield art.
(Credit: www.forposterityssake.ca)



Today, the Crow's Nest Officer's Club continues as a club, although open to the public.²²² It is also listed as a museum and a historic site. A unique distinction for a bar! It has what is likely the largest collection of RCN gunshield art anywhere and has crests and badges from many ships, Canadian and foreign. The Club's website has an excellent 3D virtual tour. Check it out and see if you can spot the Cobalt's gunshield art. <https://crowsnestnl.ca/tour/>

The Cobalt and her crew were a bit late to the game in getting gunshield art. While there are no records of when the gunshield art was first painted, it can be backdated based on the artwork the gunshield art was based on. As described in Section 11, the Cobalt's gunshield art portrayed the mining heritage of the town of Cobalt but was based on the Beechcraft Busy Bee created by Walt Disney for the Beech Aircraft Corporation in 1942. This leads to an obvious question – how did an artist/sailor in the RCN find out about a corporate mascot created for a company based far from the ocean, in Wichita Kansas?

The likely explanation is advertising. In July 1942, the Beech Aircraft Corporation had a full-page advertisement in *Flying* magazine and possibly other magazines as well, that featured the Beechcraft Busy Bee. Since magazines were supplied to sailors by various organizations from the Red Cross and the YMCA to, in the case of HMCS Cobalt, the Old Timers of Cobalt (see Section 11), the most likely explanation is that the artist saw the advertisement in a magazine and took that as inspiration to create the Cobalt's gunshield art. The artist may also have found it in the magazine racks of a store in New York City, since the Cobalt was in New York several times in July and August 1942.

It is likely then that the Cobalt's gunshield art was applied soon after July 1942 when this advertisement appeared. More likely, given the amount of time that the Cobalt was spending at sea, it was applied in August or September 1942. Interestingly, if this is correct, then the Cobalt got her gunshield art after leaving St. John's and the Newfoundland Escort Force and the Crow's Nest, although she was still in St. John's from time to time.

Despite being no longer based in St. John's, it is clear that the Cobalt made at least one more trip to St. John's. In the collection of the Crow's Nest is a rendition of the Cobalt's gunshield, signed by the same artist who painted the original gunshield in the photo in Section 11 – Watson. In keeping with the traditions of the Crow's Nest, it is likely that the version of the artwork in the Club actually pre-dates when the Cobalt's gunshield art was first painted. Thus, a little piece of HMCS Cobalt lives on in the Crow's Nest in St. John's.

As noted in Section 11, a smaller version of the artwork from the Crow's Nest was also given to the Town of Cobalt. This version appears in at least two photos taken inside the town council chambers, one likely taken during the war and one most likely taken a few years after the war. As stated in Section 11, this is thought to have been given to the town in the spring of 1943. It is now part of the collection of the Cobalt Mining Museum.

²²² <https://crowsnestnl.ca/>

July 1942 advertisement from the Beech Aircraft Corporation featuring the Beechcraft Busy Bee. (Credit: <https://books.google.ca/books?id=XtlZmhIDXRYC&pg=PA87&dq=flying+magazine+july+1942&hl=en&sa=X&ved=2ahUKEwjrvvzs24j-AhX7j4kEHQSVcyk4ChDoAXoECACQAg#v=onepage&q=flying%20magazine%20july%201942&f=false>)

The Beechcraft Busy Bee

CREATED by Walt Disney especially for Beechcraft, as a badge of merit and honor to be awarded to employees of any rank or station. To qualify for the award an employee must have demonstrated, by performance, the qualities of high efficiency, interest in his work and in training for further advancement, cheerful cooperation with others, and the constant determination to "Kil' em with Production."

The Beechcraft Busy Bee, rampant on a field of blueprint paper shaped in the form of a Beech leaf, embodies these qualities. Although this Beechcraft Busy Bee is busy as can be, he's not too busy to look aside to see, if instead of two jobs, he can't do three. His flamed Beechcraft winged insignia and his cheerful grin are indicators of his high morale, but his determination is written all over his face.

Most Beechcrafters will qualify for this award. With willing spirit and determination they are pushing production rates ever upward.

Design conceived by Walt Disney

BEECH AIRCRAFT CORPORATION, WICHITA, KANSAS, U.S.A.

HMCS Cobalt gunshield art, part of the collection of the Crow's Nest Club in St. John's Newfoundland and Labrador. (Credit: Gary Green and Margaret Morris, Crow's Nest Officer's Club, personal communication with the author.)



Version of the gunshield art given to the Town of Cobalt in 1943 and is now part of the collection of the Cobalt Mining Museum. It is by the same artist – Watson - that painted the version in the Crow's Nest and painted the original artwork on the ship's gunshield. Oddly though, this version is missing the bee's wings and a few other details. (author's photo, with thanks to the Cobalt Mining Museum)



Photo taken in the Town of Cobalt council chambers, likely taken after the Second World War, showing the artwork based on HMCS Cobalt's gunshield sitting on the fireplace mantle. The man sitting at the head of the table is Ken Buffam who was mayor of Cobalt from 1949 to 1956, although it is not certain if this photo was taken while he was mayor. (Credit: Cobalt Mining Museum. Photo has been digitally restored by the author. Credit to Maggie Wilson of the Cobalt Historical Society for identifying the location where the photo was taken, identifying Mr. Buffam, and providing information on when he served as mayor, personal communication with the author)



Another wartime-era colour version of the Cobalt's gunshield art. The source is unknown, and there is no other information about this artifact. It appears to be on a fairly small piece of cardstock, judging by the marks in the corners where it appears to have been bent. It is possible that some of these were printed for crew members.



A4.15 Training and Workups

To be effective in her role, the Cobalt's crew needed to be well trained as individuals, as teams, and as a crew as a whole. Each person had to know their role of course, from cooks to radar operators. But teams needed to be able to work together, such as the teams responsible for weapons like the main gun or the depth charges, or the engine room crew. For example, firing the main 4-inch gun required several men taking orders from a gunner officer on the bridge to aim, load, and fire the gun, and to keep a steady supply of the correct ammunition and charges coming to the gun – teamwork was essential.

Crew members also needed to know their role in an emergency. For example, a cook might take over as a firefighter, and receive necessary training. Various crew members would need to know their roles and responsibilities in emergency repairs in the event of damage from a torpedo hit, collision with another ship, or some other emergency, referred to as damage control. And of course, crews needed to know what to do if the ship needed to be abandoned, including how to get up on deck in the dark, and how to launch the Carley floats and get into them in rough seas.

North Atlantic convoy duty was no pleasure cruise, and crews needed to be prepared, both to achieve their goal of escorting convoys and to survive in a war conducted in an incredibly hostile and unforgiving environment.

Training for all newly recruited sailors began with basic training. On the east coast, this was done at HMCS Cornwallis, a shore installation near Digby, Nova Scotia. There, the recruits would learn some of the basic skills expected of anyone in the military and expected of sailors. Some showing particular aptitudes were selected for more specialized training, such as communications. However, sailors left Cornwallis with a LOT to learn.

Much was learned and many skills were honed through on-the-job training once sailors were assigned (drafted) to specific ships. Sailors could also be sent for further training ashore, and some trades required specialized training, such as ASDIC and radar operators, navigators, and engineers working on the boilers and in the engine room.

However, to truly function as teams, and as a ship, the whole ship needed to be put through its paces through training at sea. For HMCS Cobalt and her crew, the first opportunity for this type of training came soon after the ship was sent to St. John's as part of the Newfoundland Escort Force (NEF).²²³ After the Force was formed, it soon became apparent that a lot more training was needed to bring the Force to the state of effectiveness needed to challenge the U-boats. Lieutenant-Commander James "Chummy" Prentice was the captain of HMCS Chambly, also part of the NEF, and he was Senior Officer, Canadian Corvettes. For about nine weeks, Prentice pushed the NEF ships and crews hard, very hard, to increase their state of readiness. The training covered everything from signals training to weapons training to the use of the ships' minesweeping equipment. Ships trained together on how to conduct anti-submarine sweeps, and invaluable skill when convoys came under attack.

This training period also included "real world" training for ASDIC operators. A submarine of the Royal Netherlands Navy, based in Halifax, provided an underwater target for the ASDIC operators. This helped the operators to learn how to track and maintain contact with submerged submarines, and how to

²²³ Description of NEF training under Lieutenant Commander Prentice is based on: The Training Gap: Navy, Part 31. Marc Milner, February 20, 2009, Legion Magazine.

distinguish between submarines and other contacts, like whales or schools of fish. Before the introduction of radar, ASDIC was the only way to find submarines unless one was spotted on the surface, and even after radar was introduced it remained a critical tool since it was the only way to find and track submerged submarines. Having ASDIC operators who were good at their jobs was a matter of life and death!

After this period of intense training, the operational schedule of HMCS Cobalt and her sisters was so intense that there were few other opportunities for training of this type. Particularly after the United States entered the war and U-boats began carrying out heavy attacks along the east coast of North America, the Canadian corvettes were stretched to their limit, with limited opportunities for training.

However, one milestone in the service lives of corvettes and their crews necessitated a period of training – refits. HMCS Cobalt went through three refits: December 1941 to January 1942, March to April 1943, and April to July 1944. During each refit, new equipment was installed, such as radar (first and second refits), improved ASDIC (third refit), and new weapons, particularly hedgehog (third refit). Each time the Cobalt and other corvettes came out of refit, there were also significant changes in the crew, with new crew members and officers that had not worked together before.

With new equipment and weapons and new crew members as well as other changes, workup periods following refits were essential. Workup periods were used to provide training on the new equipment and weapons and to provide an opportunity for crews to work together to become cohesive teams. During workups, ship's officers and crews were also evaluated by experienced officers who looked at all aspects of performance, including gunnery, communications, lookout activities, and use of the ship's boats, as well as emergency procedures including fire control, damage control, and preparations to abandon ship.

Until mid-1944, workups for RCN ships on the east coast were conducted in Nova Scotia, in St. Margaret's Bay, and Pictou. However, winter weather could hamper training. A new RCN shore establishment was set up in Bermuda – HMCS Somers Isles – as a year-round training facility for workups. HMCS Cobalt's final workup was completed in Bermuda. This was likely the furthest south that the Cobalt ever sailed until her much later career as a whaling ship since the Cobalt was not involved in escorting convoys in the Caribbean.

A report on HMCS Cobalt's workup in Pictou in June 1943, following her second refit, is provided on the following pages.²²⁴ The report gives a good sense of how thorough the evaluations were that were conducted during workups.

²²⁴ Source: Library and Archives Canada, RG24, Volume 6909.

Captain (D) Halifax

Office of The Training Commander

Report on Working Up

From: Refit H.M.C.S. " COBALT " To: W.L.E.F.
 (WUPs # - refer)
 Commenced WUP 7 June '43 Completed WUP 21 June '43 Total No. days HWUP Nil
 No. of days Sea WUP delayed Nil Reasons for delay - SWUP 15

Equipment

Type of RDF set SW 2 C Type of Asdic set 123A 61440
 L/A Armament 4" B.L. MK I No. of D/C Throwers 4
 H/A Armament 1 x 2pdr Pom Pom D/Cs carried 70 Full stowage 70
2 x 20mm Oerlikons
2 x Bren.

Name	Seniority	Rank	Duties	Sea Time	Short Courses			
					A/S	G	S	T
R.A. JUDGES	15 Jan'40	Lieut. RCNVR	C.O.	18 Months.				
C.D. HEWARD	13 Apl'43	Lieut. RCNVR	X.O.	10 Months				
A.W. BETT	7 Dec'42	Mate RCNR	Nav.	4 Months	Yes			
N.M. McMILLAN	11 May'42	S/Lt. RCNVR	A/S C.O.	9 Months	Yes			
H.E.D. SCOVILL	9 Nov'42	S/Lt. RCNVR	R.D.E.	2 Months.				
N.I. RUSSELL	15 Jan'43	S/Lt. RCNVR	Torp. A/A	Accounts Nil.				

Staff Training Officers' Impressions of Personnel

Name	Rating	Effic- lency	Keen- ness	Remarks	Non-sub.
V. 6587 D. PIMLOTT	A/P.O.	5	6	Keeps set in good order and takes charge of SD's well. Needs practice on MPT.	H.S.D.
		4	5	Attitude is good but they need a great deal of practice at M.P.T.	S.D. Ratings
3657 J. BROWN	A/P.O.	6	6	Knows his job and is anxious to get drill well organized. D/Cs well cared for.	L.T.O.
V5985 T. McTAGGART	A.B.	6	6	A good seaman and an excellent QR II. Takes charge well.	Q.R.II
2973 D. BACKMAN	A/CPO	6	6	Knows his job. Co-operates with officers. Should spend more time on upper deck.	Cox'n Takes charge
V. 3645 J. MORRISON	L/Sig.	5	6	Interested but needs to study. Should take charge more. In time will be a good yeoman.	L/Sig. (well)
		5	5	All weak at practical and books. Need more instruction.	Junior Sigs.
V. 23257 J. GRANT	L/Tel.	5	5	Does not appear interested. Room for improvement. Needs to take charge more.	L/Tel.
		5	5	They are good operators and are fairly interested but need to work and study harder.	Junior Tels.
V. 6904 G. SMITH	A.B.	5	5	Quite a good operator but does not take charge of, or help junior operators.	L/RDF Operator
		4	5	Below average as operators. Need more encouragement and more instruction.	Junior Operators
				Fair. Quite accurate but still rather slow.	CODERS.

* 10 marks is maximum for each. 5 marks indicates satisfactory average

Captain (D) Halifax

Office of The Training Commander

Report on Working-up Programme (Continued)

H.M.C.S. " COBALT "

SEA Evolutions and Exercises carried out		Assessment	Remarks
1.	Lecture to PO's & L/Smn.	Sat.	Appeared interested. Suffering from effects of refit. Improved during WUP.
2.	OoW Exercises by day	Poor.	All Officers are inexperienced but CO is giving them all the assistance possible.
3.	OoW Exercises by night	Poor.	Lack experience. No appreciation of position of target when ship alters course.
4.	Ship handling	Good.	Commanding Officer capable and careful. Conditions were very unsatisfactory. Need a great deal of practice as a team
5.	A. S. Ps	Poor.	X.O. takes charge. Has drilled his party carefully and knows what to do.
6.	Boarding Party with S/M	Good.	Can fire a pattern in quick time.
7.	Counter attack with watch on deck	Good.	Gunnery control good but all need drill in A/S.
8.	Night action procedure	Sat.	Gunnery well above average, but rest of organization requires practice.
9.	Collision stations	Good.	Fire and repair parties know their job. Collision mat well handled.
10.	Fire stations	Good.	Good flexible organization. All officers know flooding arrangements.
11.	Damage Control	Sat.	Shores placed satisfactorily.
12.	Anchor work	Sat.	Exercised daily. A capable foc'sle party.
13.	Boat work	Fair.	Need much more practice with the correct orders being given.
14.	Exercise life boat's crew	Sat.	Boat away in quite good time.
15.	Secondary steering	Sat.	Need more exercise - Inclined to be slow.
16.	Secure to buoy		Not carried out.
17.	Prepare to abandon ship	Poor.	Poorly organized. Ships company slack in wearing lifebelts. Organization in hand.
18.	Towing and being taken in tow	Sat.	Quite well handled by X.O. Ship well handled by C.O.
19.	Stream fog buoy		Not carried out.
20.	Rig and lay out Dan buoy		Not carried out.
21.	Heaving the lead	Good.	Good reports to bridge. Exercised frequently.
22.	Rig deep sea lead		Not carried out.
23.	R/T exercises	Sat.	Messages handled quickly and efficiently.
24.	Oiling at sea	Sat.	Well directed by X.O. Ship well handled by C.O.
25.	Lookouts Exercises	Fair.	Attitude good but require constant supervision by O.O.W.
26.	Pistol and Rifle firing	Sat.	Instruction given.
27.	Full calibre firing	V. Good	Exceptional accuracy.
28.	Firing at sleeve target		Not carried out.
29.	A/C exercises: RDF, D/F & R/T	Poor.	R.D.F. well below average.
30.	Escort duty: 48 hrs. with convoy		Not carried out.
31.	Recreation parties	Good.	Boat racing and Ball games entered into enthusiastically.

SECRET.

Captain (D) Halifax

Office of The Training Commander.

Report on Working-up Programme (Continued)

H.V.C.S. " COBALT "

Section I - Report on the Ship's efficiency in Gunnery.

This ship's Gunnery is well above average and G.C.O., Lt. Heward, controls the gun very well. The QR II takes charge of the gun's crew and looks after the armament very well. Magazines are clean and well stowed and there is evident attention to detail. Short range weapons are well handled

Section II - Report on the Ship's efficiency as an A/S unit.

Depth Charges: Organization Good. Reloading Drill Sat.

Reloading time for full pattern of 10 charges 40 sec

D/C organization and drill is very satisfactory. The C.O. has quite a good knowledge of A/S but none of the other officers are capable of carrying out an efficient O.O.W. counter attack. The A/S team needs considerable practice before they can be considered really satisfactory. The A/S C.O. has had a short A/S course but he definitely needs a refresher.

Section III - Report on the Ship's efficiency in Communications.

This department would improve considerably if the Signal Officer would take charge and show more interest in his job. Both the L/Sig and the L/Tel. need to take charge more. There is at the present time a noticeable lack of attention to detail. V/S is weak at practical and books. W/T organization is fair and R/T is good. The whole communication branch showed a definite improvement during the W.U.P.

Section IV - Report on Ship's efficiency in Engine Room Department.

It is evident that this department had been allowed to deteriorate over a long period of time and that a great deal of work will have to be done before it reaches a satisfactory state of efficiency. Good work has been done during and after refit in general cleaning up and it is expected that new interest in their work has been given to Engine Room ratings. It is stated that the main propelling and auxiliary machinery is now working well. The ship completed refit 24th May, 1943 and came off slip 3rd June, 1943. The C/E.R.A., C.E. Glistler took charge just prior to refit and has made good headway towards putting this department into an (efficient state).

Section V - General Remarks.

This ship showed a definite improvement during the WUP due mainly to the energy and enthusiasm of the C.O. and X.O. The C.O., Lt. Judges is an efficient officer who handles his ship well and who commands the respect of the ship's company. Lt. Heward, 1st Lieut., is a keen and very capable officer and interested in his work. He controls the ship's gunnery efficiently and in general works hard to improve the organization and fighting efficiency of the ship. Mate Bett is average as a navigator, but is only interested in his own job. He has shown a definite improvement in his general attitude under the present C.O. S/Lt. MacMillan lacks the ability to take charge and has a poor power of command. As A/S C.O. he is definitely below average. S/Lt. Scovil should make a good officer. He has had 21 months lower deck and is very keen in all respects. S/Lt. Russell is a keen officer with a good power of command. He does however, need to apply his energies to his own department, namely Signals.

H.M.C.S. "COBALT" required a thorough "Hogging Out" when she arrived at Pictou and WUP was handicapped by the state of the ship and gear generally. However the ship made a great effort to clean and work up at the same time.

I consider H.M.C.S. "COBALT" is now up to average and will improve quickly under the forceful efforts of her C.O. and 1st Lieutenant.

J. C. Hibbard

(J.C. Hibbard)

COMMANDER, R.C.N.
THE TRAINING COMMANDER.

/RF

Appendix 5: Officers that Served Aboard HMCS Cobalt

Below is a list of all officers who served aboard HMCS Cobalt from the beginning of her active service in early 1941 to the end of the war.

This information is compiled from publications of the Canadian Navy List. Each publication of the list provided information on each officer serving in the RCN, including their rank, the ship or shore establishment where they were serving, and their seniority. Each publication also provided an update on the officer complement of each ship and shore establishment.

The Canadian Navy List was published from 1910 to 1965 and during the Second World War it appears to have been updated monthly or close to that. The [CFB Esquimalt Naval and Military Museum](http://www.forposterityssake.ca/RCN-DOCS/NAVY-LISTS-RCN.htm) has digitized all available Canadian Navy Lists to preserve them and make them available to researchers. They are also available at <http://www.forposterityssake.ca/RCN-DOCS/NAVY-LISTS-RCN.htm>

September 1940

First reference to HMCS Cobalt in the Canadian Navy List. No officers are listed, and the entry says: Building at the works of Messrs. Port Arthur Shipbuilding Co., Port Arthur, Ont. The October, November, and December 1940 updates are available, and none refer to HMCS Cobalt despite her commissioning in November 1940.

February 1941

Lieutenant Commander (in command) Robert R Campbell (RCNR)
Lieutenant Norman E. Whitmore (RCNVR)
Sub-Lieutenant William W. Watson (RCNVR)
Sub Lieutenant Jean P. Bousquet (RCNVR)
Chief Skipper Lester W. Echlin (RCNR)

March 1941

Lieutenant Commander (in command) Robert B. Campbell (RCNR)
Lieutenant Norman E. Whitmore (RCNVR)
Sub Lieutenant William W. Watson (RCNVR)
Sub Lieutenant Jean P. Bousquet (RCNVR)
Chief Skipper Lester W. Echlin (RCNR)

June 1941

Lieutenant (in command) Colin J. Angus (RCNR)
Lieutenant Norman E. Whitmore (RCNVR)
Lieutenant Douglas I.W. Bruce (RCNVR)
Lieutenant William J. Bichan (RCNVR)
Sub Lieutenant William W. Watson (RCNVR)
Sub Lieutenant Everett D. Palmatier (RCNVR)
Chief Skipper Lester W. Echlin (RCNR)

July 1941

Lieutenant (in command) Colin J. Angus (RCNR)
Lieutenant Norman E. Whitmore (RCNVR)
Sub Lieutenant Everett D. Palmatier (RCNVR)
Chief Skipper Lester W. Echlin (RCNR)

August 1941

Lieutenant (in command) Colin J. Angus (RCNR)
Lieutenant Norman E. Whitmore (RCNVR)
Sub Lieutenant William M. Whyte (RCNVR)
Chief Skipper Lester W. Echlin (RCNR)

October 1941

Lieutenant (in command) Colin J. Angus (RCNR)
Lieutenant Norman E. Whitmore (RCNVR)
Sub Lieutenant William M. Whyte (RCNVR)
Sub Lieutenant David E. Howard (RCNVR)
Chief Skipper Lester W. Echlin (RCNR)
Chief Skipper Donald D. Morin (RCNR)

December 1941

Lieutenant (in command) Colin J. Angus (RCNR)
Lieutenant (G) Norman E. Whitmore (RCNVR)
Sub Lieutenant William M. Whyte (RCNVR)
Sub-Lieutenant Oswald O. Paddon (RCNVR)
Sub Lieutenant David E. Howard (RCNVR)
Chief Skipper Murdo Smith (RCNR)

January 1942

Lieutenant (in command) Colin J. Angus (RCNR)
Lieutenant (G) Norman E. Whitmore (RCNVR)
Lieutenant George R. K. Lynch (RCNVR)
Lieutenant Oswald O. Paddon (RCNVR)
Sub Lieutenant David E. Howard (RCNVR)
Chief Skipper Murdo Smith (RCNR)

April 1942

Lieutenant (in command) Colin J. Angus (RCNR)
Lieutenant Paul S. Major (RCNVR)
Lieutenant George R. K. Lynch (RCNVR)
Sub Lieutenant David E. Howard (RCNVR)
Chief Skipper Murdo Smith (RCNR)

September 1942

Lieutenant (in command) Colin J. Angus (RCNR)
Lieutenant John M. Home (RCNVR)
Mate Ernest S. Cassels (RCNR)

Sub Lieutenant Charles V. W. Laughton (RCNVR)
Sub Lieutenant Forrest Angus (RCNVR)
Sub Lieutenant George E. Best (RCNVR)

August 1943

Lieutenant (in command) Ronald A. Judges (RCNVR)
Lieutenant Charles D. Heward (RCNVR)
Mate Alfred W. Bett (RCNR)
Sub Lieutenant Norman M. McMillan (RCNVR)
Sub Lieutenant Neil J. Russell (RCNVR)
Lieutenant Walter G. Crawley (RCNVR)
Sub Lieutenant Henry E. D. Scovil (RCNVR)

October 1943

Lieutenant (in command) Ronald A. Judges (RCNVR)
Lieutenant Charles D. Heward (RCNVR)
Mate Alfred W. Bett (RCNR)
Sub Lieutenant Neil J. Russell (RCNVR)
Sub Lieutenant Henry E. D. Scovil (RCNVR)

February 1944

Lieutenant Commander (Acting)(in command) Ronald A. Judges (RCNVR)
Lieutenant Charles D. Heward (RCNVR)
Lieutenant Neil J. Russell (RCNVR)
Lieutenant (Acting) James E. Eakins (RCNVR)
Mate Alfred W. Bett, George Medal (RCNR)
Lieutenant Henry E. D. Scovil (RCNVR)

May 1944

Lieutenant Alfred W. Bett, George Medal (RCNR)
Lieutenant Charles D. Heward (RCNVR)
Lieutenant Donald M. Williamson (RCNVR)
Lieutenant (Acting) James E. Eakins (RCNVR)
Lieutenant-Commander (Acting) Ronald A. Judges (RCNVR)

July 1944

Lieutenant (in command) Ralph M. Wallace (RCNVR)
Lieutenant Alfred W. Bett, George Medal (RCNR)
Lieutenant Donald M. Williamson (RCNVR)
Lieutenant (Acting) James E. Eakins (RCNVR)

September 1944

Lieutenant (in command) Ralph M. Wallace (RCNVR)
Lieutenant John D. Carter (RCNVR)
Lieutenant Donald M. Williamson (RCNVR)
Lieutenant (Acting) James E. Eakins (RCNVR)
Lieutenant (Acting) Thomas G. Markey (RCNVR)

Chief Skipper Frederick E. Corneille (RCNR)
Warrant Engineer (Acting) George F. Cairns (RCNVR)

November 1944

Lieutenant (in command) Ralph M. Wallace (RCNVR)
Lieutenant John D. Carter (RCNVR)
Lieutenant Osborne K. McClocklin (RCNVR)
Lieutenant Donald M. Williamson (RCNVR)
Lieutenant (Acting) James E. Eakins (RCNVR)
Lieutenant (Acting) Thomas G. Markey (RCNVR)
Chief Skipper Frederick E. Corneille (RCNR)
Warrant Engineer (Acting) George F. Cairns (RCNVR)

January 1945

Lieutenant Commander (Acting)(in command) Ralph M. Wallace (RCNVR)
Lieutenant John D. Carter (RCNVR)
Lieutenant Osborne K. McClocklin (RCNVR)
Lieutenant Donald M. Williamson (RCNVR)
Lieutenant (Acting) Thomas G. Markey (RCNVR)
Chief Skipper Frederick E. Corneille (RCNR)
Warrant Engineer (Acting) George F. Cairns (RCNVR)
Electrical Sub Lieutenant (Radar Duties) Theodore R. Marr (RCNVR)

March 1945

Lieutenant Commander (Acting)(in command) Ralph M. Wallace (RCNVR)
Lieutenant John D. Carter (RCNVR)
Lieutenant Donald M. Williamson (RCNVR)
Lieutenant William C. Gardner (RCNVR)
Lieutenant Channing D. Gillis (RCNVR)
Lieutenant (Acting) Thomas G. Markey (RCNVR)
Chief Skipper Frederick E. Corneille (RCNR)
Warrant Engineer (Acting) George F. Cairns (RCNVR)

Appendix 6: Newspaper Articles Related to HMCS Cobalt

Except as otherwise noted below, these articles are from online searchable archives of historical newspapers. Articles from the Temiskaming Speaker are from PaperofRecord.com and the other articles are from Newspapers.com.

NAME OF TOWNS FOR NAVAL VESSELS

According to Rear Admiral Percy W. Nelles, Chief of the Naval Staff, the new vessels, of the "Corvette" class just built or being completed in Canadian shipyards, will carry the names of different towns throughout Canada. The Canadian Navy's destroyers and mine-sweepers are named after rivers and from other geographical sources.

Winnipeg Tribune, August 19, 1940. The oldest reference to HMCS Cobalt

Corvette Launched On Lake Superior

[By The Canadian Press]

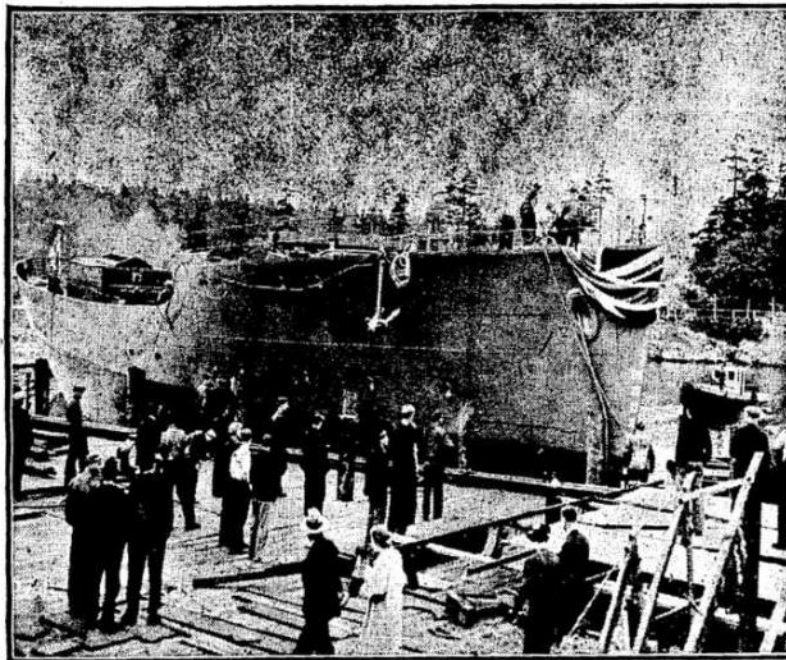
A LAKE SUPERIOR PORT, Aug. 19. — Another ship for Canada's navy, first of a group of several corvette class vessels to

be completed here, under contract for the Dominion government, was launched here Saturday.

The vessel is H.M.C.S. Cobalt, christened in traditional style by Mrs. Gordon MacDougall, wife of the general manager of the plant which built several vessels in the Great War

Temiskaming Speaker, July 11, 1940

CANADIAN CORVETTE TAKES TO THE WATER



*Temiskaming
Speaker, October
17, 1940*

Canada's major naval programme involves the construction of about 65 speedy corvettes and some 30 mine-sweepers, at a cost of approximately \$52,000,000. One of these sleek corvettes is here shown taking to the water at a recent launching.

New Canadian Craft Will Be Named H.M.C.S. Cobalt

Mayor and Council of Silver Town Planning Presentation to Vessel Which Will Get Name From Northern Ontario Centre

Cobalt, Nov. 4—Notified that one of the ships being constructed under the Dominion's new naval program is to be named after this pioneer Northern Ontario mining camp, members of Cobalt town council, at the November meeting held at the weekend, authorized the preparation of an appropriate souvenir, suitably inscribed, for presentation to His Majesty's Canadian Navy ship "Cobalt."

Corvette Type

The vessel, believed to be of the Corvette type, is nearing completion at one of the ports on the Great Lakes, and Lieut-Commander R. B. Campbell will be the commanding officer. The gift to the ship, it has been decided, will include specimens of ore natural to this camp, and the assistance of A. A. Cole, mining engineer for the T. and N. O. Railway, is being sought to prepare the souvenir.

When H.M.C.S. Cobalt is ready to be commissioned, Cobalt officers and men of the Algonquin Regiment presently stationed at the Head of the Lakes, will be asked to represent the municipality. A letter is being sent from Mayor H. W. Rowdon to Captain A. R. Herbert, who, with several other officers from here and a large number of other ranks, are the Cobalt contingent of the Algonquins. The mayor also wrote to Lt.-Commander Campbell, expressing good wishes for the ship and those who sail in her. 4-11-40

Men on Active Service Get Christmas Leave

By Canadian Press

OTTAWA, Nov. 13.—Men in the Canadian Active Service Force will enjoy special Christmas and New Year's leaves of six days though not more than 50 per cent of the strength of any unit, in any rank will be granted leave at any one time, the defence department said in a statement to the press.

Defence headquarters gave out this information last night and through a transmission error The Canadian Press said such leaves would be granted to not more than 40 per cent of the strength of any unit in any rank at any one time.

The department statement said leaves would be granted "as far as possible, consistently with the necessities of the wartime situation."

From the War Diary of the Algonquin Regiment, November 1, 1940 to November 30, 1940. Library and Archives Canada, RG24, Volume 14997.

NAVAL VESSEL NAMED AFTER SILVER TOWN

First municipality in this part of Ontario to be so recognized, the mother camp of the T. & N. O. mining country will have a namesake in the Dominion's expanding naval forces, and in a short time now "H.M.C.S. Cobalt" will be commissioned for active service in the present war. The ship, believed to be of the **corvette** type, has been under construction at one of the ports on the Great Lakes, and in a letter to Mayor H. W. Rowdon of Cobalt, and read to the town council at the November meeting of that body last Friday, her commanding officer, Lieutenant-Commander R. B. Campbell, wrote that she is almost completed and ready for allotted tasks.

Council decided to have a suitable souvenir of the silver camp prepared for presentation to the ship, and also to request officers and men of the Algonquin Regiment whose homes are in Cobalt, and who are stationed meantime in Northwestern Ontario, to represent their town at ceremonies incidental to putting the new boat in commission. The gift, which will be prepared with the assistance of Arthur A. Cole, mining engineer for the T. & N. O., will include specimens of ore appropriate to the camp, and a suitable inscription also will be drafted. Council delegated Councillor C. H. Taylor to attend to these duties in co-operation with Mr. Cole.

The mayor wrote to Lt.-Commander Campbell expressing good wishes for "H.M.C.S. Cobalt" and praying God's blessing on the ship and all who may sail in her. He also wrote Captain A. R. Herbert, Cobalt officer with the Algonquins, to make the request of the council. Other Cobalt officers with the unit include Lieutenants G. L. Cassidy, Jock McLeod and Clark Robertson, and there are many Cobalters included in other ranks and serving with the Regiment at present. In his letter to the mayor, Lt.-Commander Campbell, an officer of the R.C.N.R., wrote that it would be "a happy gesture" if representative citizens could arrange to be present "before the ship proceeded into active service," and in reply the mayor referred to this "useful addition" to Canada's naval strength.

*Temiskaming Speaker,
November 7, 1940*

*North Bay Nugget, November
15, 1940*

Arthur militia unit.
A party of Cobalt officers and men from the Algonquins will fraternize with Naval men this week on "H.M.C.S. Cobalt," new Corvette-class naval boat being built at the lakehead.
Capt. B. Herbert, of Cobalt, O.C. of the Algonquin Headquarters Company, will pay the respects of Cobalt citizens to Lieut.-Commander Campbell, and will make a presentation to the Lieut.-Commander and his crew, on the new ship, on behalf of the Town of Cobalt.

LUCK CHARM OF NATIVE ORE FOR H.M.C.S. COBALT

A typical piece of ore found in the Cobalt camp, and donated by the La Rose Mine, will form the base of the desk pen set to be presented by the municipality there to "H.M.C.S. Cobalt," the corvette addition to the Canadian navy named for the mother mining area of the T. & N. O. district. The ship is reported to be nearly ready for service and last week-end officers and men from Cobalt, and at present in winter quarters with the Algonquin Regiment, acted as hosts to the ship's crew, on behalf of their fellow-citizens and by authority of the town council.

The ore base, termed on the suggestion of Arthur A. Cole, mining engineer for the Temiskaming and Northern Ontario Railway, a "luck charm," has been sent to Toronto to be polished and prepared for its formal presentation to the vessel. On the desk set will be a silver plate, and on this there will be an inscription reading as follows: "Luck Charm of silver-cobalt-nickel ore from the La Rose Mine; presented to H.M.C.S. Cobalt by the Town of Cobalt, Ontario, Canada; November, 1940." Mr. Cole, who has co-operated with the town council in securing an appropriate gift for the town's naval namesake, proposed the wording.

Mayor H. W. Rowdon told The Speaker on Monday that the ore, which weighed several pounds, was regarded as a representative specimen of native mineral. His Worship declared that the services of

(Continued on Page Six)

Temiskaming Speaker,
November 28, 1940

LUCK CHARM

(Continued From Page One)

Hugh Sutherland, Toronto mining man associated closely with the La Rose property, scene of the original "find" in the Cobalt camp thirty-seven years ago, had been enlisted in making the souvenir gift complete for handing over to the officers and men manning the corvette, which has been built on the Great Lakes.

The Cobalters with the Algonquins had a cruise on "H.M.C.S. Cobalt" a few days ago, according to a message home from Captain A. R. Herbert. Later, a social hour was held on the ship, with the Cobalt men entertaining their naval colleagues and rendering during the proceedings, with due gusto, the "Cobalt Song." Other officers participating in the proceedings are stated to have been Lieutenants G. L. Cassidy, Jock McLeod and C. B. Robertson, school teachers from the silver town who enlisted with the Algonquins.

HANG PICTURE SHIP NAMESAKE IN COBALT HALL

An enlarged photograph of H.M. C.S. Cobalt is to be hung on the walls of the council chamber at the Cobalt town hall, it was stated this week. The picture will show the ship, a **corvette** built at a Great Lakes port, complete and ready for service. Three smaller photographs have been on display at the office of A. L. Herbert in Cobalt, having been sent there by Captain A. R. Herbert, of the Algonquin Regiment, and who was in charge of the Cobalt party which did honors when the town officially recognized the vessel as its namesake. These pictures show the ship on the stocks while being built, in the act of being launched sideways and afloat after launching. The town also is presenting H.M.C.S. Cobalt with a desk pen set whose base is a typical piece of ore from the camp.

*Temiskaming Speaker,
December 12, 1940*

*Temiskaming Speaker,
February 6, 1941*

PRESENTATION SET ON DISPLAY IN COBALT STORE

The desk set presented to H.M. C.S. "Cobalt" by the town council of the vessel's **namesake**, on behalf of the citizens of the silver city, has been on display this week in the window of the office at Cobalt of A. L. Herbert, whose son, Captain A. R. Herbert of the Algonquin Regiment, made the formal announcement of the gift to the officers and crew of the ship. Resting on an onyx base is the piece of LaRose silver-cobalt ore, highly polished, that forms the souvenir, and on it is the "good luck charm" inscription prepared by A. A. Cole, mining engineer. The pens and parts of the base are mounted in silver.

*North Bay Nugget,
April 12, 1941*

★ ★ ★

Cobalt Has One

When Cobalt was honored in a similar manner, the townspeople left nothing undone to honor the men who would man the sub-chaser bearing the Cobalt name and extensive plans were made to coincide with the day the new corvette was launched at a Canadian shipbuilding yard. Sudbury has since been honored in a similar manner and according to the latest news is enthusiastically preparing to acknowledge the move.

★ ★ ★

MONDAY, FEBRUARY 24, 1941.

Name Corvettes After Prescott, Sudbury, Cobalt and Kenogami

Names of towns and cities from coast to coast in Canada have been chosen for 54 corvettes of the Royal Canadian Navy being built in the Dominion under the war-time ship construction program.

Bays from one coast to the other also are represented in the navy, their names having been chosen for 18 minesweepers.

A list of names for corvettes and minesweepers, given out by the navy today, showed the following:

Corvettes.

Amherst, Sackville, Moncton, Matapedia, Avida, Summerside, Louisburg, Rimouski, Pictou, Bad-dock, Buctouche, Shediac, Brandon, Levis, Shawinigan, Lunen-

burg, Sherbrooke, Dunvegan, Sorel.

Camrose, Gambia, Chicoutimi, Dauphin, Saskatoon, Lethbridge, Napanee, Prescott, Sudbury, Collingwood, Orillia, Barrie, Galt.

Moose Jaw, Battleford, Drumheller, The Pas, Cobalt, Kenogami, Algoma, Rosthern, Morden, Carlton, Oakville.

Weyburn, Wetaskiwin, Agassiz, Chilliwack, Trail, Kamloops, Quesnel, Dawson, Alberni, Nanaimo, and Edmundston.

Minesweepers.

Cowichan, Malpeque, Ungava, Mahone, Chignecto, Outarde, Wasago, Minas, Quinte, Chedabucte, Miramichi, Bellechasse, Clayoquot, Quatsino, Nipigon, St. Ann, Georgian, Thunder.

NORTHWEST OF THE PAST

20 YEARS AGO

The Ontario department of public welfare announced it was abolishing the position of district relief administrator for the combined districts of Thunder Bay, Rainy River and Kenora, effective Oct 31, on which date M K Morrison, who had held the post for four years, would retire

Ships in Lake Superior reported having to cut their speeds up to 50 per cent as heavy winds buffeted the waterway

Joseph York, son of Mr and Mrs J York, 21 Mona St, a stoker in the RCNVR, returned to the east coast to continue training after spending a leave with his parents here

John C Dobie, son of Mr and Mrs E J B Dobie, Regent Street, left for Ottawa where he accepted a position in the civil service

Mr and Mrs J Edwards, 295 Wolseley Street, left for Wells British Columbia

Mrs Clifford Southern was elected president of the Cobalt Club, a club formed a year ago to supply knitted goods for the crew of the corvette, Cobalt, which was built at the Port Arthur Shipyards

40 YEARS AGO

Hunters began oiling their guns in preparation for the part-ridge season which began at sun-up

Hugh O'Leary, former district judge, was asked to accept the Liberal nomination for the coming federal election

J R Gillespie was re-elected president of the Fort William Lawn Bowling Club in a meeting held in the City Hall

James Bennett left for Toronto via CPR

William Scott and P. Chace left for Whitefish Lake to try their luck at duck hunting

T Servais, Whitney Scott, B McTeigue and T McCuaig left on a duck hunting trip down the CPR line

Mr Kenefick of the fish hatchery staff returned from Orient Bay with a quantity of spawn for the local hatchery.

Ald Frank Spence, F J Bourke, J B Hardy and W J Wood, local druggists, returned from Atikokan where they assisted searchers in locating Dr Graham Chambers, prominent Toronto physician, who was lost in the woods for over a week while on a hunting trip

*Temiskaming Speaker;
December 24, 1941*

*Unfortunately, the
bottom part of the
article is not legible, so
two or three
paragraphs are
missing.*

CLUB IS FORMED TO HELP COBALT CORVETTE CREW

For the purpose of "adopting" the Canadian corvette which bears the name of the silver town, and which to some extent through force of circumstances is stated to have been an "orphan" ship, the H.M.C.S. Cobalt Club is being organized, its members to be men formerly connected with the camp, assisted in measure by present residents of the community there as response is made. Already, in initial efforts, arrangements have been made for supplying magazines regularly, approximately a half-month's supply of cigarettes has gone forward and three radios have been provided for the use of the crew.

Members of the club, as a starter, include Richard Pearce, one of the editors of The Northern Miner, H. C. McCloskey, formerly of the McKinley-Darragh mine, Fraser D. Reid of the Coniagas property, and Gilbert LaBine, all men who were associated with mining in Cobalt's earlier days. Administrator of the fund which is to be provided is R. S. Taylor of New Liskeard, and for years a citizen of Cobalt, and who had been asked to take over these duties. Other mining men are to be approached, it has been indicated from Toronto, and the Kiwanis Club in Cobalt itself is expected to play its part in the project.

Donations of \$50 each from the Toronto men mentioned were the first financial contributions to the fund, and other money will be raised. It was stated here that some 10,000 cigarettes had been forwarded to the ship, which carries a crew of 69 officers and men, while subscriptions have been placed with six well-known magazines of a wide variety of interests, and for two copies apiece these to be sent regularly through the naval authorities. It is probable, also, that fruit for the crew will be available when the ship is in port, through the fund, although the commanding officer had indicated that it was scarcely feasible to have this particular contact at other times, since the corvette is at sea for considerable periods.

H.M.C.S. Cobalt Sees Action

*Temiskaming Speaker,
March 26, 1942*

His Majesty's Canadian Ship "Cobalt" has seen plenty of action, some of it termed "successful", in the Atlantic ocean, it was reported here this week of that trim **corvette**, built in a Great Lakes shipyard and named for the famous silver town, according to one member of her crew encountered by chance on a transcontinental railway train by two Temiskaming air force members en route to their home district on leave. The ship, it was explained, had been on convoy duty.

This news of H.M.C.S. "Cobalt" was given by Telegraphist W. C. Perry, whose home is on the prairies, to LAC Lorne Pacey and his brother, LAC Grenville Pacey, who this week are on a visit from the Far East to their parents, Mr. and Mrs. Roy Pacey of Kerns township.

The former is stationed at Coalhaven, in northern British Columbia, and his brother is at Vancouver, and it was while they were heading Temiskamingwards that they met Telegraphist Perry, who was returning then to his East Coast duties after spending a brief leave at home.

Getting into conversation with him, the Pacey brothers learned that the boys manning the corvette "are the swellest bunch of fellows I have ever sailed with," in the opinion of Telegraphist Perry. The crew have reason to be proud of their ship, it was stated, and Perry told the brothers from Kerns township that he had been on a number of corvettes, that the "Cobalt" was very well fitted-up for her duties and indeed, in this respect, was "by far the best" of the craft in which he had sailed.

Gets Word from Joe Howie

Mayor Taylor Of Cobalt Hears From Englehart Man Now With Navy, Who Reports Having Worked With Men From **Corvette "Cobalt"; Had Dinner There**

*Temiskaming Speaker,
November 26, 1942*

Word that cigarettes being provided by members of "The Old-Timers of Cobalt" organization are reaching the crew of the corvette named for the Silver Town has been received by mayor C. H. Taylor there through the medium of a letter from Joseph Howie, prominent in Masonic and Odd Fellows work in this district, and presently on active service with the Royal Canadian Navy. Mr. Howie, who in peace time is locomotive foreman for the T. & N. O. at Englehart, is now Chief Engine Room Artificer on the **corvette** "Stadacona."

In the letter, Mr. Howie told how quite recently he had come in contact with Jack McLennan, who holds a similar rank to his own, but on the "Cobalt" corvette, and how the latter had produced a packet of cigarettes. In the container was

a small card, on which was printed the information that the fags were sent with the good wishes of the Old-Timers, which is composed of former residents of Cobalt now living elsewhere, and chiefly in Toronto. Acknowledgment of the cigarettes through R. S. Taylor of New Liskeard was requested, and Mr. Howie requested mayor Taylor, as a fellow-employee on the railway, to pass the word along that he had sampled the packet's contents.

The "Cobalt", according to the opinion of Mr. Howie, is "a good ship." He had had an opportunity of going aboard that **corvette** while in a Canadian port and had taken dinner aboard her, together with the appropriate "tot." Mr. Howie noted in his letter that here was some connection between the North Country and the ship named after one of its best-known centres, and he added that two seamen from the "Cobalt" had been working with him on some job. Another friend of Mr. Howie is the Chief E. R. A. of the **corvette** "Timmins", mayor Taylor was advised.

New Skipper For "Cobalt"

*Temiskaming Speaker,
August 26, 1943*

Corvette Named For Silver Town Gets High Praise From Her Commanding Officer; Comforts Provided By Old Timers Group Much Appreciated

The stout **corvette** known as His Majesty's Canadian Ship "Cobalt" has a new commanding officer, information reaching contributors to the special fund raised by Old Timers of the Silver City, and devoted to buying comforts for the crew of the vessel, discloses. The skipper now is R. A. Judges, Lieut. (n), R. C. N. V. R., and who, in writing to R. S. Taylor at New Liskeard to apologise for delay in getting in touch with him before on matters relating to the fund, notes that "I know you will readily realize that in taking over a new command there are a million and one things to be attended to."

Another reference to the fund comes from Lieut. John M. Home, R. C. N. V. R., who is a Montreal lawyer in private life, but who at present is executive officer on the "Cobalt." He informed a contributor to the fund that "I make the most of my leisure time, while on short leave from H. M. C. S. 'Cobalt', to write a few lines of appreciation for the splendid work done by your group." Lieut. Home adds that "all the articles sent to the ship are greatly enjoyed and put to good use. The cigarettes are a positive boon (especially as sail-

ors, officers included, spend their money fast) and the magazines are passed around the ship from mess to mess and read from cover to cover in the off-watches."

Lieut. Home continues: "You may rest assured that if 'Cobalt' is efficient (and it would take a brave man to tell us that she is not!), credit must be given to your group in large measure for maintaining morale." The new commanding officer notes that on taking over from Lieut. Commander Angus, "I found that H. M. C. S. 'Cobalt,' through the kindness and efforts of yourself and others, is extremely well taken care of, and I am quite sure that I would not be making an overstatement if I said it was the best taken care of ship that it has been my pleasure to serve on since the commencement of war."

Lieut. Judges adds that "I know it is not necessary for us to convey, what my predecessor has already told you, of just how much this is appreciated by my officers and ship's company. I only hope that at some future date I shall have the opportunity of extending my thanks to you personally. Please be assured that we shall carry on in the same manner and with the same fighting efficiency and spirit as in the past; in other words, retain the name of which the town of Cobalt can be justly proud." He closes with thanks for "your untiring efforts in assuring the comfort, recreation and welfare of my crew."

Advertisement from the
Temiskaming Speaker,
September 9, 1943



**A CANADIAN
CORVETTE**

A great percentage of Canadian R.C.N.V.R.'s are sailing on ships similar to the one pictured above. They come from all parts of Canada. The Western Prairies has sent a particularly large quota. Seaworthy and capable, the men love these staunch little warships.

CANADIAN sailors and Canadian ships are now serving on all the oceans of the world. The Canadian Navy has expanded from 15 ships to 550 since the beginning of the war.

Sixty thousand men (and many women) are now engaged in Canada's shipyards—some on the Atlantic Coast, some on the St. Lawrence and the Great Lakes, others on the Pacific coast. Shipbuilding has become a major Canadian industry.

Back of all this activity in the shipyards is the work of producing parts and materials. Ninety per cent. of the materials and fabricated parts are products of Canada.

At every stage of this long line—from forest and mine to mill ... to the shipyard ... to the ship, finished and afloat—the need of bank service is not less than the need for power.

Contractors, lumbermen, miners, riveters, sailors—all classes and in fact all persons use the bank. We are glad to be of service to shipbuilders and sailors participating in Canada's war effort.

IMPERIAL BANK OF CANADA

NEW LISKEARD BRANCH — J. S. INK, Manager
MATACHEWAN BRANCH — N. M. PLANT, Manager

Toronto Telegram, November 20, 1943. (Credit: Department of National Defence)



**By PHYLLIS GRIFFITHS
Telegram Staff Reporter**

An Eastern Canadian Port, Nov. 20—Her decks were greasy with oil, and you'd have said at a glance that she had seen some wear and considerable tear. But the very sight of Corvete K— quickened one's pulses as she rested briefly in port from Atlantic convoy work.

Corvete K— is the Cobalt, for the Ontario mining centre of that name. She is manned by a crew which is a full 50 per cent. from Ontario. Better than half of that half hail from Toronto, and the commanding officer is a 33-year-old Torontonian—Lieut. Ronald Judges, RCNVR, whose Naval record is a pre-war pre-war race, and who sold many a pre-war display advertising contract for The Evening Telegram.

When the Navy invited this reporter to go aboard a corvette fresh in from Atlantic service, I jumped at the chance of renewing old friendship with Ronnie Judges and at the same time of seeing the Cobalt, one of Canada's original corvettes. She was built in an Ontario shipyard, at Port Arthur, and was injected into the great battle against U-boats more than three years ago.

Cobalt looks her age—but she's well preserved. When I stidded aboard, her crew members were busily and deftly at work preparing her for sea again. Fresh paint would submerge her rustiness, her boilers were getting a cleaning, and the cursed oil which had given her an unwanted bath when a fuel line spouted over her, was going to be scraped off laboriously.

"Isn't she a mess!" said Lieut.

Judges, keen blue eyes running lovingly over Cobalt's length.

"Everything happens to us," he went on. "We'll have to take the paint right off to get the oil off too."

A lot has happened to Corvete K— in three years, and in the six months since her command passed to the shock-headed blond Toronto salesman-yachtsman, graduate of the Royal Canadian Navy's special "Long N" (long navigation) course for officers whose work at sea has marked them as potential "skipper" material.

"REAL SHAKING UP"

In the Battle of the Atlantic, the Cobalt has time and again been in the thick of it. The Navy hardly whispers, much less talks—but some time back, in the course of a grueling two-day, three-night engagement with U-boats, Cobalt really got one of the subs where she wanted it.

"We think we gave that sub a real shaking up," said Lieut. Judges. "I can't say more than that."

Convoy duty for a corvette, in his words, is "sometimes very monotonous, sometimes very hectic. It's not often there is a happy medium. You go along for days, and nothing happens. Then it's like all hell breaking loose."

A corvette crew's work is never done. It's a constant round of painting, scraping, checking equipment—and fighting.

"I've got a grand crew, and fine officers," said the tall young skipper, leaning back in a swivel chair at a report-strewn desk centred by a pen and pencil stand which is a "luck charm" of silver Cobalt nickel ore from the La Rose-Rouyn mine.

The town of Cobalt and its citi-

zens have "adopted" the ship and her company, and have given them special radios which can be used at sea without danger of detection by the enemy, gramophone and records, toasters, iron, cigarettes and comforts and goodies galore. The Cobalt proudly carries as ship's crest a plaque showing a busy bee, in miner's kit, drilling a swastika.

"We're certainly well looked after," said Lieut. Judges. "Between the people of Cobalt, the Navy League and the Red Cross we're properly spoiled. We are well supplied with woollens and, believe me, we really need them—out there. Especially when you get wet. Then you need a complete change."

Most of the ladies aboard corvettes are seacick at first, but get over it and are seldom troubled thereafter.

DEPEND ON NEW PILL

"Our senior steward was seacick all the time on our last trip," said Lieut. Judges. "He toted a bucket around with him and just carried on. He'll likely get over it."

If he doesn't, instead of getting shore duty the navy's new seasickness pill is available for him.

Whenever possible, ships' crews

play one another football or baseball. The majority of the men put on weight—plump right up—on the regime of fresh sea air and plenty of good regular food.

"Not their skipper," I said, surveying Lieut. Judges' lean frame.

"No, I'm afraid I don't eat regularly," he said, "and when we're at sea I don't catch much sleep. I never take my clothes off—just stretch out on the couch you're sitting on there. Short for me? Well, I just push my head right up against the one end and my feet against the other, and then I don't fall off as the ship rolls and pitches. It's no smooth ride on a corvette, you know."

Last time out it was so far from smooth that a man went overboard as the Cobalt heeled over. He was saved—but only by a whistle.

The seaman—21-year-old A.B. Milton Whyman of Oakwood, near Lindsay—had to jump overboard to avoid being pinned by a swinging sea-boat. It was mid-afternoon, but a thick fog shrouded everything, and the Atlantic was very rough.

SAVED BY WHISTLE

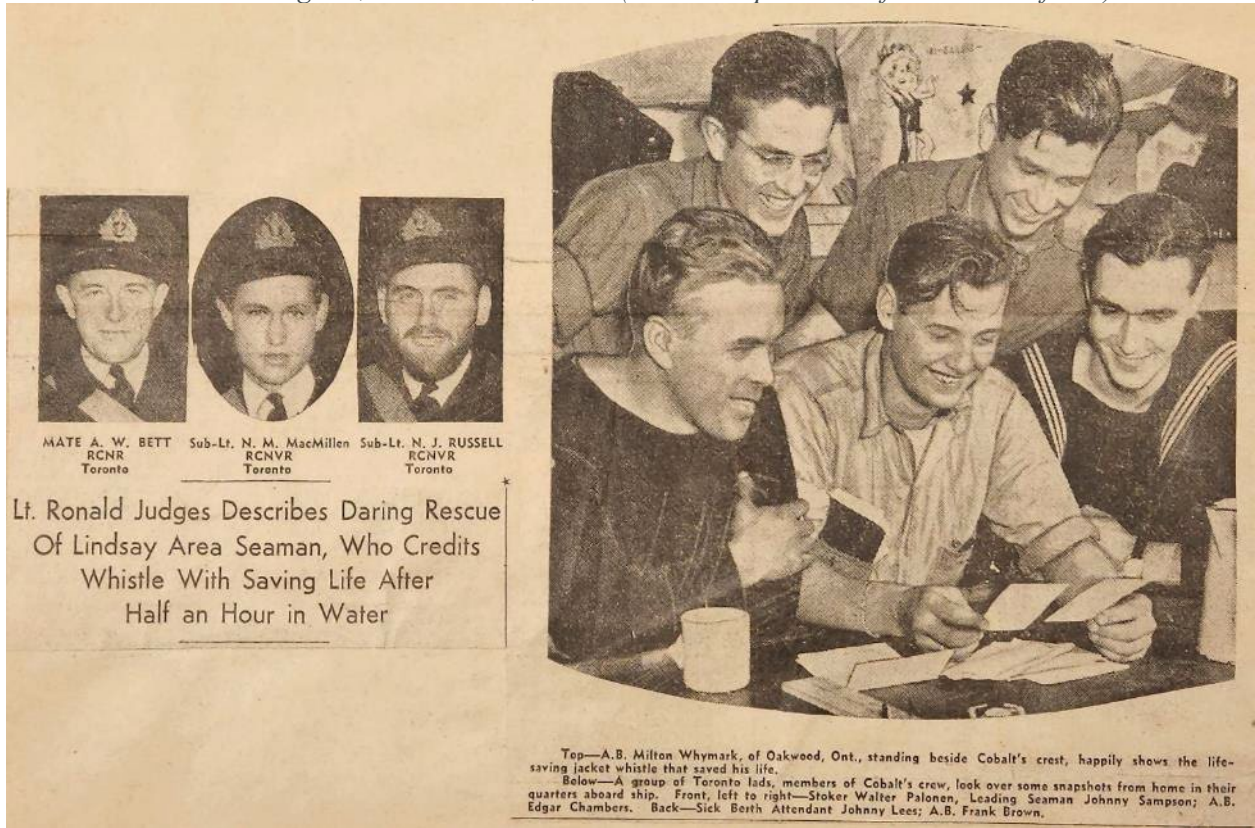
"The No. 1 (Lieut. Denys Heward,

RCNVR, of Montreal) did a fine job of getting a boat away," said the skipper. "We'd never have found the chap but for the whistle attached to his life belt. There's a whistle on every belt, and we all wear life belts when we're at sea, all the time. The man kept blowing his whistle, and the No. 1 kept blowing his, and the man was located fairly quickly—even though you couldn't see your hand in front of your face. They got back safely to the ship, finding it by our siren, and the only casualty was the sea boat. It got battered in and was no use salvaging."

The rescued seaman told me thankfully: "The guy who thought of putting whistles on life belts is tops with me. I was in the water maybe half an hour, long enough to find out it was darned cold. But I sure was lucky."

Whyman, employe of the Canadian General Electric plant at Peterboro before joining the navy, said he hadn't written his wife about his experience, thinking it might worry her.

"But I guess it won't fuss her too much to hear about it," he said, "seeing as I came out of it O.K."



Navy Citations Detail Acts of Heroism at Sea

Canadian Press, January 3,
1944

Newspaper this is from is not
known.

(Credit: Collection of
Ronald Judges, courtesy of
Chanin Graham, personal
communication with the
author)

Ottawa, Jan. 3 (CP).— In brief citations, the Royal Canadian Navy told today of acts of bravery at sea which brought operational awards to 40 of its personnel in the New Year's honors list.

The citations disclosed Mate Alfred W. Bett of Toronto was awarded the George Medal for



Alfred W. Bett.

leading a volunteer boarding party which fought and extinguished a fire which broke out on a United States gasoline tanker after it collided with another ship in a fog.

Bett led a party from the Canadian corvette Cobalt and helped fight the blaze for more than two hours with hand extinguishers. The ship was in danger of blowing up at any moment. For their part in this exploit Engine Room Artificer James M. Wercly of Sorel, Que., and Signaller Michael J. Fitzgerald of Toronto received the British Empire Medal. Acting Lt.-Cmdr. Ronald A. Judges of Toronto was mentioned in despatches for the spirit and skill shown in laying the Cobalt alongside the blazing tanker.

Acts of bravery during the sinking of the corvette Louisburg by enemy aircraft in the Mediterranean early in 1943 brought awards to six men.

Lt. William R. Wright of Lachute, Que., awarded the Distinguished Service Cross, was the last man to

leave the Louisburg. He assisted in rescue work despite the loss of an eye and other wounds.

Posthumous Mentions.

Lt. Cmdr. William F. Campbell of Toronto and Coder Hugh Merryweather of Edmonton were posthumously mentioned in despatches. Act. Ldg. Stoker William Oliphant of Carbon, Alta., I.S. William Ritson-Bennett of Calgary and O.S. Joseph A. Guersette of Sherbrooke, Que., were mentioned in despatches.

Campbell, "due to his rapid summing up of the situation and his prompt action," was responsible for saving many lives but lost his own, his citation said. Merryweather lost his life by giving his lifebelt to another rating. Ritson-Bennett, when the water was above his knees, stopped to unstrap a man from his Oerlikon gun and saved his life. Oliphant and Guersette were also credited with saving the lives of shipmates.

Bravery and endurance in a hitherto-unannounced collision involving a Canadian ship brought decorations to three men.

Engine-room Artificer Donald R. d'Aubin of Sydney, N.S., who took charge of the engine-room and got the ship under way after his chief was injured, received the British Empire Medal. Lieut. Donald Logie of Hampton, N.B., who took charge of the damage-control party, and Stkr. PO. Hugh Scott of Montreal, who helped d'Aubin with the engines, were mentioned in despatches.

Membership in the Order of the British Empire went to Sub-Lt. Campbell E. Cork of Sydney, N.S., who led a boarding party which saved a damaged ship. After a day-long struggle, the efforts of Cork and six men made possible the beaching and eventual salvage of the vessel.

On the following pages is a press release from the RCN, released on March 22, 1944, providing details of an incident in which crew members of the Cobalt boarded a burning oil tanker and extinguished the fire, allowing the tanker and cargo to be salvaged, as described in Section 9. (Credit: Department of National Defence)

This press release came out six months after the incident occurred on August 19/20, 1943. The post-incident investigation referred to in Section 9 was submitted to Rear Admiral Murray, The Commander-in-Chief, Canadian North West Atlantic, on August 27, 1943. Thus, it was known long before this press release was written that the investigation had concluded that no submarine was in the vicinity of the convoy. The accounts of HMCS Cobalt's attacks provided in the press release are accurate, but the press release fails to mention the investigation and its conclusions, in effect propagating a myth that the convoy had come under attack. It makes for a good story, and Ronald Judges and the crew of HMCS Cobalt really did think that they were attacking a U-boat. But perhaps the myth made a better story than the truth, which could have reflected badly on Judges and his crew by readers who didn't have all of the facts about what happened in the chaos of the dark and fog on the North Atlantic. Was it propaganda? Or a well-meaning attempt to tell the story in a way that reflected the best of what Canada's sailors were doing while not inadvertently making them look foolish?

331/25

ROYAL CANADIAN NAVY OFFICIAL PRESS RELEASE

RELEASE DATE -- Wednesday Mar 22, 10 A.M., E.D.T. 1944.

An East Coast Canadian Port -- The nerve-straining conditions under which a fire party from the Canadian Corvette Cobalt boarded a blazing gasoline tanker and saved the ship and its cargo from certain destruction, were described here today. The R.C.N. revealed that the incident occurred in the West Atlantic after a long series of anti-submarine attacks had kept the corvette's crew at action stations almost continuously for two days.

Cobalt's fire-fighting exploit was referred to in brief citation at the year-end when the names of the captain, the navigation officer and two members of the crew appeared in the R.C.N.'s decorations and awards list. Mate Alfred W. Bett, R.C.N.R. of Toronto, who led the fire party, has been awarded the George Medal. Engine Room Artificer, fourth class, James A. Wereley, R.C.N.R., Sorel, Que. and Signaller Michael J. Fitzgerald, R.C.N.V.R. of Toronto, both get the British Empire Medal for their part in the salvage of the tanker.

The corvette's captain Lieut.-Commander Ronald A. Judges, R.C.N.V.R., of Toronto, was mentioned in despatches throughout the action and the salvage operation. for the skill and leadership he displayed

The tanker, travelling in a convoy bound for Britain, collided with another merchant ship in a fog at night and burst into flames which swept through the midship living quarters, killing a dozen men in the crew. All those who could escape were forced into lifeboats a few minutes after the collision.

To the men in the Cobalt, screening the rear of the convoy against U-boats, it looked like a submarine attack.

"We saw a red glare in the fog over the convoy," Lieut.-Cdr. Judges reported later, "and by a freak coincidence almost at the same instant our Asdic operator picked up the 'hydrophone effect' of a torpedo coming at us.

"We altered course toward the approaching torpedo and almost immediately we began to get action. We picked up a strong submarine contact and fired a full pattern of depth charges. A few minutes later we repeated the treatment."

Sticking to the scent, Cobalt followed the U-boat contact a short distance and attacked again. The Captain had evidence that he was getting results.

"We could smell oil on the surface of the sea and we heard an underwater explosion that could not be classified as a depth charge," he said. "We had reason to feel we were giving a U-boat a nasty pasting."

With depth charge parties working at savage speed in the darkness, loading the throwers with their heavy cans of high explosive, they got in two more attacks on good contacts that night before they had to rejoin the convoy.

Next day the Cobalt screened the tanker which was still afloat but wallowing in the swells and burning fiercely. They searched the area, without results, for survivors who were eventually rescued by another ship more than forty miles away.

In the afternoon, the corvette picked up fresh U-boat echoes and delivered two more attacks. The hunt went on during a second night. The final attack, made the next day, was delivered close to the burning tanker.

"By mid-afternoon," Lieut.-Cdr. Judges said, "it appeared that we had driven off the U-boats for the time being, or put at least one out of action. At any rate there were no new contacts and we decided to have a look at the tanker."

The vessel was still blazing but to the Cobalt's captain and Mate Bett, the navigating officer, "she looked salvageable."

Taking E.R.A. Wereley to examine the tanker's engines and Signalmen Fitzgerald to keep the party in contact with the Cobalt Mate Bett loaded the corvette's portable fire fighting equipment into a seaboard and with the boat's crew of seamen at the oars, they pulled over^{to}/the burning ship.

"We found the loading hatches blazing," Mate Bett said, "but once we got the extinguishers going we made steady progress. In two hours, we had the fires out."

Equipped only with asbestos gloves and their anti-gas respirators, the fire party found the intense heat and gas fumes all they could stand. In the galley, they counted the burned bodies of 10 merchant seamen who had been trapped, beyond help when the ship was abandoned.

"Everything above the main deck was burned out," Mate Bett reported, "but when the fires were out we discovered that we had saved more than 80 per cent of the cargo of gasoline and by the time we left the ship she was ready to be towed into port."

Official recognition of the job done by the Cobalt's fire party is contained in the citation accompanying the award of the George Medal to Mate Bett. "This officer and his party fought the fires for over two hours," the citation reads, "although they knew the ship was in danger of blowing up at any moment. . ."

Honourable mention and full marks for a big contribution to the success of the job were awarded by Mate Bett to the members of the seaboard's crew who ferried the fire party to the tanker, later helped with the fire fighting and stood by to take them off. In the boat's crew were, Leading Seaman Douglas McElroy of Gatineau, Que., Able Seaman James F. Brown of Toronto, A.B. Garfield Smith of Toronto, A.B. R.E. Smith of Port Arthur and A.B. Leo Sullivan of Censo, N.S.

The following are different published media articles based on the above press release. It is interesting to see how the writer of each article emphasized slightly different aspects of the description in the press release.

CORVETTE SAVES TANKER CARGO

An East Coast Canadian Port, March 22.—(CP)—After delivering a series of attacks against submarines in the western Atlantic, men of the Canadian corvette Cobalt boarded a blazing gasoline tanker and saved the ship and its cargo from destruction.

For this exploit, Cobalt's captain, Lieut.-Cmdr. R. A. Judges, Toronto, was mentioned in dispatches at year-end in the navy's decorations and awards list, and the George Medal was awarded Mate Alfred W. Bett, of Toronto, who led the fire party. Engine-room Artificer J. A. Wereley, of Sorel, Que., and Signalman M. J. Fitzgerald, of Toronto, each were awarded the British Empire Medal.

The tanker, bound for Britain, collided in a fog at night with another merchant ship, and burst into flames. Cobalt's crewmen, screening the rear of the convoy against U-boats, thought it was a submarine attack.

Cmdr. Judges said that just as a red glare was noticed in the fog, the corvette's asdic operator picked up the "hydrophone effect of a torpedo coming at us." Cobalt altered course towards the torpedo, picked up a strong submarine contact and fired one and then another depth charge pattern.

After a third attack, the crew could smell oil on the surface of the sea and heard "an underwater explosion that could not be classified as a depth charge," Judges said. "We had reason to feel we were giving a U-boat a nasty pasting."

The tanker was still blazing when Cobalt closed with her, but the officers thought she looked salvageable. Mate Bett loaded fire-fighting equipment into a seaboat, took Wereley and Fitzgerald with him and went aboard the burning ship. In two hours they had the fires out.

Canadian Press, March 22, 1944

Newspaper this is from is not known.

(Credit: Collection of Ronald Judges, courtesy of Chanin Graham, personal communication with the author)

*ard,
944*

HMCS Cobalt Saves Tanker

An East Coast Canadian Port, March 22.—(CP)—After delivering a series of attacks against submarines in the eastern Atlantic, men of the Canadian corvette Cobalt boarded a blazing gasoline tanker and saved the ship and its cargo from destruction.

For this exploit, Cobalt's captain, Lt.-Cmdr. R. A. Judges, Toronto, was mentioned in dispatches at year-end in the navy's decorations and awards list, and the George Medal was awarded Mate Alfred W. Bett of Toronto, who led the fire party. Engine Room Artificer J. A. Wereley, of Sorel, Que., and Signalman M. J. Fitzgerald of Toronto each were awarded the British Empire Medal.

The tanker, bound for Britain, collided in a fog at night with another merchant ship, and burst into flames. Cobalt's crewmen, screening the rear of the convoy against U-boats, thought it was a submarine attack.

Cmdr. Judges said just as a red glare was noticed in the fog, the corvette's asdic operator picked up the "hydrophone effect of a torpedo coming at us." Cobalt altered course towards the torpedo, picked up a strong submarine contact and fired depth charge attacks.

After a third attack, the crew heard "an underwater explosion that could not be classified as a depth charge," Judges said.

The tanker was still blazing when Cobalt closed her, but the officers thought she looked salvageable. In two hours they had the fires out.

City Corvette Skipper Fought Subs, Saved Ship

Globe and Mail, March 23, 1944

(Credit: Collection of Ronald Judges, courtesy of Chanin Graham, personal communication with the author)

Home on his first long leave in 2½ years, Lt.-Cmdr. Ronald Judges, 33-year-old leading Toronto yacht trophy winner, yesterday discussed details of a navy announcement that his corvette, H.M.C.S. Cobalt, had won a two-day battle with U-boats and saved a burning gasoline tanker and most of its cargo.

At the same time the tall, blond, young corvette skipper declared that Nazi subs are still a major menace, and expressed the opinion that Germany's newest underseas craft are big, long-range ships with new equipment that permits them to fire broadsides of torpedoes at their victims instead of firing bow and stern tubes in alternation.

Visiting relatives on Wendover Rd., Lt.-Cmdr. Judges was accompanied by his wife and 2½-year-old daughter, Judy, who have been living near the east coast port from which the young captain has been operating part of the time. One of the best known local yachtsmen, Lt.-Cmdr. Judges was a member of the National Yacht Club, and in 1938 joined the R.C.N.V.R. when he believed war was certain. He was posted to active duty in January, 1940, and has seen almost steady action since then. Yesterday he said: "If there has to be war, I'm seeing it the way I'd want to; I get a bigger kick out of a corvette than I ever did out of the little wind ships."

Won Awards.

Lt.-Cmdr. Judges was mentioned in despatches, Mate Alfred Bett of Toronto was awarded the George Medal, and C.P.O. J. Wereley of Sorel, Que., was awarded the B.E.M. for their parts in the saving of the oil tanker. According to the R.C.N. announcement, the tanker collided with another ship in what Judges yesterday called "a thick, pea-soup fog." A dozen men lost their lives in the fire which broke out immediately; their bodies were found by Mate Bett later.

Almost simultaneously with the torpedoing of the tanker, the Cobalt's Asdic operator picked up the tone of a torpedo, so the Cobalt shifted course and headed toward the torpedo's direction, gambling with chances that it would catch the U-Boat near the surface. Depth charge patterns were laid, and the Asdic picked up the hum of the sub. More charges were dropped, and all through the night the little corvette chased its quarry. After an undersea explosion which Judges said "could not be classified as a depth charge explosion," oil was smelt, leading to the belief the sub was badly wounded, if not sunk.

Got Fire Under Control.

Two days later, after further battles with other subs, things looked clear, and the corvette, to quote Judges, "looked over the tanker which we had tried to protect." Smoke and flames were pouring from the ship, but Mate Bett volunteered to lead a fire party aboard. Scrambling up lines which the escaping crew had left dangling to windward, the boat's crew, wearing asbestos gloves and gas masks as protection against heat, hauled up portable firefighting equipment. Two hours later they had overcome the fire, though they had expected at any minute the ship might go sky-high. The ship and 80 per cent of the cargo of aviation gas was saved and turned over to another ship to be towed into port.

Yesterday Lt.-Cmdr. Judges didn't want to amplify his statement about Hitler's big subs, with their lateral-firing torpedo tubes. He held that it was logical that such development would have occurred, merely judging from the dimensions of the biggest subs, which would be big enough for installation of such tubes. Firing abeam would save subs much manoeuvring and increase their torpedo fire power, he pointed out.

Saskatoon Star Phoenix, March 23, 1944. Possibly the longest article about the event and reflecting the most details from the original RCN press release. (Credit: Collection on Ronald Judges, courtesy of Chanin Graham, personal communication with the author.)

SASKATOON STAR-PHOENIX

Fire Party from Corvette Saved Tanker and Cargo

AN EAST COAST CANADIAN throughout the action and the straining conditions under which a fire party from the Corvette saved the tanker and its cargo from certain destruction.

The incident occurred in the West Atlantic after the Corvette had kept the corvette's crew busy for two days, being exploit was referred to in brief citation at the year-end when the names of the captain, the navigation officer and the gunnery officer were mentioned in the RCN's decorations and awards list. Mate Alfred W. Bett, of the Corvette, has been awarded the George Medal. Engine Room Artificer, Fourth class, James A. Wier, of the Corvette, has been awarded the Empire Medal for his gallant and leadership he displayed

The officer candidate observes the fire training and practical experience.

THURSDAY, MARCH 23, 1944.

in the crew. All those who could were sent to the Cobalt, a few minutes after the collision. To the men in the Cobalt, screaming with excitement, the U-boats, it looked like a submarine attack.

We saw a red glare in the fog over the sea. The U-boat was a few minutes after the collision. To the men in the Cobalt, screaming with excitement, the U-boats, it looked like a submarine attack.

...the afternoon, the corvette delivered two more attacks. The hunt went on during a second day, the U-boat was seen in the burning tanker. ...the afternoon, the corvette delivered two more attacks. The hunt went on during a second day, the U-boat was seen in the burning tanker.

The cabin of H.M.C.S. Unicorn is a spacious, bright new office on the east side of the ship. Lt. Col. C. A. K. White, who is in command of the ship, is seated at the table. The life size oil portrait on the left wall is of Lieutenant Commander White, and activity aboard ship. The life size oil portrait on the left wall is of Lieutenant Commander White, and activity aboard ship. The life size oil portrait on the left wall is of Lieutenant Commander White, and activity aboard ship.

Saskatchewan and the establishment there has now cost more than ... A postwar scheme of mobile sea cadet training course has been advanced by the League with honour ... F. F. MacMillan is chairman of a ... which is engaged in increasing the ... 2,000 trust fund for improvements ... to the United camp.

WE EXTEND HEARTY GREETINGS
to the
“SILENT SERVICE”
And Particularly the
Ships Complement of
H.M.C.S. UNICORN

Paymaster Lt. D. W. SNAITH, accounting officer at H.M.C.S. Unicorn, who arrived at the ship ... Halifax, N.S.

Navy League Vigorous

Yachtsman Prefers Corvette To Sailing

TORONTO, March 23—(C)—Lt.-Cmdr. Ronald Judges, 33, well-known Toronto yachtsman before the war, in an interview last night said he gets "a bigger kick out of a corvette than I ever did out of the little wind ships."

Home on his first long leave in 2½ years, he told of the experience he had as commander of the corvette H.M.C.S. Cobalt, when the little warship won a two-day battle with U-boats and saved a burning gasoline tanker and most of its cargo.

He said also that German submarines still are a "major menace" and expressed the opinion that Germany's newest undersea craft are big, long-range ships with new equipment that permits them to fire broadsides of torpedoes at their victims instead of firing bow and stern tubes in alternation.

*Sault Daily Star, March 23,
1944*

*Ottawa Journal, March 23,
1944*



GIVING HIS DAUGHTER A HAND—Lieut.-Cmdr. Ronald A. Judges, Toronto, now home on leave, is commander of the corvette H.M.C.S. Cobalt, which recently put to rout Nazi subs, thus saving a burning oil tanker. He is with his small daughter, Judy, as he helps her to launch a toy sailboat in the bathtub.

MEMBER REFERS TO EXPLOITS OF THE COBALT

Reference to a recent naval exploit was made in the Ontario Legislature last Thursday by C. H. Taylor, M.P.P. for Temiskaming, and his statement, given below, is self-explanatory. It follows:

"Mr. Speaker:

"I wish to rise to a point of privilege before the Orders of the day, to draw to the attention of this House the story of the heroic actions of the crew of H.M.C.S. **Corvette**, "Cobalt," an account of which appeared in this morning's Globe and Mail. Three members of this crew have won the following distinction: CPO James Wercley, of Sorel, The British Empire Medal; Mate Alfred W. Bett, of Toronto, The George Medal; Capt. Ronald A. Judges, who has been mentioned in despatches, and who are now home on a well-earned leave.

"I consider it a great privilege, and honor, not only as Member for that particular riding, but as mayor of that fair town in whose honor this **Corvette** was named, to have this privilege.

"While this crew are not citizens of our town nor am I acquainted with any of them, I feel the members of this House will join me in expressing our deep appreciation and gratitude to this heroic crew for their gallant action. In the event some of the members have not heard of this fair town, I would remind them that it was the fifth largest silver camp in the world, and it is today the world's best example of what is known as 'glorified free enterprise.' We are sometimes referred to as a 'ghost town,' and dead, but we refuse to be down."

*Temiskaming Speaker,
March 30, 1944*