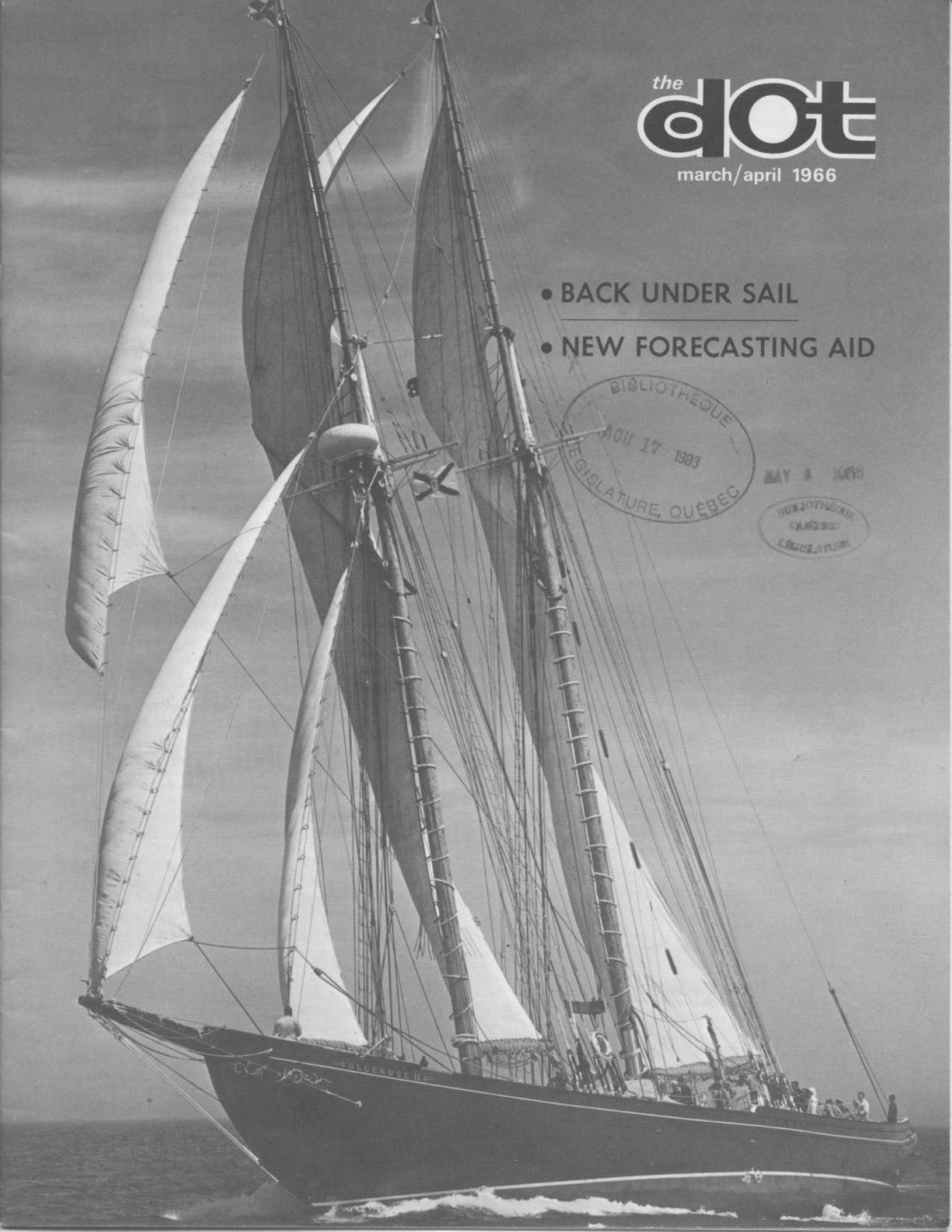

the dot

march/april 1966

- BACK UNDER SAIL
- NEW FORECASTING AID

the DOT

VOLUME 17 • NO. 2
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COVER

The Bluenose II enroute to the West Indies from Nova Scotia in January. See story "Back Under Sail" on page 4.

Editor *Yvonne McWilliam*
Rédacteur français *Edouard Deslauriers*

THE DOT *is a Department of Transport staff magazine published under the authority of the Minister, Hon. J. W. Pickersgill, by the Information Service Division.*

ROGER DUHAMEL F.R.S.C., QUEEN'S PRINTER AND CONTROLLER OF STATIONERY, OTTAWA, 1966

The DOT has decided to take a fundamental idea from group dynamics theory—participation—and offer its 14,000-odd readers a chance to become writers or idea collectors.

We are asking you to prod your memories for any Centennial-type of story which you, relatives or friends might have been connected with or have knowledge of. It might be about marine matters—a rescue, on the job experiences or anecdotes, new construction methods which set a pattern and so on. In air services it could concern inauguration of certain new equipment and its implications, particularly trying construction jobs or like things.

The department itself has decided to publish two historical works as a centennial project—about Canada's marine and air services—and has commissioned two well-qualified men to do the job.

J. R. K. Main, who will write the air services history, is a former director of civil aviation for the department and is widely-known in Canadian aviation circles. T. E. Appleton, a member of the marine operations branch, has an association with the sea that goes back many years through Royal Navy and Royal Canadian Navy service to merchant marine service beginning in 1929.

Suggestions from employees of the department would be most helpful in adding vignettes to the official histories being written by these men, and could be compiled and published as a series in *the DOT* as centennial approaches and during 1967 itself.

Let us hear from you.

The Editor

Le DOT fait appel à la collaboration de ses quelque 14,000 lecteurs. On est en quête de rédacteurs ou du moins de gens qui seraient en mesure de nous suggérer ou de nous soumettre des sujets ayant pour thème le Centenaire de la Confédération.

Il s'agit de se creuser les méninges pour dénicher des faits et gestes qui pourraient faire l'objet de récits intéressants.

Il pourrait s'agir de sujets touchant la marine, comme, par exemple, un sauvetage, une décision historique, de nouvelles méthodes de construction qui font époque. Dans le domaine des services de l'air, il pourrait s'agir de l'adoption d'un nouvel équipement et ses implications ou d'un projet de construction particulièrement difficile à réaliser.

Le ministère, de son côté, a décidé de publier deux œuvres historiques comme projet du centenaire. L'une porte sur la marine canadienne et l'autre sur les services de l'air. A cette fin, le ministère a retenu les services de deux personnages hautement qualifiés pour remplir ce mandat.

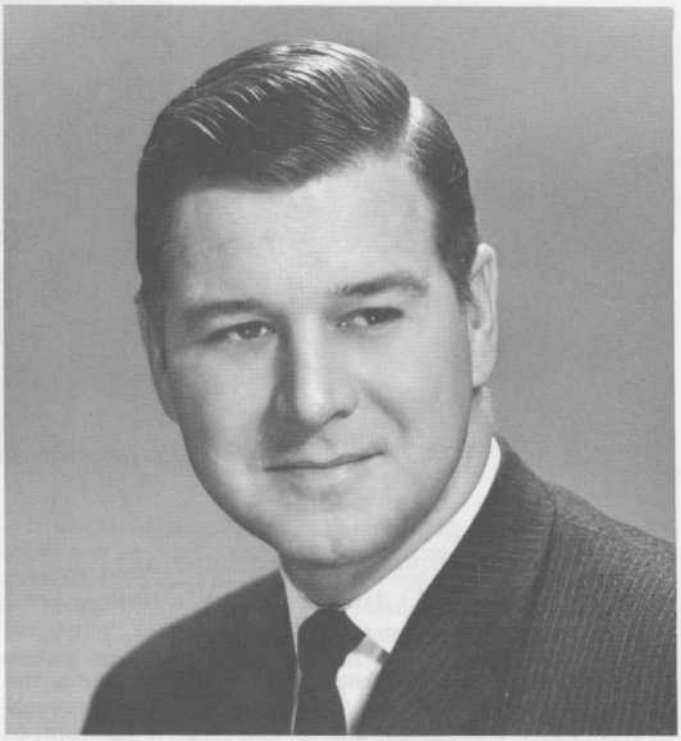
M. J. K. Main, qui fera l'historique des services de l'air, est un ancien directeur de l'aviation civile au ministère des Transports et est avantageusement connu dans les milieux de l'aviation canadienne. M. T. E. Appleton, attaché à la direction des opérations de la marine, est mêlé de près aux choses de la marine depuis 1929.

Des suggestions des employés nous aideraient à préparer une série d'articles qu'on pourrait publier dans *le DOT* à l'approche du centenaire et durant l'année 1967.

On attend de vos nouvelles.

La rédaction

Appointed Director of Transportation Policy and Research



Ray R. Cope, 35, has been appointed director of transportation policy and research for the department, effective April 1. In this newly-created position Mr. Cope will advise on policy development in the various transportation fields, land, sea and air. The branch will be a focal point for federal transportation research work.

Since 1964 Mr. Cope has been on loan to the department from the Canadian National Railways and has occupied the post of director, railway and highway branch. He will continue to be responsible for policy and research matters in that area.

A native of Vancouver, B.C., Mr. Cope graduated from the University of British Columbia in 1953 with a Bachelor of Science degree in mechanical engineering. He has taken post graduate studies in economics at McGill University. From 1953 to 1964 he was with the Canadian National Railways in various positions in the research and development area and in their hotel department.

Mr. Cope is president of the Canadian Transportation Research Forum and a member of the Engineering Institute of Canada. He is married and has two children.

Tradex Investment Fund Now Available to DOT Employees

Five years ago employees of the Departments of External Affairs and Trade & Commerce organized a fund to provide for investment by their foreign service personnel. Known as the Tradex Investment Fund Limited, it was incorporated by Letters Patent in January, 1960. Because of the advantages offered by Tradex it was decided to extend admissibility to all members of the two departments who are continuing civil servants.

Subsequently, requests were received from members of other departments and eligibility to purchase Tradex shares was extended to employees of the departments of Agriculture, Defence Production, Citizenship and Immigration, National Health & Welfare, Finance, Industry, Justice, Secretary of State and Dominion Bureau of Statistics.

As a result of requests from some D.O.T. personnel, the Board of Directors of Tradex agreed to broaden eligibility to include them provided the department concurred.

Deputy Minister Baldwin has given approval for D.O.T.'ers to be informed of their eligibility to participate in this mutual investment fund if they so desire. Participation is, of course, the personal decision of each employee.

To briefly acquaint readers with Tradex mutual investment fund the main features it offers include:

1. **No "loading" charges. Tradex employs no salesmen and shares are purchased directly from the company, therefore the cost of commissions is eliminated.**
2. **No directors' fees are paid since the directors are civil servants who donate their services.**
3. **The minimum monthly subscription is fixed at $10 and no down payment is required other than a five dollar registration fee. Provision is also made for lump sum purchases.**

Other points of interest are that investment is in the hands of professional investment counsel and that the Royal Trust Company is responsible for safekeeping of assets and accounting.

D.O.T. employees interested in finding out more about the plan should write to:

Tradex Investment Fund Limited,
76 Metcalfe St.,
Ottawa 4, Ont.

Back Under Sail

By Ken Parks

"I must go down to the seas again
to the lonely sea and the sky
And all I ask is a tall ship
and a star to steer her by—"

It was January 10, a dull and miserable day of freezing rain and soggy snow in Ottawa, when Captain John C. Smith, one of D.O.T.'s Arctic area superintendents, hearkened to the words of John Masefield.

For Ottawa, frigid winter weeks lay ahead. For Capt. Smith, who spends his summers in such bleak places as the windy wastes of Hall Beach in Foxe Basin, a course had been set to east and south. A tall ship, the beautiful Lunenburg schooner "Bluenose II", awaited him at Halifax; in two more days he would be at her helm, bound for the balmy West Indies.

The experience was not a new one for the captain. A native Newfoundlander, he learned his seamanship under sail. His father had been part-owner of a fishing schooner and he was brought up in real seafaring fashion. His first command was the big schooner "Nina W. Corkum", a vessel even larger than "Bluenose II". In summer she was operated in the banks' fishery and in winter she served in the coastal trade. Aboard her, Capt. Smith sailed south, taking salt fish to Martinique and Barbados and bringing back cargos of rum and molasses.

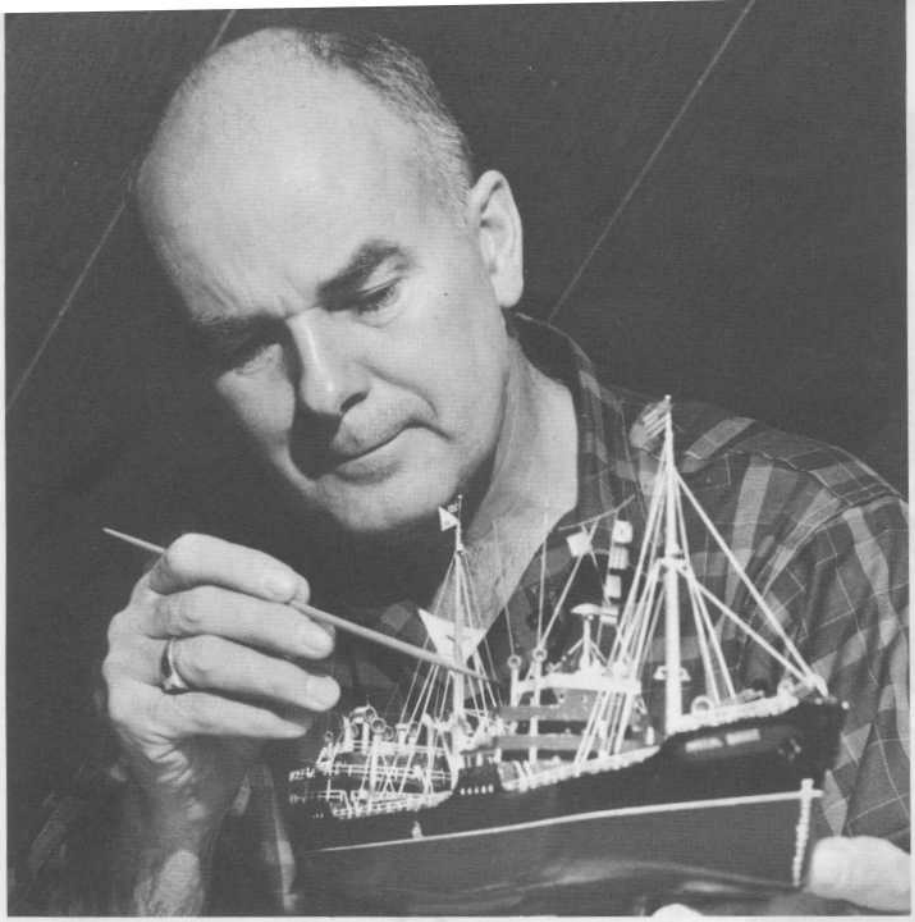
Later he had "gone steamboating" for nearly 20 years and travelled all over the world. He ended up as mate and master of cargo ships working along the coast of Canada's Western Arctic. This led him to his present post with the Department of Transport. His active seafaring has been largely eclipsed by his new duties but, like so many of the department's desk-bound sailors, the sound of an anchor chain still is vaguely musical.

In 1963 Captain Smith read of the launching of "Bluenose II" at the yard of Smith and Rhuland. The same firm built the original "Bluenose", which brought renown to Canada throughout the 1920's and 30's when, commanded by Capt. Angus Walters, she defeated all comers in the international schooner races off the East Coast.

Interested in the new ship, he wrote to her owners, Oland and Son Breweries, Halifax, who had ordered the ship built as a memorial to her now-legendary predecessor, and as a "goodwill ambassador" for Nova Scotia and Canada.

Following correspondence with Col. Sydney Oland and his son Donald Oland, in which he related his own experience as a schooner skipper, Capt. Smith happily accepted their invitation

Ship model making is a hobby with Capt. Smith, who is seen here with a replica of the original "BLUENOSE".



Captain Smith, using a tiny brush, touches up the paint work on a scale model of the tanker "IMPERIAL QUEBEC", aboard which he served as a deck officer.

to sign on as second mate. He was to be paid 25 cents per month as a legal technicality, for a winter cruise to the Caribbean Sea.

On January 12, 1965 "Bluenose II" headed out of Halifax harbor under command of Capt. Ellsworth Coggins, one of the last commanders of ocean-going sail and the man who sailed the Lunenberg-built square-rigger "Bounty" from Nova Scotia to Tahiti for the recent filming of "Mutiny on the Bounty". First stop was at St. George's Harbour, Bermuda, but before "Bluenose II" reached port Capt. Smith had re-lived some of his earlier rough, tough days at sea. The schooner ran into winds of up to 60 knots and had to pound her way through smashing seas. Like her predecessor, she rode the storm well.

The crew, comprised of the captain, 14 regular sailors, two Montreal stock brokers, "Bus" Galt and Richard D. Gariepy, and Capt. Smith, were happy, nonetheless, to go ashore in Bermuda and do a bit of sight-seeing. They remained there from January 16 to January 20, then headed for Puerto Rico, where they arrived on the 24th to pick up Don Oland and a charter party for a cruise among the West Indian islands.

Two days later "Bluenose II" was under way, bound for St. Thomas in the Virgin Islands, where they arrived the following day and the ship stayed overnight. While at St. Thomas the schooner was visited by a host of people, for the most part tourists, among them Canadians who had spotted the red-and-white ensign the vessel was flying. From there, "Bluenose" sailed to Tortola, but bad weather made it necessary to bypass that harbor and proceed to St. Kitt's in the Leeward Islands. Here again unfavorable winds and lack of a good "holding ground" for anchorage caused a change in plans and the vessel continued on to Antigua, arriving in English Harbour on January 31.

Twice during the voyage Capt. Smith called Ottawa, using the ship's radio to get in touch with a "ham" radio operator in the Capital. The first time, when "Bluenose II" was southward bound out of Bermuda, he called his wife at their home at 1220 Placid Avenue; on the second occasion he called from Puerto Rico and talked to Cargo Superintendent Ed. P. Flynn in the Hunter Building.

It was at Antigua that Capt. Smith said good-bye to his shipmates and boarded a jet plane that brought him rudely back to the cold, hard facts of life in frigid February in Canada.

The pain of parting was not eased by copies of "Bluenose Newsletter" that thoughtful shipmates continued to send him, reading usually along such lines as:

"The 'Bluenose II' sailed from Port Castries to Marigot Bay today, where she is now anchored, her stern tied to a coconut tree and with bananas hanging from her boom. . ."

"Getting back under sail was a fine experience", the captain said. "It gave me a good opportunity to test my skill as a navigator. I was in charge of the 4 to 8 watch.

"The ship handled beautifully, even in the worst weather. She is fully equipped with the latest navigation aids, of course, such as radar, a Decca Navigator, echo depth sounder, ship-to-shore radio and a good many other refinements unknown in the days of the original "Bluenose".

"Below decks, she is fitted out in luxurious fashion for guests with five handsomely-appointed double staterooms. She also has big twin diesel engines for use when the wind drops."

"Bluenose II" measures 143 feet in length overall, with a beam of 27 feet and a draught of just under 16 feet. Her main top mast towers more than 127 feet above her deck and her total sail area measures nearly 11,000 square feet. Built exactly on the lines of the first "Bluenose", she has inherited the excellent performance of the earlier ship and, in good winds, can log a steady 12 knots without trouble.

Looking back upon his Caribbean voyage, Capt. Smith would not find it a chore to undertake such a trip any winter. Like a true son of Grand Bank, Newfoundland, he probably will never be quite able to ignore the call back to, what Masefield so vividly pictured:

"The wheel's kick and the wind's song
and the white sail's shaking,
And a grey mist on the sea's face
and a grey dawn breaking."

Ted Devey examines the organ's magnet box—an electro-pneumatic component.

Do-it-yourself Organ Building—

a full scale hobby

By YVONNE McWILLIAM

If you were assembling a do-it-yourself pipe organ kit you might need:

- 1519 pipes ranging in length from 16 feet down to 3/8 of an inch
- two 6×9 foot chests to support the pipes
- a two manual console
- a three horsepower motor
- and a 2½ foot square blower

You would probably also need a large basement, a garage and an understanding wife.

Possessor of all these is Ted Devey, systems engineer with radio regulations engineering section of the telecommunications and electronics branch at Ottawa. Although he is a member of the Royal Canadian College of Organists, Ted doesn't play—yet. By the time he assembles the pipe organ in two years, however, he will have been taking piano lessons for five years and will be ready for organ studies. He can then practise on his own instrument, a 26 rank organ (which is big in case you know nothing about pipe organs).

Ted's interest in organ music goes back to his youth when he enjoyed listening to it, both in and out of church. He decided to one day build his own electronic organ and learn to play, but it wasn't until about five years ago that he switched his thoughts to the much more complicated task of building a massive pipe organ.

After leaving the Navy in 1961 Ted joined the Department of Transport and was posted to Ottawa. There he heard about a local professional organ builder, Raymond Barnes, and sought him out. It was Mr. Barnes who suggested Ted build a pipe organ and who gave him much advice and encouragement.

First acquisition was much of an organ discarded by McPhail Baptist Church followed by an old console from St. Matthews Anglican Church. Before Ted got around to doing anything with them, however, he read about the proposed demolition of a downtown Ottawa United church, the cornerstone of which was laid by Sir John A. Macdonald in 1896. As an organ buff he knew that the church's Breckles and Matthews organ had been completely rebuilt and modernized in 1957 and provided with a

new console. He decided to try and purchase the entire thing and put in a bid to the new owners of the building, who were preparing for demolition. As luck would have it Ted was the only person to do so. The organ was his—for a price, plus dismantling.

Enlisting the aid of two friends, one an organist, he worked evenings and weekends to move the organ over a three week period last December.

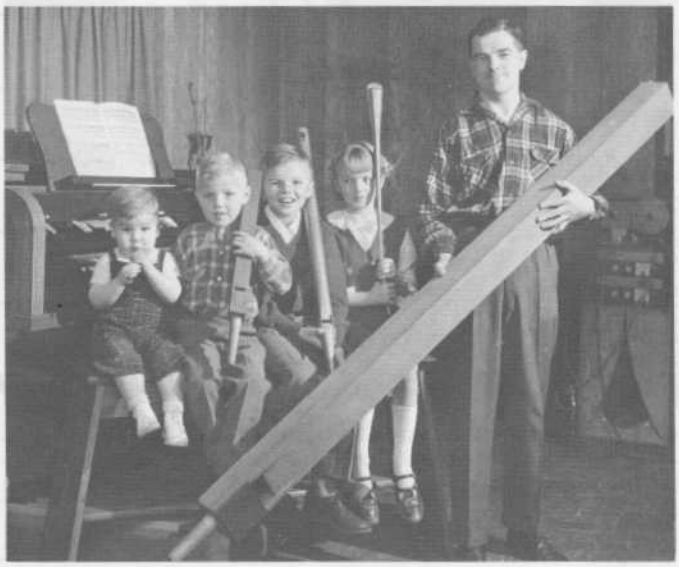
Ted feels he got a real bargain. He estimates the work done to the organ in 1957 cost $7,000 or $8,000 and that to replace the entire organ, pipes and all at today's prices would cost about 20 to 30 times the price he paid.

The Devey's (yes, Mrs. Devey thinks the project is a wonderful addition to their ranch style bungalow) are planning to enlarge their three bedroom house, to provide an area with a 10 foot high ceiling for the new "member of the household". Meanwhile, Ted plans to install some of the pipes this fall after first getting the blower hooked up to the motor.

Unusual as Ted's hobby might sound, another member of the Telecommunications branch shares it. He is Clarence Thomas, a technician in electronics. Clarence is a member of the congregation of a church which a few years ago discarded its organ when a new one was installed and fell heir to the old instrument. He set up as much as he could in the basement of his home, but many pipes had to remain in packing cases. Now he is having a new house built with a basement designed to accommodate the entire organ. Both he and Mrs. Thomas are taking lessons and, as Mrs. Thomas points out, will have no trouble putting in the time when Mr. Thomas retires in 1967 after 40 years with D.O.T.

In Ottawa, and other Canadian cities, perhaps, there are several homes that either have finished pipe organs installed or have them in various stages of construction. Some of these owners are professional musicians but the majority are people like Ted Devey and Clarence Thomas who may not play, but who regard organ building as a challenging hobby.

Six-year-old Peter gets a lesson in basic finger exercises from Daddy at the two manual console.



The four Devey youngsters—Paul, 2; Peter, 6; Tommy, 11 and Ellen, 8—and their father hold five of the 1519 pipes which go into the 26-rank organ.

Met branch develops new forecasting aid

By WILLIAM DUNSTAN

Most water temperatures are taken by means of an immersion thermometer "in a bucket"; Don Massey of the meteorology branch's climatology division takes them from 500 feet or more up in the air!

Since the beginning of last year, he has been flying over the Great Lakes testing an infra-red radiation thermometer as an airborne indicator of surface water temperature.

T. L. (Lloyd) Richards who, as head of the Lakes Investigation unit, is in charge of the project, explains that some means of taking water temperatures over a large area in a short space of time would be extremely useful in forecasting meteorological conditions over large lakes and their adjacent land areas. It also could help greatly in assessing water losses through evaporation and in studies of the formation and dissipation of ice.

The radiation thermometer seemed worth investigating and the area of experimentation chosen was the Great Lakes, where the met branch has a continuing need for observations of surface temperatures.

The thermometer works by sensing the radiant energy from the surface at which it is directed. It compares this reading with an accurately calibrated reference black body and converts the difference to an electrical signal which varies with temperature. This reading is shown on a meter and transcribed automatically onto a chart by means of a pen.

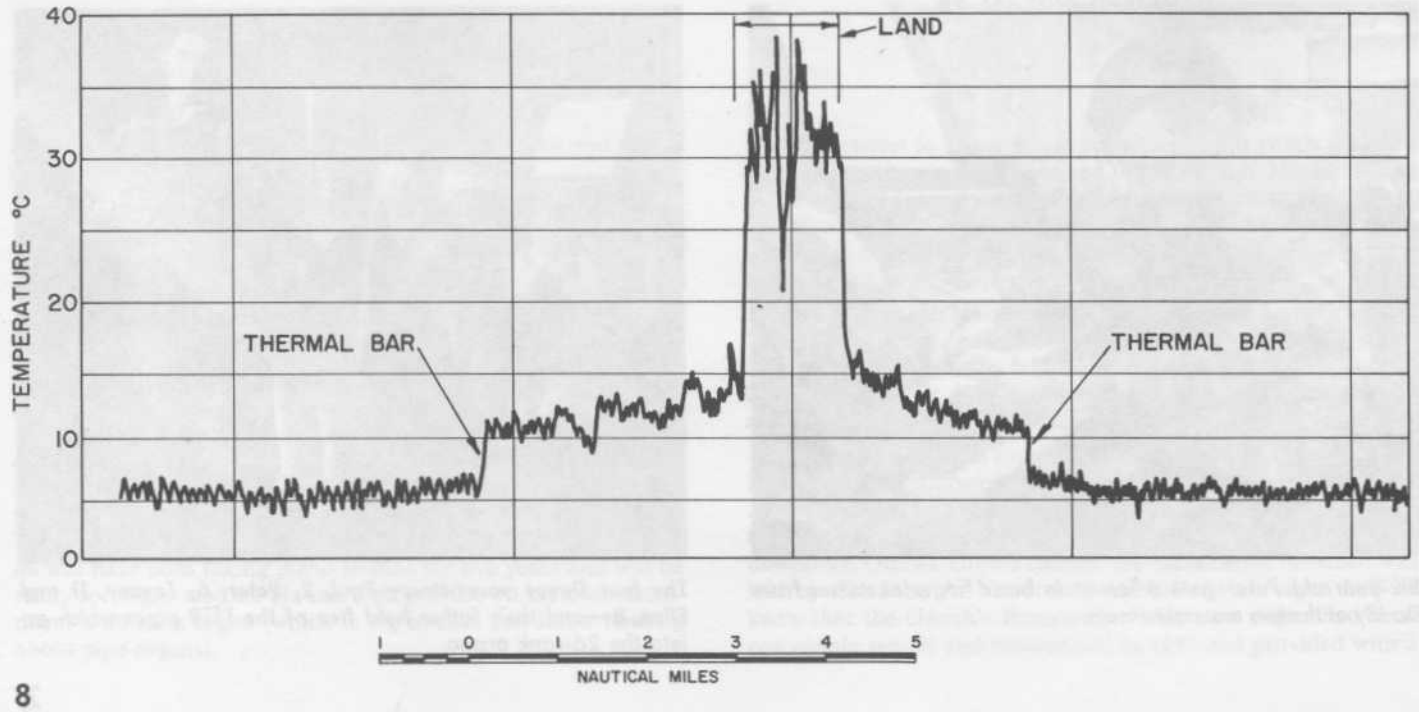
Don Massey, a research assistant, made his first flights in conjunction with the meteorological branch's regular ice survey of the Great Lakes, pointing the sensor through a camera-bay in the bottom of a twin-engined Lockheed 14. The first readings fluctuated wildly, mainly because of cold air flowing into the bay around the sensor.

Lloyd Richards took the problem to Wendell Smith, elec-

continued on page 10

This temperature trace was made at the Lake Ontario shoreline last May.

Les températures indiquées ont été captées au-dessus du lac Ontario en mai dernier.



On prend la température de l'eau – à 500 pieds dans les airs

Qui donc aurait pensé qu'on en serait venu un jour à prendre la température de l'eau. . . à 500 pieds dans les airs. C'est pourtant ce que fait Don Massey, du Service de la météorologie.

Depuis le début de cette année, Don fait des envolées régulières au-dessus des Grands Lacs, où il met à l'épreuve un thermomètre aux rayons infra-rouges qui sert a déceler les températures de l'eau.

Le directeur du projet, M.T.L. (Lloyd) Richards, nous explique que cette façon de prendre la température de l'eau, à cause de la vaste étendue de territoire couverte en peu de temps, permet aux spécialistes de formuler des prévisions météorologiques pour les grands lacs et les terres adjacentes. De plus, elle permet d'évaluer les pertes d'eau causées par l'évaporation et d'étudier la formation des glaces.

Ce thermomètre spécial est équipé de dispositifs ultra-sensibles qui captent les éléments de la température. Ces informations sont ensuite transmises à d'autres appareils hautement spécialisés pour être enfin enregistrées et notées automatiquement sur un graphique.

Don Massey a tenté ses première expériences en pointant tout simplement son thermomètre par une ouverture au fond d'un bi-moteur Lockheed 14. Les indications ont oscillé follement sur le graphique, et cela à cause de l'air froid circulant autour du thermomètre.

Lloyd Richards a immédiatement soumis le problème à M. Wendell Smith, un spécialiste de l'électronique, qui a proposé divers moyens de protéger contre les courants d'air les dispositifs trop sensibles du thermomètre. On a réussi ainsi à réduire sensiblement tous les inconvénients de ce côté.

La prochaine phase du programme a été d'évaluer l'utilité du nouvel instrument, découvrir les erreurs commises dans l'enregistrement des températures et d'en déceler les causes. A cette fin, on a fait appel à la garde côtière qui a prêté les services du Porte Dauphine. Plusieurs envolées ont été effectuées au-dessus du navire à des altitudes variant entre 200 et quelques milliers de pieds. A bord du navire, on a pris la température de l'eau et fait d'autres tests sur les conditions météorologiques. Les résultats ont été comparés à ceux qu'on obtenait du haut des airs. Ce fut un succès. La différence notée ne s'élevait qu'à un degré centigrade, plus ou moins.

Lloyd Richards est convaincu qu'on vient donc de mettre au point un instrument pratique qui saura rendre les plus grands services dans tous les domaines de la météorologie. Il reste encore

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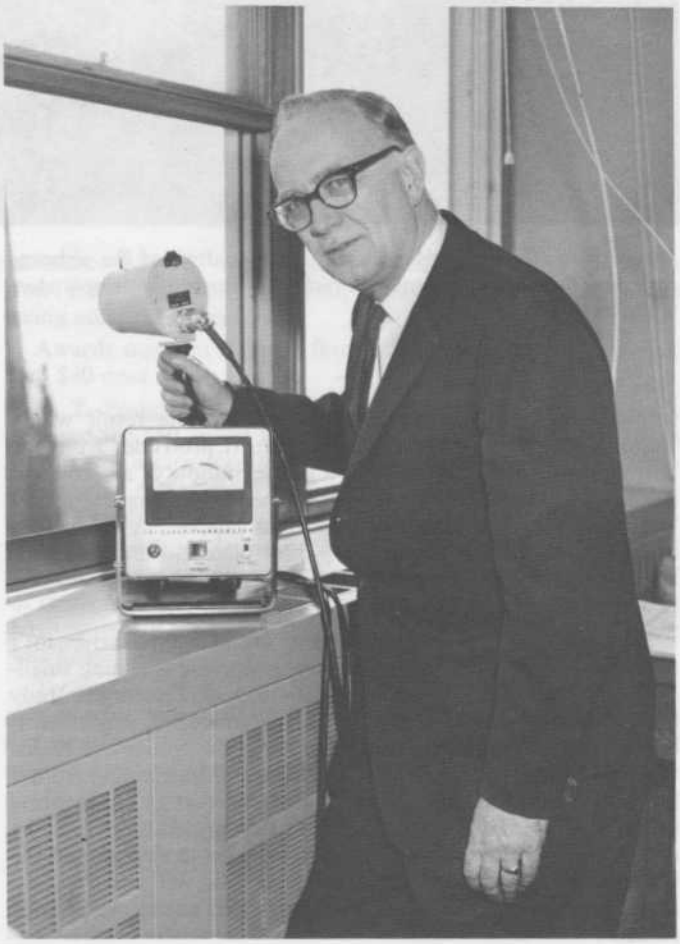
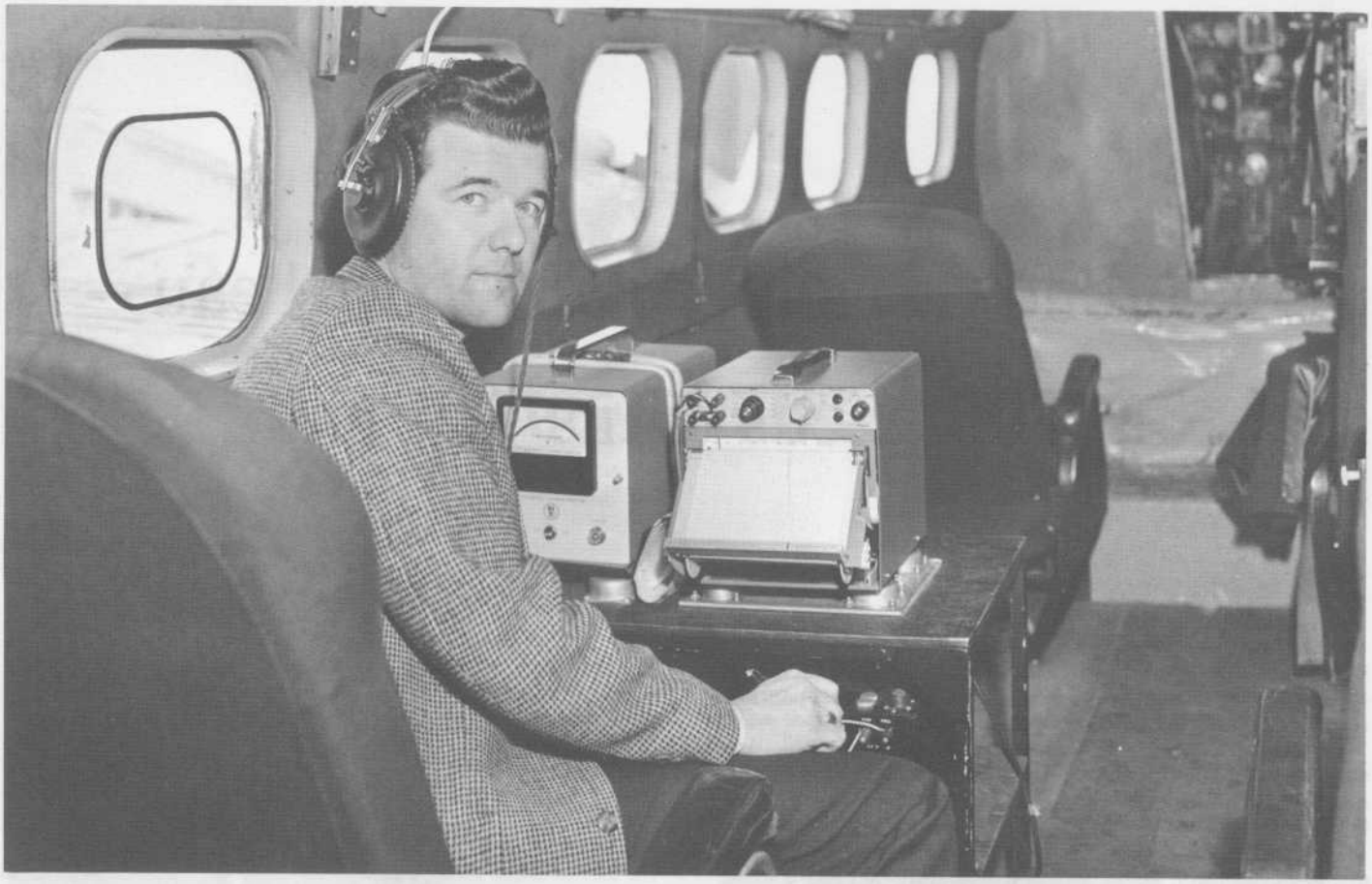


Lloyd Richards, who is in charge of the research project, takes the temperature of Lake Ontario by pointing the sensor head of the radiation thermometer out of his office window at the mile-distant lake.

Lloyd Richards, qui a la responsabilité du projet, prend la température du lac Ontario en pointant le thermomètre en direction du lac sis à environ un mille de son bureau.



Research Assistant Don Massey sits at the controls of the airborne radiation thermometer through which he records lake temperature while in flight.

L'adjoint aux recherches Don Massey vérifie les données transmises par le thermomètre qui a décelé, du haut des airs, les températures des lacs qu'on survole.

New Aid:

tronics expert in the instruments division. The result was a baffle, like a streamlined stovepipe, which protrudes from the bottom of the plane and induces a gentle outflow of air from the cabin. Fluctuation was cut down further by raising the sensor higher off the floor in a shock-resistant bracket. As well, they experimented with a polyethylene film placed over the sensor head. This also cut down the fluctuation but made the reading two or three degrees too high.

Next phase of the program was to evaluate the instrument's usefulness for making lake-wide surveys and for detecting small-scale water temperature variations. It also was necessary to study the causes and extent of errors. This is where the department-operated C.C.G.S. Porte Dauphine came in. Numerous flights were made over the research vessel at altitudes ranging from a few hundred to a couple thousand feet as Great Lakes Institute technicians on the ship measured water temperatures and the meteorological conditions in the air between the aircraft and the water. In all these tests the new instrument did well and the technique now is considered reliable to within about one degree celsius*.

"We feel that already we have developed a valuable and practical research tool," says Lloyd Richards, "but there are numerous implications of a highly scientific nature that call for more sophisticated research. The higher the aircraft flies, the more distortion there will be in the readings, depending on the moisture content and temperatures of the intervening air, as well as other factors. The complex problem of determining what precise effect these factors have is being tackled by Rod Shaw, a staff member of the met branch who now is taking his Master's degree from the University of Toronto through D.O.T.'s educational assistance program. He has made this study the subject of his M.A. thesis."

Basic experiments are pretty well completed now and Lloyd Richards expects that operational flights will begin this spring. Besides this specific application, the project has made a considerable contribution to general scientific knowledge.

A report on the test and evaluation of the airborne radiation thermometer has just been published as a meteorological branch technical paper. Rod Shaw's contribution will be described in his Master's thesis, and Lloyd Richards expects to present an overall review of the whole program to a world-wide symposium on the hydrology of lakes and reservoirs to be held in Italy this fall.

La température de l'eau:

évidemment beaucoup de travail à faire dans ce domaine, puisqu'on ne connaît pas encore tous les facteurs qui influeront sur le fonctionnement de l'appareil à de plus hautes altitudes, par exemple. Un travail de recherches sur ces questions est actuellement en préparation. C'est Rod Shaw, membre du personnel du service de la météorologie, qui prépare présentement sur le sujet sa thèse de maîtrise de l'Université de Toronto.

De son côté, Lloyd Richards se propose de soumettre un exposé général de son programme lors d'un symposium mondial sur l'hydrologie des lacs qui aura lieu en Italie à l'automne de 1966.

**The celsius scale is the centigrade scale, renamed by many scientists to honor Anders Celsius, a Swedish mathematician and astronomer of the Eighteenth century who invented the centigrade scale.*

Senior Management Looks on Suggestion Award Programs as Essential

Recently Executive Vice-President and General Manager C. F. McErlean of United Airlines has made some comments about his company's suggestion award program which apply not only to United Airlines but to all concerns operating such programs.

He said that he believes certain things are essential to the success of any organization and near the top of the list is the need for two way communication of information and ideas.

"Each manager must exercise constant vigilance to keep ideas flowing. Anyone in the company with an idea must be given a sympathetic receptive hearing. A sure way to block communication channels is to ridicule suggestions or fail to give sincere consideration and study to all ideas submitted."

Mr. McErlean concluded by saying: "Equally important to the flow of ideas is the necessity to keep open channels of discussion for management of all levels within and between administrations and departments. We must welcome constructive clashes of thoughts and ideas if we are to find the best solutions to the vast problems encountered in a successful business venture."

Secretary of D.O.T.'s suggestion award plan Ted Howe estimates that 500 suggestions are made by D.O.T.'ers every year. Each is carefully reviewed, discussed and evaluated before being accepted or rejected.

Awards made in the past few months include a $50 one and two $40 ones.

R. T. Bodkin, a technician, electronics at Abbotsford, B.C., received the $50 award for recommending that good used tubes from the Terrace localizer be reused in other communication equipment. Adoption of the suggestion means an annual savings of $1,200 for the department.

David V. Knight, a fire fighter at Saskatoon Airport suggested that a pressure gauge and hand throttle be installed on the roof of crash trucks allowing one man to operate the turret and still have control of the engine. The idea was accepted and Mr. Knight was awarded $40.

Technical officer L. G. Nelson, headquarters telecomm, suggested certain revisions and up-dating of the CATV inspection report which resulted in considerable savings of man hours of radio inspectors' time. For his efforts he received a $40 award.

Other winners include:

NAME	POSITION	LOCATION	AMOUNT
R. Conibear	technician, electronics	Ottawa	$25
G. L. Desrochers	radio inspector	Montreal	$30
" "	" "	"	"
J. T. Hart	radio operator	Sarnia, Ont.	$30
J. B. Williams	technician, meteorology	Vancouver	$10
D. H. Walker	technician, electronics	Ottawa Airport	$15

A Posting to Isolation

By BETTY HEALEY

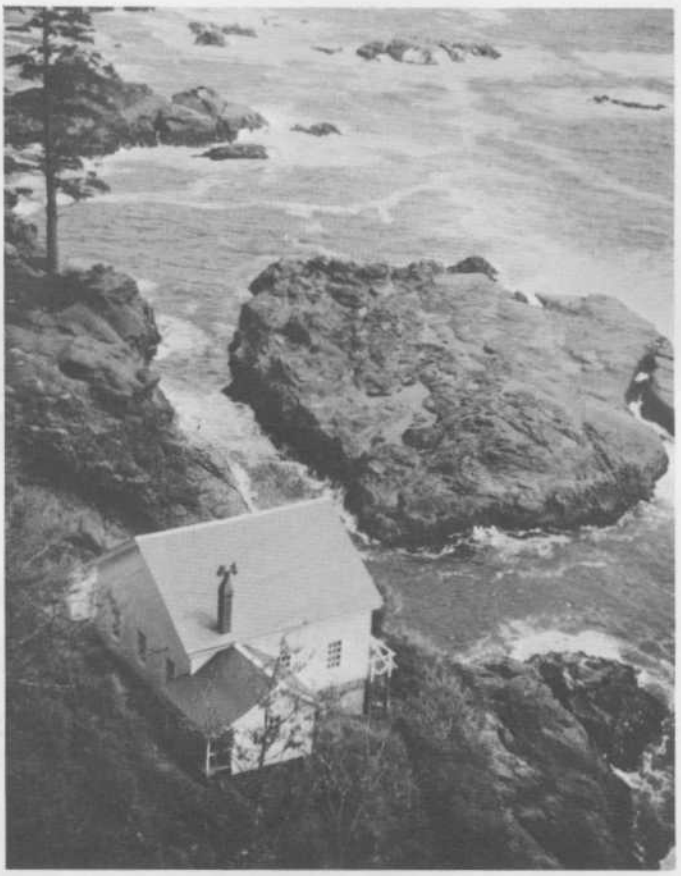
Editor's note:

D.O.T.'er Arthur Healey was officer-in-charge at Pachena Point Marine Radio Station from 1949 to 1955. With his wife Betty and three children, Ann, John and Michael who were then 12, 8 and 7 years of age respectively, he spent six years at this isolated post. He went from there to Alert Bay and last summer took over as officer-in-charge at Victoria Marine Radio.

Access to Pachena Radio, which was closed down in 1958 after 45 years of operation, was by lighthouse tender, or Bamfield lifeboat, and then by workboat through the surf to the bonnet-sling; then highline up the cliff. If one was a good hiker, it was possible to trek the nine miles from Bamfield to Pachena—and that was how the Healey's first got there.

Today, living once again in a large urban community, Mrs. Healey recalls the rewarding experiences shared by the family during that six year period. The children are now young adults: Ann is married and the mother of four children; John received a Bachelor of Education degree last year and is now teaching at Burns Lake, B.C., and Michael, working towards a Master's degree in zoology at UBC, plans to go to Europe for Ph.D. studies.

The following article first appeared in the December, 1965 issue of Tel-Talk, an interesting newsletter edited by Maintenance Supervisor R. H. M. Lobb for Vancouver region telecommunications personnel.



Pachena Point fog alarm building

On first hearing that we were going to live at Pachena Point, an isolated station on the west coast of Vancouver Island, I was most apprehensive. There were so many things to consider and provide for—schooling for the children, medical attention, lack of the amenities, separation from family and friends. The fear of not being able to cope with these new situations gave me many an anxious moment. Even the word isolation had an ominous sound. Being a gregarious type of person the thought of being thrown on my own resources was quite frightening.

How would the children make out with their school work? What if one of them broke a leg or became desperately ill? How could I bear to be separated from family and friends? What if I didn't like the other people on the station? What if I couldn't get along with them? I was going to have to leave behind all my electrical appliances. How would I manage without them? There would be no theatre, no concerts, no movies. We are creatures of habit and change of environment from the hustle and bustle of city life to the awesome quiet of wilderness or lonely island shore seemed overwhelming. I needn't have been afraid. On the contrary, I found it a rich and rewarding experience.

It is true that judging from the standpoint of mileage we would be far from a doctor and a hospital but in reality, my husband assured me, we would be no farther away than the radio communication at the station. If anything untoward occurred we could get medical aid and assistance by word of mouth. Outside stations are equipped with first aid kits. We provided ourselves with one of our own, too, asking advice of our doctor. He also gave us a prescription for a sedative to be used only in an emergency. Fortunately we never had need of more than a 292 to ease the pain of an infected tooth. There are times when evacuation from an outside station is impossible because of weather conditions but these are rare.

We discovered that the correspondence school in British Columbia is the finest of its kind. With a little help and encouragement from us our children received the best education available, perhaps even better than in the average public school. In what other classroom could they have received individual attention from the teacher? What better experience could I myself have had than to review my early education so as to keep one jump ahead of my pupils?

I think the most important part of our sojourn on an isolated station as far as the children were concerned was the fact that they were free from outside influence—we were able to bend the twigs the way we wanted the trees to grow. They didn't really miss companions of their own age. We believe they grew up more independent and self-reliant than if they had remained in the city. When the time came for us to return they made the transition from country life to the classroom with less trouble than we had anticipated. They did have difficulties to overcome but they were able to face up to them in an adult manner that impressed both their teachers and classmates.

We learned a vast number of things about life and living and the country around us that we would never have had the opportunity to discover if we had not undertaken the great adventure. We learned to walk, from our first meanderings on the trails and tentative explorations of the beaches, to the day when with a pack on our backs we could strike out on an 18-mile hike with no trepidation whatsoever. We learned to observe nature at first hand, to scramble up and down cliffs, to explore the woods and the beaches. We examined the myriad shells and sea life. We relaxed in quiet corners. We listened to the never ceasing murmur of the sea; gazed in awe when winter waves thundered and crashed on the rock ledges. We studied the flora and fauna, the migration of birds. We discovered that the forest and the seashore have a special attraction.

Here we had time to think, to wonder and assess. We learned why glorious music is composed; why great books are written. Music was as near to us as our radio. We put our powers of concentration to work and studied the classics as well as we could within the circle of our limited knowledge. We trained ourselves to listen for recurrent themes, to identify different instruments. We provided the children with some musical instruments and taught them the little we knew and persuaded anyone with any musical ability to help us out.

It was our experience that we did not find ourselves lonely and shut off from congenial company. There were other operators, some with wives and families, some bachelors. Counting the two lightkeepers, there were 17 people, including children, on the station. The personnel changed considerably over the years we spent at this outpost and we were constantly adjusting to new faces and personalities. This was a test of our ability to get along with other people no matter what their opposing ideas and ideals. In the city we had been free to pick and choose our companions and naturally selected those who were compatible. Here we met all kinds of different people. We learned to have patience with their foibles, for as sure as little apples are green we had plenty of our own. We felt then, and still feel, that learning tolerance for the other person's point of view is a trait well worth cultivating. For our own peace of mind and for the good of the group as a whole we tried to adjust to and harmonize with these conflicting nuances of character and behaviour. Whatever we felt about misfits, and there were misfits, we kept to ourselves. We tried to be friendly with everyone and not invade anyone's privacy. We enjoyed our privacy too; hours, days kept to ourselves to do all those things we had never had time for before.

How would you fill those hours? Would you like to further your education? Correspondence courses and university extension courses almost unlimited are at your disposal. You want to write a book? Now is your chance. All you need is a corner with a desk and a typewriter, stacks of paper, and the Open Shelf Library will supply you with reference books. Are you a nature lover? The study of the flora and fauna, not to mention bird life, is fascinating. Are you a photographer? Here you have unlimited opportunity to pursue your hobby. Is your need to paint or draw or fashion a collage? All your materials are at hand—grass seeds, shells, fungi, pebbles or whatever.

Once we became interested in the infinite possibilities that lay before us, we welcomed the chances that came our way. We realized that learning is a very important part of living. If we had remained in the city would we ever have taught the boys the correct care and use of firearms? Would our daughter have been taught household economy, not through having to be careful of the pennies so much, as through the lack of convenience of the ever-ready corner grocery.

We learned to live amicably in a limited community. We shared some of our leisure time with the group and welcomed them all in our home one evening a week in a kind of community social. We needed their company. We needed to get to know them. We needed to listen to what they had to say; some of it trivial nonsense; some of pithy import. We encouraged their talents. We encouraged our own. We felt that we might never have another opportunity.

When we had left the city to travel this unknown path we had made up our minds to make it a happy experience. I think we succeeded and our time on an outside station proved to be a joyful interlude in our lives. We knew from our own experience the difficulties our neighbours were facing and we tried to make it agreeable for them. In doing so we helped ourselves.

My years of isolated experience are a long time behind me now, but I feel from the vantage point of years that living there taught me many things that I otherwise might not have learned. Such things as coping with emergencies (even if only in the larder); getting along with people (many strangers walked in and out of my life—hikers, researchers, frauds, dedicated and sincere men, bewildered young people, sages, countless simple human beings who left some small part of themselves in my hands for which I am extremely grateful); finding out for myself my own capabilities and limitations, for which I am very thankful.

Life is mostly what you make it wherever you are, whatever you are doing. A posting to isolation can be a grand episode in your life if you will let it be.

Pachena Point station dwellings

The Healey's, left to right: Mike, Art, Betty and John

Students operate a simulated control centre. Such centres keep track of planes on long-distance flights, giving control guidance and necessary instructions to the pilots.

They train to be

"Policemen of the Sky"

"Tower to pilot" instructions are given by student air traffic controllers to their associates in the next room who follow flight instructions by guiding individual beams of light, representing airplanes, across a large wall map of the airfield.

"Pull up to the right immediately" said the man at the microphone, and the disk of light that represented a giant jet plane made its approach across the airfield chart. As it turned, however, he realized he had directed a light aircraft into a collision path with the jet. A crash seemed certain.

Then all motion ceased.

"Now", said the instructor as he flipped a switch, "let's see just where you went wrong".

The scene was D.O.T.'s Air Services School at Ottawa, where students learn and practise the techniques of air traffic control under circumstances which closely approximate working conditions at modern airports across the country.

Through ingenious gadgetry, "pilots" follow instructions from a control booth ("tower") and turn various knobs to guide individual disks of light across a wall on which an air terminal map is drawn. In guiding the "flights", the air traffic controller trainee must take into account wind and other climatic factors which are made known to him just as they are communicated to the operational tower.

The functional part of the course also includes controlling flights by means of radar, as in terminal control, and through telephone communication and the recording of data, as in control centres which guide long-distance flights.

In addition to such practice sessions, carried out with the latest equipment under almost precisely the same conditions as "the real thing", there are classes in meteorology, navigation, and various other fields in which an air traffic controller must have some knowledge.

"They have a great deal of basic information to assimilate" says Art Johnson, superintendent of the school. "They must be familiar with air regulations, rules and procedures, weather, aircraft recognition, aircraft performance and navigation. In the control tower they must be able to determine which of a number of planes will reach the field first, and plan their approaches accordingly. In control centres, they must be able to carry in their minds the changing positions of numerous planes in flight. It's like a big game of three dimensional chess, in which you must plan two or more moves ahead and in which there is no margin for error."

There is a great need for air traffic controllers—not through a lack of candidates, but because only relatively few can meet the extremely high standards.

The role becomes increasingly critical as planes become swifter and more numerous. Until the advent of radar, airport arrivals during adverse weather conditions had to be limited to about one every 10 or 12 minutes; now they are spaced five miles apart, or one every two minutes at current rates of speed. So crowded is the sky between Montreal and Toronto, for instance, that two parallel airways have been set up—one coming and the other going—to speed up traffic.

Art Johnson says there are scores of applicants for this interesting and well-paid career, but many are weeded out in qualifying exams. The successful ones enter the 20-week initial course, which from one-third to one-half fail to finish. Forty nine students are enrolled in the current course.

Following the basic course, an air traffic controller spends three months training in an airport tower and initially up to six weeks in an area control centre.

"It takes about 18 months to produce a licensed airport air traffic controller, and approximately five years to become a fully qualified instrument flight rule controller," says Art Johnson.

"We need all we can get."

Retirements

Octave Hamel, a 42-year veteran radio operator, retired from Montreal Region in December.

The father of 14 children ranging in age from 29 to 9, Mr. Hamel's interest in radio began while he was a boy. He obtained his first class certificate at the age of 23 and immediately applied for and obtained a position as a ship's wireless officer. He spent the following 13 years at sea.

During these years his job took him to England, Germany, France, Belgium, Australia and many tropical ports-of-call. As an employee of the Canadian Marconi Company, he was transferred to a shore posting after his marriage.

Mr. Hamel's first land post was at Grindstone, the Magdalen Islands. The family spent 12 years there and then moved to Father Point. In 1957 Mr. Hamel became a D.O.T. employee and served at Quebec City until his recent retirement.

Most people would be content to sit back and take things easy after 42 years of work, but not so Octave Hamel. He is beginning a new chapter of his life by taking on the duties of doorman at Quebec City's Garrison Club.

Mr. and Mrs. Hamel and 12 of their 14 children.

T. Marcel Tardiff retired from the staff of the St. Lawrence Ship Channel at the end of January. He had been in charge of field operations in the Trois Rivieres Section since 1956.

Mr. Tardiff joined the Canadian Hydrographic Service after graduating from Laval University in 1929. He spent nearly 20 years with that government service before leaving in 1947 to go into private business. With his wide experience in charting and channel improvement, Mr. Tardiff joined the St. Lawrence Ship Channel in 1951.

With an inclination to travel and a fondness for fishing and hunting, Mr. Tardiff chose to retire well before the compulsory retirement age in order to enjoy these activities.

A 25-year veteran of the steamship inspection division, *Thomas Ramage* of Halifax retired in January.

Mr. Ramage, a native of Scotland, spent several years aboard Canadian government ships before joining the steamship inspection division in 1940. During his 25 year-D.O.T. career he was based at Halifax, however his job took him throughout the Maritime Provinces. His earlier years at sea took him from the Arctic Circle to Australia so in the days of retirement ahead Mr. Ramage intends to enjoy being at home creating and repairing things in his basement workshop.

Miss A. Muriel Turner, a clerk in the accounts section at St. John, N.B., district marine agency, retired in February. She had completed more than 45 years of government service.

Miss Turner joined the former Department of Marine at St. John in June, 1920. During her years of service she worked under five different marine agents.

Prior to her retirement, Miss Turner was honored by fellow employees. Capt. E. O. Ormsby, district marine agent, presented her with a purse, while Miss Alice Garey presented a bouquet of roses on behalf of the Civil Service Federation.

Harry V. Allan, regional administrative officer with Vancouver air services, retired in January after 38 years of government service.

Mr. Allan joined the old Department of Marine in 1928 as a radio operator. He served in the Maritimes and at Fort Churchill before moving to British Columbia to work in the West Coast Marine radio service. In 1938 he transferred to aviation radio and during World War 2 was involved in developing many aeradio stations on the Prairies and in North Western Canada.

Mr. Allan was appointed district administrative officer at Edmonton in 1948 and in 1955 was transferred to Vancouver as regional administrative officer.

At a dinner held in his honor Mr. Allan was presented by Regional Director Dr. T. G. Howe with several gifts from his coworkers. Mrs. Allan, too, was honored.

New appointments in Financial Services

Early in the new year the appointments of Mr. W. J. Murphy, as chief of financial audit and Mr. Alex Campbell, as chief financial officer, administration, were announced.

A native of Peterborough, Ontario, Mr. Murphy attended high school there and in 1932 graduated from Peterboro Normal School with a 1st class teacher's certificate. In succeeding years he obtained several certificates in art and physical education training and in 1940 completed a four-year evening course at the University of Detroit which led to a diploma in commerce and finance.

Mr. Murphy taught elementary school from 1932 until 1941 and then joined the RCAF as an administrative officer. He served in Canada, the United Kingdom and Italy and at the time of discharge in 1945 had attained the rank of Squadron Leader.

From 1946 to 1948 Mr. Murphy was with the Department of National Defence, first as assistant financial superintendent (Air) and as chief supervisor, central pay accounts (Navy). He joined D.O.T. as administrative assistant to the chief of financial services in 1948. Three years later he was appointed assistant chief and, in 1959, became chief.

In his new position Mr. Murphy will be responsible for the establishment and maintenance of a financial audit program throughout the department.

Mr. Campbell was born and educated in Ireland. Prior to coming to Canada he was employed in the public accounting field.

In 1952 he joined H. J. Heinz Company in Leamington, Ontario and during the next 10 years held such positions as internal auditor, department head of general accounting and department head of cost accounting. In 1962 Mr. Campbell joined Kayser-Roth of Canada Ltd. in London, Ontario as manager of cost accounting. Two years later he was appointed comptroller of Spramotor Ltd., also of London, and left in 1965 to join the public service as senior cost research analyst with the Board of Transport Commissioners.

Mr. Campbell's new duties with D.O.T. will centre, for the present, on the implementation of the new financial management program throughout departmental staff groups. At a later date he will assume supervision of financial services for these groups.

Mr. Campbell is a registered member of the Society of Industrial and Cost Accountants of Ontario. In obtaining his R.I.A. degree he was awarded the Ontario Society's silver medal for the highest mark in industrial legislation and the Canadian and Ontario gold medals for the highest mark in advance cost accounting

1965 Fire Prevention awards to DOT airports

Mr. James A. Byrne, (left) Parliamentary Secretary to the Minister of Transport, presents the 1965 fire prevention award winning certificate to Mr. H. Gourdeau, executive assistant to the assistant deputy minister, air.

The presentation, which took place at the Parliament Buildings in Ottawa on February 22, was on behalf of the D.O.T. airports which won awards in the 1965 Government of Canada Fire Prevention Contest.

Competing in a class of 278 entries, Vancouver International Airport placed 10th; Edmonton International Airport, 12th; Torbay Airport, St. John's Nfld., 13th; Halifax International Airport, 16th; Moncton Airport, 18th; and Ottawa International Airport received honourable mention.

The 65 air services entries in the contest stressed the year-round fire prevention programs carried out at each site and in addition included the continuous crash fire rescue training.

Cross — Canada Dateline

Moncton, N.B.—Managers of the newly decentralized areas of the Moncton region telecommunications and electronics branch were brought together in November for a two-week training course. The course covered such subjects as effective financial and personnel management, and the organizational structure of the decentralized areas.

The telecommunications and electronics branch of the department provides extensive domestic and international communication services, both air and marine, and maintains electronic navigational aid facilities for both. Radio and teletype communications assist in the control of air traffic at all major airports in New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland. A safety service is maintained for mariners on a continuous basis by marine coast stations located at strategic points on the East coasts.

Navigational aids include Decca and Loran transmitting systems for marine and air usage, low frequency and high frequency radio ranges for guidance of aircraft, surveillance radar for air traffic control, instrument landing systems and precision approach radar to assist aircraft landings, harbor and meteorological radar systems and numerous radio beacons located on airway routes for aircraft and on the coasts for the guidance of shipping.

Representatives from the 12 areas established throughout the Atlantic Provinces and Magdalen Islands were welcomed by J. A. Lenahan, regional director of air services at Moncton.

Front row, left to right: J. Strong, Gander; H. Moore, Halifax; J. Alfred, Ottawa; R. Read, Moncton; P. Bowes, Ottawa; E. Brown, Saint John, N.B.; and R. Austin, Yarmouth. Back row: M. Behune, Sydney; C. Le Gresley, Grindstone; J. Anstey, St. John's, Nfld.; E. Funston, Goose Bay; D. MacKay, Trepassey, Nfld.; H. Garland, Fredericton; J. Wilmhurst, Charlottetown and G. Conrad, Moncton.

Toronto—In March twenty-five Canadian weather observers received pendant type wall barometers as awards for excellence in weather observing and reporting. Among the recipients was Mr. W. H. Wearne, of Telkwa, B.C., who has been taking regular weather observations for the meteorological branch since 1922. This was the second award to Mr. Wearne.

In announcing the awards, J. R. H. Noble, director of the meteorological branch, stressed that Canada is particularly fortunate in having the co-operation of many individuals in maintaining weather stations. These co-operative weather observers are supplied with instruments by the branch. They take time each morning and evening to observe and record observations of temperature and precipitation. The observers at several of the 2300 weather stations in Canada have performed their duties for many years in the public interest without remuneration from the meteorological branch.

The weather reports submitted by the co-operative observers, along with reports received from 275 stations staffed by employees of the department, are used in the compilation of weather statistics for the various monthly reports published by the branch.

The awards are the twelfth of such annual awards. Winners were selected on the basis of faithful service over a period of at least five years, along with excellent weather reporting. To some of the observers, weather is an interesting hobby, others make use of the observations in their business activities and some take the observations solely as a public service.

Point Edward, N.S.—The first edition of the Dolphin, the Canadian Coast Guard College newspaper, appeared on the "Stands" in December. Cost—10 cents a copy. It was comprised solely from contributions from cadets ranging from comment on the course content, to personal items about fellow students.

It is a snappy little paper, which should improve with each issue.

Point Edward, N.S.—During a pre-Christmas visit to the Canadian Coast Guard College, Assistant Deputy Minister, Marine, Gordon W. Stead, announced his intention to donate an annual trophy for the best all-round first year cadet.

Mr. Stead played an important role in the establishment of the college and it was thought fitting, to ensure that his name will be associated with the college in the years to come, that the trophy be named the "Stead Trophy".

Kamloops, B.C.—Kamloops Airport Staff walked off with top honours, the Doc Quealy Award, in Vancouver air services region's 1965 annual fire prevention contest. They topped entries from 21 stations.

The Kamloops entry showed a considerable amount of effort had been expended by each member of the three-man staff. The number of fire prevention activities conducted throughout the year and the preparation of the winning entry indicated an upsurge over Kamloops fire prevention activities of previous years.

In presenting the award to Airport Manager W. Rempel, Mr. E. Hickson, D.O.T. chief of airports, commented on the fine efforts shown in displays at Kamloops to make the public aware that fire prevention is initially its responsibility. Mr. Rempel also received a letter of commendation from the B.C. deputy fire marshal.

At left is one of the Kamloops displays of equipment and posters set up in the terminal building during fire prevention week.

Appointed to Information Services

Edouard (Eddie) Deslauriers, formerly news editor with Ottawa's French-language daily newspaper "Le Droit", has joined information services as a public information officer. Among his duties, he will be serving as French editor of "the DOT."

Mr. Deslauriers is a native of Ansonville, Ontario, a small community near Timmins. He attended primary school at Iroquois Falls, Ontario, and secondary school at Sacred-Heart College in Sudbury. In 1949 he moved to Ottawa where he attended the University of Ottawa. Graduating in 1952 with a bachelor of arts degree and a baccalaureate in philosophy, he entered the newspaper field as a cub reporter with "Le Droit".

During his years with the newspaper Mr. Deslauriers covered the regular Ottawa "beats" for six years and was then assigned to head the paper's Hull office. In 1961 he became city editor and in 1965 news editor.

His addition to the information staff fills a long-standing need for a person to produce press releases, speeches, articles and other written material in the French language.

Nomination au service d'information

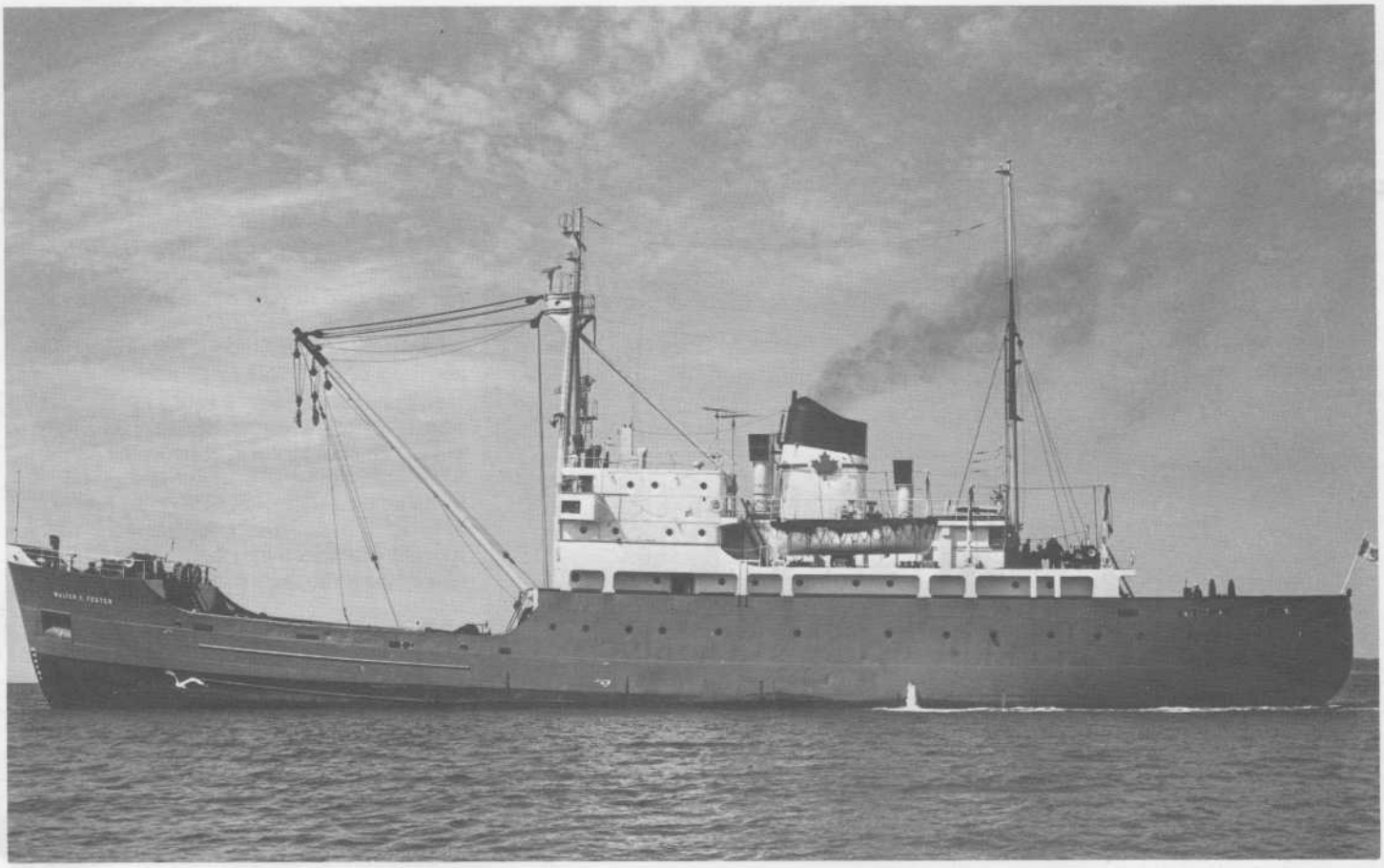
Edouard (Eddie) Deslauriers, ci-avant chef de l'information au journal «Le Droit», à Ottawa, vient de passer au service du ministère à titre d'agent d'information. Il se joint donc, par le fait même, à l'équipe qui s'adonne à la rédaction de la revue «the DOT».

M. Deslauriers est natif d'Ansonville, Ontario, petite localité sise près de Timmins. Il a fréquenté l'école primaire d'Iroquois Falls, Ontario, puis a fait son cours secondaire au collège du Sacré-Cœur, à Sudbury. En 1949, il est passé à l'Université d'Ottawa, où il a décroché son baccalauréat des arts et un baccalauréat en philosophie en 1952. La même année, il passait au service du journal «Le Droit».

Au cours de son stage au journal, M. Deslauriers s'est adonné au reportage général dans à peu près tous les services du quotidien pendant six ans. Puis, en 1958, il prenait la direction du Bureau de Hull du même journal. En 1961, il devenait chef adjoint de l'information, puis chef de l'information en 1965.

Sa nomination au service de l'information remplit un vide qu'on cherchait à combler depuis déjà longtemps. Les services d'un rédacteur de langue française étaient en effet réclamés depuis plusieurs années.

Canadian Coast Guard ALBUM



CCGS WALTER E. FOSTER, an icebreaking lighthouse supply and buoy vessel, was completed at the yard of Canadian Vickers Limited, Montreal, in December, 1954. She is attached to the Saint John, New Brunswick, district marine agency of the Department of Transport.

CCGS WALTER E. FOSTER

LENGTH: 229 feet, two inches.

BREADTH: 42 feet, six inches.

DRAFT: 16 feet.

POWER: Steam, two Vickers-Skinner Uniflow engines developing a total of 2,000 shaft Gross tonnage 1,672.