TRANSPORT CANADA

JANUARY—FEBRUARY
JANVIER—FÉVRIER 1968

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COVER

Captain Paul Fournier, master of the Canadian Coast Guard Ship *John A. Macdonald*, stands beside the ship he commanded during what became known as the "epic voyage" last fall. (See story page 5).

(Photo by Deni Eagland, Vancouver Sun)

FRONTISPICE

Le capitaine Paul Fournier est photographié ici auprès du n.g.c.c. *John A. Macdonald* qu'il a commandé dans un périlleux voyage qui a conduit le navire jusqu'au cœur de l'océan Arctique, l'automne dernier. (Voir article en page 7.)

(Photo de Deni Eagland—Vancouver Sun)

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TRANSPORT *is a staff magazine published by the Information Services Division of the Department of Transport, Government of Canada, under the authority of the Minister, Hon. Paul T. Hellyer.*

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ROGER DUHAMEL F.R.S.C. QUEEN'S PRINTER AND CONTROLLER OF STATIONERY, OTTAWA, 1968

ROGER DUHAMEL M.S.R.C., IMPRIMEUR DE LA REINE ET CONTRÔLEUR DE LA PAPETERIE, OTTAWA, 1968

our new name

As you've probably noticed, we've changed our name.

We didn't do it lightly or on the spur of the moment, but only after considerable soul-searching motivated by two considerations:

First, our editorial policy is to make the Department of Transport staff magazine bilingual in keeping with government policy. "News on the DOT" and "The DOT" simply did not lend themselves to this policy.

Second, we wanted the magazine's name to be as closely descriptive of the department's role as humanly possible.

Happily, the world TRANSPORT fits both these requirements admirably.

In addition, we've included the artwork carried on all our press releases and ministerial speeches which combines our air, marine and communications activities.

As will be seen by the Deputy Minister's message on page 3, D.O.T. is in search of an insignia which will symbolize the department.

We don't have all the details yet, but the competition will definitely be limited to departmental employees. And in all likelihood, the winner will receive an award. So it's not too early to begin some creative doodling!

In any case, we hope you'll like the changes we've made and agree that our new name does represent an improvement.

We also hope that what you will find under the new name continues to be worthy of the enviable reputation that your staff magazine has won, both within and outside the departmental family, as the voice of TRANSPORT.

notre revue change de nom

Vous avez sans doute remarqué que nous avons changé le titre de la revue. Nous ne l'avons pas fait à la légère ou par intuition soudaine, mais seulement à la suite d'une longue réflexion, en considérant deux exigences.

Premièrement, nous voulons, conformément à la ligne de conduite du gouvernement, rendre bilingue le magazine des fonctionnaires du ministère des Transports. Les titres «News on the DOT» et «The DOT» ne se prêtaient pas à la réalisation de cet objectif.

En second lieu, nous voulions que le titre du magazine décrive aussi bien que possible le rôle du Ministère. Heureusement, le mot TRANSPORT satisfait admirablement à ces deux exigences. Sa signification est la même dans les deux langues et il semble que ce soit le seul mot qui décrive le mieux la portée générale de nos intérêts et de nos responsabilités.

Nous avons, de plus, tenté d'inclure dans le titre le dessin qui figure sur tous nos communiqués et sur la page frontispice de tous les discours du Ministre. Ce dessin représente nos activités en matière de transport aérien et maritime, et de communications.

Comme l'indique le sous-ministre dans son message (en page 3). nous sommes également en quête d'un nouveau symbole ou insigne pour illustrer le travail qu'accomplit le ministère des Transports. Il s'agira vraisemblablement d'un concours s'adressant particulièrement aux employés. Un prix sera sans doute offert à l'employé dont la suggestion aura été acceptée. Une invitation donc à ceux qui se sentent inspirés . . . Il n'est pas trop tôt pour se mettre à la tâche.

A tout événement, nous espérons que notre nouveau titre vous plaira et que vous conviendrez avec nous qu'il constitue une amélioration.

Nous espérons également que vous continuerez à trouver la présente publication digne de la réputation que s'est méritée votre magazine, en tant que voix du TRANSPORT, à l'intérieur comme à l'extérieur du Ministère.

a new symbol

I think it is high time that we had a symbol or insignia which represents the Department of Transport and which will be an indication of our activities and our purpose, both to the general public and to all members of the Department. Further, I think that everyone in the Department who wishes should have a chance to put forward suggestions in this connection.

A small headquarters group will be established to plan and decide how best this can be done and further details will be carried in the next or second issue of "Transport."

un nouveau symbole nécessaire

Il est grand temps, je crois, que nous ayons un symbole ou un insigne qui représente le ministère des Transports et qui soit un indice de nos activités et de notre but, tant aux yeux du public en général qu'à ceux de tous les membres du Ministère. Je pense, de plus, que tout employé qui le désire, au Ministère, devrait avoir l'occasion de présenter des suggestions à cet égard.

Nous établirons un petit groupe, à l'administration centrale, en vue de préparer ce projet et de décider de la meilleure manière de le réaliser. Le prochain numéro de «Transport», ou celui qui le suivra, vous présentera de plus amples renseignements à ce sujet.

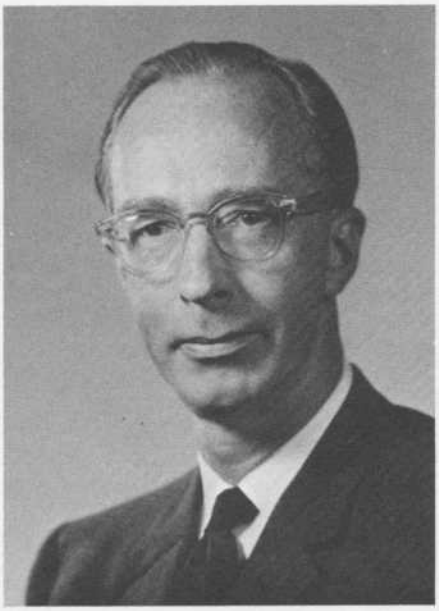
J. R. Baldwin

Deputy Minister *Sous-ministre*

the press and the government

by Gordon W. Stead
Assistant Deputy Minister
Marine Services
Department of Transport

Recently, Mr. Stead, known to newsmen who have called our Information Services Division requesting interviews as a man whose door is always open, was asked to write a guest column for the annual edition of Canadian Shipping and Marine Engineering News devoted to Department of Transport activities. In the belief that what Mr. Stead had to say is important to all of us, his remarks are re-printed below.



Webster defines an editorial as ". . . an expression of the views . . . of the person . . . in control of the paper." Heady stuff, indeed, for one of the anonymous bureaucracy! Dare one, not of the fourth estate, wield the awesome power of the press?

Editorials customarily comment on the deeds or misdeeds, or even nondeeds, of somebody responsible for a function in our society. As things are, this body is often government, although business and labor also get their share of advice.

This time, let us consider the press itself and its relation with government officials. Nor need this be a trespass upon the hospitality of this column, but rather the natural consequence of another point of view in momentary "control" of this journal.

It should never cease to amaze the rest of us that people trained as writers—but not in the substance of the varied matters they must write about—get as many news stories as straight as they do. With reporters who have had a chance to specialize and, to the extent that they check their stories with someone who knows the facts, reliability is high. It is not always so; and when it is not, the press can hardly claim to fulfil its rightful role as essential informant to democratic opinion. Rather, democracy becomes confused and uncertain.

Most civil servants with any degree of responsibility are in the business to try to make democracy work. The role of the press is to discover and inform, so that the judgments of democratic society may be soundly based. Public servants and the press are thus equally committed. The press does little public service when it portrays conscientious public servants as buffoons.

Times change—and, of recent years, perhaps more rapidly in the federal service than in many other fields. The merit system has been in effective operation for years. A whole new generation—the no-nonsense wartime crop—has risen to seniority. They do not conceive their jobs as dependent on secrecy or artifice. They expect to operate in a goldfish bowl. They welcome comment and criticism, provided only that it is informed and relevant. Indeed, without the support of an interested and informed public they can do little; and they keenly understand this.

What has happened to the traditional distinction between news and comment? It is hard to find a news story nowadays that is free from opinion. Is this really the job of the reporter whose aim should be to inform? From an editorial writer opinion and contention are expected—but from a news writer?

Of course, government departments are not without fault. They try to select items of genuine interest for release to the press, but they may favor things in which the department can feel some pride. There is little harm in this if releases are used by the press the way they should be. They can only serve as snippets of information to keep the public up to date. They can never substitute for the well-rounded news story dug out by a reporter's effort.

As long as the press relies entirely on departmental releases and fails to invade the offices of senior public servants to ferret out news, published stories will lack depth. In the marine field, happily, the situation has improved tremendously in recent months as senior newsmen have really tried to find out where things stand. May this interchange continue!

Public business should be as public as possible, subject only to the essential right of government, as of anyone else, to negotiate and to contemplate in private. Facts should be open and there is no excuse for the press not getting them straight.

Our phones are there for all to use.

It was all in a day's work for the John A. Macdonald

The long journey that was called "an epic voyage" has ended where it began and CCGS *John A. Macdonald* is back on the job patrolling the frigid waters of the Gulf of St. Lawrence.

But for Captain Paul Fournier and the 90 members of the John A.'s crew, the trip that started out as a routine re-supply mission in the Eastern Arctic, unexpectedly took them through the Northwest Passage, through a dramatic rescue deep in the polar ice and finally to a hero's welcome on the west coast before they returned home to Dartmouth via the Panama Canal, was one they will never forget.

It all began quietly enough last July 4 when the fully-provisioned icebreaker, third largest in the world, slipped out of Montreal harbour for what its crew expected to be a routine three-month round of surveying, loading and unloading cargo and aiding in the annual Department of Transport re-supply operation.

She was busy at this work when a call came through on Sept. 5 asking for assistance.

The Victoria-based icebreaker *Camsell* was working in the Beaufort Sea, 1,500 miles to the west and couldn't answer all the calls for help from trading vessels being hemmed in by heavy ice floes moving close to the mainland.

So the *John A.* crossed the famous stretch of Arctic water and, in doing it, became the first ship to sail the Northwest Passage through Victoria Strait

A proud Captain Paul Fournier shows Transport Minister Paul Hellyer around CCGS John A. Macdonald after the ship arrived for a hero's welcome in Vancouver.

Le capitaine Paul Fournier guide le ministre Paul Hellyer dans une visite du n.g.c.c. «John A. Macdonald» peu après l'arrivée du navire à Vancouver.

since Sergeant Henry Larsen did it in the *St. Roch* 25 years ago.

Three weeks later, a call for help came from further west. The United States Coast Guard Cutter *Northwind* was stranded deep in polar ice approximately 500 miles north of the Alaska coast.

And so what looked to be an impossible struggle against the forces of nature was begun as the 6,186-ton *John A. Macdonald,* in company with the USCGC *Staten Island,* began to batter her way through the heavy ice toward the stricken U.S. ship.

With high winds and what seemed to be progress at a snail's pace, the ships inched toward the disabled *Northwind.*

Recalls a member of the *John A.'s* crew: "The ice was so thick at times that we couldn't move an inch and it looked like the rescue might have to be abandoned and the American ship left there for the winter."

Rescue, however, came with dramatic suddenness when a shift in the wind allowed the three ships to open up the last stretch of ice that separated them and then turn about for the long journey south.

For the *John A.,* the only way home after the ships reached open water was through the Bering Strait, down the Pacific Coast, through the Panama Canal and home to Dartmouth via the West Indies and New York.

Her chance to redouble her triumph by making the return trip across the Arctic was lost when the passage to the east froze while the big icebreaker was churning her way toward the *Northwind.*

"Canadian Icebreaker Completes Northwest Passage Trip," declared a Quebec newspaper; "Icebreaker to get hero's welcome in B.C.," reported all three Toronto papers; and "Hero's Welcome Awaits 'Breaker in Vancouver," said banner headlines in British Columbia's dailies.

First to go aboard the ship when it docked in Vancouver was Transport Minister Paul Hellyer who warmly congratulated Capt. Fournier and his men with the words: "We Canadians are proud of you, both for your trip and for the aid you gave to the disabled ship Northwind."

In Seattle, the ship was given a civic reception and Captain Fournier was presented with a citation which read in part:

"The Commandant of the United States Coast Guard takes pleasure in commending the Canadian Coast Guard Ship *John A. Macdonald* for service as set forth in the following citation:

"For exceptionally meritorious service during the period 23 September to 8 October 1967 while under the operational control of the U.S. Coast Guard and engaged in the perilous task of rendering assistance to the damaged USCGC *Northwind* which was in imminent danger of being icebound for the long Arctic winter at Latitude 79 degrees, two minutes North, Longitude 168 degrees, six minutes West.

"The operation required the utmost in ice seamanship, skillful manoeuvering of the vessel and outstanding teamwork from the entire crew of the *Macdonald* which resulted in *Northwind* clearing the ice on 8 October.

"The courageous action, initiative, diligence and perseverance of the personnel on board the *Macdonald* during this hazardous operation were in keeping with the finest traditions of the United States Coast Guard."

The citation was signed "P. E. Trimble, Vice Admiral, Acting Commandant, U.S. Coast Guard."

In accepting the award, Capt. Fournier said that while he was honored, he felt obliged to point out that the *John A. Macdonald* was merely returning favors done many times by the U.S. Coast Guard and added: "We're paid to do this job. We try to do our best."

The fact that the *John A.* had done her best was reflected in a letter received by Transport Minister Hellyer from Alan S. Boyd, Secretary of the United States Department of Transportation, who said, in thanking the Department for its help: "I look forward toward continuing the excellent relationship between our polar fleets and in all of our areas of mutual interest."

Commenting editorially on the ship's busy summer, the Montreal *Gazette* said:

"The Arctic has truly been conquered when a ship's master can say the Northwest Passage is all in a summer's work.

"The ghosts of a thousand mariners who tried to find the passage without success must have watched the *John A. Macdonald* smash her way through."

Un voyage de routine devient une aventure mémorable

Le long trajet qu'on a appelé «un voyage épique» s'est terminé là où il avait commencé, et le n.g.c.c. *John A. Macdonald,* de retour, patrouille de nouveau les eaux glacées du golfe Saint-Laurent.

Mais, pour le capitaine Paul Fournier et les 90 membres de l'équipage du *John A.*, ce voyage qui, à ses débuts, devait être une mission de ravitaillement de routine dans l'est de l'Arctique, est devenu une aventure qu'ils n'oublieront jamais. Le *John A. Macdonald* a d'abord inopinément franchi le passage du Nord-Ouest et a par la suite participé à un sauvetage dramatique très loin dans les glaces polaires au sommet du monde. L'exploit a valu aux membres de l'équipage un accueil de héros à Victoria, Vancouver et Seattle avant qu'ils ne rentrent chez eux à Dartmouth en passant par le canal de Panama.

Toute l'affaire a débuté assez calmement le 4 juillet dernier alors que le brise-glace, se glissait hors du port de Montréal pour entreprendre ce que son équipage croyait être une tournée de routine de trois mois à faire de l'hydrographie, à charger et décharger des marchandises et à aider à cette entreprise annuelle du ministère des Transports.

Le 5 septembre, il était occupé à ce travail lorsqu'un appel lui parvint du *Camsell.* Ce brise-glace, qui a sa base à Victoria, était à l'œuvre dans la mer de Beaufort, à 1,500 milles à l'ouest, et ne pouvait répondre à toutes les demandes de secours qui lui arrivaient des navires de commerce qui se faisaient entourer par des masses de glace épaisse se déplaçant à proximité du continent.

Ainsi, le *John A.* s'est dirigé vers cette fameuse étendue des eaux de l'Arctique et, de ce fait, est devenu le premier navire à franchir le passage du Nord-Ouest en passant par le détroit Victoria depuis que le sergent Henry Larsen a accompli cet exploit à bord du Saint-Roch, il y a 25 ans.

Trois semaines plus tard, une demande de secours est parvenu au *John A.* d'un point plus à l'ouest. Le cotre *Northwind* de la Garde côtière des États-Unis était échoué, très loin dans les glaces polaires, à environ 500 milles au nord de la côte de l'Alaska.

Et ainsi a débuté ce qui semblait être une lutte impossible contre les forces de la nature. Le *John A. Macdonald,* d'une jauge de 6,186 tonneaux, et le cotre *Staten Island* de la Garde côtière des États-Unis ont commencé à se frayer un chemin à travers la glace épaisse vers le navire américain immobilisé. Luttant contre de grands vents, on avançait à pas de tortue en direction du *Northwind* désemparé.

Un membre de l'équipage du *John A.* décrit la situation en ces termes: «La glace était si épaisse, à certains moments, que nous ne pouvions pas avancer d'un pouce et il semblait qu'il nous faudrait peut-être abandonner la partie et laisser le navire américain passer l'hiver à l'endroit où il se trouvait.»

Cependant, le sauvetage s'est fait avec une rapidité dramatique lorsqu'un changement de vent a permis aux navires d'ouvrir un chenal à travers la dernière étendue de glaces qui les séparait et de faire demi-tour pour entreprendre le long trajet vers le sud.

Map shows operations of CCGS John A. Macdonald showing its Northwest Passage route and the course it took in company with the United States Coast Guard Cutter Staten Island through the polar ice pack to aid the stricken USCGC Northwind.

Cette carte indique le parcours suivi par le n.g.c.c. «John A. Macdonald» qui a franchi le Passage du Nord-Ouest et a filé vers l'océan Arctique pour se porter au secours du «Northwind», navire de la Garde côtière américaine, lequel était en panne dans les glaces polaires.

Pour le *John A.*, le seul moyen de rentrer à Dartmouth après le sauvetage était de traverser le détroit de Béring, de longer la côte du Pacifique, de franchir le canal de Panama puis de passer par les Antilles et par New York.

L'occasion de doubler son triomphe en faisant son voyage de retour à travers l'Arctique a échappé au gros brise-glace. Tandis qu'il se frayait un chemin vers le *Northwind,* le passage vers l'est lui a été bloqué par les glaces.

«Un brise-glace canadien franchit le passage du Nord-Ouest», annonçait un journal du Québec; «Un brise-glace sera accueilli en héros en Colombie-Britannique», clamaient les trois journaux de Toronto; et «Un accueil digne d'un héros attend le brise-glace à Vancouver», disaient les manchettes de quotidiens de la Colombie-Britannique.

Le premier à monter à bord du *John A.*, lorsqu'il a accosté à Vancouver fut M. Paul Hellyer, ministre des Transports, qui a chaleureusement félicité le capitaine Fournier et ses hommes en les accueillant par ces mots: «Nous, Canadiens, sommes fiers de vous, tant à cause de votre voyage qu'à cause de l'aide que vous avez apportée au navire désemparé *Northwind.*»

A Seattle, le navire fut l'objet d'une réception civique et on présenta au capitaine Fournier une citation dont voici un extrait:

«Le commandant de la Garde côtière des États-Unis a le plaisir de rendre hommage au navire de la Garde côtière canadienne *John A. Macdonald* pour les services mentionnés dans la citation suivante:

«Pour services exceptionnellement méritoires pendant la période allant du 23 septembre au 8 octobre 1967, alors qu'il servait sous la direction de la Garde côtière des États-Unis et qu'il s'acquittait de la tâche périlleuse de porter secours au cotre avarié *Northwind* de la Garde côtière des États-Unis, qui se trouvait en danger d'être retenu dans les glaces pendant le long hiver de l'arctique à la latitude de 79 degrés, deux minutes nord par la longitude de 168 degrés six minutes ouest.

«Cette opération exigeait au plus haut point la connaissance de la navigation dans les glaces, la manœuvre habile du navire et le travail d'équipe extraordinaire de la part de tout l'équipage du *Macdonald* qui ont permis, le 8 octobre, de libérer des glaces le *Northwind.*

«Le courage, l'initiative, la diligence et la persévérance dont a fait preuve le personnel du *Macdonald* durant cette opération hazardeuse ne le cèdent en rien aux meilleures traditions de la Garde côtière des États-Unis.»

La citation portait la signature de P. E. Trimble, Vice Admiral, Acting Commandant, U.S. Coast Guard.

En acceptant cette récompense, le capitaine Fournier s'est dit honoré mais il a ajouté que le *John A. Macdonald* ne faisait que rendre les services reçus maintes et maintes fois de la Garde côtière des États-Unis et il a conclu: «Nous sommes payés pour faire ce travail. Nous nous efforçons de le faire de notre mieux.»

Au sujet de l'exploit, la *Montreal Gazette* écrivait en page de rédaction:

«L'Arctique a réellement été conquis lorsqu'un capitaine de navire peut dire que la navigation dans le passage du Nord-Ouest fait partie de la routine.»

«Les ombres des milliers de marins qui ont tenté sans succès de découvrir ce passage ont dû regarder attentivement le *John A. Macdonald* y frayant son chemin.»

Transport Minister Hellyer chats with two members of the crew of the John A. Macdonald in Vancouver. Jerry Duggan of Bell Island, Nfld., has been with D.O.T. for four years. Hayward Stratton of Valleyfield, Nfld., joined the Canadian Coast Guard in June of 1967 and the operation was his first in the service.

Le ministre Paul Hellyer s'entretient avec deux membres de l'équipage du «John A. Macdonald». Jerry Duggan, de Bell Island (T.-N.), est à l'emploi du ministère des Transports depuis quatre ans. Hayward Stratton, de Valleyfield (T.-N.), est au service de la Garde côtière canadienne depuis juin 1967. C'était sa première tournée dans les eaux de l'Arctique.

weather wonderland

If you've ever wondered why hurricanes are named (for easier identification) or maybe what the temperature is 200 miles up (2,000 degrees F.), then a visit to the meteorological exhibit at the new National Museum of Science and Technology in Ottawa is a "must."

There, among a fascinating variety of exhibits in what Dr. David Baird, the director, calls his "Fun Museum," the visitor can find out for himself a little of the science of meteorology by pushing buttons, breathing into weather instruments or watching instantaneous weather reports flash across a moving screen.

The subject is the world's weather, the way it affects us and the manner in which it is observed and presented—whether as a topic of discussion among friends or a briefing on which a pilot bases his flight plan.

The display also takes a peek at the future with a life-like model of the Essa weather satellite showing its all-seeing cameras which peer down at the earth and photograph the ever-changing weather patterns and shows how the meteorologists working at ground stations decipher the co-ordinates and draw in national and provincial boundaries to make sense of what the satellite has photographed.

Starting with an invitation from Dr. Baird, the Met. exhibit was put together by Percy Saltzman, one of the Branch's best known boosters, Al Mowat of the weather services section, Pat Connor and Claude Buffett, the two Met. staffers who assembled the equipment, and Charles Taggart of the Meteorological Satellite Data Laboratory who worked on the satellite exhibit.

"The thing that's different about this exhibit and the reason that everyone gets so much out of it," says Mr. Mowat, who spent two weeks in Ottawa helping to get the project launched, "is the fact that visitors press the switches and make the equipment work by themselves."

Mr. Mowat, whose enthusiasm for the project led him to bring along his personal tape recorder to record the official opening of the museum by Dr. Baird and State Secretary Judy LaMarsh, and interview a few of the hundreds of visitors who went through the exhibit during its first two weeks, says the exhibit was established relatively inexpensively to help make the Meteorological Branch better known to the public as well as to interest young people in meteorological careers.

Proof that the exhibit is accomplishing both objectives is contained on tape as well as on a notebook left at the centre of the exhibit where visitors are encouraged to leave their names and their impressions of the display.

The comments range from the "keen" and the "cool" of the younger generation to "beautiful" (a lady visitor) to "excellent and informative."

"Good to see Met. in action," wrote an Ottawa-based Met. technician; "Above all it is thought-provoking," added a science teacher; and summed up in the words of an elderly gentleman visitor: "It's better than what I've seen at Expo."

jumbo jets - are we ready?

This view of Toronto International Airport shows how the three factors of airport planning—people, land vehicles, and air vehicles—are interrelated.

Cette vue de l'aéroport international de Toronto nous donne un aperçu des facteurs dont il faut tenir compte dans l'élaboration des plans relativement à l'aménagement d'un aéroport. Ces facteurs sont le public voyageur, le transport en surface et le type d'avion.

by William Dunstan
Information Services Division

There have been some wails of late that, as jumbo jets and supersonic aircraft prepare to whistle down toward Canadian runways, the Department of Transport is whistling a puzzled tune while it wonders whether or not to do anything about it.

The fact that such criticism could not be more wildly untrue is sometimes difficult for a government department to put across.

Plans are well advanced to meet every conceivable requirement of the new air age but, having said that much, our lips are sealed in most circumstances.

No specific plans or proposals, no matter how soundly researched or generally acceptable, are official until they have been approved by the Government and cannot, therefore, be revealed until then.

Yet we can claim, with some validity, that we lead the world in some of our planning for this next great leap forward in aeronautical speed and dimensions.

One of the new concepts that have created enthusiasm among planners is the "drive-in-gate-check-in" concept. Under this plan, each aircraft has its own gate and passengers drive direct to the gate.

The passenger can see his aircraft from his car. He parks at the site, enters the gate and goes directly to his aircraft. His baggage is checked and goes directly on board, without mingling with other baggage flow.

Arrivals are similar—much like the case of the ship which ties up at a dock where all passenger and baggage services are devoted to that ship.

The first jumbo jet will begin operating into Canada early in the 1970's, the supersonics a few years later.

D.O.T. planning for these events entered a stepped-up phase some 18 months ago with the formation of an aviation systems planning group, under the Civil Aviation Branch, with the immediate objective of planning for the new air age at Toronto and Montreal international airports.

This was not, of course, the birth of planning within D.O.T., which has planned for and assisted the development of civil aviation since its formation in 1936.

Since the 1950's for example it has spent well over $100,000,000 in building across Canada a chain of major international airports which are among the finest in the world.

The program still is underway and at Vancouver a new $23,000,000 air terminal, designed to accommodate expansion for future needs, is scheduled to open early next year.

The program involves not only the planning and design of intricate airport systems, but considering and planning the overall national aviation system within which they operate.

The aviation systems planning group brings together planners from throughout Air Services to work in a single committee of experts, calling on others for advice and technical assistance as required.

Chairman of the group is Dennis Hemming, whose other hat is that of Chief, Planning, Research and Development.

The group has had a number of meetings with senior officials of major international airlines in order to exchange information relative to changes which will have to be made to airports and procedures in order to accommodate the larger aircraft.

The Department provided technical data on airport operations, especially with regard to Montreal and Toronto international airports, which will be the first Canadian points to handle the big jets.

The airlines in turn were invited to outline their concept of what their new aircraft will require.

Inspection services, such as those provided by Health, Immigration, Customs and Agriculture, could easily impede the flow of passengers and goods.

Last spring, a group of representatives of all departments concerned, including some members of the Department of Transport's aviation systems planning group, made a study of European inspection services for air passengers, baggage and freight.

Following further discussions, plans have been made for innovations in passenger handling which will make procedures of Canadian inspection services the most efficient and expeditious in the world.

The Department also hires consultants to aid in the systems planning of individual airports as sub-systems of the national transportation system.

These consultants employ the various diciplines essential to encompass the full range of technical and scientific skills required to analyse all the operating elements and component parts of an airport system and to integrate these analyses into an overall program.

In general, the consultants first develop long-range forecasts of aviation operations, economic and other factors on which future planning can be based.

They then develop an airport layout concept which will make the best use of the existing site and provide a framework within which future expansion can take place.

Finally, they recommend what developments will be necessary to meet forecast requirements of airport users during the coming 20-year period.

This includes staged development concepts for the passenger terminal area, air cargo area, general aviation area, airport operations and maintenance areas, commercial areas and road systems.

Four 20-year master plans for airport development currently are under study or in the process of completion: for Toronto, Montreal, Winnipeg and Calgary.

In addition to consultant studies, similar surveys are conducted at several airports each year by the aviation systems analysis section of Planning, Research and Development.

These studies are designed to evaluate an airport as a complex of many interrelated systems. Each system must be kept in balance with the others to ensure the safe and balanced flow of people, aircraft, road vehicles and cargo.

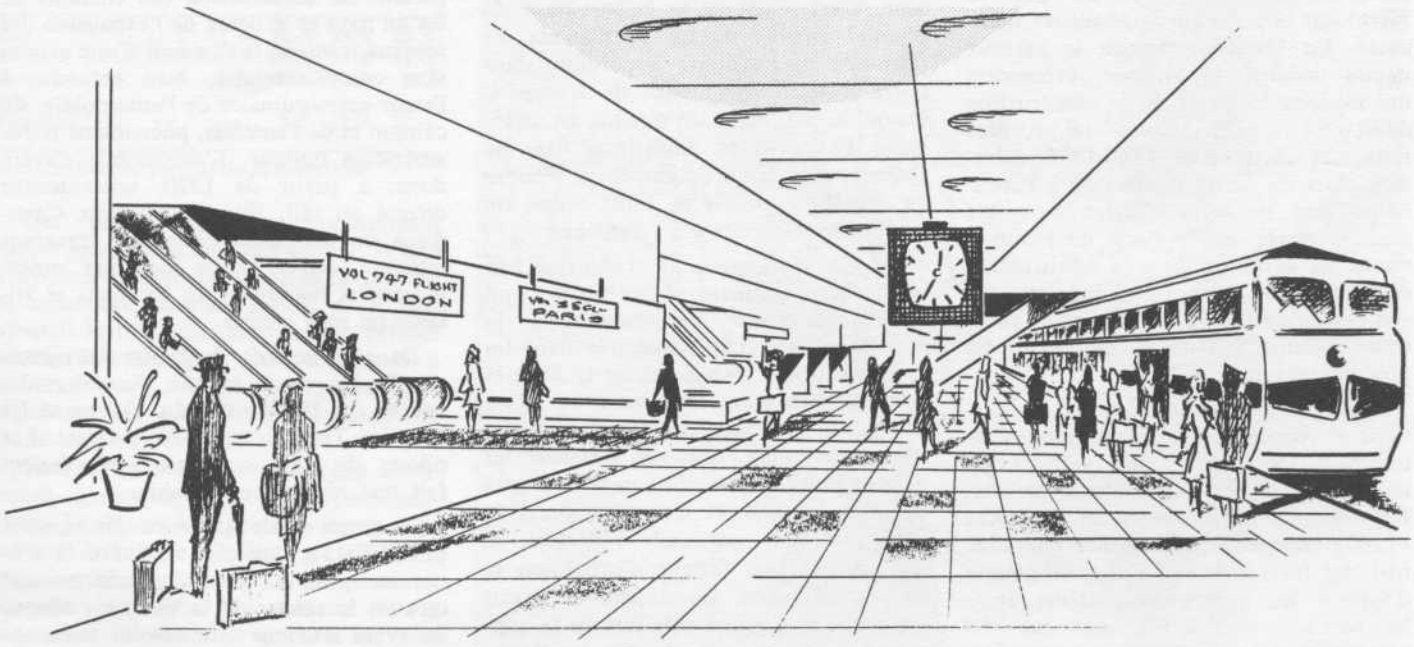
Reports of these studies make recommendations on how to keep the present systems in balance until they last out their design life. They also make 10- and 20-year forecasts for use in planning new facilities for future requirements.

An individual aviation systems analysis considers everything related to the airport. This includes the terminal area air space and the runway and taxiway systems, the various interrelated areas and activities that take place in the terminal building, the adequacy of roadways, linear curbspace, parking areas, characteristics of public ground transportation systems, general aviation requirements, and the size and suitability of cargo handling equipment and space.

In addition to its studies of current airports, the Department takes pains to keep abreast of the latest in technology and concepts in handling aircraft, passengers and goods.

The new aircraft are on the way, but they won't even start to arrive for another four years. Plans for the new air age are well in hand, but they do not call for constructing new, costly terminals and facilities long before they are needed.

It can be stated with confidence, however, that when the time comes, Canada will have ample facilities to handle the jumbos, the supersonics, and the flood of passengers and goods they are expected to bring.



Artist's conception of how the air traveller of the future may arrive at the airport.

Ce croquis d'artiste veut nous faire voir comment le voyageur de demain arrivera à l'aéroport.

Les transports dans l'évolution économique du Canada

Par Pierre Camu

Président de l'Administration de la Voie Maritime du Saint-Laurent.

Pendant plus de quatre cents ans, soit depuis la découverte du pays par Jacques Cartier, parmi les modes de transports commerciaux l'un d'eux eut toujours la vedette.

Sous le régime français, de 1534 à 1760, les transports par eau constituent le seul mode commercial de transport. Les voiliers qui arrivaient des ports de la métropole remontaient le Saint-Laurent jusqu'à Québec, puis jusqu'à Trois-Rivières et Montréal. A partir de ces trois ports fluviaux, par canot d'écorce, adopté de l'Indien, on explora d'abord une grande partie du continent nord-américain, incluant les bassins du Saint-Laurent et du Mississipi. A la suite des explorations, on établit et organisa sur une base commerciale l'exploitation des fourrures, avec forts et postes de traites bien situés aux points stratégiques de confluence ou en aval et en amont de rapides et chutes.

Entre les régions riveraines du bas Saint-Laurent et l'Acadie, dont la vallée d'Annapolis et Port-Royal, les communications et échanges se faisaient par navire. L'intendant Talon reconnut l'importance de ce moyen de transport en favorisant la création de chantiers maritimes. En 1663, on lançait le premier navire construit à Québec, événement qui marqua le début de la construction de navires en bois, industrie qui prospéra jusqu'aux environs de 1860-1870, subissant alors un déclin naturel dû à l'apparition des premiers navires à coque d'acier. Après une période de réajustement, on se lança dans la construction de navires en acier. Cette industrie n'a pas cessé de s'accroître au point de constituer aujourd'hui l'une des entreprises les plus importantes du Canada.

C'est par navire aussi que les explorateurs et commerçants britanniques pénétrèrent à l'intérieur du pays pour y organiser aussi le commerce des fourrures. Les résultats de la guerre de Sept Ans (1760) changèrent l'allégeance politique, mais les transports par eau continuèrent d'assurer les liens indispensables entre les parties peuplées du continent. Au commerce des fourrures allait succéder celui du bois.

A la fin du dix-huitième siècle on se rendit compte qu'il fallait améliorer davantage les grandes voies navigables. Alors commença une période très active de construction de canaux le long du Saint-Laurent. Un peu plus tard, en aval de Montréal, on lança l'«Accommodation» en 1809, le premier navire à vapeur à circuler sur le Saint-Laurent; en 1817, le «Frontenac» devint le premier navire à vapeur à circuler sur les Grands Lacs.

On vit par contre apparaître un peu partout des routes carrossables entre les villes principales, si bien qu'au début du dix-neuvième siècle on pouvait, par diligence, se déplacer de Québec jusqu'à York (Toronto) et atteindre Boston en Nouvelle-Angleterre. On commença à construire systématiquement des routes provinciales après la guerre américaine de 1812.

Malgré tous ces développements, les transports par eau devaient, chaque année de novembre à la fin d'avril, s'arrêter à cause de la présence des glaces. Seuls les ports situés le long du littoral de l'Atlantique restaient ouverts en toute saison.

Le réseau routier était encore très primitif et inutilisable en certaines saisons. C'est pourquoi la construction du premier chemin de fer au Canada est une date extrêmement importante dans notre histoire des modes de transport. Quand le premier train circula, en 1836, entre Laprairie et Saint-Jean dans le Québec, on trouva ce jour-là la réponse au problème d'offrir en toute saison un moyen de transport sûr et efficace.

Ce n'est qu'à partir de 1850 que l'on commença vraiment à construire un réseau ferroviaire par rapport à la population qui était concentrée dans les parties sud de l'Ontario et du Québec et dans les provinces maritimes, et là où la révolution industrielle s'implantait. Le navire continuait, bien sûr, d'assurer les liaisons maritimes avec les pays étrangers et entre les régions riveraines non encore desservies par rail. Toutefois, le rail en tant que facteur d'expansion et de consolidation du territoire devait jouer son plus grand rôle lors de la construction du chemin de fer Pacifique-Canadien vers l'Ouest. C'est en 1885 que l'on put enfin atteindre la Colombie-Britannique et le littoral du Pacifique. Ainsi le chemin de fer, en partant de la grande plaque tournante qu'était Winnipeg, ouvrit de grand espaces au peuplement et à l'agriculture céréalière. A l'âge des fourrures et du bois allait succéder l'âge du blé.

Au cours de cette deuxième moitié du dix-neuvième siècle, les armateurs des ports du Saint-Laurent, surtout ceux de Montréal, afin de conserver les avantages acquis par le navire, firent creuser le chenal en aval de Montréal. D'autre part, en amont, le gouvernement entreprit la construction de nouveaux canaux à quelque 12 pieds de profondeur. C'est ce système qui devait rester en vigueur jusqu'à l'ouverture en 1959 de la voie maritime du Saint-Laurent, telle qu'on la connaît aujourd'hui. On développa considérablement les ports de commerce des Grands Lacs, du Saint-Laurent et des côtes de l'Atlantique.

Avant que le réseau ferroviaire étende ses ramifications et monopolise le transport des gens et des marchandises, l'automobile faisait son apparition dans les rues de Toronto, Montréal, Ottawa et Québec. La première guerre mondiale de 1914-1918 marqua la fin de la grande période de construction des chemins de fer au pays et le début de l'expansion des réseaux routiers. Il s'agissait d'une expansion complémentaire, bien entendu, à l'essor extraordinaire de l'automobile, du camion et de l'autobus, phénomène nord-américain typique. L'automobile s'avéra donc, à partir de 1920, une menace directe au rail. Elle donnait aux Canadiens un deuxième réseau de transport intérieur, ouvert douze mois par année, efficace et rejoignant les hameaux et villages les plus reculés.

Dans la période de l'entre-deux-guerres l'avion avait permis d'explorer les vallées du Mackenzie, du Yukon et les lacs des Territoires du Nord-Ouest. Les pilotes de l'Arctique canadien s'étaient fait une réputation enviable.

Au cours du deuxième conflit mondial (1939-1945), l'aviation militaire fit d'énormes progrès. Il était donc normal qu'avec le retour de la paix, on adapta les types d'avions aux besoins commerciaux. Tout se fit à la fois dans le domaine des transports aériens au Canada à partir de 1945; on construisit des aéroports, on fonda des compagnies d'aviation, on établit des liaisons aériennes avec

l'étranger et on compléta l'exploration des territoires de l'Arctique canadien.

Qu'il suffise de rappeler que des grandes compagnies canadiennes comme Air-Canada qui a célébré son vingt-cinquième anniversaire en 1962 et le Pacifique Canadien il y a quelques mois, pour comprendre que l'essor de l'aviation commerciale correspond à la phase du développement économique le plus diversifié et le plus industrialisé qui soit au pays. L'avion était le premier mode de transport qui n'obéissait pas à la géographie du pays.

Un autre moyen de transport, le pipeline, connut aussi un grand essor dans les années cinquante avec la construction des grands pipe-lines trans-canadiens qui transportent aujourd'hui le pétrole et le gaz naturel des Prairies à peu près partout entre Montréal et Vancouver.

C'est pendant les années cinquante qu'on construisit des lignes ferroviaires spécialisées, en ce sens qu'on construisit ces lignes entre les ports du golfe Saint-Laurent et les mines de fer de Terre-Neuve et du Nouveau Québec. Ce développement économique régional important était relié à l'ouverture de la voie maritime et à l'approvisionnement en minerai de fer des industries sidérurgiques des Grands Lacs.

Pour mieux estimer le rôle que joue aujourd'hui chacun des principaux modes de transport, nous présentons le tableau suivant:

Pourcentage du trafic interurbain par mode de transport

	1938	1941	1951	1956	1965
Eau	42.2	27.4	24.5	23.8	26.5
Rail	54.7	69.5	63.8	55.8	41.8
Route	3.1	3.1	8.2	7.5	9.3
Air	—	—	—	—	—
Pipe-line	—	—	3.5	12.9	22.4

SOURCE: Bureau Fédéral de la Statistique.

Ces pourcentages ne représentent qu'un genre de trafic commercial. Si l'on y ajoutait le trafic des camions de fermes, et celui des camions privés, et si l'on ajoutait le trafic des automobiles privées servant au transport des voyageurs à travers le pays, il est évident que la route représenterait un fort pourcentage du trafic total aujourd'hui.

Tout de même, le rail et l'eau continuent d'occuper une place prépondérante. Les transports par eau depuis l'ouverture de la voie maritime en 1959 ont gagné quelques points et maintiennent leur part du trafic. Les chemins de fer cependant déclinent et perdent du terrain. Les pipe-lines ont capturé une grande partie du trafic des pétroles et du gaz naturel. C'est le moyen de transport qui a réalisé les plus grands gains au cours des quinze dernières années.

Cet article est le premier d'une série qu'on se propose de faire paraître dans la revue au cours des mois à venir. Ces articles, reproduits avec l'autorisation des auteurs, ont paru dans la revue française «Transports» qui a consacré son numéro de juin dernier à l'évolution des transports au Canada.

This is the first in a series of articles by experts on Canadian transportation which will appear from time to time on these pages. Taken from "Transports," the voice of the transportation industry in France, the articles were commissioned for a special edition of the magazine published to mark Canada's Centennial.

Main route to the north. *Un coin isolé du Nord.*

their work helps speed our nation's business

by Bryan Goodyer
Information Services Division

A relatively little-known but vitally important agency of the Department of Transport is working toward the day when any Federal Government employee in Saint John for instance can dial a Government telephone in Vancouver or any major Canadian city without the aid of an operator.

"Right now the system exists only between Ottawa, Toronto and Montreal, but we're working toward the day when everyone will be able to call everyone else," says J. B. (Jack) McDermott, commercial staff officer with the Administrative Telecommunications Agency which co-ordinates the communications needs of all Government departments and agencies.

Operators on the special government switchboard at the Bell Telephone Company building in downtown Ottawa help speed local and inter-city calls that get Canada's business done.

Les téléphonistes attachées au standard téléphonique spécial du gouvernement à l'édifice de Bell Canada, à Ottawa, s'acharnent à diriger le plus rapidement possible les appels urbains et inter-urbains nécessaires à l'administration des affaires de l'État.

The job is complex but has, nevertheless, paid off in tremendous savings since the ATA was established in February 1965.

In certain cases, it now costs less to make an inter-city call than to write a letter. Savings of $4,000,000 were reported in 1966 for long distance calls that would have cost the Government $5,500,000 at direct distance dialing rates.

The cost of a typical six-minute long distance Ottawa-Montreal call during office hours is $3.25 at the commercial person-to-person rate, $1.55 by direct distance dialing, but only 13 cents through the private Government system.

(The cost of letters is estimated by various management authorities at $1.50 to $2.50 and up, depending on several factors. The average cost of Government telegrams is about $2.10 each when sent the regular way, or 85 cents by Telex.)

The Government is the biggest customer of the Bell Telephone Company of Canada in terms of dollars, geography and people.

As G. H. Mellen, Federal Government communications manager for Bell says: "The Government is run as a tremendously large corporation, staffed by astute business-conscious men who like to drive a hard bargain. Many of the services we provide are in a competitive field, which means we have to be ready to meet their needs faster and better than the other fellow if we want to keep or increase our share of the Government's communications dollar."

That dollar is a big one.

Last year the Government spent $40,000,000 on communications including everything from the most complex needs to the girls who operate the prime minister's special switchboard.

We have, one might conclude, come a long way from the Government telephone system which originally consisted of small switchboards in the individual departments.

These were amalgamated into one large facility in Ottawa during the Second World War for reasons of efficiency and economy.

In the 22 years that followed, most departments have been greatly expanded, new ones have been created and these and Crown agencies now have a huge volume of long distance telephone calls to make all over Canada and often overseas.

The ATA was set up in 1965 as a result of the Glassco Commission report and the first training courses for telecommunications service officers were held a year later.

Today the agency has a staff of 15 working out of the D.O.T.'s Number Three Temporary Building in Ottawa and 18 officers working in six regions across the country that correspond to the Department's six Air Services regions.

The agency holds continuing training seminars to keep its officers in the field up to date on the direction of its rapidly expanding facilities and to keep departmental telecommunications officers aware of new services.

Now that telephone service between Ottawa, Toronto and Montreal is integrated, the agency is working on plans to include Quebec City, Halifax, London (Ont.), Winnipeg, Edmonton, Victoria, and others.

"Before 1970, direct private line dialing should be available for all unrestricted consolidated Government telephones, although subject to administrative and physical restraints which have yet to be worked out for departmental controls and equitable expense recovery," said V. C. McDonald, who has been acting as administrator until the recent appointment of A. Bruce Donaldson as chief of the agency.

Despite its long range plans and diverse activities in every phase of Government communications, the heart of the agency's job still remains with the 60,000 telephones on public servants' desks.

Ottawa has 27,750 consolidated Government telephones and 24 operators, Toronto has 1,873 telephones and nine operators, and Montreal has 1,171 telephones staffed by four operators.

In the course of its work, the ATA has learned quite a bit about the people it serves.

The average installation has two telephones and four or five people who use them, making altogether about two commercial long distance calls as well as eight Government System inter-city calls each month.

At least one of the commercial calls on the average could have been made for 85 cents on the Government's facilities instead of $2.85, which indicates, says the ATA, that one person in five needs more instruction on how to use the "Directions" in his Government Directory.

The remaining four out of five are placing their calls efficiently and making them at an average $9.40 expense per month per Government main line, compared to a cost of $30 if these calls had been placed through commercial services.

nommé chef de l'ATA

M. A. Bruce Donaldson, âgé de 44 ans, de Montréal, a assumé récemment la direction de l'Agence des télécommunications administratives au ministère des Transports.

La nomination de M. Donaldson, ingénieur des télécommunications, est la première faite à la suite d'une campagne de recrutement effectuée dans tout le pays en vue du choix de quatre spécialistes pour diriger les divisions techniques au sein du nouveau Bureau des télécommunications de l'État.

La création de ce Bureau a été recommandée par la Commission Glassco. Son organisation a été confiée à M. F. G. Nixon, ci-devant directeur des Télécommunications et de l'Électronique au ministère. Le Bureau est chargé de recommander, sous réserve de leur étude par le ministère ou le gouvernement, des régimes et lignes de conduite d'ensemble en matière de télécommunications, tant de nature nationale qu'internationale. Il doit également coordonner les services de télécommunications du gouvernement fédéral.

A titre de chef de l'Agence des télécommunications administratives, M. Donaldson est chargé des besoins des ministères et des organismes du gouvernement fédéral en matière de télécommunications et collabore dans ce domaine avec les sociétés commerciales.

Il est également chargé de la gestion des services de télécommunications interurbains unifiés et d'autres services des communications administratives. Il participe à la prévision des tendances d'ensemble des besoins en matière de télécommunications et dirige l'établissement des normes techniques qui doivent être appliquées.

Natif d'Orillia, en Ontario, M. Donaldson détient un baccalauréat en sciences appliquées de l'Université de Toronto.

chief named to head ATA

A. Bruce Donaldson, a 44-year-old Montreal telecommunications engineer, has assumed his appointment as chief of the Administrative Telecommunications Agency with the Department of Transport.

Mr. Donaldson's is the first appointment arising from a Canada-wide search for four experts to head technical divisions within the Department's new Telecommunications Policy and Administration Bureau.

The Bureau, which is being organized by F. G. Nixon, former director of the Telecommunications and Electronics Branch of the Deparment, has been established in line with recommendations of the Glassco Commission to develop, co-ordinate and recommend broad telecommunications plans and policies both national and international for appropriate ministerial or government consideration and to assist in co-ordination of the federal Government's telecommunications services.

As chief of the ATA, Mr. Donaldson will be responsible for the administrative telecommunications needs of the federal Government departments and agencies and for co-operation with commercial companies.

He will also be responsible for the management of the consolidated intercity and other administrative telecommunications services, will participate in forecasting broad trends of telecommunications requirements and directing the development of technical standards to be applied.

A native of Orillia, Ont., Mr. Donaldson has been employed by the Bell Telephone Company of Canada at Montreal since his graduation from the University of Toronto in 1950 with a Bachelor of Applied Science degree.

He is married and has four children.

Des étudiants d'un collège américain adoptent le n.g.c.c. "Alexander Henry"

Un navire de la Garde côtière canadienne, le brise-glace baliseur «*Alexander Henry*», a maintenant son nom inscrit en toutes lettres à l'entrée d'un édifice sis au cœur du campus d'un collège américain. Il s'agit d'une initiative des étudiants de Lake Superior State College, à Sault Ste-Marie, au Michigan, qui ont décidé de nommer une aile de leur résidence en l'honneur du navire canadien qui, depuis 1962, patrouille les eaux des Grands Lacs au service de la navigation maritime.

Le geste posé par les étudiants a été officiellement reconnu par la Garde côtière, en octobre dernier, lorsque le navire, au terme d'une de ses dernières missions dans le lac Supérieur avant l'arrivée des neiges, s'est arrêté à Sault Ste-Marie, en Ontario, pour accueillir les étudiants du collège venus à sa rencontre.

Les étudiants, en compagnie de leur doyen, M. Bernard Smith, ont été reçus à bord par le capitaine Eudore Vézina et les membres de son équipage. Après une visite du navire, le capitaine a remis aux étudiants, en guise de souvenir, une magnifique photo en couleur du n.g.c.c. «*Alexander Henry*». La photo a été prise au cours des mois d'été alors que le brise-glace naviguait au large de son port d'attache, à Parry Sound, Ontario. Les étudiants se proposent de l'accrocher au tableau d'honneur à l'entrée de leur résidence.

Sans doute banal en soi, l'événement mérite tout de même d'être signalé, croyons-nous, puisqu'il constitue en fait une autre preuve de l'intérêt que suscite aussi bien à l'étranger que chez nous le travail de la Garde côtière canadienne.

Pour les étudiants eux-mêmes, c'était une expérience sans doute fort enrichissante. La plupart de ces jeunes montaient pour la première fois à bord d'un brise-glace canadien. Ils en sont repartis avec la conviction d'avoir ajouté quelque chose d'important à leur bagage de connaissances générales. Pour le capitaine Vézina et les membres de l'équipage, le moment vécu au contact d'un groupe aussi intéressé a été des plus agréables.

Les services de la Garde côtière canadienne sont en grande demande dans la région des Grands Lacs depuis un certain nombre d'années, surtout depuis l'ouverture de la Voie maritime du Saint-Laurent. Les navires patrouillant ces eaux sont attachés aux agences de la marine du ministère des Transports à Parry Sound et à Prescott, en Ontario. Le ministère a également une sous-agence à Port Arthur.

La flotte du ministère opérant dans les Grands Lacs se compose d'une quinzaine de navires, dont deux, soit le n.g.c.c. «*Alexander Henry*» et le n.g.c.c. «*Simcoe*», sont des brise-glace légers qui, en plus de s'adonner à la pose et à l'entretien des bouées et balises ainsi qu'au ravitaillement des phares, sont chargés du déglaçage nécessaire pour garder les voies ouvertes pendant la saison de navigation. En juin 1969, un nouveau brise-glace à deux hélices, actuellement en construction chez Davie Shipbuilding, à Lauzon, au Québec, sera mis en service dans les Grands Lacs.

Les autres navires de la flotte, utilisés surtout pour le balisage, sont le «*Grenville*», le «*C. P. Edwards*», le «*Nokomis*», le «*Kenoki*», le «*Parry Sound*», le «*Navaid II*» et le «*Marmot*». Plus légers, ces navires ne sont pas renforcés pour naviguer dans les glaces et servent plutôt comme bateaux de travaux.

A ceux-là s'ajoutent les cotres de recherches et de sauvetage qui patrouillent régulièrement les Grands Lacs pendant toute la saison de navigation. Ces cotres sont équipés de tout l'outillage nécessaire pour secourir les naufragés. L'un d'eux a même le personnel et l'outillage pour faire des réparations sous-marines temporaires à un navire en détresse. Quatre cotres de recherches et de sauvetage, soit le «*Relay*», le «*Spume*», le «*Spray*» et le «*Spindrift*» sont attachés à l'agence de Prescott. Un cinquième est affecté aux recherches et au sauvetage dans la région de Windsor.

Face à l'expansion que prend le commerce maritime dans la région des Grands Lacs, les responsabilités de la Garde côtière canadienne, comme on peut le constater, augmentent à un rythme accéléré dans ce secteur du pays. Le geste que viennent de poser les étudiants d'un collège du Michigan, en nommant une aile de leur résidence en l'honneur d'un de nos navires, doit enfin servir à nous rappeler l'importance du rôle joué par la Garde côtière non seulement dans la région des Grands Lacs mais partout où ses services sont requis.

WELCOME ABOARD—*Students from Lake Superior State College at Sault Ste. Marie, Michigan, are welcomed aboard CCGS Alexander Henry at Sault Ste. Marie, Ont. The students, who named a new wing of the college in honor of the Canadian icebreaker, were invited aboard by Captain Eudore Vezina, centre, who presented them with a color photograph of the ship, while Connie Mattson, left, and Louis N. Rassay responded by presenting the ship with a pennant inscribed with the college's name.*

(Photo courtesy Sault Daily Star)

BIENVENUE À BORD—*Des étudiants de Lake Superior State College, à Sault Ste-Marie, au Michigan, sont accueillis à bord du n.g.c.c. "Alexander Henry". Les étudiants, qui ont nommé une aile de leur résidence au collège en l'honneur du brise-glace canadien, étaient les invités du capitaine Eudore Vézina qui leur a remis en guise de souvenir une photo en couleur du navire. On voit, au premier plan, le capitaine en train de présenter la photo à Mlle Connie Mattson, alors qu'un autre étudiant, Louis N. Rassay, lui remet un fanion portant l'emblème du collège.*

(Photo du Sault Daily Star)

students honor coast guard ship

A modern new addition to the campus of Lake Superior State College at Sault Ste. Marie, Michigan, proudly bears the name of the Canadian Coast Guard Ship *Alexander Henry*.

The new building was named in honor of the 1,674-ton Great Lakes icebreaker in a gesture of international goodwill by the college's student body.

The students' generosity was officially recognized by the Coast Guard last October when the Parry Sound-based ship, nearing the end of its last trip into Lake Superior before freeze-up, stopped at Sault Ste. Marie, Ont., for a special meeting with the students who had informally "adopted" it.

A group of them, accompanied by Dr. Bernard Smith, dean of students at Lake Superior State College, were welcomed aboard the *Alexander Henry* by Captain Eudore Vezina and the members of his crew.

Following a tour of the icebreaker the students were presented with a large framed color photograph of the ship which will hang in the entrance to the new wing.

For the students, the visit provided an unusual experience because they had never before been on board a Canadian ship while, for the crew, it afforded an excellent opportunity to show off their ship to an unusually interested audience.

The fleet operated by the Department of Transport in the Great Lakes comprises a dozen ships based at marine agencies at Parry Sound, Ont., on Georgian Bay, Prescott, Ont., on the St. Lawrence River, and a sub-agency at Port Arthur, Ont., near the head of the lakes.

Of this fleet, the *Alexander Henry* and CCGS *Simcoe* are light icebreakers which, in addition to maintaining aids to navigation and supplying lighthouses on the Great Lakes, are used to keep the shipping lanes free of ice during the navigation season.

In June 1969, a new icebreaker now in construction at the yards of Davie Shipbuilding at Lauzon, Que., will join a fleet that includes ships with such names as *Grenville, C. P. Edwards, Nokomis, Kenoki, Parry Sound, Navaid II, Marmot, Relay, Spray, Spume* and *Spindrift*.

Facing the continued expansion of maritime traffic on the Great Lakes the responsibilities of the Canadian Coast Guard are becoming increasingly heavier and so the students' gesture in naming a wing of their residence in honor of one of these ships serves perhaps to underline the importance of the role played by the Coast Guard, not only in the Great Lakes, but wherever its services are required.

five bursary winners now deep in studies

by Bryan Goodyer
Information Services Division

The five winners of the 1967 Department of Transport bursaries are now deep in the throes of their first year at college, thanks in part to a generous gesture nearly five years ago by D.O.T. employees.

The five, who include three girls and two boys, are: Gwenyth L'Hirondelle, Fort Nelson, B.C., Denise M. A. Schuetze, Sidney, B. C., Cheryl L. Stewart, Ottawa, John Roger Walker, Winnipeg, and Paul Graham Knox, Vancouver.

All were awarded $500 bursaries as part of the Department's annual student aid program designed to encourage and financially assist children of serving, retired and deceased employees of the Department to obtain a university education.

The funds for these bursaries are derived from the annual interest revenue from the investment of the balance of $25,000 in surplus D.O.T. insurance funds remaining after plebiscites held in 1961 and 1964, in which employees elected either for the return of their pro rata share of the surplus funds or to have their share transferred to the scholarship fund.

Revenue from the trust fund, although originally sufficient to provide for only three bursaries, now provides for five annual awards.

Gwenyth L'Hirondelle

Gwen L'Hirondelle, daughter of P. D. L'Hirondelle, officer-in-charge of the weather office at Fort Nelson, B.C., was born at Peace River, Alberta, 16 years ago.

After completing her elementary grades in Whitehorse, Yukon Territory, and junior high school in Fort Nelson, she graduated from Grade 12 at Victoria Senior Secondary School with a 91 per cent average.

Gwen, whose hobbies are music, sewing and swimming, is now attending the University of Victoria where she is majoring in English.

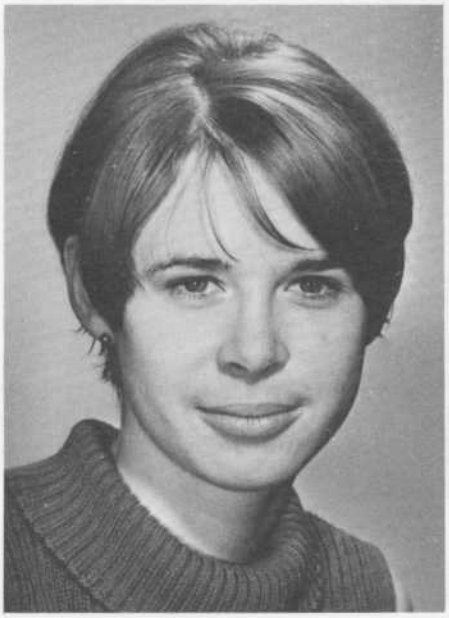
In addition to the D.O.T. Bursary, she also received a scholarship from the Government of British Columbia and the Sara and Jean MacDonald Bursary, administered by the University of Victoria.

Denise M. A. Schuetze

Denise, daughter of E. E. Schuetze, a mechanic at Victoria International Airport, was born in Bella Coola, B.C., and attended elementary school in Keremeos and Vancouver before graduating from North Saanich High School, Sidney, B.C.

A member of the biology club at the University of Victoria where she is studying bacteriology toward a Bachelor of Science degree with honours, Denise is interested in sewing, cooking, playing the guitar and being outdoors.

After graduation, the youthful scholar says she would like to obtain her Master's degree in Science and perhaps join the National Research Council.



Cheryl L. Stewart

Daughter of Roger M. Stewart, an electronics technician at headquarters, Cheryl is taking a science course toward a Bachelor of Science degree with honors in chemistry at Carleton University.

The 18-year-old scholar, who was named an Ontario Scholar and won the $400 Francis C. C. Lynch Scholarship in addition to the D.O.T. Bursary, is a graduate of Brookfield High School in Ottawa.

John Roger Walker

John Roger Walker, 17, son of Roger H. Walker, superintendent of works and plant services for the Winnipeg air services region, was an honor student throughout high school.

Graduating from River East Collegiate, John received an average of 88.8 per cent in his Grade 12 examinations, won the first Isbister Scholarship awarded in his district, a $250 Centennial Scholarship and a $150 award from the Municipality of North Kildonan for having the highest average in his high school in addition to the D.O.T. Bursary.

John is currently enrolled in science at the University of Manitoba, is interested in camping, travelling and the outdoors, but as yet is undecided as to a future career.

Paul G. Knox

Paul, son of J. L. Knox, regional meteorologist with the Vancouver air services region, was born in Toronto and attended elementary school there.

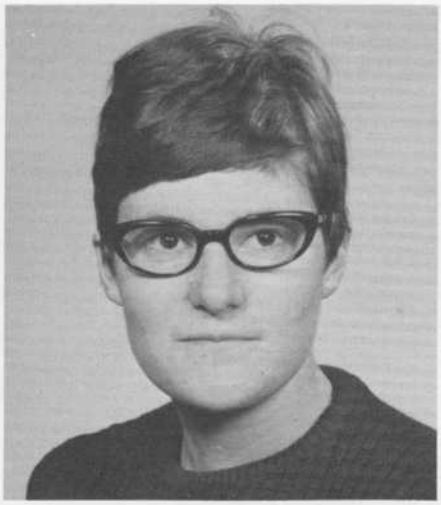
After attending Burnhamthorpe Collegiate for two years, Paul enrolled at Magee High School in Vancouver when his father was transferred to the west coast.

Active in musical productions, the student council and the school newspaper, Paul graduated from Magee with first class honors and is now enrolled in first year arts at the University of British Columbia.

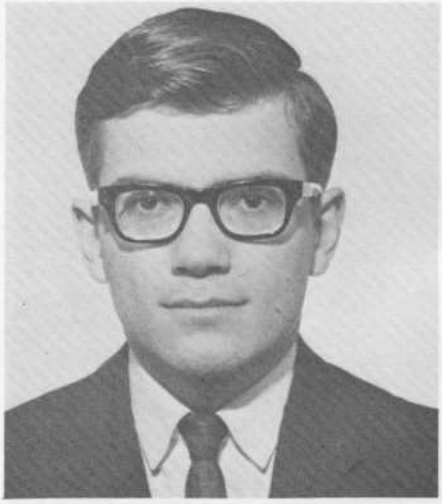
In addition to the D.O.T. Bursary, Paul won a $300 B.C. Government scholarship.

He plans to take an honors degree in sociology and then go into either law or town planning.

where are they now?



Roberta Pattison



Howard Baker

G. K. Hryciw

It was just over four years ago that the first D.O.T. "scholars" were named and presented with $400 bursaries to help them finance their first year of college.

Where are they now?

Roberta Pattison, now 22, daughter of Robert F. Pattison, officer-in-charge of the meteorological station at Saskatoon, has completed four years of higher education at the University of Saskatchewan.

After completing the two-year pre-veterinary course, she was accepted into the first class of the new Western College of Veterinary Medicine and is now midway through the four-year course, reports her dad.

Roberta spent last summer working in the Department of Pathology at the college.

G. Kenneth Hryciw, now 20 years old, the son of Edmonton air traffic controller Emile Hryciw, has completed three years towards an honours degree in mathematics, taken a year off to earn money to return to university and is now back at the University of Alberta in Calgary to complete his education.

Howard J. M. Baker, who is now 21, has also just returned to Dalhousie University in Halifax after taking a year off to work.

The son of Howard Baker Sr., a D.O.T. radio technician at Gander, Newfoundland, Howard expects to complete his studies and receive his Bachelor of Science degree in the Spring.

in pursuit of excellence

Among the many sons and daughters of D.O.T. personnel who have excelled academically in addition to the five annual bursary winners is Melissa Keddie, daughter of D. D. G. Keddie, executive assistant to the assistant deputy minister for air.

Melissa, who graduated from Ottawa's Lisgar Collegiate with a total of nine awards, is now deep in studies at York University's Glendon College where she is taking a general arts course specializing in languages and the humanities.

Among her prizes, Melissa counted the York University governor's scholarship, valued at $1,500, and the $400 awarded her as an Ontario Scholar because she scored an average of more than 80 per cent in her Grade 13 examinations.

In addition, Melissa won the Christie-Hill medal for French, the James Hope medal for history, the Madaleine de Vercheres Chapter of the Imperial Order Daughters of the Empire scholarship in Grade 13 history, the Thomas Wardrope scholarship for classics, the Ontario Department of Education award for the highest mark in Ontario in Grade 13 history, the silver medal for an average of 90 per cent on her year's work, and the Upper School cup for standing highest in her grade.

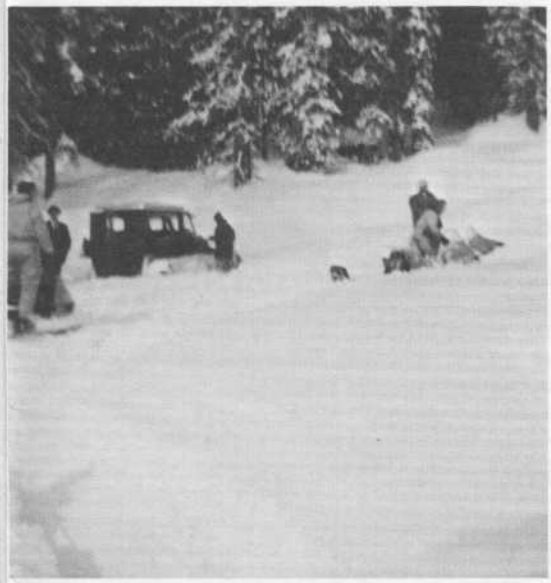
And the future?

"Melissa has always been interested in the United Nations and its endeavors," says Mr. Keddie. "She's looking forward to work among the developing countries of the world after graduation."

Melissa Keddie

d.o.t. technicians reach for the top

by William Dunstan
Information Services Division



Halfway up Mara Mountain, the D.O.T. crew finds it tough going in 18 inches of fresh snow.

D.O.T. employee at way station, three miles from the top of Mara Mountain.

When the snow flies, spare a thought for the telecommunications and electronics staff at Enderby, B.C., and their twice-weekly climb up Mara mountain to check the Vortac station that nestles right inside the summit.

The three-man crew consists of Dick Archer, officer-in-charge; W. D. Sheldon and A. Efting. Their office is located in the Village of Enderby, from which they make their periodic trips up the mountain.

In winter, the trip is made in a tracked vehicle up the snow-covered bush road, a distance of about 15 miles. Earl Porter, Telecom's chief of operations, vividly recalls one such trip.

"One of the treads on our vehicle broke," he said, "and we had to go up by foot in order to call for repairs. I jumped out before putting on my snowshoes, and immediately sank above the waist in loose, powdery snow."

At 6,600 feet above sea level, the VOR above Enderby is second highest in Canada. Other sites in the Rockies are at Kimberley, 7,500 feet; Princeton, 5,500 feet, and Victoria, 2,000 feet. They form the last link in a VOR air navigation system right across Canada.

VOR, which tells the pilot the direction of his position from the station, is difficult to install in mountainous terrain because the signal may bounce off surrounding peaks, thus giving the pilot erroneous information. The usual procedure is to place the antenna close to the ground in the centre of a large level area on the highest mountain peak in the immediate area. In this manner the surrounding terrain is "hidden" from the antenna so that no radiation is reflected.

At Enderby, they provided a flat expanse by blasting off the top of the mountain and constructed the building underground. It is connected with the outside by means of a tunnel.

In addition to VOR, the Enderby station is equipped with a Tacan unit, a navigational aid which gives the pilot his bearing and distance from the unit. It is thus categorized a "Vortac" station.

Three miles up the mountain is a non-directional beacon and a remote transmitter for direct controller-pilot communications. This spot, which is near an automatic weather station reporting to the office in the village, is equipped with sleeping accommodation and a kitchen for use by the inspection team, which uses it as a base camp for the climb to the top. The Vortac location is extremely noisy due to air conditioners and other machinery and unsuited for a lengthy stay. There is accommodation at the top, however, in case the party is marooned by storms or for any other reason. Walkie-talkie sets are carried for communication with the village in case of difficulties and there have been occasions when a helicopter was engaged to bring a party down from the top.

No sympathy is due the crew in summer, however, for then the mountain is transformed. The large area at the top is an alpine meadow lush with green grass and a wide variety of floral colour. Vehicles must keep to the gravelled road for the swampy meadows will not support their weight except in winter. The men are free to stroll, however, among the lovely, rare plants which attract nature study groups from miles away.

TRANS-CANADA

Tribute to Canada

Confederation Point, N.W.T.—

EN L'HONNEUR
DU CENTENNAIRE DE LA CONFÉDÉRATION
CANADIENNE
ERECTED BY THE CADETS OF THE
CANADIAN COAST GUARD COLLEGE
SERVING ABOARD
C.C.G.S. LABRADOR
COMMANDED BY CAPTAIN I. GREEN
IN POSITION
80 38'30" N 87 15' W
NOW NAMED
CONFEDERATION POINT
AUGUST 24, 1967
A MARI USQUE AD MARE

With these words, Canada's most northerly Centennial project was dedicated last summer by 14 cadets from the Canadian Coast Guard College at Sydney, N.S., serving aboard the Canadian Coast Guard Ship *Labrador*.

The cairn was erected on an unnamed point north of the Department of Transport weather station at Eureka on Ellesmere Island, less than 600 miles from the North Pole.

Suggestion Awards

Ottawa—Two Department of Transport employees received $30 suggestion awards recently for suggestions that improved operations.

J. P. Francis of Peterborough, Ont., a lockmaster at the Hyde Lift Lock on the Trent Canal, won his award for a suggestion that led to the elimination of a vexing engineering problem in the construction of coffer dams at canal locks.

C. W. Purchase, a lightkeeper at Cape Bonavista, Bonavista, Nfld., won his award for suggesting an improvement to the construction of water cisterns at D.O.T. lighthouses.

THE MAKING OF HISTORY—*Captain Ivan Green, master of the Canadian Coast Guard Ship* Labrador, *and (left to right) Cadets Robertson, Maillette and Purney of the Canadian Coast Guard College at Sydney, N.S., were among a group of cadets and ship's officers who literally made history last summer when they completed Canada's most northerly Centennial project, the erection of a cairn on a point of land on remote Ellesmere Island dedicated to Confederation. The photographs taken and the story of the project (see "The DOT" of September-October 1967) are now a part of the College's official history.*

UN GESTE QUI PASSE À L'HISTOIRE—*Le capitaine Ivan Green, du n.g.c.c.* "Labrador", *est photographié ici en compagnie de trois élèves-officiers du Collège de la Garde côtière canadienne devant un cairn érigé, comme projet du Centenaire, sur l'île Ellesmere, aux confins nord de l'Arctique. Un cairn jumeau, renfermant des documents sur la Garde côtière et sur le collège ainsi que des voeux du Gouverneur général Roland Michener, a également été érigé sur l'emplacement du collège à Sydney, N.-É. (Voir numéro de septembre-octobre 1967 de la revue* "The DOT"). *Les élèves-officiers dans la photo sont, de gauche à droite, Robertson, Maillette et Purney.*

Special Stamp to Honor Met.

Ottawa—The Post Office Department has announced that a special stamp commemorating the 200th anniversary of the first meteorological readings made in Canada will be issued on March 13.

The readings, the first recorded observations by barometer and thermometer in Canada, were officially recorded on Sept. 10, 1768 at Prince of Wales Fort near Churchill, Man.

There are, reports the Meteorological Branch, remarks on the weather of earlier record made by soldiers and explorers but these are largely non-instrumental and were made in transit rather than at a fixed point over a period of time.

The observations made at Prince of Wales Fort were published in the Philosophical Transactions of the Royal Society in 1771 by William Wales and Joseph Dymond, both prominent scientists of the day who had come out to Hudson Bay as guests of the Hudson Bay Company and under instructions from the Royal Society to observe the transit of Venus.

Wales, one of the foremost astronomers and mathematicians of his time, later accompanied Captain Cook on his two voyages around the world.

The Wales and Dymond observations were made under the headings of barometer, thermometer (one inside, one outside), winds, weather and other miscellaneous headings.

Observations were made three times a day on the average, but there are some days with two, some with three, and the occasional day with as many as five observations.

The first weather entry dated Sept. 10 notes it was "rainy with a gentle breeze" and the final one records that the two weathermen "took down the instruments and packed them up."

"These men," our meteorologists agree, "would be most intrigued with

the way in which the weather, which is now observed at the airport, about 10 miles from Fort Churchill, is gathered."

MUTATIONS À LA GARDE CÔTIÈRE—*Le capitaine Charles-H. Couillard, en bas à droite, vient d'assumer le commandement du n.g.c.c.* Simon Fraser, *en remplacement du capitaine Elphège Pelletier, à gauche, qui se voit confier le commandement du nouveau brise-glace de la Garde côtière canadienne, le* J. E. Bernier. *Le capitaine Couillard, dans les services de la marine du gouvernement depuis 1936, était capitaine à bord du n.g.c.c.* Chesterfield. *Le capitaine Pelletier, de son côté, est à l'emploi du ministère des Transports depuis 1953. Il a également servi comme officier à bord du* Chesterfield *et a occupé diverses autres fonctions avant d'être nommé capitaine du* Simon Fraser *en juin 1965.*

He also enlisted the aid of a second aircraft which his radar indicated was in the area and was relieved to hear about 15 minutes later that the lost aircraft was over the Watertown field and landing.

Ottawa Tower subsequently received a letter of thanks from the pilot, Barbara Fasnacht of Lancaster, Penn., in which she explained how she came to get lost.

"For you it may have been the routine 'just-in-the-line-of-duty' procedure for which your air traffic controllers are so thoroughly trained," she said. "For me, of course, it was a potentially frightening experience during which your calm guidance and constant communication never permitted me to leap beyond concern and into panic."

"I only know that you were there and I was not alone," she added. "That was enough for me."

Met. Film Premieres

Ottawa—"In One day," the 18-minute color film on Canada's weather service, has been previewed and received "rave" reviews from members of the Meteorological Branch and senior D.O.T. officials in Ottawa.

The National Film Board has also announced that theatrical rights to the 35 mm film have been sold to Columbia Pictures for release in theatres across Canada.

The film, which gives a handsomely impressionistic view of what goes on day in and day out from Weather Station Alert to Ocean Station Papa to the outskirts of Metropolitan Toronto, was produced by a National Film Board crew under writer-director J. J. Carney.

It opens with a . . . but wait . . . why not see for yourself. Watch for it at your local theatre!

NEW COMMAND—*Captain Charles H. Couillard, right, takes command of* CCGS Simon Fraser *from Captain Elphège Pelletier, left, who has been named master of the Canadian Coast Guard's newest icebreaking supply ship,* CCGS J. E. Bernier. *Capt. Couillard, who joined the government service on July 7, 1936 as a seaman, was master of* CCGS Chesterfield *prior to his new appointment. Capt. Pelletier, who joined the D.O.T. May 2, 1953 as third officer aboard* CCGS Chesterfield, *and after several other appointments, was named skipper of the* Simon Fraser *on June 28, 1965.*

A Letter of Thanks

Ottawa—It was beginning to look like another routine night for Ron Williams, an air traffic controller in the Ottawa tower, when an urgent signal from the pilot of an aircraft apparently lost over the Ogdensburg-Watertown area of New York state broke in on the tower's normal activity.

Mr. Williams quickly but quietly identified himself, ascertained the relevant information, then proceeded to give the pilot directions for landing at Watertown Airport.

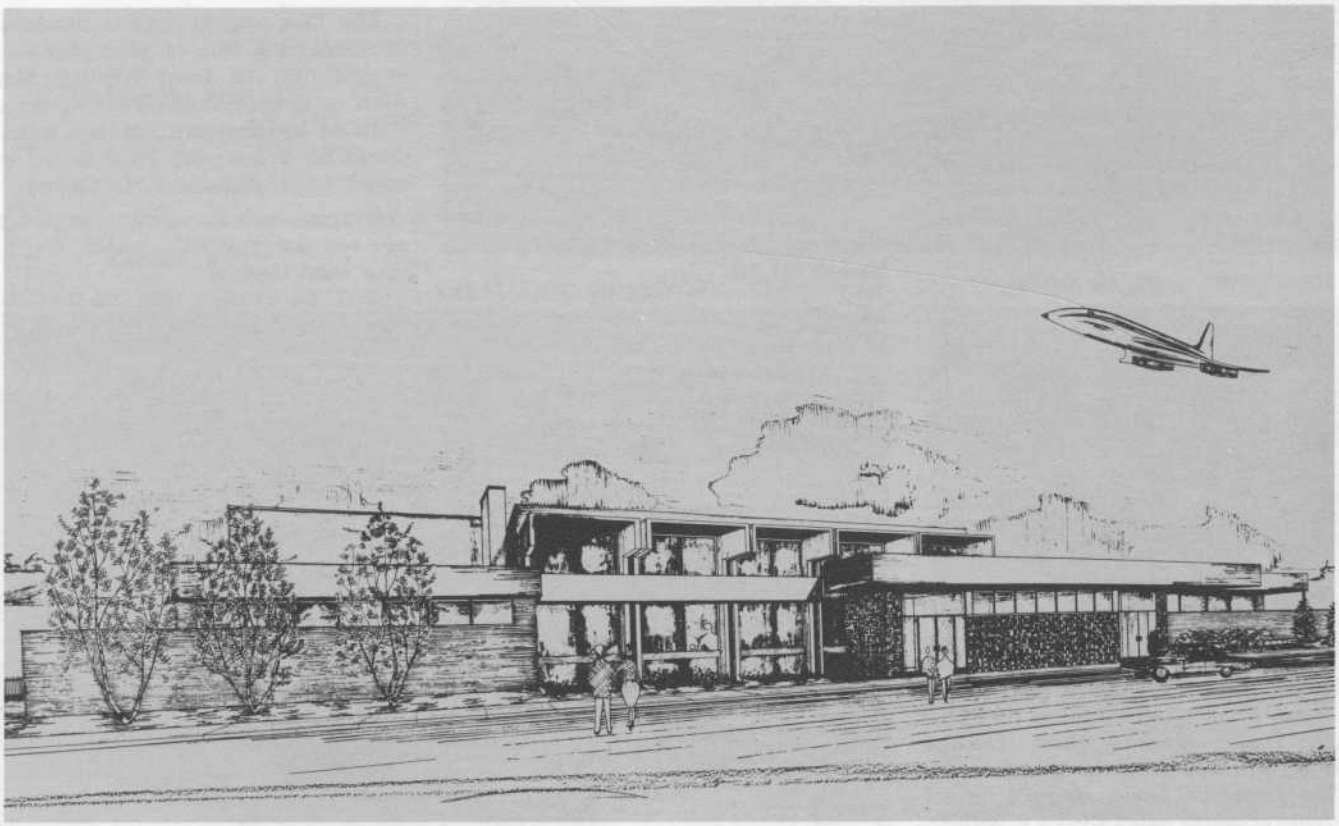
WATER, WATER EVERYWHERE—*West Coast lightkeepers and their families, who normally depend on the rain water they catch for household use, recently experienced a dry spell through a lack of moisture. To solve the problem,* CCGS Estevan *was pressed into service to get loads of water to the lighthouses. Water is taken aboard a barge off the Canadian Pacific Railways wharf at Nanaimo, then Second Mate Tony Fitch (above) pilots the barge out to the Gallows Point lighthouse where hoses are connected and the water races on its way to fill the tanks.*

DE L'EAU PARTOUT. . . MAIS RIEN À BOIRE—*Les gardiens de phares de la côte ouest se fient habituellement sur l'abondance de la pluie dans la région pour s'approvisionner en eau potable. La pluie s'est cependant faite rare pendant un certain temps, cette année, et il a fallu faire appel à la Garde côtière qui a dépêché le n.g.c.c.* "Estevan" *au secours des assoiffés. On voit ici un membre de l'équipage, Tony Fitch, qui, à l'aide d'une péniche, est allé cueillir de l'eau au quai du Canadien Pacifique à Nanaimo. Avec sa provision d'eau, il est en route pour le phare de Gallows Point.*

Transport

ALBUM

des Transports



SAGUENAY/BAGOTVILLE AIR TERMINAL

COST OF TERMINAL:
$460,000
NO. OF RUNWAYS:
Two, one 6,000 feet in length, the other 10,000 feet long.
PASSENGER TRAFFIC (1966):
92,339
AIRCRAFT MOVEMENTS (1966):
42,843
Officially opened Nov. 21, 1967

AÉROGARE DU SAGUENAY/BAGOTVILLE

COÛT DE L'AÉROGARE:
$460,000
NOMBRE DE PISTES:
Deux, l'une de 6,000 pieds et l'autre de 10,000 pieds.
NOMBRE DE VOYAGEURS (1966):
92,339
ARRIVÉES ET DÉPARTS (1966):
42,843
Inaugurée officiellement le 21 novembre 1967