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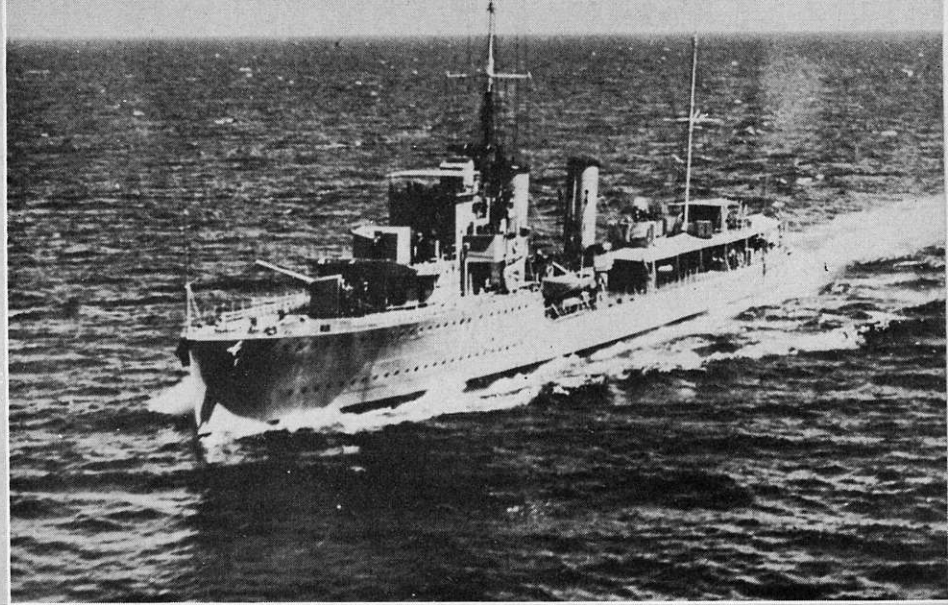
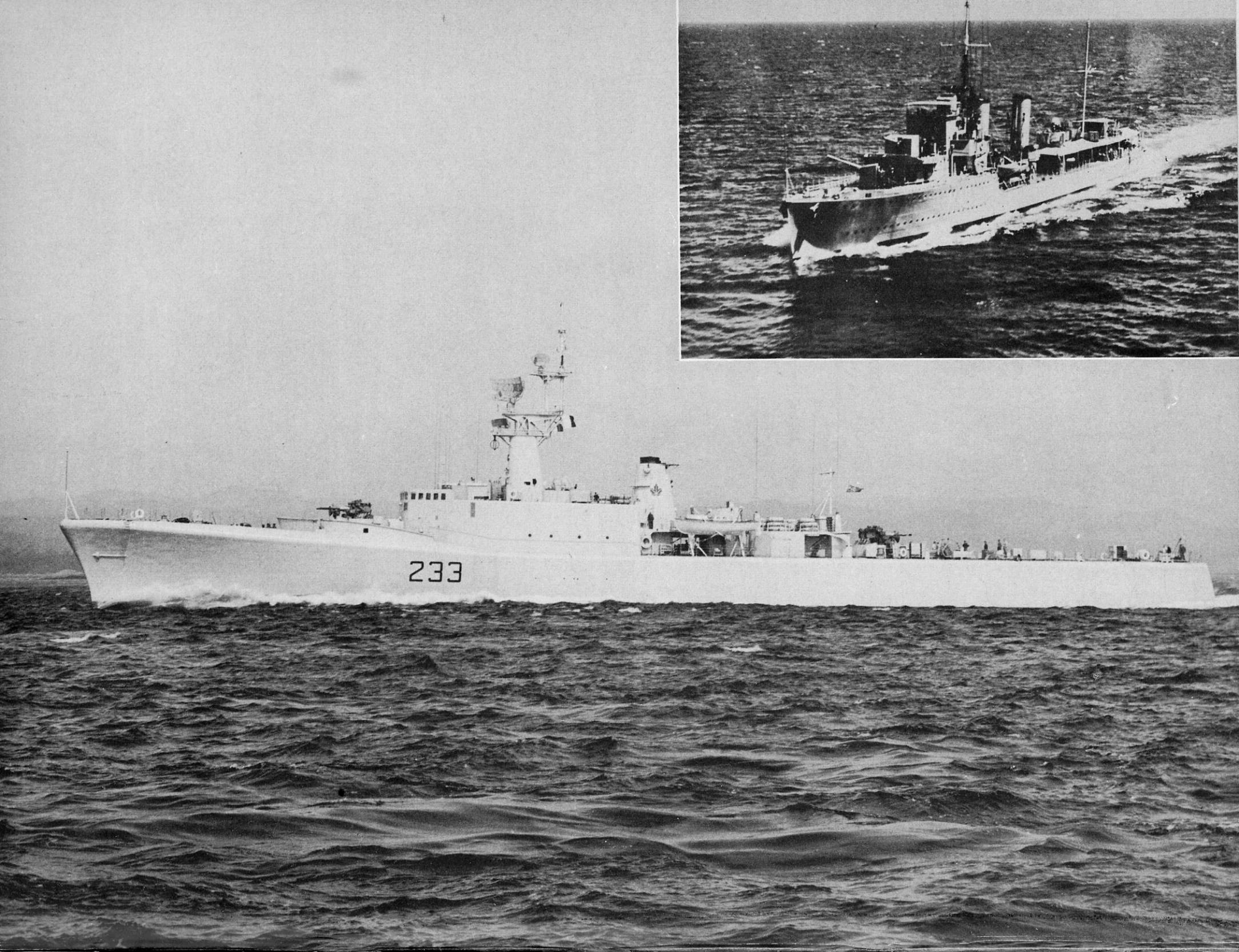
The CROWSNEST

PACIFIC NAVAL
LABORATORY.

SEP 27 1957

ESQUIMALT, B. C.





The CROWSNEST

Vol. 9 No. 9

THE ROYAL CANADIAN NAVY'S MAGAZINE

JULY, 1957

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The Cover—Bonaventure, bienvenue! When Canada's new aircraft entered her home port of Halifax for the first time fog blanketed the harbour, but there was sunshine in the welcome of the thousands, civilian and service, who awaited her arrival. Even before she reached Canadian shores, the first Canadian-owned carrier had found a warm spot in Canadian hearts and had been unofficially re-christened the "Bonnie"—(HS-548973).

LADY OF THE MONTH

A turbulent, mighty river, which rushes in angry fury through rocky canyons and then spreads itself out in placid channels among the lush farmlands of the Lower Mainland of British Columbia, the Fraser was first explored to where its muddy waters pour into the sea just under a century and a half ago.

The Fraser is not a peaceful river. Even in its lower stretches, where ocean cargo vessels ply their trade and where cattle graze on the flat delta lands, the Fraser has risen in fury against the intrusion of man and broken down his dikes and laid waste his fields.

It is a fighting river and it has given its name to one of Canada's newest fighting ships, the destroyer escort HMCS *Fraser*, commissioned at Esquimalt on June 28.

The motto of the new warship is "Je suis prêt"—"I am ready". The new warship stands ready to serve Canada at the instant of the call to arms, just as did the first HMCS *Fraser*, of tragic but honoured memory. (E-4052)

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RCN NEWS REVIEW

HMCS Skeena carries out pre-wetting trials in Bedwell Harbour. (CN-3224)

Five 'Sweepers Starting Service

Five Bay class coastal minesweepers were scheduled to commission into the Royal Canadian Navy between August 1 and December 19 of this year. There are nine ships of this class in commission.

The new ships are the remaining five or six replacing those turned over to France in 1954 under the NATO Mutual Aid agreement. The first replacement, HMCS *Fundy*, is now in service with the First Canadian Minesweeping Squadron based at Halifax.

The five ships are constructed of wood and aluminum. Each has a displacement of 400 tons, a length of 152 feet and a beam of 28 feet. Diesel-powered, these ships are being equipped with the latest minesweeping equipment and navigational radar.

The names of the ships, their builders, location and tentative commissioning dates are as follows: *Chignecto*, George T. Davie Ltd., Lauzon, Que., Aug. 1. *Chaleur*, Marine Industries Ltd., Sorel, Que., Sept 12. *Thunder*, Port Arthur Shipbuilding Co., Ltd., Port Arthur, Oct. 3. *Miramichi*, Victoria Machinery Depot Co. Ltd., Victoria, Oct. 28. *Cowichan*, Yarrows Ltd., Esquimalt, Dec. 19.

All five will be the third ships of the name to serve in the RCN. Their immediate predecessors were among the six Bay class minesweepers turned over to France in 1954 and renamed: *La Bayonnaise* (ex-*Chignecto*), *La Dieppoise* (ex-*Chaleur*), *La Paimpo-*

laise (ex-*Thunder*), *La Lorientaise* (ex-*Miramichi*) and *La Malouine* (ex-*Cowichan*).

The first *Chignecto* was a Bangor class minesweeper, commissioned in October, 1941, which spent the war on patrol and escort duties off the west coast of Canada. She was paid off for disposal in November 1945.

The first *Chaleur* was an ex-RCMP motor boat which served from 1939 to 1945 as tender to the shore establishment of the Naval Officer-in-Charge, Quebec, an establishment which also bore the name "*Chaleur*".

Admiral Wright Lauds RCN Ships

Official recognition of the success of the Royal Canadian Navy's representation in the International Naval Review, held off Norfolk, Va., in June, has been "received from Admiral Jerauld Wright, Commander-in-Chief, U.S. Atlantic Fleet.

Commenting on the presence of the two new anti-submarine destroyer escorts, *Assiniboine* and *Ottawa*, Admiral Wright said in a message to Vice-Admiral H. G. DeWolf, Chief of the Naval Staff:

"The International Naval Review and the Associated Fleet Week in Virginia have terminated and were tremendously successful.

"HMCS *Assiniboine* and HMCS *Ottawa* contributed immeasurably to that success. Many old friendships between our two nations were further cemented.

"It was an honour and a privilege to have been associated with your splendid representatives in this memorable event."

The first *Thunder* was a Bangor class minesweeper commissioned in October 1941, which served in both the western Atlantic and in European waters taking part in minesweeping and escort duties in Normandy invasion operations and in post-invasion operations in the English Channel. She was paid off for disposal in October 1945.

The first *Miramichi* was a Bangor class minesweeper which commissioned in November, 1941, and served on anti-submarine patrol and escort duty off Canada's West Coast until the end of the war. She was paid off for disposal in October 1945.

The first *Cowichan* was also a Bangor class minesweeper. She was commissioned in July, and, like the first *Thunder*, served in both the Western Atlantic and in European waters taking part in minesweeping and escort duties in Normandy invasion operations and in post-invasion operations in the English Channel. She was paid off for disposal in October 1945.

Helicopter Lays Overland Cable

Time and about 12 miles of cable were among the economies effected by a navy helicopter for army communications during a recent exercise at Camp Cagetown, N.B.

The helicopter, piloted by Lt.-Cdr. John Laurie, Swift Current, Sask., with Lieut. Howard Cook, Kingston, as copilot and observer, carried out the experimental cable-laying, bridging the

distance between the 1st Canadian Infantry Division and the "enemy" force in "Exercise Yo-Yo", a night manoeuvre.

About four miles of cable were laid over swampy and thickly-forested ground where neither men nor land vehicles could operate. To go around the area would have taken nearly 16 miles of cable.

Last year a light fixed-wing aircraft tried a similar experiment but the project failed when the cable became entangled and broke in several places.

This year the more manoeuvrable helicopter trailed out the cable from a series of connected reels secured in a casualty evacuation basket. Paying out the cable was AB Lorne Wood, of Tweed, Ont., who found this venture into communication activities worked just fine.

Fourth Summer in North for Labrador

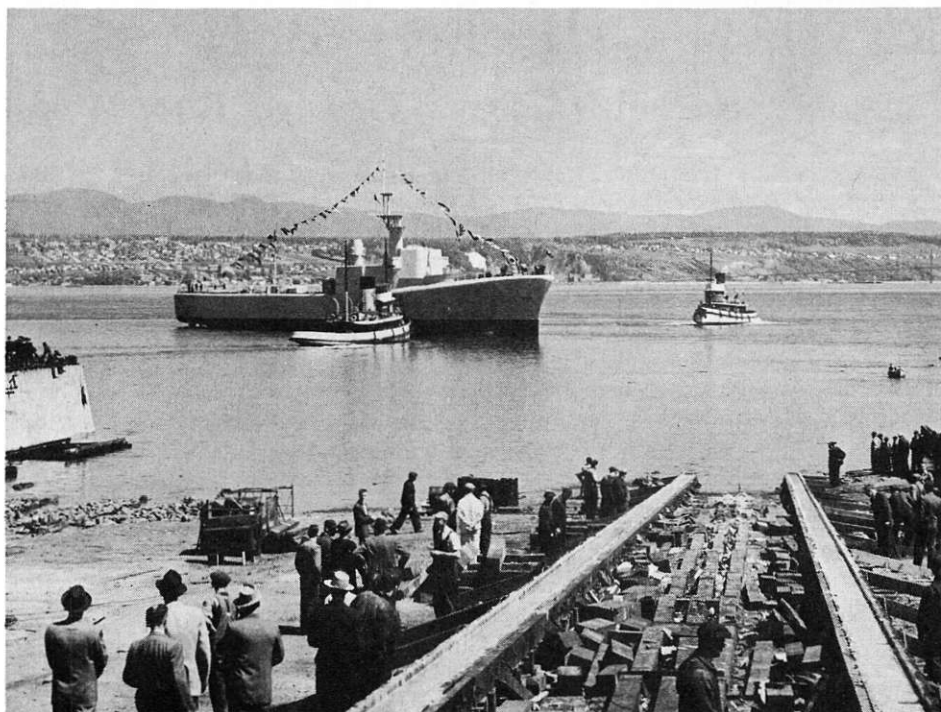
The *Labrador*, far-ranging Arctic patrol ship of the Atlantic Command of the RCN, headed for the Far North on June 25 for her fourth successive year of surveys and research and her third in support of the seaborne supply of Distant Early Warning Line sites in Canada's eastern Arctic.

Her complement includes six scientists. Michael Boulton is the chief scientist for the cruise, also heading the hydrographers. Other hydrographers assisting him will be S. S. Dunbrack and S. Van Dyke. E. E. Rodney is the draughtsman. They are from the office of the Dominion Hydrographer in Ottawa.

The oceanographic party is led by A. E. Collin, senior oceanographer. Assisting him will be F. D. Forgeron and R. B. Perry, the latter from Texas A & M University. Mr. Collin and Mr. Forgeron are from the Atlantic Oceanography Group at St. Andrews, N.B.

On arrival in northern regions, the *Labrador* began the initial survey of DEW Line supply routes and landing beaches at Fox Harbour. A hydrographic oceanographic survey party was landed in the Davis Strait area, with the ship returning to Resolution later in the month to pick up the hydrographers and their equipment.

Following participation in the sea-lift for DEW Line stations the ship will arrive at the eastern approaches to Bellot Strait late in August to try to map out an escape route for U.S. ships reaching the Arctic from the West Coast. If this route is impossible,



HMCS Gatineau, 13th new anti-submarine destroyer escort in the navy's current 14-ship program, was launched at Lauzon, P.Q., on June 3. Here, she gets her first taste of water as she swings into the St. Lawrence River from the launching ways at Davie Shipbuilding and Repair Co., Ltd. She is the second of the name to serve in the RCN. The first was the former British destroyer, HMS Express, which was commissioned into the RCN on June 3, 1943, and was paid off for disposal in October, 1945.

an alternate route will be sought. The *Labrador's* surveys and mission on behalf of United States' supply vessels should be completed sometime between September 15 and 20.

Her final task before returning to Halifax will be to explore Barrow Strait and Wellington Channel regions, followed by sea hydrography in the Baffin Sea on the homeward journey. At the latest, she should be home by October 20.

The ship is commanded by Captain Thomas C. Pullen, of Oakville, Ontario, and Halifax, a veteran of last year's northern operations.

In 1955 and 1956, she carried out valuable surveys of far northern waterways and each year led supply convoys through the tortuous, ice-packed routes to DEW Line supply marshalling points.

Four Picked for DCRA Meet

Four marksmen were to represent the RCN's Pacific Command Rifle Association at the annual meet of the Dominion of Canada Rifle Association at the Connaught Rifle Range, Ottawa, August 11 to 17.

They are CPO Walter Burch serving in HMCS *Malahat*, Victoria and CPO George Grotka, PO Robert McCallum



Sponsor at the launching of the *Gatineau* was Mrs. H. N. Lay, wife of Rear-Admiral H. N. Lay, Vice-Chief of the Naval Staff, with whom she is seen here on the christening platform. Rear-Admiral Lay represented the navy at the launching.

and Ldg. Sea. Harry Wells, all serving in *Naden*.

Ldg. Sea. Wells was in the Pacific Command contingent which attended the annual DCRA meet in Ottawa last year. His marksmanship there resulted in a senior standing in the Canada-wide contest.

RETURN CURRENT BENEATH GULF STREAM

Survey Discloses Flow of Cool Water from Arctic

HOW DEEP is the Gulf Stream? Is there a counter-current flowing beneath it carrying cooler water to the tropics?

Techniques and apparatus, which do for deep water what radiosonde balloons have done for the upper atmosphere have been developed by Dr. J. C. Swallow, of Britain's National Institute of Oceanography, and were successfully utilized by the Royal Research Ship *Discovery II*, which returned to Plymouth at the end of April after three months of carrying out measurements of deep ocean currents.

The results of the expedition are discussed in a bulletin issued by the Admiralty following the ship's return.

It is more than 100 years since the presence of cold water at the bottom of the tropical oceans showed deep undercurrents, from the polar regions, and some time since growing interest brought an outline picture of worldwide circulation, but it is only recently that deep currents have had the same interest for marine scientists as upper-air winds for meteorologists. To measure them was a difficult problem, and progress using current meters lowered from ships anchored in deep water has been very slow. It was clear that little progress would be made till there was a submarine counterpart to the meteorologists' upper-air balloon, and it would have to signal its movements by acoustic methods because we cannot look down into the ocean.

The first attempts used an acoustic transmitter sinking very slowly under a string of parachutes, but this proved too difficult, and Dr. Swallow hit on the much more practical idea of using a transmitter carried by a container which is made to sink to a predetermined depth where it will drift along with the water. He used aluminium scaffold tubing closed at the ends; this makes containers which are less compressible than seawater, and if loaded heavily enough to sink at the surface they gain buoyancy as they go down. The depth at which they will float can be arranged within narrow limits.

Having made the floats drift along with the water sending out sound pulses which can be picked up by hydrophones in a surface ship up to distances of several miles in fairly bad weather, the chief technical difficulties are solved. With the help of navigational aids, echo sounding, anchored marker buoys and radar, the deep floats can be tracked

closely enough to show the deep tides and currents. It is not an easy routine, but demands close attention, watchfulness and co-operation between all engaged in the measurements and the handling of the ship.

The technique was developed in the National Institute of Oceanography and the Royal Research Ship *Discovery II*, and it cannot be used to full effect till it is more widely adopted and used in the most rewarding circumstances. Till a few months ago the *Discovery II* had followed 12 floats for several days at different depths in several parts of the eastern North Atlantic Ocean, as much of the work as possible being done in co-operation with other marine laboratories. The measurements are a considerable addition to our knowledge of the sea and the technique was improved till it could be used in all but the worst weather.

Progress in the theory of oceanic circulation is fastest in the U.S.A. A number of young scientists, stimulated in dynamic meteorology and working together, are taking realistic account of the drag of the prevailing winds, the effect of the earth's rotation, the density layering of the oceans and the frictional forces which can transfer and dissipate energy. Dr. H. Stommel of the Woods Hole Oceanographic Institution, Woods Hole, Massachusetts, one of the most active workers, has campaigned for measurements of the water movements at great depths below the Gulf Stream. He maintains that there should be a considerable southward movement. This was implied in his two-layer theory of the ocean; it might explain why the Brazil Current in the South Atlantic Ocean is so weak compared with the Gulf Stream in the North Atlantic Ocean. He was "out on a limb" till someone made the measurements, and discussions across the Atlantic Ocean left little doubt that this was the most productive area and problem into which the new technique should be extended.

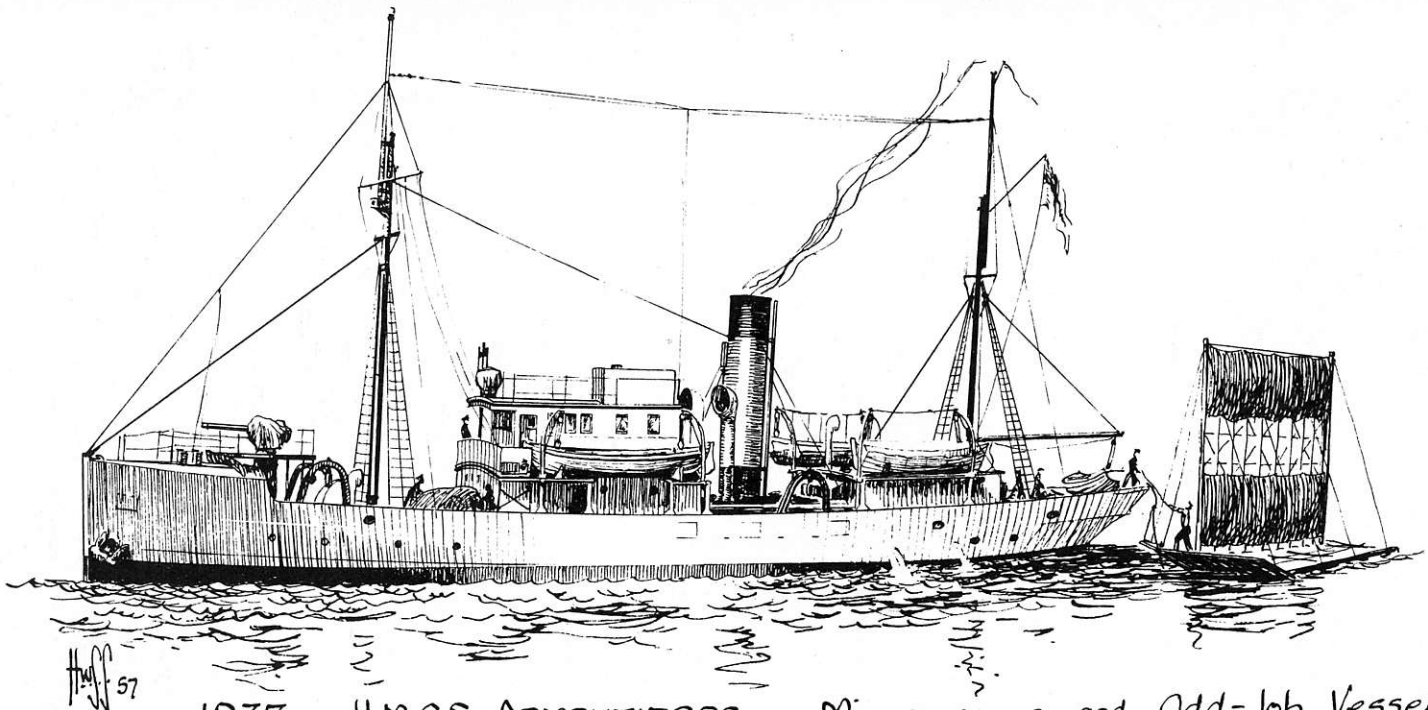
The National Institute of Oceanography could not have sent the RRS *Discovery II* across the Atlantic Ocean without generous help from the Woods Hole Laboratory, and the work would not have been effective if their research vessel *Atlantis* had not been there to carry out close measurements and sampling of the water, from surface to bottom, along representative lines

across the area under investigation. These observations allow the construction of isobaric charts for the sea like those in weather reports, and such charts can be used to calculate the water movements if some initial assumptions can be checked by direct measurements.

Everything pointed to the existence of little or no horizontal movement at a depth of 5,000 to 6,000 feet, with northward movements above and southward movements below, but till this joint operation was undertaken there was no certainty as to what would be found, and no one could guess at the speed of the deep southward movement if it really was there. It was shown to be there: the Gulf Stream was strong to the north near the surface. There was little or no movement between 4,500 and 6,000 feet and three floats followed at 8,200 feet and four at 9,200 feet went south. One of the deepest did one-third knot steadily, travelling 23 miles in 66 hours. Photographs of the deflection of a ball suspended by string from a compass only 18 inches above the bottom still showed an appreciable southward movement.

It is clear that no attempt to understand the surface currents and their variations could be complete without full account of such massive movements at great depth. It will be some time before the observed currents' density and pressure distributions can be fully considered, but there is no doubt that this collaboration between the British and U.S. laboratories is a landmark in Marine Science. The comparison between direct measurements and conclusions based on density distributions will add greatly to the value of much work of this nature which is to be done in the International Geophysical Year.

The *Discovery II* recorded waves 50 feet high on three days during the first two weeks outwardbound in early February. On the return voyage she made detailed temperature observations and water analyses from surface to bottom along a northern route. Dr. Swallow is returning to the United States to measure deep currents in the Pacific Ocean. The work will be done from research ships of the Scripps Institution of Oceanography, University of California; the National Institute of Oceanography is providing the equipment.



1937 — H.M.C.S. ARMENTIERES, Minesweeper and Odd-Job Vessel.

A MADEMOISELLE NAMED 'ARMENTIERES'

By

CDR. H. W. S. SOULSBY, RCN
(RET'D)

HMCS ARMENTIERES was one of six ships built in Montreal and Kingston in 1917 for service in the Royal Canadian Navy as minesweepers and patrol craft during the First World War. The other five were the *Givenchy*, *Thiepval*, *Loos*, *Arras* and *Arleux*, all named after places in France where Canadian troops fought. They were designed on lines similar to North Sea trawlers, which by reason of their shape were able to stand the roughest sea, and by reason of their fittings for fishing were ready-to-use minesweepers. The fittings consisted of two pairs of "gallows" and the large trawl-winch, the latter capable of holding over 100 fathoms of $2\frac{1}{2}$ " wire.

Other trawlers which were built in Canada during the First World War and saw service in the Royal Canadian Navy were different in design, being smaller and having a different type of boiler; the last survivors of this class to serve were the *Festubert* and *St. Eloi*, which ended their days as gate vessels for Halifax Harbour, and Sydney, respectively.

The fact that the *Armentieres* is still afloat is a tribute to RCN engineers who saw to it that the boiler was thoroughly well looked after, a "boiler-clean" being called for every six weeks or so.

I had the honour and interesting experience of serving as commanding officer of *Armentieres* for a total of six years and nine months (is that a record in the RCN?) in two periods

of over three years, during which time I piloted her 42,000 miles on the British Columbia coast—none of it at a greater speed than $9\frac{1}{2}$ knots! I joined her first in May 1930 at Esquimalt and immediately proceeded to sea on a duty typical of the West Coast—the "Sea Patrol".

This was technically for the purpose of enforcing the Pelagic Sealing Treaty

then in force between Great Britain, the United States, Japan and Russia. This treaty called for the prevention of fur-seal hunting except by bona fide aborigines, i.e., Indians; even they had to do their hunting from hand—or sail—propelled boats and fire-arms were not permitted. The *Armentieres* and *Thiepval* carried out this duty in conjunction with CGS *Givenchy* of the Fisheries Department during April, May and June of each year when the seals were supposed to be proceeding in great



The *Armentieres* spent some days half submerged after hitting an uncharted rock in Pipestem Inlet, Barkley Sound, in 1925. The photograph shows her apparently in a tail-spin. More damage was done to her during the course of salvage operations than in actually hitting the rock, Cdr. Soulsby says. (CN-32387)

numbers up the coast of British Columbia to their breeding grounds in the Pribiloff Islands.

In practice we seldom saw more than a dozen or so at a time in little groups anywhere near the coast! However, part of the duties was to inspect skins held by buyers prior to disposal to dealers. I have seen piles of skins at Ucluelet, Clayoquot, and Nootka, but never had a satisfactory explanation of how they were caught!

The *Armentieres* came around from the East Coast in 1919 in company with the *Stadacona*. The latter vessel subsequently had a varied career as a rum-runner and private yacht. On arrival in Esquimalt, the *Armentieres* and *Thiepval* were fitted out to make them more suitable for training ships. A captain's cabin was built abaft the wheelhouse, and two cabins built in below the upper deck.

Training of RCNVR personnel was a continuous occupation of these little ships and though not ideal for the purpose, there must be hundreds of officers and men who got their first experience of steering, heaving the lead, and manning the seaboard in the *Armentieres* and *Thiepval* in the 1920s and '30s.

The *Thiepval* was lost on February 27, 1930, when she struck an uncharted rock in the channel in Barkley Sound which now bears her name.

When I joined the *Armentieres* in 1930, the West Coast Squadron of the Royal Canadian Navy consisted of two ships—*Armentieres* and *Vancouver*, the latter an ex-RN destroyer launched in 1918. Esquimalt Harbour was then a delightfully peaceful and beautiful place, with the village of 50 houses 45 of which were pulled down in 1941

to make room for the growing dockyard. There was even a "pub" called "The Bucket of Blood" down at the water's edge. I never was certain that that was its proper name or just a nick-name. Now Esquimalt Harbour is lined with wharves and jetties at which lie ships, huge and very different from those of 1930.

In my drawing I have depicted the *Armentieres* in 1937 taking a Modified Pattern Six target in tow. This was a frequent duty for which she was well fitted.

The *Armentieres'* duties were many and varied so that I often think of her as the "Cinderella of the Fleet". We performed the menial tasks which the very superior destroyers, with their guns and torpedoes could not or would not do. However, like Cinderella, we had our hour or two of glory, for on more than one occasion the *Armentieres* was the vice-regal yacht! His Honour the Lieutenant Governor of British Columbia flew his flag once to go to Vancouver, and another time to go to Alert Bay.

We had a bishop as a passenger on one occasion. We took Rear-Admiral Walter Hose on his last inspection trip before he retired as Chief of the Naval Staff in 1933.

In 1935 the *Armentieres* acted as a hydrographic surveying ship, embarking two surveyors and a boat's crew from CGS Wm. J. Stewart during the survey of the west coast of the Queen Charlotte Islands, one result of which is a channel named after the ship and a cove named after the commanding officer.

One of the most interesting and constructive jobs a naval vessel could be called upon to do—apart from Hydrographic Surveying (my opinion)—fell

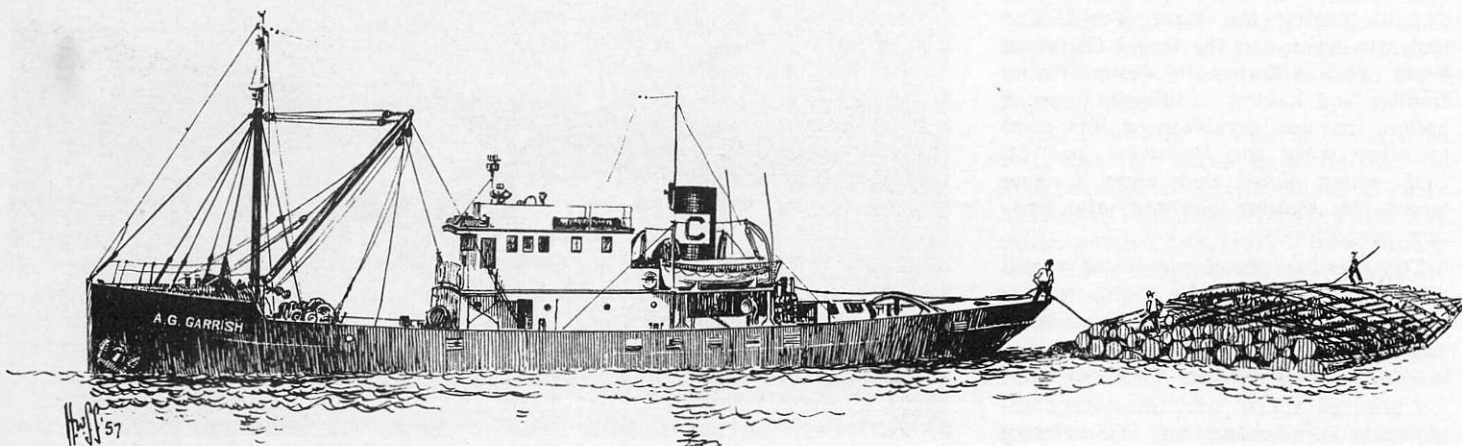
to the lot of the *Armentieres* during the years immediately preceding the Second World War. That was, to assist the officials of the Pacific Biological Station at Nanaimo in their oceanographic work. Our part was to take J. P. Tully, and an assistant out to sea while they lowered mysterious apparatus to depths as great as 400 fathoms to obtain data about the sea water. Our minesweeping winch was used in this operation, which was rather like using a bulldozer to do a sewing machine's job.

This oceanographic work, begun in 1935, and which took the *Armentieres* on several occasions a hundred miles off the B.C. coast, was the beginning of what has developed into a world-wide operation and has placed Canada in the forefront of the nations in this branch of scientific research.

The last war duties of the *Armentieres* were the Examination Service and Minesweeping. In order to enhance the efficiency of the minesweeping gear she suffered the indignity of having her stern trimmed, giving her a deformed appearance aft!

When the war was over the *Armentieres* was placed on the disposal list and swung around an anchor for a few years until bought by the Coastal Towing Company of Vancouver. They put a new Yarrow boiler in her, and two winches, and generally changed her around, and employed her towing logs and scows about the West Coast. In my drawing I have depicted her taking a Davis Raft in tow.

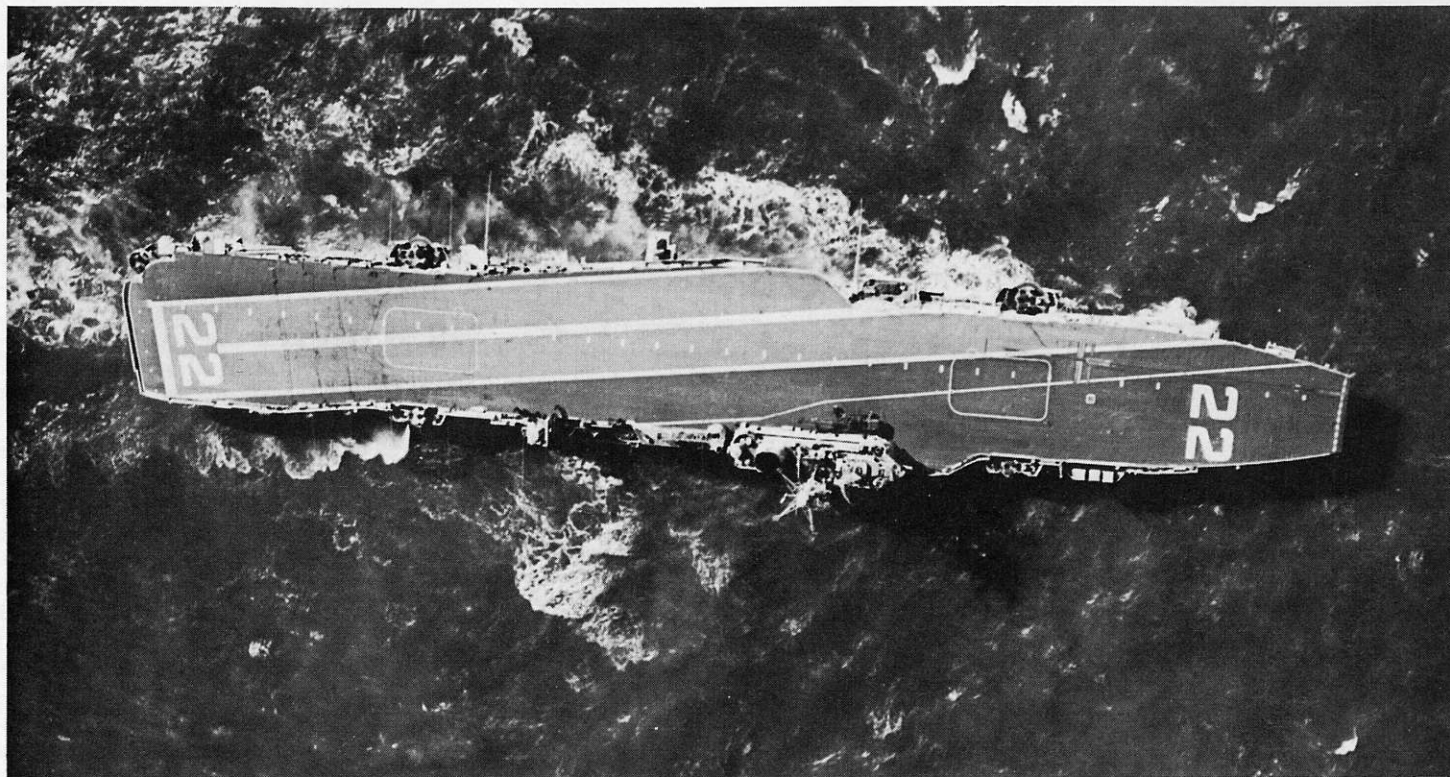
In a recent letter from her owners they tell me they intend converting her to a freighter with Diesel power. It seems that this 40-year-old veteran will be going strong for quite a while yet!—H.W.S.S.



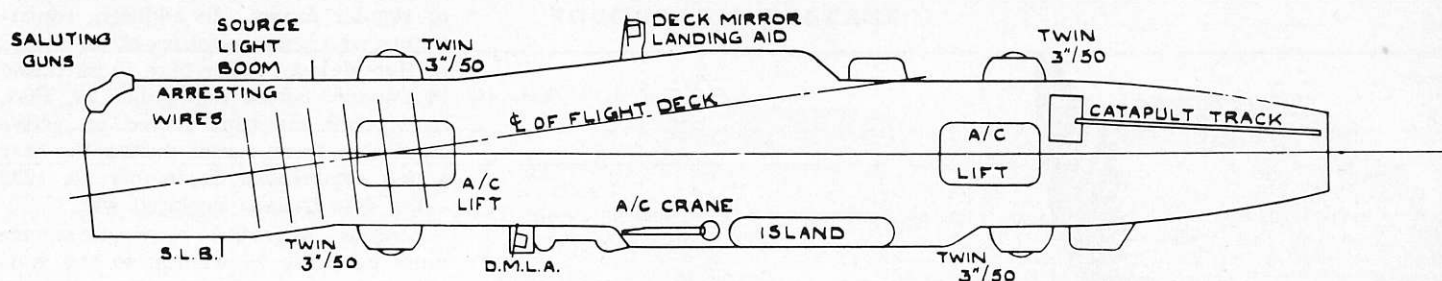
1957 — 20 Years later — ARMENTIERES given a new lease of life as a tug.

FLIGHT DECKS OF 'BONNIE' AND 'MAGGIE'

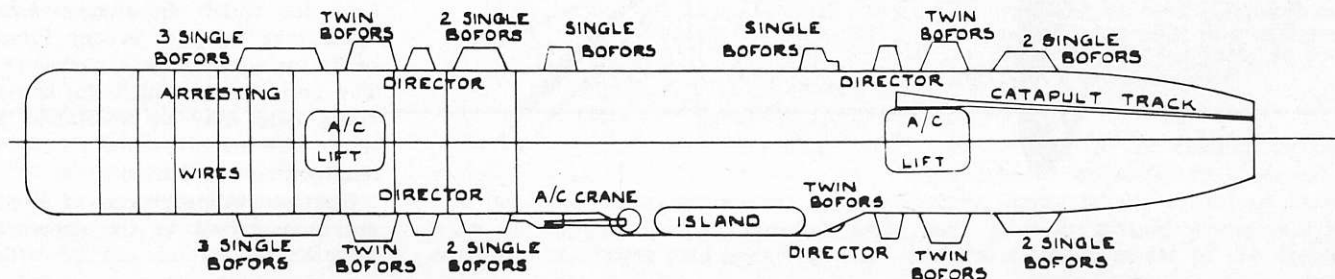
Diagrams Show Effect of Jet Era on Carrier Design



FLIGHT DECK SKETCH COMPARISON



HMCS BONAVENTURE



HMCS MAGNIFICENT

THE DEFENCE SERVICES PENSION ACT

An Outline of the Main Provisions of Part V

THE ACT respecting pensions for the members of the Armed Forces is known as the "Defence Services Pension Act". This act provides two pension plans commonly known as Parts I to IV and Part V.

All members of the permanent and regular forces who were appointed or enrolled in the permanent or regular forces on or before March 31, 1946, are under the pension plan provided by Parts I to IV, unless they have elected to come under Part V. Those governed by this provision are few in number and therefore this article will deal with the pension plan provided under Part V of the DSPA.

Part V applies to all persons who were not members of the regular forces on March 31, 1946, but were appointed to or enrolled in the regular forces after that date, and to those members who elected to transfer from Parts I to IV to Part V. Officers appointed temporarily or for a fixed contract are excluded unless they are commissioned direct from the lower deck.

Every member commences contributions to the Permanent Services Pension Account from the date on which he becomes subject to Part V, and contributes for the full time while in re-

Handy Guide to The Pension Act

The Defence Services Pension Act is a 50 - page document, couched in legal terms and containing so many provisos that the average officer or man, trying to find what he has coming to him at the end of his service, is lost in a labyrinth of "ifs", "ands", "buts" and "ors".

Officers of the Supply Branch — particularly those who deal with pay and accounting — are, of course, an exception to the rule. It is to one of their number that The Crowsnest has gone in the hope that the more important aspects of the Pension Act might be brought within the understanding of ordinary mortals.

The accompanying article is merely intended as a handy guide to the Act. Not all the fine points are covered and the last word rests with the Pension Act itself.

ceipt of pay and allowances. If the contributor is absent from duty because of leave or secondment without

pay, he is normally required to contribute for the period he is so absent, and that period is counted as service for the purposes of computing a pension or gratuity.

A continuous period of absence from duty in excess of 60 days in respect of which a forfeiture of pay and allowances is imposed, or in respect of which a deduction is imposed equal to the whole of the pay and allowances withheld by reason of suspension from duty, is not counted as service for the purposes of computing a pension or gratuity and therefore, no contributions are made for that period.

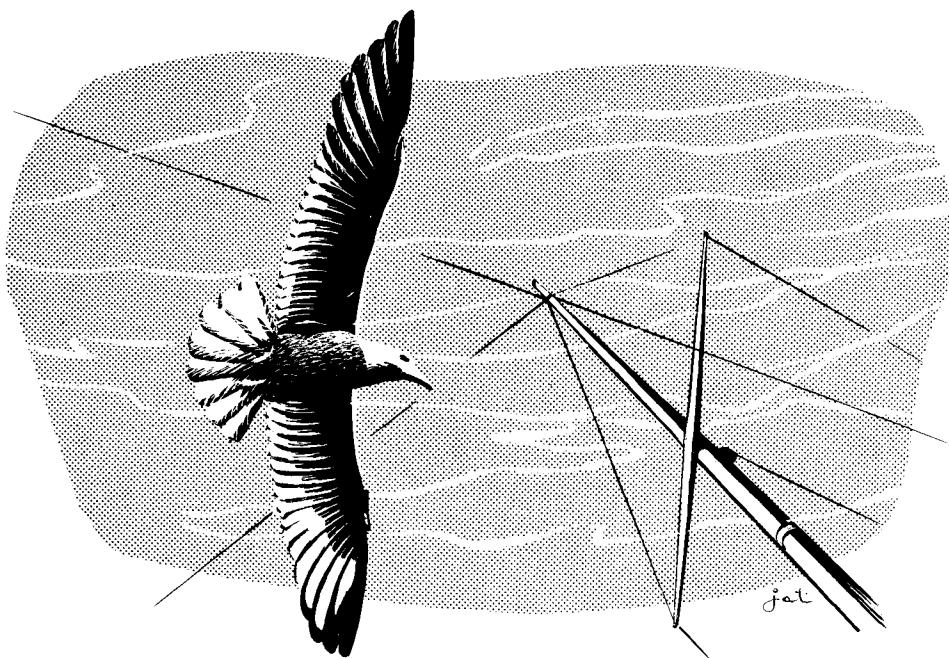
The rates of allowances used for the purposes of computing the amount of contributions and a pension or gratuity are fixed by the regulations to the DSPA. They are not necessarily the same as the allowances actually paid and the tables in the regulations should be consulted.

Contributors under Part V of the DSPA may elect to count certain previous service towards pension. This service for the purpose of computing contributions and pension or gratuity include time served in the civil service, in the Royal Canadian Mounted Police, in Canadian auxiliary or reserve forces, as well as time served in the permanent or regular forces. In addition, contributors who were members of the forces of Her Majesty, other than those raised in Canada, before September 30, 1947, may count the time served on active service in those forces during the war which commenced September 10, 1939 —the date Canada declared war.

Election to count previous service must be made in writing to the contributor's commanding officer within one year of becoming a contributor. If a contributor fails to make the election within one year, he may so elect at any time before he ceases to be a member of the regular forces, subject to certain penalties as prescribed in the regulations to the DSPA.

The contributions for any previous time for which an election has been made may be paid in one lump sum, or by instalments for a period of years. The period over which the arrears are being paid may be shortened at any time, but no provision is made for lengthening the period.

The benefit provisions of the DSPA are summarized in the accompanying table.



Qualifying Service in the Forces	REASON FOR RELEASE	Gratuity or Pension Payable
Less than 10 years	(1) Having reached age limit for rank. (2) Services no longer required by reason of reduction in establishment. (3) To promote economy or efficiency. (4) Being physically or mentally unfit to perform his duties as a member of the forces.	A gratuity equal to one month's pay and allowances for each year of service.
10 years or upwards	By reason of inefficiency in performance of his duties.	One-half the pension which could have been paid until age 65 and thereafter two-thirds of normal pension.
	By reason of misconduct.	If approved by Treasury Board one-half the pension which normally would have been paid until age 65 and thereafter two-thirds of normal pension.
10 years but less than 20 years	(1) Having reached age limit for rank.	A pension reduced by one per cent for each complete year by which the number of years service in the regular forces is less than 20 years.
	(2) Services no longer required by reason of reduction in establishment.	Pension shall be reduced by one-third until he attains the age of 65 years.
	(3) To promote economy or efficiency.	
	(4) Being physically or mentally unfit to perform his duties as a member of the regular forces.	An annual pension.
	Having served on active service during war which commenced 10 September, 1939 and who was not a member of the regular forces on 1 June, 1944 but became a member of the regular forces on or before 31 December, 1948 and is released by reason of: (1) Having reached age limit for rank. (2) Services being no longer required by reason of reduction in establishment. (3) To promote economy or efficiency. (4) Being physically or mentally unfit to perform his duties as a member of the regular forces.	An annual pension.
20 years or more	(1) Having reached age limit for rank. (2) Services no longer required by reason of reduction in establishment. (3) To promote economy or efficiency. (4) Physically or mentally unfit.	An annual pension.

VOLUNTARY RELEASE

Qualifying Service in the Forces	REASON FOR RELEASE	Pension or Gratuity
20 years but less than 25 years	MEN ONLY	
	Who are released at own request otherwise than by reason of misconduct <i>at the end of a period of engagement or re-engagement.</i>	An annual pension reduced by five percentum for each complete year by which his period of service in the regular forces is less than 25 years.
25 years or upwards	MEN ONLY	
	Who are released at own request otherwise than by reason of misconduct at the end of a period of engagement or re-engagement.	An annual pension
At any time other than as above stated	ANY CONTRIBUTOR	
	Any reason	A gratuity in an amount equal to contributions without interest if the contributor is not eligible to receive an annual pension or gratuity under any other section of this Part.

The annual pension granted is one-fiftieth of the average annual pay and allowances received by the contributor during the last six years of his service, multiplied by the number of years of

pensionable time not exceeding 35 years.

A pensioner who, subsequent to release, is appointed to or enrolled on continuous full-time paid service of one

year or more in the regular forces, in the reserve or auxiliary force of the Navy, Army or Air Forces of Canada, may elect in writing within one year of the commencement of the full-time

paid service to count that additional service, or civil service in respect of which he is not entitled to an annuity, towards increasing his pension.

The whole or part of the pension he may be receiving terminates for the period during which the augmenting service is performed. Any pension received during this period must be repaid except in the case where the pensioner's pay and allowances have been reduced by the amount of the pension. The repayment may be made in one sum or by instalments. During the augmenting service the pensioner contributes to the Permanent Services Pension Account at the rate of six per cent of his pay and allowances.

On completion of the augmenting service the pension is computed on the term of service on which his service was originally based together with the augmenting service, this whole period known as "pensionable term". The rate of the pension is one-fiftieth of the average annual amount received in pay and allowances by the pensioner during the last six years of the pensionable term for each year of the pensionable term, but the number of years shall not be in excess of 35.

In the event of the death of a contributor who has less than ten years' service in the permanent or regular forces, the widow receives a gratuity equal to one month's pay and allowances which the contributor was receiving at the time of death for each year of pensionable service including elected reserve or other time.

In the event of the death of a contributor with ten years' or more service in the permanent or regular forces or on the death of a pensioner, the widow receives an annual pension equal to one-half that which would have been payable to the contributor or in the case of a deceased pensioner, one-half of the pension being paid to the pensioner. In addition, for each child under age of 18 the widow receives a pension equal to one-fifth of the annual pension payable to her, or \$300 for each child, whichever is the lesser. The total of the widow's and children's pensions may not exceed three-quarters of the pension which would have been payable to the contributor or was being paid to the pensioner.

The widow's pension is suspended if she remarries; however, if she should again become a widow, application in

writing may be made for the resumption of this pension.

The pension payable to a widow or child is included in the estate of the contributor or pensioner for purposes of determining succession duties. The widow or child may, if desired, make application to the Minister of National Defence for payment of the whole or any part of the portion of the succession duties which are attributable to that pension. Where the Minister has directed the payment to be made the pension will be reduced either for the term requested by the widow or child, or during the entire period for which the pension is payable in order to reimburse the Pension Account for the amount of the payment made to cover the succession duties.

The above precis covers the salient features of Part V of the DSPA and in a very general manner. Any member of the forces who wishes more detailed information should discuss his problem with the Supply Officer of the ship or establishment in which he is serving. The DSPA together with the regulations are contained in Appendix XXI of QRCN, QR(Army) and QR(Air).—D.K.M.G.

AN HISTORIC EVENT ON THE ROAD TO THE ISLES



The Saguenay enters the canal lock through the Canso causeway during her cruise to Atlantic province and St. Lawrence River ports late this spring. The DDE was the first major warship to go through the locks in the causeway, which is shown in the background. It connects the mainland with Cape Breton Island, or vice versa, depending on your loyalties. (O-9586)

OFFICERS AND MEN

Ceremonies Mark Canada's Birthday

Canada's 90th anniversary as a self-governing dominion in the British Empire was observed with special ceremonies on Monday, July 1, at the NATO headquarters of Admiral Jerauld Wright, USN, NATO's Supreme Allied Commander Atlantic at Norfolk, Virginia.

The Dominion Day anniversary was observed during morning colours at 8 a.m. when the flags of the 15 NATO nations were hoisted at the Allied Command Atlantic Headquarters.

The ceremonies included renditions of the national anthems of the United States and Canada, and the parading of the U.S. Marine Corps Honour Guard.

Captain C. P. Nixon, RCN, Assistant Chief of Staff for Personnel and Administration, presented his country's colours to the U.S. Marine Corps Colour Guard for hoisting with the other flags.

Veterans' Group Urges Support

The wider the support a veterans' organization receives from former members of the armed services, the greater

is its potential for serving the community and the country at large.

This point is made in a communication from the White Ensign Branch of the Canadian Legion in Halifax, as follows:

"Not so long ago the editors of *The Crowsnest* very generously offered to make space in that excellent publication for reports of activities of any or all of the naval veterans' organizations from coast to coast in Canada.

"We of the White Ensign Branch of the Canadian Legion in Halifax are deeply grateful for this kindness and wish that we could write a glowing description of our community work such as juvenile sports, playgrounds, supervised dances for teen-agers, outings for older or shut-in veterans—or that we are sponsoring a scholarship for deserving children within the community.

"These are just a few of the projects we could and would achieve if we had the membership of all those eligible within this community and this item is an appeal to those who are eligible to come forward and join our ranks.

"Eligibility for membership requires that you must have been honourably

Street Name Pays Homage to Ship

Halifax, N.S., already a city steeped in history and tradition, has named a street after one of the most famous ships of the Second World War.

The street has been named Jervis Street after the *Jervis Bay*, an armed merchant cruiser that waged a suicide battle with the German pocket battleship *Admiral Scheer* in November, 1940. The *Jervis Bay's* valiant action saved all but five of her 37-ship convoy from certain destruction.

discharged from service in any of Her Majesty's Naval Forces or the Merchant Navy and membership entitles you to play an active part in the projects mentioned above and, perhaps most important of all, to ensure that proper attention shall be paid to the welfare of all who have served and the welfare of their dependents and to see to the maintenance and comfort of those who require special treatment, particularly the disabled, sick, aged and needy, and to promote the welfare of their dependents.

"Membership fee is but \$5 a year and this includes a subscription to *The*

HALF-YEARLY PROMOTIONS LIST

The names of 20 officers are contained in the half-yearly promotions list of the Royal Canadian Navy. The regular force is represented by 14 members and the Royal Canadian Navy (Reserve) by six. The list of those promoted follows:

ROYAL CANADIAN NAVY

To Commander (7)

Lt.-Cdr. William Bremner, formerly Executive Officer of *Magnificent*.

Lt.-Cdr. Kenneth E. Grant, on the staff of the Director of Torpedo Anti-Submarine and Mine Warfare, Naval Headquarters.

Lt.-Cdr. E. Maurice Chadwick, Staff Officer (Plans and Coastal Defence) to the Flag Officer Pacific Coast.

Lt.-Cdr. Robin B. Hayward, Commanding Officer, *Algonquin* (destroyer escort).

Lt.-Cdr. G. Raymond Smith, Assistant Director of Personnel (Officers), Naval Headquarters.

Lt.-Cdr. D. H. Patrick Ryan, on the staff of the Director of Naval Aviation, Naval Headquarters.

Lt.-Cdr. W. Henry Fearon, on the staff of the Director of Naval Aviation, Naval Headquarters.

To Captain (E) (1)

Cdr. (E) Frank Harley, Commanding Officer, *Cape Breton*.

To Commander (E) (2)

Lt.-Cdr. (E) Ernest S. Baker, on the staff of the Supreme Allied Commander Atlantic, Norfolk, Va.

Lt.-Cdr. (E) Victor F. O'Connor, formerly Senior Engineer Officer in *Magnificent*.

To Commander (L) (2)

Lt.-Cdr. (L) Frederick C. Palmer, Deputy Manager Electrical Engineering, HMC Dockyard, Esquimalt, B.C.

Lt.-Cdr. (L) William B. Christie, Deputy Electrical Officer, *Bonaventure*.

To Chaplain Class IV (P) (1)

Chaplain Class III (P) Frederick H. Godfrey, *Naden*, RCN barracks at Esquimalt.

To Commander (S) (1)

Acting Cdr. (S) James W. Thomson, Officer-in-Charge, Aviation Supply Depot, RCN Air Station, Dartmouth, N.S.

ROYAL CANADIAN NAVY (RESERVE)

To Commander (3)

Lt.-Cdr. John M. Robertson, *Carleton*, Ottawa.

Acting Commander Leonard J. D. Garrett, Executive Officer, *Nonsuch*, Edmonton.

Lt.-Cdr. Charles H. Aharan, Commanding Officer, University Naval Training Division, University of Western Ontario.

To Commander (E) (1)

Lt.-Cdr. (E) Peter F. Barr, *Discovery*, Vancouver.

To Captain (S) (1)

Cdr. (S) Garnet A. MacLachlan, *Prevost*, London, Ont.

To Acting Commander (S) (1)

Lt.-Cdr. (S) Frederick J. Edwards, *Star*, Hamilton.

Legionary. Any previous member who has allowed his membership to lapse will be reinstated for \$1. Further information may be obtained by writing or telephoning the officials listed below:

"President: Stanley Armstrong, 13 Hunter Street, Halifax, 'phone 4-9164; secretary-treasurer: John E. Mobley, 6 Mountain Road, Halifax, 'phone 5-9423; vice-president and membership committee chairman: W. L. Saul, 4 Green Street, Dartmouth, 'phone 6-3026."

Sioux Assigned to East Coast Fleet

After 12 years' service in the Pacific Command, the veteran destroyer HMCS *Sioux* left Esquimalt on July 2 for the East Coast to join the Atlantic Command.

Under the command of Cdr. Peter Godwin Chance, the *Sioux* sailed by way of the Panama Canal and was due at her new base on August 5.

Most of the ship's company were to leave the ship in Halifax to join HMCS *Margaree*, the new anti-submarine destroyer escort commissioning at Halifax this fall. They will sail her to Esquimalt where she will join the Pacific Command.

The *Sioux* was built in 1943 for the Royal Navy by J. Samuel White and Company, Limited, Cowes, England, and transferred to the Royal Canadian Navy on March 5, 1944. Although named after a famous Indian tribe, the *Sioux* is not a Tribal Class destroyer but a Fleet "V" Class.

During the war years, the *Sioux* served in many theatres of operations and saw numerous engagements with enemy units, particularly off the Norwegian coast and in the English Channel.

Arriving at Esquimalt in late December 1945 she was paid off into the Reserve Fleet and remained there until she was commissioned again in January 1950. During her period of inactivity she was converted and modernized to become the first Canadian ship to be fitted with bunks in place of the conventional hammocks.

In July 1950 the *Sioux*, in company with the Tribal Class destroyers *Cayuga* and *Athabaskan*, sailed from Esquimalt for the Korean war zone.

She served two tours (18 months) under the command of Cdr. (now Captain) Paul D. Taylor. She sailed on her third tour on November 7, 1954, under the command of Cdr. A. H. Rankin.

The *Sioux* was the last ship to return from the Far East and duty with the United Nations forces. She returned to Esquimalt in September 1955.

During the period she spent in the Far East, the *Sioux* established an enviable record with the United Nations Naval Forces in Korean waters.

Following her return from the Far East, the *Sioux* was employed on training duties in the Pacific Command as a unit of the Second Canadian Escort Squadron. She was also one of the ships representing Canada at the Coronation of Her Majesty Queen Elizabeth in June 1953.

F. A. Price Heads Naval Officers

The 12th annual general meeting of the Naval Officers' Associations of Canada was held at the end of May with sessions at *Naden* and *Royal Roads*. Chairman of the meeting was F. A. Price (Captain RCN(R)) (Ret'd), of Quebec City, who was elected president of the national body.

The honorary president is Rear-Admiral Walter Hose, of Windsor, and the honorary counsel, R. C. Merriam of Ottawa. Regional vice-presidents are: Maritimes, Douglas Martin, of Saint John; Quebec, C. J. Angus, of Ottawa; Ontario, N. W. Simpson, of Toronto; Prairies, J. J. Boyd, of Winnipeg, and West Coast, G. C. Dixon, Victoria. W. R. Inman, of Ottawa, is vice-president, reserves. H. McClymont, of Ottawa, was reappointed secretary-treasurer.

The charter of the Naval Officer Association of Halifax was surrendered and a fresh charter was issued to a new organization, which has adopted the name of the Naval Officers' Association of Nova Scotia. The president of the new group is H. R. MacDonald, and the secretary is N. J. Magnusson.

The meeting accepted a report of a special investigating committee, which has been at work for the past year enquiring into the organization and chief points of this report were:

- (a) Changing the name of the national organization by deleting the words "Dominion Council" and when supplementary letters patent are issued by the Secretary of State the Naval Officers' Associations of Canada will be the continuing name.
- (b) The Naval Defence Conference, which was a standing committee of the NOAC, was disbanded and in its place three standing committees were named:

Naval information committee, chairman, F. C. Aggett, Toronto; Reserve liaison committee, chairman, R. P. White, Ottawa; Technical committee, chairman, E. S. Brand, Ottawa.

It was agreed to provide cash prizes of \$50, \$25 and \$10 to the winners of first, second and third awards given for the Naval Photographic Salon.

It was decided to hold the 13th Annual Meeting in Saint John, N.B., on June 5, 6 and 7, 1958.

Resolutions were adopted recommending that service pensions be increased to assist pensioners to meet the increasing cost of living, that the "over-seas service requirement" for veterans' benefits such as medical care be moderated, and that the Minister of National Defence be requested to give consideration to the increasing of the clothing allowance to serving officers in Naval Reserve Divisions.

Stadacona Course Teaches Teachers

Class A-46 is the first of the Instructional Technique Classes, Educational Training School, *Stadacona*, to be mentioned in *The Crowsnest*, but it has been preceded by many classes, whose members deserve credit for the valuable service which they have performed as instructors in the various schools of the Atlantic Command.

Instructional technique began to develop following the Second World War from a realization of the value of "better teaching" in RCN schools. A two-week "A" course evolved, and for a short time a one-week "B" course was also given.

The present Instructional Technique Course was initiated last August, when the two-week course was expanded to three weeks. The course is available to all personnel concerned with instruction in RCN schools of the Atlantic Command, as well as personnel taking their Trade Group IV Course.

The syllabus includes consideration of basic teaching principles and their application to RCN instructing, subject matter analysis, lesson outlining and planning, the design, construction and utilization of training aids, and testing techniques.

Five practice teaching lessons are given by each student, and evaluated by a course officer and class members who comment on the lesson's effectiveness after its delivery. These comments help the student instructor to realize his good and his poor tendencies so that he can retain and strengthen the former, and modify or eliminate the latter.

Graduates of Instructional Technique return to their various schools with increased confidence in their ability to organize and present subject matter well. For them, it is a personal achievement, and for the RCN training program a step forward.

Navy Photo Salon



PHOTOGRAPHS taken in ships and establishments, in Canadian cities and ports around the world are included in the second annual Royal Canadian Navy Photo Salon. Eighty-four photographs have been selected for this year's salon. They reflect the talents and professional capabilities of the Navy's official cameramen, and present a wide variety of subjects.

A total of 222 entries were received for the salon from naval photographers serving in ships of the fleet and in shore establishments across the country. Some of the photos were submitted as official entries—taken by sailor-photographers in the course of duty at sea or ashore. Others are personal entries, taken with the cameramen's own equipment during off-duty hours.

Most of the entries have a true nautical flavour. Others present striking travel scenes, pleasing landscapes, and close-up studies of a variety of subjects.

Highest honours in the salon went to PO Eugene Hovey, of Port Colborne, Ont., currently serving in Halifax, for his entry showing the cruiser HMCS Quebec in a tropical harbour. To AB J. W. Young, of Carlisle, Sask., now at

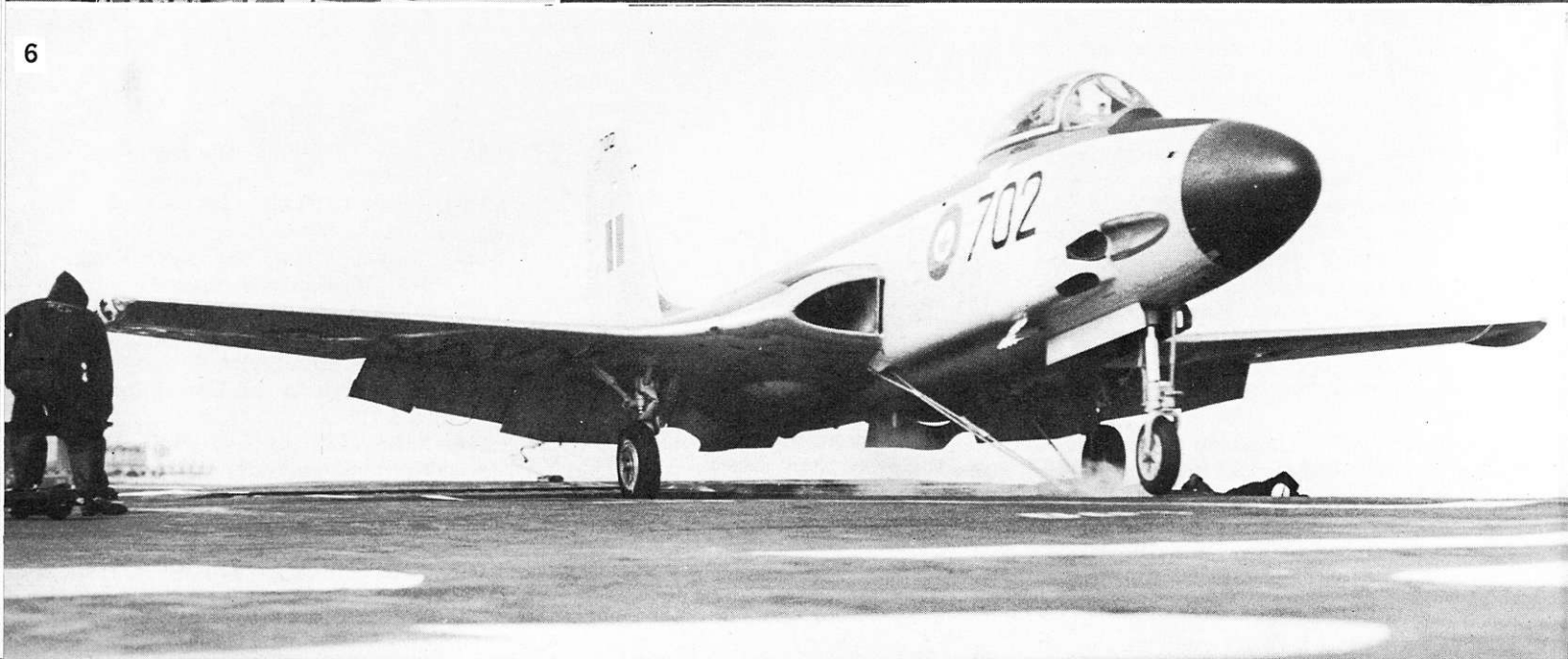
Esquimalt, B.C., went the second prize for his picture "Power Trials"—a destroyer-escort doing speed trials. Third place honours went to PO L. J. LeBlanc, of Shediac, N.B., now at Naval Headquarters, for his entry entitled "Spring Jewels", a close-up study of glittering dewdrops on a floral bush.

The entries were selected by a panel of three experts in the photographic field—noted photographer Malak of Ottawa; Jack Van Dusen, picture editor of the Ottawa bureau of the Canadian Press, and H. W. (Bert) Holmes, Director of Photography for the Department of National Defence.

Photographs which appear on the middle pages were not chosen in their order of merit. The choice was dependent on space available and others will appear in future issues of *The Crowsnest*. On this and the four next pages are some of the pictures, titles, and names of photographers responsible for them:

- (1) "Tropical Haven" by PO Eugene Hovey (first prize).
- (2) "Power Trails" by AB J. W. Young (second prize).

- (3) "Spring Jewels" by PO L. J. LeBlanc (third prize).
- (4) "Coming Alongside" by AB T. C. Broderick.
- (5) "Birds of a Feather" by Ldg. Sea. J. H. Oakes.
- (6) "Banshee" by AB Charles Wamback.
- (7) "Time to Retire" by Ldg. Sea. E. B. Miller.
- (8) "Doric Columns" by CPO D. S. Howes.
- (9) "Manhattan Towers" by Wren A. V. MacKenzie.
- (10) "Cat Crackers" by AB R. J. Maheux.
- (11) "Winged Eagle" by Ldg. Sea. J. H. Oakes.
- (12) "Royal Roads, B.C." by Ldg. Sea. H. F. Buck.
- (13) "Sunset" by PO J. A. Young.
- (14) "The Finishing Touch" by AB Charles Wamback.
- (15) "Take Off" by AB Ernest Campbell.
- (16) "Show Off" by Ldg. Sea. W. L. McNaughton.
- (17) "Main Street" by AB R. J. Maheux.





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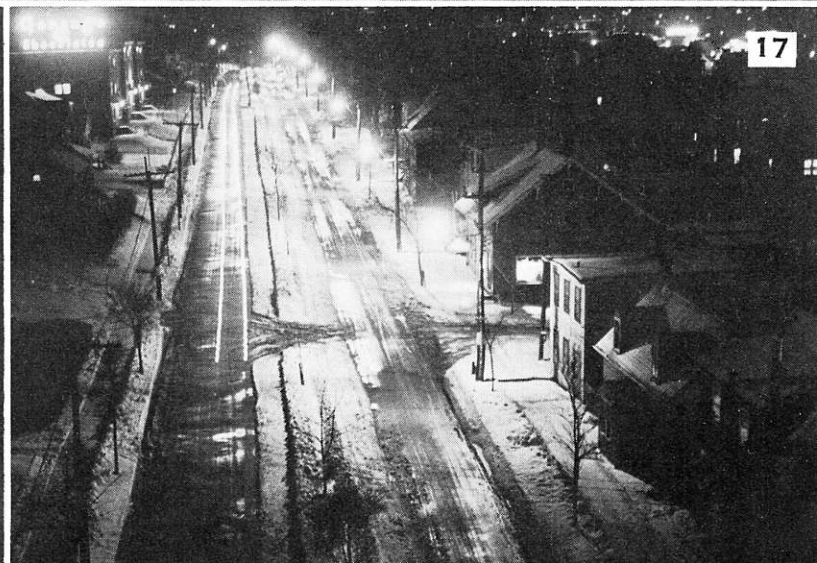
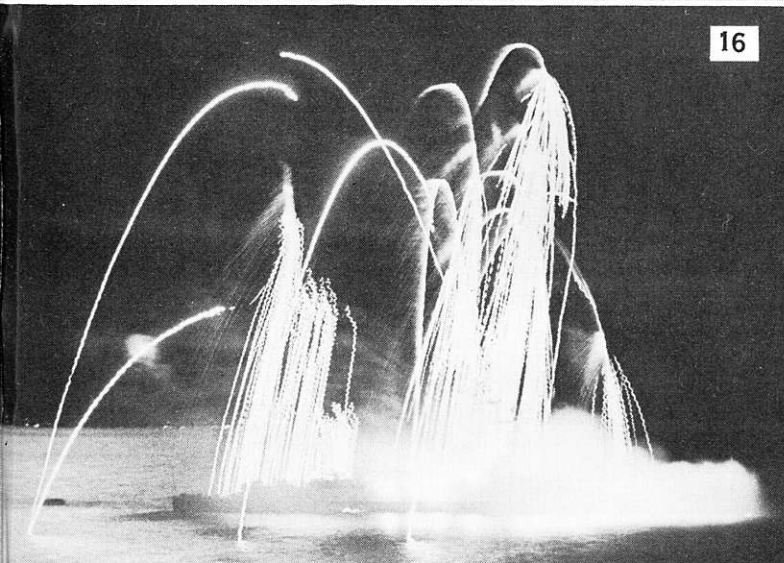
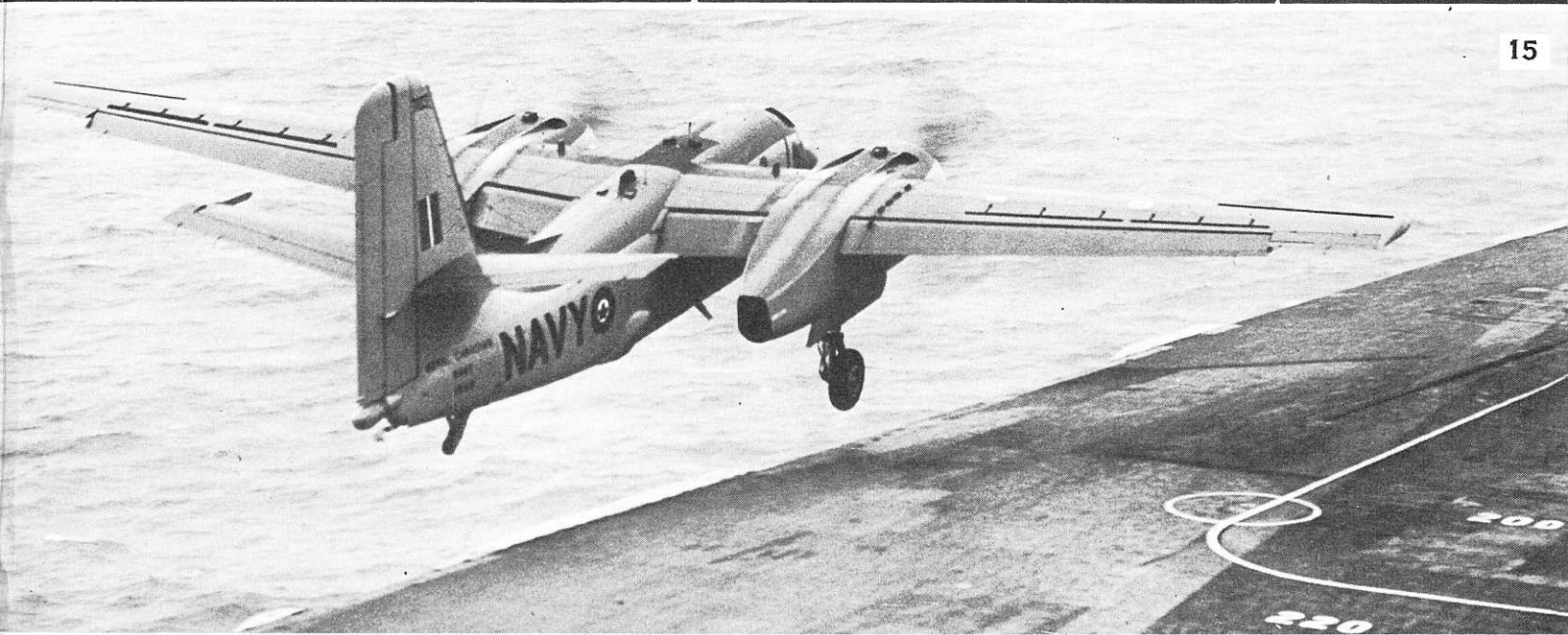
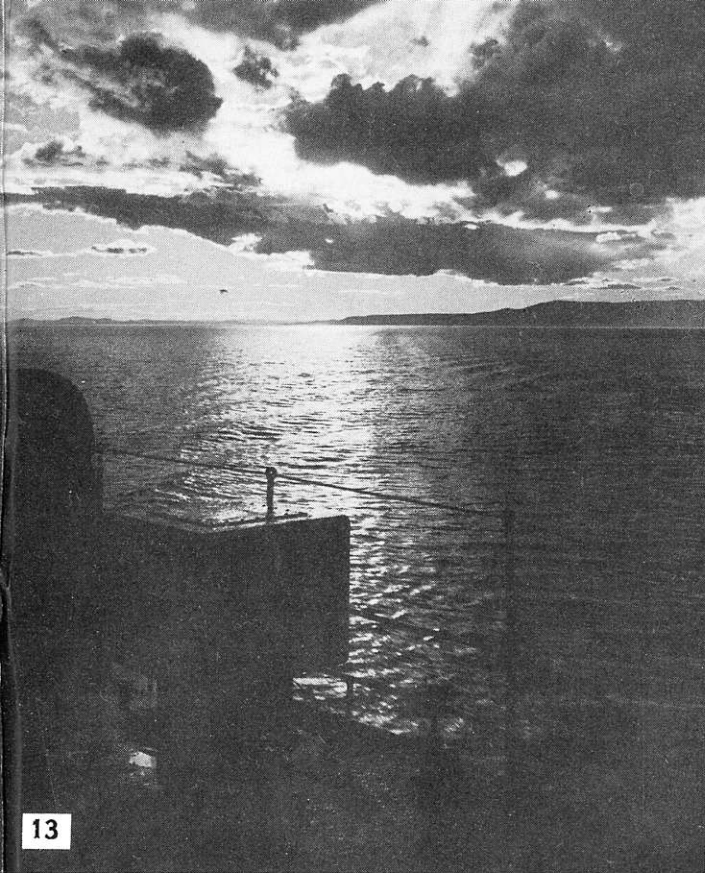


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COMMISSIONING OF THE SECOND FRASER

New Destroyer Escort Joins West Coast Fleet

HMCS *FRASER* was commissioned at Yarrows Ltd., Esquimalt, on June 28 as the second of the new destroyer escorts to join the fleet on the West Coast and the sixth of the class to be commissioned.

Guest of honour at the ceremony was the Lieutenant-Governor of the Province of British Columbia, the Hon. F. M. Ross, CMG, MC. During the ceremony, which included official acceptance of the ship for the RCN by Captain (L) J. Deane, Assistant Chief of Naval Technical Services, addresses were given by Mr. Ross, H. A. Wallace, managing director of Yarrows, Rear-Admiral H. F. Pulien, Flag Officer Pacific Coast, and by Captain (E) Erik Revfem, Principal Naval Overseer, West Coast.

The commissioning services were conducted by Chaplain (P) H. R. Pike, and by Chaplain (RC) J. T. Farrell.

Over 300 guests were present for the ceremony which was held on Government Jetty. The ship was berthed pointing shoreward and in consequence presented a splendid sight to the guests who approached down the jetty from *Naden* on a sunny but breezy summer afternoon.

When the ship had been manned and the captain, Cdr. R. Phillips, had been piped aboard, the guest of honour was received and proceeded to the captain's cabin where he signed the visitor's book. The remainder of the guests who wished, then toured the ship, conducted by the ship's officers. After the tour a reception was held on the quarterdeck.

By 1930 that same evening the ship had been moved across the harbour to "A" Jetty in HMC Dockyard, the latest member of the Royal Canadian Navy.

The new *Fraser* is the second of her name to serve in the Royal Canadian Navy.

The first *Fraser* was one of two destroyers acquired from the British Admiralty by the RCN to replace two over-age destroyers, the *Champlain* and *Vancouver*. One, the *Cygnets*, was to become HMCS *St. Laurent*, while the other, the *Crescent*, was renamed HMCS *Fraser*.

The two warships were commissioned into the RCN on February 17, 1937. Captain (later Rear-Admiral) V. G. Brodeur was the *Fraser's* first commanding officer. The destroyers sailed for Canada from Portland, Dorset, on March 12, of the same year. The *Fraser* went to Esquimalt, where she arrived on May 3, while the *St. Laurent* joined the RCN ships on the East Coast.

For the few remaining pre-war years, the *Fraser* carried out a busy schedule of training cruises. In the early months of 1938 she sailed south to join Halifax-based units at Panama for a cruise down the west coast of South America. A year later, under her third and last commanding officer, Commander (later Rear-Admiral) W. B. Creery, she sailed with other Pacific coast units through the Panama Canal to join with ships from Halifax for exercises in West Indies waters.

Other activities of the *Fraser* included the embarkation of Lord Tweedsmuir, Governor General of Canada, during his 1937 visit to British Columbia; participation in the escort of President Roosevelt during his visit to the province in September of the same year, and in the four-destroyer escort of Their Majesties King George VI and Queen Elizabeth for their crossing from Vancouver to Victoria in May 1939 during the Royal Visit.

A little over three months later, Canada was at war. On August 31, four destroyers, the *Fraser*, *Ottawa*, *St. Laurent* and *Restigouche*, lay at anchor just off Coal Harbour in Vancouver where they were to take part in celebrations for the city's annual exhibition.

The same day, a message was received from Naval Service Headquarters at Ottawa ordering the *Fraser* and *St. Laurent* to Halifax. The ships were rapidly prepared. One hour and 49 minutes after orders had been received, the destroyers were steaming at high speed for the Panama Canal and the East Coast.

The *Fraser* arrived in Halifax September 14 and the *St. Laurent* followed a day later.

Joining the Halifax force, the *Fraser* spent the next few months on convoy duties. In March, 1940, the ship was ordered south to join the Jamaica force in the Caribbean where allied warships had been bottling up German merchant shipping caught in that area by the war. In the latter part of May 1940 the *Fraser* was one of the Canadian destroyers sent overseas to assist in the defence of Britain against threatened invasion.

Following her arrival, she was assigned mainly to convoy duties, including the escort of troopships carrying Canadian soldiers to the United Kingdom.

On June 21, the day Hitler imposed the armistice at Compiègne, the *Fraser* was dispatched to assist in the evacuation of St. Jean de Luz, a small town on the Bay of Biscay coast near the Franco-Spanish border and one of the last outlets for refugees attempting to leave the continent.

On the evening of June 22, she carried out anti-submarine patrols in the bay off the town, and later helped cover the vessels arriving to embark the refugees. At dawn on June 23, she was ordered northwards to Arcachon, on the Biscay coast southwest of Bordeaux. Her commanding officer carried two secret hand messages: one addressed to Sir Ronald Campbell, the British ambassador to France, and the other to Admiral Darlan. It was believed Sir Ronald was in Arcachon at the time.

As she approached the coastal town, the *Fraser* sighted a small sardine boat tossing in the rainswept waves. When she came alongside, it was found the boat was carrying the British ambassador, the Canadian minister to France (Lt.-Col. Georges P. Vanier), and the South African minister to France, as well as naval military and air attachés.

The refugees were embarked and the two secret messages handed to Sir Ronald. It has been the intention that one of Sir Ronald's staff should take the

message to Admiral Darlan and then seek to escape to safety over the Franco-Spanish border, but, when Sir Ronald read the message for Admiral Darlan, he decided it was too late for the message to be of any use, and the *Fraser* returned to St. Jean de Luz, where the rescued diplomatic personnel were transferred to the British cruiser *Galatea*.

At St. Jean de Luz, the evacuation continued smoothly and efficiently and by 1250 on June 25 the evacuation was practically complete. The last warships in the harbour were the *Fraser*, another Canadian destroyer, the *Restigouche*, and the British cruiser *Calcutta*. When they stood out to sea shortly after, the *Fraser* had embarked five officers and 33 men of the Royal Navy, one British army officer, one French naval officer and four Polish seamen.

The *Fraser* was never to reach her destination for, late that same night, June 25, she was in collision with the

Calcutta while the ships were forming into line ahead 12 miles due west of Pointe de la Courbe light at the Gironde River mouth.

The *Fraser* went to the bottom in the early hours of June 26—Canada's first naval loss of the Second World War. Rescue efforts by the *Restigouche* and the *Calcutta*, and by the officers and men of the *Fraser* themselves, saved many, but 45 of her ship's company were lost. Most of those who survived went down four months later, on October 23, with HMCS *Margaree*. In addition to those of the *Fraser's* ship's company, 19 of the 33 men of the Royal Navy evacuated from St. Jean de Luz were lost.

It was a tragic end for HMCS *Fraser* and the men who lost their lives, but in her few years as an active unit of the RCN the *Fraser* had upheld the highest traditions of the fleet.

To her successor she left the battle honour:

"Atlantic 1939-40."

CHICAGO VISIT THRILLS RESERVISTS

'Windy City' Extends Wholehearted Reception

ASK ALMOST any of the 400 officers and men of the permanent and reserve force what they remember most about their July 1 visit to Chicago and chances are they'll tell you three things stand out in their minds: (a) the size of Chicago and its picture-postcard skyline; (b) the Windy City's beautiful girls and (c) the day that Rear-Admiral K. F. Adams' crisp white uniform was covered in soot at an official function.

When the three ships arrived for their official visit to be guests of honour at the Chicagoland Fair over the Canada Day holiday, they were besieged with invitations to do almost everything from enjoy a whopping steak dinner, Chicago style, to seeing the Chicago Cubs defeat Brooklyn Dodgers at Wrigley Park. This included visits of a cultural and scientific nature to the big Chicago Museum of Science and Industry to the less cultural but perhaps more salty visits to some of Chicago's night spots, with which the city is well endowed.

The arrival set the pace for the four-day visit of the three Algerines. As the ships moved in line ahead around a breakwater and headed in to their berth at mile-long Navy Pier, about 135 yachts from seven Chicago yacht clubs blared a welcome and

formed a marine path through which the Canadian warships treaded a gingery course. It is not surprising that foc'sle parties were somewhat distracted since every yacht from the smallest outboard to the largest 110 foot cruiser had as crew members jill-tars (civvie style) wearing the newest creations in bathing suits, not excepting the Chicago version of bikinis so short they were called "biks".

Once secured the official party came aboard the flagship of the escort squadron, the *Sault Ste. Marie*, in which Rear-Admiral Adams was wearing his flag. It was aboard her during the period in which official greetings were being extended to the Canadians by representatives of the State, civic, military and other dignitaries that Admiral Adams was drenched in rich black soot. "Soo" was the offender as a blast of soot belched out of the stack and somehow singled out FOND as the recipient.

Officers were not surprised when it was later suggested that for official functions that day No. 15s would be acceptable.

The ships were swarming with people in no time and invitations were handed out thick and fast. Tours were organized. People invited young Canadian seamen to their homes for meals and

swims and dances and parties. The tars were guests of radio and TV programs. As a matter of fact Admiral Adams, who is a high officer in the Township of Lynden's Horse Show, received what was perhaps a bigger plug for the forthcoming event than any other similar horse show has received. It was mentioned several times on the coast-to-coast U.S. show "Breakfast Club", not only by the emcee but by Admiral Adams as well.

On the holiday evening several hundred former Canadians were guests on board the three ships and the Canadian consulate staff at an "at home" and that, of course, lead to more parties and dinners and tours.

Meantime the sailors had gone uptown and were allowed in theatres free, were given meals free, some received reduced fares in taxis, and others visited some of the famous lounges and entertainment spots, where in many cases everything was on the house. In true Canadian naval style on the second day it was not uncommon to see several Canadian tars riding about in late model cars—there was a marked preference for convertibles and hardtops—these autos being piloted by gorgeous members of Chicago's distaff set.

By the way, some sailors saw the fair.—W.J.H.

AFLOAT AND ASHORE

PACIFIC COMMAND

HMCS *New Glasgow*

A large sized birthday cake, 48 brass machine nuts and a frigate rolling heavily in the blue Pacific combined with the best wishes of a ship's company to make a perfect day for a grand sailor and shipmate.

CPO Frank Galley, chief ERA in the *New Glasgow*, celebrated his 48th birthday May 16, while the ship was steaming for Pearl Harbour in the Hawaiian Islands in company with the *Sussexvale* and *Ste. Therese*.

The *New Glasgow's* head chef, PO Don Cambridge, arranged the surprise proceedings which took place at the close of the evening meal in the ship's Chief and POs' cafeteria. Chief Galley was presented with a cake such as he had never seen before.

With much ceremony the candle-lit cake, surrounded with cigars, and decorated with 48 $\frac{3}{4}$ " brass machine nuts, was carried into the cafeteria and set in front of the Chief. Although Frank enjoyed the cake he was denied

WEDDINGS

Lieutenant Thomas S. (E) Allan, Naval Headquarters, to Miss Katharine Christie Ross, of Ottawa.

Midshipman W. J. A. Draper, *Cayuga*, to Miss Kathleen Rose Pember, of Victoria.

Lieutenant (L) Bernard S. Friedman, RCN(R), York, to Miss Helen Edith Paikin, of Hamilton.

Able Seaman Scott Graham, *Assiniboine*, to Miss Sandra Edna Leslie, of Dartmouth, N.S.

Able Seaman J. Ross Higginbotham, *St. Laurent*, to Miss Ida Louise Wood, of Rollo Bay West, P.E.I.

Lieutenant Gordon T. Hodgson, *Saguenay*, to Miss Katharine Eleanor Jepson, of Ottawa.

Able Seaman Harold D. Kemp, *Saguenay*, to Miss Betty Marlene Osborne, of Monkton, Ont.

Surgeon Lieutenant Frederick N. Lewis, RCN(R), *Prevost*, to Miss Jean Mary Leitchan Watt, of Toronto.

Midshipman John R. Lusher, *Stadacona*, to Miss Nancy Anne Lord, of Toronto.

Able Seaman Glen M. McCollman, *Crescent*, to Miss Coralie Ann Moore, of Victoria.

Sub-Lieutenant (P) George E. Nickson, *Niagara*, to Miss Doris Yvonne Stanbury, of Peterborough, Ont.

Able Seaman George K. Stacey, *Haida*, to Miss Caroline Margaret Helen Jordan, of Strathroy, Ont.

Sub-Lieutenant R. R. Specht, RCN(R), *Prevost*, to Miss Dale Delores Bond, of London, Ont.

Petty Officer William A. Steadman, *Naden*, to Miss Mary Cruise, of Victoria.

Lieutenant Maurice Tate, *Athabaskan*, to Miss Marilyn Diane Mathison, of Victoria.

Lieutenant-Commander (L) W. B. Wilson, Naval Headquarters, to Miss Patricia Ruth Purvis, of Ottawa.

the pleasure of smoking any of the cigars as he had sworn off nicotine the day previously.

May 16, in addition to being Frank's birthday was also his 34th anniversary of going to sea.

He was born in 1909 at Leeds, England, and made his first trip to sea in 1924 at the age of 15, when he signed on as a fireman aboard a freighter of the Watson-Watts Line running from Liverpool to the Orient. These were the days of coal burning ships, and during a normal four-hour watch a fireman would hurl approximately five tons of coal into the hungry fires.

Early in the summer of 1926 he left a ship which had docked at Montreal and signed on in one of the Great Lakes vessels plying between Toronto and Duluth, Min. Frank found Toronto to be an interesting place and so decided to settle there for the rest of his days. He secured employment as an engine fitter with the Mahoney Electric Works of that city.

His "shore establishment" ideas lasted exactly one year before his feet began itching to roam in the far away places of the world and once again he went back to sea as a merchant seaman. This time the sea was his livelihood for a period of 20 years before he once more decided to get a shore job and settle down.

During this 20 years he sailed under the flags of many countries and visited most ports of the world. In 1935, while awaiting a ship in Vancouver, he married a girl from Duncan, B.C., who was on the nursing staff of a Vancouver hospital. Frank has now been married for 22 years and has a grown-up son and a daughter.

At the outbreak of the Second World War he joined the Navy as a chief ERA and in 1943 was promoted to the rank of warrant engineer. During hostilities he served in HMC Ships *Albarni*, *Trail*, *Calgary*, *New Liskeard* and *Sussexvale*.

On being demobilized in 1946 from the Naval service he returned to the Merchant Navy. This time he signed on a Park steamship as third engineer and made a return trip from Vancouver to Australia.

Following the Australian voyage Frank decided it was time to swallow the hook and come ashore for good.

He acquired a position as assistant chief engineer at the Royal Columbian Hospital in New Westminster, B.C. His old urge to travel did not return until the time of the Fraser Valley floods in 1948 when many naval craft and personnel arrived in New Westminster to aid in the emergency. Being close to the Navy once again brought back the old urge to roam and Frank rejoined the Navy that same year as chief ERA.

In two years' time Frank will be 50 years old and, according to naval regulations, he will be retired. This time he believes he will stay on the beach for good and perhaps go into the motel business. This may be true but if his chronic ailment of the "itching foot" returns at some future date Chief Galley may find himself back in his old habitat on the rolling pitching sea.—J.B.

ATLANTIC COMMAND

HMCS *Labrador*

Glowing words were used by the Canadian Ambassador to Denmark, H. F. Feaver, to describe the success of the *Labrador's* visit to Copenhagen in April.

Mr. Feaver, in writing to Captain T. C. Pullen, the *Labrador's* commanding officer, appended his report to the Canadian Government on the visit, which he described as an "unqualified success". The letter and extracts from the report follow:

Dear Captain Pullen:

Mrs. Feaver and I were very pleased to receive your letter of April 15th. In my turn, may I express my heartfelt congratulations on the excellent impression made in Copenhagen during

BIRTHS

To Able Seaman R. E. Brooks, *Stadacona*, and Mrs. Brooks, a daughter.

To Able Seaman Robert J. S. Davis, *D'Iberville*, and Mrs. Davis, a son.

To Lieutenant-Commander Davis C. Edwards, *Stadacona*, and Mrs. Edwards, a daughter.

To Chaplain (P) A. G. Faraday, *Stadacona*, and Mrs. Faraday, a son.

To Lieutenant (L) F. D. Jardine, *Stadacona*, and Mrs. Jardine, a son.

To Lieutenant (L) E. W. Lockwood, *Stadacona*, and Mrs. Lockwood, a son.

To Lieutenant-Commander C. H. P. Shaw, Naval Headquarters, and Mrs. Shaw, a son.

the recent visit of your ship. All members of the Embassy have the most pleasant recollections of the time spent with you and your officers and on board the *Labrador*, and we sincerely hope that the *Labrador's* visit to Copenhagen will be repeated in the years to come.

You will, I believe, be interested in the enclosed copy of our letter to Ottawa reporting on the visit. The attachments to the letter show conclusively how successful the voyage was. Copies have been sent to Ottawa for transmission to the Department of National Defence and I hope that you will keep this set as a personal reminder of your visit here.

My wife joins me in wishing you and your ship a most successful voyage to the Arctic this summer.

Yours sincerely,

H. F. FEAVER,
Ambassador.

Extracts from the Ambassador's Report:

The visit from April 9 to 15 to Copenhagen of the RCN's Arctic Patrol Vessel HMCS *Labrador*, under the command of Captain T. C. Pullen, CD, RCN, was, in my estimation, an unqualified success. No ship of the RCN could have commended itself more, either to the general public or to Danish officials than did this ship which has done so much excellent work in the Arctic during the past three years.

Captain Pullen and his officers added greatly to the store of goodwill which has been built up in Copenhagen in the past through visits of other RCN ships, while the scientists on board made innumerable contacts with their Danish colleagues which will be of great value to both countries. Lastly, through the really excellent publicity which appeared in the press and on television, citizens of Denmark were made actually aware of Canada's activity in a field which, because of Greenland, is of particular importance to this country.

6,000 Pints of Blood Donated

Over the past eight years civilian and service personnel of *Shearwater* have given more than 6,000 pints of their blood for the Canadian Red Cross blood transfusion service.

The donations were added up by R. S. Whyte, blood donor director for Nova Scotia, after a mid-June clinic during which *Shearwater* personnel gave 500 pints of blood.

The clinic was held with the blessing of Captain D. G. King, commanding officer of *Shearwater*.



A change in Wren officer appointments took place last spring at Naval Reserve Command Headquarters in Hamilton when Lt. (W) Winnifred Grace Lyons, of Hamilton and Toronto, (left) became Staff Officer (Wrens) to the Flag Officer Naval Divisions, succeeding Lt.-Cdr. (W) Jean Crawford-Smith, who had held the position since November 1954 and who has become Staff Officer (Wrens) at Naval Headquarters. (COND-4203)

The exceptional interest displayed by the Royal Danish Navy in the *Labrador's* visit was evident in the fact that the Commander-in-Chief was host the first evening of the visit at a supper dance given in the Naval Officers' Club while the following day the Commander-in-Chief (with Prince Knud, the King's brother, acting as co-host) entertained at a luncheon in honour of the Canadian visitors. All members of the Embassy staff who were shown around the ship have exceptionally pleasant recollections of the efficient and friendly manner of the officers and men, who were unfailing in their courtesy.

HMCS *Outremont*

On Saturday, April 27, the *Outremont* manned and cheered ship in the Saint John, New Brunswick, harbour approaches, as Cdr. P. G. Chance, embarked in the pilot vessel, left the ship and Lt.-Cdr. M. O. Jones assumed command.

On Monday, May 6, the *Outremont* sailed with an unusual nominal list. The band of the RCA was to take part in the "Bermuda Tattoo". With them, band members carried a very large consignment of baggage containing music and instruments for almost every occasion. Soon after departure the ship lifted to a gentle southerly swell, and the bandsmen were very happy indeed

to sight the friendly shores of Bermuda two days later.

When it was possible to take stock of casualties from sickness, they included one set of upper dentures which had belonged to a sadly disillusioned flute player.

The *Outremont* joined the *Haida*, with the pipe band of the Black Watch Regiment embarked and the *Buckingham* with the sunset guard from *Cornwallis* off Bermuda, and followed the *Haida* into harbour to come alongside at Hamilton.

Although the three ships only stayed in Hamilton overnight the privilege of being in the centre of activities in Bermuda made the stay most enjoyable.

HMCS *D'Iberville*

Thursday, May 16, was proclaimed Navy League day in Quebec City, in conjunction with the semi-annual National Council meetings of the Navy League of Canada in Quebec City from May 15 to 18.

The Quebec branch of the Naval Officers' Association of Canada held its annual meeting in *D'Iberville* on Wednesday, May 22.

The commanding officer, Cdr. J. M. Favreau, represented the RCN at the arrival of the foreign service attachés and Commonwealth service advisers on May 23 at the Quebec City airport. These attachés and advisers spent a

day in Quebec City visiting military establishments.

The *D'Iberville* annual pilgrimage to Mount Thabor took place on May 30, the Feast of the Ascension. Chaplain J. A. G. Gravel, RCN(R), celebrated mass at the sanctuary on the occasion.

CNAV *Scatari* visited Quebec City in late May on passage to the Great Lakes.

A ship's company dance was held on May 31 in the lecture room of the Grande Allee Armouries. This event was considered a success by all and in particular by the new entries under training.

On Tuesday, June 11, Rear-Admiral R. E. S. Bidwell, Flag Officer Atlantic Coast, arrived in Quebec City wearing his flag in the *Saguenay*. The *Huron*, *Iroquois* and *Micmac* accompanied the *Saguenay*.

Admiral Bidwell visited *D'Iberville* where the inspection of the guard was followed by small receptions both in the Wardroom and the Chief and Petty Officers' Mess.

HMCS Bonaventure

The entire cast of the variety show "Brightly Nightly" which was running at the Empire Theatre, Belfast, very kindly offered to put the show on in "B" Hangar one Sunday evening.

The after lift was rigged as a stage and the appropriate scenery constructed. The dance band played before the show and during the intermission. An estimated 800 members of the ship's company and their guests attended the gala performance which starred the Scottish comedian Alex Munro.

In May Ulster Festival Week was held and the Lord Mayor of Belfast sponsored a parade which consisted of floats depicting life in Ulster.

Entries were on a competitive basis. The *Bonaventure* ran a competition within the ship to decide on the theme for the float. This was won by a C2s' mess, which proposed a float showing Ulster settlers in early Canada. The float was an unqualified success and out of 108 floats entered in the parade won third prize for originality.

HMCS Shearwater

Sod-turning ceremonies for two new Royal Canadian Navy chapels at the *Shearwater* Naval Air Station were held last May with Mrs. D. G. King, wife of the base commander turning the first sod for the Protestant Chapel and Rev. Michael MacIsaac, retiring Chaplain of the Fleet (RC), doing the honours for the Roman Catholic Chapel.

Construction of the new chapels, according to chaplains of both faiths,

would begin immediately and be completed within "three or four months".

The chapels will be similar in construction to the Protestant and Roman Catholic churches recently opened at Shannon Park. Chapels of like construction are now being used by all branches of the Canadian Armed Forces, in Canada and overseas.

Large crowds of naval personnel, their wives and children attended the sod-turning ceremonies, held under a warm spring sun.

Speaking to members of both congregations Captain D. G. King said he was happy that the day had finally come when the base would have new chapels. "The sites are most appropriate and will serve the congregations even better," he said.

The shovel for the turning of the first sod for the Protestant chapel was presented to Mrs. King by Mr. Dauphinee, senior member of the church committee.

Father MacIsaac said that he would not see the Roman Catholic chapel as Chaplain of the Fleet "but I'll know it is here and being used".

Father Ronald MacLean, who has since become Chaplain of the Fleet also congratulated the congregation of the new chapel and urged them to think of it as a symbol of humility. "Let us dig away ourselves and begin to build within us again starting with this new chapel."

Roman Catholic ceremonies were arranged by Chaplain Charles Murphy, while Chaplains D. G. Peebles and G. N. Schaus were in charge of arrangements for the sod turning at the site to the Protestant chapel.

Until the chapels are completed—at a cost of \$86,000 for the Protestant chapel and \$95,000 for the Roman Catholic, including residence for the chaplain—both congregations will continue to worship in temporary quarters near the entrance to the base.

Recruiting - 1815 Style

THE FOLLOWING recruiting poster was used at the conclusion of the War of 1812 between Britain and the United States. Its purpose was to attract likely seamen to the Halifax Station 141 years ago.

Compiled by the Second Lieutenant of HMS *Leander*, a frigate serving on the North American Station of the Royal Navy, it provides a fascinating picture of the type of ship and seamen which preceded those of the RCN today.

Who would enter for a small craft?
Here's your Fine Whacking,
Double-banked Frigate,
LEANDER.

Can stow corvettes on her Booms,
Eighteen-Gun Brigs on her Quarters,
and Tens Up Astern!
Every Man a Double Berth, can
Play at Leapfrog on her Lower Deck
With Hammocks slung!

Twenty Prime Young Fellows
Wanted for the Admiral's Barge;
None need apply that would
Not Eat a Yankee Alive!

Going to that Fine Full-bellied
Station called HALIFAX,
Where you get a Glass of
Boatswain's Grog for Two Pence,
And a Cod for a Biscuit.
God Save the King!

The LEANDER
And a Full-Bellied Station!

One wonders what type of recruiting technique was used to recruit seamen to the "playground of the North Pacific" in the nineteenth century. What lures could Esquimalt have to compete with Halifax?—L.F.

ICE NAVIGATION IN THE WESTERN ARCTIC

FROM THE DAYS of the earliest explorers and whalers until 1935, little or no change took place in the method of navigating western Arctic waters in Canada. Operations in these waters were based on experience, personal knowledge of ice movements, channels and harbours, and the ship was conned through the ice or hazardous areas from the crow's nest. The main change was the advent of power to supplement sail and eventually to take over from sail. With one exception, the *Baychimo*, owned by the Hudson's Bay Company, all ships were of reinforced wooden construction and for the most part, very low powered.

In 1935 a significant event took place when three trappers, Messrs. Storr, Watson and Purcell, brought the motor vessel *Audrey "B"* into this area. She was built along the lines of a First World War sub-chaser and relied on her speed and shallow draft to evade the ice, as she could not withstand any pressure. In 1937 she survived one of the worst ice years, while the Hudson's Bay Company's ship *Fort James* was crushed in the pack and lost off Cape Bexley, and the RCMP vessel *St. Roch* was so severely strained by ice pressure that she had to be taken to Vancouver for repairs.

However, although this was no major change from previous concepts, all ships had a common denominator and were navigated without benefit of charts, radar, fathometer, ice reconnaissance by air, weather reports, and little or no communications.

The operation of the *Audrey "B"* gave rise to considerable speculation that this was the answer to operations in the western Arctic and that, with all the aids to navigation, ice could be successfully evaded. After the Second World War the Yellowknife Transportation Company of Edmonton, Alberta, decided to accept this theory and re-fitted the *Snowbird II* (a former LSM) in Victoria, B.C., to supply the RCAF loran base at Cambridge Bay. She was not to enter the ice pack under any circumstances but would rely on air reconnaissance to remain in safe waters. This ship entered the Arctic in 1948 and after four years of successful operations was taken out to Vancouver. On drydocking, there was no evidence of any ice damage and she was found to be completely seaworthy.

The building of the Distant Early Warning line in 1955 along the Arctic coast called for the major supply of materials and equipment to be delivered by water. This was to prove the greatest assault on the unknowns and hazards of northern waters since the time of the Franklin search in 1948. However, little or no attention had been given to the successful voyages of the *Audrey "B"* and *Snowbird II* and consequently the U.S. Navy (Military Sea Transportation Service), who were charged with the responsibility of sealift, were faced with intelligence relating to the operations of small underpowered wooden ships, unassisted by any aids to navigation, no charts from the Alaska border to Boothia Peninsula, and channels which, out of expedience, once found safe were used annually by all concerned without any further search for deeper or wider passages.

Two vessels, the USCGC *Storis* (WAG 38) and the USS *Requisite* were to change history in so far as navigation went in the Western Arctic from "By guess and by God" to one of almost normal procedures. They were ordered to head the task force in Canadian waters and charged with the responsibility of charting a track from the Alaskan border to Boothia Peninsula as well as sounding the harbour approaches to all DEW sites. The harbours proper or anchorages were dealt with by the U.S. Hydrographic Service and units from the U.S. Navy's UDT Establishment. As the result of the hydro work performed by these ships during the 1955 season, elements of the task force were able to follow in safety with limited charts of the area and completed their mission without one failure. Whole new channels, deeper and wider than those used for decades, had been discovered and charted, viz: Dolphin Union Straits, Queen Maud Gulf and Simpson Straits, and the limiting factor in draft appeared to be 23 feet in Simpson Straits.

By the completion of the 1955 delivery, experience dictated a hard look at the season's operation. Old timers along the northern coast, particularly between Icy Cape and Herschel Island had long advised shipping to remain between the Arctic pack and the shore. The "Graveyard" of the Arctic aptly describes this area. Once in the main pack many vessels had suffered fatal

The Author

The accompanying article is written by Squadron Leader Scott E. Alexander, RCAF. The question which is bound to arise in many a naval mind is: What can a squadron leader know about surface navigation in the Arctic? The answer in this case is "Quite a bit", as will be evident from the following brief notes on his career.

Scott Alexander was born 45 years ago in Vancouver, B.C., worked in canneries while attending college, qualified as a coastwise skipper but instead of making immediate use of his qualifications joined the Royal Canadian Mounted Police in 1932.

He joined the RCMP patrol ship *St. Roch* in 1934 and during the next four years made several Arctic voyages in the course of which he learned to speak Eskimo and was for a time in charge of the RCMP detachment at Cambridge Bay on Victoria Island north of Canada's Arctic coast.

His leaving the RCMP to join the RCAF in 1942 did nothing to relieve him of Arctic duties. His first major posting was to Goose Bay, Labrador, where he was chief security officer and conducted search and rescue operations. He made flights with service and scientific objects to Ungava peninsula and Baffinland.

During subsequent service at Edmonton and Air Force headquarters he was an adviser on Arctic problems and for four years he was officer commanding the RCAF Survival Training School, with headquarters at Edmonton. Then, in November 1955, he was chosen for service at the Distant Early Warning Line Project Office in New York City.

This summer, for the third successive year, Squadron Leader Alexander is serving in Arctic waters. He is on loan to the U.S. Coast Guard and is serving as ice pilot for three Coast Guard cutters, which have as one of their objectives the investigation of a new Northwest Passage, west to east, through Bellot Strait — a project in which the Labrador, approaching from the east, is offering a helping hand.

damage and not even the most powerful icebreaker could make any impression on it.

Ships that did enter the pack found great difficulty fighting their way clear into open water when that occurred and consequently lost considerable time in working the ice into leads. The adage is this: When the Arctic pack is in, nothing will move; when it is out, any vessel can move.

The practice had been for the task force to follow the "Wind" type icebreakers, but with a draft of 29 feet they were generally forced to operate in ice. This resulted in severe damage to some of the other ships attempting to follow. Even the icebreakers were damaged on occasion. With proper air reconnaissance of the ice, and weather reports, it was considered that, by using the "inside" passage, the breaker could be relegated to a position of minor importance and for stand-by emergency.

Again in 1956, the *Storis* and *Requisite* led the way and enlarged upon the hydro information already obtained. Ships were limited to 16-foot draft and were able, for the most part, to stay inside the ice. Damage caused by ice

was very minor compared to 1955 and no ship grounded through being forced off course by the pack. The sealift was completed in record time and all ships rounded Point Barrow before the end of August.

However, again experience indicated that the task force was rushing the season and better conditions should prevail if the sailing dates were set back two weeks. There had been a mistaken impression that all ships should clear Point Barrow for outside by September 10. This was an arbitrary date set for the old-time wooden ships. As the season got later, young ice would form during the night or colder days, particularly in the vicinity of old ice. When these low-powered ships attempted to force their way through the young ice, it would mush up around the bows and hull forcing the ship to a standstill. It was impossible to work and the ship so caught was in extreme danger. This was not the case with large steel vessels of much higher horse power and that type of ice was easily run through. This meant that the season could be extended to approximately the end of October.

It would now appear obvious that the type of vessel best suited for the western Arctic is the shallowest draft with the highest speed commensurate to the efficiency of delivery of the freight load involved. With proper air reconnaissance and weather reports there should be no trouble avoiding ice. If this principle is followed and utilizing the available aids to navigation the problem now becomes one of simple navigation. There are no hazards as the early skippers knew them and today the master of a vessel is dealing with known facts with the imponderables removed.

The *Storis* is again leading the way for the 1957 season but without her redoubtable smaller partner, *Requisite*. This time she is accompanied by two other WAGLS and it is hoped to transit the Northwest Passage from west to east through Bellot Straits, from Seattle to New York. The Royal Canadian Navy's *Labrador*, which is the first icebreaker to circumnavigate the North American continent, will rendezvous with the American ships at Bellot Straits and assist in the completion of the operation.—S.E.A.

Dinghies race on Dow's Lake July 14 during the first Sea Cadet regatta sponsored by the Ottawa Squadron of the RCNSA. (O-8090)



'42 - - THE YEAR THE TIDE OF WAR BEGAN TO TURN

THE YEAR 1942 has its memories for all those who participated in naval, military or air operations of the Second World War. Yet how many could name offhand all the epoch-making events of that year? A five-ocean war, the dreadful depredations of U-boat and bombers at sea, and the shattering battles on the grainlands of Russia, are sufficient to confuse and even baffle the memory of the most ardent students of Second World War history.

Captain Roskill showed us in the first of the planned three volumes of "The War at Sea" that he had the eye of a seaman; the second volume of this official history confirms his reputation as an outstanding naval historian who can take his readers—whether they be naval, army or air enthusiasts—through the shocks of 1942 to the hopeful horizons of 1943.

After the unrelieved gloom of 1941, the early months of 1942 saw both the British and American Pacific Fleets still staggering from the blows of the Japanese in the Far East. Before the tide turned places like Ceylon, the Solomons, Maldives and Darwin—to name but a few—became more than mere geograph-

ical expressions to the Allied cause. Retribution was not far off.

The strategic victory of the Coral Sea, besides marking a revolutionary change in naval tactics (for not a single surface ship of either side sighted the enemy) was but the prelude to the confirmation of the decisive nature of carrier-borne air weapons in the maritime strategy of the Allies. British carriers had already pointed the way at Taranto, Matapan and in the pursuit of the *Bismarck*. Now at Midway the Japanese were forced to withdraw because their precious carrier force was destroyed.

Malta convoys, the struggle for Suez and North Africa on land, the German U-boats and bombers wreaking devastation on shipping, the mortifying story of the escape up-Channel of the German battle cruisers and the growing demand for more maritime aircraft (a controversial subject in the postwar period) to increase both the defensive and offensive aspects of the Battle of the Atlantic are a few frank reminders of the many-sided blows and problems which faced maritime strategy in this desperate year.

While it is naturally concerned chiefly with the Royal Navy, it also deals with

BOOKS for the SAILOR

those phases of the Battle of the Atlantic in which the Royal Canadian Navy gained its most cherished battle honour. For many Canadians the North Atlantic in 1942 was the focal theatre of operations, where Canadian-escorted convoys fought their grim battle with the enemy and the elements.

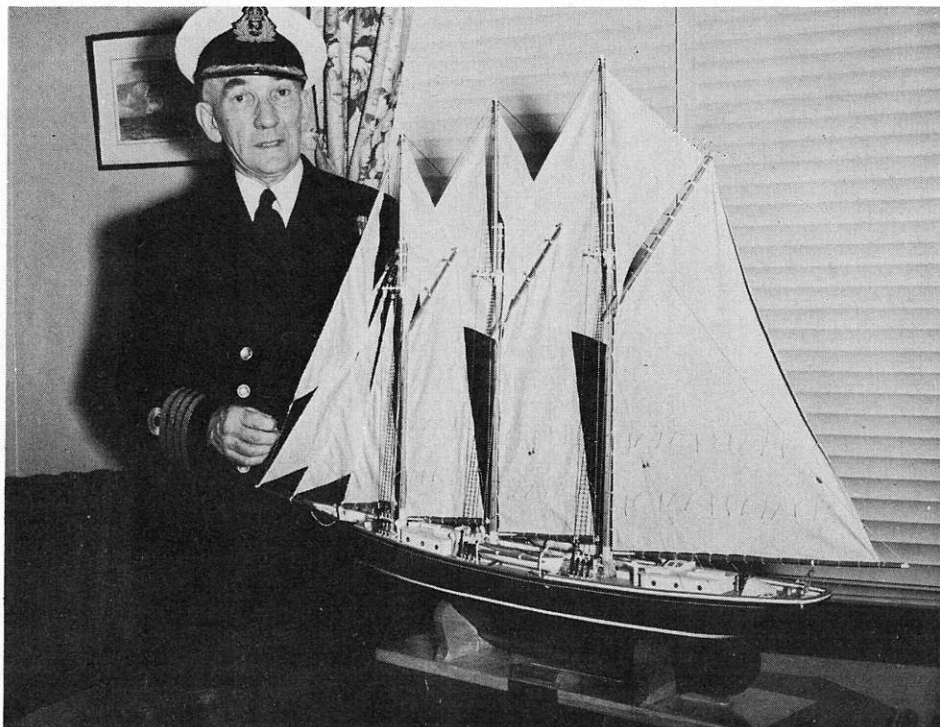
The volume contains references to famous RCN ships, the names of which have recently been proudly perpetuated in the naming of the RCN's new destroyer escorts, which fought the longest battle of the war in the Atlantic. We read of HMCS *Assiniboine* ramming and sinking *U-210* (a useful map of this particular convoy action is attached) and the night sinking of the *Ottawa* by enemy torpedo in September 1942.

The final chapters bring the war up to the end of May 1943 and it is heartening to read of the Canadian contribution to the turning point of the Atlantic battle, which saw the introduction of new anti-submarine measures and the provision of air cover on the convoy routes. By this time the RCN was doing half the convoy work in the North Atlantic, in addition to operations elsewhere, and the new command of Commander-in-Chief North-West Atlantic under Rear-Admiral L. W. Murray, RCN, testified to the ever increasing Canadian escort vessel strength in the Western Atlantic. Supported ably by its RCAF colleagues based at Gander, Sydney, Halifax and Yarmouth, the RCN began with its naval partners to reap the benefits of "the patient pursuit of a maritime strategy".

Not even a rigorously condensed account of this volume can do it justice, for it is as usual excellently produced with superb photographs, appendices, maps and statistical tables.

Of particular interest to Canadian readers is the naval side of the Dieppe raid in August of that year. The lesson learned from the naval point of view and later put into effect at the North Africa and Sicily landings was the need for adequate supporting fire from long and short range bombarding ships.

There is the episode of valiant courage displayed by Captain R. T. Peters, born in Prince Edward Island and later a resident of British Columbia, who



A perfect scale model of HMCS *Venture*, one-time training schooner in the RCN, has been built by Captain (E) C. M. O'Leary, RCN (Ret'd), of Halifax. The name of the schooner lives on in the RCN as the junior officers' training establishment at Esquimalt, B.C. The handsome model is his first.

was awarded a posthumous Victoria Cross for his exploits at the assault of Oran.

Many of us too will remember, although at the time we were blissfully ignorant of the details of events, the "monster" troop transports which independently crossed the Atlantic in this fateful year. The two majestic Queens transported 200,000 troops in six months—a fine feat in the midst of the sad story of the 119 ships of 729,160 tons which were lost to U-boats in Novem-

ber of 1942. Painfully slow though it was, relief was just around the corner.

Few will be disappointed with this book. Even the naval experts will shudder at the way we survived the hammer-blows that came from all quarters that year.—L.F.

THE WAR AT SEA, 1939-1945 (Volume II), The Period of Balance. (United Kingdom Military Series), by Captain S. W. Roskill, Her Majesty's Stationery Office, 539 pages with many charts and graphs. Price £2-2-0.

support, for which we should be duly thankful. Similarly, the lack of aircraft carriers and overseas bases crippled the surface fleet tactically. Even so, its very existence forced us to concentrate heavy units which could have been most useful elsewhere; but Hitler understood this so little that at one stage he ordered all heavy units to be paid off.

There is a very clear section on carrier warfare in the Pacific, and another on amphibious operations. The author particularly admires the USN supply and maintenance system, which allowed their fleets to stay at sea up to ninety days at a time.

All in all, the chief merit of this book is to point out that, if you must have a war, the needs and principles of sea-power must be given the utmost consideration. In the author's view, Germany's defeat stemmed chiefly from her failure to recognize this. A look at Napoleon's downfall should have made it plain.

Anyone who is interested in naval matters should make this book required reading.—D.L.H.

SEA WARFARE 1939-45, A German Viewpoint, by Vice-Admiral Friedrich Ruge, translated by Commander M. G. Saunders, RN. Published by Cassell & Company Ltd., London, and distributed in Canada by British Book Service (Canada) Ltd., Toronto. 337 pages, illustrated with photographs, maps and diagrams. Price \$8.50.

HOW THE WAR AT SEA APPEARED TO GERMANY

VICE-ADMIRAL Friedrich Ruge, the writer of "Sea Warfare 1939-45" must be unique among surviving senior officers of the German Navy. Not only has he had a distinguished career (he is now head of the Naval Section of the West German Ministry of Defence) but he has a clear, simple literary style which makes his many writings very informative and most interesting. This book is no exception, and suffers nothing in translation, which is excellent.

"Sea Warfare" is a non-technical account of the naval actions of the last World War from the viewpoint of an expert who was on the other side. The subtitle, "A German Viewpoint", is not really correct, since his outlook is far more than that of a professional sailor, which is an international thing. He makes no excuses for Hitler, nor for the staff bungling which caused so much wasted German effort, but he does defend the morality of various actions, such as the sinking of the *Athenia*, on the grounds of military expediency, and states at one point that "The Wehrmacht fought the war without hatred—save only against partisans, if indeed that can be called war—and its escutcheon remained untarnished". Since he wrote for a German public, his attitude is probably natural, and may also account for the impression he gives that the Germans fought by the rules whereas the Allies often did not.

Otherwise the book is easy to read and enlightening. It gives enough detail of naval campaigns to let the reader see the results of bad planning by a vacillating High Command and an egomaniac Fuhrer. He shows clearly how basic strategic reasoning was disregarded and how little the leaders understood the role and importance of sea-power in any major campaign. One of the most interesting sections deals

with the acute embarrassment caused the Germans by Italy's precipitate entrance into the struggle without strategy, plans, logistics or anything but a fear of losing the pickings.

Since Germany went to war prematurely, before the Navy had begun to fulfil the well-known Z-plan, the naval war was perforce a trade-attrition battle. Even then, the Navy was severely hampered by the fact that there was no naval air arm and that Reichsmarschall Goring refused to let the Luftwaffe provide and train anything like sufficient forces for naval co-operation. The U-boats, consequently, never received adequate information or



Twenty-six Royal Canadian Sea Cadets and their officers are shown as they were about to board their RCAF North Star for their flight to the Empire Sea Cadet Camp in England. The man in "civvies" is E. D. Cornell, of the Montreal branch of the Navy League of Canada, who bade them farewell. (ML-5765)

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.

ADAMEK, Donald L.....LSEM1
ADAMS, George W.....LSQM1
ANDREWS, John.....LSCV1
ANGEL, John R.....LSCS2
ARCHER, Carl.....LSCS2
ARMSON, Colin.....C2PC4
ARSENAULT, Donald J.....LSRP1
AYERS, Lionel F.....LSAF2

BALDOCK, Franklin H.....LSAM2
BARNES, Douglas P.....LSAA1
BARRINGTON, Arthur H.....LSMA1
BAXTER, Warner.....LSCS2
BECKETT, Brian H.....LSCV1
BECKETT, Rex D.....P2ER3
BELANGER, Wilfred J.....LSAR2
BENSON, George F.....LSQM1
BERANGER, John G.....LSCS2
BEVAN, David P.....P2MA3
BILODEAU, Jean-Paul.....LSCR1
BINDER, Robert C.....P1CR3
BLACK, Andrew J.....P2GA3
BLACK, James O.....P2CV2
BLACKMAN, Richard.....P2EM2
BLASCHEK, William R.....LSEM1
BLIGH, Harris K.....LSBD2
BONN, Russell W.....P2EG3
BOOKER, Stuart D.....LSED3
BOONE, Harvey W.....LSAR1
BOUFFARD, Claude J.....LSLR1
BOYD, Thomas C.....LSCS2
BROWN, John A.....LSBD2
BROWNING, Orval C.....P2AF2
BURKE, Edward A.....P1CS3
BURRELL, James R.....P2EF3
BURTON, Arthur E.....LSCR1
BUTTS, Thomas H.....P2AF2

CALEY, John R.....LSCS2
CARLESS, George A.....LSAR2
CARNAHAN, John W.....P2CV2
CASE, Allen S.....LSCR1
CHATHAM, William A.....P1MA4
CHORNEY, Michael G.....P2EF3
CLARKSON, Thomas.....C1CS4
CORNISH, Ernest A.....P1CV3
CORVELEYN, Robert P.....LSAA1
CRANE, Spencer.....LSQM2
CRAWLEY, Carl A.....C2CV3

D'AMOUR, Marc J.....LSAA1
DARCHEN, Roland C.....LSAC2
DAVIES, Edward A.....LSCV1
DELONG, Orlando J.....LSCS2
DEMONE, Elder L.....LSCS2
DENAULT, Earl T.....P1CV3
DEVLIN, Ronald J.....P2ER3
DILL, Ronald S.....LSQM1
DOBBIE, William H.....LSMA2
DOUCETTE, Roy J.....P2EF3
DOUGLAS, John J.....LSRC1
DOWDALL, Francis T.....LSEA2
DRAPER, William E.....LSAM2
DRINNON, Stewart M.....P2CR2
DURDLE, Edward B.....LSTD2



Their feat of sailing from Tobago to Grenada in an open boat hardly put them in the same league with Captain Bligh, but may have set a target of sorts for the RCN. This whaler crew from the Micmac made an overnight journey of 76 miles. The December 1954 issue of "The Crowsnest" carried the story of a 58-mile voyage of one of the Cayuga's whalers in Japanese waters, an excursion which, lacking favouring winds, took 36 hours and a total run of 85 miles. Shown here, front row, left to right: Petty Officers R. W. Moll and Leonard Rinder, Lt. T. S. Hayward and Mr. N. B. Pakenham. Rear: POs F. G. McBride, Bruce Hewitt and Mid. P. D. Crofton.

EBURNE, Andrew G.....P1RT4
EDMONDS, Leonard R.....P2CR2
EDWARDS, Ronald H.....LSQM1
ELTON, James R.....P2AT3
EMPEY, Roy G.....LSRP1
ESTES, Ronald W.....P1CS3

FAIRFIELD, Donald E.....LSCV1
FAULKNER, Richmond S.....P1EM4
FELL, William B.....P2ER3
FERSTER, Everett H.....LSEM1
FITZGERALD, David S.....P2SH3
FLEMING, William.....LSCR1
FLETCHER, Ronald D.....LSRP2
FLOWERS, Horace B.....LSRP1
FORD, Clifford B.....LSEM1
FORDHAM, Roy E.....LSCS2
FORTIN, Emilien J.....P1HA3
FRAMPTON, Derwin O.....LSCS2
FRASER, Peter E.....LSCV1
FRENCH, William G.....LSBD2
FRIIS, George A.....P2CV2
FRY, Kenneth A.....LSEM1

GALE, Milton R.....LSTD2
GEORGE, Robert G.....P2SH3
GLASSFORD, Lloyd H.....P1CR3
GOLEBOWSKI, Frank W.....LSQM1
GORDON, Dennis C.....P2GA3
GOULD, Norman A.....P1CS3

HALLIDAY, William K.....LSCR1
HARDY, Marcel J.....LSEM1
HARRETT, Carman G.....LSEM1
HAYWARD, Arthur E.....P2ER3
HELSEBY, Jack.....P1ET4
HENDERSON, Harvey W.....P2ER3
HICKMAN, Clifford J.....LSAA1
HILL, Grover C.....LSMA2
HILL, Michael J.....P2ER3
HILL, Stanley W.....P1RT4
HOBBS, John D.....LSCS2
HODGKINS, Frederick W.....C2CV3
HORRELL, Donald N.....LSCR1
HOULDEN, Mark L.....LSAR2
HUGHES, Leslie C.....P2CR2
HUGHES, Owen A.....LSTD1

IRWIN, Robert F.....P2ER3

JACKLIN, Charles W.....LSRP1
JACKSON, Lionel K.....LSRP2
JOHNS, Henry J.....C2CK3
JOHNSON, Allan V.....LSEM1
JUULSEN, Robert H.....P2EF3

KENNEALY, Timothy J.....P2CS2
KOBAYASHI, John A.....LSRP1
KYNASTON, Bernard F.....P1ET4

LADOUCEUR, Andrew J.....LSCR1

LAINE, Robert J.....LSCV1
 LAMOUROUX, Louis G.....P2CS3
 LANGLOIS, Howard F.....P2CK2
 LAPIERRE, Gerald L.....LSCS2
 LAPOINTE, Jules J.....LSAR1
 LAPORTE, Wayne L.....LSAA1
 LATAILLE, Rejean J.....LSRT2
 LAUZON, Rudolph J.....P2EF3
 LAVERGNE, Conrad T.....LSAR1
 LAWRENCE, John S.....LSRP1
 LEBLANC, David A.....LSAF2
 LEE, Donald G.....LSCS2
 LEES, Laurence.....LSCV1
 LEGREE, Arnold J.....LSCV1
 LEVESQUE, Gerald J.....P2VS2
 LINDSAY, Ronald P.....P2ER3
 LYGARD, Donald J.....P2EM2

MacKINTOSH, Kenneth W.....P1EM4
 MacLEAN, John D.....LSCR1
 MacLEOD, Angus N.....P1VS3
 MacLEOD, Raymond J.....LSSW2
 MacMILLAN, Joseph S.....LSQM1
 MacNAB, Grant A.....LSBD2
 MacPHEE, James R.....LSMA2
 McCABE, Ernest H.....LSEM1
 MCCOLL, Karl T.....LSCV1
 McCOMB, Edward G.....LSCV1
 McCORMICK, Ron P.....P2AT3
 McDONALD, John C.....LSCS2
 McGOWAN, James D.....P1CR3
 McGRATH, John T.....LSCS2
 McLAUGHLIN, John T.....C1R14
 McLEAN, Ronald J.....LSAR1
 McMENEMY, Ernest S.....C2CR3
 MANLEY, Patrick J.....LSCV1
 MARGERISON, David J.....LSCV1
 MARTIN, Raymond H.....LSCS2
 MARTIN, William A.....LSCR1
 MATTHEWS, Deryck B.....LSCS2
 MAYNE, George M.....LSAF2
 MAZACHOWSKI, Michael B.....LSQM1
 MEDYNSKI, Arthur P.....LSEM1
 MESSERVEY, Murray J.....P2EM2
 MILLMAN, Hugh A.....P2SH3
 MULLOCK, William R.....LSEM1
 MUNRO, John M.....LSAA1

NAIRN, Douglas J.....LSCR1
 NETHERY, James A.....LSCV1
 NORMAN, William C.....LSCS2
 NORRAD, Donald C.....P1EM4

OLSON, Robert O.....P2EM2
 ORTH, Roy O.....P1EM4

PARKIN, Alan G.....P2CR2
 PARRISH, Charles G.....LSCV1
 PAYNE, Charles A.....LSAA1
 PECORE, Bernard A.....LSAM2
 PHEBY, Gerald S.....LSBD2
 PICKAVANCE, Harold J.....LSEM1
 POWROZ, William J.....C2CR3
 PRICE, Hugh J.....LSAA1
 PROWSE, Charles W.....P2ER3

QUACKENBUSH, Harvey W.....LSCS2
 QUICK, Ronald W.....P2EF3
 QUINN, Richard F.....P2ER3

RANDALL, Douglas A.....LSQM1
 RANKIN, Glenn M.....LSCR1
 REEVES, Joseph N.....LSCV1
 REID, James C.....P1SH4
 RICKWARD, William A.....P2EF3
 RILEY, Gerald A.....P2CV2

RISPIN, William B.....LSRA2
 ROBERGE, Bernard L.....C1V14
 ROBINSON, John C.....LSAA1
 RODGER, Robert.....LSEM1
 ROLLET, Frank E.....LSCR1
 ROSCOE, William A.....P1EM4
 ROUTIER, Joseph G.....LSRP1
 RUFFELL, Walter D.....LSRC1
 RUPPEL, Harry.....P2CV2
 RUSTON, Richard V.....LSEA3
 RUTHERFORD, Donald.....P1RT4

SCHELL, Roland F.....LSAR2
 SCHEUER, Karl H.....P2BD3
 SELLERS, Marie L.....WPIML3
 SETTERINGTON, Richard M.....P2ER3
 SEYMOUR, Paul A.....LSBD2
 SHARPLES, Edward J.....LSEM1
 SHEEHAN, Donald G.....P2ER3
 SHEWFELT, John G.....LSCS2
 SHIER, Ronald D.....LSCS2
 SINDERLY, Peter P.....LSED2
 SKEET, Alfred M.....LSEM1
 SLADE, Edward W.....LSCR1
 SMITH, Lester H.....LSEF3
 SMITH, Philip H.....P2ER3
 SMITH, Richard.....LSCS2
 SMITH, Ronald C.....LSCV1
 SPENCE, John C.....P1ET4
 SQUIRE, Bruce H.....P2TA3
 STEVENSON, Jerry P.....P2CR2
 STEWART, Maxwell M.....LSCR1
 STRACHAN, Donald A.....LSEA2
 STURGESS, William F.....LSCR1

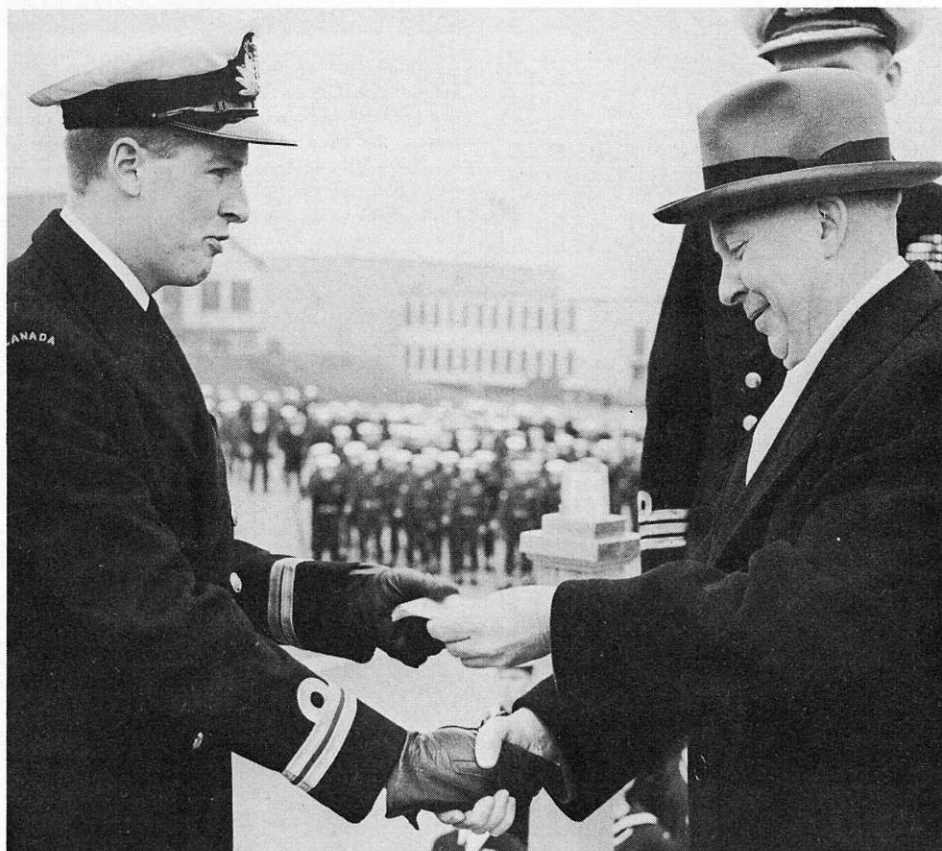
TANGUAY, Benoit G.....LSAF2
 TATE, Ronald J.....P2CV2
 TAYLOR, William H.....P2MA3
 TENNANT, Lynn W.....LSCS2
 THIBAUT, Richard J.....LSAR1
 THOMAS, George R.....LSQM1
 THOMPSON, Brian E.....LSEM1
 TODD, Vernon.....P2RR3
 TUBMAN, George E.....LSEM1

URQUHART, Ian A.....P2ER3

VERMETTE, Raymond W.....P2CV2

WARE, George A.....LSCR1
 WATSON, Garth E.....LSLR2
 WEST, Roland G.....P2AR2
 WESTWOOD, Kenneth S.....LSCR1
 WETMORE, Robert W.....LSCR1
 WHEELER, Robert V.....P2SH3
 WHITE, James A.....LSCS2
 WHITEHORN, Howard A.....LSCS2
 WHITTINGHAM, John J.....LSCS2
 WILKINS, James F.....LSCS2
 WILLISON, Donald G.....LSEM1
 WILSON, John W.....P1RT4
 WOODS, John.....LSCV1
 WOODS, Michael A.....LSRP1
 WORKMAN, Riley J.....LSMO2
 WRIGHT, James A.....P1EA4

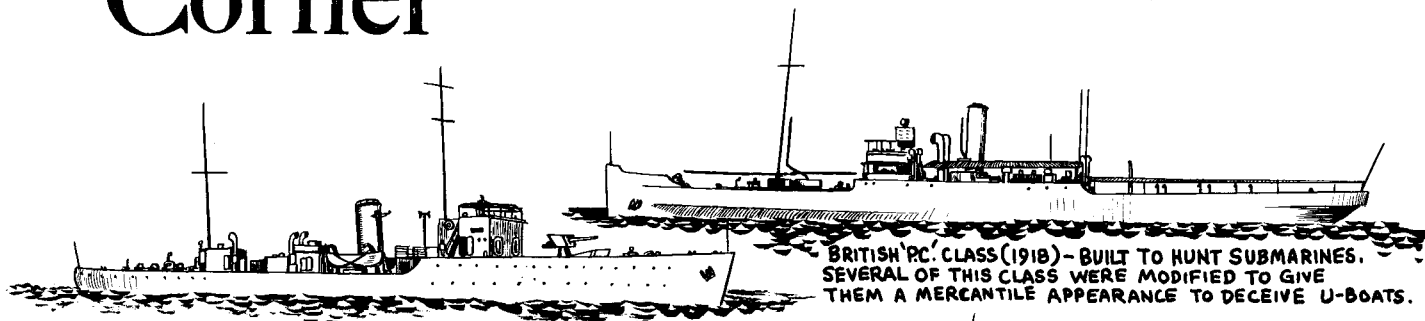
ZIRK, William E.....LSCS2
 ZUTTER, Percy N.....LSTD2



Instr. Lt. Peter H. Watson (left) receives a cheque for \$100 from H. R. McDonald, president of the Nova Scotia branch of the Naval Officers' Associations, at ceremonial divisions in Cornwallis. Lt. Watson, on the staff of the Educational Training Centre there, was the 1956 winner of the Barry German Prize in Naval History, founded by the Naval Officers' Associations of Canada, for his essay, "The Impact of the Royal Navy on the History of Nova Scotia, 1749-83". (DB-8787)

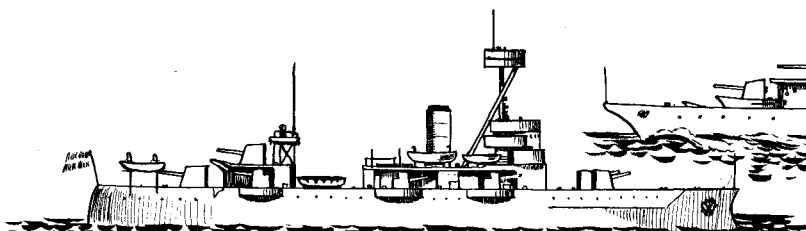
Naval Lore Corner

Number 49
PATROL VESSELS AND SLOOPS

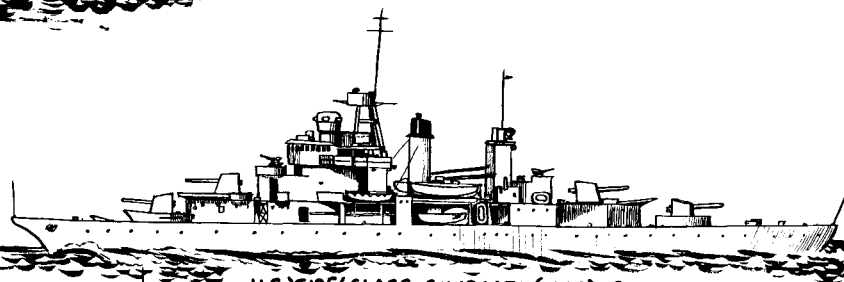


BRITISH 'PC' CLASS (1918) - BUILT TO HUNT SUBMARINES. SEVERAL OF THIS CLASS WERE MODIFIED TO GIVE THEM A MERCANTILE APPEARANCE TO DECEIVE U-BOATS.

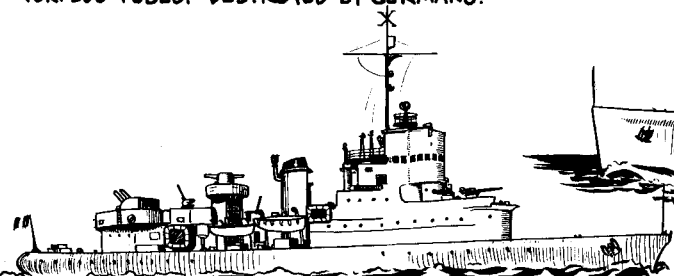
BRITISH 'KINGFISHER' CLASS - ANTI-SUBMARINE PATROL VESSELS (1935-38), ONE 4 INCH GUN AND DEPTH CHARGES.



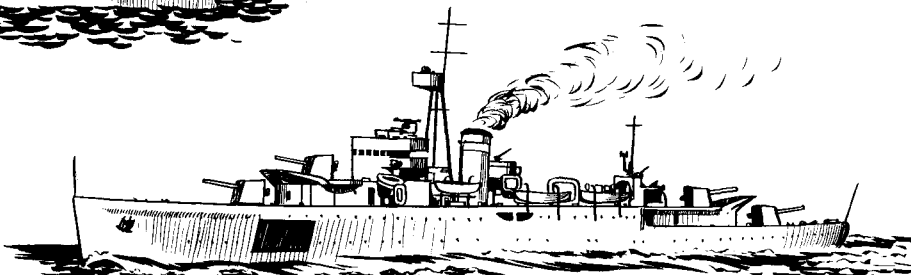
DANISH SLOOP 'NIELS JUEL' (COAST DEFENSE) - 3800 TONS, 10 5.9 IN. GUNS, 2 SUBMERGED TORPEDO TUBES. DESTROYED BY GERMANS.



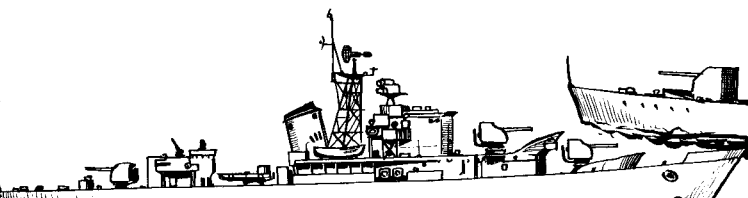
U.S. 'EIRE' CLASS GUNBOATS (1936), 2000 TONS, 4 6 INCH GUNS. CARRIED A SEAPLANE.



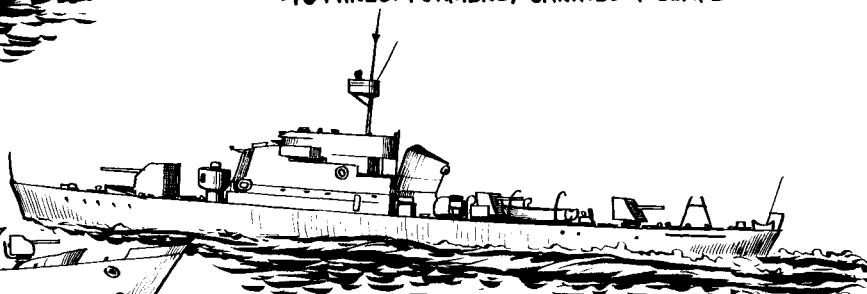
FRENCH 'ELAN' CLASS ESCORTS - VERY LOW FREEBOARD, FOR SERVICE IN MEDITERRANEAN.



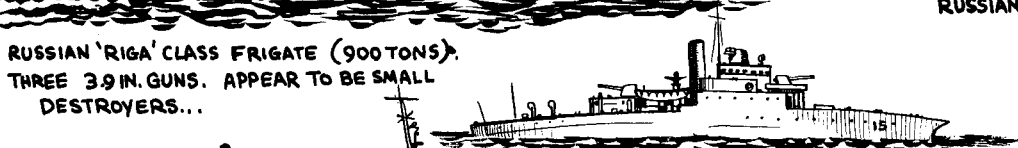
PORTUGUESE SLOOP 'BARTOLOMEU DIAS' - BUILT IN BRITAIN, DESIGNED FOR COLONIAL SERVICE - 4 4.7 IN. GUNS AND 40 MINES. FORMERLY CARRIED 1 SEAPLANE.



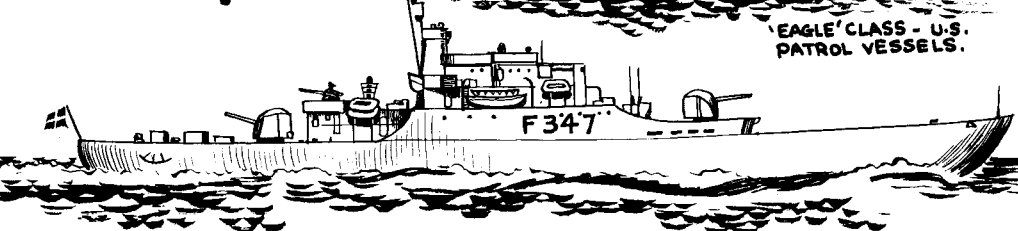
RUSSIAN 'RIGA' CLASS FRIGATE (900 TONS). THREE 3.9 IN. GUNS. APPEAR TO BE SMALL DESTROYERS...



RUSSIAN 'KRONSTADT' CLASS PATROL VESSELS.



'EAGLE' CLASS - U.S. PATROL VESSELS.



DANISH CORVETTE 'TRITON' CLASS. (ITALIAN BUILT) - 760 TONS, 2 3 IN. GUNS. BUILT FOR PATROL AND ESCORT DUTIES.

