I SAW THREE SHIPS COME SAILING BY
ON CHRISMAS DAY IN THE MORNING...

A Christmas Message from The Minister

THE SONG the angels sang on that winter's night so many centuries ago still expresses the yearning of mankind for peace and the world's lasting need for men of goodwill.

It is traditional that the Christmas season should be a time of peace and joy, but it is also a time when those associated with the Royal Canadian Navy, either in a service or civilian capacity, may well pause to consider the reason for its being.

The Royal Canadian Navy exists as one of the forces standing on guard within the framework of the United Nations and the North Atlantic Treaty Organization for the preservation of peace and freedom in a sorely troubled world. Its energies are directed to the end that men here and everywhere may lead useful and tranquil lives, unshadowed by fear.

The past year has been for the Royal Canadian Navy one of far-ranging activity, from the Far East to the Arctic and on the broad expanses of the Atlantic and the Pacific in manœuvres and exercises. New ships have joined the fleet, among them the world's most modern anti-submarine vessel, and others will be added in the coming year.

The relaxation in world tension means that fewer officers and men of the Navy will spend Christmas away from their homeland than in any year since 1949. Nevertheless, some are still serving far from Canada, and they come especially to mind when I wish all uniformed and civilian members of the Royal Canadian Navy and their families a joyous Christmas and a peaceful, happy New Year.

Ralph Campney

Minister of National Defence.

The CROWSNEST

Vol. 8 No. 2 THE ROYAL CANADIAN NAVY'S MAGAZINE DECEMBER, 1955

CONTENTS

The Cover — With a quaint disregard for geographical facts, the waits of ancient times wandered the streets of Merrie England, and, as was to be expected of a maritime people, linked the story of the Nativity with the sea in their carols. The three ships, they related, sailed into Bethlehem "And all the bells on earth did ring for joy our Lord was born." (*Drawn by Douglas Baker, Naval Art Section.*)

The Crowsnest Extends to Its Readers All Best Wishes for Christmas and the New Year

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From behind a battery of microphones, Prime Minister Louis St. Laurent addresses the ship's company and guests at the commissioning of HMCS St. Laurent in Montreal. Among those appearing in the photo are (from left): Cdr. R. W. Timbrell, commanding officer; Rear-Admiral R. E. S. Bidwell, Flag Officer Atlantic Coast; Constr. Captain Frank Freeborn, Principal Naval Overseer, Montreal; R. K. Thoman, Vice-President, Canadian Vickers Limited; Hon. Ralph Campney, Minister of National Defence; Chaplain of the Fleet E. G. Foote; Vice-Admiral E. R. Mainguy, Chief of the Naval Staff, and Commodore Paul W. Earl, Naval Officer-in-Charge, Montreal. (ML-3760)

Destroyer Escort Joins Fleet

The anti-submarine destroyer escort *St. Laurent* joined the fleet on October 29.

In warm, bright sunshine, in the presence of more than 1,200 guests from many parts of Canada assembled on the dockside at Canadian Vickers Limited, Montreal, the *St. Laurent* was officially commissioned as a unit of the Royal Canadian Navy.

The Rt. Hon. Louis St. Laurent, Prime Minister of Canada, was the guest of honour at the impressive ceremony. He told the gathering that the sole purpose of the ship "is the maintenance of peace and the defence of freedom".

He paid tribute to "the magnificent combination of Canadian skills" which made it "possible for us to produce in Canada a world leader.

"This vessel began as a sharp challenge to the skill of Canadian shipbuilders and manufacturers," he said. "We see her today as a floating tribute to their accomplishments. None is better equipped for her particular purpose."

In accepting responsibility for the ship, Commander R. W. Timbrell, the *St. Laurent's* commanding officer, said it was the duty of him and his ship's company "so to conduct ourselves that we shall be a credit to both the tradition and the skill which have brought our ship to life."

The *St. Laurent* was officially turned over to the RCN by Colonel O. H. Barrett, OBE, president of Canadian Vickers Limited and accepted by Rear-Admiral (E) J. G. Knowlton, Chief of Naval Technical Services.

The impressive religious portion of the commissioning ceremony was conducted by Rev. Dr. E. G. B. Foote, Chaplain of the Fleet. (P) and Rev. R. M. Ward, Assistant Chaplain of the Fleet (RC).

Attending as members of the official commissioning party were Hon. Ralph Campney, Minister of National Defence; Vice-Admiral E. R. Mainguy, Chief of the Naval Staff; Rear-Admiral R. E. S. Bidwell, Flag Officer Atlantic Coast; Rear-Admiral Knowlton; Commodore Paul W. Earl, Naval Officer-in-Charge, Montreal; Colonel Barrett; R. K. Thoman, vice-president, Canadian Vickers Limited; Constructor Captain Frank Freeborn, Principal Naval Overseer, Montreal Area, who introduced the guest speakers.

Following the ceremony, Prime Minister St. Laurent, members of the official party and the invited guests made a tour of the ship.

The *St. Laurent* sailed for Halifax October 31 to join the Atlantic fleet. During the five-day trip—carried out in typical Atlantic weather—the ship was put through her paces and the ship's company given an opportunity to "settle in".

Arriving at Halifax on the morning of November 5, the *St. Laurent* was greeted by a noisy reception from other units of the fleet. Awaiting her at jetty 5 were the Mayor of Halifax, senior naval officers and hundreds of friends and relatives, the atmosphere enlivened by the band of HMCS *Stadacona.*

The *St. Laurent* sailed for Bermuda later in the month to begin her working up exercises.

Biggest West Coast Exercises Held

Ten ships of the Pacific Coast command participated with United States naval, air and ground forces in November in one of the largest co-ordinated exercises held off the West Coast since the end of the Second World War. The entire exercise, held off the coast of California, involved 125 ships, about 15,000 U.S. Marines and more than 300 aircraft, including planes of the RCAF.

The Canadian naval units participating were the *Cayuga, Athabaskan, Jonquiere, New Glasgow* and *Stettler,* of the Second Canadian Escort Squadron, the *Ste. Therese* and *Sussexvale* and the Second Canadian Minesweeping Squadron, composed of the *Comox, James Bay* and *Fortune.*

Following the exercises, held from November 14 to 18, the Second Minesweeping Squadron visited Long Beach and San Francisco before returning to Esquimalt November 29. The remainder of the Canadian ships returned to Esquimalt November 22.

"Soo" Sets Out For East Coast

The Algerine coastal escort *Sault Ste. Marie* sailed from Esquimalt November 2 for Halifax to join the Eleventh Escort Squadron. She is travelling by way of the Panama Canal and is scheduled to arrive at Halifax December 16. The *"Soo"* will replace the coastal escort *Minas,* which was sailed to Esquimalt in October by the same ship's company.

Five Ships Call At U.S. Ports

Canadian ships of the Atlantic Command which visited United States ports during November were the *Gaspe, Ungava, Trinity* and *Resolute,* which called at Providence, R.I., and HMCS *New Liskeard,* which made operational visits to Baltimore and New London.

881 Squadron Visits Bermuda

Aircraft of VS 881 from HMCS *Shearwater* flew to Bermuda late in October for six weeks of training and exercises out of the USAF base at Kindley Field there. Twelve Avenger aircraft and 114 officers and men of the squadron, under the command of Lt.-Cdr. N. J. Geary are participating. The squadron was scheduled to return to Halifax December 12.

While based at Bermuda, the squadron carried out TAS exercises during November with the *Nootka, Outremont, Ambush,* and *Astute,* in co-operation with the RCAF.

Labrador Ends Successful Cruise

After nearly half a year of strenuous operations in the Canadian Arctic, HMCS *Labrador* arrived in Halifax November 18, ending her second successive year of history-making achievement.

During her operations in northern waters, the *Labrador's* most important assignment was to serve, from mid-June to the end of September, as senior ship of some 14 units charged with the delivery of thousands of tons of supplies from Distant Early Warning Line sites in the Foxe Basin area of the Eastern Arctic.

Less than a month before her return, her commanding officer, Captain O. C. S. Robertson, became ill. The medical officer on board decided that it would be best if he were hospitalized and arrangements were made for his evacuation. The ship proceeded to Coral Harbor, on Southampton Island, and from there the captain was flown by RCAF aircraft to Montreal. A successful operation was performed November 7.

Cdr. J. M. Leeming, the executive officer, took command, and brought the ship back to Halifax, but not before carrying out additional hydrographic and oceanographic surveys in Hudson Strait and the Strait of Belle Isle.

The pressure of a closely-timed schedule made it impossible for the First Sea Lord, Admiral Lord Mountbatten, to visit the Royal Canadian Navy's newest ship, the destroyer escort St. Laurent. He is pictured here with Vice-Admiral E. R. Mainguy, Chief of the Naval Staff, studying a photograph of the new warship, which is unique in appearance, design and capabilities. (O-8458)

Warships Recall Athabaskan's Loss

Memorial services were held on board the *Magnificent* and *Micmac* on Saturday, October 29, to honour the memory of the 129 officers and men who were lost in the sinking of the first HMCS *Athabaskan* during the Second World War.

The services were held with the two ships stopped in the position in the English Channel where the *Athabaskan* went down during an engagement with enemy surface forces on April 29, 1944.

Wreaths were cast onto the Channel waters from the quarterdeck of the *Magnificent* by Commodore E. P. Tisdall, Senior Canadian Officer Afloat Atlantic, and from the *Micmac* by Cdr. E. T. Madgwick, commanding officer of the latter ship. The Last Post was played as a Guard of Honour presented arms. One minute's silence was followed by Reveille, and the service closed with the singing of the Naval Hymn and "God Save the Queen".

Crescent Back as Destroyer Escort

The former destroyer *Crescent* was commissioned as an anti-submarine destroyer escort October 31 after a two-and-one-half-year conversion job at HMC Dockyard, Esquimalt.

The *Crescent,* converted along the lines of HMCS *Algonquin,* carries new anti-submarine weapons and devices which have been put into service since *Algonquin's* commissioning in 1953.

Under the command of Captain Paul D. Taylor, the *Crescent* will carry out three months of extensive trials and working-up exercises.

Four Mediterranean Ports Visited

HMCS *Magnificent* and HMC Ships *Haida, Huron* and *Micmac,* which began a five-week European cruise late in October, visited four ports in as many countries during November.

After sailing from ports in The Netherlands October 28 the ships called at Gibraltar November 2, Valencia November 4-8, Genoa November 11-15 and Marseilles November 18-22 before returning to Gibraltar November 25.

Three of the four ships return to Halifax December 7, by way of the Azores, the *Haida* detaching at Gibraltar for Portsmouth, departing there for home December 7.

COs of Divisions Meet in Hamilton

Commanding officers of the 22 naval divisions held their eighth annual conference at HMCS *Star*, Hamilton, from October 31 to November 4.

It was the third time that the commanding officers had met in Hamilton at the headquarters of the Flag Officer Naval Divisions. During the five-day conference, the subjects discussed including many facets of the administration, training, recruiting and public relations programs.

Several senior officers from Naval Headquarters addressed the conference. They were Rear-Admiral H. S. Rayner, Chief of Naval Personnel; Captain J. C. O'Brien, Director of Naval Training; Instructor Captain Martin Ellis, Director of Naval Intelligence; Captain H. G. Burchell, Assistant Chief of Naval Technical Services; Captain C. P. Nixon, Director of Tactics, and Commodore Duncan Raymond, Assistant Chief of Naval Staff (Plans).

Included among the major items discussed by the COs was the Great Lakes Training Centre which had its biggest year during 1955. The COs heard a summary of the activities on the lakes and proposals for the 1956 season.

Rear-Admiral Kenneth F. Adams, Flag Officer Naval Divisions, was chairman of the meeting, with Capt. Frank B. Caldwell, Chief of Staff, assisting.

The next conference will be held in late October, 1956.

City of Same Name Adopts St. Laurent

There was nothing which obliged them to do it, since the destroyer escort *St. Laurent* is named after the river rather than the town, but the good people of St. Laurent, northwest of Montreal, have officially adopted the ship.

The city of St. Laurent is following a practice begun during the Second World War, when many Canadian cities and towns adopted ships of the RCN and provided gifts and comforts for their ships' companies.

The offer to adopt the *St. Laurent* was made by Mayor Maurice Cousineau of the city and gratefully accepted by Cdr. Robert W. Timbrell, commanding officer of the ship. Alderman Norman Hartenstein of St. Laurent has also taken a keen and active interest in the project.

Among the gifts to be presented to the ship by the city are baseball jersies, swimming suits, magazine subscriptions, silverware and other amenities.

The city of St. Laurent lies immediately northwest of Montreal. It is the third most populous municipality on Montreal Island, having increased from 10,000 in 1948 to 40,000 at the present time.

Quebec on Fall Caribbean Cruise

HMCS *Quebec* began a five-week autumn training cruise to the Caribbean early in November with her first stop Willemstad, Curaçao, November 19, for a two-day visit. During her stay in the Dutch city the cruiser's officers and men were received royally and had the opportunity of meeting with officers and men of the Royal Netherlands Navy.

Visits to Montego Bay, Jamaica, and New Orleans were made later in the month. She is also scheduled to visit Great Stirrup Cay in the Bahamas before returning to Halifax December 10.

Montreal through a periscope was the unusual view obtained by Hon. Ralph Campney, Minister of National Defence, when he went on board HMS Astute during the submarine's visit to the Canadian metropolis. With him is Lt.-Cdr. T. B. Dowling, Commanding Officer of the Astute. (ML-3142)

(See story on Page Ten)

'Copter Transport For First Sea Lord

The cricket pitch of Rideau Hall served as an aircraft landing field on October 26 when a helicopter of the Royal Canadian Navy carried Britain's First Sea Lord, Admiral the Earl Mountbatten of Burma, from Ottawa to Kingston and back.

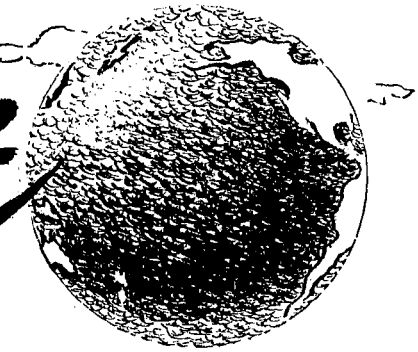
The helicopter was pressed into service to enable Admiral Mountbatten to keep abreast of a busy program. At Kingston, on the 26th, he lectured to the National Defence College in the morning, addressed the Canadian Army Staff College in the afternoon, then inspected and spoke to the cadets of the Canadian Services College, Royal Military College. His evening engagements included a reception at the Parliamentary Press Gallery and a naval mess dinner at HMCS *Carleton*, the Ottawa naval division.

A second helicopter acted as escort and spare aircraft, accompanying that carrying the official party. Both machines were Sikorsky HO4S-3s.

Among those accompanying the First Sea Lord were Vice-Admiral E. R. Mainguy, Chief of the Naval Staff, Captain F. B. P. Brayne-Nicholls, Admiral Mountbatten's Naval Assistant, and Captain W. G. Parry, Senior Naval Liaison Officer (U.K.).

The helicopters were stationed temporarily at RCAF Station Uplands. Pilots included Cdr. F. W. H. Bradley, Commander (Air) at *Shearwater;* Lt.-Cdr. John H. Beeman, commanding officer of Helicopter Squadron 21, and Lt.-Cdr. John D. Lowe, Staff Officer (Helicopters) at Naval Headquarters.

The Wet Planet



WINGING from outer space, a traveller from some remote corner of the universe would distinguish the third planet from the sun as a gleaming, blue star. On his return he might well report that what set apart this jewel among the planets from the others was its wetness.

There is a strong belief among scientists that life, in the richness and variety found on earth, cannot exist on any of the other worlds which revolve about the sun. Primitive vegetation may eke out an existence on the red, dusty plains of Mars but all the others would appear to be inhospitable to living things.

The earth has an abundance of water and a wholesome atmosphere simply because it is the right size. What atmosphere and water the moon once possessed, if ever, have long since boiled off into space. The powerful gravitational fields of the cold giants, Jupiter, Saturn and Uranus, have kept hugged to them the light poisonous gases, methane and ammonia, which the weaker gravity of earth allowed to escape into space. Venus, almost the twin of earth in size, reveals no trace of moisture in her dust-filled atmosphere.

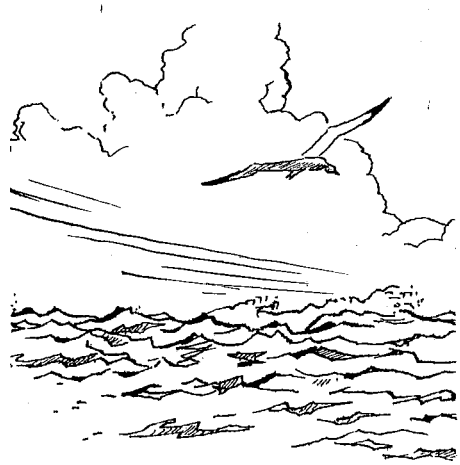
Space-fiction writers call the world "Terra", after the usage of the Romans. They would be better advised to call it "Aqua".

For overlaying the surface of the earth are 300 million cubic miles of salt water. Of the whole surface of the world, less than a third (29 per cent) shows itself above the surface of the sea. Even in the northern hemisphere, where the land masses are concentrated, nearly 61 per cent of the area lies below the ocean. South of the equator 81 per cent of the surface is flooded.

On a map of the world the names appear "Atlantic Ocean, Pacific Ocean, Arctic Ocean" and so on. But in reality there is only one ocean; the great sea is without boundaries.

THE ANCIENTS, building their civilizations on the shores of the Mediterranean, fearful of venturing out into the watery wastes in their small, open vessels, unaware that beyond the horizon lay immense continents, spoke of the ocean as a great river flowing around the circumference of their flat world. To them the world was predominantly dry land. The Phœnicians, trading along the coasts of Africa, dispelled the belief that the world was confined to an area whose boundaries lay within a few hundred miles of the Mediterranean—the sea in the middle of the earth—but their discoveries only emphasized the vastness of the land masses rather than the greater immensity of the ocean.

On the far side of the world, the Polynesians knew otherwise. They lived in a world where the great reality was the sea and the coral atolls



through which they sailed for thousands of miles were happy accidents.

The Vikings may have been the first among western men to venture across the Atlantic Ocean. They discovered Iceland and Greenland and the north-eastern shores of North America. But they were a proud and isolated race. Their knowledge was not transmitted to the rest of the known world. Even when Columbus set out on his voyages he did not realize the great sweep of the ocean and when at last he sighted land he thought he had gone more than half way around the world and come upon outposts of Asia. To the confusion of schoolboys right up to the present day, he called the natives "Indians" and the islands of his discovery the "West Indies". A navigator of today who was 10 miles out in his calculations would blush; Columbus was 10,000.

However, his voyages fired the imagination of the voyagers of western Europe and launched the great age of exploration out of which our modern civilization has grown. The ocean ceased to be an impregnable barrier and became a great highway, reaching to the ends of the earth, carrying legitimate trade and loot.

For the next 300 years, man's great concern was with the surface of the ocean and the few feet immediately below it — the shallows, rocks and reefs, the storm-whipped waves, the fish which could be caught to supplement the meagre offerings of the soil.

Only in recent years, as the history of man is measured, have the depths of the ocean been probed and abysses discovered which could drown the highest mountains. Soundings have been made in the Mariana Trench in the Pacific to a depth of 35,640 feet. Everest, the world's highest mountain, which so long defied the most determined efforts of man to scale it, stands a mere 29,002 feet. If the continents were to sink below the seas and the depths were to rise so that the earth formed a smooth ball, the ocean would roll over it to a depth of a mile and a half.

NOW IT IS KNOWN that buried in the sea are mountain ranges and valleys, canyons and plains, that the ocean level rose and fell with the going and coming of the Ice Ages, that in the far-off past the seas invaded the continental land masses and that in their warm shallows the first life was nurtured. The cells of man's body are bathed by lymph which in its chemical composition must match that of the ancient sea. He is, in effect, a sea animal who carries his own private sea in his veins and among his bodily tissues. He can no more survive the loss of water from his vital organs than can a jellyfish.

To the sea he not only owes his very life but also his well-being and wealth.

From the sea come the rains which water his fields. Almost since the beginning of time the patient rains have carved the mountains and built the plains, have leeched minerals from the soil and spread silt on the ocean floor in great fan-like deltas. The seas absorb the heat of the sun and thereby cool the tropics; they release it and temper the cold winds of winter in more northerly zones. If the ocean did not behave in this way, like a great thermostat, much of the world would be scarcely habitable.

The invasion of the land by the sea in the past has given the modern world much of its wealth. It departed and left behind forests buried in sediment which are the coal beds of today; it left behind the decaying organic matter which has been transformed by time into the oil which powers automobiles, ships and aircraft; it deposited great beds of minerals and sedimentary rock which are the foundation of construction and manufacturing industries.

But the giving has not been all one way. Much of the mineral wealth of the land has run into the sea. Common salt is the most abundant substance dissolved in the ocean, which also contains in lesser quantities rare and valuable chemicals and metals which are increasingly demanded by today's technological civilization. It has been known at least for a century that fabulous wealth in gold is dissolved in the sea. Today there is more interest in the fact that thorium, uranium, vanadium and other metals which are essentials of the Atomic Age are found there. Magnesium, chlorine and other needs of industry are already being extracted from brines left by ancient seas, and new synthetic resins, which act on the same principle as the chemicals used in domestic water softeners, may make it commercially feasible to extract the rarer elements.

MORE IMPORTANT than all the mineral wealth of the sea, however, is the vast self-renewing storehouse of food which it contains. Fishing and whaling have long supplied important supplements of protein and fats and the ocean becomes increasingly important as a source of food with the increasing pressure of population. The suggestion has even been made that whales might be herded and husbanded, like cattle, in enclosed seas.

Unlike the land, the ocean's richest growth is not necessarily found in tropical areas. The greatest productivity of life occurs where ocean currents well from the depths, fertilizing the surface waters with minerals. Thus some of the richest feeding grounds are found in Arctic and Antarctic waters. Some marine biologists foresee the day when the plankton, the almost microscopic life on which fish and whales feed, will itself be harvested and converted into proteins and fats for human consumption.

The foregoing, however, are not the thoughts of the sailor. He is concerned with starting from "A" and going to "B", whether his ship carries cargo or guns. He may know the beauty of moonlit nights in tropical waters, of crisp breezes and sparkling sunlight. He also knows fog that for days may smother sight and sound and tempests that whip the sea into a rage that threatens the safety of his ship.

"And what are the boasted glories of the illimitable ocean?" asked Charles Darwin, when he had returned from his long voyage in HMS *Beagle* which added so much to mankind's store of knowledge of land and sea. "A tedious waste, a desert of water, as the Arabians called it."

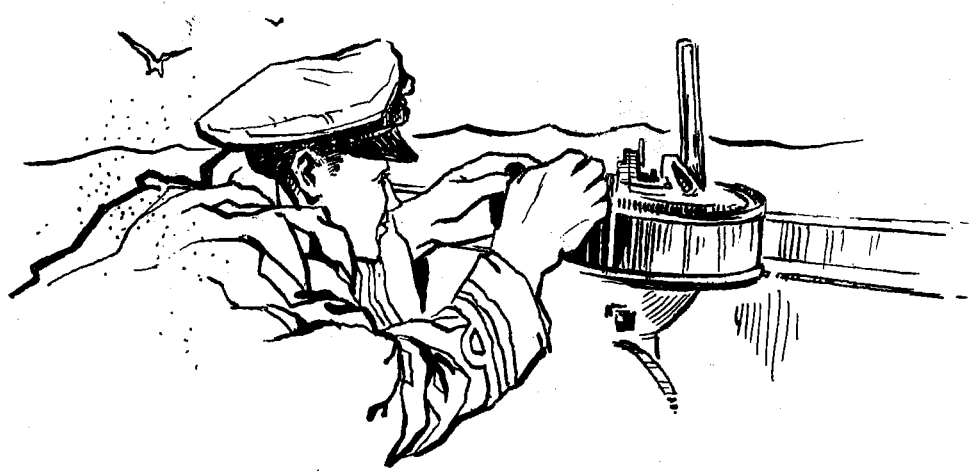
But he, too, recognized that life at sea had various delights (seasickness was not one of them) and wrote of them with pleasure. In this he was in the company of poets throughout the history of the written word, from Homer's "wine dark sea" to Masefield's "tall ship". Aphrodite, the goddess of beauty was born of the sea foam, so the ancients said, but they also told of Scylla and Charybdis, rocks guarding the Strait of Messina, which clashed together and shattered any vessel daring to pass that way.

THE REFERENCES to the sea in the Bible are few and uncomplimentary, because the Hebrews began as a nomadic race, children of the desert. Jonah was blamed by his shipmates for a great storm at sea; St. Paul was shipwrecked on Malta and when St. John described the New Jerusalem he said: "And I saw a new heaven and a new earth: for the first heaven and the first earth were passed away; and there was no more sea."

That time has yet to come. The sea is with us, fickle, menacing, serene, terrible, and exquisitely beautiful. Over the oceans of the world still ply mighty ships exchanging the wealth of nations. The function of the navies of the free world is to see that that trade continues and to frustrate those who would, in time of war, deny food, raiment and military succour to nations over the seas who cherish freedom.

Within recent years has come a realization that Canada not only fronts the sea on east and west, but also to the north. Deep within her territory is the second largest inland sea on earth — the Hudson Bay. With the opening of the St. Lawrence Waterway, world trade routes will reach deep into her heart.

Civilizations first arose in verdant river plains. They were swiftly succeeded by nations who dared the seas, who traded afar and gleaned both wealth and knowledge. The sea is with us still, an avenue of trade, of understanding and good will.



THE DAY THE ARMY CHEERED THE NAVY

Cdr. Soulsby Recalls a Stirring Day at Sea in Stadacona

THE ANSWER to your question "What ship?" on page 6 of the August 1955 issue of *"The Crowsnest"* is definitely: "HMCS *Stadacona*".

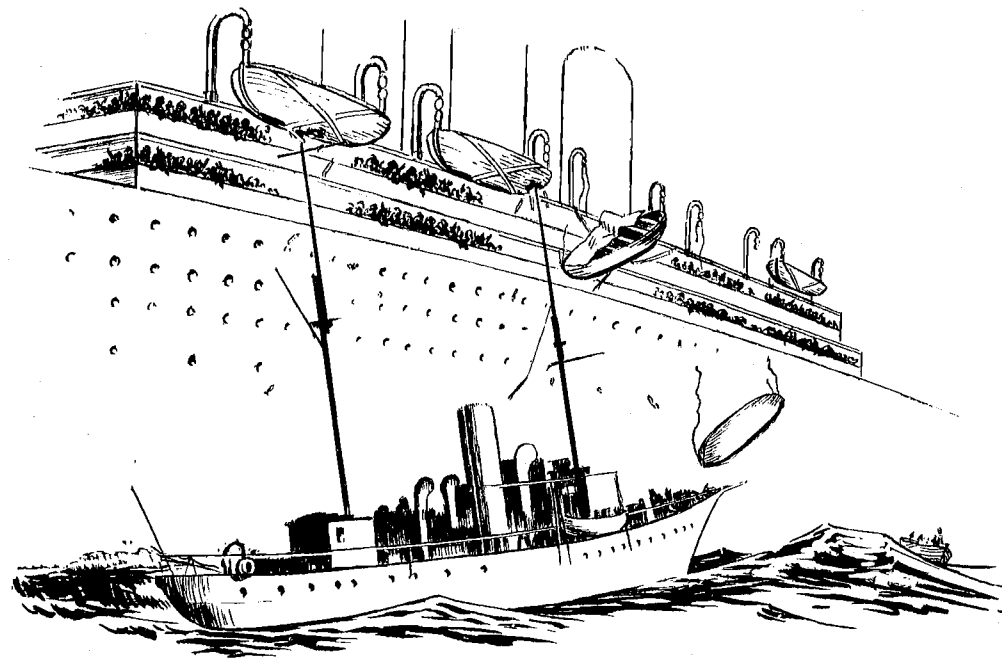
She was built in the United States during the last decade of the nineteenth century as a private yacht. Bought in 1915 by the Canadian Government, she was armed with one 4-inch QF gun and one twelve-pounder and was detailed for duty as a patrol vessel on the east coast of Canada.

I had the honour and not unqualified pleasure of serving in the first *Stadacona* from February 23, 1916 until July 28, 1916. Another RCN midshipman, Donald St. George Lindsay, and I, joined her one cold snowy day in Halifax, feeling rather downcast and disgusted because we had expected to be sent to England to join a battleship in the Grand Fleet, but instead, found ourselves in this quite un-naval looking craft in our home port.

The captain was an RNR ex-Cunard officer, who had very good ideas about running his ship strictly according to the best RN rules and traditions. Unfortunately, however, no doubt being accustomed to the ponderous movement of large liners, he never did learn to handle the *Stadacona*. She was a b-blank to handle anyway, even by an expert. She had high free-board and was comparatively light and had a left-handed single propeller. These, together with a swan bow and bowsprit, made berthing alongside a jetty not an easy operation. We had not a few hair-raising experiences on this account and probably the most exciting occurred on April 5, 1916, when we were patrolling off Halifax.

About 0900 on this day, when somewhere outside the Outer Automatic, we observed the 50,000-ton White Star liner *Olympic*, then one of the largest ships in the world, leaving Halifax Harbour with five or six thousand Canadian troops on board bound for England on one of her many regular "trooping trips" across the Atlantic.

The wind had freshened from the southeast raising a sea which made the *Stadacona* bob about in her usual abominable manner. We saw that the *Olympic* had not stopped to drop the pilot as she passed the pilot cutter, a few miles inshore from us. This meant that the pilot was still on board and would be taken to England—willingly



or otherwise we didn't know, nor would it have mattered.

However, our skipper, full of initiative and a desire to show what the Navy could do, made a signal to *Olympic* saying that *Stadacona* would take off the pilot if he wished, to which *Olympic* replied Thank you very much", and stopped. The *Stadacona* got under her lee about half a cable off and lowered a whaler.

Now, from my observation and experience, the lowering and hoisting of a boat in a seaway, properly and safely, is not among the easiest things sailors are called upon to do. Our officers and ship's company may have had experience of a sort, but shall we be kind and say they had not had much practice in that ship? Added to which the davits were of an old American type and our whaler did not fit them properly. . . . Anyway, it took a little longer than it should have to lower the whaler and during the process the very large *Olympic* and the tiny *Stadacona* got closer together. Whether the *Olympic* blew down on the *Stadacona* or the smaller ship was attracted to the larger can be left to others to decide, the fact was it became time for the *Stadacona* to move in order to avoid bumping against the side of the great ship. We could not go ahead because the whaler was in the way—so we went astern and the left-handed propeller, which was so handy for marking starboard landings alongside a wharf, accelerated our swing into the *Olympic's* side. So we bumped—many times!

We were scending five to ten feet in the sea. Our skiff was crushed at her davits and the davit sockets stove our side in, fortunately well above the water line. The fore yard broke in two and hung dangling alongside the mast. Our mastheads poked holes in the *Olympic's* lifeboats as we passed along her side and cork from their fenders rained down on our decks. Our lifeboat fell with a splash into the sea, just ahead of us. Another lifeboat, one of its falls having carried away, hung by its other fall for a moment, fouled the forward 4" gun, carrying away its securing chains and knocked it spinning before the boat bounced off our foc'sle and also fell into the sea.

I was off duty at the time and, standing aft, had a fine view of all this. As we proceeded aft along the great ship's side, I was petrified with fright as we seemed to drift around under the huge counter stern and I visioned the *Stadacona* being impaled on her propeller! Imagine the situation had that occurred —we would have filled and sunk like a stone and put the *Olympic* out of action into the bargain! However this dreadful catastrophe did not occur and we drifted

clear. While all this was going on the *Olympic's* decks were lined with thousands of Canadian Tommies cheering for the Navy.

What the thoughts of the Captain of the *Olympic* were I don't know; he was in the White Star and our Captain was an RNR officer from the then rival line —Cunard! We eventually picked up our whaler and the pilot, who said he would much sooner have risked a trip across the submarine-infested Atlantic! Taking the two damaged and drifting lifeboats in tow we proceeded into harbour feeling rather sheepish, and spent a week or two repairing our damage. The *Olympic* carried on, and completed many round trips across the Atlantic, successfully avoiding torpedoes for the rest of the war. In fact, she actually rammed and sank a submarine on one voyage.

Incidentally, the Navy seemed to have it in for the *Olympic*, as earlier in her history she was rammed on her starboard quarter by a British cruiser, HMS *Hawke*, while the latter was overtaking her in the Solent. Subsequent prolonged litigation brought to light a theory that a larger ship actually does attract a smaller one to her when sufficiently close, and this formed part of the defence of the captain of the *Hawk*. Later I served under this same captain whose name was Blunt and who was known throughout the service as "Suction" Blunt as a result of this episode.

When I left the *Stadacona* in July 1916, she was in Quebec, undergoing repairs to the main engines and I did not see her again until the mid-thirties when I recognized her in the Straits of Georgia, near Vancouver. She had come around to the Pacific Coast a year or so after the end of the First World War, in company with the minesweepers *Armentieres* and *Givenchy*. Her subsequent career is probably not completely known in detail to any one person; for a time she was a rum-runner and finally reverted to her original role as a private yacht under the name *Moonlight Maid* before being broken up in Seattle in 1948.—H.W.S.S.

Nothing So Indefinite As The Definite Article

WHEN IS a ship a "he"?

The answer is "When she isn't a 'the'."

How complicated the whole business can get is illustrated by the following hypothetical instance:

"*Cheroot* signalled that he was in contact with a submarine, but before his signal was acknowledged, a torpedo blew 50 feet from her stern. The *Cheroot* remained afloat and eventually she was towed safely to port." (So was he.)

By long-standing usage "*Cheroot*" refers to the captain — usually a "he" — and "the *Cheroot*" to the ship herself— always a 'she'. Of course, the name may appear as "HMCS *Cheroot*", in which case the definite article is not used and there is no doubt about the gender.

For another thing, since the initials stand for "Her Majesty's Canadian Ship" it would be quite ungrammatical to say "the HMCS *Cheroot*". On the other hand, there is nothing wrong in saying "the USS *Forrestal*", and this form is common in American writings on naval subjects.

The Royal Canadian Navy Correspondence Manual doesn't go into the subject very deeply, saying merely:

(*a*) Names of ships shall be typed in capital letters or in initial capitals between inverted commas, e.g., MAGNIFICENT or "Magnificent".

(*b*) The letters "HMCS" shall be used only when essential for clarity.

The subject of whether or when the definite article should be used with ship names is not mentioned.

Not so the Naval Secretariat Handbook (BR 49 (1945)) of the Royal Navy. It raps the use of inverted commas and then goes on to insist on the use of "the" before the name of a ship. The following is a direct quotation:

> The use of inverted commas in the names of H.M. Ships, besides causing unnecessary clerical labour, has no roots in Naval Custom; it is a modern habit. Admiralty typists have been instructed to avoid it for the last fifteen years (c.f. any Admiralty Letter). The traditional way to write the name of one of H.M. ships is as on a cap ribbon, i.e., H.M.S. VICTORY; alternatively, "the" is used in place of "H.M.S.", (c.f. Collingwood's despatch on Trafalgar). This naturally does not apply in signals, nor is it customarily adhered to in staff minute sheets, notes, drafts, etc. It applies to memoranda and formal correspondence. The name of a ship without any prefix is, by old naval custom, reserved for addressing the Captain of a ship in person.

Reference to either handbook, however, does not settle the question of literary usage.

Canadians and Americans have, for example, pretty well abandoned the use of periods in abbreviations and to spell the name of the ship in capitals would be to create an unsightly printed page.

A less formal ruling than provided by any correspondence manual was needed to settle the question and somebody around the office just happened to have hung on to a copy of *"The Dittybox"*, dated February 1946 and published by the Royal Navy. And there in black and white (six-point) was this item:

> DESIGNATION OF H.M. SHIPS
>
> There are only two correct methods of referring to H.M. Ships.
>
> In the case of H.M.S. *Victory*, for example, she should be referred to either as H.M.S. *Victory* or as the *Victory*. The use of "Victory" is quite wrong; using the name of a ship without any prefix is, by old naval custom, reserved for addressing the captain of a ship in person.

But the words after the semicolon had an unpleasantly familiar ring and, sure enough, they were lifted, without so much as a thank you, right out of the Royal Navy's Secretariat Handbook.

We have our own system. We call it (oops, her) HMCS *Cheroot* or the *Cheroot*.

And when do we call a ship a "he"?

Answer: When it's "Ship ahoy!"

Red Cross Thanks Services for Help

Gratitude for the assistance given by the Royal Canadian Navy and the other armed services to the Canadian Red Cross Society was expressed in a letter received by Vice-Admiral E. R. Mainguy, Chief of the Naval Staff.

The letter, from George Aitken, chairman of the executive committee of the Red Cross, said:

The Central Council of the Canadian Red Cross Society at its recent meeting unanimously approved the following resolution:

"The Central Council of the Canadian Red Cross Society acknowledges with gratitude the splendid co-operation received from the Navy, Army and Air Force in aiding and assisting the Society in many ways, particularly in its Blood Transfusion and Disaster Services."

We are most grateful for the co-operation we received from the Navy and particularly for the large number of blood donors who have been recruited through your officers in Vancouver and Halifax.

MAN *of the* MONTH

CAPTAIN FOR CHRISTMAS

Custom Rooted Deeply in Past

THE CUSTOM of making the youngest member of the ship's company captain for Christmas Day would appear to have pretty ancient roots—not all of them in accord with present day standards of propriety.

During the Middle Ages it was the custom of cathedral towns in Europe to elect a boy-bishop on December 6, the Feast of Saint Nicholas, the patron saint of children. He retained office until Holy Innocents' Day, December 28, and during the period he was accorded real privileges and powers.

On election, the boy-bishop was dressed in bishop's robes, complete with the bishop's symbols of authority, the mitre and crozier, just as captain and junior exchange uniforms, while a number of his comrades, usually from among the choir boys of the cathedral, were robed as priests. The group then toured the town blessing the people.

During succeeding days he performed all the bishop's functions, except the Mass, and in some cases he was even granted the right to make ecclesiastical appointments. A modern parallel is the boy-captain trying to make requestmen and defaulters stick.

It can easily be seen that the custom did not lend itself to good government within the church, but it was suppressed with difficulty. King Henry VIII prohibited the election of boy-bishops; Queen Mary I revived the tradition. It was suppressed for good in England by Queen Elizabeth I. However, the custom survived in Germany until 1799.

The election of boy-bishops is thought to have been a survival of certain customs surrounding the Roman Saturnalia, which was celebrated on December 17 and 18, officially, but which actually marked the beginning of a full week (in some cases a month) of festivities.

One of the customs of the Saturnalia was the suspension of rank. Slaves sat at the family table, addressed their masters on equal terms and sometimes were even waited on by them. Army officers preserve the tradition to the present by serving other ranks their Christmas dinner.

Children had a special day set apart for them during the celebrations during which they received gifts, usually of dolls.

The Saturnalia reached the depths of barbarity among the Roman Legions in Europe. They would each year elect a soldier who for 30 days would be accorded every honour and privilege. No limits were set on his licentious conduct. But at the end of the 30 days he was required to cut his throat.

Needless to say, with the spread of Christianity, this custom became highly unpopular. However, a pale image of it survives to this day in the Lord of Misrule who presides over the carnivals of Latin countries and whose effigy is abused or burned at the end of the festivities.

Fortunately no such consequences attach to the Navy's designation of a boy-captain except that, at times, the incumbent may have the uncomfortable feeling the next day that he has made a fool of himself.

West Coast Historical Tour

The Pacific Command this year took members of the Victoria Section, B.C., Historical Association, on their annual outing.

The day's tour started with a visit to the new Naval Maritime Museum, in a picturesque red brick building about 60 years old, on the Esquimalt Road. It is one of the best maritime museums on the coast and is attracting many visitors.

Instr. Cdr. C. Herbert Little, Command Education Officer, *Naden,* was in charge of the party, which he took on a conducted water tour of the harbour, pointing out ancient buildings, such as the magazines on Cole Island, and other sites including Maplebank, the Admiral's residence, and Belmont, where the home of Chief Justice David Cameron stood long ago.

There were tours, too, through the dockyard, passing Admiral's House, built in 1885, and through *Naden,* followed by tea in *Naden* Wardroom, with Mrs. J. H. Hamilton and Miss Kathleen Agnew presiding. Russell Potter, chairman of the Victoria Section, expressed thanks to the Navy.

Instr. Cdr. Little gave the following brief history of Esquimalt:

"The first recorded visit of white men to Esquimalt was in 1790, by the Spaniards," he said. "On July 19, the captured British sloop *Princess Royal,* re-named *Princess Real,* under command of Lieut. Quimper, anchored in the harbour, which was named by him Puerto de Cordova, after the Viceroy of New Spain.

"The following spring the *San Carlos,* under Eliza, and the *Santa Saturnina* came to Esquimalt and in 1792 came the two schooner-surveying vessels, *Sutil,* under Galiano, and *Mexicana,* under Valdes.

"The first charts of the harbour were begun by Quimper and added to by other captains, but owing to Spain's secrecy about her new discoveries, also to the Nootka convention of 1795, Esquimalt was not developed for another 50 years.

"In the summer of 1846, a hydrographic survey of Esquimalt harbour was begun by Lieut. James Wood in HMS *Pandora,* assisted by Mr. Inskip, the naval instructor of the frigate *Fisgard,* and his 14 midshipmen.

"From the *Fisgard,*" Cdr. Little said, "came many place names of Esquimalt harbour: Fisgard Island, at the entrance to the harbour; Duntze Head, after her captain, Rodd Hill after her first lieutenant. Constance Cove, Thetis Cove and Plumper Bay were named for British warships on this station a century ago.

"The first flagship to enter Esquimalt was the 50-gun frigate, HMS *Portland,* wearing the flag of Rear-Admiral of the Blue Fairfax Moresby, Commander-in-chief from 1850 to 1853."

Cdr. Little told of an historic event in Esquimalt's history: "A dramatic incident of August, 1914, was the purchase by the B.C. Government (Premier Richard McBride) of two submarines from their builders in Seattle. For a few days the province had its 'private navy'—the only occasion of its kind in Canadian history.

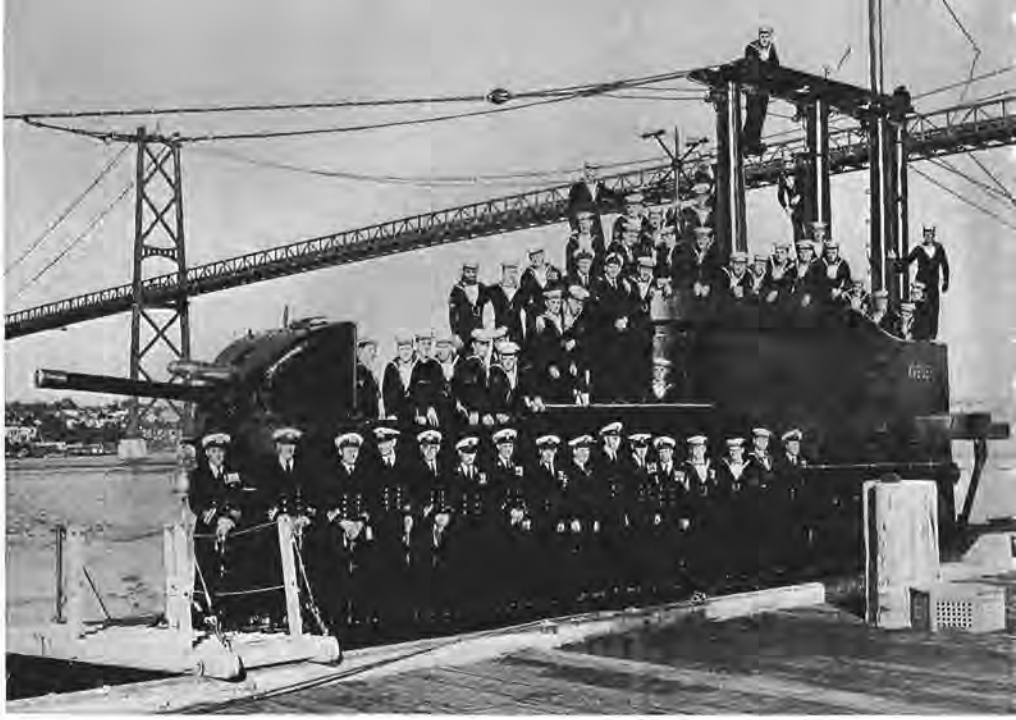
"The federal government took over the submarines and added them to its Pacific naval force. They served here with the *Rainbow, Shearwater* and *Algerine* until 1917 when, with the *Shearwater,* they sailed to Halifax. The *Shearwater* was the first ship flying the White Ensign to transit the Panama Canal."

Mrs. A. J. O'Reilly of Point Ellice House recalled that she and her husband had been in one of the submarines the day after they reached Esquimalt in 1914.

On the way back to town, visits were paid to the naval cemetery and to St. Paul's Church, for long an Esquimalt landmark.

THE SIXTH SUBMARINE SQUADRON

The following account of life in the Sixth Submarine Squadron, on loan to the Royal Canadian Navy and operating out of Halifax, was written by Lt.-Cdr. Tom B. Dowling, RN, commanding officer, HMS Astute. *The other boats of the squadron are the* Ambush *and the* Alderney.



The captain, officers and men of HMS Ambush. (HS-38549)

NOW THAT the Sixth Submarine Squadron is a familiar part of the Halifax Naval scene, it may be of interest to hear the type of routine and running that the submarines follow here.

First, a word about the composition of the squadron. The three submarines are manned by part RCN, part RN crews, still mostly RN but the balance will become more even in the future. The crews are subject to RN discipline but the submarines are under the operational and administrative command of the Flag Officer Atlantic Coast.

The purpose of the squadron is to provide Canadian anti-submarine efficiency. This will become even more important when the new RCN A/S vessels are operating.

The sea time is spent mostly in the Gulf Stream, working from Halifax during the summer and autumn, and from Bermuda during the winter and spring, in order to avoid the Nova Scotian and Grand Bank fogs and poor water conditions.

Often one submarine goes to sea with one or two frigates who have A/S training classes embarked, and exercising goes on each day and sometimes nights until either the week or the training period is completed. If the running is weekly, we normally enter harbour on Thursdays. The surface ship will practise obtaining, holding and maintaining sonar contact, and the submarines will be given dummy torpedo attacks on the frigates.

Aircraft may be brought in for one period a day to carry out combined exercises with the frigates against the submarine, or a submarine may go to sea solely for RCAF Maritime Air Command or Naval Air training, familiarizing the air crews with the appearance of a submarine both on radar and visually and for sonar buoy exercises.

Sometimes there are trials of equipment to be carried out and newly-commissioned ships require a work-up with a submarine, and of course there are the big fleet exercises to fit in.

The submarines spend one week in seven alongside and dock for two weeks every six months at Halifax, so you can see that fitting all the requirements is quite a jig-saw puzzle.

Life in the squadron is not all work however. Montreal and Quebec, St. John's, Newfoundland; New York, New London and Norfolk have all been visited, the latter three ports operationally. These visits have proved really novel and interesting and have provided a welcome diversion for everyone.

Except for closer living conditions, life in a submarine is much like that in any other type of ship. Everything has its equivalent. The usual rounds of watchkeeping, cleaning, tot-time, eating, dishing-up, ditching gash, cleaning for rounds and recreational films or games apply just as much in a submarine as anywhere else, but the emphasis shifts.

Ditching gash for instance, can be a most unpleasant chore involving two men dressed up in full foul-weather clothing and employing half of one of the watches off watch. Cleaning up becomes impracticable on a large scale, as the gangways and equipment have to be left clear and this prevents full scale cleaning usually until we get back to harbour.

So cleaning stations are less, but watches on the other hand come around more frequently as each watch is only, by custom, two hours, extra attention being required, and also the ship's company is in three watches. Sometimes a watch is one or two overborne and rotating stand-offs are worked but generally, except for some half-dozen daymen, the longest any man will be able to sleep at a time is under four hours. In addition, when the submarine is prepared for diving everyone is involved; and for dives, attacks and evolutions, the ship's company may go to diving (action) stations and no notice for this is expected, or given. So you can see it is a case of roundabouts and swings.

Recreation is limited. Everyone has a bunk, and when dived a submariner in his bunk is using up less air than he would be holding forth in his mess and so sleep is not frowned on. Films are shown to give each man a show every two days when possible, and games and music and visits to the bridge for fresh air, when the sea is calm enough, fill in the rest of the time.

Occasionally, when exercises are not taking place, and the sea is calm, it is possible to open up the fore hatch and get some fresh air into the messes. This attracts more men up than usual, as there is plenty of space on the upper-deck casing, and on these occasions the whole of the fore casing is available.

Meal time is a squeeze and some men will find a corner to sit with their plates in their laps, but the old system of living, eating and sleeping in one's own mess continues and is popular with nearly everyone. The torpedo stowage compartment serves as overflow sleeping accommodation for seamen however.

We already feel quite established here in Canada, and look forward to the day when we are really a nearly half-Canadian squadron.—T.B.D.

OFFICERS AND MEN

AN OFFICER who played a key role in the wartime expansion of the Royal Canadian Navy and who has had a prominent part in the development of the postwar fleet went on retirement leave this fall, only a few days before the commissioning of the *St. Laurent,* with whose design he had been so greatly concerned.

Commodore (E) Arthur C. M. Davy, 52, of Ottawa and Victoria, who has been Engineer-in-Chief and Deputy Chief of Naval Technical Services at Headquarters since August 1949 proceeded on retirement leave October 17.

When he is finally released from the service on June 27, 1956, he will have served in the Navy for close to 39 years.

Commodore Davy became Director of Shipbuilding in 1939 and for the next six years worked incessantly to provide the ships that gave Canada the third largest of the allied navies.

Under his direction were the conversion of three CNR liners to auxiliary cruisers, the construction of 94 corvettes, 12 Algerine and 54 Bangor minesweepers, plus fairmiles, motor torpedo boats and a variety of miscellaneous craft, to which later were added frigates and Tribal Class destroyers. For the Tribals, Commodore Davy arranged for the building of the first marine steam turbines in Canada. At that time the destroyers were the largest warships ever built in this country.

For his part in the naval shipbuilding program Commodore Davy was appointed an officer of the Order of the British Empire in June, 1946, the citation stating that he "never wavered from the tasks assigned to him, and the rapid commissioning of ships of the Royal Canadian Navy was, in great part, due to the tireless efforts of this officer".

Commodore Davy, while attending the National Defence College, Kingston, in 1948-49, once again became involved in the build-up of the fleet, taking a hand in the design and development of Canada's ultra-modern anti-submarine destroyer escorts. The first of these, the *St. Laurent,* was commissioned October 29.

In August, 1949, Commodore Davy was appointed Engineer-in-Chief at Headquarters with additional responsibilities as Deputy Chief of Naval Technical Services. Since he took over the Engineering directorate, his staff has multiplied from six to 76 people, concerned with the development of designs and the North American production of machinery for the 14 *St. Laurent* Class destroyer escorts, 20 coastal minesweepers, and several other classes of ships that go together to form the bulk of Canada's up-to-date fleet.

Commodore Davy was born in Westmount, Que., on October 11, 1902, and began his career in the Navy when he entered the Royal Naval College of Canada as a cadet in August 1917.

COMMODORE (E) A. C. M. DAVY

Graduating as a midshipman, he went overseas for training in Royal Navy ships and establishments, serving at sea in the battleships *Emperor of India, Orion* and *Ajax.* In 1923 he transferred to the engineering branch of the RCN and took qualifying courses at Royal Naval College, Greenwich, and the RN Engineering College.

When serving in the Mediterranean as a midshipman in coalburning ships, he learned the strenuous art of trimming coal in bunkers and later earned an upper-deck watchkeeping certificate.

In December 1927, Commodore Davy, then a lieutenant, was appointed to the British destroyer *Toreador.* The ship was turned over to the RCN, re-named HMCS *Vancouver* and sailed to Esquimalt early in 1928. Three years later he went to Ottawa as assistant to the Chief of Naval Engineering. The staff then consisted of one commander, one lieutenant, one civilian and one stenographer.

After other shore and sea appointments on each coast he was promoted to commander in mid-1937 and six months later began overseeing construction of two Basset Class minesweepers in the East and machinery for two more building on the West Coast. He completed the first two and then went west to finish off the others.

In August 1939 Commodore Davy was appointed Engineer Officer of the destroyer *Kempenfelt* (later HMCS *Assiniboine*) but on the outbreak of war was called on to take charge of the conversion of RMS *Letitia* to an armed merchant cruiser. That December, he became Director of Shipbuilding.

During the feverish period of building up the fleet for the Battle of the Atlantic, Commodore Davy put in one stretch where he spent 25 consecutive night on trains, while spending the days in shipyards or on ship trials. He worked every day, weekends included, until about 1 a.m. and it was not until 1943 that his first breather came in the form of one week's leave. He had been granted the acting rank of captain (E) in 1942 and was confirmed in rank a year later.

Commodore Davy was appointed Superintendent of the Dockyard, Esquimalt, in July 1946, leaving there two years later to attend the National Defence College at Kingston. Then once again he resumed shipbuilding duties and in 1950 was promoted to his present rank.

He married the former Isabel Muriel Thomas, of Vancouver, in 1926. There are two children, Richard Thomas and Sylvia Frances. The Davys plan to make their home in Vancouver.

First Sea Lord's Schedule Crowded

To renew his acquaintance with Vice-Admiral E. R. Mainguy, Chief of the Naval Staff, and to discuss naval matters generally with service and government officials, Admiral the Rt. Hon. Earl Mountbatten of Burma, First Sea Lord and Chief of the Naval Staff, made

a three-day visit to Ottawa during October.

A firm believer in the maintenance of an effective liaison between the Royal Navy and Commonwealth fleets, Admiral Mountbatten was making his first visit to Canada since assuming the top service post in the British Navy. He was accompanied by his naval assistant, Captain F. B. P. Brayne-Nicholls.

His heavy schedule of official appointments began Monday, October 24, soon after his arrival at Montreal, with a luncheon at the Seigniory Club, at Montebello, Que. Later that day he attended a reception by the Canadian Council, Royal Life Saving Society, at the Chateau Laurier Hotel. He dined that evening with the High Commissioner for the United Kingdom in Canada.

The following day he delivered a talk to officers at National Defence Headquarters and then met with the Canadian Chiefs of Staff, the Naval Board, and the Defence Research Board.

At a luncheon he addressed a meeting of the Canadian Club of Ottawa, and during the afternoon called on Prime Minister Louis St. Laurent, Defence Minister Ralph Campney and Trade and Commerce and Defence Production Minister C. D. Howe.

Dinner at Government House was preceded by a reception given by the Dominion Command, Canadian Legion of the British Empire Service League.

A trip from Ottawa to Kingston and return in an RCN helicopter featured the third day of his visit. In Kingston, Admiral Mountbatten addressed officers attending the National Defence College and the Canadian Army Staff College and inspected and spoke to cadets of Royal Military College. On his return to Ottawa he visited the Parliamentary Press Gallery and in the evening was dined by officers of Naval Headquarters at HMCS *Carleton*.

The First Sea Lord and his party left early on October 27 for Washington, where he conferred with the Chief of Naval Operations of the United States Navy and other service and government leaders.

Gun Run Team Top Parade Unit

York's Gun Run Team came through with flying colours at the London Western Fair in London, Ont.

The team from the Toronto naval division led the parade of reserve forces and veterans' organizations and walked off with a trophy and plaque awarded for the best unit on parade.

Their participation in the fair included an exhibit of the gun run featuring the "over-the-wall" manœuvre.

These are members of the No. 62 Petty Officers' Leadership Course held at HMCS Cornwallis between August 29 and October 10. Front row, left to right: PO John Hoffman, PO Alfred Harris, PO A. F. West (Course Petty Officer), Lieut. G. G. Armstrong (Course Officer), PO E. L. Fisher and PO James Tyre. Second row: Petty Officers William Senior, Roger Ethier, Richard Bagley, George Aird, Robert Barnes and Gordon Jones. Third row: Petty Officers Jack W. Palmer, Jack Armitage, Ernest Gardner, Alan McRae, William Hartley and William Ritchie. Back row: Petty Officers Ronald Lowry, David Litchfield, William Coldwell, Leslie Painter, Donald E. Perry, Earl Norton, Francis Malaugh and Llewellyn Hounsell. (DB-5912)

A/Capt. Edwards Aviation Director

Cdr. (P) Gordon C. Edwards, of Toronto, was promoted to the acting rank of captain dating from his assuming the appointment of Director of Naval Aviation on October 7.

He succeeds Captain A. B. F. Fraser-Harris, of Halifax, who is attending a course at the National Defence College, Kingston.

In February 1954 Captain Edwards was appointed commanding officer of the frigate *Stettler*, a post which he held until his recent appointment.

Reservists Win Qualification

An RCN(R) officer from Toronto and another from Ottawa share the honour of being the first officers of the naval reserve to qualify as communications specialists since the end of the war.

Lieut. Douglas V. Latimer, of HMCS *York*, Toronto, and Lieut. D. F. S. Coate, of HMCS *Carleton*, Ottawa, successfully completed the three-month communications course at HMCS Communication School at *Cornwallis* and qualified as Lieutenant (c).

The course, which began in June, was designed to qualify naval reserves who would be able to perform the duties of squadron communication officers. They receive instruction in general communication subjects with an emphasis on tactical communications.

This was the first course. Future courses will be held.

Dual Appointment For Commodore

Commodore (E) Brian R. Spencer, who became Engineer-in-Chief at Naval Headquarters late in August, took up the additional appointment of Deputy Chief of Naval Technical Services on October 3.

He thereby inherited both "caps" worn by Commodore (E) A. C. M. Davy, who proceeded on retirement leave in October.

Rutledge Heads Shipbuilding

J. C. (Jack) Rutledge took over directorship of the Department of Defence Production's Shipbuilding Branch at the end of September, succeeding R. M. (Bert) Robertson, who returned to

his previous position with the Dominion Bridge Company.

Mr. Robertson was the last of the branch directors on loan from industry, who helped the Rt. Hon. C. D. Howe set up his organization. He had served 14 months.

Mr. Rutledge is a graduate of the University of Toronto and a civil servant since 1940, except for naval service in the Second World War. In 1951, he was appointed Director of Administration and Secretary of the Department on its formation in 1951. He then served as Deputy Co-ordinator of Purchasing until his appointment as Deputy Director of the Shipbuilding Branch.

Cdr. Whynot New CO of Tecumseh

Acting Commander William F. Moreland, RCN(R), commanding officer of HMCS *Tecumseh*, Calgary naval division, since mid-August, 1951, relinquished his command at the end of October and went on the retired list of the reserve.

He is succeeded by Lieutenant-Commander George Keith Whynot, formerly executive officer of *Tecumseh*, who will have the acting rank of commander while holding the appointment.

Order of St. John For Naval Officer

Surgeon Captain Henry Robertson Ruttan, OBE, CD, Commandant, Medical Joint Training Centre, Toronto, was invested with the Order of St. John of Jerusalem by Governor General Vincent Massey at Government House, Ottawa, on October 21.

Captain Ruttan, son of Mrs. A. C. Ruttan, of Victoria, has been commandant of the centre in Toronto since June 7, 1954.

F. W. Matthews New Deputy NCC

A member of the Royal Corps of Naval Constructors arrived in Canada from England October 31 to become Deputy Naval Constructor-in-Chief of the Royal Canadian Navy.

F. W. Matthews, who has served in the British Admiralty since 1939, will begin a loan period of four years with the RCN, replacing H. Ronald Mason, who returned recently to the Admiralty following a similar loan period.

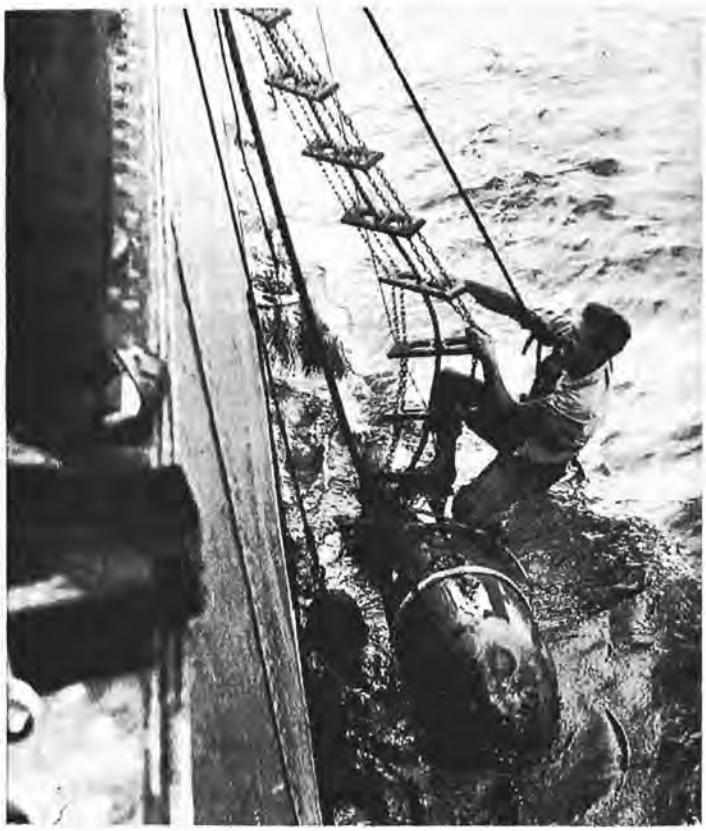
Mr. Matthews joined the Admiralty from the Royal Naval College, Greenwich, and his experience since then covers those aspects of Admiralty work which are most directly applicable to the RCN at the present time, namely design and construction work on destroyers, dockyard operations and work in conjunction with the reserve fleet.

Like his predecessor, he holds the rank of constructor captain in the RCN (Reserve) during the Canadian appointment.

Serves Dockyard For Forty Years

First employed in HMC Dockyard at Halifax in 1915, Edward Hynes has retired after 40 years' continuous service there in charge of the stationery store.

The Canadian Government has recognized his 40 years of employment by giving him a Certificate of Service signed by the Minister of National Defence, thanking him for his long and faithful service. The certificate was presented to him by Commodore (E) W. W. Porteous, Superintendent of the Dockyard, at a brief ceremony at the time of Mr. Hynes' retirement.



It flies through the air with the greatest of ease — but there's nothing easy about getting the darn thing back on board. Ldg. Sea. Hayward Saunders is stuck with the wettest and most strenuous part of a torpedo exercise on board the Haida.

HOW TEAMWORK BUILT THE ST. LAURENT

Industries Across Canada Shared in Ship's Production

SOME OF the problems and achievements attending the construction of the *St. Laurent* were outlined by J. C. Rutledge, director of the shipbuilding branch of the Department of Defence Production, at a press conference held on board the new destroyer escort at Montreal on October 17.

To the representatives of press, radio and television, Mr. Rutledge observed that they had been given the opportunity of seeing at first hand the new warship and would have gained some appreciation of its design, complexity and capacities.

There were some points which might not be immediately apparent, Mr. Rutledge said, and he outlined them as follows:

First of all, the *St. Laurent* is the lead vessel, or the first, of its class. The total destroyer escort program represents 14 such vessels, all being built in Canadian shipyards. Seven distinct shipyards are participating in this program covering the Maritimes, the St. Lawrence and the West Coast. It is a program broadly distributed and making full use of Canada's maritime facilities.

Secondly, this program involves the skills of a huge number of manufacturers whom you might not normally associate with the shipbuilding industry.

The manly art of self-expression has been stopped cold in its tracks. The boiler room telegraph on board the St. Laurent has been designed to prevent the voice pipe from the bridge from glowing a dull red and emitting blue flames and the odor of brimstone. It has a position meekly labelled: "Stop making smoke," without even a couple of dashes to indicate the traditional phraseology. The engineer officer, Lt.-Cdr. (E) G. H. Gillis regards the shiny new gadget with a somewhat skeptical eye. (ML-3631)

The speed of the automatic potato peeler on board the St. Laurent may be judged from the fact that the picture was snapped at 1-100th of a second. The photo was taken before the commissioning and a Vickers employee is the beneficiary of the mechanical wonder. (ML-3632)

It has involved the creation in Canada of certain industrial facilities which up to this point did not exist.

For example, in Toronto there was established a facility for the manufacture of the main propulsion equipment. This turbine facility has been operated by the John Inglis Company Limited. In Montreal plant and equipment for the manufacture of the special gears was required; this has been operated by the Dominion Engineering Company Limited.

In Trenton, Nova Scotia, facilities were introduced for the manufacture of rotor forgings; these were operated by Trenton Steel Works Limited. In Hamilton specialized facilities for the manufacture of auxiliary turbines were established and operated by Canadian Westinghouse Company Limited. In Montreal special test facilities were developed and operated by Peacock Brothers Limited.

A program such as this has made heavy demands on skilled personnel in the Navy, in the shipyards, and in industry. It has posed specialized production problems requiring as it does a class of equipment more closely designed than ever before in this field in Canada. Finally, it has demanded skills of co-ordination and attitudes of co-operation of a high order.

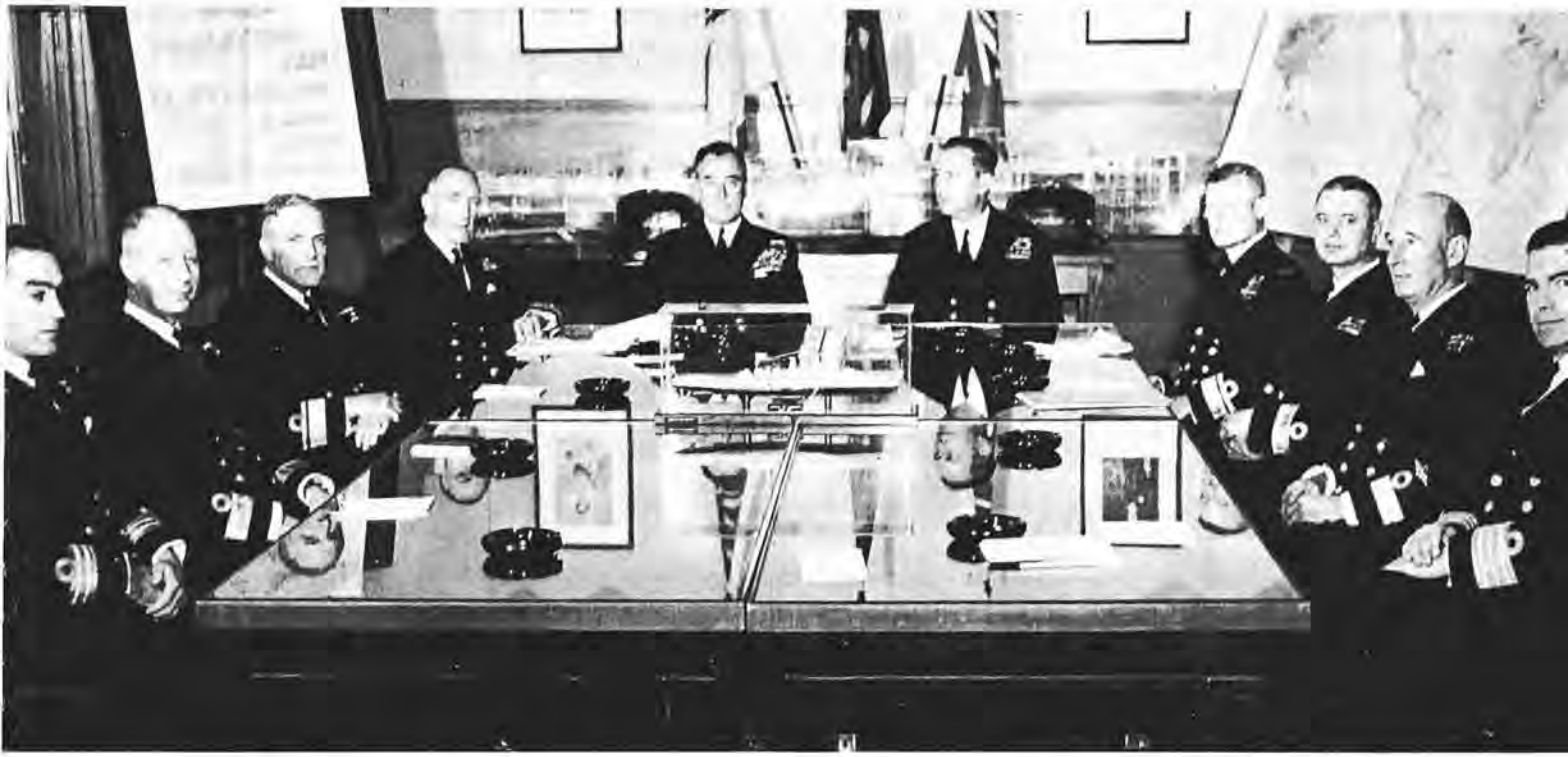
In short, may I emphasize that this ship is the first of a program. The program is an expression of the facilities of a significant number of independent shipyards and a huge number of Canadian manufacturers. In a dramatic way this program may be regarded as a truly Canadian one.

Nelson—Ghost Of Distinction

An officer from HMCS *Magnificent* reported meeting at Quonset Point a USN officer who had recently been to Halifax.

The U.S. officer praised Halifax as a liberty port and climaxed his praises with:

"And that is a mighty fine hotel. 'The Lord Calvert' it's called, isn't it?"



The members of the Naval Board sat for their photograph on the occasion of the late October visit to Ottawa of the First Sea Lord, Admiral Lord Mountbatten. Shown clockwise around the table are: Cdr. (S) H. A. Black, secretary to CNS; Commodore D. L. Raymond, Assistant Chief of the Naval Staff (Plans); Rear-Admiral (E) John G. Knowlton, Chief of Naval Technical Services; Rear-Admiral H. N. Lay, Vice-Chief of the Naval Staff; Lord Mountbatten; Vice-Admiral E. R. Mainguy, Chief of the Naval Staff; Rear-Admiral H. S. Rayner, Chief of Naval Personnel; Commodore K. L. Dyer, Assistant Chief of the Naval Staff (Warfare); Commodore H. P. Sears, Assistant Chief of the Naval Staff (Air), and Captain (S) C. V. Laws, Secretary, Naval Board. (O-8461)

NELSON'S LEGACY TO TODAY'S NAVIES

First Sea Lord Addresses Mess Dinner at Carleton

NELSON'S LEGACY to the navies of today was that of a man of real vision, of great humanity, a man far ahead of his times. He passed on to the present age a new concept of sea power, and a new philosophy of the sea.

The largest assembly of naval officers ever to attend a mess dinner in Ottawa heard these thoughts expressed by Admiral the Earl Mountbatten of Burma, the First Sea Lord, who was the guest of honour on the night of October 26 at HMCS *Carleton*.

The address which Admiral Mountbatten gave in proposing the toast to Nelson's immortal memory was one which he had given only five days earlier in the Painted Hall of the Royal Naval College Greenwich on the 150th anniversary of the Battle of Trafalgar. The Trafalgar dinner was attended by Her Majesty the Queen, His Royal Highness the Duke of Edinburgh and what Her Majesty described on the occasion as "an ocean of admirals".

After his main address at the mess dinner and in reply to a personal toast, Admiral Mountbatten revealed an intimate familiarity with the lighter side of naval life which served to make the occasion doubly memorable to those attending.

Following is the text of the First Sea Lord's address in proposing the toast to the immortal memory:

LAST WEEK we celebrated a landmark in the history of Great Britain—a battle which was the culmination of a great sea campaign, perhaps the most glorious ever fought by the British Navy. Trafalgar not only saved England from the scourge of foreign invasion; it turned the tide of the Napoleonic wars, by finally and completely cutting off Napoleon from the sea and confining him to a land campaign which ended in his ultimate downfall.

Among the names that we associate with this resounding victory, and with the campaign that led up to it, there are two that stand out above all others: William Pitt and Horatio Nelson. The Prime Minister laid down the broad lines of our grand strategy; the Admiral was pre-eminently responsible for translating this strategy into decisive action.

We regard Nelson as the greatest sea officer of all time. Even when he was alive, his fame and repute were immeasurable; since his death he has not only secured a place unique in our history, but he has become an almost legendary figure, after whose example a tradition has been established which has been accepted without question. Or perhaps I should say, almost without question. For just the other day a friend of mine who served during the last war on the lower deck said to me: "If you are going to speak on Trafalgar Day, don't go and overplay Nelson. I know plenty of people who, when they hear his name mentioned, are afraid that someone's going to try and put the clock back." He said this jokingly, and I feel sure he realized that what he said was a gross exaggeration; but I detected a substratum of seriousness in his manner. I knew what he was trying to convey and I was forcibly reminded of a discussion in the wardroom, more than 30 years ago, when I was a young officer.

"Admiral So and So is a menace," I suddenly heard a young brother officer saying: "he has done the Navy more harm than any man since Nelson."

I was pretty well shaken by that, as you may imagine! And I lost no time in asking the speaker how he could possibly think that Nelson had harmed the Navy. He explained that of course he didn't really mean that literally. He had not been talking of the man, but

of the misuse to which he considered his name was put. Hide-bound senior officers, he said, when they wanted to shoot down any new or forward looking proposals, always claimed that these did not fit in with the Nelson tradition! He too was exaggerating; although the "Devil can quote the Scriptures to his purpose", and I suppose it would be too much to hope that Nelson's name had never been misused!

We all know that blind hero-worship can be a bar to progress if it leads to an uncritical acceptance, as guiding principles for all time, of methods which were conditioned by the material possibilities of a bygone era. If Nelson is ever quoted, however, as excuse for not facing the future fair and square, it can only be by people who have no idea what he *really* stood for, or how he was regarded in his own way.

To his contemporaries—at any rate to the country at large—he was the man who had dealt a series of shattering blows to our enemies, and who had met his death at the moment of his greatest achievement. But to those who were in a position to appreciate how these victories had been achieved, he was much more than a romantic figure; he was a great tactical genius who, almost alone among the seamen of his day, thought forward and planned in such detail that his victories were virtually a certainty before action was joined.

Even during his lifetime those "in the know" realized the peculiar, the great qualities of this man, who was able to weld together the individual officers and men who manned the ships of his fleet. For Nelson did not fight his battles with a motley collection of ships of war; he fought with a fleet which, under his leadership and inspired by his example, had been forged into *one* exact, flexible, and devastating weapon.

In the past 150 years we have come to appreciate even more from the logs of his ships, and from contemporary letters, some of the sources of that power that he was able to wield, greatly in advance of the accepted methods of leadership at that time. For instance, the records show how Nelson realized that mutual trust between admiral and captains is an essential pre-requisite of victory at sea. Instead of looking on his captains as subordinates, who were there merely to carry out orders blindly, he would take them into his confidence. In every squadron or fleet that he commanded, he would call them to regular meetings (at sea as well as in harbour) and he would discuss with them the problems they would jointly have to face. At these meetings his captains were able to learn his every plan, his every thought about his plans.

What is more important, he was a big enough man to be able to meet his subordinates in *equal* discussion, without feeling the need to shelter behind his rank and the regulations. His captains were encouraged to put forward *their* plans and *their* thoughts, and they came to realize that *their* Admiral would consider these as carefully as he did his own.

As Nelson won the hearts of his officers by trust, so he won those of his men by humanity. He recognized that sailors were human beings, and behaved accordingly. That may seem a trite thing to say; but we must remember that when he joined the Navy, the seamen were still abominably treated. Their lives have been written of as "brutalizing, cruel, and horrible": and we are told that the sailors' general conditions of living were as bad as could be found today only in the vilest of slums. The sailors (many of them kidnapped by the press-gangs) have been described as being cooped up between low decks in an eternal stench of bilge and rotting boards, with no leisure, no books, no leave (since men allowed ashore seldom came back), fed on the most outrageous food; always scandalously underpaid and often without any pay at all for years, and subjected to ferocious punishments.

Although conditions on the whole improved during the latter part of the 18th century, they were still bad enough to lead to the great mutiny of 1797. On the outbreak Nelson wrote: "I am entirely with the seamen in their first complaint"—and our records abound in instances of his solicitude for his men and of his work on their behalf. "My time," he writes in 1783, "ever since I arrived in town, has been taken up in attempting to get the wages due to my good fellows."

Another time, we find him writing to the Admiralty saying "these flannel shirts, being made five or six inches too short, exposed the men to sudden chills, so shirts five or six inches longer would be one of the best things yet introduced into the Navy, and would perhaps save the lives of more than one good sailor." Today, thank heaven, conditions afloat bear no resemblance whatever to those of the eighteenth century. But it is clear that they cannot compete with the vastly improved standards of living that prevail ashore; the very nature of life at sea will probably exclude such a thing as far ahead as we can reasonably foresee.

Although there are many compensations in life afloat for all those who love the sea, we must, nevertheless, do everything in our power to improve living conditions—and to continue to improve them. Nelson, whose restless brain was forever searching for new ways of battle, new methods, new techniques, never accepted the status quo—whether in conditions, material, or even motive power. His ships were of wood—the best material for shipbuilding at that time; they were driven by the wind, because sails were superior and, in fact, the only alternative, to oars.

But we are told that when Henry Bell in 1803 petitioned the Board of Admiralty to consider introducing steam-power for warships, Nelson said, "My Lords and Gentlemen, if you do not adopt Mr. Bell's scheme, other nations will and in the end vex every vein of this Empire." If he had lived to implement his views in the Admiralty, the story of the development of steam in the Navy might have been very different; since he alone among the senior officers of his day appears to have been sufficiently far-seeing to appreciate its true significance.

Britain, at that time, already had a great naval tradition, which had grown steadily through the centuries; but in Nelson's hands this grew into something more; and when he died he left behind him a new concept of seapower. For it is when we come to study the strategy of his last campaign that his true greatness becomes apparent. As we follow the movements of the single ships, the squadrons, and the fleets through 18 months of blockade and chase, we find ourselves in the presence of seapower wielded on a majestic scale, spread over the width of half the world. But Nelson not only passed on to us the new concept of seapower; he passed on an attitude of mind, a way of looking at the Navy—what one might call a philosophy of the sea, compounded of all those qualities which he himself so abundantly displayed. If we understand Nelson's legacy correctly, we shall see that it is the legacy of a man of real vision, of great humanity, a man far ahead of his times.

Tonight when we honour the toast to Nelson's immortal memory (honouring also the officers and men whom he led to victory) let us resolve that we shall never allow the Nelson tradition to become an excuse for timidity, for lack of initiative, or fear of that great adventure which is the new age that now confronts us. If we are really to honour the tradition he bequeathed to us in the spirit as well as in the letter, we can do so in 1955 by facing the world of thermo-nuclear weapons, atomic-powered submarines and guided missiles and new conditions of service for our sailors in the spirit in which Nelson faced *his* world 150 years ago.

The Fable of the Forgotten Fifty

". . . inside the iceberg, the numbers 'five zero' could be plainly read. Scarcely believing his eyes, he reported the discovery to his captain, the commanding officer of an International Ice Patrol vessel, on duty in Newfoundland waters. To the amazement of the onlookers, demolitions subsequently revealed a large white icebreaker, with 'five zero' on her side . . ."—Canadian Press despatch.

THE ABOVE is from a recent report concerning the incredible discovery of a ship frozen inside a massive block of ice.

The following is an exclusive, eyewitness account of the story behind that report, as told to this paper by a CPO Hooper, on bridge duty when the ship was finally broken free.

Inside that icebreaker were men who had been continuously at sea for nearly ten whole years!

At first, it was extremely difficult to confirm the identity of the ship, as she was not mentioned in any of the official lists of the member countries of the NATO organization, nor by any other country. The ship claimed to be HMCS *Labrador*, a Canadian naval vessel sent north in the spring of 1955 to assist in the earliest stages of the establishment of the DEW Line, in Farnorth State, that area north of Canada between Alaska and Greenland.

According to CPO Hooper, the ship accumulated ice while carrying out scientific operations, on completion of the DEW Line work. Things started out easily enough, but after one particularly bad storm, the ship's company awoke to the fact that there were now many feet of ice completely covering the ship from stem to stern and that contact with the outside world had been totally lost. In truth, they were now prisoners within their small world.

Radios and radars no longer worked; boats, helicopters, and all exposed fittings were unusable, useless. The ship had been reduced to the status of a drifting piece of ice.

The Captain immediately instituted a wintering-in-routine. As navigation was no longer possible, the main engines were reverted to extended notice; below, watchkeeping was maintained on the electric generators and on the fresh water heating units; and, on the bridge, one man stood watch to pipe the routine and to announce what day it was. (Eventually, he also announced what month it was and what year it was.)

A permanent Sunday routine was followed. Over the years the Padre preached something like 3,300-odd sermons.

Food was rationed from the start, and, in time, was cut down to one hot meal a day (at noon) with one malted milk tablet for breakfast and for supper. Fresh food, of course became unknown and, for special occasions, a good square meal of C or K rations was considered a treat.

The weather presented no difficulties; inside all was comfortably warm, except near a punkah louvre. As the weather staff could no longer reach their office nor receive their outside data, the forecaster was reduced to trying to predict

which punkah louvres in the ship would blow the hardest and which would not blow at all. By an incredibly confused technique, the engineers invariably managed to prove him wrong!

Reading matter was at a premium and, although library books were fully read, prized above all were copies of "Esquire", and your favourite paper, "Smirk" with the illustrated articles.

Girls became merely the subject of conjecture: the principal topics of discussion were money and leave. Gambling was rife. Joe Primeau eventually cornered the market on cash in the ship. The Supply Officer was forced to issue script in lieu of money. Subsequently, Primeau cornered the market on script as well.

Many showings of RCN Film Society movies were made, on the doubtful grounds that they were entertainment. We understand that, if the Film Society thought these movies were in bad shape when they sent them out, they ought to see them now. Reels of Scotch tape.

Also for entertainment, cribbage and bingo tournaments were held. In this way, Primeau cornered the canteen.

The Padre issued a paper called "Bergy Bits". No news being received, it was pretty bare. However, the paper sported a bear called "Buzz". Over the years, he multiplied so that eventually the paper had 11 bears. Wasn't so bare after all and was full of buzzes.

Leave credits built up at a fast rate. Most men on board had become entitled to 15 month's leave with pay, and their intentions ranged all the way from pleasant holidays in Florida to one man who intended to spend his 15 months in Halifax.

Some applications for discharge were submitted, but after being fully considered by a committee appointed by the Captain, they were, along with requests for compassionate leave, invariably turned down.

Promotions were handled by a subdepot set up within the ship. Ordinary Seamen became CPOs; and CPOs became tired . . . and then retired. Almost one third of the ship's complement had been pensioned by the time the lookout first sighted the "five zero".

Mail was a problem. The standard pipe was: "The mail will close on board next month." Of course, it never did. One serious result of not getting any incoming mail was that the supply of chewing gum quickly ran out.

As usual, the shipwrights were busy. By the time the ship was released the Quarterdeck contained 11 small pleasure boats, two hydroplanes, two large treasure chests and a 60-foot sailboat. Naturally, unnumbered thousands of smaller "carry-home" articles were also produced, many of which were stowed in the two treasure chests.

Every year baseball pools were held on the results of the World Series. The same team always won, as in the 1955 competition, the last heard by the *Labrador*. The winner that year was a now-defunct organization known as the Brooklyn Dodgers. Old timers may remember this particular team — they made some kind of history that year by accidentally defeating the predecessors of the present World Champions, the New York Yankees.

Over the years, one man (McAvoy) won a total of $854.00 by holding the winning tickets on the final games of the series. (This same man also won the Halifax ETA pool, holding the ticket for the year 1965).

Apparently, many of the ship's company thought that their ship was breaking up when they heard the ice cracking under the efforts of the rescue vessel. Men appeared on the upper deck with their two most valuable possessions, (life jackets and copies of "Smirk") tucked under their arms.

Gaining her freedom, the *Labrador* radioed to Canadian Naval Headquarters, Ottawa. This was said to have caused a certain amount of consternation, as none of the younger members of the staff had even heard of such a vessel, and, among the veterans, none had any knowledge of her since her most enjoyable christening party, one hot summer's day in 1952.

Returning to her old base of Halifax, *Labrador* was under the distinct impression that she had been forgotten. However, at Halifax she was met by a massed armada of two harbour craft and one tug. And, just as she was berthing alongside, a fulsome message was received from CANAVHED (Canadian Naval Headquarters) expressing a precise "well done".

So this tale has a happy ending. All was well, at last. Ottawa had discovered an old Navy list . . . and had noted that the "five zero" had come home.

And that is the story of the Forgotten Fifty.

"Smirk" Magazine.
28th May, 1965.

Labrador's Captain Praised For 'Outstanding Services'

Captain Owen C. S. Robertson, commanding officer of the *Labrador*, has been commended by senior United States Navy officers for his "outstanding services" in support of DEW line operations in the Arctic.

As commander of a naval task group including United States Navy and Coast Guard icebreakers, Captain Robertson was responsible for carrying out survey work, clearing channels through ice and establishing electronic position indicator stations in Foxe Basin, off Baffin Island. These duties were a part of operations involving the transportation by the U.S. Navy's Military Sea Transport Services of equipment and personnel for construction work on the eastern portion of the joint United States-Canadian Distant Early Warning radar system.

On successful completion of the Foxe Basin supply operation, Admiral Arleigh (Thirty - One - Knot) Burke, Chief of Naval Operations, U.S. Navy, despatched in a message to Captain Robertson, "hearty congratulations for the most excellent performance of your task group.

"The undertaking was a stupendous effort with the accepted hazards of ice, weather and unknown hydrography. The successful attainment of all objectives is a tribute to your leadership, professional ability and courage."

Vice-Admiral F. C. Denebrink, commander of the Sea Transport Services, in a message to Capt. Robertson, expressed his "congratulations and appreciation of the outstanding services you have rendered as a task group commander of combined U.S.-Canadian forces. Your leadership, courage, professional skill and determination have been of the highest order throughout trying operations in uncharted waters and hazardous ice conditions and reflect the greatest credit upon you and upon your service. It has been a pleasure to have you serve with us in our mutual endeavours. Please convey to all under your command my congratulations, best wishes and appreciation for their substantial contribution".

Her responsibilities to the DEW Line supply mission completed, the *Labrador* remained in Foxe Basin, carrying out survey and oceanographic work required for future operations in that area. Late in October and during November the ship conducted surveys and oceanographic studies in Hudson Strait and along the coast of Baffin Island.

THERE'S CARNAGE DOWN BY JETTY FIVE

The Action Room - - Where U-Boats Were Hunted on Shore

THE RETIREMENT of Rear-Admiral J. C. Hibbard, DSC, CD, RCN, at an early age due to ill health, brings back many memories of the Battle of the Atlantic. Anyone who knows anything of the history of the Royal Canadian Navy will remember the numerous actions in which the Admiral played such a distinguished part both as leader of an Escort Group and when commanding a Tribal. Fewer people probably realize that possibly his greatest contribution to the defeat of the U-boat was made during one of his brief periods ashore.

When, in the winter of 1942, Admiral Hibbard was appointed Training Commander on the staff of Captain "D" Halifax, he had had nearly three years experience of anti-submarine warfare in the Atlantic. He had seen the convoy system and the asdic defeat the original in-shore, submerged, daylight attack tactics of the U-boat. As leader of an Escort Group, he had fought more than one action against the new "pack attacks" during which, in the deep waters of the Atlantic, concentrations of German submarines came in together at night with conning towers awash, attacking as submersibles, firing their torpedoes while on the surface and using their power to dive only to escape.

Admiral Hibbard realized, as well as any officer afloat, how essential it was to train the crew of every escort ship under the new battle conditions; to give officers and men with no war experience some chance to realize what they were going to meet before they were thrown into action; to let those in operating ships correct past mistakes and practise for future battles; and, at the same time, to exercise the whole fighting team of every ship together, instead of separately in individual groups.

The thing seemed impossible. In Halifax, as in every other port where escort ships were based, there were schools where individuals and individual teams could be trained and exercised. Communication ratings could be given practice. Gun crews could be drilled. Asdic teams could carry out firings by day or night or runs on a submerged target submarine, though the time available for sea exercises was all too short, since operating ships during their period in port always had defects to be repaired and there was continual pressure to get newly commissioned ships away before they had finished their workup training in order to fill gaps in the escort groups.

There was excellent piecemeal training but nobody had, nor ever has, in peace or war, staged a full-scale sea exercise representing the attack on a large convoy at night by numerous submarines. A second thought on the magnitude of such an operation and the risks that would be run must convince even the most optimistic training officer that such a thing is impossible. Yet something of the sort was essential if escort ships were to be properly trained.

The Training Commander, knowing the essential, proceeded to achieve the apparently impossible. He designed the Action Room.

About the Author

The naval career of Captain J. D. Prentice, DSO, DSC and Bar, RCN (Ret'd), can hardly be summed up in a single sentence. Born in Victoria, B.C., he had 22 years of service with the Royal Navy until his retirement in 1937—three of those years on loan to the Royal New Zealand Navy. At the outbreak of the Second World War he entered the RCN with his old rank of lieutenant-commander.

He was the first Canadian commanding officer to draw blood in the war against the German U-boats. This happened in September 1941 when the corvette *Chambly*, under his command sank U-501 off Greenland in an action that so thoroughly cowed the submarine's captain that he leaped to the quarterdeck of the corvette *Moose Jaw*, the *Chambly's* companion in the attack. Captain Prentice was awarded the Distinguished Service Order—the first to be awarded to a Canadian naval officer during the Second World War.

Three years later, in command of the destroyer *Ottawa*, the second of the name, in the English Channel, he got his second U-boat. For his services in anti-U-boat operations he was awarded the Distinguished Service Cross on January 11, 1945, and a Bar to the DSC a week later.

In between these two operational high points of his career lay service as Senior Officer Corvettes Afloat and as Captain D Halifax.

Now he is retired by the sea in Victoria, where he gardens, raises chickens, does church work, goes fishing and writes adventure stories for boys.

Because he was Captain D Halifax shortly after the Action Room came into being and because he was in a position to appraise the results of Action Room training at sea, Captain Prentice was invited to contribute the article which appears here.

If ships could not be exercised under battle conditions at sea, then those conditions should be simulated ashore.

A large room completely darkened, called the Battle Room, would allow a night battle to be staged at any time. In the centre of that room the replica of an escort ship's bridge could be built. It must revolve, to represent alterations of course and be made to roll and pitch to produce conditions similar to those in a ship at sea. Even sheets of "spray" could be thrown over it and a pair of ·303 rifles firing blanks close under the bridge screens would give the same flash effect as the ship's foremost gun.

Around the bridge, as far from it as space permitted, could be built a false horizon on which movable models would take the places of all the actors in the drama of night battle, of the convoy, of the other escorts, of the attacking surfaced U-boats. These models could be made to alter course, to send up rockets, to explode and sink, to flash signals, fire guns and carry out depth charge attacks, or to submerge when required. Small electric light globes lowered down on strings would make good star shells, the old spotting table pieces of cotton wool would show the fall of shot. In fact the captain of any escort ship and his entire bridge personnel could be put through a very realistic night convoy battle.

But those on the bridge were only one part of the ship's fighting team. The training of the other parts of that team was equally important.

Obviously it was hardly possible to build a complete escort ship ashore but the bridge in the Battle Room could be connected with other rooms in its vicinity by normal ship communications of voice pipe and telephone. A wheel house could be built in which the ship's coxswain would steer the bridge and the ship's action plot be kept. A radar cabinet would have the appropriate set installed. A W/T office could be fitted with the necessary instruments. It would even be possible to build a gun and depth-charge room complete with throwers, which could be fired with reduced charges, and rails, where the gun and depth charge crews could be exercised under night action conditions.

A control room would be required from which Training Officers would sight and analyze the battle. They must be in close communication with the movers of the models in the battle room, must be able to throw blips on

the "ship's" radar screen and transmit to and receive from "her" and W/T officer by R/T and W/T.

An A/S attack teacher connected to wheel and asdic house would give underwater targets. Finally a control room plot must be installed so that a full record of the action could be kept and its results analyzed.

It was along these lines that Admiral Hibbard must have thought. Like many great inventions it seemed simple—once the idea had been produced. It consisted of the combination, development and elaboration of many training "gadgets" already in use. Something had been taken from the Gunnery School, from the A/S School, from the Signal School, from the Navigation School. But—nobody had thought before of the combined use of all those instruments to give realistic battle training.

The idea may have seemed simple. To put it into practice proved to be a very different matter. The leading of the necessary wires and voice pipes from a freely revolving "bridge" alone posed no mean problem. It took a tremendous amount of ingenuity and energy on the part of both training and technical officers to produce the first Action Room but with the Training Commander's enthusiasm and drive behind his team it was operating in an old building in Halifax Dockyard by the fall of '42. It was crude and without all those details which have been mentioned. But its worth was proved immediately by the rate of applications for runs put in by all the experienced commanding officers of escort ships who entered the port.

A bigger and better Action Room was built in Halifax in 1943. The idea was adopted by both the Royal Navy, who called it the Night Escort Teacher, and the United States Navy. Before the end of the war Action Rooms were in operation in every major port where escort ships were based.

Admiral Hibbard's invention may well be classed as one of the greatest single contributions to that training of escort ships which made possible our victory in the Battle of the Atlantic.—J.D.P.

Some Footnotes

The following notes on the Action Rooms are from a report on anti-submarine training submitted to headquarters by Rear-Admiral Hibbard (then A/Captain and Captain D Halifax) in November 1945:

"From their inception until the cessation of hostilities with Japan, the Action Rooms in Halifax were used by 370 different ships with a total of 1,746 runs. Approximately 133,000 officers and men received training, which when analyzed in relation to the number of runs, shows that about 30,000 different officers and men passed through the Action Rooms, or almost all personnel serving afloat."

"Trial runs were carried out in the Action Room during August 1942, and preliminary plans were made for the establishment of a Tactical Unit similar to those operated by the Western Approaches Command. The Action Room was in full operation in September, and 53 ships, with 1,034 persons participated. Full night action procedure was carried out, exercising each ship's Commanding Officer, Officer of the Watch, Gunnery Officer, A/S Control Officer and teams, Signal Officer, Signalmen, Telegraphists, Plotting Officer and plotting personnel, Coders and Lookouts."

"Due to the heavy demand on the Action Room, it was found necessary to construct a second Action Room, which was designated Action Room II. This construction was commenced in January 1943 and completed in July 1943. Lt.-Cdr. Mervyn S. Woods, RCNVR, was appointed in charge of the action room in February 1943, and subsequently both Action Rooms, and much credit for the valuable training must be given this officer."

The Royal Navy's trials cruiser Cumberland is seen as she carried out anti-atomic tests in the Mediterranean. A harmless quantity of radioactive liquid was scattered over her decks and then the hosing-down equipment was turned on to test its efficiency. The results showed that atomic fission matter could be quickly removed by such a washdown, with the ship's company below decks out of harm's way. (Photo courtesy U.K. Information Office.)

THE RCN'S NEW INFLATABLE LIFE RAFT

Not Quite All the Comforts of Home - - But a Good Start

"The ship's sea boat had been destroyed by the second explosion and several men had been injured. Nevertheless five Carley floats had been put over the side, all men had got away from the ship . . . "

THIS PASSAGE is part of the description of the loss of the Canadian minesweeper *Guysborough* in the eastern Atlantic on March 17, 1945, as it appears in Joseph Schull's "The Far Distant Ships".

It tells a story of men at the mercy of the sea and states . . . "the sea was not to prove merciful".

"Along the sides of the crowded float, as darkness closed down, exhausted men let go their holds and disappeared. Twice the buffeting seas turned the float itself completely over; and each time some ten less remained."

Tragic though it was, this scene occurred with relentless frequency throughout the war. Even in peacetime, a man lost overboard through storm or accident has little chance of surviving shock and exposure unless quickly recovered.

With a view to reducing as much as possible such losses of life at sea, the Royal Canadian Navy, in conjunction with other Allied fleets, has for some years been designing, manufacturing and testing various devices to give the shipwrecked sailor a much better chance of survival.

Equipment under development or actually in service includes life jackets, immersion suits, life rafts, survival ration kits, and wireless sets.

Life jackets, weighing only two pounds, and capable of supporting an unconscious man with his head above water, are now in production. Immersion suits for saving life in very cold waters and weighing only three pounds are undergoing tests, while work is progressing on wireless transmitting sets which will reconcile the pick-up arrangements in ships and aircraft and be suitable for installation in life rafts.

As for life rafts, the Royal Canadian Navy has developed a 20-man inflatable raft embodying many features designed to enhance the survival chances of sailors who are forced to abandon ship at sea.

The new raft has an oval-shaped buoyancy chamber to which are attached two arches, a centre thwart and a floor, all of which are inflatable. A canopy, made of two thicknesses of material separated by an air space is supported by the arches. Thus the occupants are protected on all sides by a layer of air, insulating them from extremes of temperature outside the raft.

This is the Royal Canadian Navy's new inflatable life raft. Unlike the old Carley float some thought has been given to protecting the survivor from the sea and weather. The lone passenger in the picture is Lt.-Cdr. M. W. Mayo. (O-3091)

The main entrance is through the opening at the stern which is fitted with a hauling-in-ladder and two boarding ladders. Another opening is provided in the bow and is intended chiefly for lookout purposes and working the drogue. Both openings are fitted with a sleeve type closure.

A towing strop runs the complete length of the underside of the floor and a towing bridle is fitted at each end of the raft. A drogue and line is attached to the bow bridle. The drogue, by being thrown out and hauled in, can serve as a limited means of propulsion, and it's often vital to get clear of the ship.

On the underside of the floor are four water pockets for increasing the stabil-

ity and checking the sway of the raft when drifting before a wind. Each has a trip line for spilling the water when it is desired to increase the rate of wind drift or when being towed. CO_2 cylinders for inflating the various parts of the raft are supplied and are augmented by two pairs of bellows. Ancillary equipment includes two rescue lines each consisting of a "quoit" and 100 feet of orange cotton buoyant line; a buoyant knife fitted into a sheath at each of the entrances; a drogue, two provision packs containing rations and emergency kit; pyrotechnics, fishing outfits, whistles, bailers, repair kits, and a heliograph mirror.

The raft is launched normally by manually operating the hydrostatic release gear or cutting the rope lashing and pushing or dropping the raft overboard. A pull on the operating cord, which is always secured to the ship, operates the gas release mechanism and the raft starts to inflate, bursting the valise in which it is stowed. The unfolding of the raft operates another mechanism which inflates the floor.

Should a life raft remain on board when a ship sinks, the hydrostatic release gear, which is incorporated in the stowage arrangement, operates under pressure and releases the raft from the ship. The raft rises towards the surfaces of the sea and when the pull on the operating cord reaches 40 pounds the gas release mechanism is activated. When the inflating raft exerts sufficient additional pressure on the operating cord, the cord parts, freeing the raft completely from the ship.

Due to the manner in which it is folded before stowage, the raft, upon release, should normally inflate the right way up regardless of the position of the valise on the sea. In the unlikely event of the raft being launched upside down, it can be righted manually.

Two white lights on the top of the raft will automatically come into operation soon after the raft is inflated.

The expenditure of time, thought, effort and expense in the production of the new life rafts has been made without any expectation that they will put to "operational" use in peacetime. The odds are against the ship's company having to take to boats and floats in dead earnest except in battle conditions.

More immediately important are such safety devices as life jackets, for the simple reason that the individual is more likely to find himself in trouble than the ship. Since the Second World War there have been a number of men lost overboard; there has been none lost through a ship foundering.

Cdr. D. J. Carrison, USN, writing in the "United States Naval Institute Proceedings" says that in the eight years following the Second World War 387 men serving in the United States Navy were lost overboard as a result of small boat accidents, or from falling or being washed over the side. Small boats accounted for 154 of these deaths, falling overboard 191 and being washed overboard 42. In fact, Cdr. Carrison concludes from his figures that the safest place to serve is in a submarine. Destroyers are the most dangerous.

But the point he makes is that all too many of these lives were lost through carelessness. Small boats ventured out into seas too rough for them; sailors crossed open decks without lines, tended by husky shipmates, about their waists. And even then the losses would not have been so high had it not been for certain "salty types" who would not wear their life jackets.

Even if a sailor does not value his life highly, the Navy does. Apart from all humanitarian considerations—and they weigh as heavily in the Navy as in any other walk of life—the trained sailor represents an investment of thousands of dollars and months or years of training effort. Take care of yourself!—W.L.P.

NAVAL DIVING TEAMS COMMENDED

Naval diving teams have been commended by Naval Headquarters for "excellent work under adverse conditions" in three unusual diving operations carried out earlier this year.

The operations took place near Gimli, Manitoba, in March; near Brooks, Alberta, in April, and at the mouth of the Saguenay River in May.

In the first two, diving teams from the Diving and Explosive Training Centre at *Naden* recovered the remains of aircraft which had crashed into Lakes Winnipeg and Newell. These operations were led, respectively, by CPO W. E. Cubitt and Lt.-Cdr. Philip Henry. Lt.-Cdr. Henry is officer-in-charge of the training centre.

Sub-zero temperatures, four feet of ice and seven feet of soft mud were among the hazards encountered at Gimli. The aircraft, a T-33 jet trainer, had disintegrated on crashing into the lake 13 miles from shore. The largest fragment was but two feet square and the sharp metal pieces tore at the rubberized diving suits, providing an additional hazard. The suits had to be patched 13 times during the operation.

The team's four men spelled each other so that each day two men did the diving while the other two made up the surface crew. Altogether, the men spent 60 hours on the muddy bottom and made a total of 24 dives, averaging two-and-a-half hours per dive.

The surface temperatures ranged as low as 20 degrees below zero but work proceeded in spite of the cold. Thawing weather breaking up the ice above finally forced a halt to the mission after nearly two weeks of searching, and after more than 2,000 pounds of the sharp fragments had been raked up with hand rakes and hoisted to the surface in wire baskets.

The following month a Harvard trainer crashed into Lake Newell, near Brooks, Alberta, and again naval divers were called on to recover the aircraft. Mud and ice made the job difficult and Chinook winds and piling ice further complicated the operation.

High pressure water hoses were used underwater to free the aircraft fragments from the enclosing mud which was more than 12 feet deep. At times the divers themselves were encased in the mud and were forced to use the high pressure hoses upwards to clear a channel for their ascent to the normal lake bottom.

The operation took a total of 117 underwater hours and 58 individual dives averaging two hours per dive.

The third naval diving team commended by Naval Headquarters came from the RCN Diving School at Halifax and was led by Lieut. G. H. Lawther.

Its job consisted of an underwater survey of a light-house foundation and was carried out on behalf of the Department of Transport. The foundation, a huge steel and granite-chip "mattress", was laid last year on White Island Reef, off the mouth of the Saguenay. Divers were required this spring to inspect the "mattress" for rocks and debris, to measure its extent and mark its boundaries.

This type of operation is usually a one-day job for a naval diving crew but because of unusually strong tides the White Island Survey took eight days to complete. Only for an hour at low tide were conditions safe enough for diving.

As a result of this survey, carried out in dangerously swift water, the basement mattress was deemed sufficient in both extent and stability for the light-house to be placed upon it.

Britannia Royal Naval College Jubilee

After 50 Years, Institution Undergoing Drastic Change

By
A. CECIL HAMPSHIRE
British Writer on Maritime Affairs

THE JUBILEE of the Britannia Royal Naval College, Dartmouth, celebrated recently, marked not only the 50th anniversary of this famous "British nursery" for naval officers, but the beginning of a new era in its history.

The College is to become more a university and naval training establishment than the public school with a naval bias it resembled in the past.

This change has come about due to the higher entry age of cadets in the Royal Navy and a broadening of the educational qualifications. The age bracket is now 17 years 8 months and 19 years. A scholarship scheme has also been introduced whereby a certain number of boys may be selected by interview at the age of 16. Selection guarantees them a place at 18 and the provision of financial assistance to finish their schooling.

Started in May of this year, cadets under the new scheme now receive an all-through course of training centred at Dartmouth before going to sea as acting sub-lieutenants. Midshipmen ex Dartmouth will eventually disappear completely from Britain's seagoing fleet.

The course lasts seven terms, in three phases. Phase I, which the lads undergo as cadets, lasts two terms and consists of a general introduction to naval life, and education to academic standards in mathematics, mechanics, science and basic naval history. Phase II, lasting one term as cadet, is devoted to sea training in ships of the Dartmouth Training Squadron, comprising a destroyer, two fast frigates and two fleet minesweepers. On board the boys become part of the rating complement and live on the lower deck. During this phase they also undergo ten days' flying instruction at a naval air station.

Phase III consists of four terms after promotion to midshipman. During this period they receive technical training consisting of seamanship, gunnery, torpedo and anti-submarine, engineering, navigation and communications. Also included is instruction in what the modern Navy calls "ABCD", or defence against atomic, biological and chemical attack. During this phase the midshipmen will go to sea for short periods in the training squadron to put into practice afloat what they have learned ashore.

The Britannia Royal Naval College, Dartmouth, England, has marked its 50th anniversary and the beginning of a new era. Entrants are in a higher age bracket than formerly and courses are comparable to those offered by a university. As can be seen in this picture of the college, rifle and foot drill are still required, but such subjects form only a minor part of the curricu! (Photo courtesy U.K. Information Office)

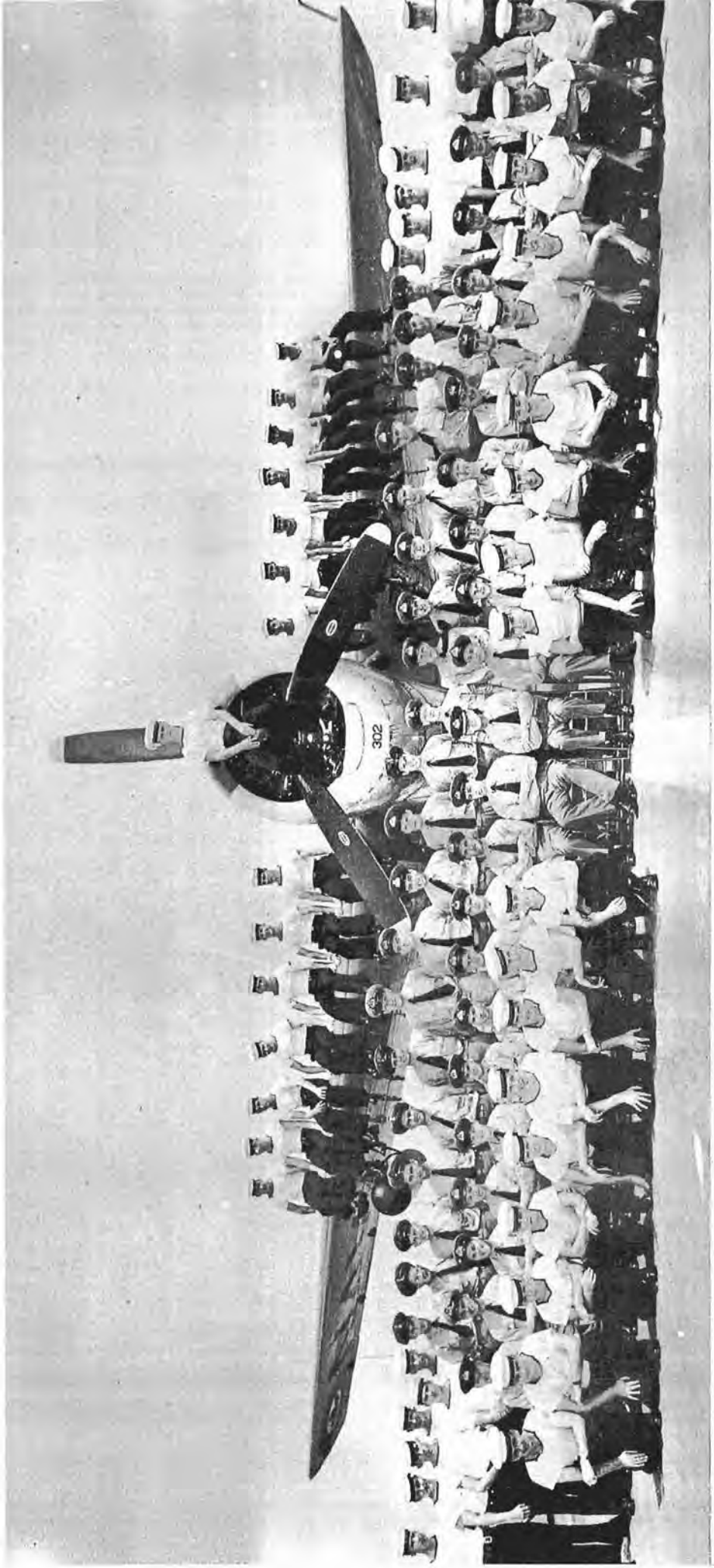
Integrated with the professional will be a considerable amount of academic instruction. There will be a strong thread of the Humanities through Phase III to counteract the narrowing effect of a lengthy professional course.

The university system of lectures, tutorial periods and private study will be used. Naval discipline will be maintained, but the old-time regimentation is to disappear as unsuitable for the young men of today. The new Dartmouth trainees will be encouraged to think for themselves, work by themselves and employ their leisure profitably.

To cope with the increased technical training now to be given at the College the naval staff is being augmented, and new and up-to-date equipment is being installed, including the main engine of a destroyer, a battery of modern guns and the latest radar.

Considerable structural alterations are also being made to provide new type accommodation and private study facilities to these young naval officers of tomorrow.

Whatever regret may be felt at the passing from the Fleet of the old-time midshipman, the Dartmouth staff under Captain W. G. Crawford, himself a one-time Chief Cadet Captain, is confident that it can and will produce officers of the calibre required by the Navy of today and the future. *(U.K. Information Office)*



Another for the family album—the 90 officers and men who fly the Avenger aircraft of 880 Squadron and keep them flying. The picture was taken on board the Magnificent and, quite obviously, on a fine, warm summer's day. (Mag-6435)

Nobody Here But Us Bears

LONG HOURS, hard work and dismal weather failed to dull the sense of humour of sailors working this past summer on DEW Line operations in the Arctic.

There was, for example, the exchange of messages between the underwater diving teams of the Royal Canadian Navy's Arctic patrol ship *Labrador* and the U.S. Navy's survey ship *Pursuit*. The two teams frequently worked together, examining and clearing beaches and beach approaches at landing sites. On one occasion the *Pursuit's* team sent to the *Labrador* the following message:

"My best info reports no shelter on beach X If available suggest you bring wall tent X Will furnish music and dancing girls X 282200—"

To which the *Labrador* replied:

"Your 282200P X Will provide tent three major Canadian cities two oil fields and one icebreaker complete if last word your message GIRLS X 282345P."

Another of the ships in the task group headed by the *Labrador* was the USS *Rushmore*, a landing ship (dock). In the course of one of their operations, *Labrador* received from *Rushmore* the following message:

"Team Jig (reinforced), with intrepidity and gallantry over and above the call of duty, by strategically sound deployment and tactically perfect assault, succeeded after fierce struggle in capturing starving orphaned baby Arctic fox X. Same now under double guard in spud locker X Consuming huge quantities milk and food including forearm of captain's jacket X Request permission to retain aboard for the time being and until weaned X Great morale factor since counter-attack on captain X Odds 100 to 1 favour fox with no takers X 160945P."

This was *Labrador's* reply to *Rushmore*:

"Your 160945P You bully X Retain fox until he gets meat contained in jacket X 161450P."

Later, after the supply mission had been completed and all other ships had left the area, bound for home, the *Labrador*, continuing with her survey work, concluded a message reporting her position and intentions, the weather and the departure of the last supply ship, with:

"Ain't nobody left here but us polar bears."

THE NAVY PLAYS

Marathoners Put Through Hoops

Shearwater staged a rugged inter-departmental medley marathon with eight teams taking part in ten events. This is just how rugged it was:

One at a time representatives of each team ran from the gym to the upper playing field and kicked a drop or place kick from the 25-yard line; walked on stilts from 25-yard line to centre of field and then ran to main gate; ran from main gate about a mile to Clarence Park Bowling Alleys; bowled a strike and ran about a mile and a quarter to "F" hangar ·22 rifle range; shot one inner or bullseye and ran to boat shed; paddled dinghy around a course using one oar, secured boat and ran to main gate; ran from main gate to gym and climbed rope to beams; ran from gym to old fire hall and sawed through a 6" x 6" log; ran from old fire hall to upper playing field and climbed slide greased with wet soft soap then ran to the recorder's table; ate three dry crackers and whistled two bars of a tune.

The events were run off in relay fashion, with a baton being passed from man to man between events.

The winning team consisted of: PO Patrick B. Windross, Leading Seamen John C. Cavanagh, Stanley W. Witwicki, Able Seamen Bruce E. Davey, Joseph M. Ricard, Joseph P. Gariepy, Ian M. Storm and Gilbert M. Monast, and Ordinary Seamen George A. Sly and John W. Hayden.

Point Edward Has Good Season

A tremendously successful softball season was achieved at Point Edward Naval Base in Sydney, N.S. With a small naval complement, a team consisting mostly of civilians working at the base was formed and named the Naval Base Pirates. The team played in the Suburban Intermediate League.

Naval personnel connected with the team were Lt.-Cdr. (S) Evan Lloyd, Manager; CPO C. A. Brodie, playing coach, and CPO J. G. Brown, RCN(R). The team won first place in its league, and defeated Point Edward Cubs and Sydney River Aces in the playoffs.

In the Nova Scotia playdowns, the Pirates upset the highly-rated Broadway Combines, Sydney City Champions, after losing the opener and coming from behind to take the next two. This was repeated against Northside Royals, losing the first and taking the next two. New Waterford fell in two straight, both games being close and well played, to give the base the Cape Breton Championship in its first year.

The Pirates were eliminated by Trenton Scotias in the provincial semi-finals in straight games.

The team's success gave a tremendous lift to softball in the area, and served to keep the Navy well to the fore with the public in Cape Breton Island. Plans are already being laid for an even greater season next year.

Heavy Program In Cape Breton

During 1955, HMCS *Cape Breton* carried out an ambitious sports program, and it is apparent that the time made available for this purpose has been well spent.

The weekly sports program includes progressive instruction in swimming, PT tables, apparatus and games instruction. On Friday afternoons all hands go to sports or recreation, encompassing a round robin of softball and soccer, tabloid sports, tugs of war, volleyball tournaments and swimming meets.

In their first season in the Highland Park Softball League the ship's team came fifth. At the Atlantic Command level, teams reached the semifinals in soccer, the finals in softball, and water-polo, and came an extremely close second in the track and field meet.

The *Cape Breton,* with a team in the Nova Scotia Junior Canadian Football League, expects a successful season. In an exhibition game against Moncton's senior team they gave a good account of themselves, dropping a close game 27-17, and in their first league game topped *Shearwater* Juniors 23-6. Coach PO James Kitchin and trainer PO Richard Manderson have turned out a light, fast and smooth-working team.

Although the basketball season has finished, the *Cape Breton* always provided a winning team for exhibition games against the cadets or visiting ships, the team being led by AB James Harquail.

During the summer months the apprentices went off to camp for two weeks where it was possible to conduct round-robin tournaments in softball and volley-ball, knockout tournaments in darts and horse shoes as well as a program including swimming, sailing, boat-pulling, archery and tabloid of sports.

Iroquois Vies With Cornwallis

Iroquois "sports" spent a day ashore in *Cornwallis,* winning over the base team in hard and softball and losing in basketball.

The destroyermen reached the semi-finals of the Atlantic Command baseball and softball championships but were knocked out of the competitions by *Stadacona* and the *Cape Breton* respectively.

A skeet club was formed on board the *Iroquois* recently, a product of keen interest germinated during the last Korean tour. The sports officer is casting a competitive eye on all comers against his men in this activity.

City Council Votes Praise for Navy Day

A resolution passed at a special meeting on August 23 recorded the unanimous appreciation of the Victoria City Council of this year's Navy Day program at the West Coast city.

The resolution, addressed to Hon. Ralph Campney, Minister of National Defence, was:

"That the members of this Council hereby place on record their delight and appreciation in regard to the splendid annual 'Navy Day' celebration held in Victoria on Wednesday, August 17; that they express their admiration of the full and excellent program presented; that the efficient friendly and whole-hearted manner in which those responsible and those participating spared no effort to insure the greatest possible enjoyment for thousands of Victorians and visitors; that the members of the Council signify their special appreciation of the willing, generous co-operation given by the officers and men of the visiting British cruiser HMS *Superb*; that they convey heartfelt thanks for the whole celebration to the Flag Officer Pacific Coast, Royal Canadian Navy, and through him to all of the officers and men involved; and that a copy of this resolution be sent to the Minister of National Defence, Ottawa."

The letter to Mr. Campney was signed by Mayor L. Harrison, who extended his personal compliments on the subject of the resolution.

A Song of the RCN

The Origin of 'Wavy Navy'

THE POST-WAR generation of sailors scarcely knows the wavy stripes which adorned the sleeves and shoulder straps of officers of the RCNVR. Year by year, since the war ended, the "VR" uniforms, worn on such occasions as Remembrance Day and Trafalgar Day balls, have become progressively rarer and snugger. Even fewer will remember the wavy stripes on the collars of the men of the reserve two-score years ago.

The wavy stripes, of course, led to the RCNVR being designated the "Wavy Navy", a name that is unlikely to be forgotten for years to come.

Serving on board the destroyer *Saguenay* in 1936 were two young officers, one a gunner (T) of the regular force, the other a "VR" sub-lieutenant, who were the "Mr. Gallagher and Mr. Sheen" of entertainments at sea. They were billed as "Budgy and Popy". One of their numbers started off: "Roll along, Wavy Navy, roll along." The words were adapted to a tune, then popular in the Navy, which sang of prairie schooners, rather than the seagoing kind. It was "Roll Along, Covered Wagon" and it was sung with a verve that matched the fervent prayer of sailors of the Second World War: "Give me land, lots of land; don't fence me in."

The officer-composers were Gunner (T) P. D. Budge, RCN, now a commodore and commanding officer of HMCS *Naden*, and Sub-Lt. Rufus Pope, of the Montreal naval division, who was lost when the destroyer *Margaree* was cut in half by a collision in the North Atlantic.

The song "Wavy Navy" might be called immortal in that it helped to carry a host of men, most of them from homes far from the sea, through what seemed an eternity of war.

It helped to build an unequalled *esprit de corps*, perhaps a too-powerful one. A "VR" of war days was likely to turn on a man who had transferred to the RCN with the caustic observation: "So you signed a separate peace!"

Be that as it may, the song aroused no resentment in the hearts of the regulars. They sang with as much gusto as the reservists.

The story was told that when the *Athabaskan* was sunk by enemy gunfire in a bitter Channel action, survivors were clinging to Carley floats awaiting the slim chance of rescue when a voice was raised among them in song. It was (so legend says) their commanding officer, Cdr. John Hamilton Stubbs, whom they were never to see again, and the song he chose to keep their spirits and courage high was:

Wavy Navy

Roll along, Wavy Navy, roll along!
Roll along, Wavy Navy, roll along!
When they say "O there they are!"
It's the RCNVR—
Roll along, Wavy Navy, roll along!

Oh we joined for the Glory of it all!
Yes we joined for the Glory of it all,
But the good old RCN
Made us change our minds again—
Roll along, Wavy Navy, roll along!

Oh we joined for the chance to go to sea,
Yes we joined for the chance to go to sea,
But the first two years or more
We spent parading on the shore—
Roll along, Wavy Navy, roll along!

And when at last they sent us out to sea—
Yes when at last they sent us out to sea,
There were several things we saw
That were not brought up before—
Roll along, Wavy Navy, roll along!

Oh we joined for the payment and the fun,
Yes we joined for the payment and the fun,
But of pay there has been none,
And the fun is yet to come—
Roll along, Wavy Navy, roll along!

Now before we pull up hook and sail away—
Yes before we pull up hook and sail away,
If you want some good advice,
Before you join think once or twice—
Roll along, Wavy Navy, roll along!

WEDDINGS

Lieutenant (L) James O. N. Fitzgerald, Naval Headquarters, to Miss Rose Marie Cleary, Antigonish, N.S.

Lieutenant Keith Dunham Lewis, *Naden*, to Miss Diana Wynyard Evans, Halifax.

Leading Seaman Donald C. Rasmussen, *Naden*, to Miss Lucille I. Clifford, Victoria.

Able Seaman William G. Shannon, *Iroquois*, to Miss Norma Agnes McCool, Upper Stewiacke, N.S.

Able Seaman Lawrence Truelove, *New Liskeard*, to Miss Cynthia Swicker, Milton, N.S.

Able Seaman D. G. Urquhart, *Stadacona*, to Miss Lorraine Isaac, Halifax.

BIRTHS

Lieutenant (S) G. W. Blackburn, *Quebec*, and Mrs. Blackburn, a son.

Leading Seaman Ramon Bradbury, *Micmac*, and Mrs. Bradbury, a daughter.

Lieutenant-Commander W. E. Clayards, *Stadacona*, and Mrs. Clayards, a daughter.

Lieutenant Frank W. Costin, *Magnificent*, and Mrs. Costin, a son.

Lieutenant - Commander Ross Dickinson, *Tecumseh*, and Mrs. Dickinson, a daughter.

Leading Seaman Daniel Lemieux, *New Liskeard*, and Mrs. Lemieux, a daughter.

Surgeon Lieutenant - Commander D. B. Maunsell, *Quebec*, and Mrs. Maunsell, a daughter.

Lieutenant John Middleton, *Micmac*, and Mrs. Middleton, a daughter.

Lieutenant (S) A. H. MacLeod, *Quebec*, and Mrs. MacLeod, a son.

Leading Seaman C. E. MacMillan, *Quebec*, and Mrs. MacMillan, a son.

Instructor Lieutenant-Commander William F. McGown, *Quebec*, and Mrs. McGown, a daughter.

Petty Officer Edward McLeod, *Micmac*, and Mrs. McLeod, a daughter.

Able Seaman Douglas Leo Mousseau, *Queen Charlotte*, and Mrs. Mousseau, a son.

Able Seaman Joe Rustulka, *Tecumseh*, and Mrs. Rustulka, a daughter.

Leading Seaman R. L. Salmond, *Tecumseh*, and Mrs. Salmond, a son.

Able Seaman Lorne Schofield, *Micmac*, and Mrs. Schofield, a son.

Leading Seaman A. J. Stringer, *Tecumseh*, and Mrs. Stringer, a son.

Able Seaman G. A. Vincent, *Stadacona*, and Mrs. Vincent, a son.

Lieutenant K. M. Young, *Stadacona*, and Mrs. Young, a daughter.

LOWER DECK PROMOTIONS

Following is a further list of promotions of men on the lower deck. The list is arranged in alphabetical order, with each man's new rating, branch and trade group shown opposite his name.

ALLINSON, George A.....LSEM1
ANDERSON, Harold S.....LSAM2
ARBOUR, Edmond L.....LSEM1

BAILEY, John O.....LSEM1
BANKS, Beverley W.....P2CK2
BARNSWELL, Arnold A.....LSEM1
BARRETT, George F.....P2SW2
BELL, Wesley G.....LSEM1
BENNETT, Gerald M.....P2EM2
BERGUM, Earl C.....LSAA1
BERRY, Robert F.....LSRW3
BILLEY, William.....P2EM2
BLACKLOCK, George A.....LSSW1
BLANEY, Eric H.....C1ER4
BOWDEN, Richard L.....P2RN3
BREWSTER, Hugh E.....LSCK1
BROWN, Charles L.....LSAR1
BROWN, George A.....P1AC3
BROWNWELL, Albert H.....P1AR3
BRUCE, William E.....LSEM1
BRUNET, Albert H.....LSRN3
BRUSH, Thomas F.....LSAM2
BUCHANAN, John D.....C1RT4
BULLOCK, Kenneth.....P2OM3
BURGESS, Garfield H.....LSEG3

CAINE, Michael P.....P2AA2
CAIRNS, Orville W.....LSEM1
CALDWELL, George W.....C2RT4
CASSIDY, Donald J.....LSAR1
CHAREST, Jean-Guy R.....LSEM1
CHARTERS, Clifford C.....LSRC1
CHAUNCEY, Stanley M.....LSEM1
CHRISTENSEN, Stanley W.....LSEM1
CLARK, James M.....P2AO2
COCHRANE, Reginald T.....LSAF1
COLTART, Robert L.....LSEM1
COOPER, Marion J.....LSEM1
COUILLARD, Andre D.....LSEM1

DALEY, Coleman A.....P2EA3
DAVEY, George W.....C2AC3
DAWSON, Clifford S.....LSRC1
DAY, Kenneth A.....C2AC3
DEPPISCH, James M.....LSSW1
DEVLIN, Frederick J.....C2RA4
DOOLITTLE, Francis C.....LSRP1
DOUCET, George J.....LSAM2
DREW, John H.....C1ER4
DUBE, Roland L.....C2ET4
DUNBAR, Grant H.....LSAP2

EASTON, William R.....P2ED3
EWER, Alfred.....P2AO2

FEDOROWICH, Edward.....LSEM1
FENN, William G.....P2DV3
FLETCHER, Robert W.....LSLR1
FLOOD, Albert W.....LSRP1
FLOWERSMITH, Martin S.....LSEM1
FORGIE, John.....LSEM1
FORRESTER, William D.....LSRP1
FORTUNE, Patrick J.....P2EM2
FOWLER, Daniel C.....LSRP1
FRANKTON, Vernon M.....P1ER4
FREEBURN, Neil W.....LSEF3
FRIEDRICH, John P.....LSAF1
FROST, James F.....P2EG3
FURTAH, Morrie W.....LSEM1

GATEHOUSE, Henry R.....LSRP2
GAUDET, Burton L.....LSAW1
GENEAU, Yvon H.....LSEM1
GERMANO, Vernon P.....P2ED3
GLAZIER, George A.....LSQM1
GOODING, Gordon H.....C2ER4
GOULET, Walter E.....LSAR1
GRAVELLE, David E.....LSAP2
GREEN, Wesley T.....LSEM1
GREENWOOD, Harold M.....P1AF3
GRIFFIN, Phillip S.....P2EA3
GRIGG, James F.....LSAA1
GRONDIN, William H.....C2EM4

HAROLD, Calvin H.....LSQM1
HATCHER, William T.....C1ER4
HENSON, John C.....P2EM2
HERDMAN, Robert J.....C1ER4
HILLSTROM, Bruce G.....LSEM1
HOLMES, John H.....LSQM1
HOULE, Roland J.....C2ER4
HOWELL, Kenneth K.....LSCR1

IRVING, Robert F.....LSEM1
IVEY, Gordon W.....C2EM4

JEFFERS, Donald.....LSRC1
JEFFRIES, Kenneth A.....LSTD1
JENNINGS, Garrison F.....LSAP2
JOHNS, Harris H.....C2ER4
JOHNSON, George W.....LSRP1
JOHNSON, Peter.....P1AC3

KELLY, Ronald W.....P1RA4
KENNEDY, James P.....LSQR1
KNIGHT, William S.....LSRP2
KNIGHTINGALE, Harold D.....LSEM1
KNOLL, Ronald C.....LSEM1

LAFORET, James M.....LSTD1
LAFRENIERE, Malcolm J.....LSEM1
LAVIGNE, Leopold D.....LSCK1
LAWSON, Robert V.....LSRP1
LEBLANC, Henri G.....LSEM1
LEE, Gordon.....P1AR3
LIPSCOMBE, George J.....P2EA3
LISTON, Walter W.....LSAP2
LORANGER, John G.....LSEM1
LYNCH, Douglas A.....LSLM2
LYSENS, Paul.....C1ER4

MAKAROWITCH, Edward R.....LSEM1
MALCOLM, Francis J.....C2EM4
MALOUIN, Maurice E.....LSEM1
MARKEY, James C.....LSLR1
MASSIE, James H.....LSTD1
MASTIN, George A.....LSRN3
MATHURIN, Roger L.....LSSW1
MAXWELL, Jack M.....P2AA2
MILES, Harold F.....C2EM4
MORRISON, Duncan R.....P2ED3
MORRISON, Richard F.....LSQR1
MORRISON, Robert N.....LSCK1
MOSEHOLM, Harold.....C2PC4
MYERS, Ralph K.....C2ET4
MacDONALD, James H.....C2ER4
MacDONALD, Stephen W.....LSRS3
MacDORMAND, Robert G.....P1ER4
MacDOUGALL, Kenneth G.....LSAA1
MacINTOSH, Reginald G.....LSEM1
MacKINNON, Leo R.....P2AF2
McCART, Henry W.....LSAP2
McCAULEY, James.....LSRS3
McCLANAGHAN, Alfred W.....LSDV2
McGREGOR, John H.....P1LR3
McINTYRE, Thomas.....LSTD1
McLEOD, William.....P2EM2
McMASTER, Frederick G.....LSCK1
McNAUGHTON, Robert H.....LSED3

NEAR, Ronald G.....P2AO2
NEBUCETT, Alfred.....LSEM1
NELSON, Walter R.....C2ET4
NEWCOMBE, Robert E.....LSPW1
NESTMAN, Henry A.....LSEM1
NICHOLSON, Alfred W.....LSAR1

OLVER, Glenn R.....P1RA4
OSBORNE, Roy.....C2ER4

PALMER, Thomas E.....LSTD2
PAPI, Richard N.....C2EM4
PARKE, William A.....P2QM2
PATTERSON, William A.....P2AA2
PEACOCK, James R.....P2CR2
PERRIN, William R.....LSCR1
PICKERING, Russell A.....LSQR1
POTTER, Douglas H.....LSEM1
POWELL, Robert A.....C2ER4

RAMSAY, Jack R.....LSEM1
RENWICK, Donald W.....LSRP1
REX, Harry.....LSEM1
RICHARDSON, Kenneth R.....P2RC2
RIDGEWELL, Lloyd F.....LSQM1
ROBB, William D.....LSVS1
ROBERTS, Clifford J.....LSEM1
ROBERTSON, Alexander M.....LSBD2
ROBICHAUD, Joseph G.....LSEM1
ROSBERG, Eric W.....LSQM2
ROSE, William G.....LSRP1
ROSS, Jack A.....C2SW3
ROYLE, George A.....LSAF1

SAULNIER, Joseph H.....LSEM1
SIMPSON, Lawrence R.....P2AA2
SIMS, Arthur R.....C1ER4
SMITH, Gordon A.....LSAA1
SMITH, Norman W.....C2SE3
SNOWDON, Campbell M.....LSAM2
SOUSA, Norman J.....P2EM2
SPENCER, Alan.....P1ER4
STARK, James O.....P1ER4
STEWART, Hugh N.....C2AT4
STUBBINGS, Frederick W.....LSAR1
SULLIVAN, Elmer L.....P2EM2
SUTHERLAND, Ronald E.....C2EA4

THACKER, James E.....LSAR1
THERRIAULT, Donat F.....LSCR1
THIMSEN, Preston J.....LSQM1
TISSEUR, Gerard L.....LSQM2
TOWNSEND, Philip G.....LSPW2
TURLEY, Frederick A.....LSEM1
TURNBULL, John E.....LSEM1
TURTON, Ronald E.....LSCK2

UNIAC, Patrick T.....LSSE1
UPCOTT, Gerald B.....LSEM1

WATSON, Charles E.....LSEM1
WHALLEY, Allen.....P1AF3
WHITE, Thomas C.....LSAR1
WILBERFORCE, Glenn E.....LSEM1
WILLIAMS, John R.....LSEM1
WILLIAMSON, Norman.....P1ER4
WILSON, Robert A.....LSTD2
WOODER, Frank K.....P2OM3
WRIGHT, Carl J.....LSSE1

ZUAR, Ralph V.....LSMO1

LOWER DECK PROMOTIONS IN THE RCN(R)

BAUDER, Larry R.....ABAW1
BENNETT, May Grace.....WAVS1

CLEMENT, Jean-Jacques.....LSBD2
CLENDENNING, Glen R.....LSAW1
COWAN, Phyllis A.....WLCS2
CUNCLIFFE, Erie.....ABNRS

DESROCHERS, G. E.....C2TD1
DRUMMOND, George Frederick..ABAAS

EVAN, Dorothy M.....ABCR1

FOWLER, Francis P.....P1QR1

GAGNON, Robert J. O. H.....P2AW2
GREGOIRE, Jeanne E. M.....WLMA1
GREGORASH, Paul Tony.....P2NS2

HAMELUCK, William Sam.....ABNS1
HANDRIGAN, Shirley A.....WANS1
HARPER, Ronald G.....ABRPS
HARRISON, Kathleen M.....WLCV1
HEFFERMAN, Theresa M.WLMM1(NQ)
HENRY, James.....C2QR1

JACKMAN, Mary Lois.....WLVS1
JAMES, Nancy.....WLQMS

JOHNSTON, Harrol J.....P1PB3
JOY, Cecil M.....ABQMS

KOWTUN, Alexandra.....WLAW1

LE BLANC, Leo J.....LSVS1
LOWDEN, Larry Robert.....LSAA3
LYNCH, Ralph H.....ABBD1

MACKAY, Keith Ernest.....ABAA1
MACNEILL, Catherine P.....WLNS1
MALTBY, Clifford A.....C2AW3
MARCHANT, Albert James.....LSBD2
MARTYN, Margaret E.....WAVS1
McTAGGART, Alexander.....C2ER4
MEUNIER, Lucien Alphonse.....LSBD2
MONTURE, Basil Clarence.....C2ER4
MOORE, Gerald W.....LSQRS

O'LEARY, Michael R.....LSQRS

PAQUETTE, Joseph O.....ABAA1
PARITT, Cyril R.....LSBD2
PELTIER, L. Louis J.....LSAA1
PENHALE, Harold B.....C1MR3

REGAN, Robert Dan.....ABCR1
RICHARDSON, John E.....LSPW2
RINGERS, Johannes S.....LSBD2

ST. LAURENT, Joseph.....LSCR1
SIMS, Frederick Raymond.....LSQMS
SMITH, Russell J.....LSNS1
STALKER, Shirley E.....WAMA1

TOUSIGNANT, Bernard C. M....LSBD2

WALDNER, Joseph.....LSCR1
WAYNE, Richard Seymour.....LSQRS
WIGGIN, Lorne Thomas B.....P2EM2
WITHENSHAW, Doreen.....WLAW1

An exhibit conveying the message of the Royal Canadian Navy toured the exhibitions in the smaller Ontario cities this year and reminded citizens far from the sea that the Navy was very much a going concern. Flanking the central display were coloured transparencies of naval scenes and a small movie screen on which were shown naval films. Lt.-Cdr. Norman J. McDonald, area recruiting officer, was in charge of the display. Personnel shown here are PO Leonard Hall (left), AB Stanley Blazynski and PO Leo Pelletier. (Photo courtesy The Sudbury Star.)

RETIREMENT OF EIGHT CPOs ANNOUNCED

CPO John BROWN, 45, C1DV4, Woodstock, Ont.; joined July 2, 1929; served in *Stadacona, Festubert, Saguenay, Champlain, St. Laurent, Mayflower, Avalon, Peregrine, Scotian, Iroquois, La Hulloise, Haida, Niagara, Cornwallis;* awarded British Empire Medal (military division, operational), Canadian Forces Decoration; retired August 4, 1955.

CPO Claude CLAUDE, 43, C1EM3, Eastview, Ont.; joined September 2, 1930; served in *Stadacona, Festubert, Ypres, Saguenay, Champlain, Assiniboine, Skeena, St. Laurent, Avalon, Micmac, Carleton, Portage, Bytown;* awarded Long Service and Good Conduct Medal; retired September 1, 1955.

CPO Ronald COWAN, 39, C1AA3, Winnipeg, Man.; joined March 19, 1934; served in *Naden, Skeena, Ottawa, Restigouche, Stadacona, Niobe, St. Laurent, Iroquois, Warrior, Tecumseh, Ontario, Cornwallis, Griffon, Chippawa;* awarded Mention - in - Despatches and Long Service and Good Conduct Medal; retired August 20, 1955.

CPO Norman DODDS, 44, C1CK3, Ottawa, Ont.; joined June 24, 1930; served in *Stadacona, Champlain, Saguenay, Crusader, Ottawa, Niobe, Griffon, Avalon, Cornwallis, Warrior, Scotian, Magnificent, Hunter;* awarded Long Service and Good Conduct Medal; retired August 8, 1955.

CPO William Henry FIRMAN, 47, C2ET1, Red Deer, Alta.; joined September 1, 1928; served in *Naden, Skeena, Vancouver, Fraser, St. Laurent, Assiniboine, Hamilton, Stadacona, Cornwallis, York, Wallaceburg, St. Boniface, Givenchy, Ontario, Iroquois, Rockcliffe, Discovery, Chippawa, Star, Brockville;* awarded Long Service and Good Conduct Medal, Canadian Forces Decoration; retired September 1, 1955.

CPO James Gerald Patrick HANN, 40, C1EM3, Halifax, N.S.; joined September 9, 1935; served in *Stadacona, Champlain, Pembroke, Crusader, Ottawa, Gaspe, Arras, Saguenay, Niobe, Columbia, Arrowhead, Stettler, Peregrine, Avalon, Buckingham, Bowmanville, Kapuskasing, Scotian, St. Boniface, Iroquois, La Hulloise, Brunswicker, Micmac, Warrior, Magnificent, Haida;* awarded Long Service and Good Conduct Medal; retired September 8, 1955.

CPO Ellis M. PARKER, 40, C1OT4, Berwick, N.S.; joined January 5, 1935; served in *Stadacona, Saguenay, Venture, St. Laurent, Skeena, Cornwallis, Niobe, Saskatchewan, Avalon, New Liskeard, Magnificent, Swansea, Haida, Nootka, Naden, Micmac;* awarded Long Service and Good conduct Medal; retired September 6, 1955.

CPO Frederick A. TROTTIER, 45, C1TA4, Halifax and Ottawa; joined September 20, 1929; served in *Stadacona, Fundy, Champlain, Skeena, Saguenay, Charlottetown, Micmac;* awarded Mention - in - Despatches and Long Service and Good Conduct Medal; retired September 20, 1955.

Naval Lore Corner

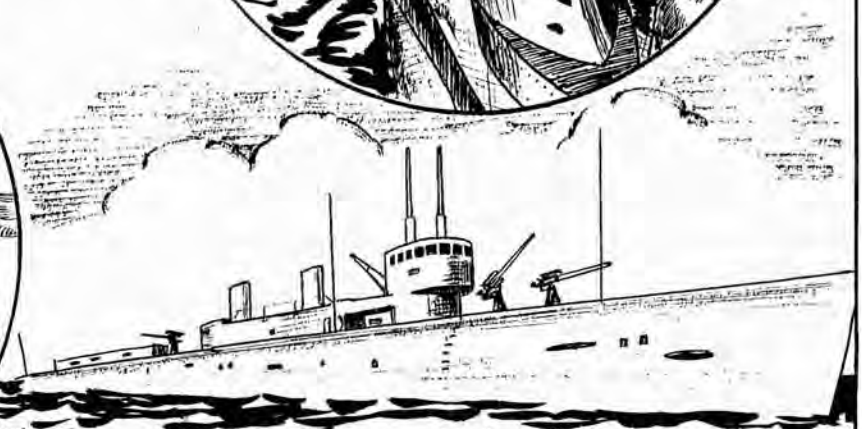
NO. 33
EARLY SUBMARINES

BRITISH 'A' CLASS – THE FIRST BRITISH-DESIGNED SUBS IN THE R.N. (1903-8). DISPLACEMENT SUBMERGED WAS 204 TONS, AND SUBMERGED SPEED WAS 7 KNOTS... (HAD 16 CYLINDER GASOLINE ENGINE)

BRITISH 'D' CLASS (1907-11) WERE FIRST CLASS DESIGNED WITH DIESEL ENGINES, TWIN SCREWS, WIRELESS, AND A DECK GUN. - 550/600 TONS 14/10 KNOTS -3 18IN. TORPEDO TUBES

EARLY BRITISH SUBMARINES IN WORLD WAR I USED CARRIER PIGEONS IN PLACE of WIRELESS...

THE FIRST SUBMERSIBLES CALLED 'DAVIDS' WERE USED BY THE CONFEDERATES IN THE AMERICAN CIVIL WAR. ARMED WITH A SPAR TORPEDO, THE 9 MAN CREW WORKED THEM BY HAND. (LATER BY STEAM).



BRITISH 'K' CLASS (1916) .. GIANT 'FLEET' STEAM DRIVEN SUBS.. FUNNELS COLLAPSED FOR DIVING. - 22 KNOTS.

J.M. THORNTON

11,000—12-55
N.P. 575-1373

OTTAWA
EDMOND CLOUTIER
Printer to the Queen's Most Excellent Majesty
1955