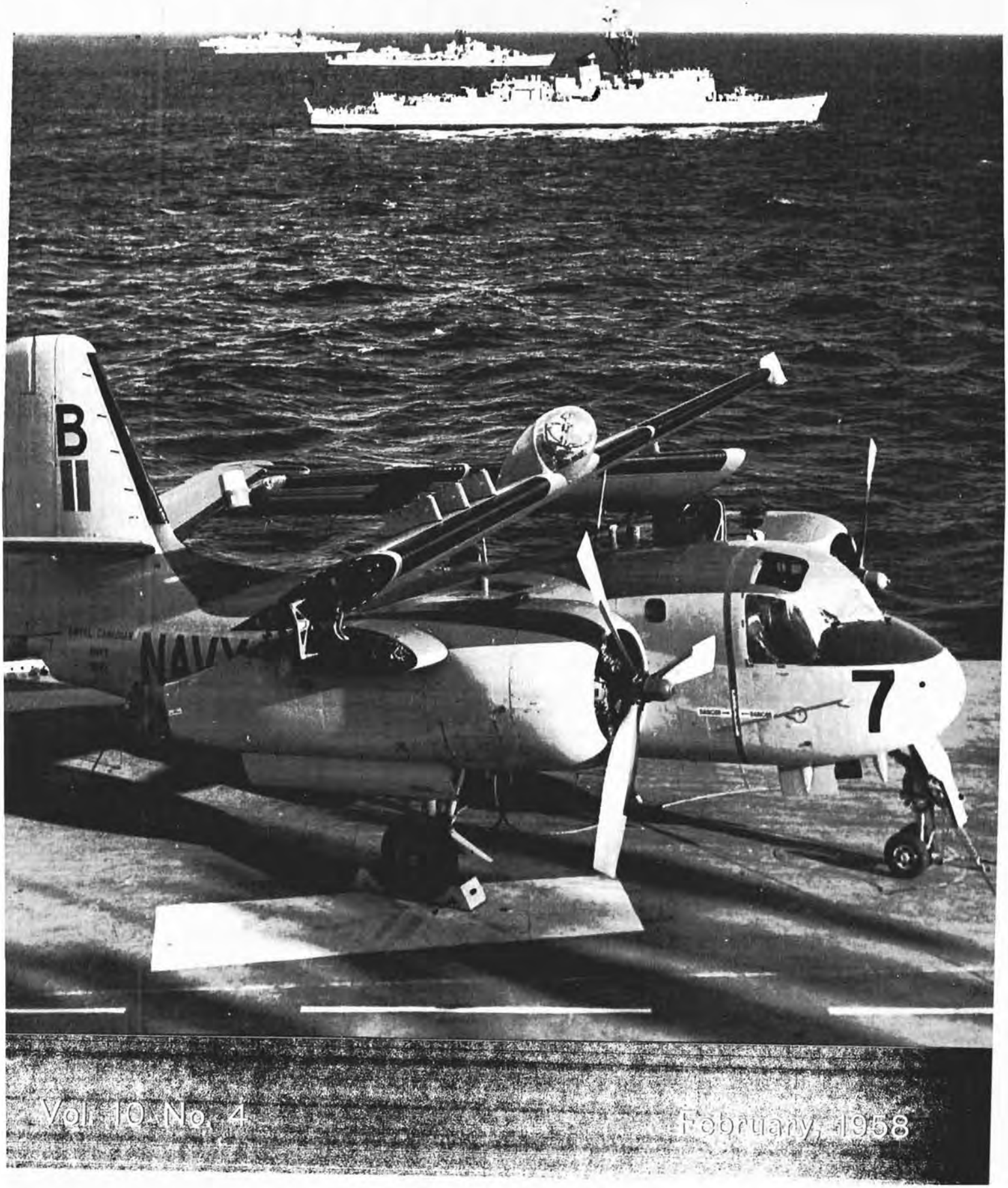
The CROWSNEST



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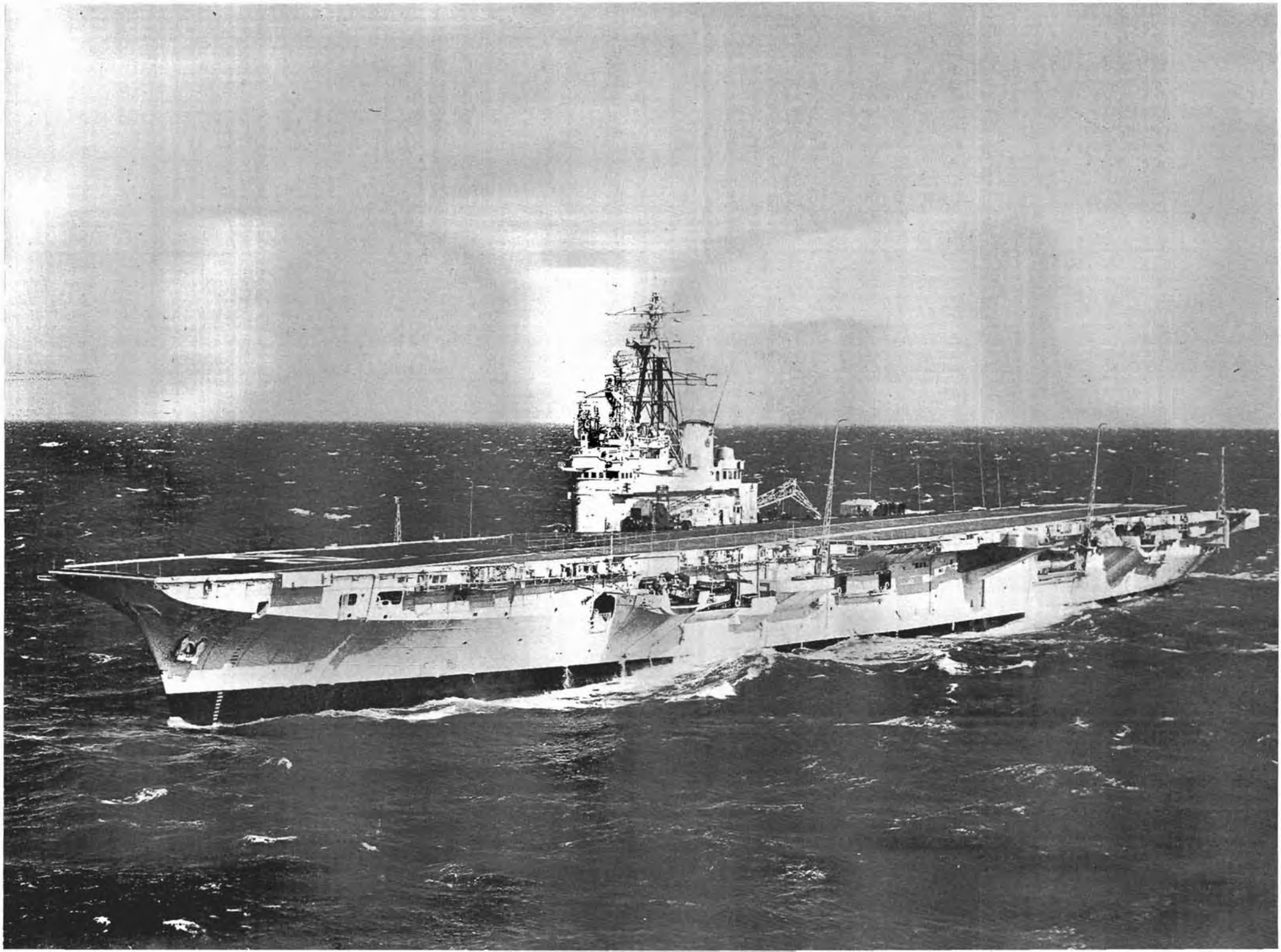

The CROWSNEST

Vol. 10 No. 4 THE ROYAL CANADIAN NAVY'S MAGAZINE FEBRUARY, 1958

CONTENTS

The Cover—Ships of the Royal Canadian Navy went south in late January to meet the spring and to exercise with ships of the U.S. Atlantic Fleet. The cover picture, taken from the *Bonaventure*, shows four of the destroyer escorts that went along—the *Algonquin, Micmac, Haida* and *Nootka*. A Tracker anti-submarine aircraft is in the foreground. (BN-1554)

LADY OF THE MONTH

Aircraft carriers, as a class, are not noted for their beauty of line, their grace or their speed. They leave those attributes to the aircraft which they mother.

Just the same, there is something reassuring about their great bulk and surging power that commands much the same kind of admiration that is elicited by the sleek lines of a cruiser or one of the RCN's new destroyer escorts. Steaming through an azure sea with the sun warming her sides, as were the circumstances when the picture on the opposite page was taken, HMCS *Bonaventure* has a dignity and beauty of her own.

The *"Bonnie"* was commissioned at Belfast, Ireland, on January 17, 1957, and—for a year-old lass—she has been around. Work-ups here, work-ups there, three times across the North Atlantic and then, three days after her birthday, heading south for exercises in the Caribbean. (BN-511)

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RCN NEWS REVIEW

This is far from the only time that the St. Laurent has been pictured in these pages. It is, however, the first time she has been shown wearing the RCN's new light grey. Doesn't she look smart as paint? (HS-49735-R)

Alliance Ends 18-Month Tour

HMS *Alliance*, after 18 months of service with the Royal Navy's Sixth Submarine Squadron, sailed from Halifax on February 22 for the United Kingdom.

The *Alliance*, under the command of Lt.-Cdr. Howard Clutterbuck, has been working with the Atlantic fleet in submarine and anti-submarine exercises. The boat was scheduled to arrive in the United Kingdom March 3.

The submarine, which is partly manned by Canadian personnel, has served several tours of duty with the RCN.

Minesweepers Hold Exercises

Units of the Pacific Command Second Canadian Minesweeping Squadron left on February 11, for extensive minesweeping exercises in the Oyster Bay area on the east coast of Vancouver Island.

Taking part in the operation were the minesweepers *Fortune, James Bay, Miramichi* and *Cowichan*. Accompanying the 'sweepers was the naval diving tender *YMT-10*, which engaged in clearance diving work.

New French Ships Visit East Coast

Two new units of the French Navy arrived in Halifax on February 8 for a four-day visit.

They were the fleet escort ship *La Bourdonnais* and the escort ship *L'Agenais*.

Vice-Admiral Querville, president of the permanent commission for trials of units of the French fleet, wore his flag in *La Bourdonnais*.

Twenty-one-gun national salutes were exchanged in the vicinity of Maugher Beach and personal salutes to Admiral Querville and the Flag Officer Atlantic Coast were fired in the seaward defence area.

Admiral Querville called on the Lieutenant-Governor on arrival and the Mayor of Halifax Monday, February 10. A program of entertainment was arranged for the visiting sailors, including receptions and a tour of the Halifax area.

La Bourdonnais, completed at Brest in 1956, carries a complement of 311 officers, warrant officers, petty officers and men. *L'Agenais*, built at Lorient completed last year, carries 176 personnel.

Winnipeg Cadets National Winners

Two Royal Canadian Sea Cadet Corps, both in Winnipeg, received national awards recently.

The *John Travers Cornwell, VC,* Corps, for the fourth time in seven years, was awarded the Dominion Proficiency Trophy, emblematic of the most efficient sea cadet corps in Canada, and the *Crusader* Corps was presented with the Gibson Attendance Trophy for the best attendance of a cadet corps.

The presentations were made by Ray Hamerton, president of the Manitoba division of the Navy League of Canada, during a father and son banquet of the *John Travers Cornwell* Corps held at HMCS *Chippawa*, the Winnipeg naval division.

Fire Losses Kept Down in 1957

"An ounce of prevention is worth a pound of cure" might well be the slogan of the Naval Fire Service which was able to report a reduction of 1957 fire losses to almost half those of 1956.

In the annual report of the Directorate of Fire Fighting, the loss for 1957 is shown as $36,529, compared to $69,119 in the previous year.

Headed by Lt.-Cdr. (SB) W. J. Simpkin, of Bradford, Ont., and Toronto, Director of Fire Fighting, the Naval Fire Service emphasizes the need for fire prevention and has its stations carry out frequent inspections of naval property for fire hazards. The firemen also conduct continuous fire-safety education program for civilian and naval personnel in shore establishments, and also train sea going personnel in fire fighting and fire prevention.

As part of the program, the firefighters stage annual displays and demonstrations during Fire Prevention Week and on Navy Day, and give frequent fire prevention lectures. Special talks are also given in schools to children of naval personnel, on the dangers of fire.

An important cause of naval fires, in 1957 as in previous years, was believed to be careless smoking. Equally numerous fires—109—were attributed in 1956

and 1957 to careless smoking, but the total loss was kept to $2,682 in 1957 compared with $7,343 in 1956.

As in other years, one or two major fires accounted for most of the yearly loss, and the big 1957 loss was from a fire at the Chezzetcook bombing range near Dartmouth, N.S., amounting to $19,750.

Last year 500 members of the Naval Fire Service, manning 18 fire stations in naval housing areas, dockyard, armament depots and magazines, training establishments, supply depots radio stations, the naval air station near Dartmouth, and civilian air fields where RCN air squadrons are located, answered 829 calls, of which 152 were requests for assistance from non-naval sources.

Please Send Boat For Dome Stick

"Impressing the importance of accuracy in all phases of message handling on young communicators is one of the most difficult tasks facing our instructors", says the Communications Training Centre in its weekly column in the *Naden Lookout*.

"Even minor mistakes in reception or in recording a message", the CTC adds, "can change completely the thought originally intended, and result in embarrassing consequences".

To illustrate this an incident that occurred in 1936 is recounted by PO John Sully (RCN (R)), *Discovery*, who was then serving in the RN destroyer *Eclipse*, at the time of the story secured to a buoy in Grand Harbour, Malta.

One day a message was transmitted from Castille Signal Tower and the Duty Signalman in the *Eclipse* read and recorded the message:

"PSB FOR DOME STICK."

The officer - of - the - day was somewhat puzzled as to what a "dome stick" was and unsure if the motor cutter would accommodate it. After consultation with the A/SCO (now known as the TAS officer) they took it up with the first lieutenant.

The matter was discussed at some length and it was decided that a dome stick was too large for the motor cutter. A message was sent to the battleship *Queen Elizabeth*, moored nearby, asking for the loan of her 38-foot pinnace.

In due time the pinnace, complete with working party, arrived at the Calcara Steps to pick up the "dome stick".

To the astonishment of the working party, the embarrassment of the ship's officers and the merriment of the ship's company, a Maltese wardroom steward stepped aboard.

How did it come about?

Easy. The original message was: "PSB FOR DOMESTIC K" (Please send boat for domestic—acknowledge). However in 1936 there was no separation sign used in the text and stewards were commonly called "domestics".

Two new units of the French Navy arrived in Halifax in early February during a violent wind and rain storm. The fleet escort La Bourdonnais is shown as she neared her berth in HMC Dockyard. She was followed by the escort frigate L'Agenais. (HS-51527)

Officer Appointed To Command Huron

Cdr. William H. Howe has been appointed to take command of the Tribal class destroyer escort *Huron* on her commissioning on March 28 at Halifax after major refit.

He has been officer-in-charge of the communication school at *Cornwallis* since 1955.

Naval Firemen Attend Big Blaze

The Naval Fire Department at St. John's Nfld., played a major role in combatting the worst fire in that city in recent years when it was called to assist the St. John's Fire Department with a blaze in the CNR freight shed.

Although the entire freight shed was destroyed the naval firemen were of material assistance in confining it to only one building and thus saving several valuable properties beside it.

The fire fighters and Tug No. 3 were called out at 0715 on January 25, and reported back to their station at 1645 on the same day, after assisting in fighting the conflagration for more than nine hours. The fire boat laid 1,600 feet of hose and operated its pumps for eight hours.

"Without the fire boat," said the superintendent of the St. John's Fire Department, "there would have been insufficient water to combat the fire."

Officials of the St. John's Fire Department and the Canadian National Railways expressed officially their appreciation of the assistance rendered by the naval fire department, and the Canadian Commander Newfoundland indicated that personnel of this department were deserving of the highest commendation.

Ship's Bell Given To Legion Branch

The Eastview Ont., branch of the Canadian Legion has fallen heir, appropriately enough, to the ship's bell from the frigate HMCS *Eastview*.

At the end of the Second World War the bell was given to the town of Eastview in recognition of what the residents had done for the ship.

Recently Mayor Gordon Lavergne of Eastview turned the bell over to the local branch of the Canadian Legion for safe keeping.

The *Eastview*, a River class frigate, was laid down in August, 1943, at the Canadian Vicker's Ltd., Montreal yard, launched in November 1943 and commissioned in June, 1944. Following work-ups, she served on the North Atlantic convoy routes until war's end, as Senior Officer's ship with C-6 Escort Group.

Sent to the West Coast after V-E Day, she was slated for Pacific duty but V-J day obviated that. The ship was turned over to War Assets Corporation in July 1946 and later along with two sister ships, she was sunk as a breakwater at the entrance to Comox Harbour, B.C.

The Balloon Busters

— A short story by Lt.-Cdr. W. V. A. Lesslie —

IN ADDITION to expressing marine doubts as to the Commander's paternity, the trio seemed to share a complaint of unjustifiable persecution. The remarks being exchanged between the three bored naval officers were not at all flattering to that august gentleman who filled the appointment as Executive Officer of their remote and almost forgotten naval air facility on the coast of Wales.

The fat little steward, the only other occupant of the mess, was busily engaged in polishing a table top for the fourth time, as he listened to and inwardly applauded the cause being expressed. However, his instinctive lower deck enmity for gold braid was surprisingly betrayed when he found himself mentally siding with the Commander. To his own amazement, he was sympathizing with the punitive action which resulted from the misdeeds of the three officers, who were now bemoaning their stoppage of leave. After all, the midnight application of shoe polish to certain fixtures in the Commander's bathroom could hardly be expected to provoke any sentiment of cheerfulness and goodwill the following morning.

The "Digger", a fighter control officer was sounding off on the injustices of navy life. He was flattered to note that McKay, the Canadian radar technician, was nodding his head in silent concurrence with each sentence. Kelly, the fighter pilot, with commendable Irish alertness, noted the steward's tuned ear and admonished the other two to be careful that the Commander did not overhear them.

As if justifying Kelly's discretion, the door of the mess swung open and the Commander stood on the threshold, making little effort to conceal his disappointment at the limited companionship available.

The war of nerves lasted only seconds before the building began to shake and shudder and all the occupants, except McKay, were aware of a sound of rushing wind.

McKay was just thinking that he had never known the Commander to be so enraged before, and was wondering who was catching it, when he realized that he was alone in the room. He stood up and went into the hall to find his two friends huddled under the billiard table, as paint and plaster showered about them.

"Who's going to go and look?" asked Kelly.

"Not me," said the Digger. "The way things have been lately, I'd be blamed if it was the Devil himself."

This unproductive conversation was interrupted by the Commander's reentry from the courtyard, whence he had retreated with commendable speed.

"Come on you idiots. Don't sit there like an old maid in a battleship. Get out there and remove that thing from the chimney."

A MINOR traffic jam developed as the active members of the party turned to look at the chimney on reaching the courtyard.

The Digger, Kelly and McKay stared in open-mouthed amazement. Undulating above the wardroom was a Royal Air Force barrage balloon; it had presumably come adrift from the Cardiff defences, and become so deflated that it would have settled to the earth, like a lady admiral chairing a meeting, if it were not for the eternal winds of Wales.

Its dangling length of broken cable had somehow become entangled about the wardroom chimney. In between gusts of wind, it dropped and displayed a doleful, spaniel-like look that inspired McKay's sympathy. Moment's later, a recurring gust swept over the clifftop and transformed the balloon into a gargantuan bronco, whose every lunge threatened to dislodge the chimney, or lift the whole building off its foundation.

McKay's scientific training at the University of Western Ontario made him aware of the fact that the centre of gravity should be kept as low as possible when equilibrium is impaired or when great shocks are sustained. For one or other of these reasons, he sat down on a nearby rock, which the Commander, in true naval fashion, had painted white because it was too big to move.

"McKay, you look the least useful of this lot," said the Commander. "Go and phone the Officer of the Watch and get him to . . . ". The sentence was never completed as the Commander's eye followed McKay's wavering finger to note

that the vagrant balloon had demolished the telephone wires.

The Commander then turned to the steward with instructions to run to the guardhouse and pass the message for help. Since the steward was a naval edition of "Mr. Five-by-five" and since the guardhouse was over a mile away across the duty runway, the use of the word "run" was hardly applicable. However, the valiant little steward remembered Nelson's signal and set out at his top speed; he reminded McKay of a tumbleweed with legs.

When McKay's attention returned to the situation at hand, he observed that the Commander was asking for suggestions as to how someone, other than the Commander, was to reach the chimney and attempt to unwind the mooring cable. There was no response for a few moments, until the Digger stepped forth and spoke, with his hand aloft.

"I shall carry the mail, sir," he announced. He had spotted a twelve-inch plank leaning against the wall and had, with admirably quick thinking, related it to the Commander's motorbike and the problem at hand.

BEFORE cooler heads could restrain his Lightning Brigade intentions, he was astride the Commander's little motorbike and was put-putting round and round the First Lieutenant's prize flower bed, as he gathered flying speed.

"Tallyho. One bogey. Twelve o'clock high. Go! Go!" was his announcement as he peeled off his circuit and hurtled toward the inclined plank.

The Commander was transfixed. Kelly covered his eyes and peeked between his fingers. McKay put both elbows on both knees, and both chins on both hands, and watched dazedly.

There was a roar and a thud, and the three groundlings next saw the motorbike cross the ridge of the roof and pass out over the edge of the cliff and down to the sea below.

Closer examination, as the dust subsided, revealed that the Digger had abandoned ship at an opportune moment and was now clinging to the chimney. He unwound the tail of the mooring wire and passed it down to Kelly and the Commander, warning them to take the weight as he unwound the last critical coil. In the process, on two occasions, gusts of wind caused the balloon to surge like a hooked swordfish and the loose coil snapped tight around the chimney, lifting Kelly and the Commander to an undignified tiptoe stance. McKay, acting now as anchor man in this inhuman tug-of-war, restored control of the balloon by passing the tail of the wire around the rock, on which he was still sitting.

THE LAST JERK had jammed the wire into the chimney mortar and the Digger called down for some sort of tool to pry it loose. Kelly's responsive mind flashed to the Captain's car, parked nearby, and he started toward it to get a tire iron. Remembering the gusts of wind, he turned back to remind the others to be careful while his weight was off the wire.

The warning went unpassed, for by that time his companions were already a hundred feet away, dangling from the balloon cable, which was shedding bits of chimney.

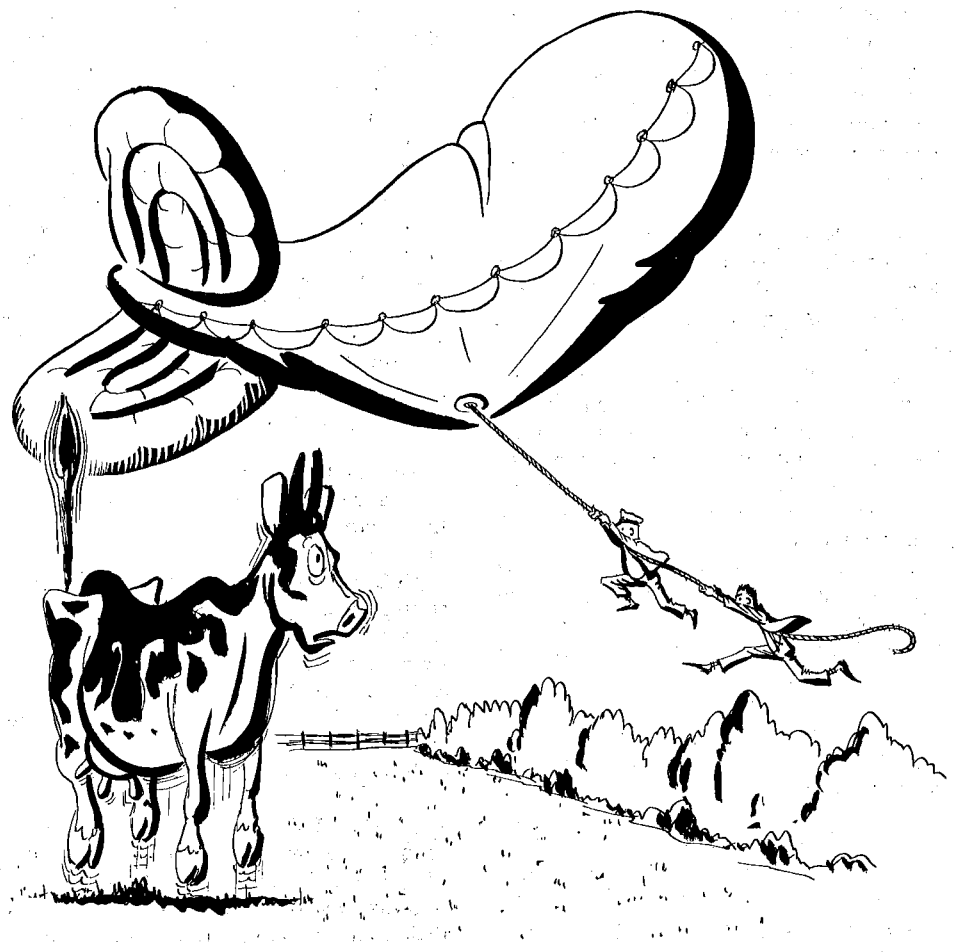
The Digger slipped and tumbled down from his temporary eagle's nest and sat beside Kelly on the running board of the Captain's car. They felt rather like characters in the last scene of a Mickey Mouse cartoon, as they watched the balloon and its cargo, lurching and swaying, and growing smaller in the distance.

IN THE AIR, the conversation and events were both somewhat out of the ordinary. McKay was busy trying to prevent the Commander's boots from demolishing his bridgework as he called up in the temporary direction of authority.

"Sir, I just saw the perimeter fence pass under us. Does that mean I'm in trouble for improperly leaving ship?"

The Commander opened his mouth to reply but, at that moment, a gust of wind caused the balloon to zoom and dive. This reminded him that it was some seventeen years since his plumbing had endured the escalator feelings of seasickness. He closed his eyes and mouth and found himself, for the first time, regretting the service consequences of those antics on the China Station during his years as a lieutenant, which indirectly were to blame for his present predicament, since his classmates were all in command of cruisers, and so in relative safety.

McKay surmised that the lack of a reply by the Commander indicated that he was still in the doghouse. He discarded any idea of further conversation and concentrated on watching the landscape pass by beneath them. He was particularly intrigued with the reaction of a placid old cow which had been chewing its cud in rural contentment.



Suddenly it froze, in the middle of a bite, at the unfamiliar sight of one Royal Navy Commander, and a companion of lesser importance, passing over the field. The old cow lifted its head and closed its eyes, as if hoping that this amazing sight would go away. On opening its eyes, the cow beheld the dancing balloon itself. This was too much for any gentle lover of pastoral peace, and it is doubtful if the owning farmer ever found out why the dairy declined to accept the next day's milk shipment.

On several occasions the wind subsided enough that McKay's dangling feet touched the ground as the balloon descended briefly. However, the Commander warned McKay that, if he was to take advantage of such an opportunity to abandon ship, he would be charged with desertion in the face of the enemy. The Commander had no wish to undertake a solo trip to Ireland.

McKay hadn't realized that the enemy had a face but he had no wish to return to Canada in irons, so he obediently retained his grip despite opportunities to stay ashore.

This proved to be quite an energetic policy, as he had to have his legs carrying out running motions before, during, and after each temporary descent. These gazelle-like leaps formed a unique and uncomfortable way of crossing Wales and he began to look forward to reaching the cliff where his trot-and-jump act would enable him, at last, to experience the thrill of a carrier take-off.

IN THE COURSE of this hop-and-hang progress across the fields, McKay was destined to be the first straw in the ruination of the afternoon of an innocent couple of bystanders.

Leading Stoker Cameron was entertaining one of the village barmaids by describing the wonders of Glasgow on a Saturday night, as they sat on the edge of a field. It is not for us to assess whether his intentions were to continue this travelogue. In any case, he suddenly stopped talking, on noticing that his ladylove's eyes were popping in amazement. Cameron's eyes did a tennis-fan sweep along her arm and past her trembling fingertips and out in the indicated direction.

The sight of a twenty-five-foot balloon leering at him over the hedge was enough to cause him to forget his objective, at least momentarily. Before he could recover his composure, the balloon passed overhead and the Commander and McKay came into view.

Seeing the obstructing hedge approaching, McKay had begun a Tarzanic gallop and leap to avoid running aground. The leap was well timed, since he reached the zenith just over the hedge and commenced the next descent. The village belle decided to clear the line of fire and tumbled into the ditch.

McKay touched the ground only long enough for two running strides but, on becoming airborne again, his knee struck Cameron on the nose. The Leading Stoker joined the lady in the ditch.

As soon as the balloon and its strange cargo passed over the edge of the cliff, it gained some shelter from the wind and the trio descended steadily toward the Irish Sea. McKay and the Commander felt like doughnuts at coffee break, as they were dunked and withdrawn several times before taking up the position of the olives in a Panama martini.

McKay found that these duckings served to clear his mind and he began to appraise the position in which he found himself. The Commander, a sorry sight, had lost his upper when he spat out a portion of the Irish Sea which had carried out a preliminary reconnaissance of his innards during the first dip.

WE WILL LEAVE our grounded birdmen now and return to the Digger and Kelly, who still sat on the running board of the Captain's car, a 1935 MG, watching their recent associates zoom and dive about in their unnatural activities. They marvelled at the piston action of McKay's legs as he ran and leaped, alternately, until the whole hallucination disappeared over the edge of the cliff.

"Nice fellah."

"Who, the Commander?"

"No. McKay."

"Yeah."

"Any family?"

"McKay?"

"No. The Commander."

"Yeah."

"Tough."

"Yeah."

THIS INSPIRING conversation was interrupted by the return of the steward, who announced that the Officer of the Watch was bringing help to dislodge the balloon. He added that the Corporal of the Guard had said that the RAF offered rewards for the return of truant balloons.

The Digger brought this dissertation to a close by pointing silently at the site of the vanished chimney, but already his receptive mind was conjuring up a vision of a huge bundle of pound notes cavorting through the air with an escort of blue-clad cherubs.

"I've been thinking," he said to Kelly.

"Me too."

"Is possession really worth nine points with the legal boys?"

"We might have to share it with them."

"Bet it's in the 'oggin by now. Would that be breaking leave?"

"Dunno. The camp includes the foreshore and the legal beagles still haven't a definition of territorial waters."

"Think we should try it?"

"Yeah."

"The Captain's car?"

"Can't walk."

"OK."

This staff conference was concluded with the little MG carrying them swiftly through the back lanes that are so pretty and prevalent in rural Wales. The expedition nearly came to an abrupt halt when, on rounding a bend, they came bow-to-bow with a big six-wheeled Matador troop transport. They could not be described as face-to-face, any more than a Dachshund and a Great Dane can be face-to-face.

Fortunately, the ever present roadside hedge was not too coarse, so our heroes and their valiant steed charged through into the field, with screaming brakes and tires. Stoker Cameron again found that his audience had abandoned him in favour of the safety of the ditch. Seconds later they were reunited, without any effort on Cameron's part, as the port bow fender of the MG delivered an uncouth wallop to his afterdeck.

Without further adventure, the car regained the road and arrived at the beach. They saw their treasure bouncing in the waves with the Commander emulating a tea-bag.

Kelly and the Digger secured the car's tow rope to the back bumper and waded into the surf. After a certain moment of spluttering profanity, they passed it to McKay, who tied it to the mooring wire of the balloon. They ran ashore and started the car. It moved away surprisingly quickly, but this was easily explained because a gust of wind had caused the balloon to surge against its new leash and the rear bumper ended up in seven fathoms of water. A repetition, using the front bumper, was a little more successful since the bumper, this time, reached the ten-fathom mark.

Since there appeared to be no future in affixing the rope to anything but the car itself, Kelly passed it through the trunk, up through the floorboards and lashed it to a piece of driftwood which he wedged across the seat so that it projected out the open doors.

KELLY got in to drive but, no matter how he placed the gearshift, the car only moved backwards whenever he released the brake. He was more concerned to find that it even moved backwards when the brake was on. An off-shore wind and the undertow influence of the surface were forcing the balloon to seaward and slowly dragging the captain's car closer to the water's edge, despite frantic spinning of its wheels.

The Digger then displayed the quick-thinking of seamanship knowledge so prevalent in naval airmen, and he raced to a nearby fisherman's boat where he "liberated" an anchor, complete with a short length of chain. This he dragged to a position in front of the car and quickly buried. There was just enough time to affix the cable to the car before it was dragged into the sea. The balance of power that is the traditional diplomatic objective had been achieved.

The struggle remained a hopeless draw for over an hour and Kelly and the Digger later claimed the distinction of being the only naval officers who had ever kept an anchor watch in an MG. During the period of stalemate there was an exchange of prisoners and the sea yielded McKay and the Commander in exchange for the Commander's trousers which had become ensnarled in the balloon rigging.

Eventually the evening breeze slackened and the valiant MG was able to land its catch. Progress was slow, as each recurring gust of wind swept the balloon skyward and, in so doing, lifted the rear wheels of the MG so they spun in noisy frustration. The results usually included a rotation of the car's direction which had to be corrected.

By 2130 the catch was landed and tow rope was reduced in length so that some ten feet separated the car and the balloon. They did not dare deflate it as they knew it would be too cumbersome to transport in the small car. However, they were equally aware that leaving it there, inflated or deflated, would invite poachers on their prize before morning.

It was therefore quite obvious that this triphibious beast must be taken to the camp where it could be placed in the overnight care of the Pay Commander whose appearance, by chance, was not unlike that of the balloon.

McKay meanwhile had taken the Captain's "Station Order Book" out of the glove compartment to look up the station vehicle regulations and traffic rules. There were clear instructions governing the transportation of explosives and gasoline and for sports parties and libertymen but nowhere was there any mention of rules governing the road transportation of balloons in an inflated state. The quartet had enough combined naval service to appreciate that this probably meant that it was prohibited, but they felt entitled to special dispensation.

THEY STARTED up the narrow lane with the smugness born of complying with the "One Way" sign. As soon as they breasted the hill leading from

the beach they became exposed to the residue of the evening breeze. The balloon's upsurge again lifted the spinning wheels off the ground and, with very deliberate slowness, deposited the car in contravention of the "One Way" sign. Kelly wondered if any passing policeman or magistrate would accept the true explanation of this violation without considering further charges.

It was impossible to turn the cumbersome cavalcade around in the narrow road, but Kelly noticed that they had passed the spot where he had earlier breached the hedge. He drove back that hundred yards or so and again swerved through the gap to get turning room in the field.

After seven quiet years as a milk machine, while adhering to a philosophy of live-and-let-live, this third invasion of privacy was too much for the poor old cow. It lay down quietly in the corner of the field, gave premature birth to a cross-eyed calf, and was sold to the mess as fresh-killed meat the next day.

Leading Stoker Cameron, who was by now paying ardent court to his village lass, began to suspect that past sins were catching up with him, in the shape of torment. For the third time, his tactical and psychological progress were both wiped out by the uninvited arrival of one balloon, one bumperless car, three foreign officers and a trouserless Commander. It would indeed be hard to imagine any greater combination of handicaps to the course of true love.

Insult was added to injury when the Commander, who was circling the car like a mother hen, failed to see the love nest of the ditch and stumbled into the status of three-in-a-ditch being a crowd —one bewildered stoker, one haughty barmaid and one Commander in shorts and shirttail.

The Commander, unlike McKay, had the good taste to apologize for the intrusion before he set out in hot pursuit of the perambulating circus which by now was nearing the horizon. The Digger looked back to see that Leading Stoker Cameron was sitting on the edge of the ditch with his head in one hand and beating the ground beside him with the other fist. The village lass was carefully looking out over the edge of the ditch, like a wary submarine commander about to surface.

During the trip back there were several more occasions when the back wheels spun in suspension and, at one point, a strong eddy of wind sent the flabby prisoner soaring aloft with such vigour that the whole entourage was suspended in a most dangerous and disconcerting manner. Fortunately Kelly still had his anchor and was able to employ a squid-jigging technique to hook the concrete abutment of a bridge over the next bend in the road. They were thus able to pull themselves back to earth. The MG was probably the first car to travel "as the crow flies".

This was the last notable event in their unusual pilgrimage and they reached the outskirts of the camp where they were duly challenged by the sentry. On being told that it was the Commander with a balloon, he promptly quoted, at the shapes in the darkness, his instructions that no ladies were allowed into the camp after sundown.

In his toothless and trouserless state, the Commander was unable to express his thoughts on the situation, but the Digger was able to assure the sentry that entry should be permitted, though the sentry nearly bayoneted "the lady admiral" as it passed with ponderous dignity.

The Court Stenographer's Record of the Court Martial of

Acting Lieutenant (P) Patrick Michael Kelly, RNVR

Judge Advocate: Acting Lieutenant Kelly, you are charged with the following:

1. did improperly leave His Majesty's Ship, namely by RAF balloon.
2. did cause the destruction of 300 yards of telephone cable, the property of General Post Office, on the shore road.
3. were guilty of unauthorized low flying in an aircraft for which not qualified.
4. did cause the premature death of a cow in calf, said cow being the property of one Llewelyn Lewis.
5. wilful destruction of one window in cabin 33, the property of His Majesty.
6. did negligently lose the bumpers of one automobile, jointly owned by the Commanding Officer and the Workingman's Finance Company.

Prosecutor: (addressing the President of the Court Martial)

Sir. Since laying the foregoing charges, the circumstances surrounding this series of events have been reconsidered.

It is impossible to substantiate the time at which the alleged offences took place as the principal witness, the former Commander, is now Fleet Mail Officer, New Guinea. I must therefore withdraw the charge of improperly leaving ship.

I also ask the Court's permission to withdraw the charge of low flying. Lieutenant Kelly claims that he was not airborne at any time on the day in question. The only prosecution witness, one Leading Stoker Cameron, is not available to testify. He is now serving a two-year sentence for unprovoked assault of the Officer of the Watch when the latter asked him if he had enjoyed his leave on the day in question.

The service psychiatrist has examined Lieutenant Kelly and stated that he cannot be held responsible for the destruction of the window in his cabin. It was stated that his act of throwing one anchor out the window during a nightmare was quite a reasonable reaction. I therefore withdraw that charge also.

Therefore, Mr. President, the prosecution only proposes to proceed with the second, fourth and sixth charges. The principal evidence in all three charges takes advantage of the medical phenomena whereby the experience causing death by shock is etched into the eyeball of the victim. I therefor offer as evidence this photograph of the eyeball of Mr. Lewis' dead cow. You will see quite clearly an almost photographic reproduction wherin the court may see one Royal Air Force balloon, one bumperless car, the subject of the sixth charge, and the driver, one Lieutenant (Radar) RCNVR, who is now Shore Patrol Officer in Dawson City. The accused also is easily recognized as the occupant in the rear seat.

President of the Court: Lieutenant Kelly. You have heard the charges and preliminary evidence. How do you plead?

The Accused: Insanity as of 24th August, 1942, Sir.

President: Very well. I would like the following information for the Court record and to assist me in deciding punishment. When did you enter His Majesty's Service?

The Accused: I volunteered the 24th August, 1942.

CROSSING THE LINE - - AN ANCIENT RITE

Equator Scene of Most Entertaining of Naval Customs

NO CRYSTAL BALL, no soggy tea leaves, no greasy deck of cards was needed to foretell, with the departure of the cruiser *Ontario* from Esquimalt on February 24 on her southern training cruise that in three weeks or less she would be a shambles.

This was no reflection on the ship's company or the *Venture* cadets who sailed in her. Shortly before the middle of March she was due to steam across the equator and become the scene of an ancient and uncouth ritual.

Lt.-Cdr. A. D. Taylor, recruiting officer for Quebec City, has delved into the history of many naval customs and has embodied his findings in a book, "Customs of the Navy", which has had quite a large circulation in the Royal Canadian Navy, although it has not yet been officially published. From the following extract from his book, it should be possible to reconstruct what will befall not only the officer cadets in the *Ontario* but a good many members of the ship's company as well:

Without a doubt the most entertaining of all naval customs is that of the ceremony of Crossing the Line, a practice which had its origin in the pagan initiation rites of the Vikings. The next recorded instance, somewhat obscure in detail, is that a variation of these rites was performed by ships' companies on crossing the 36th parallel of north latitude and entering the Straits of Gibraltar. Some centuries later the ceremony became one for crossing the equator. A summary of the events of the present-day ceremony as practised aboard RCN ships may be of interest.

The night before the ship is due to cross "The Line" a quaint ceremony takes place on the forecastle, in which the Bears, as agents of the Secretary of State of King Neptune's Watery Realm, board the ship, in theory via the hawsepipes; with some ingenuity this can be effectively staged with curtains of spray illuminated by coloured lights. The Bears should be received on board by a member of the ship's company who has previously been granted the Freedom of the Seas, and by him conducted to the captain on the bridge, there to deliver a Royal Proclamation regarding the ship's entry into Neptune's Kingdom, and the holding of the Royal Court on the morrow to initiate all novices into the mystic rites. The Bears may then make their exit by the way they came.

For the next day, that on which the ship crosses the equator, a canvas bath of suitable size should be rigged, and above one side of the bath rig a ducking stool and thrones for the King and Queen Amphitrite. To commence the ceremony the Royal Bugler sounds "Clear the lower deck" and "Officers' Call," to the vicinity of the bath—"dress of the day": bathing trunks—and then the Royal Procession makes its stately progress from the Royal Robing Room to the Royal Bath. This is always a high point as the members of the court will have gone to considerable pains concerning their costumes and appearance. Extreme latitude in this matter is customary, though it is usual for the king to have a bushy grey or black beard, a crown, and of course, a trident.

The actual ceremony will usually commence with the investiture of some decoration to the captain as "The Insignia of the Most Exalted Order of the Old Sea Dog"; for the executive officer and such other shipboard personalities as have already crossed the line the "Equatorial Star" or the "Equinoctial Cross" might be in order. (Engineers' workshops are potential sources of suitable decorations.)

At this point, in regal and flowery language (i.e. carefully following his script) His Majesty King Neptune I (by the Grace of Mythology Lord of the Waters, Sovereign of All Oceans, Governor and Lord High Admiral of the Bath—to cite his traditional titles) will address the Novices as to their impending fate, warning them that none shall be overlooked, and that all "shall be initiated into the Mystic Rites of the Freedom of the Seas, according to the Ancient Customs of Our Watery Kingdom".

The Judge's Clerk will then call each candidate in order, to be presented by the Judge to Their Aquatic Majesties, and to be examined and prepared for the rites of initiation by the King's Most Eminent Physician (NB—Formal medical training is NO qualification for holding this post in the Royal Court). The customary treatment prescribed normally consists of an enormous pill, concocted in the chief petty officers' mess with the co-operation of the galley and sick bay staffs. About all that can be said of the pill is that it will not be toxic, but almost certainly laxative. As if this were not enough, a tonic, similarly of doubtful content, will be administered by the doctor's assistant; a large galley syringe, properly used for icing cakes, proves most effective for this purpose. The doctor may also use

a wooden mallet to sound back, chest, and probably head of the victim, who is then certified fit for the ordeal, and is passed on to the Royal Barber and his nefarious assistant, to be made more presentable for the initiation rites. These unskilled functionaries will lather his face, and probably more, and then shave him with a large wooden straight razor. During this he will be pushed over backwards into the canvas bath, there to be ducked several times by the bears.

From time to time, should the secret police report that some novices are in hiding (no doubt in fear and trembling), the King may interrupt the proceedings to make public announcement of their offence, and order his police to arrest the offenders and bring them before him, to answer for their misdeeds.

When the greenhorns have all been dealt with "according to the customs of the sea" it is usual for the shellbacks to apply to re-qualify, following which formalities are relaxed and the entire Court will undoubtedly take a plunge (not always voluntary) into the bath. It is needless to say that this ceremony is one of great amusement and much good-natured skylarking.

We normally commemorate the occasion by awarding a "Crossing the Line" certificate specially produced for that ship and that particular cruise across "The Line". Many of these certificates have been created artistically by Cdr. H. W. S. Soulsby, RCN (Ret'd), of Victoria, a frequent contributor to *The Crowsnest*.—A.D.T.

7-Year Refit for Victorious

Following a period of seven years, during which she was virtually rebuilt in Portsmouth Dockyard, HMS *Victorious*, the world's most modern aircraft carrier, was commissioned in January.

The work carried out on the ship was the largest task of its kind ever undertaken in a royal dockyard or commercial shipyard in Great Britain.

The *Victorious* is the first British aircraft carrier to be fitted with all of the British-developed aids to naval flying, the fully-angled flight deck, steam catapults and mirror deck landing aids. In her modernization program, more than 800 miles of electric cables, 10,000 lighting points, 10 miles of ventilation trunking and 17,000 square yards of linoleum were used.

The island, for the size of the ship, appears small by present-day standards but this has been done to allow the maximum available flight deck area. The placing of the two-tier operations rooms, radar display room and associated compartments below the flight deck level has enabled the size of the island to be kept to the minimum.

Strong enough to take the heaviest of Fleet Air Arm aircraft, the flight deck is just over 775 feet long. The angled deck is the ship's most striking feature. An angle of 8¾ degrees has been achieved by extending the flight deck outwards for 41 feet on the port side for a length of 120 feet. It overhangs the ship's side by some 35½ feet.

Her modernization was deliberately prolonged to enable all of the latest equipment and developments to be incorporated. Her radar has been described as the best ship-borne air defence radar in the world which combines early warning and high discrimination of an aircraft's position in plan and height simultaneously. It is also fitted with a high discrimination radar with a computor to "talk down" aircraft safely on to the deck in all weathers.

During the Second World War, the *Victorious*, which was launched in September, 1939, was in many actions against the enemy between May, 1941 and May, 1945. Air strikes were launched against the German battleships *Bismarck* and *Tirpitz* in 1941, 1942 and 1944. Her escort duties took her to North Russia and Malta in 1942 while her air group covered the North Africa landings and then, in the following years of the war, launched strikes against land targets in New Georgia, Northern Sumatra and Palembang.

On May 9, 1945, she was hit on the flight deck by a Kamikaze aircraft but within a few hours was in action again.

"Drive On" Ship For Sea Transport

The latest ship of the United States Navy to join the Military Sea Transportation Service fleet in the Atlantic, is, according to the Armed Forces Press Service of New York, the first transport vessel to utilize the new roll-on, roll-off loading and unloading technique.

The ship, the USS *Comet*, can load over 700 vehicles, one sixth the number required for an armoured division, in a matter of hours. By conventional means this loading would take several days.

Cargo and vehicles instead of being loaded by hoist, are driven aboard on five hydraulically operated platforms from dock level. Drivers follow a series of coloured lights which directs them to the main deck or either of the two storage holds by means of ramps. Special winches, portable battery-chargers and tire-pumping equipment keep stalled vehicles moving, while ventilation and drainage systems handle the hazards of exhaust fumes and spilled gasoline.

The *Comet* is 499 feet long, with a speed of 18 knots and a cruising range of 13,000 miles.

OFFICERS AND MEN

Medical Officers Visit Halifax

Twelve medical officers from the three Armed Services currently attending a course at the Medical Joint Training Centre, Toronto, visited the Halifax area 13-15 February.

The group arrived by air February 13, toured the RCN Hospital, *Stadacona*, and heard a lecture by Surgeon Cdr. H. C. Lane, principal medical officer. Friday the members visited *Shearwater*, and saw a demonstration of diving equipment and techniques on board the *Granby*, headquarters ship for the RCN's operational diving unit.

Included in the group were seven Army medical officers, three from the RCAF and two from the Navy. The purpose of the tour was to acquaint members with naval medical facilities.

Admiral Adams Soon to Retire

Rear-Admiral Kenneth F. Adams, who for the past five years has been in command of the 22 naval divisions of the RCN(R), with headquarters at Hamilton, Ontario, will proceed on retirement leave on April 2, 1958, after 33 years of service in the RCN.

Rear-Admiral Adams established the naval reserve headquarters in Hamilton in April 1953 and was instrumental in organizing the RCN(R) on its present basis.

He will be succeeded by Commodore Edward W. Finch-Noyes, who has been Commodore, RCN Barracks, Halifax, and commanding officer of Stadacona.

Rear-Admiral Adams was born in Victoria, B.C., on September 6, 1903, and graduated from the Royal Naval College of Canada in 1922. As there were no naval vacancies at that time, he entered the merchant service and obtained his master's certificate. He joined the Royal Canadian Naval Reserve in 1928 and a few months later transferred to the Royal Canadian Navy as a lieutenant.

A period in the destroyer *Vancouver* and service with the Royal Navy followed until 1931, when he returned to Canada for two years' service in the *Skeena*. A further two years with the Royal Navy was followed by his appointment as first lieutenant of the destroyer *Champlain*. In 1937 he became

REAR-ADMIRAL K. F. ADAMS

COMMODORE E. W. FINCH-NOYES

first lieutenant of another destroyer, the *St. Laurent*.

Shortly before the outbreak of the Second World War Rear-Admiral Adams was appointed to *Stadacona*. He was serving as executive officer of the barracks when he was promoted to the acting rank of commander in July 1940. He was confirmed in rank in January 1941.

From April until December 1941, Rear-Admiral Adams was in command of the auxiliary cruiser *Prince David*. He then returned to Halifax as commanding officer of Stadacona.

Between February and December 1943 he commanded the destroyers *Assiniboine* and *Ottawa*, and the auxiliary cruiser *Prince Henry*. This was followed by service at Naval Headquarters as Director of Warfare.

In August 1944 he became Commanding Officer of HMCS *Somers Isles*, the Royal Canadian Navy's wartime sea training base in Bermuda.

Early in 1945 he commanded the *Iroquois* and in July of that year became commanding officer of *Stadacona* for the second time.

Rear-Admiral Adams assumed command of the cruiser *Uganda* (now the *Quebec*) in July 1946 and was in this ship for a year before taking up the dual appointment of Deputy Chief of Naval Personnel and Director of Naval Reserves at Naval Headquarters. He relinquished the former post in June 1949 to devote full time to his duties as Director of Naval Reserves. In September 1949 he was appointed in command of the aircraft carrier *Magnificent* and two years later he assumed command of *Naden*.

With the formation of a new establishment at Hamilton to administer the 22 naval divisions and the RCN (Reserve), Rear-Admiral Adams became the first Commanding Officer Naval

WEDDINGS

Able Seaman Jerome J. Bellmore, *Cornwallis*, to Miss Margaret MacDonald, of Port Hood, N.S.

Able Seaman William H. Dockrill, *Outremont*, to Miss Martha Glenda Simpson, of Halifax.

Lieutenant Alan H. Brookbank, Naval Headquarters, to Miss Patricia Josephine Ellis, of Ottawa.

Sub-Lieutenant (MN) Margaret Ann Brown, *Naden*, to Lieutenant Barry D. Blair, Royal Canadian Engineers, of Guelph, Ont.

BIRTHS

To Able Seaman V. A. Propp, *Naden*, and Mrs. Propp, a son.

Divisions on April 27, 1953. His promotion to Rear-Admiral was effective May 27, 1955.

Rear-Admiral Adams was awarded the Greek War Cross, Third Class, by King George II of Greece, in December, 1942 for his services while captain of the *Prince David*. The Canadian ship was one of a number of warships which escorted another carrying the King of Greece from North African waters to England in September 1941.

An outstanding athlete in his earlier years, Rear-Admiral Adams has always fostered and taken an active interest in sports and recreational programs in ships and establishments under his charge.

Commodore Finch-Noyes was born in Hamilton on June 9, 1909, and was living in Oakville, Ontario, when he entered the RCN as a cadet in September 1926. He has been Commodore RCN Barracks, Halifax, since August, 1955.

"Another little touch won't do it any harm."—and Ord. Sea. Dick Austin puts a mirror-finish on his ship's bell. The New Waterford re-entered service as a newly-modernized Prestonian class frigate on January 31. (E-44292)

Wren Officer Enters Permanent Force

Lt. (W) Constance Eileen Ogilvy, of Toronto, has been granted a permanent commission in the Royal Canadian Navy. Formerly on a three-year short service appointment, she has been assistant to the Personnel Selection Officer and Wren Divisional Officer at HMCS *Stadacona*, RCN Barracks at Halifax.

Lt. Ogilvy entered the WRCNS as probationary wren in December, 1942, and was commissioned in August, 1943. She served, until she took her discharge in March 1946, as unit officer at HMCS *St. Hyacinthe*, wartime signals school near St. Hyacinthe, Quebec; at *Stadacona*, and at *Cornwallis*.

After graduating from the University of Toronto in 1949, with a BA degree, she worked with the Toronto Board of Education until 1955. During this time she also went on the active list of the RCN(R) at *York*, Toronto naval division. In September 1955 she entered the RCN on a short service appointment.

His Worship Mayor Percy Scurrah, of Victoria, spoke during the commissioning ceremonies of the modernized frigate Beacon Hill last December. Standing behind the guest of honour are Rear-Admiral H. S. Rayner, Flag Officer Pacific Coast; Cdr. (L) J. R. Allen, Resident Naval Overseer, Vancouver, and Lt.-Cdr. P. F. Wilson, commanding officer of the Beacon Hill. (E-43926)

Royal Navy Unites Reserve Forces

A move comparable to the formation of a single reserve by the Royal Canadian Navy in 1946 has been made by the Royal Navy, with the announcement by the First Lord of the Admiralty, the Earl of Selkirk, in December that all the Royal Navy's volunteer reserves would be amalgamated under the title of the Royal Naval Reserve.

Affected by the change are the existing Royal Naval Reserve (RNR), whose members are drawn from merchant service and fishing fleets; the Royal Naval Volunteer Reserve (RNVR); the Royal Naval Volunteer (Wireless) Reserve (RNV(W)R), which will be incorporated in the new reserve as the telegraphist branch, and the Royal Naval Volunteer (Postal) Reserve (RNV(P)R).

The Women's Royal Naval Volunteer Reserve (WRNVR) will continue as a separate organization but will be closely associated with the new RNR.

An official statement said that three main considerations had been taken into account:

"(a) The changed concept of modern war, which requires that reservists, on mobilization, be ready to join the Fleet without any further training;

"(b) The need to review the tasks which the volunteer reservist can reasonably be expected to perform efficiently on mobilization, having regard to the approaching end of National Service, with its two years' valuable experience with the Royal Navy, and

"(c) The ever-present need to make economies in naval expenditure."

The primary function of the reserve will be to meet the sea-going requirements of the Royal Navy and the sea training of reservists will be concentrated in modern coastal minesweepers, such as have, for some years, been attached to each RNVR division. Floating drill ships are to be withdrawn and replaced by shore headquarters, as an economy measure.

Captain (now Acting Commodore) H. V. W. Groos, who commissioned HMCS Bonaventure on January 17, 1957, bids farewell to senior chiefs of the aircraft carrier before proceeding to the West Coast to become Commodore, RCN Barracks, Esquimalt. He is shaking hands with CPO Ted Rigby. (BN-1503)

New Sea Weapon Introduced by USN

The United States Navy recently disclosed that a new weapon, known as the *RAT*, is now operational with the Pacific and the Atlantic Fleets.

The *RAT*, a nickname for "rocket assisted torpedo", combines many advantages in one small package. Its use permits destroyers to "kill" submarines without going within range of the submarine's torpedoes. The "kill" radius around the ship has been extended for many miles. In addition, the *RAT* is light, (450 pounds), small (torpedo eight feet; the entire *RAT* system 16 feet), inexpensive, logistically foolproof, and can be armed with an atomic warhead.

Mounted on a short track on a five-inch gun, it is automatically aimed and launched by an electronic computer linked to the standard sonar submarine detecting gear. It is boosted into the air by a solid fuel rocket motor and as it nears its maximum altitude an aluminum casing opens to release the torpedo. On the downward arc the speed is reduced by two six-foot parachutes to minimize damage to the control mechanism. Once in the water the "homing" gear takes over and guides the weapon to the target.

After nearly 14 years of operation, the bakery at the Royal Canadian Navy's Central Victualling Depot in Halifax closed recently. The Navy will now purchase its bread and rolls from commercial bakeries in the area. The bakery, which has produced an average of 85,000 pounds of bread and rolls each month, supplied ships and establishments in the Halifax area, in addition to HMCS Cornwallis. The establishment employed a staff of 15 naval personnel. Leading Seamen Albert Watson and Gerald Goldring are shown placing the last batch of bread in the ovens. (HS-51455)

Permanent Status for Wren Officer

Lt. (W) Dorothy June Kiely, of Ottawa and Brockville, Ont., has been granted a permanent commission in the Royal Canadian Navy.

Formerly on a three-year short service appointment, she has been carrying out flying control duties at *Shearwater* since January, 1953. In addition Lt. Kiely is Wren divisional officer at *Shearwater*.

Born in Ottawa, she entered the RCN (R) in August, 1952, at *Donnacona*, Montreal naval division. In January, 1953, she commenced a flying control course with the RCAF, after which she took up her present appointment.

Foreshadowing future armadas of undersea warships, the nuclear submarines Seawolf (nearest camera) and Nautilus steam into Long Island Sound. (Official U.S. Navy Photograph.)

Atomic Power High in Naval Planning

RCN Officers Train in Nuclear Marine Engineering

THE ROYAL CANADIAN NAVY is taking an interest in the possibilities of nuclear energy in the propulsion of naval vessels.

The development of a group of Royal Canadian Navy personnel trained in nuclear engineering gained impetus early this year when the first Canadian naval officers selected to study this newest field in marine propulsion began a one-year training period in the United Kingdom.

Three officers and a civilian engineer of the RCN joined the Yarrows Admiralty Research Development Team at Glasgow, Scotland, in mid-January. Each of them had previously completed a 16-weeks training course at the Reactor School at the Atomic Research Centre, Harwell, England. They are: Cdr. (E) R. St. G. Stephens; Con. Lt.-Cdr. W. M. Ogle; Lt. (L) G. A. Kastner, and R. A. Mitchell, a member of the Naval Engineering Design Investigation Team, Ville la Salle, Montreal.

At Yarrows, together with naval architects and engineers from the Admiralty and British shipyards, they will study design techniques and reactor installation in relation to marine engineering. The project as a whole is under the sponsorship of the Admiralty. The arrangement to send RCN representatives to Glasgow is in accordance with the long-established and close relationship between the RN and the RCN.

A reference to this intention to send naval personnel to the United Kingdom for this purpose was made by the Hon. G. R. Pearkes, Minister of National Defence, when, in the course of his statement on defence policy in the House of Commons on December 5, 1957, stated: "Studies in nuclear propulsion for ships are to be undertaken in conjunction with the Royal Navy, and a Canadian team of scientists and naval officers will proceed to the United Kingdom for this purpose early next year."

At the present time, the RCN has other officers employed in the nuclear engineering field. Lt. (E) S. E. Hopkins, became the first RCN officer to receive a Master of Science Degree in nuclear engineering, when he graduated from the University of Ottawa in September, 1957. He was seconded to Atomic Energy of Canada Limited at Chalk River prior to taking up a temporary appointment at the end of 1957 as Staff Officer (Nuclear Engineering) at Naval Headquarters.

Early in January, Cdr. (E) M. W. Anketell-Jones left Ottawa for the United Kingdom to take the reactor course at Harwell. On his return to Canada this summer, he will take up the appointment held at present by Lt. Hopkins.

In addition, two other officers are studying nuclear engineering as part of a course they are taking at the Massachusetts Institute of Technology, Lt.-Cdr. (L) C. R. Nixon and Lt.-Cdr. (L) Joseph Stachon.

THE VALUE of nuclear power for marine propulsion was discussed by Rear-Admiral G. A. M. Wilson, Deputy Engineer-in-Chief (N) and Rear-Admiral Nuclear Propulsion, in an address at the Royal United Service Institution in December. It was the first comprehensive review of the subject given to a United Kingdom audience, according to the *Admiralty News Summary*, from which this is reprinted.

After reviewing the fundamentals of reactor design and selection Admiral Wilson went on to describe the maritime possibilities of nuclear power.

In view of its importance the full text of that part of his speech is here reproduced:

WHAT DOES nuclear power offer? From a naval viewpoint almost limitless endurance at high power without requiring oxygen for combustion. This is, of course, ideal for a submarine and for the first time in history we have within our grasp a true submersible independent for long periods of any contact with the atmosphere and capable of high sustained speed underwater. As an instrument for surprise attack against targets (sea or land) it has potentialities which are unsurpassed, and the problems which it poses to the defence are formidable indeed.

The effectiveness of submarines in the anti-submarine role is not in doubt and if we are to have any chance to kill enemy submarines which are nuclear propelled, ours must have at least as good, if not better, capabilities. As a long term development, the threat of offensive action using ballistic rockets and similar weapons fired from submersibles, even when submerged, can be greatly increased by the adoption of nuclear propulsion. Its strategic and tactical potentialities are so great that nuclear propelled submarines must surely be regarded as a new weapon of war rather than as an improved existing type. The American Navy, based on the phenomenal results experienced

with trials of *Nautilus* in every conceivable role (except that of a ballistic missile carrier) certainly so regards them.

As early as 1946 the Admiralty were aware of the potentialities of nuclear power for such an application, but due to the lack of facilities and personnel, it was impossible to institute anything more than the sketchiest preliminary investigations until 1950. At this time the preliminary design of a land based prototype of a gas-cooled graphite-moderated low-enrichment reactor was considered, which it was hoped would form the basis of a submarine machinery installation. Investigations showed that the proposed design would be unsuitable and the study was abandoned. It did, however, reveal much valuable information on gas technology which proved useful in the Calder Hall program.

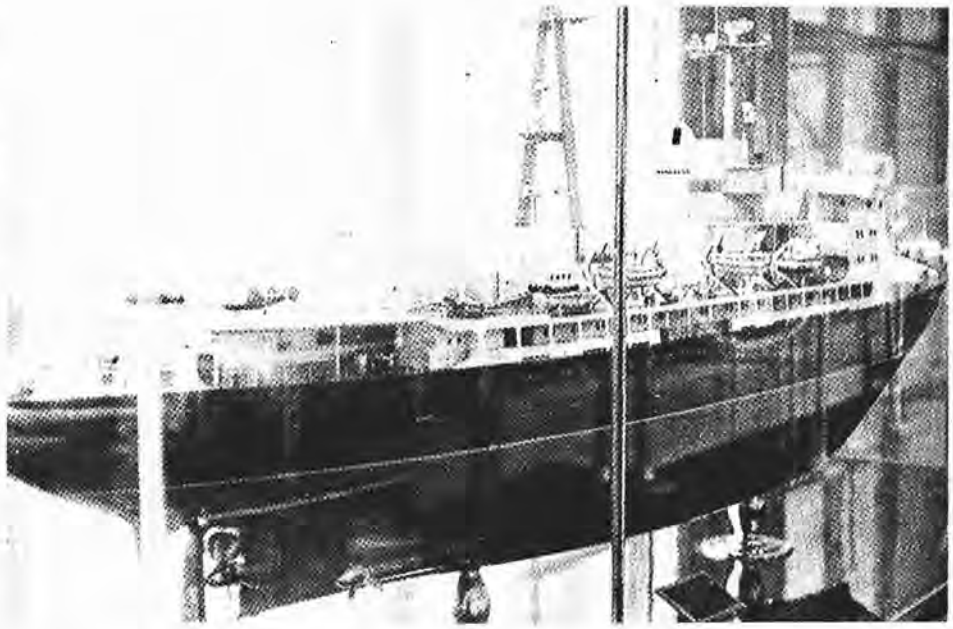
By this time most of the available effort of the Atomic Energy Authority had been diverted to the land based program. There is no doubt whatever in my mind that the policy of the country, with its crying need for increasing land power generation, was entirely right in channelling its whole endeavours first to this end. Coupled with this, the unavailability of fissile material for highly enriched systems delayed any serious start being made on a further study until 1954, when the *Dreadnought* project was initiated.

APART FROM the submarine, where should we aim for the next military application?

In surface ships, the advantages of long endurance at high speed must always be weighed against the penalties of weight, and space. Reactors, even the most compact of them, tend to be heavy and cumbersome beasts. Therefore, we shall certainly first see nuclear propulsion applied to large rather than small surface ships.

The aircraft carrier, with its need for high speed, is a worthwhile application and it has other particular advantages in greatly improved possibilities of ship, flight deck and radar layout; increased capacity for aviation fuels and much improved conditions for landing on. The carrier clearly has very strong claims indeed for our next fighting ship application.

For those who have doubts on the wisdom or necessity of converting to a nuclear fleet, I would suggest they reflect on what is being done by other nations in this field. The Americans are committed to, and have made a great start in constructing a nuclear fleet. Nineteen submarines of varying types are built or under construction or planned for completion by 1961, a cruiser is due to be completed by 1960, and a large fleet carrier will follow. Preliminary design investigations for a destroyer are in progress. As regards the carriers, approval for a further five has been sought by the Navy; one each succeeding year for a total of six in service by 1966.



Here are two views of a model of the Russian nuclear-powered icebreaker, Lenin, launched late in 1957. Her engines will develop from 44,000 to 56,000 horsepower and she will have three propellers, giving her a maximum speed of 18 knots. It is reported that the Lenin will be able to steam for a full year without refuelling and that her daily fuel consumption will be five ounces.

We do not know definitely the Soviet intentions, but they must be aware of the advantages that nuclear-powered submarines would give to their very large underwater fleet. Their achievement with their satellite program bears ample evidence of their rapid advances in the scientific field.

The French have announced their intention of getting a submarine to sea by 1961.

It is obvious that the transition from conventional power to nuclear will be a slow one and we will be faced with the problem of operating both types of ship at the same time. It is just not practicable to convert conventionally propelled warships to nuclear and, in my opinion, it will eventually be of great benefit to adopt nuclear propulsion for Fleet replenishment work, thereby spreading the benefits widely

The western world's third atomic submarine, USS Skate, slides from the ways into Connecticut's Thames River last spring. The Skate is the U.S. Navy's first "production model" atomic submarine. (Official U.S. Navy Photograph.)

over the conventional Fleet by very greatly increasing its operational endurance.

FROM A TECHNICAL point of view, the problems associated with the application of nuclear power to a merchant ship of a large tanker type, or a fleet replenishment tanker, are expected to be quite similar and, to a large degree, much of the research and development could be dovetailed. It is generally agreed that a tanker is probably the most rewarding application for commercial vessels — at least initially.

If nuclear power is to be attractive commercially it must be economically competitive. All studies to date have shown there to be a disparity between the overall operating costs of a nuclear and conventionally powered ship, but, as would be expected, the gap is smaller the larger the ship. In the early stages of merchant ship development it will be necessary to choose a ship which has a high usage factor and one which is capable of large bulk transport weight. A tanker most nearly fills these conditions and it is for this reason it is thought to be the most attractive proposition at the present time, although the high speeds required for trans-Atlantic liners and some other fast passenger ships with the consequent heavy expenditure of fuel at these high powers, makes this type of ship another strong candidate for nuclear power. For obvious reasons it is too big a commercial risk for a first venture.

Many people have done economic studies and have, I think, reached roughly the same conclusion; that is, that at the present time there would be approximately a 15 to 20 per cent increase in running costs of a nuclear vessel over a similar conventional one. I thought you might be interested to see the trends that some studies have shown to date.

The cost per ton of delivering oil in the United Kingdom from the Persian Gulf has been plotted against ship speed for both conventional and nuclear ships of varying size. All nuclear ships have been assumed to be fitted with a graphite-moderated gas-cooled reactor. Allowances have been made for running cost, fuel costs and capital costs to give an overall operating cost. You will see that in the case of conventional ships varying fuel costs have been taken to cover possible increases in these charges.

Today's prices vary between £6 10s. and £9 a ton, but the rate of increase of fissile fuel costs over the last few years leads one to expect that these figures will continue to increase. In the nuclear case the amortization charges on capital predominate and the fuel costs are only a small percentage of the overall costs whereas in a conventional ship the fuel costs contribute by far the greatest part of the overall operating costs.

It will be seen that for a 65,000-ton deadweight ship the costs of conventional and nuclear vessels break even at about 21 knots, but this does not represent the optimum operating speed for either. At higher speeds the nuclear ship wins over the conventional one, but there is no commercial incentive to operate at these higher speeds unless there should be a shortage of oil in this country and it became a paying proposition to import oil at a higher price. The 65,000-ton ship looks more attractive than the larger ship due to the fact that it could return in ballast via Suez, whereas the 80,000-ton ship would have to go round the Cape both ways.

IT WILL BE CLEAR from all this that it is the capital costs and not the running costs which are retarding the application of nuclear power to commercial vessels at the present time. All efforts must therefore be directed to reducing the capital charges and development is currently going on to achieve this aim. In land power stations it is now considered possible to bring down the unit cost by raising the generation capacity for the same size plant. In a ship this increased power cannot be so easily utilized. It could

Nuclear-Powered Ships in Being, Under Construction or Projected

CANADA

Icebreakers (1):

Department of Transport considering construction of atomic icebreaker as part of plans for keeping Lower St. Lawrence open year-round.

FRANCE

Submarines (1):		
Q.224	——	In planning stage; ready by 1961.

RUSSIA

Icebreakers (2):		
Lenin	16,000 tons	Launched late 1957; to be in operation by 1960.
——	28,000 tons	Projected.

UNITED KINGDOM

Submarines (1):		
Dreadnought	2,000 tons	On order.
Tankers (2):		
——	90,000 tons	Expected to be world's largest ships; to transport oil from Middle East via Cape of Good Hope.

UNITED STATES

Aircraft Carriers (1):		
CVA(N)65	85,000 tons	Authorized.
Guided Missile Cruisers (1):		
Long Beach	14,000 tons	To be ready by 1961.
Submarines (19):		
Nautilus	3,180 tons	First of kind; commissioned September 30, 1954.
Seawolf	3,200 tons	In operation.
Skate	——	About 25 per cent smaller than Nautilus.
Swordfish	——	
Sargo	——	
Sea Dragon	——	
Halibut	2,900 tons	Guided missile launcher.
Triton	5,450 tons	To be largest submarine ever built; radar picket; speed over 30 knots.
Skipjack	——	This and five following are high-speed subs of teardrop design; will "fly" underwater and expected to be able to outmanœuvre fastest destroyers afloat; Skipjack to join fleet some time in 1959.
Scamp	——	
Scorpion	——	
Sculpin	——	
Shark	——	
Snook	——	

(Five other nuclear submarines in early planning stage.)

Merchant Ship (1):		
NS Savannah	10,190 tons	To be ready by 1960; speed 20 knots; accommodation for 60 passengers.

increase the speed at which the ship would operate, but since speed varies only as the cube root of the power, we do not get significant gains in the economics. We must look, therefore, for other ways, and one avenue which appears promising is the use of slightly enriched fuel which can drastically reduce the size and weight of the reactor and its associated shielding. Advantages also lie in the use of higher operating temperatures and higher efficiencies.

Moreover, building prototype plans can be an important step in reducing capital costs. As experience is gained, both designers and manufacturers will develop methods which should lead to manufacturing cost reductions. In its present infancy, the production of nuclear equipment has, of necessity, often to be carried out on a costly "one off" basis.

Foreign reports tend to confirm these findings as regards the economics of nuclear propulsion. But despite this fact, many countries have embarked on a nuclear programme of construction and/or extensive feasibility studies. In America the Eisenhower peace ship, a fast cargo passenger liner of about 25,000 tons displacement, is due for completion in 1960. This is predominantly a prestige ship and has certainly not been claimed as economic. Despite this, however, they will have the opportunity of gaining first-hand experience in design, construction and installation and operation of a nuclear propelled merchant vessel. In addition to this, feasibility studies are proceeding with governmental backing especially into the possibility of using gas-cooled reactors coupled with closed cycle gas turbines. The Americans with less need to develop cheap electricity from nuclear power are able to put a far greater concerted effort into the ship problem and will, to my mind, be a real danger to our shipbuilding industry unless we, as a nation, can get moving quickly.

The Russians are building a 16,000-ton displacement icebreaker which is due for completion about 1960.

In Japan, design studies of two nuclear ships are reported to be actively in progress. Whilst the size, type and power are not known, it has been reported that the maritime administration are seeking an allocation of over £4 million for their 1958 budget for a development of nuclear propelled merchant ships. We also know the Japanese are particularly interested in the possibility of commercial submersibles.

Norway, Sweden, Netherlands, Italy and France are all reported to be actively

engaged on the design of plants for mercantile marine applications. The Norwegian and Swedish studies are understood to be well advanced, but there is not evidence of any authorization to build. Norway is, however, building an experimental reactor scheduled to start operations in 1958 which, although basically a shore plant, is expected to lead to the design of a marine plant.

In Western Germany four German firms have formed a company which has a development of a reactor for ship propulsion as its main objective, and they are intending to construct a shore prototype plant as a first step.

IN THIS COUNTRY (the United Kingdom) several groups of companies have announced the formation of associate companies whose avowed intention is the design and development of nuclear plants for merchant ships. Only the most preliminary investigations, however, have been undertaken to date. Of course, no nuclear venture can proceed far without the help and, in particular, the experimental backing of the UKAEA. In any case, the Authority has complete control of fuel supplies and advises the Cabinet on reactor safety.

This leads me to one point which I have not yet touched on at all, but which is of primary importance—the question of safety. Time does not permit me discussing this at any length, but I should like to say that with nuclear reactors there is no danger of nuclear explosions in the sense of a small atomic bomb. The worst that can happen would be an accident comparable to a boiler explosion probably due to loss of coolant, but this could have the resultant effect of spreading highly radio-active materials over a comparatively large area and might therefore be quite a major disaster.

One endeavours in reactor design to choose a system which is inherently safe; that is to say, one in which the loss of moderator or the coolant tends to reduce the criticality of the reactor rather than increase it. Due to certain fundamental nuclear properties it is possible to make systems self-compensating, and so reduce the effect of mechanical failures. The problem of safety in marine plants is, of course, even more difficult than for power stations, since we are faced not only with an unstable platform which prohibits, for instance, the use of gravity for emergency shut-down by control rods, but we must also consider such problems as stranding and sinking.

Whilst many of these problems are formidable, they are, I feel, capable of solution and, as always the best way of finding out the answer is to undertake a realistic project. It will be necessary to evolve a fundamental philosophy for safety and ensure that design and construction of all marine plants complies with them. It will almost certainly be necessary to use some form of containment vessel for the whole of the primary circuit. We are well aware of the importance of safety and as a first step a Safety Committee has recently been instituted to study the behaviour of nuclear warships in British territorial waters and ports. Besides the Admiralty, members of the Atomic Energy Authority, Ministry of Transport, and Lloyds Register are represented.

IN ADDITION to the safety aspect, there are undoubtedly large-ship installation problems which will have to be faced. The heavy concentrated weight of the reactor pressure vessel and shielding will necessitate specially designed structures and supports which will have to be carefully designed as part of ship's structure. The siting of the machinery in the ship will need careful consideration, and it is most unlikely that we would be able to install it well aft since this would result in problems in ship stability and trim. The positioning of the machinery must also be considered from the point of view of collision, to ensure the reactor is least liable to damage. It will be appreciated that the overall design of the nuclear plant and associated machinery will call for the very closest of co-operation between the reactor designers, marine engineers and naval architects.

The transition from oil or coal to nuclear power for the majority of ships is as inevitable as the earlier transition from sail to steam. It will start comparatively slowly, but with ever growing momentum. No one can predict just how fast this will happen although there are many who are willing to try.

It seems to me that people tend to look at the advent of nuclear propulsion as though through a telescope—some of them see things looming very near, others would appear to be looking down the wrong end, while there are still others who have forgotten to take the cover off the eyepiece. None of these views are right if we keep our sights on the target of economical operation.

It is always the lot of a new component that it is compared in its early days with its fully developed predecessor. So it was when the first turbine was scorned by supporters of the reciprocating engine, leading to a battle of opinion only settled finally by a practical demonstration. In the case of the reactor, however, we have already a convincing demonstration of what can be achieved in USS *Nautilus*. The experience with this ship has done much to allay fears and we believe that on a basis of ease of operation and reliability the pressurized water reactor has been outstandingly successful. Nevertheless, I think that our successors a century or so ahead may well look back with the same amused interest on this early effort as we now tend to be today at Stephenson's rocket engine. The stage of development is somewhat comparable and there is certainly no doubt that a reactor plant such as we have in the submarine is a bulky and uneconomical instrument.

It is already clear that the military advantages of nuclear power are profound and the prospects for commercial shipping almost certainly attractive. We must not be hesitant in pursuing the prizes which we can now see ahead, or be deterred by the many uncertainties that exist today.

The technical problems in the application of atomic power to marine use are certainly not insuperable, but a vast field of development in physics, engineering and metallurgy lies ahead aimed at increasing temperatures and efficiencies and in reducing costs. The task ahead of industry calls for wise direction, tenacity of purpose and technical excellence.

One of the problems which has faced this country is the scarcity of enriched uranium. The development alone of suitable types of small high-duty reactors will require highly enriched fuel, quite apart from the much larger amounts needed to support a fleet of nuclear powered ships. These are factors which have to be faced in preparing programs for nuclear propulsion in the Royal Navy and Merchant Marine so that both requirements are incorporated in the Government's fissile fuel policy. Lack of fissile material is the

main reason why we are so many years behind the Americans in the application of this form of propulsion, but it has one advantage in that it has driven the scientific and engineering genius of Great Britain to seek a solution of nuclear power for electric generation using natural uranium.

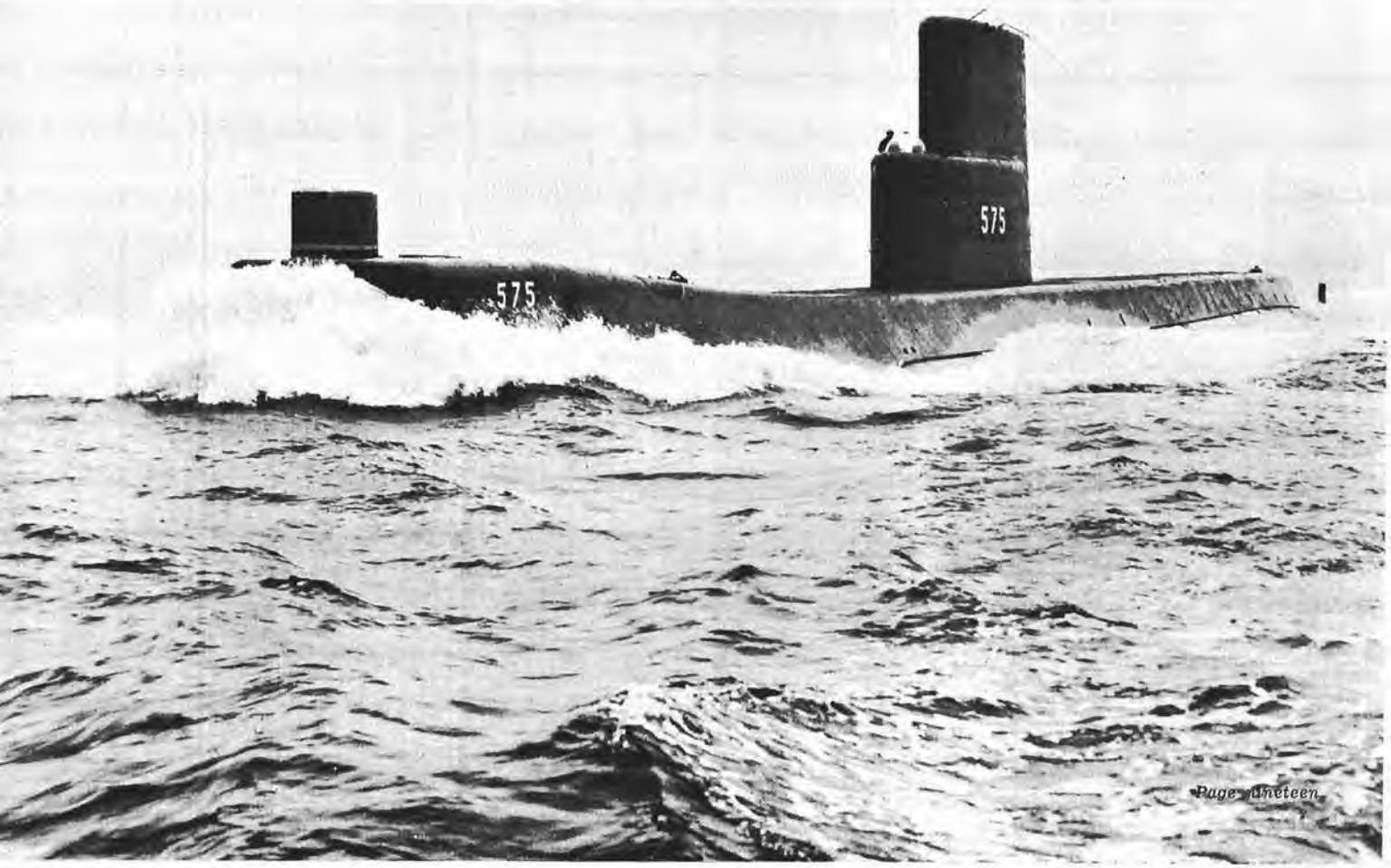
THE POSITION has to be faced that the U.S. Navy two years ago adopted a firm policy of developing and applying nuclear power plants to all types of naval vessels with what they described as an "appropriate sense of urgency". They have stated categorically any vessel of fleet size projected for construction after 1960 will be nuclear propelled. You have heard something of their extensive naval program. The Russian intentions have not been published, but it would be dangerous to assume that they are far behind in their naval plans. There is, I think, little need to enlarge on the impossible odds against which any conventionally-fuelled navy would fight against a fleet of ships able to steam for months at high speed. Unless an armed force is equipped with contemporary weapons, it is obsolete and the very purpose of its existence vanishes.

In the mercantile field we are well aware of the activities of other nations. Some of their nuclear designs are well advanced. In the years ahead the health of our shipbuilding industries will depend upon their being able to meet in open competition with foreign nations the demand of ship owners for nuclear powered ships. Once feasibility and economy are proven, this demand is certain.

The Admiralty, in its role as sponsors to the shipbuilding and marine engineering industry, recognizing the urgency of this matter, instituted a Committee on Nuclear Propulsion under the Chairmanship of the Civil Lord in an endeavour to co-ordinate the overall effort and recommend a policy how best to proceed. Shipowners, shipbuilders and interested government departments are all represented on this committee.

A great challenge lies before us. We cannot move faster than technical developments will allow, and our aim will constantly be to develop an economical ship. Nevertheless, it is of paramount importance to get a ship to sea, on which to build experience, with the minimum of delay. Of course, there will be risks and the cost will be high, but the eventual harvest which the Royal Navy and our great Mercantile Marine can reap it worth untold effort. Posterity will not excuse us if we fail in this task, Admiral Wilson concluded.

The U.S. Navy's nuclear-powered submarine Seawolf, shown during trials last year off New London, Connecticut. (Official U.S. Navy Photograph.)



AFLOAT AND ASHORE

PACIFIC COMMAND

HMCS Ontario

The *Ontario* in the course of her January training cruise entered Acapulco harbour in bright sunshine and was subsequently credited with breaking the spell of unseasonably cold weather prevalent before her arrival. Gun salutes were exchanged after which the captain called on D. E. Cole, Canadian ambassador, and local authorities.

A luncheon and reception on the day of arrival brought to the ship more than 200 Mexican government officials, industrialists, and some visitors to the city.

In Mexico City on Monday, January 27, Captain John C. Littler laid a wreath at the "Minnos Heroes" monument in honour of the boy heroes of Chepultepec. Later that day the Canadian ambassador and Captain Littler made courtesy calls on the secretaries of foreign affairs; navy and national defence; the governor of the Federal District; and President Ruiz Cortines. That evening a reception was given by the Mexican naval authorities in honour of Captain Littler and his officers at the Hotel Del Prada.

The Canadian Ambassador and Mrs. Cole also gave a reception in honour of the *Ontario's* commanding officer at the Embassy residence. Both receptions were attended by Mexican naval and government officials, diplomats and industrialists.

Guest of honour at the recent commissioning of the newly-modernized frigate New Waterford, Cdr. A. C. Wurtele, RCN (Ret'd), reeve of Esquimalt, is shown signing the ship's guest book in the presence of the commanding officer, Lt.-Cdr. Walter S. Blandy. (E-44247)

The 68 *Venture* cadets, with five of their officers, travelled by bus from Acapulco to Mexico City for a two-day visit. After a four-hour tour of Mexico City (courtesy of the Mexican Navy) the cadets were entertained at lunch by the British Society at the Reforma Club. Later the *Venture* cadets attended a reception at the Hotel Del Prada.

Officers and men received many invitations to attend hotel and private beaches for swimming and lunch in Acapulco.

Mrs. W. Burke, regent of HMCS Bonaventure Chapter IODE, Shannon Park, presents an Inter-Departmental Softball Trophy to Captain (now Acting Commodore) H. V. W. Groos, while he still commanded the aircraft carrier Bonaventure. The standard bearer is Mrs. C. Moser. (BN-1498)

NAVAL DIVISIONS

HMCS Cabot

Cabot resumed winter training early in January, marking the occasion with ceremonial divisions during which Commander J. H. Bovey, Canadian Naval Commander, Newfoundland, accompanied by Commander Harold Garrett, commanding officer of *Cabot*, inspected the ship's company and presented awards.

Following the ceremony Cdr. Garrett paid tribute to Cdr. Bovey for his keen interest in the St. John's Naval Division during his appointment as Cancomnew. He also wished Cdr. Bovey every success in his next appointment as commanding officer of the new destroyer escort *St. Croix*, due to be commissioned next fall.

HMCS Discovery

The first mess dinner held by wrens of HMCS *Discovery*, Vancouver naval division, saw the presence of Lt.-Cdr. (W) Jean Crawford-Smith, Staff Officer (Wrens) from Naval Headquarters, Ottawa, as guest of honour and guest speaker.

The dinner was held to celebrate the renovations to the Wrens' Mess and advantage was taken of Lt.-Cdr. Crawford-Smith being in Vancouver during her Western Canada tour.

In her address, Lt.-Cdr. Crawford-Smith outlined, briefly, the history of

the wrens and mentioned that by 1956 wrens in the RCN(R) numbered 600 with 70 wren officers. She also cited the opportunities existing for RCN(R) wrens to transfer to the permanent force.

"Two big strides were made recently to make such a step more appealing", she said, "one is that wrens now have a separate seniority roster, and no longer have to compete with men on the same roster, and wrens may now transfer to another branch under the same conditions as a man."

During the dinner, Lt.-Cdr. (W) Carol Sellars, senior wren officer, presented proficiency pins to 13 wrens who had contributed to extra activities within their mess and on the base.

Special guests included Cdr. J. H. Stevenson, Cdr. A. W. Ross, Lt.-Cdr. William MacInnes, and Lt.-Cdr. B. A. L. Ewens.

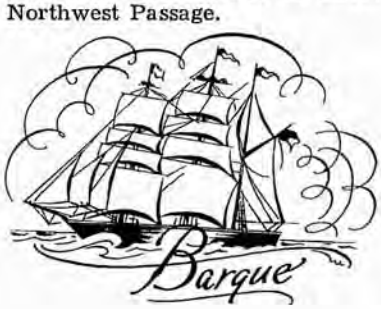
HMCS Unicorn

Unicorn, the Saskatoon naval division, was the scene, in January, of the unveiling of a permanent memorial to the 14 ships of the Royal Navy to bear the name of the mythical monster.

On the quarterdeck at *Unicorn*, the latest ship or establishment in the British Commonwealth to bear the name, is a showcase containing the battle honours of the former *Unicorns*. These dated from the 14th century to 1945.

The unveiling took place at a mess dinner in honour of a former commanding officer of *Unicorn*, Captain Harold W. Balfour, OBE, VRD, RCN(R) (Ret'd), who has now taken up a position in Burnaby, B.C.. Captain Balfour was among the first to join the division when it was formed in 1923, and is a former president of the Naval Officers' Associations of Canada.

Strangely enough, although 14 *Unicorns* preceded the Saskatoon division, the establishment was not named for any of these. Saskatoon's *Unicorn* was named for one of the first vessels to enter Hudson Bay. This was a Danish warship under the Danish navy's most travelled and experienced officer, Jens Munck, who was sent by King Christian IV of Denmark in 1619 in command of an expedition which hoped to discover the Northwest Passage.



E. C. Connolly, chairman of the Public Employees Division, Halifax-Dartmouth United Appeal, presents a United Appeal award to Cdr. G. H. Hayes, commanding officer of the Saguenay, in recognition of the ship's support of the Halifax community chest. The ship's company contributed $965 or 128 per cent of its quota during what was probably the shortest campaign in history. The ship was in the Bay of Biscay last fall, at 1800 the captain gave a "pep-talk" over the SRE, and three hours later the campaign was wrapped up. The Saguenay led the Atlantic Command in percentage-wise contributions. Shown with Mr. Connolly and Cdr. Hayes are members of the Saguenay's Community Chest Committee, left to right: Lt. (S) Max Young, AB Edward Jewer, CPO Rupert Currie, CPO Frank Walford and PO John A. Sutherland. Other members of the committee were: Sub-Lt. J. G. Carruthers, PO W. C. Duffy, CPO G. A. Lauder, Ldg. Sea. J. L. Barnes, AB B. M. Marsh, Ldg. Sea. R. L. Lake. (HS-51434)

Members of Stadacona's Chief and Petty Officer Mess visited the Nova Scotia Home for Coloured Children, St. Joseph's Orphanage and the Protestant Orphanage recently to present cheques on behalf of the mess. Making friends at the N.S. Home for Coloured Children are CPO Samuel Short, mess president and CPO Sydney Manning, secretary-treasurer. (HS-51483)

Here is a view of Quebec in 1760, the year after General Wolfe's forces scaled the cliffs at the far left and captured the capital of New France. The caption in "The King's Book of Quebec", published by the Mortimer Company, Limited, of Ottawa, in 1911, does not identify the warship in the right foreground. The picture is described as "a drawing by Short". (Reproduced by courtesy of Mortimer Limited, Ottawa.)

AS DEATH TOSSED DICE BEFORE QUEBEC

Three Stood with Ropes about Their Necks - - One Died

IN THE SUMMER of 1760 the North American squadron of the Royal Navy was assembled in the St. Lawrence River near Quebec City. The French fortress on Cape Diamond had fallen to the British the previous autumn when Wolfe had carried out his famous attack upon the Plains of Abraham. However the British had won their victory at Quebec too late in the season to proceed up the St. Lawrence against the French forces at Montreal. And so in 1760 a British fleet again assembled at Quebec to support the army in its campaign in the hinterland against the French.

On a Saturday morning in July, as the ships lay at anchor in the river, three men on board HMS *Vanguard* were awaiting execution. James Mike, Thomas Wilkinson, and William McMillard had been found guilty of desertion in time of war and sentenced by court martial to be hanged. A red pennant had been hoisted aboard the *Vanguard,* and a gun fired, in order to warn the others of the squadron to have their boats attend. As the sentence of the court martial was carried out, the assembled ships' companies witnessed one of the strangest executions ever to take place in Canada.

Three seamen had been condemned to die by hanging. The sentence was carried out upon only one of these men. Which of the seamen escaped hanging? Why was this allowed to happen? These documents and letters which were written at the time tell the story in their own way.

This was the sentence of the court martial:

"The Court Pursuant to an Order from the Right Honourable the Lord Colville Commodore and Commander in Chief of His Majesty's Ships and Vessels in North America to Captain William Parry directed and dated the first day of July 1760, having all first duely taken the Oath enjoyn'd and directed by an Act of Parliament made in the twenty-second year of the Reign of Our present most Gracious Lord King George the second, proceeded to the Tryal of James Mike, Thomas Wilkinson, and William McMillard Seamen belonging to His Majesty's Ship *Vanguard* for having left the Hospital at Point Levi the twenty first of June last without Leave where they had been sent for the recovery of their Healths, and that they were taken out of a Canoe by His Majesty's Ships *Penzance* the twenty fifth of the same Month off Green Island; and having heard the Evidence in support of the Charge against the Prisoners and what they had to say in their Defence and Maturely and Deliberately weigh'd and consider'd the same;

"The Court are of the opinion that the Charge of Deserting has been fully prov'd against the Prisoners, and that they fall under part of the sixteenth Article of War; for which they do adjudge the said James Mike, Thomas Wilkinson, and William McMillard to suffer Death by being Hanged by the Neck until they are dead, on board His Majesty's Ship *Vanguard* at such time as the Commodore and Commander in Chief shall direct, and they the said James Mike, Thomas Wilkinson, and

William McMillard are hereby Sentenced to suffer Death Accordingly."

There was appended to the sentence an address to Lord Colville by the court martial: "To the Right Honourable Lord Colville Commodore and Commander in Chief of His Majesty's Ships and Vessels in North America:

"My Lord

"We the President and Other Members of a Court Martial held this day on board the *Vanguard* for the Tryal of James Mike, Thomas Wilkinson, and William McMillard Seamen for Desertion, Having (on being fully satisfy'd that the Charge was prov'd against them) found them Capitally Guilty and accordingly adjudg'd them by our Sentence to suffer Death; Yet we do most humbly presume that we may undertake without any Inconsistancy to our said Sentence to Recommend two of the said Delinquents to your Lordship for Mercy, being greatly induced thereto on account of their Families whose Subsistence must depend on their Labour; and at the same time hoping and humbly conceiving, that the Example so necessary to be made will be as fully answer'd by the Executing One, as if the Three were to suffer; And that the Mercy Extended to the other Two, will also create a due sense of your Lordship's Lenity amongst the Seamen in the Squadron, and thereby deter them from attempting the same, as they will see the Just Sentence of the Court takes place, 'tho at the same time Mercy is Extended.

"We do therefore address your Lordship, that you will be pleas'd to reprieve Two of the Three now under Sentence of Death: But as their Crime is the same and all equally Culpable, it would be wrong for us to point out the Victim.

"We do therefore beg leave to Recommend to your Lordship that they may cast Lotts, or throw the Dye, to determine whose fate it must be to suffer.

"Given under our hands on board the *Vanguard* at Quebec the 5th July 1760. William Parry, Julian Legge, Thos. Hankerson, Jo. Deane, Wm. Adams, John Boyd."

The order for the execution of the sentence was in accord with the recommendation of the Court martial:

"By the Right Honourable the Lord Colville Commodore, and Commander in Chief of his Majesty's Ships and Vessels in North America.

"Whereas James Mike, Thomas Wilkinson, and William McMillard, three Seamen belonging to his Majesty's the *Vanguard* under your command, are by the Sentence of a Court-Martial, condemned to suffer Death; for Desertion; a Copy of which Sentence I send you on the other side.

"And as the Members of the said Court-martial have interested themselves in behalf of the Prisoners, and by a written application to me have desired that Mercy be extended towards them; You are hereby required and directed to cause the Sentence to be put in Execution on Saturday next, in the forenoon, in part only, after the following manner.

"You are to hoist a red Pendant at the fore-top-gallant-mast head, and fire a Gun, as a Signal for the Boats of the Squadron to attend; and when all Things are ready for the Execution of the three Prisoners, above named you are to cause them to throw the Dice, or draw Lotts, so that one only may suffer death, who is immediately to be executed upon firing a Gun as a Signal for the same. The other two are to be reprieved until further Orders; and they are hereby reprieved accordingly. Dated on board the *Northumberland* at Quebec, and written with my own hand, July 8th, 1760,

COLVILLE

"To Captain Robert Swanton
Commander of His Majesty's
Ship *Vanguard*."

A letter was sent by Lord Colville to the Admiralty Secretary explaining the unusual sentence:

"Sir

"I think it is my Duty to lay before their Lordships my Reasons for ordering his Sentence to be executed only in part; which I do, by endorsing the Application from the members of the Court-martial, and my Order for the Execution.

"I am

Sir

Your most humble Servant

COLVILLE

"NORTHUMBERLAND at Quebec
July 10, 1760.
John Cleveland Esquire."

This was justice tempered with mercy 200 years ago. Hanging was routine and there was no subsequent correspondence on the carrying out of the sentence.

What happened when the sentence was executed is not recorded — probably because it was simply a matter of disciplinary routine. For this was war. Hanging in those days was hanging. It did not involve the victim standing on a trap, which was sprung, fracturing his neck. Rather he was hoisted to the yardarm by his own shipmates, and slowly strangled.

It is interesting to speculate on the scene which arose from the court martial sentence and the recommendations for leniency. Did all three culprits stand on deck with ropes about their necks? Was the name of the doomed man drawn from the master-at-arms' hat or were dice thrown upon the deck until the fatal number turned up?

These were trivial questions in that harsh era. Today we do not even know which man died. (*Naval Historical Section.*)

Cumberland Tests Automatic Guns

Accepted into service more than 30 years ago, the trials cruiser HMS *Cumberland* has the distinction of being the oldest warship afloat under the Royal Navy's White Ensign—and in some ways the most modern.

In 1951 the *Cumberland* became the Royal Navy's first trials cruiser and since then has carried out secret trials of atomic defence measures, new radar and gun and other equipment intended for possible future use in the RN.

During the summer and fall of 1957 she tested fully automatic three- and six-inch guns being developed for the Fleet. Both guns have a much higher rate of fire than other existing guns of the same calibre and the rate of fire of the three-inch is equal to that of a heavy machine gun.

Also tested were various systems of pre-wetting to remove radioactive contamination, a new pattern anchor and special propellers.

Freedom of Seas Still Navy's Job

Some pertinent words on the function of the navy in the present era were spoken by the First Lord of the Admiralty, the Earl of Selkirk, at the launching of the new Whitby class anti-submarine frigate *Rothesay* in Scotland last December.

"Let us not learn too late the great gift which the Navy has given to the world—the freedom of the seas," the First Lord said. "If we ever reach the stage when this country and its allies are no longer able to control the communications which the sea can provide, whether by surface ships, by aeroplanes or by submarines, then indeed will the economy of this country be at the mercy of any country that can control these communications.

"We would indeed have put our head in a cloud to think that the freedom of the seas can indefinitely depend purely on goodwill and nothing else."

THE BULLETIN BOARD

Legal Aid in U.S. Made Available

By arrangement with the U.S. Armed Forces, Canadian servicemen who are serving in the United States will receive assistance in legal matters on the same basis as when serving in Canada.

Information as to the location and office hours of the office providing legal assistance, and the nature of the service it offers, can be obtained by communicating with the nearest U.S. military installation or command.

General Order 111.60/1 outlines the arrangements for legal aid in Canada.

Photo Section Now Directorate

A change in the title of the Superintendent of Photography at Naval Headquarters, Ottawa, was announced in February. The head of the directorate is now known as the Director of Naval Photography, with the short title "DN Photo".

Women Doctors To Join Reserve

Early this year approval was given to the enrolment of a small number of women medical officers in the active list of the RCN(R).

There is no intention of enrolling such officers into the Regular Force at this time.

These officers will wear the uniform dress for nursing sisters with the exception that scarlet distinguishing cloth will replace the purple cloth of the nursing branch.

New RCN Film Produced

A new RCN film entitled "Meeting the Challenge" has been produced for general showing. The film, which runs 15 minutes, tells how the fleet is changing to meet the new threat of the submarine able to fire guided missiles from far out at sea. There are sequences showing flying operations from the *Bonaventure* and highlighting the carrier's new features and new aircraft. Other scenes show the new destroyer escorts in an anti-submarine action.

The film also covers the *Magnificent's* preparations and departure for the Middle East with men and equipment for the United Nations Emergency Force, and the finding of a new deep-water route through the North West Passage via Bellot Strait by the *Labrador* in 1957. Ceremony and pageantry are represented in the inspection of a guard by Her Majesty Queen Elizabeth II on the final day of the Royal Visit to Ottawa last October.

The film, in black and white, was shot by naval cameramen and produced by the Directorates of Naval Information and Naval Photography.

Prints are available on loan from command film libraries.

Described by the Royal Navy as the world's most modern aircraft carrier, HMS Victorious is again in service after what turned out to be one of the world's longest refits—seven years. In addition to all the latest flight aids, she has fantastically powerful radar and a filter system to provide fresh air for control rooms in the event of atomic attack. Her angled deck overhangs the ship's side by more than 35 feet and the landing mirrors have had to be installed on their own little deck, as shown. (Photo courtesy U.K. Information Office.) **See story on page ten.**

THE NAVY PLAYS

Shearwater Rink Off to Bonspiel

A rink from HMCS *Shearwater*, for the second year in a row, represented the Atlantic Command at the annual tri-service bonspiel to be held in Kingston, Ont., in late February.

The rink, skipped by Lt. (P) E. W. Smith, took the Atlantic Command curling championship from one skipped by Lt. Bert Levy, who led last year's Atlantic Command curlers home with a large piece of silverware from the tri-service spiel. Levy's team belongs to the *Stadacona* curling club.

The other members of Lt. Smith's rink are Ldg. Sea. W. R. Tinder, second; CPO H. A. Bates, lead, and CPO Robert Burbine, mate.

Interpart Sports Hold Interest

Interpart sports in *Stadacona* during January showed high interest, with ND School on top in hockey with 19 points, Electrical School out in front in basketball with 25 points, TAS School with 28 points in Volleyball, and Gunnery School "A" and Electrical School "B" 25 and 33 respectively in bowling.

'Mr. Canada' Title Won by Sailor

AB Yvon Brunet, president of the *Stadacona* Weight Lifting Club, has another title to add to his other laurels.

He recently entered the annual "Mr. Canada" competition in Montreal, along with his twin brother, and was crowned Mr. Canada for 1958.

Officers Installed By Sailing Group

The Royal Canadian Naval Sailing Association (Halifax Squadron) installed its 1958 executive following a general election of officers recently.

Captain (L) J. M. Doull has been named commodore; Lt. K. D. Lewis, vice-commodore, Lt. (L) J. F. Miles, rear-commodore; Lt. W. L. D. Hayward, fleet-captain yachts; PO Patrick Paddon, fleet-captain service boats, and Miss Frances Howe, secretary treasurer.

During the meeting it was also made known that the yacht *Pickle* would be entered in the 1958 Newport-Bermuda race and a message went out inviting applications for skipper and crew from RCNSA members in Nova Scotia.

A highlight of the meeting was a showing of a film of the *Mayflower II* historic voyage by CPO Charles Church, RCNSA representative on the trip.

The new executive of Halifax Squadron, RCNSA, includes left to right: Lt. Keith Lewis, vice-commodore; Lt. William Hayward, fleet captain (yachts); Miss Frances Howe, secretary treasurer; Captain J. M. Doull, commodore; James Miles, rear commodore, and PO Pat Paddon, fleet captain (service boats). (HS-51515)

Venture's Football Year Outstanding

Blue and Gold shone in the Vancouver Island Football scene in 1957, for the fourth consecutive year, when the cadets of HMCS *Venture* executed another outstanding season of victories.

The *Venture* Canadian football team, led by a hard core of senior-term cadets, and backed by a large group of newcomers, plunged into football and emerged with two coveted trophies.

Venture launched the season slowly and lost the first game to the Mayo Vampires, 7 to 1. This was five days after the Seniors returned from summer leave and the defeat was deserved. The Vampires played a fine game. However the talent and spirit of the first year cadets, was most encouraging.

On October 6 *Venture*, in retaliation, effected their first victory of the season, overturning the Oak Bay Drakes 32 to 0. The cadets opened the scoring with a touchdown by quarterback Jim Bell. Additional majors were achieved by Niles Floren, Peter Hopkins, Bill Nash, Stan Brygadyr and Bell, with two converts by Sharpe. This performance indicated the power of *Venture* for the remainder of the season.

On October 12, the naval cadets met their tri-service rivals for the first time in the 1957 season. True to Navy form, they drove through to a hard-fought victory over the Royal Roads team, with a final count 13 to 7, and the Venturians held the action for the better part of the game. Team Captain, Jim Guest fell on a Royal Roads fumble to score the winning touchdown.

A game scheduled for November 20, was lost by default, when most of the team was suffering from influenza.

Venture gained second place in the League on October 27, with another victory over the Drakes. This win drew the team into the play-offs with Mayo and Royal Roads. Majors were scored

by Stan Brygadyr, and by Niles Floren, on a driving 58-yard run, with two additional points for converts, and two for deadline kicks, for a score of 22 to 6.

During the next game, on Remembrance Day, *Venture* rallied to its most crucial test—the second game of the season against their tri-service brethren, in defence of the Admiral Hibbard Trophy, and to decide the opponent of the Mayo Vampires for the Vancouver Island Junior Football League Championship.

The game was launched in fine, cold rain but the dampness had little effect on the speed and spirit of either team. Cadet Ruddy scored the first and only Royal Roads touchdown, converted by Connor. *Venture* scoring was also initiated in the first-half, with a single by Floren. Bell drove home the first *Venture* touchdown early in the second half, tying the score. Floren completed an inspiring performance with another major, converting it, to make a final score of 14 to 7. Royal Roads, despite the loss of the Hibbard Trophy, showed dauntless spirit and effort and preserved the tradition of fine play and sportsmanship.

The last game, and the most vital, saw *Venture* contend with the Vampires at Carnarvon Park, on November 17, for the Tommy Douglas Trophy. The defending cadets led the field at half-time, with a score of 14 to 0 through touchdowns by Bell and Floren, and a convert. In the second half Mayo rallied with two touchdowns. Nevertheless, the cadets met the challenge as Floren and Brygadyr scored two more majors, and Nash a single on a recovery. Nash also effected two interceptions, followed by long sprints into Mayo territory.

Thus, *Venture* ended the season in splendid form, with a final score of 27 to 12, retaining the Tommy Douglas Trophy, and the Vancouver Island Junior Canadian Football League Championship.

Here are the statistics:—

Games played, 6; games won, 5; games lost, 2 (one by default); total points scored for, 109; total points scored against, 39.—J.V.O.

Shearwater Stages Hockey Comeback

Stadacona Sailors finished atop the Nova Scotia Armed Forces Senior Hockey League this year, but were not around for the playoff finals. They left that to the *Shearwater* Flyers, who went all the way.

Flyers, who finished a poor fourth in the five-team league, winning five and losing nine in regular play, whipped the league leaders three games to one in the best-of-five semi-finals.

Then, taking on the powerful Greenwood Bombers, the naval airmen won the big series four games to one. The Flyers now advance into the Maritime playoff against the winner of the Amherst Ramblers-Summerside Aces series.

The final game between Greenwood and *Shearwater* was typical of the Flyers' playoff form. Down 3-0 at the end of the first period, the airmen led by Jim Veysey, roared back in the second frame to tie the game 4-4. They scored three more in the third while holding Greenwood to a single goal to win 7-5.

Cayuga Takes Hockey Title

The Pacific Command hockey championship has gone to the destroyer *Cayuga*. The *Cayuga* defeated the frigate *Ste. Therese* 4-1 in the finals to take the trophy.

Badminton Tilt Won by Shearwater

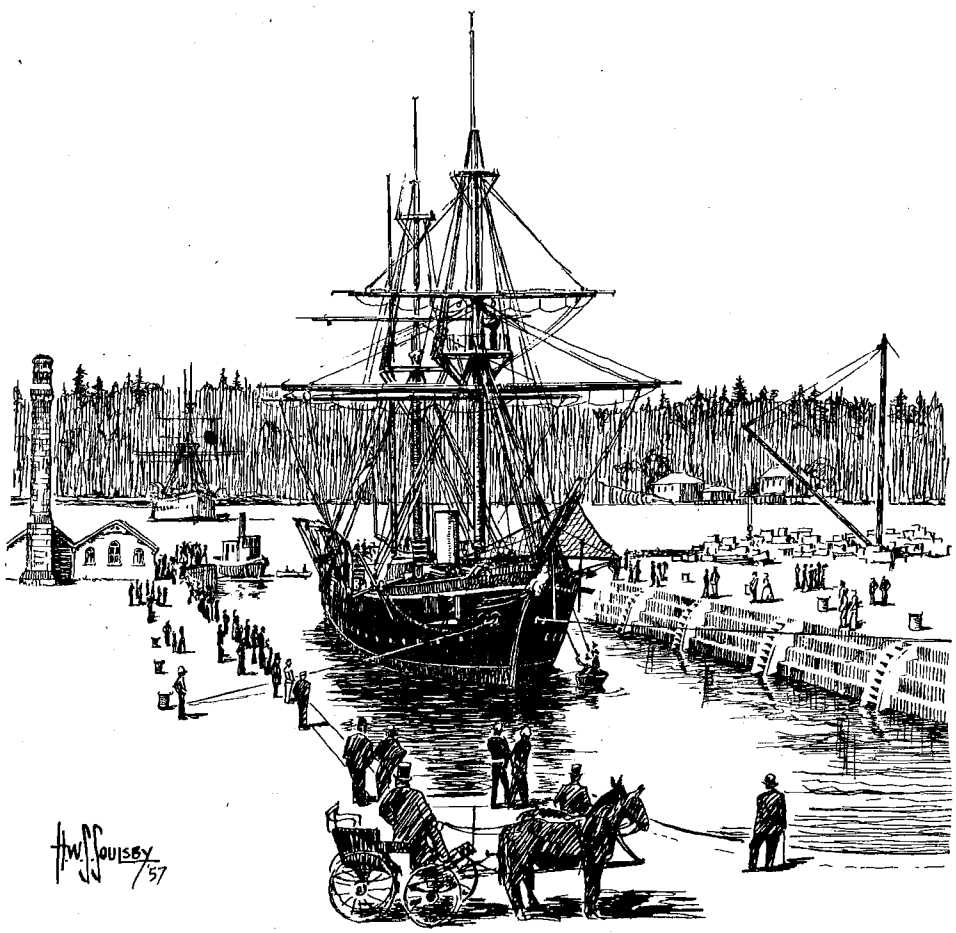
Shearwater badminton players nipped RCAF Station Greenwood 11 to eight, in an exhibition badminton tournament at Greenwood recently.

Keenly contested matches, many of which went to three sets, featured mixed doubles, ladies' doubles, men's doubles and singles.

Liverpool Curlers Too Much for Navy

In a friendly bonspiel held in Liverpool, N.S., Liverpool curlers toppled four Atlantic Command rinks by a score of 49-41.

In the first game it was Navy 9, Liverpool 10; second game, Navy 8, Liverpool 16, third game, Navy 6, Liverpool 13, and the final game Navy won 18 to 11.



The Drydock in H.M.C. Dockyard, Esquimalt, opened when H.M.S. CORMORANT was docked 20th June, 1887

This historic scene, based on an old photograph, formed the subject of the Christmas card prepared by Cdr. H. W. S. Soulsby, RCN (Ret'd), for personnel at Esquimalt dockyard.

Lower Deck Life in the Royal Navy

An Honest Account of What the Sailor Is Really Like

"The average sailor does not like to make a display of his emotions and beliefs . . . In public he will revile and mock, but his messdeck utterances are no reflection of his true thoughts . . . Aboard ship you are constantly at your place of work, and your extroversion must, in consequence, be absolute and without pause."

THE FOREGOING may explain, to a great extent, why, of the comparatively few books that have been written about the "lower deck", fewer still have presented a faithful reproduction. Too often have authors based their writing on preconceived notions, or on superficial impressions, or been deliberately misled by their tongue-in-cheek subjects.

Source of the quotation that provokes this observation is a book that belongs with the few. Its title is "Home is the Sailor" and its author, John Whelan, spent 14 years on the lower deck of the Royal Navy, entering as a boy seaman in 1932 and leaving, as a petty officer, at the end of the war.

Whelan didn't join the Navy to write a book, and that probably worked to his advantage. He joined because the Navy appealed to him, and because he was repelled by the prospect of trying to make a living in the coal mines in the dreary, depressed Welsh valley that was his home. It wasn't until many years later that the idea of writing a book occurred to him.

Whelan's naval career followed the general pattern of the times. From the boys' training establishment, HMS *St. Vincent,* he went to the battleship *Malaya,* then served in a series of destroyers, with interruptions for courses ashore. His specialty was asdic, for which he received training at HMS *Osprey.* Service afloat took him to Norway, the West Indies, Singapore, Ceylon, and most particularly to the Mediterranean.

He went through the melancholy business of the Spanish Civil War patrol and had his share of excitement in the early part of the Second World War, taking part in the Norwegian campaign, having his ship sunk under him at Dunkirk, and dodging bombs during the air raids on Plymouth and Portsmouth.

Whelan then made what was, in his words, the "mistake" of qualifying as a Submarine Detector Instructor. For although this made him a man of some distinction, it also resulted in his being forbidden to go to sea, and for the balance of the war he was monotonously employed as an asdic instructor, at HMS *Nimrod,* the famous A/S training base at Campbeltown, and in a depot ship at Freetown.

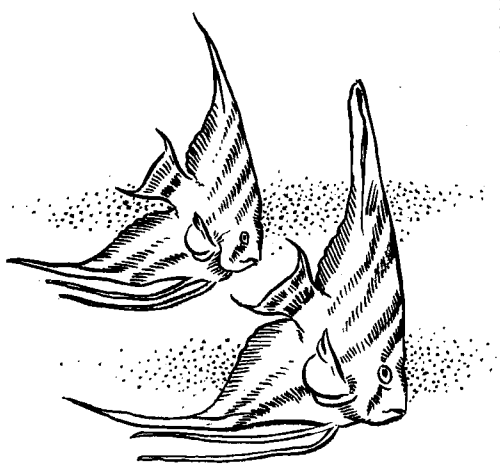
After leaving the Navy, Whelan became a schoolteacher. He credits, but with little gratitude, his long stretch as an A/S instructor with giving him

BOOKS *for the* SAILOR

experience that helped him gain his post as a pedagogue.

However, it is not the author's recitation of his naval career that gives the book its value. Nor is that the intention. The personal narrative serves simply as the basic material into which is woven an always interesting, often entertaining, picture of the lower deck in the pre-war and wartime RN.

Where Whelan excels is in his ability to bring the Navy, and especially his characters, to life. As is to be expected, the main personalities are the colourful ones, and the reader finds it hard to resist joining in their escapades and their conversational circles. Some of the deeds ascribed to these men are contrary both to conventional practice and to naval regulations, but at no time does Whelan play his shipmates false for the sake of a good story. With considerable skill, or by sheer honest writing, and because he was one of them, Whelan firmly establishes that these men possessed an indestructible, if unorthodox, dignity, and an almost fierce, if hidden, pride, in themselves, in their ships, and in what was then "the finest fighting service in the world."



There are a number of references to stories, songs and games that were a part of the pre-war Navy. For memory's sake, verses from some of the less lusty ones are quoted below:

Side, side, our ship's side,
Old Jimmy looks on her with pride,
He'd certainly faint if he saw any paint
Anywhere on our ship's side.

Oh I wonder, yes I wonder, if the Jaunty made a blunder,
When he sent this blasted draft chit to me.
For I am a barracks stanchion and I eat in Jago's mansion,
And I always say "Good morning" to the Chief.

If you take the paint brush, and I take the scrubber,
We'll clean the ship's side together,
And if Jimmy comes along, we'll sing the same old song,
Thank God we haven't joined forever.

There is one jarring note, when Whelan refers to men from the Dominions, who have come to *Nimrod* for training, as "colonials". Obviously he didn't use the term out loud in front of any Canadians. Else he would have received a special course of instruction involving the forcible removal of the word from his vocabulary. That did happen to a number of his compatriots.

Aside from this horrid malapropism, and it is one for which the author can be forgiven, "Home is the Sailor" is recommended reading, especially to those who served in the pre-war Navy, to the "ping merchants" who took their courses at *Osprey,* and to anyone who enjoys a bit of fun.

"Home is the Sailor" is published by Angus and Robertson, London. The reviewer's copy, borrowed from a public library, did not indicate the price, or whether there is a Canadian distributor.—R.C.H.

LOWER DECK PROMOTIONS

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

ARMSTRONG, William F. LSCR1

BACKES, Conrad J. LSCK1
BARTON, Kenneth B. LSRT3
BERRY, Robert F. P2RW3
BOURQUE, Donald J. P2CK2
BRIMICOMBE, Lloyd A. C2NS3
BURBINE, Robert J. C2SW4

CALDERBANK, Kenneth R. C2EM4
CAMPBELL, James M. P2SW2
CARRUTHERS, John A. P2PR3
CHARPENTIER, Joseph G. LSCR1
CISECKI, Walter P. LSMA2
COMIS, John R. LSCV1
COSBY, Michael J. LSAM2
COYLE, George J. P2RT3

DARBISON, William C. LSRT2
DAUM, John R. LSNS1
DAY, Allan J. P2OM2
DINGLEY, Roy P2LR2
DIXON, Peter J. LSNS2
DYCK, Harley D. LSCV1

EASTON, William R. P1ED4
EMERY, Lorne H. P1SW3
EMMONS, Charles S. LSAA1

FAIRS, Robert LSRT2
FAIRWEATHER, Charles J. LSEM1
FAULKNER, Arthur R. C2ST4
FOLEY, Arthur J. C2VS3

GALIPEAU, Fernand P. LSNS1
GAWLEY, Donald W. LSRA2
GERRARD, William T. P2CV2
GLAZIER, Joseph A. P1SW3
GODDARD, William C. LSCK2
GUERETTE, Joseph G. LSNS1

HAMILTON, Barry L. LSCS2
HEARNS, Thomas A. LSEM1
HEBGIN, John L. P2MO2
HEMPHILL, John J. P1CK3
HICKEN, Charles G. P2SW2
HLADY, Peter C2SE3
HOFFART, Peter H. P1PW3
HOLMESDALE, Arthur W. C2CK3

JONES, Norman L. LSEM1

KETTLE, Robert G. P1CV3
KIRBY, James E. LSQM1

LAMBERT, Louis-Bruno C2WR4
LATHAM, Clifford J. P1CK3
LAWRENSON, John E. LSAW2
LEDUC, Robert J. LSAA1
LEFEBVRE, Gerard J. P2SW2
LEGAULT, Sylvio J. LSRA2
LEHNEN, Ronald J. P2SW2
LUTON, John D. C2NS3

MacDONALD, James W. LSSW2
MacISAAC, Angus J. P1SW3
McCARTHY, Joseph T. P2NS2
McNABB, Bruce W. P1AT4
McNAMARA, Derek A. LSRP1
MARSHALL, Ronald D. LSAP2
MARTIN, Ernest D. LSRT2
MAYER, Andre J. LSCV1
MILLER, Thomas A. P1AW3
MORRILL, Alfred O. LSCR1
MORRISON, William W. C1WR4

OAKE, Austin M. LSRT2
OGAICK, Desmond T. LSAF2
OLESEN, Christian LSCV1
OLIVIER, Gilles J. LSSW2
O'QUINN, Michael T. P2CK2
OUELLETTE, Leo E. P1SW3

PLUMTON, Raymond F. P2AW2
POIRIER, Harvey J. LSAC2

RILEY, Charles J. LSQM1
ROSS, Donald W. LSQR1
RUSHTON, Lloyd W. P1MA4

SCHLICHTMANN, Rolf J. LSRT2
SEYMOUR, Gordon K. P1NS3
SHAW, Oliver C. P1NS3
SLACK, Robert A. LSEM1
SMITH, Joseph H. C2CK4
SMITH, Robert C2ST4
SONDERS, Carl P. C2ST4
SPARK, Gerald G. C1ST4
ST. GERMAIN, Jean J. LSPW1

TAYLOR, Donald C. P2HA3
TCHIRE, John P2SW2
THEORIN, Everett L. C2NS3
THERIAULT, Joseph F. P1AW3
TUTT, Richard J. P2EA3

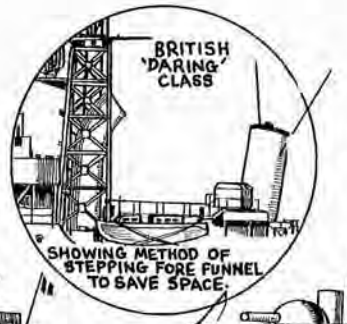
VANT-HAAFF, George E. C1ST4
VERHEYEN, Neil J. LSCR1

WALKER, Ronald G. LSNS2
WALTON, Thomas F. LSPR1
WATSON, John K. P1SW3
WEATHERBEE, Jack L. P1SW3
WHEATLEY, George H. P1CK3
WHITE, Ronald W. LSCS2
WILLIS, Lloyd K. P2ED3
WOOD, Donald G. LSTD1

Major General the Hon. E. C. Plow, Lieutenant Governor of Nova Scotia, returns the call of Rear-Admiral H. F. Pullen, Flag Officer Atlantic Coast. The lieutenant governor took up his appointment in January. (HS-51529).

Naval Lore Corner

Number 56
ODD FUNNEL ARRANGEMENTS



FRENCH BATTLESHIP 'CARNOT' (1894) HAD SQUARE FUNNELS. DISPLACEMENT WAS 12,150 TONS. ARMAMENT: TWO 12 INCH, TWO 10.8 INCH AND EIGHT 5.5 INCH GUNS. SPEED WAS 18 KNOTS.

FRENCH BATTLESHIP 'CAÏMAN' (1885) OF 7500 TONS HAD 4 FUNNELS, 2 ABREAST. ORIGINAL ARMAMENT WAS TWO 16.5 INCH MUZZEL LOADERS.

RUSSIAN BATTLESHIP 'NAVARIN' (1891) HAD 2 PAIRS OF FUNNELS. ARMAMENT WAS 4 12 INCH GUNS AND EIGHT 6 INCH GUNS... SUNK AT BATTLE OF TSUSHIMA IN 1905.

RUSSIAN CRUISER 'ASKOLD' (1900) MOUNTED 12 6 INCH GUNS AND FIVE FUNNELS... NICKNAMED 'PACKAGE OF WOODBINES'.

GREEK BATTLESHIP 'PSARA' (1897) HAD REMOVABLE FUNNEL CAPS. ON 5,000 TONS SHE MOUNTED THREE 10.8 INCH GUNS.

ITALIAN BATTLESHIP 'ITALIA' (1880) HAD SIX FUNNELS AND MOUNTED FOUR 17 INCH GUNS ON A DISPLACEMENT OF 15,654 TONS.

U.S. GUNBOAT 'NASHVILLE' (1895) OF 1,371 TONS HAD THE TALLEST FUNNELS (IN PROPORTION) OF ANY NAVAL VESSEL. ARMAMENT WAS EIGHT 4 INCH GUNS.

ITALIAN BATTLESHIP 'SARDEGNA' (1890) OF 13,860 TONS... HAD THREE FUNNELS, THE FORWARD TWO BEING ABREAST. MAIN ARMAMENT WAS FOUR 13.5 INCH GUNS.

FUNNEL ARRANGEMENTS TO KEEP FUMES CLEAR OF BRIDGES

J. M. THORNTON

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