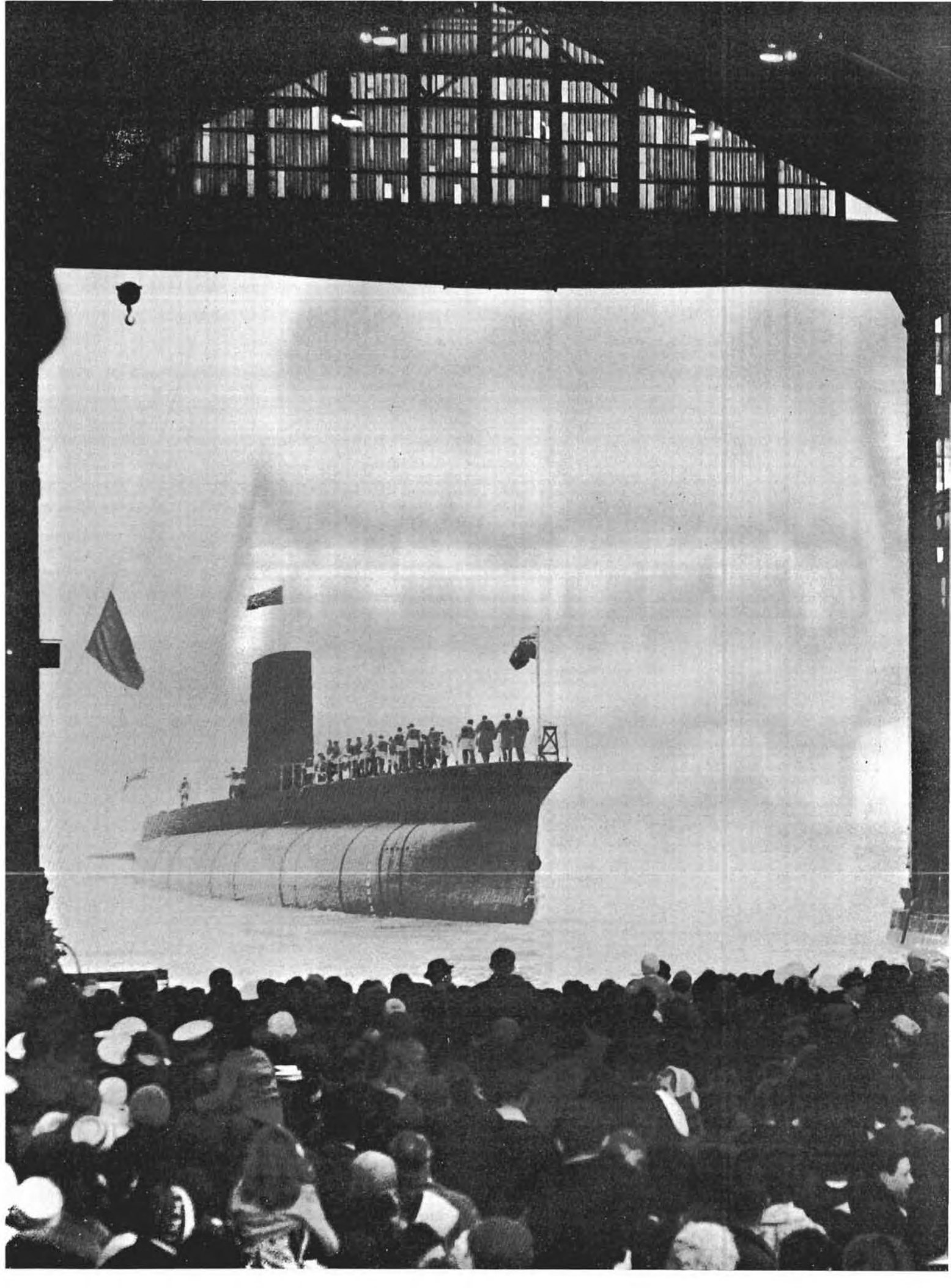
The CROWSNEST

Vol. 16 No. 3-4 OUR NAVY Issue March-April, 1964



The CROWSNEST

Vol. 16 No. 3-4 THE ROYAL CANADIAN NAVY'S MAGAZINE MARCH-APRIL 1964

CONTENTS

The Cover—As it is observed elsewhere in this issue, one of the important naval occasions of 1964 will be the wedding of the Sea King anti-submarine helicopter to the converted St. Laurent class destroyer escorts, of which four will be in service by the end of the year. The cover shows a Sea King (CHSS-2) helicopter. (DNS-31618)

OUR NAVY

This is the sixth consecutive issue of *Our Navy* that has appeared as a special issue of *The Crowsnest*. Some of the articles have already appeared in the 1964 RCN issue of Canadian Shipping and Marine Engineering News, Toronto. The regular *Crowsnest* departments omitted from this issue will be resumed with the May issue.

On the Opposite Page: This is the scene at the launching on February 29 at Chatham, England, of the *Ojibwa*, first of three Oberon class submarines being acquired by the Royal Canadian Navy for anti-submarine training or operational duty as required. (O-15413-6)

Negative numbers of RCN photographs reproduced in The Crowsnest are included with the caption for the benefit of persons wishing to obtain prints of the photos.

This they may do by sending an order to the Naval Secretary, Naval Headquarters, Ottawa, attention Directorate of Naval Photography, quoting the negative number of the photograph, giving the size and finish required, and enclosing a money order for the full amount, payable to the Receiver General of Canada.

Sizes, finish and the National Defence standardized prices, follow:

4 x 5 (or smaller) glossy finish only	$ .10
6½ x 8½ glossy finish only	.40
8 x 10 glossy or matte finish	.50
11 x 14 matte finish only	1.00
16 x 20 " " "	3.00
20 x 24 " " "	4.00
30 x 40 " " "	8.00

SUBSCRIPTION RATE

The Crowsnest may be subscribed for at the rate of $2 a year; outside of North America, $3. Orders, accompanied by cheque or money order payable to the Receiver General of Canada, should be sent to:

THE QUEEN'S PRINTER,
Department of Public Printing and Stationery,
OTTAWA, Ontario

Communications, other than those relating to subscriptions, should be addressed to:

EDITOR,
The Crowsnest,
Naval Headquarters,
OTTAWA, Ontario.

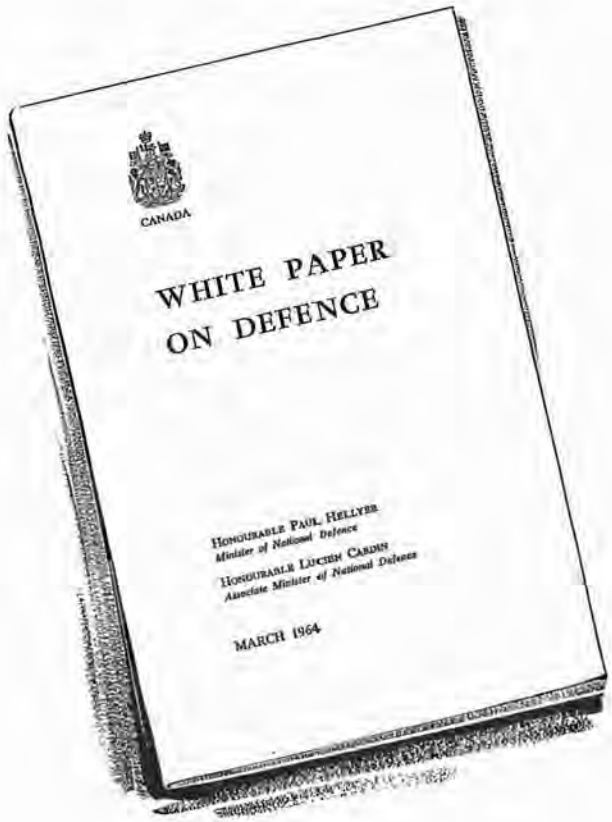
TOWARD UNITY

FORTHCOMING changes in the administration and organization of Canada's armed forces are outlined in the *White Paper on Defence* tabled in the House of Commons on March 26 by Hon. Paul T. Hellyer, Minister of National Defence.

The *White Paper* opens with a statement that the objectives of Canadian defence policy cannot be dissociated from foreign policy. These objectives are to preserve the peace by supporting collective defence measures to deter military aggression; to support Canadian foreign policy, including that arising out of our participation in international organizations, and to provide for the protection and surveillance of our territory, our air space and our coastal waters.

The second section of the paper deals with policy since the end of the Second World War in 1945, outlining developments which led to Canada adhering to the United Nations Charter, acquiring membership in NATO, forming a partnership with the United States in the defence of North America, and taking national measures to discharge the responsibility for the security and protection of Canada.

Reorganization of the Armed Forces during the post-war years is outlined, this having taken place because of the realization that the pre-war mobilization base had been inadequate. This brought about a two-and-a-half-fold increase in regular manpower and a five-fold increase in the defence budget.



Future Policy

CONSIDERATIONS affecting future policy are dealt with in Section III of the *White Paper*. Defence policy is related to the international outlook, the possible range of conflict, the part Canada can play in the deterrence of a major war, NATO strategy, the defence of Canada and North American defence.

Reference is made to nuclear weapons, with the conclusion that having accepted the responsibility for partnership in a nuclear-armed alliance, such as NATO, the question of nuclear weapons for the Canadian Armed Forces is a subordinate issue, depending as it does on how Canada can most effectively contribute to collective strength.

The paper states that the future requirement for air defence of the North American continent will depend to a large extent on whether or not an effective anti-ICBM system is developed and deployed on this continent. An ICBM defence would also have some effect on forces required against the missile-launching submarine. It states that Canadian maritime forces are increasingly effective against the submarine threat and that improved techniques give promise of even more effectiveness against both conventional and nuclear-powered submarines in the years ahead. However, major problems remain to be solved and a major study to determine the best combination of weapons systems for an anti-submarine force is in progress.

The *White Paper* then outlines the various contributions Canada has made to United Nations operations and stresses the importance of our continued participation in such forces.

Organization

SECTION IV of the paper deals with the organization of the defence forces. Reference is made to the Royal Commission on Government Organization (the so-called Glassco Commission report) dealing with the Department of National Defence and, in particular, to the recommendation that effective consolidation cannot

How Integration Will Be Implemented

The following statement concerning the White Paper on Defence was issued by Vice-Admiral H. S. Rayner, Chief of the Naval Staff, on April 3:

By now I hope that all personnel have had an opportunity to read the White Paper on Defence for themselves. The first step toward integration of NDHQ staffs is underway and there is no doubt that this reorganization will result in greater efficiency.

The Navy is already organized on functional lines and this, together with our extensive experience in the integrated Maritime Commands in Halifax and Esquimalt, places us in an excellent position to fit into the new defence organization.

The changeover from the present to the new organization will not be easy but it can and will be achieved. It will require the active whole-hearted support of all personnel. This I am sure we will give for the good of the country and the service.

The following letter in amplification of the White Paper has been received from the Minister and the Associate Minister of National Defence. It is desired that this letter be promulgated and brought to the attention of all naval and civilian personnel.

"To all members of the Armed Forces and employees of the Department of National Defence:

"The news coverage of the issuance of the government White Paper on Defence was so complete and widespread that all members of the forces and departmental employees will have had reasonably complete information on what the paper contained. However, in the event that some of the main points were missed or not completely understood, this letter is intended to set out in a very concise way what the intention of the department is in carrying out the reorganization announced in the White Paper.

"The White Paper enunciated the policy that the Armed Forces of Canada should be integrated under a single Chief of Defence Staff. It further stated that this would be the first step toward a single unified defence force for Canada. It said that this would be a step-by-step process. This process will take place in the manner outlined below.

"The first step is to establish a single defence staff at National Defence Hearquarters. A planning group is being set up at once to prepare an outline plan for the organization of this staff. When this outline organization is approved, the heads of the main staff elements will be designated and will be assigned specialist planning staffs to enable them to draw up the organization plan for their staff.

"The replacement of the three service staffs by a single Defence Staff will require legislation to amend the National Defence Act. This will take some time. It is hoped that the planning for the reorganization at National Defence Headquarters and the legislative action can be completed by July 1964 so that the change-over to the new National Defence Headquarters organization can be made this summer.

"The second step will be the reorganization of the field command structure. Planning for this will be undertaken by the National Defence Headquarters staff after it is established. It is estimated that the integration of the field commands will take approximately one year.

"The third and final step will be the unification of the three services. This will not be initiated until the various staffs outlined above have been established and are working effectively. It is reasonable to expect that it will be three or four years before it will be possible to take this action.

"The process outlined above is not immutable. As the lessons of the reorganization are learned, changes in plan or in the timing may result. However the end objective of a single service is firm.

"One of the main objectives of this reorganization is to provide funds in the defence budget for the purchase of new equipment for the forces. With a relatively fixed budget, this can only be effected by a reduction in our overhead through the elimination of duplication. Such a move inevitably means reduction in personnel. Every effort will be made to ensure that this reduction can be brought about simply by not replacing personnel when they reach normal retirement or take their discharge. Not all the reductions necessary can be effected in this manner, and special benefits are being planned for those personnel who may have to be released somewhat before normal retirement. The reduction in personnel resulting from the reorganization is being planned to take place over the next two-to-three-year period.

"The above is only an outline, but we trust that it will contribute to the understanding of all personnel of what is being undertaken. We sincerely hope and believe that this undertaking will receive the support of all personnel, both service and civilian.

PAUL T. HELLYER,
Minister of National Defence

LUCIEN CARDIN,
Associate Minister of National Defence"

be based on joint control by the three services, with the conclusion that there should be a gradual transfer of executive control to the Chairman, Chiefs of Staff.

In the opinion of the Government, this solution does not adequately resolves the basic issues, since, if a single command structure is not established, co-ordination by the committee system will remain, with all its inevitable delays and frustrations. In consequence, it has been decided to integrate the Armed Forces of Canada under a single Chief of Defence Staff and a single Defence Staff. This will be the first step towards a single unified defence force for Canada. It is pointed out that the result would be a substantial reduction in manpower strengths in headquarters, training and related establishments, along with other operating and maintenance costs, and lead to savings which would make additional funds available for capital equipment purchases.

The Government has also accepted the recommendation of the Glassco Commission on the need for a strong staff group, which is essentially civilian in character, outside the framework of the Armed Forces and it is intended to give the Deputy Minister greater responsibility for keeping under review the organizational and administrative methods of the Canadian defence establishment.

It is also intended to introduce a management system for planning and controlling major defence programs at the departmental level. The total Canadian defence structure will be grouped into a number of major programs which will cover all arms of the services and will be expressed in terms of major military missions or objectives, with each program being reviewed annually. This system will enable defence programs to be examined and considered in relation to their overall military effectiveness from the standpoint of achieving a particular mission.

Next 10 Years

THE SHAPE of the Canadian forces over the next 10 years is the subject of Section V of *The White Paper*. The Government's support of NATO is affirmed, as is its intention to maintain a Canadian Army brigade group on the central front in Europe. The two brigades in support of NATO maintained in Canada are to be re-equipped and re-trained as a mobile force to permit their effective deployment in circumstances ranging from the European theatre to United Nations peacekeeping operations.

The fourth brigade in Canada will gradually be converted into a special service force, somewhat smaller than conventional brigades and provided with airportable and air-droppable equipment. It will be trained for a variety of military tasks. Canada will also make available, from the Canadian-based brigades, one battalion for SACEUR's mobile force.

The paper outlines the present deployment of the RCAF Air Division in Europe—six squadrons in Germany in a strike role and two squadrons in France in a reconnaissance role, with all eight squadrons also being equipped for a non-nuclear attack role in order to give the air division maximum flexibility. It is pointed out that no additional CF-104s will be acquired and, in consequence, the number of operational squadrons of this type of aircraft will decline as a result of normal attrition. During that period, it is intended to give increased emphasis to the provision of aircraft for direct support of our ground forces and it is anticipated that a high performance tactical aircraft will be available with sufficient capability to permit squadrons to be stationed in Canada, in Europe or elsewhere as required. Squadrons in Canada would be available for training in close association with ground forces and would also contribute to air defence, thereby eliminating the necessity of special interceptor aircraft for this purpose. The three squadrons of CF-101s now assigned to NORAD will be maintained, as will the two Bomarc squadrons, as long as they form an integral and useful part of the NORAD system.

In view of the emphasis on increased mobility, steps are being taken to augment considerably the "air truck" component of the air transport fleet which will be available for United Nations and other requirements.

Maritime Forces

WITH REGARD to the maritime forces, it is intended to continue in the anti-submarine role and studies are continuing to determine the most effective combination of weapons systems.

A careful study is being given to the possibility of constructing two or three nuclear-powered submarines, which are powerful anti-submarine weapons, but in view of the magnitude of this project, a firm decision cannot be taken immediately. It is intended, however, to maintain a modern and well equipped fleet of appropriate size.

It is pointed out that, with increased flexibility and mobility including the addition of transport aircraft, Canada will be in a better position to fulfil any future United Nations requirements and, in this regard, a requirement for sea lift is being considered. It is intended to obtain an additional modest sea lift, either in conjunction with a NATO anti-submarine force or independently.

The paper summarizes the major projects in the years ahead, which include re-equipping of the Army as a mobile force; the provision of an adequate air and sea lift; the acquisition of tactical aircraft and the maintenance of a relatively constant improvement of the maritime anti-submarine capability.

The Reserves

THE SECTION on the armed forces reserves refers to the ministerial commission, under the chairmanship of Brigadier E. R. Suttie, and points out that the integration of the regular forces will have to be considered in any reorganization of the reserve forces. The reports of the two committees established with regard to the naval and air force reserves are being referred to the Suttie commission with the objective of obtaining from that commission recommendations for the maximum degree of integration of reserve facilities.

The section on Civil Defence outlines the way in which the Canadian Army has carried out the responsibilities assigned to it in 1959. The degree of emphasis on civil defence measures will be influenced by the decision to deploy or not to deploy an anti-ICBM system. In the meantime, approved projects will be consolidated and maintained at their present level.

Referring to Mutual Aid, the *White Paper* points out the changing circumstances in so far as the European members of NATO are concerned but states that Canada is prepared to continue to consider reasonable requests for assistance in military training and possibly in the provision of equipment to NATO nations which require such assistance and where it can be given by Canada with advantage to the alliance as a whole.

(The force structure outline will make it possible for Canada to discharge its existing NATO commitments, which run to the end of 1966. For the ensuing period new commitments will be negotiated, compatible with the force concept as set out in this paper.)

Research and Industry

THE LAST PORTION of the *White Paper,* Section VI, deals with defence research and industry. It stresses the importance of both defence research and development and the need for close co-operation between the armed services and the Department of Defence Production in order to permit efficient purchasing practices and to see that Canadian products are used wherever that is feasible.

A dynamic defence research and development program is considered an essential element of defence policy and it is the intention not only to support it fully but also to implement a gradual but consistent increase in the resources made available for such a program.

In conclusion, it is stated that the paper should be considered as a guide rather than as a detailed and final blueprint since changes can be made to meet the changing circumstances, national and international. While the use of force is not a solution to the problems of peace and security, it is essential to maintain military strength as a deterrence against attack and to help preserve the peace.

THE LAUNCHING OF OJIBWA

NINE THOUSAND Britons cheered and a band of the Royal Marines played The Maple Leaf in fast time as the submarine *Ojibwa* slid down the ways at Chatham, England, on February 29. The 295-foot craft is the first of three Oberon class submarines being acquired by the Royal Canadian Navy.

The recently appointed Canadian High Commissioner to Britain, Hon. Lionel Chevrier, was guest of honour at the launching during which the *Ojibwa* was named by Lady Miers, wife of Rear-Admiral Sir Anthony Miers, VC, British war-time submarine commander.

The *Ojibwa* is an "attack" type of submarine fitted to fire homing torpedoes and equipped with the latest submarine detection apparatus. She is capable of high underwater speeds and able to carry out long submerged patrols in any climate. A new feature in her construction is wide use of glass fibre laminate in the superstructure.

The submarine's name is taken from that of the Ojibwa tribe of North American Indians who occupy the Lake Superior region of Canada and whose legendary history was woven by Longfellow into the story of Hiawatha. The two succeeding submarines, also to be built at Chatham, England, for the RCN, will be named after other Canadian Indian tribes whose names begin with "O".

The *Ojibwa* was originally laid down as the *Onyx* for the Royal Navy but was made available to the RCN to ensure early delivery of the submarines for Canadian service.

Mr. Chevrier, who was the official representative of the Canadian government at the ceremony, said the purchase of the three submarines was a significant event in Anglo-Canadian trade relations. But, he added, this was not simply a business deal but a transaction that reflected Canadian ties with and confidence in Britain, the Commonwealth and NATO.

Hon. Lionel Chevrier, Canadian High Commissioner to Britain, (left), with Rear-Admiral Sir Anthony Miers, VC, former submarine commander, and Lady Miers, who named the RCN's new submarine, the Ojibwa, during a ceremony at Chatham, England, on February 29. (British Information Services Photo)

Lady Miers, whose husband, now retired, won the VC for stalking a Mediterranean enemy convoy with his submarine, said she was sure the Canadians who manned the new submarine would emulate the bravery of the men of the Ojibwa tribe. Naming the vessel, she broke a bottle of Canadian champagne over the prow.

The *Ojibwa* is expected to commence service with the Royal Canadian Navy in 1965.

HMCS Athabaskan, last of the Canadian-built Tribal class destroyers to remain in service, was the heroine of a North Atlantic rescue operation on March 1 which saw 34 merchant seamen brought to safety from the Liberian tanker Amphialos which had broken in two. (HS-64756-81)

ATHABASKAN'S RESCUE

THE SHIP'S COMPANY of HMCS *Athabaskan* was mustered in the forward seamen's messdeck for divine service on Sunday, March 1. The commanding officer read an appropriate lesson, the officers and men solemnly said the naval prayer. As divine service ended, the officer of the watch, Lt.-Cdr. John Huxtable, reported that a vessel on the port bow five miles distant was stopped and its appearance seemed unusual.

The *Athabaskan's* commanding officer, Cdr. Peter R. Hinton, (I was embarked as commander of the task unit) was proceeding to rendezvous with HMCS *Crescent* (Cdr. Vincent Murphy) and HM submarine *Auriga* (Lt.-Cdr. K. A. Bromback) for anti-submarine exercises.

Course was immediately altered to close this vessel and speed was increased. As the *Athabaskan* neared the scene an Argus aircraft dropped a smoke bomb near a lifeboat, drawing attention to its presence. Throughout the entire operation the willing co-operation of the RCAF aircraft was of considerable assistance.

All arrangements were smoothly and quietly made to effect rescue if, as

By

Cdr. H. W. Vondette

soon became apparent, such should be necessary. Scramble nets were rigged over the side, the sea boat was turned out, the sick bay readied for any emergency.

On closing what proved to be the stern section of the Liberian-registered SS *Amphialos,* two lifeboats were sighted with personnel on board. All available lookouts scanned the water for lone survivors. Although it was a bright, brisk day, the wind gusted to 35 knots and the height of swell was approximately 12 feet.

The *Athabaskan* closed the wreck and it was seen that a good number of the crew were still on board. There were no liferafts or lifeboats left and the deck was inclined at an angle of over 30 degrees, the forward upper works being well under water. The seas broke over the stricken vessel and the stern hung helplessly with propeller and rudder high in the air.

The *Athabaskan* closed and recovered one boat load of eight survivors and despatched her own seaboat to stand by the stern of the stricken vessel. Two of the survivors from this lifeboat were unable to cope with the scramble net as the lifeboat reared and

plunged in the heavy swell. Men from the *Athabaskan* went over the side into the lifeboat to assist and the two injured men were removed by stretcher. Unfortunately one of these man, aged 69 and apparently suffering from a weak heart, although alive on recovery, died about one hour later.

Meanwhile, the Commander of the Task Unit ordered HMCS *Crescent* to surface HM Submarine *Auriga* and proceed with all despatch to the scene as USS *Searcher* closed the area. At the height of the operation two Argus aircraft and a USCG aircraft orbited the area searching for possible lone survivors.

USS *Searcher,* at the request of the commander of the task unit, launched a motor whaleboat. Due to the weather, the engine failed and her whaleboat was not able to close the wreck. The *Searcher* remained nearby until final recovery was made to provide whatever aid may have been required.

In the heavy sea the *Athabaskan's* whaler broker her tiller and the crew resorted to steering by an oar over the stern. Because of the state of the sea and swell, rescue attempts by the whaler became futile. The whaler did, however, spot a survivor who had jumped from the ship in an endeavour to swim to the whaler and, with the aid of signals between boat and ship, the *Athabaskan* quickly manœuvred toward this man.

A Greek sailor is assisted below in the Athabaskan where he was given dry clothing and hot food.

AB Donald Patterson, one of the divers who had dressed for duty, was ordered to go to the assistance of the survivor. Within minutes the survivor and diver were both safely on board.

The second lifeboat was closed and eight more survivors were quickly embarked.

The survivors said that they did not think the ship, with a number of men still on board, would last another hour. (At 1800 on Feb. 29, with no warning whatsoever, the forward section of their ship had broken away and attempts to transmit a distress signal became impossible.)

The *Athabaskan* stood to windward of the wreck and endeavoured to swim a 20-man liferaft to the stern section of the *Amphialos,* edging perilously near to the submerged section of the vessel. However, the divers, due to the extensive oil on the surface, were soon exhausted and had to be recovered.

There was nothing left but to get near enough to pass a line to her stern section. The ship was manoeuvred to within 100 feet and after several attempts eventually succeeded in passing a Coston gun line to the wreck. To this a messenger, then a heavier line and eventually a 20-man liferaft were secured and the raft was pulled under the stern.

Eighteen men, including the ship's captain, lowered themselves one by one into the liferaft from the stern 60 feet above.

Due to the drift of the wreck, they were unable to get clear of the ship and

Sailors were clinging desperately to the stern section of the Amphialos when the shattered merchant vessel was sighted by the Athabaskan.

AB Donald Patterson, clearance diver, helps an oil-covered seaman from the Amphialos alongside the Athabaskan.

Athabaskan sailors help seaman from the Amphialos up the scramble net to safety.

the *Athabaskan* a second time, this time edging even closer, fired a well-aimed Coston gun line over the raft and towed the last survivors clear of the wreck.

The final recovery was conducted without any difficulty and the 20-man liferaft was taken on board.

HMCS *Crescent* appeared, was assigned commander of the scene and ordered to stand by. The *Athabaskan* was ordered to proceed to Halifax with all despatch.

Cdr. Hinton praised AB Donald Patterson and Ldg. Sea. Frank Edgar, both of whom fought their way through the oil-covered sea in attempts to manhandle the two lifeboats closer to the hulk. Both detached their lifelines so they could manoeuvre the rafts in the 15-foot swells.

Most of the survivors were too weak to climb scramble nets hung over the *Athabaskan's* side. Sailors from the destroyer escort climbed down and helped them on board.

Cdr. Hinton also praised the *Athabaskan's* boatswain's mate, PO Sidney McNevin, who supervised and participated in so much of the seamanship that was displayed during the operation.

Throughout this operation I was greatly impressed by the high standard of seamanship displayed by the commanding officer, officers and men of the *Athabaskan* and by the cheerfulness and bravery displayed by the officers and men of the SS *Amphialos*.

At the left, one of five injured survivors of the Amphialos is comforted by a fellow crew member as Athabaskan sailors stand by to give aid. Two clearance divers (right) from the Athabaskan, Ldg. Sea. Frank Edgar and AB Donald Patterson, each spent half an hour in the North Atlantic assisting seaman from the stricken tanker to the rescue ship.

FOLLOWING the rescue operation, messages of congratulation poured in to the *Athabaskan* and *Crescent*. The *Athabaskan*, incidenatlly, had shared in the search for survivors of a Flying Tiger airliner, down in the North Atlantic, in September 1962.

The *Athabaskan* received praise from many sources, including the owners of the SS *Amphialos*, the Commander Eastern Sea Frontier, Naval Headquarters and the Minister of National Defence. Mr. Hellyer's message was as follows:

"I note with approval the excellent display of seamanship on the part of HMCS *Athabaskan* in rescuing the crew of SS *Amphialos*. Congratulations to all who took part in the rescue on the resolute and heroic manner in which it was so swiftly done."

Mr. Hellyer also sent a message of congratulations to the crew of the RCAF Argus that first sighted and reported the stricken ship.

A letter received by Rear-Admiral Jeffry V. Brock, Flag Officer Atlantic Coast, from His Honour Henry P. MacKeen, Lieutenant Governor of the Province of Nova Scotia, reads:

"Through you I would like to congratulate Cdr. Hinton and the ship's company of HMCS *Athabaskan* on their outstanding achievement in rescuing the crew of the tanker *Amphialos*. I had an opportunity of discussing the episode with the master and mate of *Amphialos* yesterday and I can tell you they were loud in their praise of the seamanship, courage and kindness of those in the *Athabaskan*. As far as I could learn every incident during the rescue reflects the highest credit to the training, efficiency and personnel of the Royal Canadian Navy."

Other messages included the following:

"Commander 1st Coast Guard District extremely pleased and most appreciative of your outstanding seamanship in rescuing the crew of the tanker *Amphialos*. Your excellent performance has exemplified the finest traditions of the sea."—Rear-Admiral C. L. Harding USCG.

To *Athabaskan* and *Crescent*: "Your fine example of seamanship in rescuing crew of SS *Amphialos* reflects great credit on your ship. Congratulations to all officers and men who took part in the rescue on an excellent job well done."—Chief of the Naval Staff Ottawa.

"The officers and men of the Pacific Command join me in congratulations for your fine rescue work."—Flag Officer Pacific Coast.

"On behalf owners and master steam tanker *Amphialos*, may we express our gratitude to the officers and men of the Royal Canadian Navy whose heroism and gallantry saved the lives of 34 crew members of our vessel. The prompt and efficient rescue was performed under most difficult conditions in a manner which reflects credit on your entire service. Please convey our most sincere thanks and admiration to all concerned"—United Operations Shipping Agencies, Corp., 660 Madison Ave., New York City".

"My heartiest 'congratulations' and 'well done' to HMCS *Athabaskan* for outstanding performance in rescue of crew of SS *Amphialos*"—Vice-Admiral H. T. Deutermann, USNS COMEASTSEAFRON.

OPENINGS FOR SUBMARINERS

THE FORTHCOMING acquisition of three "O" class submarines from Britain by the Royal Canadian Navy will mean a continuing requirement for volunteers from general service to complete the manning of the new submarines to provide replacements.

A general message, dated March 26, says it is expected the three "O" class submarines will commission in 1965, 1967 and 1968 and will replace the "A" class submarines at present loaned by the RN and based at Halifax.

At the end of March a total of 382 qualified submariners were enrolled in the Royal Canadian Navy. This total was made up 32 officers and 350 men.

Actually serving in submarines, either Canadian or British, were 20 officers and 206 men.

RCN submariners, now serving in the RN submarine service, will be transferred to service in the RCN as required.

All three of the "O" class submarines will be based at Halifax, while HMCS *Grilse* will continue to serve in the Pacific Command.

Volunteers will be accepted for service regardless of the type or locality of the submarines. The general requirements, other than medical, are given in General Order 10.21/1, which provides in its opening paragraph that "officers and men may volunteer for service in submarines at any time during their service career". Once personnel have undergone basic training and qualified as submariners, they are entitled to wear the submarine badge.

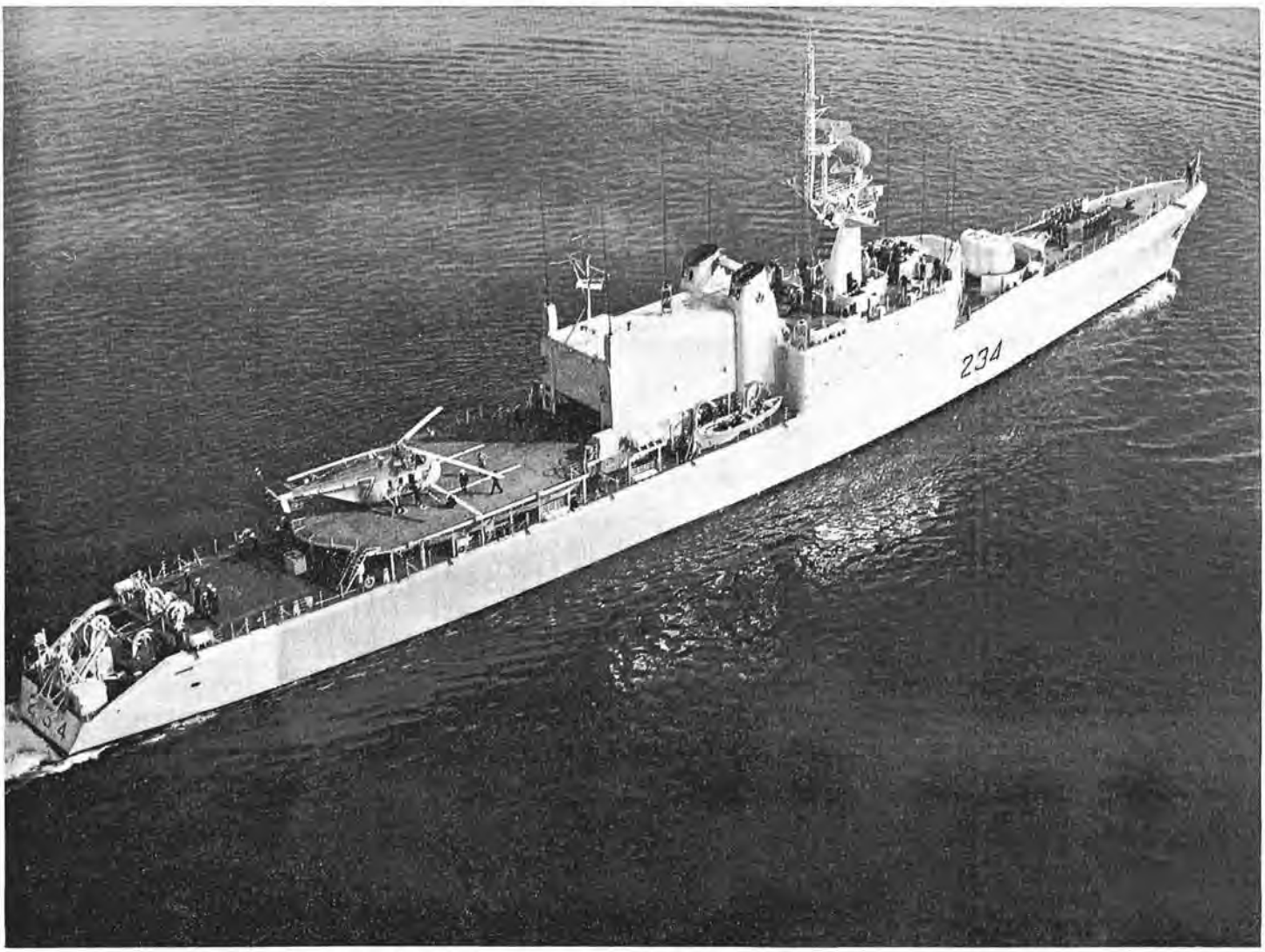
Trades to which the submarine service is open are: Weaponman Underwater (WU); Sonarman (SN); Radar Plotter (RP); Radioman (RM); Engineering Technician (ER); Engineering Mechanic (EM); Electronic Technician (LT); and Electrician's Mate (LM). A few volunteers will be accepted from the following trades: Firecontrolman (FC); Victualling Storesman (VS); Naval Storesman (NS); Cook (CK); Steward (SW), and Medical Assistant (MA). Special consideration will be given to ex-submariners now in general service.

Basic submarine training will continue to be given in either the United States or Britain, depending on the type of submarine to which the trainee is to be initially drafted.

The present intention is to permit men to remain in submarines for as long as they remain qualified in all respects and within the limitations of complement. In addition, within these limitations, men will be permitted to return to submarines after absences for trade courses etc.

The duration of basic submarine training abroad will not ordinarily permit men to take their families but, for men drafted to commission "O" class submarines or to undergo acquaintanceship courses subsequent to basic training, overseas service will in some cases be of sufficient length to enable this privilege to be exercised.

The general message also states that submarine allowance will continue to be paid in accordance with QRCN 205.37, together with the appropriate allowances when drafted outside Canada. The submarine allowance ranges from $65 a month for leading seaman and below to $115 for lieutenant-commander and above. Half these rates are payable while undergoing basic submarine training or while serving in certain "annotated" positions, such as spare crew. Non-qualified personnel are entitled to an allowance of $30 a month while serving on casual duty in a submarine in commission.



Except for the gyro-controlled stabilizer fins and the down-haul winch used to guide helicopters to the flight deck, this picture shows most of the changes being made in the St. Laurent class destroyer escorts. This is the Assiniboine. (DNS-32228)

WEDDING OF THE SEA KING

THERE'S GOING to be a wedding in the RCN this summer.

HMCS *Assiniboine*, first of the St. Laurent class destroyer escorts to be converted for helicopters, will be married to the RCN's new CHSS-2 Sea King anti-submarine helicopters. The conversion also includes installation of variable depth sonar handling gear.

The *Assiniboine* will be the first DDE to fully complete the conversion program that began two years ago and will cost an estimated $24 million by the time it's finished.

Sea King helicopters are now carrying out work-ups at techniques in handling and practising with haul-down gear similar to that they will use on board ship.

The *Assiniboine* had her conversion job finished last June; HMCS *St. Laurent's* conversion was finished in October, and HMCS *Ottawa* will return to service this year.

HMCS *Saguenay* is due to resume her duties later in 1964. Still to be converted are HMC Ships *Skeena, Fraser* and *Margaree.*

The last two ships of the Annapolis class, the *Nipigon* and *Annapolis,* slid down the ways with helicopter decks and variable depth sonar as original equipment. The *Nipigon* will be commissioned in May and the *Annapolis* in the fall.

The conversion job being done on the St. Laurent class destroyer escorts sound easy when you say it fast, but shipyard workers needed every day of the 14 months they took to convert the *Assiniboine.*

It isn't just a simple matter of plunking a landing deck and helicopter hangar amidships, then hooking variable depth sonar on the stern. Each ship being converted must be practically rebuilt. An estimated 2,400,000 man hours were spent converting the *Assiniboine.*

Except for main machinery spaces and some forward sections, converted ships are being totally re-designed. To give the St. Laurents their new look, shipyard workers begin by stripping everything off the upper deck from the bridge aft.

Finished ships display the world's most modern submarine detection

equipment, variable depth sonar, hanging over the stern. As the name implies, VDS can send its searching sonar beam into the ocean from varying depths, avoiding ocean temperature layers which in the past bent the beam enabling submarines to hide within the thermal zone.

Mounted just forward of the VDS unit, each converted ship carries a triple-barrelled Limbo anti-submarine mortar which can hurl three A/S bombs in any direction fused to explode at the proper depth, at a detected submarine.

The flight deck is fitted with a "bear trap" winch. A helicopter can land on that flight deck in bad weather conditions with the bear trap. The hovering machine, at full power, lowers a cable while the bear trap hauls it down safely on the deck. Once landed, the helicopter can be shunted by the same device into the huge midships hangar, tucked between and aft of the new twin funnels.

The Sea King helicopter is capable of operating in any weather. It is fitted with its own dunking sonar to detect submarines, and homing torpedoes for attack. These machines will fly eventually from the aircraft carrier *Bonaventure* as well as helicopter-carrying destroyer escorts.

The long range of these turbine-driven helicopters and their high speed makes them a most deadly anti-submarine weapon. They extend their mother ship's range so one escort with helicopter can cover many times the sea area it could before conversion. Their speed provides the margin needed to attack fast modern submarines.

Not only the fighting tools of the St. Laurent class are being changed in the conversion program. After conversion the ships have a much larger and better equipped recreation space forward. There is increased space in all the mess decks and activated fin stabilizers have been added to the hull to reduce the DDE's snappy roll in rough weather. The better sea-keeping qualities these stabilizers give the ship make her more comfortable for the crew, but the primary purpose of those fins is to make the hull a more stable platform for helicopter landings in high seas.

A Sea King, one of the big, swift, turbine-powered helicopters which will operate from the RCN's Annapolis class converted St. Laurent class destroyer escorts hovers over the flight deck of the Assiniboine. (CN-6759)

COPING WITH FLU AT MASSET

The Canadian Red Cross, always a willing helper in time of distress, had to call in outside help itself during a recent flu epidemic in the Queen Charlotte Islands. The Royal Canadian Navy was happy to jump into the breach.

Most of the 1,800 people of Masset fell victim to the epidemic, resulting in the re-opening of the normally closed Red Cross hospital.

A doctor and two nurses were brought in but within a week they were literally run off their feet. Most of the patients were either very young or very old Indians and required considerable attention.

The naval radio station at Masset asked for volunteers to stand tricks in the wards and help out with the feeding. The sailors quickly responded and soon became quite adept at caring for their helpless charges. They even supplied entertainment when the situation eased off after a time.

Navy cooks AB K. J. Dorosh and Ldg. Sea. L. G. Bagley put up chicken pie, cakes, meat loaf and beef and delivered the food over a three-day period.

AB Brendon C. F. Smith also helped out with feeding the patients. His wife, Brenda, herself a Red Cross nurse, joined in during the emergency.

Ldg. Sea. R. H. Petrie helped out in the wards and showed that his early training in swabbing the decks was not forgotten.

Fortunately, most of the naval personnel at the base escaped the epidemic.

AB Brendon C. F. Smith, from the naval radio station at Masset, Queen Charlotte Islands, coaxes his young Indian charge to finish off a bottle. AB Smith and other RCN personnel helped out during a recent flu epidemic that taxed the capacity of the Red Cross outpost hospital.

Mission accomplished. Eleven and a half days out of Halifax, the Bonaventure lies at anchor in the deceptive Mediterranean calm of Famagusta harbour. The unloading operation was accomplished in about six hours thanks to the smooth-working team in the ship and efficient service from the Royal Engineers Port Commandant organization. (BN-5197-44)

CYPRUS MISSION

IT IS THE CUSTOM in the *Bonaventure* to issue a supplementary sheet to Daily Orders when the ship is entering a strange port.

On May 6, two days out of Halifax, the supplement could well start like this: "Halifax is the largest commercial and naval port on the east coast of Canada. The city is the capital of the Province of Nova Scotia . . ." along with various data on port facilities, industries, topography, climate and history. It then would finish something like this, "English is spoken in Halifax, the dollar is the medium of exchange and the natives are very friendly".

Halifax is the one NATO port which the *Bonaventures* have had little opportunity to know in the past eight months.

The *Bonaventure* had sailed from "home port" last September 25. In the ensuing months and 38,000 miles of steaming she spent 39 days there, until her return May 8 from Operation Snow Goose, mid-ocean flying exercises, and other business at Norfolk, Va.

Operation Snow Goose was unique in the *Bonnie's* experience. Wearing the UN flag, she slipped from Halifax on March 18. She had taken on board, along with normal provisions, stores, fuel, avgas and general logistics, 95 officers and men of the "Van Doos", the

By

Lt.-Cdr. J. L. Wightman

Royal Canadian Dragoons and the Royal Canadian Army Service Corps, 16 Ferret armoured scout cars, 36 Canadian Army trucks and trailers, two jeeps and 160 tons of army stores. All this was designated, in slightly insulting Army parlance, the "sea tail" of the Canadian UN Contingent Cyprus.

Even though 12 Trackers of VS 880 and one H2SO4 chopper of HU 21 were also on board, the trip across to Famagusta, Cyprus, was strictly a "cargo-passenger" run. The object of the exercise was to deliver the Army's equipment, supplies and personnel to Cyprus "at best possible speed".

Getting back to September 25, 1963: When the ship left Halifax she headed for Exercise Flatrock, a NATO show ranging round the Norwegian sea and northeast Atlantic. With a couple of brief visits to Invergordon for exercise conferences the ship worked steadily for a month, putting in to Rosyth October 25 for three days. A visit to Bergen, Norway, followed then more exercises and the ship arrived at Portsmouth on November 8, did a boiler-clean period and self-maintenance, departed November 21.

She actually did get back to "home port" on December 3, staying in for three days. The ship left for the Bermuda area December 6 and carried out "carquals" (carrier qualification for pilots) in the area for almost a week, returning to Halifax December 13 for the Christmas period leave.

The *Bonaventure* sailed again January 13, carried out flying operations en route to Bermuda, played host to the Minister of National Defence, paid a brief call to port there, then sailed for the Mediterranean. Toulon, France, provided the ship's company with a break from February 7 to 16 and the ship moved on to "Gib" on February 18 for pre-exercise conferences. NATO Exercise Magic Lantern in the vicinity of Gibraltar was the next project and the ship pounded through North Atlantic and western Mediterranean seas, flying night and day. On March 7, during exercises, a priority message from Naval Headquarters recalled her from sea forthwith—destination "home port"!

Well, the Bonnies didn't see much of "home port". The ship arrived in the evening of March 13. It was a Friday night but the ship's company simply turned to and began to work round the clock. Normal replenishment, vital maintenance and off-loading aircraft took up a lot of the first couple of days. The Army's "sea tail" might have been expected to present loading problems but the Bonnies, assisted by a number of HMC Dockyard's doughty mateys, put the stuff on board, secured it below in the hangar deck and made ready to embark 12 Trackers and one "Pedro".

Lt.-Cdr. Richard Bone, liaison officer in the Bonaventure for the Army detachment on board, briefs the soldiers on vital fire precautions in the hangar deck. Boots with steel cleats or hobnails were prohibited—a spark is an unacceptable hazard where avgas fumes may be present. Most of the soldiers stowed their boots for the sea trip and wore gym shoes. (HS-74518)

It had appeared that the ship would be chock-ablock with soldiers, scout cars, trucks, jeeps, guns, ammo and billy-cans or whatever it is that the army can't march without—and no room left for the ship's "main armament", the Trackers. It turned out that the RCAF was going to lift the bulk of the fighting troops and that the ship would have room for aircraft. So on they came. If the ship had merely to steam across and off-load, at least she would come alive on the return trip and get back to her main object in life —night and day flying of ASW missions.

The controls of a Ferret armoured scout car don't quite have the feel of the Bonnie's wheel. Leading Seaman William MacArthur tries it while Trooper Wayne Nickerson spins him an Army dip. (HS-74526)

It was a record turn-around. With all Army personnel, Ferret scout cars, trucks, trailers, jeeps and stores embarked, special sea dutymen closed up, the ship slipped and proceeded for sea at 5:00 p.m. Wednesday March 18. Halifax quickly disappeared under a heavy snowstorm and the ship, secured for sea, nosed out past Sambro into a three-quarter gale.

It was a straightforward, uneventful journey. The ship headed southward in an attempt to outrun the weather, altered to the east early Friday morning and forged ahead at a steady 20 knots. Some of the soldiers, wondering how they had ended up in a 20,000-ton bucking bronco, stayed in their bunks for a day or two. But they quickly rallied.

The half-gale continued until the ship was about a day and a half out of "Gib". With a quartering sea jostling the big ship, normal activities were somewhat curtailed. There were only two days of normal flight-deck activity and sports in the entire 11-day crossing but the soldiers managed to carry out training exercises, PT, orientation lectures on Cyprus, the servicing and firing of their weapons, maintenance routines on their vehicles.

The ship entered Gibraltar on Wednesday, March 25, under typically brilliant Mediterranean skies. It was a short respite—five hours in harbour. The soldiers had short leave to visit the Rock, but the ship's company stayed on board to fuel and replenish and make ready for sea again. The balmy "Med" lived up to her press notices for about 12 hours until *Bonnie's* own "made in Halifax" weather joined up again. She pounded down the Med, with the *Restigouche* astern, for another five days.

"Rusty", detached from the Fifth Escort Squadron, had waited in Gibraltar to join the carrer as plane guard during planned flying operations. It wasn't possible to fly between Gibraltar and Cyprus, without delaying the ship's arrival. So flying operation began late Wednesday, April 1, several hours after departure from Famagusta.

A North African sandstorm lost its way when the carrier was off the coast of Libya and dumped a fine, gritty film of desert sand over the entire ship. This was adding insult to injury but the first lieutenant merely scratched his head, uttered a seaman's incantation and the hands turned to. After all they were assisting the Army, might as well get used to sand.

The ship came to her anchorage off Famagusta at 3 am, Monday, March 30.

Study of a man working his passage. During the crossing to Cyprus "Ting" Tingley, cartoonist-reporter of the London Free Press, presented his chalk-talk cartoon show in the wardroom, senior chiefs' mess, the petty officers' mess and the main cafeteria. After the show, he set up his small easel and did signed caricatures of many of the hands. Also on board, hard at work, were TV-men Bill Curtis, Paul (Big Daddy) Murray and Geoff Laurence, of CBC Atlantic Region, Peter Ward, military editor of the Toronto Telegram, and writer Phil Smith and photographer Bob Brooks of Weekend Magazine. (BN-5197-18)

The weather didn't co-operate with the RCN for Operation Snow Goose. Even the Med was unruly, as this photo of the Restigouche, plane guard for the carrier, demonstrates. (BN-5197-20)

Then began the ingeniously planned solution to a massive Chinese puzzle. Trackers were struck down, up and sideways. The fore and after lifts did an elephant's cha-cha. Ferrets, trucks and jeeps waltzed up and down the deck. In case of an insoluble traffic jam there was an emergency clearance procedure ready to go—squirting a two-ton truck off the catapult. Fortunately the shuffle worked smoothly and the Army wasn't piped to flying stations.

The off-loading was completed by about 3 o'clock that afternoon. The ship's company were highly organized, the unknown factor in off-loading had been the capabilities of the port authorities. It turned out that the Port Commandant was a major of the Royal Engineers. His British sappers were the port stevedoring and warehousing organizers. Aided by a couple of "Z" craft, (large lighters), smaller lighters, drifters and personnel ferries organized by the Royal Engineers Port Authority, the ship's staff was able to put the Ferrets, trucks, trailers, jeeps and stores over the side in record time.

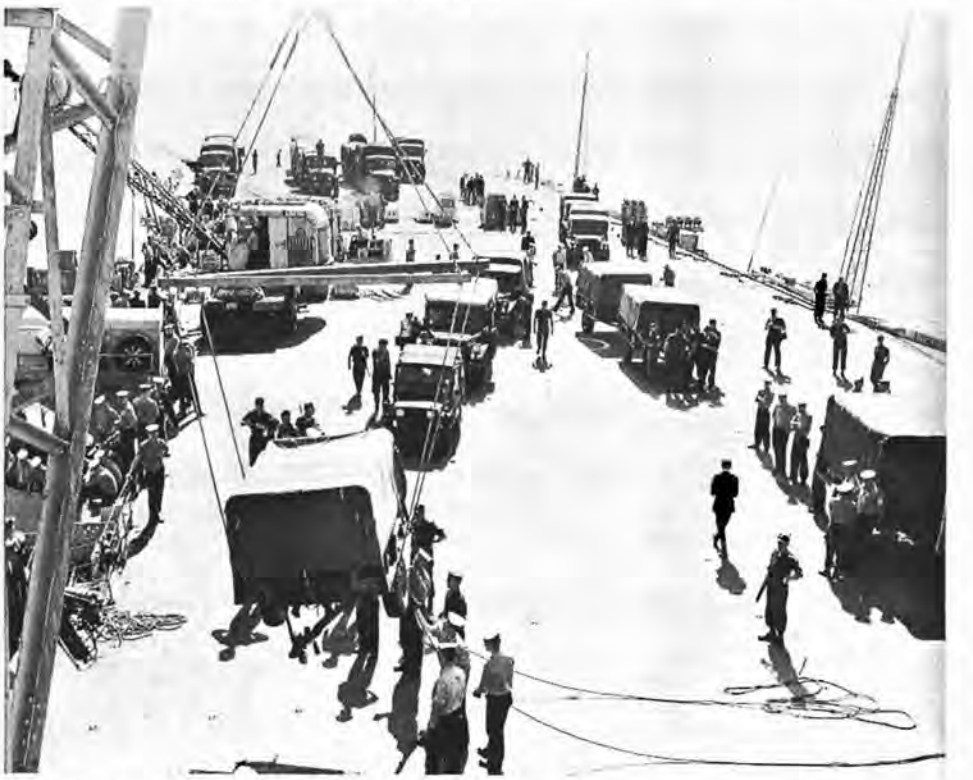
The ship was welcomed by United Nations, Cyprus government and diplomatic officials along with a corps of approximately 40 press correspondents of all nations.

Taking a special interest in the unloading activities on the flight deck were Lieutenant General P. S. Gyani, Commander of the United Nations Forces in Cyprus, the Hon. Mr. Fissentzides, Minister Plenipotentiary and Foreign Affairs Minister of the Government of Cyprus, His Excellency Arthur Andrew, Canadian High Commissioner to Cyprus, and Colonel E. A. Amy, Commander of the Canadian Contingent, UN Forces in Cyprus.

It was an entirely routine mission for the *Bonaventure*. It was carried out with despatch and efficiency, negative the theatrics.

Riding at anchor in Famagusta harbour, the big ship looked a little rusty and weather beaten, particularly with the gleaming *Restigouche* lying nearby. The *Restigouche* had had several days in Gibraltar to get that way. The *Bonaventure* had logged 8,500 heavy-weather miles in the month of March, about 3,200 miles better than her previous one-month record of May 1960.

The Bonaventure was officially welcomed to Cyprus by United Nations and Cyprus government officials. Captain R. W. Timbrell, commanding officer, discusses the unloading operation on the flight deck with Lieutenant General P. S. Gyani, Indian Army, Commander of the United Nations Forces in Cyprus, and the Hon. Mr. Fissentzides, Minister Plenipotentiary and Foreign Affairs Minister of the Government of Cyprus. (BN-5197-37)



Under the balmy Mediterranean sun, fortuitously the first really fine weather of the entire operation, the Bonaventure quickly put soldiers, Ferret scout cars, trucks, trailers, jeeps and Army stores ashore via Royal Engineers "Z" craft, other lighters and small ferries. Shortly afterwards the ship's company got their first break from routine in 12 days—swimming over the side in Famagusta harbour. The navy didn't see much of Cyprus. Leave was restricted to organized beach parties outside Famagusta. (BN-5197-32)

Living out his last years in the Chinese Community Hospital in Victoria, Soue Kee, 79, showed keen pleasure when a group of sailors called on him. Of three visitors from HMCS Saskatchewan, AB David Jowsey, Ldg. Sea. Gary Carlson and CPO Raymond McMurtrie, the latter two had known Soue Kee when they served on Board HMCS Ontario. Wearing a Saskatchewan "skimmer", Soue Kee showed he had not forgotten how to deliver a snappy, navy-style salute. (Photos by Jim Ryan)

SOUE KEE

By
Jim Ryan
Ex-PO Photographer, RCN

SIXTEEN YEARS seemed to have slipped by quickly, but it was that long ago I took my last picture as a navy photographer and left the service (with some regrets) to join the editorial staff of the *Daily Colonist* in Victoria, B.C.

But Victoria is a navy town and I've actually never lost touch with former shipmates. I've taken hundreds of pictures of them since 1948 for the newspapers.

A short time ago, talking over the old days at HMCS *Naden* with a couple of navy pals, the thought struck me: "What ever happened to the Navy's favourite laundryman, Soue Kee?"

Now, I guess there are few old *Naden* hands who don't remember Soue.

Particularly the fellows who served aboard the "Big O", the former cruiser *Ontario*.

For 33 years, Soue made daily visits to ships in dock at Esquimalt and his arrival was greeted with almost as much ceremony as a visit from the admiral. When he mounted the gangway of the *Ontario*, he was piped aboard like a celebrity—and he always replied with a smart salute.

Once on board, Soue would be allowed to announce his presence over the ship's loud-speaker system: "Laundlee!" And a lot of hands will recall how Soue would run under their hammocks in the early morning and give them a sharp clout on the rear with a "mick stick", while shouting: "Wakey! Wakey".

Former PO Photographer Jim Ryan, now a partner in Ryan Brothers Photo Centre, Victoria, tells in the accompanying story of a nostalgic visit to an old friend of his navy days, laundryman Soue Kee.

No one can recall that Soue ever handed out a ticket for the laundry and hammocks he picked up to wash. But they certainly remember how Soue operated as unofficial banker to the fleet for navymen caught short between paydays. He never charged interest, either—or was ever "seen off".

Every messdeck had an open invitation to Soue to drop in for a meal and a tot.

This all started me thinking: "I wonder where Soue is today?"

I finally found out . . . but it took a whale of a lot of digging.

I asked a few of the Navy boys but they all thought he was dead. His laundry in Esquimalt has long since disappeared. I figured the best thing to do would be to shake up the memories of a few of the fellows still serving in the RCN.

Lt.-Cdr. Ray Wormald, information officer at *Naden*, and I looked through hundreds of copies of *The Crowsnest*

—but no story on Soue Kee. We turned up a picture of him taken on the quarterdeck of the *Ontario*, though—thanks to CPO Norm Keziere, a navy photographer stationed at Ottawa. Lt.-Cdr. John Turner, at HMC Dockyard in Halifax, came through with several anecdotes on Soue after talking to Lt. Cdr. Bill Northey; ex-PO James (Dolly) Doyle, who is now taking a journalism course at St. Mary's University; and Tom Marsden, now parade lieutenant at HMCS *Stadacona*.

Everyone remembered Soue with great affection.

The next job was to find him.

Finally, with the help of his nephew, Jack Tang, of Victoria, I traced him—to the Chinese Community Hospital in the B.C. capital city.

When I walked in the front door of the tiny hospital on Herald Street, there was Soue Kee—sitting in a pair of blue pyjamas, watching television.

He remembered me, all right . . . for I had taken his picture on two occasions over the years; once when he was hit on the head and robbed; the second time when a fire hit his laundry.

What made finding Soue a tough job is this: his name isn't Soue Kee after all. That was only the name of his laundry. Soue was born Tang Kam Chew in Canton 79 years ago; he arrived in Canada at the age of 25 and operated his laundry for 50 years in Esquimalt. So people just started calling him Soue Kee.

Soue was delighted to see one of his "old navy boys". He wanted to know if the *Ontario* was still in Esquimalt, and seemed genuinely sad to hear she was paid off in 1958 and scrapped. He has been at the hospital for the past 18 months—he retired five years ago and lived in Chinatown before entering hospital.

He misses the Navy and I guess the Navy certainly misses the best laundryman ever to serve the fleet. I think he would be very glad to hear from anyone who wanted to write him a note.

The hospital matron, Mrs. Birdie Pegg, calls Soue "a wonderful patient; just wonderful." Soue calls himself her "No. 1 boy".

And that is the story of Soue Kee—it was hard work finding him, but it was well worth it!

The ancient Soue Kee Laundry, which once stood at 62 Pioneer Street, Esquimalt, has been gone these many years. Even the street has disappered, absorbed into the Dockyard complex. Sailors still remember, however, the old Chinese laundryman who roamed Dockyard and messdecks unchallenged, as he plied his trade. The picture at the right shows Soue Kee going on board the cruiser Ontario a dozen years ago.

ROYAL CANADIAN NAVY

BADGES & INSIGNIA

RCN TRADE BADGES

BADGES MARKED THUS ● HAVE DIFFERENT TRADE NAMES WHEN USED BY WRENS.

❶ SECRETARY ❷ PERSONNEL RATE
❸ ACCOUNTS ❹ NAVAL OPERATIONS
❺ COMMUNICATIONS OPERATOR


AIR FITTER


AIR RIGGER


APPRENTICE TECHNICAL


AVIATION TECHNICIAN


BANDSMAN


❷ BOATSWAIN


CLEARANCE DIVER


COMMISSARYMAN


COOK


ELECTRICAL TECHNICIAN


ELECTRICIAN'S MATE


ELECTRONIC TECHNICIAN


ENGINEERING MECHANIC


ENGINEERING TECHNICIAN


FIRECONTROLMAN


HULL MECHANIC


HULL TECHNICIAN


HYGIENE ASSISTANT


LABORATORY ASSISTANT


MEDICAL ASSISTANT


METEOROLOGIST'S MATE


NAVAL AIRMAN


NAVAL STORESMAN


OPERATING ROOM ASSISTANT


❸ PAY WRITER


PHARMACIST


PHOTOGRAPHER


P & R TRAINER


PHYSIOTHERAPY AID


❹ RADAR PLOTTER


RADIOGRAPHER


❺ RADIOMAN


RADIOMAN SPECIAL


SHIP'S STORESMAN


SHIP'S WRITER


SIGNALMAN


SONARMAN


STEWARD


TECHNICAL ASSISTANT (MED.)


VICTUALLING STORESMAN


WEAPONMAN AIR


WEAPONMAN SURFACE


WEAPONMAN UNDERWATER


❶ ADMINISTRATIVE WRITER


AIR ELECTRICAL TECHNICIAN

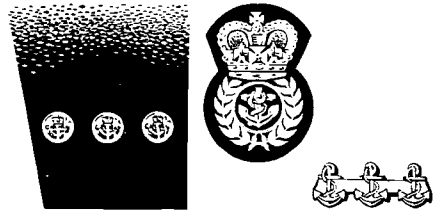

AIR ELECTRONIC TECHNICIAN

RANK BADGES

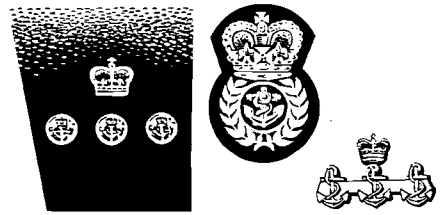
LEADING SEAMAN

PETTY OFFICER 2ND CLASS

PETTY OFFICER 1ST CLASS



CHIEF PETTY OFFICER 2ND CLASS



CHIEF PETTY OFFICER 1ST CLASS

MISCELLANEOUS BADGES

BLAZER

NAVAL PATROL ARMLET

INSIGNIA BUTTON (PERSONNEL)

INSIGNIA BUTTON (WREN, PO, CPO)

SHOULDER BADGE

NAVAL AIRCREWMAN

CLEARANCE DIVER (SHIPS)

MARKSMAN

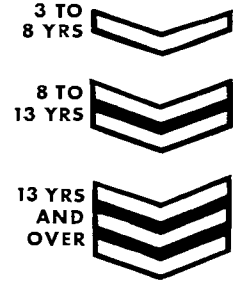
INSTRUCTOR'S BADGE

(Worn on Maple Leaf above Branch Badge)

BUGLER

SUBMARINE

GOOD CONDUCT BADGES



RCNR TRADE BADGES

AIR ARTIFICER

ANTI-AIRCRAFT RATE

ARMOURER'S MATE

COMMUNICATOR

COMMUNICATOR RADIO

COMMUNICATOR VISUAL

CONTROL ARMOURER

GUNNERY ARMOURER

HULL TECH. (WOOD)
HULL TECH. (METAL)

LAYER RATE

MECHANIC

ORDNANCE TECHNICIAN

PLUMBER

QUARTER'S RATE

RADAR CONTROL RATE

REGULATOR

SAFETY EQUIPMENT TECHNICIAN

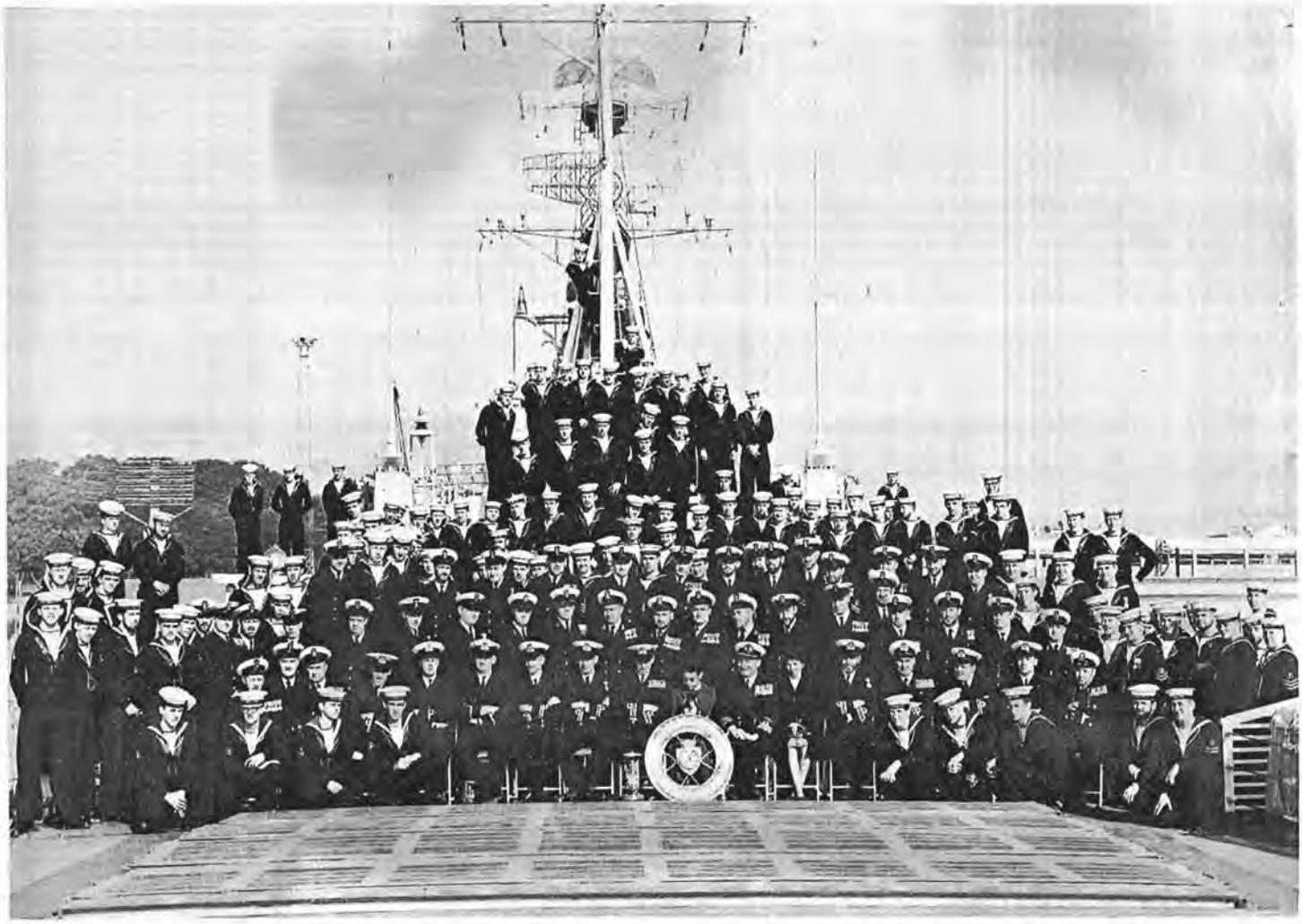
SAILMAKER

SEAMAN

TECHNICIAN MECHANIC

TORPEDO ARMOURER

TORPEDO DETECTOR RATE



FAMILY PORTRAIT—It is not often that pictures of ships' companies include a foster child but this one of the Terra Nova "family" does. Fourteen-year-old Bernard LeBozec, who is provided for by the ship's company under the Foster Parents Plan, is the central figure in this picture taken in Toulon, France. Bernard's mother is to the left of the ship's captain, Cdr. J. B. Young (BN-5179)

TERRA NOVA'S FOSTER SON

ANY 14-YEAR-OLD boy with 246 foster fathers is likely to be impressed when he meets them all for the first time. Bernard LeBozec was impressed indeed.

Bernard LeBozec is the foster child of the destroyer escort *Terra Nova*. The officers and men in the ship adopted Bernard in June 1959, under the Foster Parents Plan. Bernard lives in the small village of Larmor en Belz, on the coast of Brittany near Lorient, and the officers and men of the *Terra Nova* chose their recent visit to Toulon for a fathers-and-son meeting.

Through the Canadian Embassy in Paris, the *Terra Nova's* welfare committee invited Bernard and his mother to Toulon for a two-day visit at the foster parents' expense. French press, radio and television outlets, too, considered the visit worthwhile and national coverage of the meeting resulted.

Following the 21-hour journey by train to Toulon, Bernard and his mother were met by PO John Kingston, PO Alfred Gagnon and the press, radio and television representatives, and then were escorted to their reserved hotel rooms.

The next day the two met Cdr. J. B. Young, commanding officer of the *Terra Nova*, and were guests at a special dinner in the wardroom at which officers and men representing various ranks and messes in the ship were hosts. During the visit Bernard posed for a special photograph with his "fathers", had other meals with the men in the main cafeteria, toured the ship, and even managed a sightseeing tour of the surrounding countryside. A special treat for the youngster was a tour of Toulon Harbour in the *Terra Nova's* fast despatch boat.

Bernard's visit to the *Terra Nova* was his second direct contact with men from the ship. While the ship was in Portsmouth, Eng., in 1961, two representatives were sent to Larmor en Belz to see the lad.

Each month since his adoption one of the 11 messes in the ship has written to tell him what they have been doing. But until his visit Bernard was known only by his letters. Now he is better known to his "fathers" than ever and they have found him to be well mannered, slightly shy, and "a darn nice kid".

This is the destroyer escort, Nipigon during builder's trials in the St. Lawrence. Although she will not be commissioned until this spring, she has already taken part in the "operation" described in the accompanying story. (ML-13224)

OPERATION LITTLE NOISE

THE DESTROYER ESCORT *Nipigon* has already done an important job for the RCN, even though she won't be commissioned into the fleet as HMCS *Nipigon* until late this spring.

The destroyer escort, being built by Marine Industries Limited, of Sorel, P.Q., took part last fall in an experiment conducted by Computing Devices of Canada, Limited, an experiment which the company dubbed "Operation Little Noise" and which is described in the company's magazine, *The Pulse,* in an article by Ian Thomson.

For many years, says Mr. Thomson, there has been growing concern in the navies of the world about the amount of noise generated by the multitude of machinery and equipment contained in a modern day warship. This noise seriously affects the ship's ability to detect other underwater noises, at present the principal method of locating enemy submarines. Because of this, many attempts are being made to reduce ship noise to a minimum, thus increasing the vessel's anti-submarine warfare efficiency.

The RCN has been doing its share in these investigations, and last fall Computing Devices of Canada, Limited, was awarded a contract which brought representatives of the firm into close contact with ships, their noises and the sea.

Transducer Is 5 Stories High

A study into the possibility of long-range submarine detection is being carried out by Columbia University's Hudson Laboratories.

Project Artemis is using a new ship-borne acoustic device about five stories high. The transducer is lowered into the sea to produce sound waves for study. It requires as much electric power as a city of 50,000 people.

The Navy wanted to determine the effect regrinding a ship's main propulsion gearing would have on the vessel's acoustic noise. The company's proposal, which was accepted, was as follows:

A new destroyer escort, the *Nipigon*, would be undergoing builder's trials in the lower reaches of the St. Lawrence River before being turned over to the Navy. While the ship was in the river area, the company would arrange to measure the noise created by the vessel. She would then return to the builder's yards at Sorel, the main gearing would be removed and reground to a much higher tolerance and the gearing would then be re-installed.

It was also planned that, in the spring, when the ship was on her way from Sorel to Halifax, her noise measurements would be made under exactly the same conditions, i.e., over exactly the same course at the same speed and with the same machinery operating. Then any difference in the two measurements could only be due to the regrinding. Computing Devices therefore undertook the responsibility of measuring and analyzing the noise on each occasion and submitting the final state to the Department of National Defence.

Having selected the area, the next step was to procure a boat suitable for housing all the complex and sensitive equipment which would be used to measure and record the *Nipigon's* noise.

Tony Green and Ian Thomson (the author) work out the best approach to laying the buoys for the sound-detection experiment. (Photo from Computing Devices of Canada)

Accordingly, Tony Green, from Industrial Division, and Dick Seaman, of Engineering Division, set off for Rimouski, where they obtained the use of the fishing vessel *Gagnon*. Though not the ideal craft, it proved adequate and proved to be a sturdy vessel with fine sea-going characteristics.

The weeks before the date set for the trials were hectic ones, particularly for Computing Device's Engineering Division. When the shipbuilders announced that they would like to advance the test date by a week, the engineering crew of Dick Seaman, Barry Jeffrey, John Lighthall and Jeff Scofield had to spend many hours during week-ends and evenings to be ready for the new target date. Back at Industrial Division, Ian Thomson was embroiled in fathoms and fathoms of nylon rope, shackles, thimbles, and weird looking plans for laying and mooring buoys. Two of these would guide the *Nipigon* along a selected track at a precise distance from a third. The hydrophone was to hang at a predetermined depth from this third buoy.

This hydrophone, through which the ship noises are picked up, is the key to the whole operation and was treated accordingly. It looks like nothing more than a little rubber ball about one and one half inches in diameter but this delicate and highly sensitive instrument received kid-glove treatment throughout the entire operation, as did a very expensive tape recorder.

Tony Green and Ian Thomson were the first to leave for Rimouski, preceding the remainder of the party in order to set up survey markers and prepare buoys. These had been manufactured locally and some 1,300 pounds of

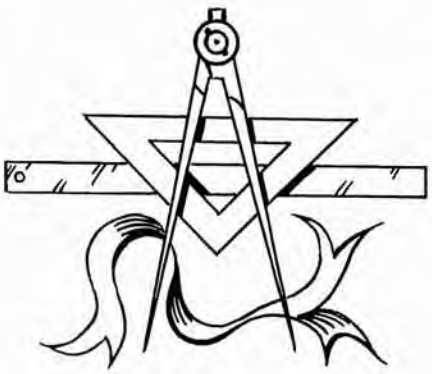
Jeff Scofield and John Lighthall operate the sensitive sound equipment while Barry Jeffrey passes a message from the Gagnon by radiotelephone. (Photo from Computing Devices of Canada)

railway track, cut to suitable lengths, had been acquired for anchoring them. Coils of nylon rope were unreeled, cut, spliced, marked with pieces of red and yellow cloth and finally reeled up again. If each buoy was moored with two anchors laid an exact distance apart, with a specific length of rope between anchors and buoy, then the movement of the buoy in the tidal current would be reduced to a practical minimum.

The other members of the group showed up two days later in a truck and station wagon loaded down with recorders, analyzers, control units, batteries and generators and all the other hundred and one things required for the operation. Ian McMillan, of Industrial Division, exhibiting considerable talent in the carpenter's trade, immediately set about constructing a good solid bench on board the *Gagnon* to hold the various pieces of equipment. Then all hands set to loading everything on board by hand.

The day of the trials broke fine and clear and, long before daylight, the party was en route to the test area. By first light, the hydrophone was in position, the *Gagnon* was anchored about 100 feet from the buoy, and the sound equipment was running and ready to record. Radio contact was established with Ian McMillan in the *Nipigon* and the word was passed to start the first run.

Looming large in the early morning light, the *Nipigon* lined up on the buoys



and started the run that would bring her past the sound boat at a distance of only 400 feet. Inside the cabin of the boat John Lighthall and Jeff Scofield operated their equipment, Barry Jeffrey made verbal notes into a small hand microphone and Dick Seaman anxiously watched a small dot of light dancing up and down on the analyzer scope and listened to an assortment of noises emanating from a speaker. Out on deck, Ian Thomson watched the ship approach, ready to advise those inside of her closest point of approach as first the bow and then the stern came in line with the buoy and a survey marker on shore.

Cutting the water cleanly, the *Nipigon* approached, passed and withdrew, the instruments recording her noise while the *Gagnon,* though rolling violently in the waves thrown up by the ship, remained in a state of relative equilibrium. The test run was successful and the trials commenced in earnest. All day the *Nipigon* steamed up and down the track at various speeds and the instruments recorded her passing. With the last of the daylight, the engineers called it a day. They had recorded sufficient data to keep them and the computers busy for some time to come.

When analysis had been completed, an interim report was to be made to the Department of National Defence and some time this spring, the *Nipigon's* noises will again be recorded.

The little fishing vessel Gagnon served as a floating laboratory for technicians from Computing Devices of Canada who were measuring the decibel output of the Nipigon. (Photo by Tend Grant, from Computing Devices of Canada)

'PEGGY' EVANS

A Portrait by H. C. W.

"Good evening, Sah! Bon Soor, Mem'-selle!"

THE CHEERY GREETINGS of the strapping hall porter of the *Stadacona* wardroom are stilled.

"Peggy" Evans died on Sunday, March 15. He was buried with naval honours as the late Lieutenant Colin Preston Evans, MBE, CD, RCN (Ret), two days later at Gate of Heaven Cemetery, Sackville, N.S. He was 64.

His death was announced by naval message to all naval commands in Canada and abroad. Someone special had been lost.

The general consensus is that there never had been a better hall porter. The Navy was proud of Peggy. He had excelled as an athlete and as a "springer". He was the special champion of the young officers and did everything in his power to help them in every way when he first became hall porter at Admiralty House in *Stadacona* in 1947 after leaving the service. When the new wardroom got going, it was found that Peggy was indispensable there, too.

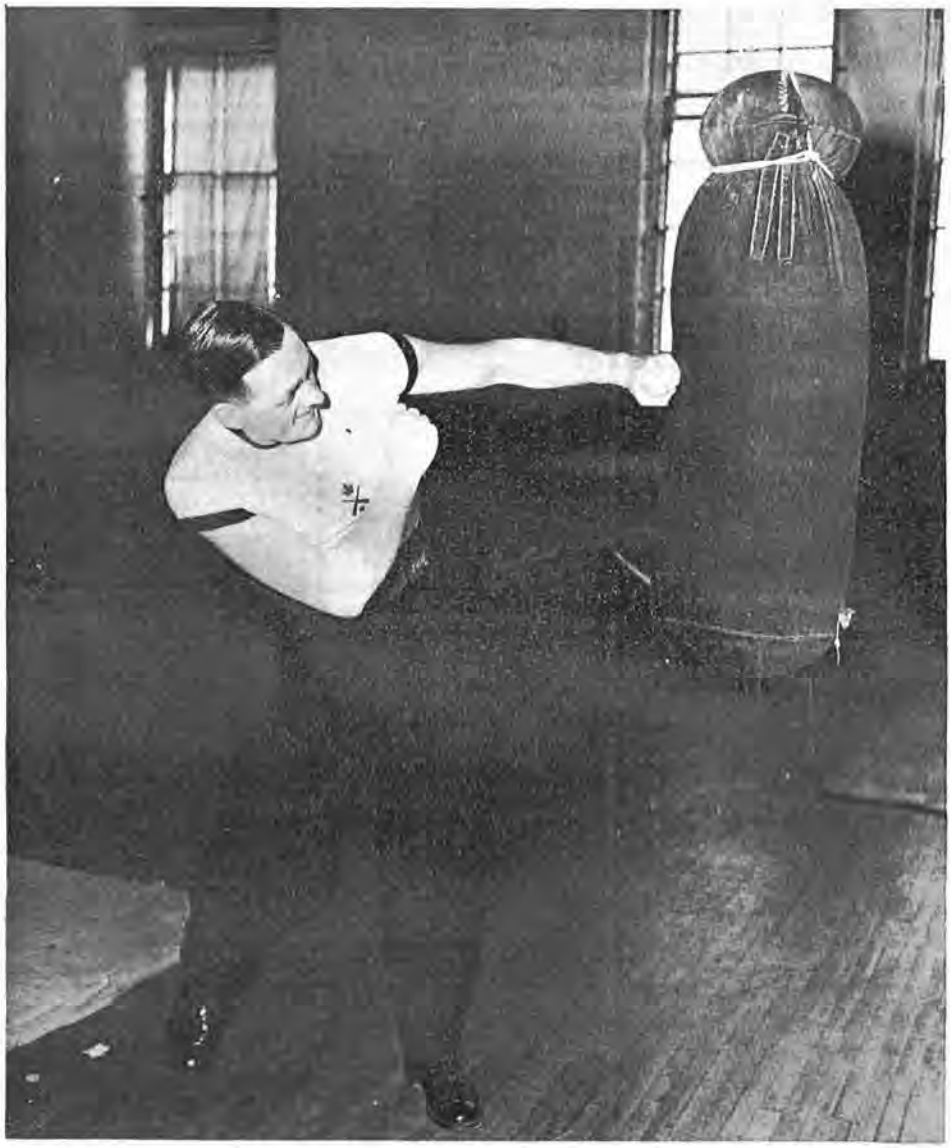
He was sometimes tough on senior officers. He pointedly told more than one of them where the barber shop was to be found. He argued down died-in-the-wool gunnery commanders, especially when it came to the respective leadership qualities of gunnery instructors versus the P and RT people.

He added his bit to biculturalism by greeting all French-speaking officers in their mother tongue, laced with the accent of Kent. He kept track of officers in their various wanderings, and of their wives and sweethearts. If an officer wasn't bringing his wife to enough mess functions, Peggy gave him the message—within the little lady's hearing.

Peggy was a splendid argument in favour of physical conditioning. (See "51 Years Young", *The Crowsnest*, April 1950). A broad-shouldered, six-footer, with a thick thatch of grey-brown hair, he moved with a springy step and kept himself trim in the metal grey cutaway that was his wardroom "uniform". He seemed to have "Norwegion" (continuous) watches in the mess.

He served in the reserve at HMCS *Scotian* in Halifax for valuable years, imparting much of his lore to the young citizen-sailors of the Halifax-Dartmouth area. His orders were never disputed and he used the forceful approach on occasion to accentuate a point, but with private mirth.

"I tell the lads to get on with it or I'll knock you flat," he once confided with a huge twinkle. "Now if a young officer tried that tack, the lads would be inclined to provoke him to see if he could. I'm too old to fight, so they go along with what I say out of respect for my years."



The heavy bag didn't swing after "Peggy" Evans poked it. It just hung there and quivered as if mortally wounded. Up to the day of his death Lt. Evans stayed fit but he scorned modern methods in favour of his own techniques developed as an RN and RCN physical training instructor. (HS-9668)

His sailor lads knew better. Peggy still had a punch that could fell an ox.

Lt. Evans was born on October 29, 1899, in Chatham, Kent, England, one of the three major manning ports of the RN. Early in 1915, Colin Evans became Boy Seaman Evans, and acquired the traditional nickname "Peggy".

A fast-growing youngster and strong as a bull, he entered the fistic world at 16. Two years later he was middleweight champion of Malta naval base. Later, although still only a light heavyweight, he captured the coveted

Hong Kong Challenge Belt and the far eastern fleet's heavyweight championship. In the early twenties, he transferred to the "springer" branch. In 1922, meanwhile, he became light heavyweight champ of the Royal Navy and Royal Marines and was runner-up in the 1924 tourney. In 1925 he won the contenders' championship in a tri-service match.

A bustling PTI, he taught boy seamen in the training ship *Marlborough* and became a petty officer. By 1926 he was the heavyweight champion of the Navy and Marines. Although he fought more than 100 bouts, a dented nose was his only scar.

Peggy first came to Canada in 1930 on a three-year loan to old *Stadacona* in the dockyard. He married Mary Livingston, of Springhill, N.S. They reared two children.

Service in Britain and Bermuda rounded out the pre-war years. Due for pension, he continued in service and

in 1943 transferred to the RCN. He taught physical fitness and physical combat to more than 1,700 sailors who passed through the Shore Patrol Training Centre, of which he was second in command. In 1946 he was appointed an MBE.

He had been on the Royal Navy's rugby union team and is remembered in the Canadian Maritimes as the man who helped organize the Halifax Rugby Referees' Association in the early '30s.

He was a member of the winning field gun's crew in the London Royal Tournament of 1924. He played soccer, was on champion water polo teams as well as fencing and bayonet fencing teams. He was a fast track sprinter and excellent in shot-put. For some years during and after the war he refereed at boxing tournaments. It was in the ring that the writer first met him. Peggy was bending over him, busy counting "ten".

Rt. Rev. William W. Davis, Anglican Lord Bishop of Nova Scotia, during a service at St. Michael's Church, Shearwater, laid his hands upon the heads of candidates in confirmation on December 23, with Stewart Churlish acting as chaplain and Bob Patterson and Ian Whitby as servers. Chaplain (P) Douglas Fuller presented the candidates. Front row, left to right, are Leslie Davids, Daniel Collins, Brian Bourquin, David Stevens, Barrie Rennick, Neill Bell and Michael Hollywood. Second row: Jacqueline Stevens, Joanna Muncaster, Leslie Heather Rennick, Evelyn Sopko. Third row: Susan McKenna, Elizabeth Keeler, Robyn Williamson, Debra Dunnet, Bishop Davis, Karen Melnyk, Janice Jamieson, Mrs. Ann Hunt, Lynn Williamson, Ann Batten. Last row: Bob Patterson, Chaplain Fuller, Stewart Churlish, Ian Whitby.

HERE AND THERE IN THE RCN

Ldg. Sea. Ronald Carter of the Shearwater Bowling Team, is pictured with his trophy after capturing the high single award in the Tri-Services Five-Pin Bowling Tournament at RCAF Station Greenwood. He rolled a perfect score of 450 and became the first man in the tournament's history to bowl a perfect string.

Starting the camping season early, HMCS Grilse, West Coast submarine, was under canvas in early March. This picture of the tarpaulin-draped Grilse was taken as she left drydock at Esquimalt toward the end of a long refit. (E-73657)

His Honour, the Lieutenant-Governor of Nova Scotia, H. P. MacKeen, receives a framed photograph of the ship's company of HMCS Scotian from the Commanding Officer, Cdr. S. C. Oland. The presentation was a highlight of a mess dinner at HMCS Stadacona by Scotian officers and their guests to celebrate the decision to keep the Halifax division open. (HS-74352)

That was pretty sudsy looking champagne the UNTD cadets of the University of Saskatchewan and HMCS Unicorn, Saskatoon, supplied to Campus Queen Gorlia Vogeli for the ceremony of naming the model of the Bonaventure they built for Winter Carnival Week at the university. Also shown are Cadets John Dalzell, Ran MacNeill and J. D. Donaldson.

CONNING IN COMFORT

by
Eric R. Axelson
Editor
Canadian Shipping and Marine Engineering News

REVOLUTIONARY CHANGES are in the cards for the control of ships' operations which will contribute much to safety at sea by increasing the efficiency and reliability of order execution on board. A two-year study at the Defence Research Medical Laboratories at Downsview (Toronto) has resulted in the development of a complete control system which is now ready to be supplied in practice. The project began two years ago and its success has been dependent largely on the support of the Royal Canadian Navy and its willingness to accept rather drastic changes in the way of life at sea.

The venture has been under the direction of Dr. N. J. B. Wiggin, Chief Superintendent at DRML, but the actual work was performed by R. E. F. Lewis, Head, Human Engineering Group, and A. V. Churchill, Scientific Officer.

Before DRML were consulted by the RCN, much design work had already been completed by the Director General Ships and ship characteristics firmly established. During this important stage, many critical decisions were made which led to the definition of ship control spaces. In this way, decisions to control machinery remotely from a specifically placed machinery control room, and to juxtapose the operations room and bridge in a fixed size and spatial relationship were made before consultation with DRMR commencedo.

As the design passed in the RCN from the preliminary phase to the contract phases, systems requirements for ship control were already hardened into specification form. Moreover, detailed diagrams enabled the number and kind of equipments to be determined and arranged. In this way the RCN was able to prepare layouts which, together with operational sequence diagrams, formed a clear basis upon which DRML could work. This had the effect of allowing DRML to concentrate less upon the layout and design of control spaces and more upon the generation of action information displays.

The ship's bridge today . . . and tomorrow

Using the principles of a not-too-widely-known branch of science, Human Engineering, the DRML team set out, first, to define closely the functions of ships' personnel in the vital areas of bridge command and engine room. Using equipment and design ideas which in most respects are already in use as a result of recent technological advances, the team of scientists has produced a startling new concept of running a ship, in war or peace.

It should be emphasized that although the project was undertaken primarily on behalf of the RCN, all the results are or will be made available to the marine industries to the extent that they are applicable in commercial vessels. (It is understood that the first installation may well be made in one of the new ships planned for Government agencies, such as the Department of Transport or the Hydrographic Service.)

What is this new concept, then?

One of the purposes of research in Human Engineering is to eliminate "the middleman" — members of a ship's crew, for instance, who in many cases serve only as communication links in the chain of command. In the old days the captain of a vessel stood on the quarterdeck giving his orders to the sailing master who was responsible for their execution by still others. In present-day ships the main improvement is that the orders are given from an enclosed bridge and sent on by mechanical means.

With the completion of the DRML project is it clear that every effort should be made to put actual control of the engines and the helm on the bridge. Then, in difficult situations such as docking, the many ship control decisions can be put into immediate effect by the officer making the decisions. Alternatively, the controls could be operated by the helmsman under supervision, still with substantial improvement. Ship's captains will recognize that this system will ease their burden considerably. No longer will they have to worry as much about delays in response to their control orders, and, more important, the ever present danger of a wrong response as a result of human error.

As the illustrations show, there is, a complete redesign of the bridge, or wheelhouse. (Of necessity, this article deals with a naval ship where several installations are essential which have no function on a commercial bridge. The latter, therefore, will be considerably simpler, and less expensive.)

The main ingredients in the new design are three control consoles which bring the needed instrument displays, controls and switches to the operators. The captain and the officer of the watch occupy raised seats, side by side, at the centre panel from which they both have a clear view of the course ahead. There are a number of gauges on the panel which together give an instant view of overall performance. An easily accessible radar scope is located between the two chairs and communication is provided through a direct-line system to important areas in the ship (sometimes called 'hot lines'), and a dial telephone.

Directly in front of this command console is the helmsman's console, with —on a man-o'-war—two seats; one is intended for a trainee or, in certain conditions, a special or relief helmsman. In addition to the usual instruments indicating course, etc., between the seats are the throttles for direct control of the engines.

On the panel before the helmsman is also something entirely new: a miniature television screen which could show the side of the vessel and is intended for use in docking. Its use is, of course, optional, since experienced captains usually have a pretty accurate impression of where they are in relation to other objects.

The decision to place bridge personnel in comfortable chairs was another result of the human engineering studies. It is evident that seated personnel will not be exposed to as much of the fatigue and stresses attendant upon standing and walking on the deck

which more often than not is pitching and rolling.

The DRML studies also led to a proposal for changing the age-old watch system which incorporates two dog-watches and puts crew on a 20-hour rather than a 24-hour cycle. The suggestion has been made that watches should, within a cruise, occur more regularly in relation to the time of day for reasons which have much to do with the chemistry of the human body and its performance capabilities. As is amply evident by the illustrations herewith, the most radical improvements under the new system will take place in the area where they are most needed.

A SHIP'S machinery spaces are in general very poor areas in which men must monitor controls and displays. Not only are the spaces confined, but the noise level is such that personnel must shout to be heard, or be efficient lip readers. Temperatures are high—so hot that gloves are needed to climb some ladders. Controls and displays are scattered with little or no thought given to the operator's requirements. To eliminate, or at least greatly alleviate, such conditions, automation again takes over.

In an appropriate location (which will be changed in accordance with the general design of the vessel concerned), two sets of consoles are installed, one behind the other.

At the rear, three positions seat, from left to right, a monitoring officer, the engineer on watch and the hull technician. The engineer has unobstructed view of the entire monitoring system at the front console, which, in the same order, has positions for the electric, engine and boiler technicians.

On all the various panels there are check points covering the entire propulsion function with its auxiliary systems—a total of more than 200 meters and gauges and valves. In cases of failure of any part, the corresponding panel shows a red light accompanied by an auditory signal warning the operator that something is going to happen. When it does, the location of the malfunction is immediately known and technicians are despatched to correct the fault.

It might be feared that such repairs would be highly complicated ventures in a variety of specialized technological areas. That possibility has been foreseen and met by provision of "package" replacement—so designed that a very small number of units need be carried to take care of the entire panel.

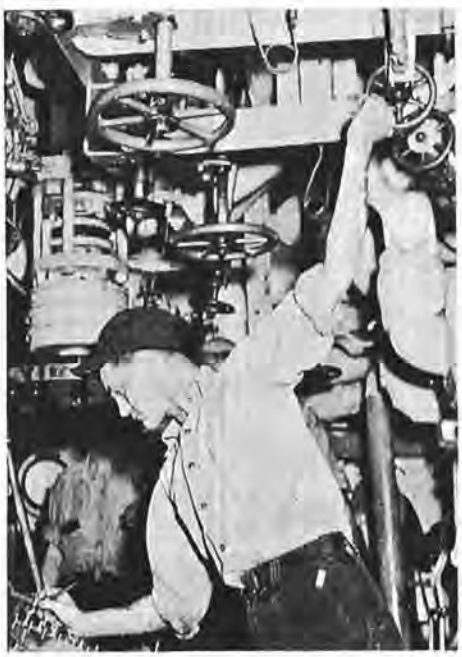
As will be realized from the above, and perhaps even better from the photographs, this new control system is a tremendous improvement on the conditions which govern the efficient and safe operation of ships. While the changes discussed here, as already mentioned, refer to naval vessels, it will also easily be seen that they are equally applicable to commercial operations. Commercial carriers are less complex in both design and equipment; they have no weapon or damage control systems to worry about. Consequently a civilian installation of comparable control systems will be much more compact and less expensive.

Like automation in general, they will lead to a reduction in crew which in the long-term outlook will more than compensate for the initial cost. Yet the manning scale is not likely to be affected to a degree where serious objections can be raised from labour. In addition, the greatly increased safety, efficiency and comfort for all concerned should more than balance all other considerations.

Because of the relative simplicity of operations, the proposed control system will not require much, if any, additional training or education of the operators. In the opinion of Mr. Lewis, the manufacturers of the various equipment ingredients today offer a highly reliable product which meets all requirements for both accuracy and stability under varying working conditions and stresses.

With the successful project, the Defence Research Medical Laboratories and its staff have taken what appears to be a comfortable lead over the rest of the world. According to reports, great interest in the developments has been shown in Great Britain and the United States, especially on the part of naval authorities.

It is great accomplishment for Canadian science and technological know-how, and it can only be hoped that a Canadian ship will be the first one to practically demonstrate its value.



Engineroom clutter will also disappear

Located on the East Channel of the Mackenzie River near the Arctic Ocean, Inuvik is the home of the naval radio station HMCS Inuvik, whose administration building is shown circled. The bare patches in the wooded foreground are experimental gardens. Two hostels and the federal school, along with the dome-shaped Roman Catholic church, share the central part of the picture. The white lines are "utilidors", insulated ducts that convey steam, hot and cold water to the buildings and carry waste away. (Photo courtesy Northern Affairs)

HMCS INUVIK

OF THE LAND-BOUND ships of the Royal Canadian Navy, the newest is HMCS *Inuvik,* commissioned in the Arctic town of that name last September 10.

The Navy has long operated a radio station in the area, formerly at Aklavik, 35 miles away in the Mackenzie River delta. Naval Radio Station Aklavik, established in 1949, was moved in March 1961 to Inuvik and its name was changed to conform to the new location.

The move was necessitated by the thawing of the permafrost under the buildings of Aklavik, which caused them to settle and shift. The new town of Inuvik, on the east channel of the Mackenzine delta, is a community on stilts, all buildings having been built clear of the ground on piling to avoid the fate of Aklavik.

Inuvik is 110 miles north of the Arctic Circle and the sun remains below the horizon for several weeks around the turn of the year. However, the sun was shining on the day of the commissioning, September 10, 1963, and the temperature was around the 50-degree Fahrenheit mark.

The ceremony held in front of the Naval Administration Building, on Distributor Street, and was witnessed by most of the 850 pupils of Sir Alexander Mackenzie School, who were released from class for what was in most cases their first view of a military ceremonial event. Several hundred townspeople also turned out for the occasion.

The guest of honour was Rear-Admiral M. G. Stirling, Chief of Naval Personnel, who was visiting Inuvik in the course of the annual tour of supplementary radio stations. His entourage included Captain A. O. Solomon, Naval Secretary; Surgeon Captain F. G. MacHattie, representing the Surgeon-General; Cdr. P. J. Pratley, Director of Supplementary Radio Activities, and Cdr. B. E. Gaynor, representing the Director-General of Naval Supply.

The ceremony was under the direction of the commanding officer, Lt.-Cdr. D. W. Smith, and the religious portions were presided over by the Rt. Rev. Henry G. Cook, suffragan bishop of the Arctic, of All Saints Pro-Cathedral, Aklavik; Rev. Fr. Adam, OMI, pastor of the Church of Our Lady of Victory, Inuvik, and Rev. A. G. Morton, Protestant officiating clergyman for HMCS *Inuvik*, of the Church of the Ascension, Inuvik.

Admiral Stirling addressed the assembly and briefly reviewed the history of the Western Arctic, paying tribute to the naval and civilian explorers who penetrated the north in the early days of Canada.

After he had inspected the ship's company, Rear-Admiral Stirling made rounds of the naval buildings.

As well as being the RCN's only commissioned establishment north of the Article Circle, what is less likely to be observed is that HMCS *Inuvik* is the most westerly of the Navy's shore bases. A line drawn due south of Inuvik would cross the Pacific Ocean about 500 miles to the west of Esquimalt, headquarters of the Pacific Command. (It is to be noted that the distance between the meridians passing through Inuvik and Esquimalt is not nearly as great at the northern locality as at the southern).

In anticipation of the commissioning of the radio station, a ship's badge was designed by the Heraldic Adviser, Lt.-Cdr. Alan Beddoe, RCNR (Ret), whose talent is reflected in most of the badges of the RCN. With the co-operation of E. C. Russell, Naval Historian, and Lt.-Cdr. Bruce A. Campbell, Deputy Naval Secretary (Administration), the badge was produced in record time.

The heraldic description and significance of the badge for HMCS *Inuvik* are:

Blazon: Party per pale Sable and Or, the figure of an Eskimo in native garb, Argent, embellished Azure, his back affronte and launching with his dexter arm a lighting flash Gules.

Significance: The black and yellow background is symbolic of the long, seasonal Arctic nights and days. The Eskimo is used here in reference to the meaning of the word "Inuvik"—"The Place of Man" or "The Place Where Man Is". He is shown in the act of hurling a flash of lightning, as a reference to naval communication.

Ship's Colours: Yellow and Black.

In everyday terms, the colours of the badge are white for the Eskimo's parka, with blue trimming and a red flash of lightning. The background is vertically divided, half black and half yellow.

To commemorate the commissioning a medallion was designed, bearing the ship's badge on the obverse and a map of the Mackenzie delta on the reverse. This was struck in the same diameter as a Canadian silver dollar in bronze, silver metal, sterling silver and gold-plated sterling silver. A limited number of bronze copies of the medallion are available to naval personnel from the ship's canteen, HMCS *Inuvik*, for $2, including postage.

Commissioning gifts to HMCS Inuvik included silverware from three other naval radio stations, a water pitcher from HMCS Gloucester, candelabra from HMCS Coverdale and a salver from HMCS Churchill.

Lt.-Cdr. D. W. Smith, commanding officer of HMCS Inuvik, displays the new ship's badge.

SURFACE SHIP vs SUB

UP TO A FEW years ago submarines were a major threat only to other ships which they could attack with torpedoes or mines. It is true that submarines could, and did, bombard shore targets but their small guns and limited ammunition supply prevented them doing any significant damage. In both World Wars submarine attacks caused serious losses to surface ships and in certain areas came near to stopping all sea-borne trade. These operations continued until large forces of surface ships, aircraft and submarines could be deployed against the enemy submarines.

Until the end of the Second World War submarine weapons limited the types of operation that could be undertaken by a submarine. Minelaying was only effective in comparatively shallow water where the mines could be laid in focal points such as the entrance to a port or in a narrow channel. These areas were normally patrolled by anti-submarine vessels and minesweepers and could also be covered by deep anti-submarine defensive minefields. The return from the small field a submarine could lay was not very good and the risks of laying were great. The most profitable employment for these submarines was to use them to attack with torpedoes but the submarine had to find a target and then close within a mile to be reasonably sure of getting a hit.

The convoy system, while primarily designed to reduce the target area available to enemy submarines, had the further advantage of obliging the submarines to enter a small area of the ocean in which they could be effectively detected and dealt with by the escorts. Unfortunately this was a weakness of the submarine that could only be exploited by an adequate escort force, a requirement that was not met during the Second World War, because of a shortage of escorts, until its later stages.

Today the problems of escorting shipping are essentially the same as in the past. Submarine speed and mobility have increased significantly but the submarine must still approach within effective range of her target. If the escort around a convoy or task force can cover the area out to the effective range of the submarine, then the submarine must, as before expose herself to the screen, if she is carry out her mission. The effective weapon range of the submarine has increased in the last few years but so have the detection ranges of the escorts. More escorts or longer detection ranges can still supply the solution.

Now, however, it is not only necessary to protect shipping from the depredations of submarines but shore targets many miles from the sea must be protected from submarine attack. This makes the anti-submarine problem much more difficult. In peacetime the submarines that can fire ballistic missiles can legally patrol the high seas, while remaining within range of their targets, for weeks at a time. The convoy concept of watchful waiting no longer holds. The submarine must be located and destroyed before she can launch her missiles.

By
Lt.-Cdr. P. F. B. Roe, RN

Very large areas of sea must now be searched, quickly and thoroughly. No one type of detection equipment is superior to the others under all circumstances, nor can any particular vehicle operate efficiently under all weather conditions. The forces available include fixed-wing aircraft, helicopters, surface ships and submarines each of which has various advantages and disadvantages.

The fixed-wing aircraft has proved to be a good submarine hunter in the past. It can be fitted with radar and other long range detection devices but these devices can only detect a submarine under certain conditions. For example, radar can only detect a submarine when she chooses to show some part above the surface. All the long range detection devices of fixed-wing aircraft are affected by bad weather and at such time the chance of an aircraft detecting a submarine is slight.

This does not mean that the efforts of an aircraft are of little use in bad weather. Although the aircraft may be unlikely to detect the submarine, the submarine may be unwilling to accept this slight chance of detection so may be diverted from her chosen course of action and prevented from carrying out her task. The measure of the efficiency of fixed-wing aircraft in anti-submarine warfare is not the cold figure of the number of submarines sunk but the number of submarines prevented from making their attacks. Over the years the number of submarines sunk by aircraft can only be a small proportion of the total number of attacks frustrated by the mere presence of an aircraft.

The helicopter is sufficiently different from other aircraft to be considered separately. It is only of short range but can lower a sonar set into the water, which puts the helicopter into a similar class with the surface escort. To operate the sonar, the helicopter must hover and lower the sonar into the water. To move from one position to another, it is necessary to raise the sonar clear of the water, fly to a new position and "dunk" again. The helicopter can only lift a comparatively light and small sonar but, as it is not moving through the water when operating, it can achieve ranges comparable to many of the sonars fitted in surface ships.

The helicopter's high speed enables it to overtake even the fastest submarines if their position is known but its low endurance limits its operations to within a relatively short distance from its base. If helicopters are to be of any use more than about 100 miles from shore they must be carried to the scene of action by surface ships. Once there they may be prevented from operating by bad weather.

The surface anti-submarine force is made up mainly of ships with conventional hull forms. In future, unconventional types of surface craft, such as hydrofoils or hovercraft, may be useful but at present these craft are still experimental.

The destroyers or frigates now used for surface escort may carry helicopters to assist them and attack submarines which may be too fast or too far away for the destroyer to catch, but the first requirement of these ships is to provide protection from submarines when aircraft cannot operate efficiently. The ship must be able to remain at sea and operate under all weather conditions. Because of the large areas to cover and the relatively slow speed of surface ships, large numbers are required, which means that each ship must be efficient at her task but must be built at the lowest cost. A balance must be struck between the advantage of

increased performance which may only be used occasionally, and building more ships which may not be individually as effective but whose total abilities may be greater.

Surface ships must undertake the whole anti-submarine task when bad weather prevents other forces from operating and they must also undertake the jobs that other units cannot perform. For example, fixed wing aircraft cannot usually locate a submarine close to or even inside a convoy. Either a helicopter or a surface ship is required and often only the surface ship can carry the necessary weapons to attack.

Surface escorts have other important tasks to perform, especially in convoy operations. Submarines are a great threat but they are not the only one. Aircraft and mines may also menace the convoy. Although anti-submarine escorts may carry only limited anti-aircraft weapons, they can deter the more impudent attacks which may be made by reconnaissance aircraft.

The best protection against mines is to keep clear of them. Merchant ships do not have the facilities to keep their information on mining up to date. They must depend on the instructions of their escort to keep them clear of danger.

In addition to all these various tasks for surface escorts someone must co-ordinate and control the various units operating together. This is another important task of the surface anit-submarine escort as she alone has the facilities and endurance to provide the essential continuity of control.

The last tine in the trident of sea-power is sub-surface, the submarine. In submarine anti-submarine operations the hunter and hunted will never see each other and the hunter must move warily in case he is detected and becomes hunted in turn. These operations are best carried out away from other shipping which may distract the hunter and allow an intruder to slip by undetected. In addition, aircraft and surface ships suffer a great onset of martial ardour as soon as they detect a submarine. Mistaken identity and attacks on friendly submarines have occurred. Submarines prefer to operate in waters clear of their dangerous friends.

Each type of anti-submarine vehicle has its place in the overall operation but none can do all the tasks on its own. Surface escorts are necessary, so it is necessary to decide on the type of ship for the job. It must have long endurance so it can stay with a convoy or patrol an area for a long time. It must be fast enough to reach the operational area quickly and to escort fast convoys or task forces. It must have good sonar and anti-submarine weapons, some anti-aircraft armament and good communication equipment. It must be manœuvrable and able to operate at high speed in bad weather and it must be reasonably cheap, as a lot are needed.

Clearly, all these requirements cannot be built into one ship. To drive a ship very fast requires very powerful engines, it takes about twice as much power to do 35 knots as it does to do 28 knots. These powerful engines take up a lot of space and have to be supplied with more fuel unless the endurance is reduced. Extra fuel takes up still more space.

The object of building anti-submarine escorts is to attack submarines, but before the submarine can be attacked it must be pinpointed. The best sonar, which is essential if the ship is to be worthwhile, gives good performance at low speed but the performance starts to fall off as speed increases. High speed is therefore not much use when hunting but it is needed to get to the operational area quickly.

Each of the requirements changes with every change of equipment, ship size, speed, endurance, sea-keeping qualities and so on. The final decision is a compromise based on the expected performance of one's own weapons and detectors and the estimated capability of the enemy.

EDUCATION ON THE HIGH SEAS

WHEN LT. DAVID MITCHELL, of HMCS *Bonaventure,* talks about his mobile classroom and library, he means mobile indeed!

In fact, during the period of a year, the former Yarmouth, N.S., high school teacher can expect to accompany his classroom and library for a distance nearly equal to that around the world at the equator.

This is part of Lt. Mitchell's job as the Education Officer on board the *Bonaventure,* to travel with the aircraft carrier during her cruises, to control a library made up of some 2,000 books and to cater to the education needs of the 1,200 officers and men on board.

In addition, as a ship's officer, Lt. Mitchell takes his turn on the bridge and performs other duties as required.

But the education of the ship's company is his major concern, and Lt. Mitchell encourages officers and men alike to make use of some of their spare time at sea to improve their educational standing.

After the warship left Halifax on Jan. 13, 120 persons signed up for courses in the Navy's junior matriculation classes, while 130 others were taking correspondence courses offered by the Department of Veteran's Affairs or provincial department of education.

"I find there is a very good interest in education among naval personnel," Lt. Mitchell said, "and it doesn't seem to be confined to any particular age group or rank.

"While some men intend to qualify for commissions, others realize their chances to get a good job on 'civvy' street are limited without a better education.

"However, the reason a man takes a course isn't really too important. The main thing is that a sailor today has every chance to get a good education free before he leaves the service and, inside or outside the Navy, education is an asset."

The reading tastes of the *Bonaventure's* officers and men are many and varied. To satisfy this range, Lt. Mitchell has on board 1,500 volumes of fiction and non-fiction, plus 500 text and reference books.

Each month about 600 of these books are taken out by the sailors to read or study in their off hours. In addition, scores of other books are used by sailors who drop into the library to browse.

Magazines of all kinds are also received regularly in the library and are available to anyone interested.

Lt. Mitchell has operated the library and classroom on board *Bonaventure* since August 1963, when he came on board after spending the previous two years as an instructor at HMCS *Venture,* the junior officer training establishing in Esquimalt.

Lt. Mitchell was a high school teacher in Yarmouth before becoming an instructor at *Venture.* In Yarmouth he was also the commanding officer of the local sea cadet corps, RCSCC *Chebogue,* which, under his leadership in 1961, took the national proficiency trophy and attendance award.

FROM BAD BOY TO HERO

IT IS THE CURRENT FASHION to be pretty blunt when writing a biography.

Only an iconoclast would take this tack with the life of Admiral Lord Mountevans, KCB, DSO, LL.D. Blunt treatment of this public darling just might mean trouble for the author.

Reginald Pound, an experienced biographer, instead has written somewhat in the vein of a doting uncle who praises the many virtues of his hero and chooses his words with very great care indeed when it comes to certain follies.

It is just as well. Top people have helped him with data, correspondence, insights. His foreword contains several score of their names and, what with initials of many honours and awards following each name, the pages are a galaxy of notables.

Edward Ratcliffe Garth Evans, stocky, vital, and with a fabulously magnetic personality, had an appetite for adventure. An extrovert, his leadership qualities were outstanding. A great wave of popularity early engulfed him and carried him on to new triumphs. Author Pound writes, "His personal magnetism is still felt, by many of those who came under his spell."

As a youth, he had his escapades and was thrown out of one school. At another his headmaster hushed the general uproar by making him a prefect, which brought about a miraculous transformation. He didn't make the grade for entry to HMS *Britannia*, the usual manner of officer entry in the Royal Navy. He went to the training ship *Worcester* (a sister of HMS *Conway*) and in his second year there won one of the three cadetships for which Worcesters and Conways could compete. He joined his first ship in 1897.

Although short, he developed enormous strength and athletic prowess and kept fit all his life. A parlor trick was to carry a grown man suspended by the trouser seat from his teeth.

He was in Scott's first expedition to the Antarctic and was second in command of the next one wherein Scott perished on the way back from the South Pole. Evans himself was as close to death as could be towards the end of the 800-mile trek back to base after leaving Scott poised for the final push to the pole. There's lots about the *Terra Nova* which should mightily interest those who have served in HMCS *Terra Nova*, present and past.

In 1917, his ship HMS *Broke* and another destroyer tangled with six fast German destroyers in the Channel and routed them, destroying two, possibly three.

For this magnificent feat, he was celebrated as "Evans of the Broke". Evans himself never liked the name but it stuck.

Two years after the war, the first and only gold medal ever struck by Lloyds for life-saving at sea was his. The account has to be read to be believed.

BOOKS *for the* SAILOR

Small wonder Evans was hailed as the bravest man of his generation. He served as C-in-C, Australia, and later Africa and in 1935 became C-in-C, the Nore.

By the time the Second World War was at hand he had gathered no less than 30 decorations and medals. A leading naval personage, irritated by the enormous publicity accorded him, went so far as to have his secretary check them all out. Pound writes: "The secretary's report produced three weeks later, brought no malicious comfort to the admiral. The list had been checked and confirmed.

Jealousy in some circles there was. His favour lay not only in the populace but also with several reigning monarchs, and leading lights of various countries knew him well and enjoyed his company always.

In the war he was a regional commissioner with paramount powers over civil defence in London. Churchill sent him in 1940 to the King of Norway with special information and reassurances. The Germans were invading, the king was in hiding. Evans resumed his civil defence duties, but he worked his tireless magic to keep London's morale ever inspired. He became known as "Evans of the Blitz".

Frequent bumps with senior civil servants made him enduring enemies and his scorn for red tape in arranging speedy relief for bombed-out inhabitants sometimes created more confusion than good. Finally, the Home Secretary had to be called upon to deliver the appropriate "blast".

He was forever in the public eye, although naval authorities long had been unhappy about such prominence awarded a serving officer. Evans contrived nothing. He carried on in his extroverted fashion, doing much as he pleased, gathering further adherents by droves. But he was always at home to a newspaperman. They have to make a living, he told his wife when one was at the door.

A busy lecturer, ardent fund raiser, he laboured mightily for most of his life in the cause of Youth. He wrote them books of his and others' adventures, supported their organizations, lent his weight and name to their activities. His public appearances, on the other hand, on behalf of political endeavours of one kind and the other, were hilariously disastrous. He was almost belligerently democratic but more usually charmingly so.

All his brimming energy was suddenly robbed from him a decade after the war. He'd burnt himself out. In his 77th year he fell asleep late one summer afternoon "as gently as a child." He did not wake again.—H.C.W.

EVANS OF THE BROKE. A Biography of Admiral Lord Mountevans, KCB, DSO, LL.D., by Reginald Pound, 324 pages, illustrated, issued by Oxford University Press, 76 Wynford Drive, Don Mills; $9.25.

THE PROWLERS

REPORTS of red-garbed men prowling the woods of Nova Scotia in the fall of the year cause little concern among residents of the Annapolis Valley. It usually means that the deer hunting season has opened.

But when reports began to circulate that a small army of men in blue coveralls was skulking the woods, some eyebrows were raised and questions were asked, except by those wise, long-time residents who assumed that "the Navy is up to something again".

The assumption was correct, for the Navy is up to something in the Nova Scotia woodlands, something called "Expedition Field Training". It's part of an expanded training program within the Leadership Division, the school within a school at HMCS *Cornwallis*.

Last fall's operation was the first of a series of woodlands exercises to be carried by officers and petty officers undergoing leadership training. The usual six-week leadership course is designed to measure and develop the leadership qualities of young officers and non-commissioned officers of the ships and establishments of the fleet. Specifically, the new field expedition training is aimed at further testing the organization and leadership qualities of course members in unfamiliar territory and circumstances, and to test their physical endurance.

The first experimental exercise was held on October 16, when the 52 members of the current leadership course were blindfolded, put into buses and trucks, and driven over a devious route to a secret area selected by the staff of the school.

The blindfolds were removed, and the students told to proceed, on foot, to their objective, the *Cornwallis* recreation camp, Raven Haven. Each section of men was given a compass, a whistle, bugle and a map of the area. Each man carried a canteen of water, three sandwiches, some fruit and a mock rifle.

All sections had to traverse marshy and heavily treed west Nova Scotia terrain, staying off the roads, determining their direction and movements from their compasses, the position of the sun, or from any experience they may have had in field craft and common sense.

But the planners of the exercise took additional precautions to cut down the possibility of course members getting thoroughly lost. A helicopter from the RCAF station at Greenwood, N.S., was on hand, and the directing staff were assisted by 12 members of the Fleet School Communications Division equipped with radios.

One section of trainees did become lost for a time but the helicopter quickly found them, heading off the possibility of a night-long search on foot.

Five hours after the exercise began, the first groups of trainees emerged from the woods in the vicinity of Raven Haven, with only a few men suffering from sprains, barked shins and elbows, and aching feet.

The experiment was deemed a success and future officers and men at the Leadership School can look forward to their day in the woods.

Good experience, good fun, and good training, without a doubt. Besides, it serves to help put one in shape for the school's other delightful diversion, the assault course.

Feet sometimes take quite a beating during expedition field training out of Cornwallis and PO Arthur E. Prill gives his the attention they have earned. (DB-18477)

"Your guess is as good as mine." Lt.-Cdr. Bernard J. Van Fleet, of Cornwallis, and Flt. Lt. J. Homel, of RCAF Greenwood, consult on the whereabouts of trainees during expedition training (DB-18490)

To the winner go the spoils, Lt.-Cdr. Donald M. Waters, officer in charge of the Leadership division, presents the coveted expedition trophy to PO David I. Spence, leader of the outstanding section in the first field exercise. (HS-18470)

COMPOSITION OF THE FLEET

The Royal Canadian Navy's 47 commissioned ships (two more will be added by the end of the year) range from an aircraft carrier through destroyer escorts, ocean escorts, a submarine, and several support ships. As well, two Royal Navy submarines serve in the Atlantic Command under the operational control of the RCN. Four small ships are on loan to other government departments. There are more than 100 auxiliaries from research vessels down to small passenger ferries.

The 20,000-ton aircraft carrier *Bonaventure* leads the RCN's anti-submarine team. The *Bonaventure* has an angled deck, mirror landing-aid and steam catapult. Her aircraft are twin-engined CS2F-2 Tracker anti-submarine planes and HO4S-3 ASW helicopters. The latter are to be replaced by the all-weather Sea King CHSS-2. There are 21 destroyer escorts in the fleet, 18 of which have been built in Canada from 1955 onward. Two others will enter service later this year; the *Nipigon*, built at Sorel, Quebec, and the *Annapolis*, from Halifax.

The first three Oberon class submarines for the RCN, the *Ojibwa*, was launched in Britain on February 29. These submarines are scheduled to enter service in 1965, 1967 and 1968. HMCS *Provider*, the RCN's first fleet replenishment ship, was accepted last fall.

The RCN has two first-line air squadrons, one armed with Trackers, the other with ASW helicopters, both squadrons with carrier operating capability. There are four other squadrons engaged in training, evaluation and utility roles.

Strength of the Navy on January 1, 1964, was 21,260 officers and men, wrens and cadets. A new ceiling of 20,700 has been authorized and will be reached this summer by normal attrition. Ships are manned to 89 per cent of war complement.

Changes in the fleet units attached to destroyer escort squadrons on each coast will take place during the year as helicopter-carrying DDEs are incorporated in the Atlantic fleet. The following was the fleet allocation as of May 1, 1964:

Atlantic Command - Ships Based at Halifax

HMCS *Bonaventure*, aircraft carrier

First Canadian Escort Squadron
(destroyer escorts)

HMCS *Algonquin*	Algonquin class
HMCS *Crescent*	" "
HMCS *Athabaskan*	Tribal class
HMCS *Assiniboine*—St. Laurent conversion	
HMCS *St. Laurent*	" "
HMCS *Yukon*	Mackenzie class

Fifth Canadian Escort Squadron
(destroyer escorts)

HMCS *Restigouche*	Restigouche class
HMCS *St. Croix*	" "
HMCS *Gatineau*	" "
HMCS *Kootenay*	" "
HMCS *Terra Nova*	" "

HMCS *Chaudiere*	Restigouche Class
HMCS *Columbia*	" "

Seventh Canadian Escort Squadron
(ocean escorts)

HMCS *Victoriaville*	Prestonian class
HMCS *Lanark*	" "
HMCS *Inch Arran*	" "
HMCS *New Waterford*	" "
HMCS *Fort Erie*	" "

Ninth Canadian Escort Squadron
(ocean escorts)

HMCS *Cap de la Madeleine*	Prestonian class
HMCS *La Hulloise*	" "
HMCS *Swansea*	" "
HMCS *Buckingham*	" "
HMCS *Outremont*	" "

Special Duties

HMCS *Provider*—fleet replenishment ship
HMCS *Cape Scott*—mobile repair ship
HMCS *Granby*—diving depot ship (converted Bangor minesweeper)

Sixth Submarine Division—one or two submarines (RN under RCN operational control)

RCN Air Squadrons

VS-880	CS2F-2 Tracker ASW aircraft
VU-32	T-33 Silver Star jet trainers CS2F-1 and 2 Trackers
HS-50	HO4S-3 ASW helicopters, rearming with CHSS-2 ASW helicopters
HU-21	HO4S-3 helicopters HTL-6 helicopters
VX-10	Various aircraft for experimental purposes

Pacific Command - Ships Based at Esquimalt

Second Canadian Escort Squadron
(destroyer escorts)

HMCS *Mackenzie*	Mackenzie class
HMCS *Saskatchewan*	" "
HMCS *Qu'Appelle*	" "
HMCS *Ottawa*, HMCS *Saguenay*, HMCS *Skeena*, HMCS *Fraser*, HMCS *Margaree*	St. Laurent class converting to helicopter carrying capability and variable depth sonar installation.

Fourth Canadian Escort Squadron
(ocean escorts)

HMCS *Sussexvale*	Prestonian class
HMCS *Ste. Therese*	" "
HMCS *Beacon Hill*	" "
HMCS *Antigonish*	" "
HMCS *Stettler*	" "
HMCS *Jonquiere*	" "
HMCS *New Glasgow*	" "

Special Duties

HMCS *Grilse*—Balao class submarine

HMCS *Oriole*—sail training yacht

RCN Air Squadron (Patricia Bay Airport, near Victoria)

VU-33	CS2F Trackers T-33 Silver Star jet trainers

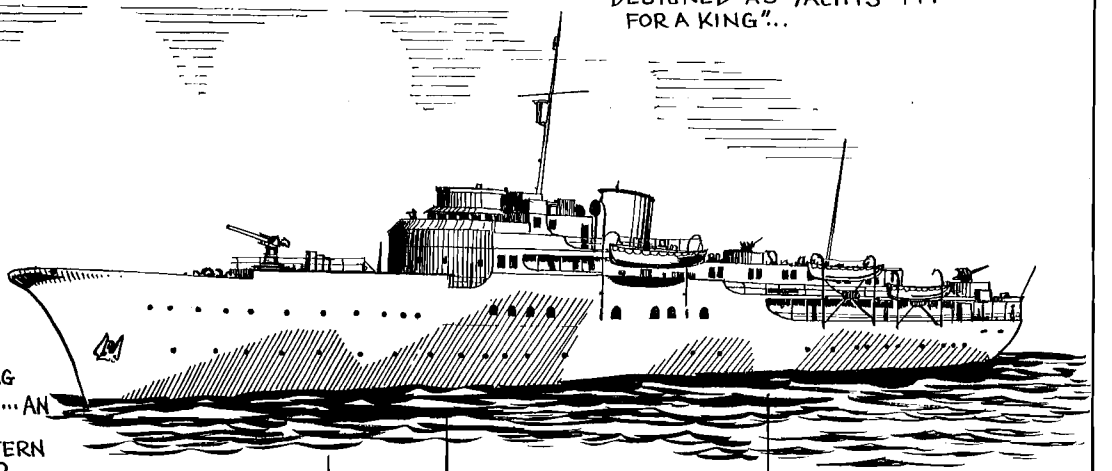
Commanding Officer Naval Divisions - Hamilton

Two gate vessels and a small cargo vessel (HMC Ships *Port St. Jean, Porte St. Louis* and *Scatari*) are maintained on the Great Lakes, manned each summer for the training of naval reserves on Canada's inland seas. They are reinforced during the summer by a ship or ships from the RCN Atlantic Command.

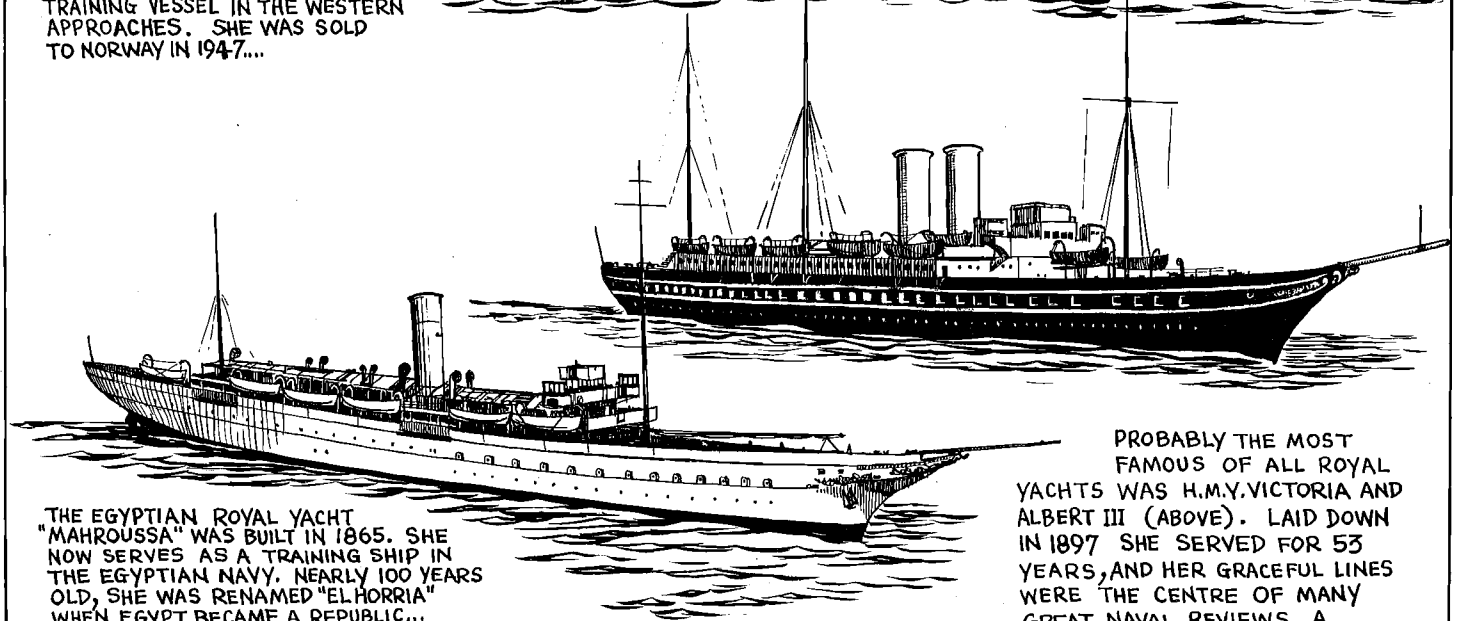
Naval Lore Corner

Number 125
ROYAL YACHTS

MANY SHIPS HAVE BEEN USED AS ROYAL YACHTS... BATTLECRUISERS AND LINERS INCLUDED. HERE ARE FOUR SHIPS DESIGNED AS YACHTS "FIT FOR A KING"...

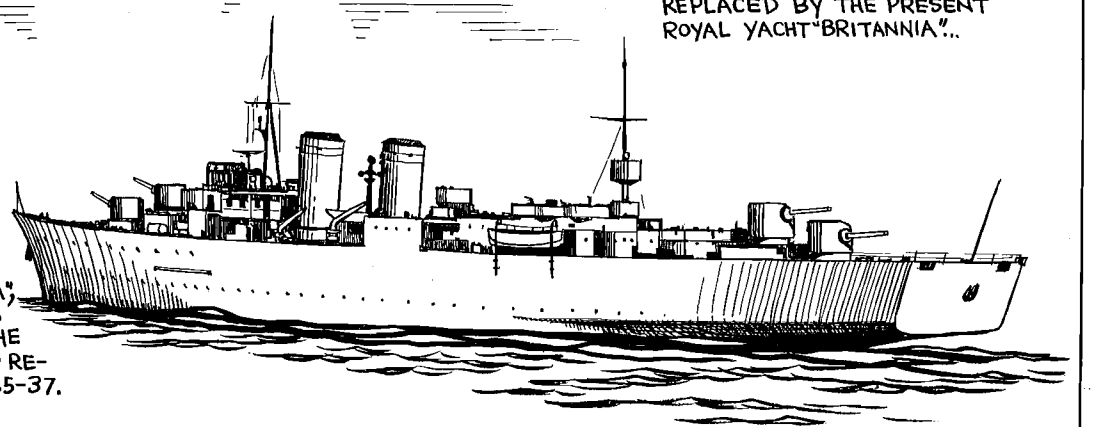


THE NORWEGIAN ROYAL YACHT "NORGE" (RIGHT) SERVED DURING THE WAR AS H.M.S. PHILANTE... AN ANTI-SUBMARINE ESCORT AND TRAINING VESSEL IN THE WESTERN APPROACHES. SHE WAS SOLD TO NORWAY IN 1947....



THE EGYPTIAN ROYAL YACHT "MAHROUSSA" WAS BUILT IN 1865. SHE NOW SERVES AS A TRAINING SHIP IN THE EGYPTIAN NAVY. NEARLY 100 YEARS OLD, SHE WAS RENAMED "EL HORRIA" WHEN EGYPT BECAME A REPUBLIC...

PROBABLY THE MOST FAMOUS OF ALL ROYAL YACHTS WAS H.M.Y. VICTORIA AND ALBERT III (ABOVE). LAID DOWN IN 1897 SHE SERVED FOR 53 YEARS, AND HER GRACEFUL LINES WERE THE CENTRE OF MANY GREAT NAVAL REVIEWS. A POOR SEABOAT, SHE WAS SCRAPPED IN 1954-5 AND WAS REPLACED BY THE PRESENT ROYAL YACHT "BRITANNIA"...



THE RUSSIAN TRAINING-SHIP/MINELAYER "ELIZABETA", WAS ORIGINALLY THE CZAR'S IMPERIAL YACHT "MARTY". SHE WAS LAID DOWN IN 1893 AND RE-BUILT AS A MINELAYER IN 1935-37. SHE IS STILL IN SERVICE...

J.M. THORNTON

Roger Duhamel

QUEEN'S PRINTER—IMPRIMEUR DE LA REINE

If undelivered return to:
The Queen's Printer, Ottawa, Canada

En cas de non-livraison, retourner à:
L'Imprimeur de la Reine, Ottawa, Canada

11,000—4-64
(RCN) 575—1780

ROGER DUHAMEL, F.R.S.C.,
Queen's Printer and Controller of Stationery
Ottawa, 1964