

news on the

dot

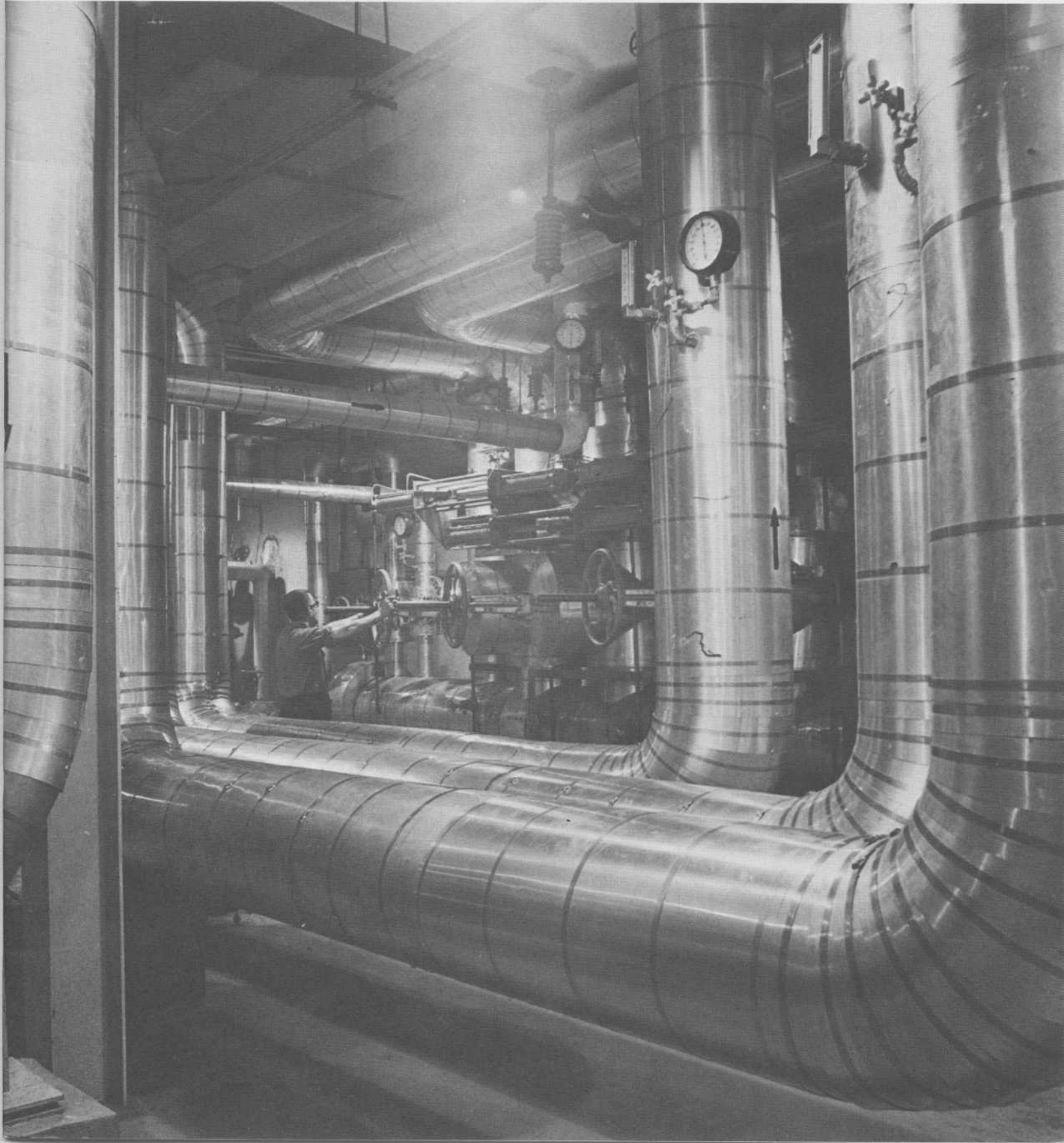
APR 28 1965

**THE OILMAN CALLS
TWICE A DAY**

**CANADA'S
LIGHTHOUSES**

CA.1. 2227

march/april 1965



CONTENTS

FROM THE DEPUTY MINISTER'S DESK LE MOT DU SOUS-MINISTRE	3
CANADA'S LIGHTHOUSES	4
THE OILMAN CALLS TWICE A DAY	7
GANDER WEATHER OFFICE	9
INTERNATIONAL CO-OPERATION YEAR	10
OPEN FOR BUSINESS 24 HOURS A DAY	12
ANNÉE DE LA COOPÉRATION INTERNATIONALE	14
D.O.T. SCHOLARSHIPS INCREASE	16
ICAO TRAINING AID	18
SUGGESTION AWARDS	19
RETIREMENTS	20
CROSS-CANADA DATELINE	22
CANADIAN COAST GUARD ALBUM	24

COVER

Aluminum-covered high temperature water lines at Montreal International Airport's central heating plant. See story, "The Oilman Calls Twice A Day", on page 7.

EDITOR

Yvonne McWilliam

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

In our July/August issue we sent up a trial balloon. Emblazoned on it was a question: Should News on the DOT change its name to the DOT or anything else, for that matter? Now we're wondering if the balloon is still rising or has it burst—experiment a failure?

Only four readers took up our challenge and as luck would have it they split on a name change—50-50.

Perhaps the balloon has burst, but with editorial blindness we'll assume it hasn't and is still rising. More letters like the following would help get us off the hook.

What's in a name?

Well—News On The DOT is rather a lot and a snappier title would simply be DOT.

T. E. APPLETON, Ottawa

What's in a name? Sometimes it matters a great deal.

Your proposal to change the name of our staff magazine is understood, but dropping the first two words of the name does not seem to leave a very attractive title. To me it does not sound something like "TIME", "LIFE" or "LOOK". Just dropping the first word "News", I believe, would leave a more topical caption. Or the word "News" in the present name might be replaced by the word "Views" and the result would sound smooth and familiar.

Working from this idea perhaps "Views of the D.O.T." would be an appropriate name, or even "D.O.T. Views". In fact, I believe I favor this last idea—"D.O.T. Views". It implies glimpses or pictures of happenings to people as well as viewpoints of people in the department, and both features are carried in our staff magazine. Other ideas I would find agreeable would be "Life with D.O.T." or "Looking at DOT".

I hope some of these ideas may be helpful.

R. B. SPANTON, Ottawa

Since you wish an opinion on the name for News on the Dot let me say, I don't like the proposed name, the Dot. To me it conveys nothing.

I would suggest DOT JOURNAL, that then covers the bilingual aspect of the publication. Or if you want, DOT JOURNAL MDT.

GEORGE H. POTTS, Halfmoon Bay, B.C.

I think your idea to change the name of News on the DOT to DOT is great. It does sound more contemporary, as you say.

Also, I would like to congratulate you and your staff for the wonderful job you are doing with the publishing of this very fine magazine. At one time I didn't think the reading worth the trouble of taking the magazine off the shelf. At that time all the magazine appeared to me to be was a 'who's who, or what's doing in Ottawa' periodical, covering very little news in the other provinces, namely the western provinces. But since this time it has come a long way in general appeal, covering all fields and subjects and thus making the magazine very interesting and informative from cover to cover. Also gone are the days when you would see the magazines lying about the office, unopened until such time as the janitor discarded them in the-trash can. Now it seems that everyone reads them and will from time to time bring up an article he has read in the course of a conversation. This shows the ever increasing popularity the magazine is gaining.

Once again congratulations on a job being well done.

M. G. JEFFRIES, Ashcroft, B.C.

The Editor



From the Deputy Minister's Desk

Le mot du sous-ministre

Living with one's neighbours is a situation which applies on a personal, a national, and an international basis. Much of our activity in the department relates to international transportation and communications.

We cannot establish standards and policies entirely by ourselves. If we expect to have our international services enter other countries and be treated fairly there, we in turn must provide similar treatment for services and communications coming from those countries. If all these matters were left to be dealt with by individual pairs of countries, numerous widely varying situations would emerge.

To avoid this, attempts have been made in every field of Department of Transport operations to establish international standards and international policies which are generally acceptable. This is done through international organizations set up specially for this purpose. An active international organization exists in each field of transportation and communications in which the Department of Transport operates, and the department, on behalf of the Government of Canada, has played a big part in the establishment of these organizations and in their continuing work.

In recognition of the importance of international co-operation in all fields, 1965 has been declared International Co-operation Year, and in this issue of "News on the DOT" we pay tribute to the value and the work of these areas of operation.

Les rapports entre voisins existent sur le plan personnel, national et international. Une grande partie de l'activité de notre ministère concerne les transports et communications sur le plan international.

Nous ne pouvons établir des normes et des lignes de conduite qui ne valent que pour nous. Si nous nous attendons que nos services internationaux aient accès à d'autres pays et qu'ils y bénéficient de conditions équitables, nous devons de notre côté assurer le même traitement aux services et communications en provenance de ces pays. Si le règlement de toutes ces questions était laissé aux deux seuls pays en cause, il en résulterait de nombreuses situations fort différentes les unes des autres.

Pour que cela ne se produise pas, on a tenté d'établir, dans chaque secteur des opérations du ministère des Transports, des normes et des lignes de conduite internationales qui peuvent s'appliquer de façon générale. Des organismes internationaux ont été établis spécialement à cette fin. Un organisme international actif existe dans chacun des domaines des transports et communications qui relèvent du ministère des Transports. Ce dernier, au nom du gouvernement du Canada, a joué un rôle important dans l'établissement de ces organismes et dans la poursuite de leur activité.

Pour souligner l'importance de la coopération internationale dans tous les domaines, l'année 1965 a été déclarée année de la coopération internationale. Dans la présente livraison de «NEWS ON THE DOT», nous désirons mettre en évidence l'importance de ces secteurs d'activité et les travaux qui s'y poursuivent.

J. R. Baldwin

Canada's Lighthouses

The history of Canada's lighthouses, filled with tales of adventure, perils of the sea, war and even the ghost from a murder story, dates back to 1733 when the first lighthouse of its kind was built by the French at Louisburg, Nova Scotia.

It was a stone tower, 66 feet high, with a blazing circle of oil-fed wicks providing the light. It was also the second lighthouse in North America, the other having been built only a few years earlier at Boston, Mass.

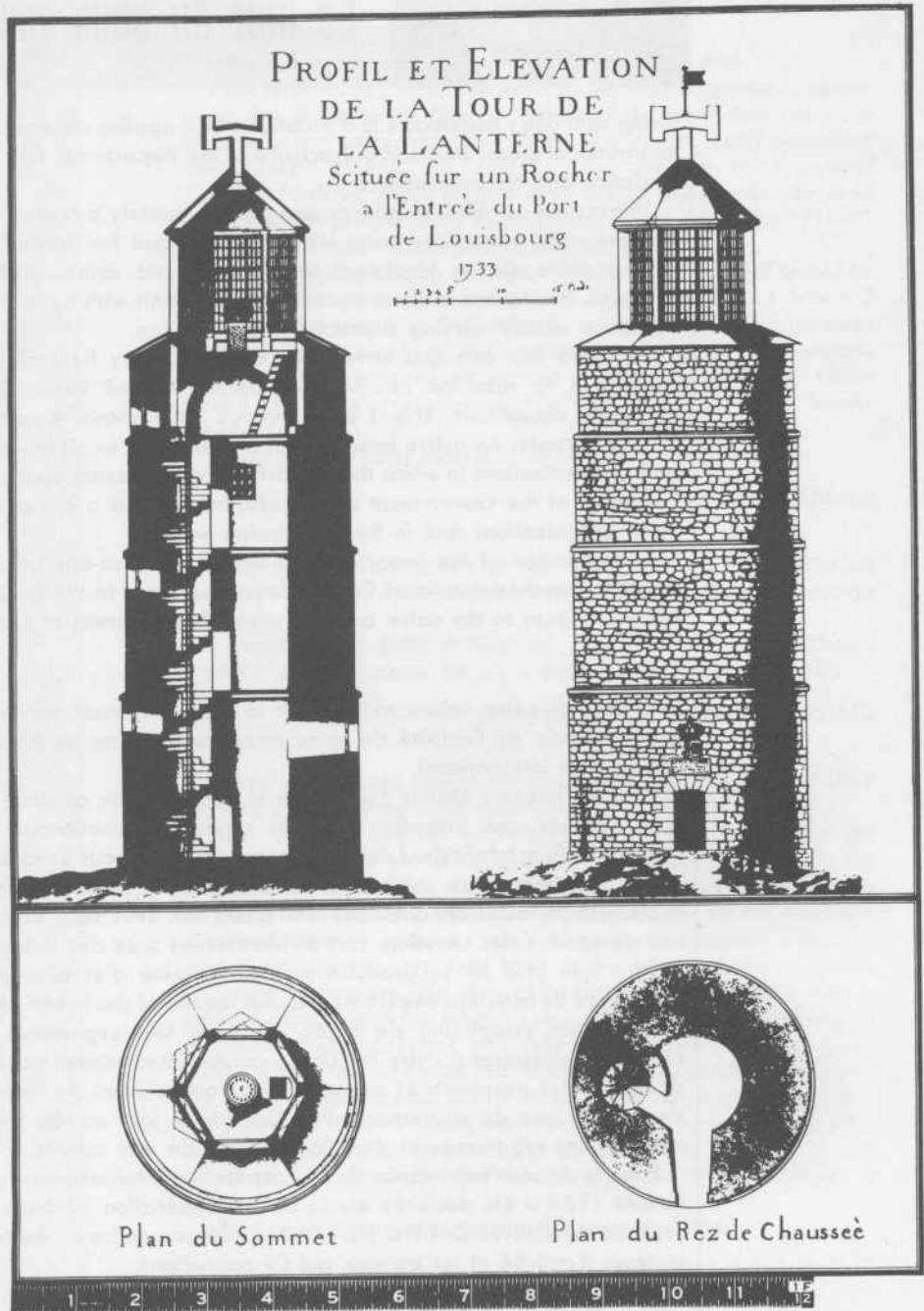
The wooden top of the Louisburg tower fell victim to its own flame and had to be replaced in 1737 by a masonry top. The structure lasted until the second English siege of Louisburg fortress in 1758, when it was damaged and subsequently crumbled into a state of decay. It later was replaced by a wooden tower and this in turn gave way to a concrete tower. Today, more than two centuries later, the construction of a replica of the original tower is planned as a part of the government plan to restore Louisburg as a national historic site.

In 1758 a lighthouse was built on Sambro Island to mark the entrance of Halifax harbor; another was erected at Cape Roseway in 1788 to serve Shelburne harbor. Saint John, N.B. acquired its first lighthouse on Partridge Island in 1791.

In 1816 the first lighthouse on the St. Lawrence River was built at Point Platon on the South Shore, 30 miles above Quebec. The first on Lake Ontario was erected in 1808 at Gibraltar Point marking the entrance to what is now Toronto harbor. The latter is the one that, according to local folk tales, is haunted by the ghost of its first keeper who disappeared and is now believed to have been murdered in 1815.

By 1835 there were 10 lighthouses in the Bay of Fundy, eight on the Atlantic Coast, one in Newfoundland and 10 on the Gulf and River St. Lawrence, including two lightships on Lake St. Peter. By that time there were also four on Lake Ontario and one on Lake Erie. Expanding Great Lakes trade gave rise to construction of a lighthouse on Lake Huron in 1847 and in

1. Gros Cap lighthouse located in Lake Superior.
2. Sand Heads, B.C. lighthouse, a modern design.
3. The metal light tower at Trinity, Newfoundland.
4. Lighthouse at Race Rock, B.C. is more than 100 years old.
5. A traditional light tower at Cap des Rosiers, Quebec.



from Sea to Sea

by Ken Parks



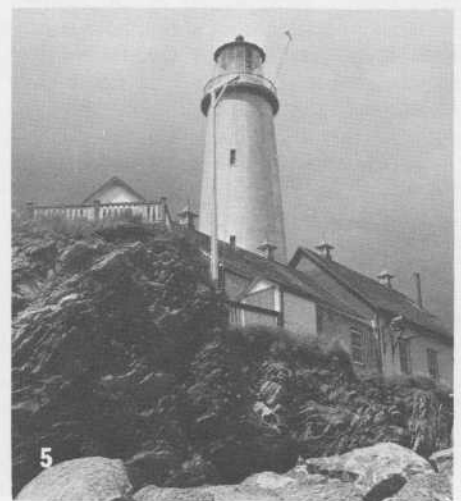
1872 the first Canadian lighthouse on Lake Superior at Michipicoten Island was erected.

On the Pacific Coast such aids to marine traffic came into being in 1861 at Race Rocks in the Strait of Juan de Fuca and on Fisgard Island at the entrance to Esquimalt harbor. A century later these towers, like many others of early but durable construction, were still in service, though equipped with modern lights and related navigation aids.

Of unusual interest is the lighthouse built in 1842 at Cape Bonavista, Newfoundland. For years the tower housed lights that were brought from Scotland and were reputed in some quarters to have once marked the Inchcape Rock, subject of Robert Southey's famed poem about the Abbot of Aberbrothock, the Inchcape Bell and the scoundrelly Sir Ralph the Rover, who moved the bell and subsequently met his doom on the rock. Today the tower houses a new modern light, the old one stored away to become a museum piece.

Lighthouses in Canada, prior to Confederation, were administered by a variety of authorities including the Trinity Houses of Montreal and Quebec, which had antecedents in Britain; the Commissioners of Public Institutions in New Brunswick and the Board of Works in Nova Scotia. The lighthouse responsibilities of these bodies were transferred to the newly-formed Department of Marine and Fisheries at the time of Confederation.

Since then the establishment of lighthouses and other aids to navigation has kept pace with the expansion of Canada's marine commerce. Today, in sharp contrast with the few crude towers of the 1700s, the Department of Transport's Marine



Works Branch is responsible for nearly 500 manned light stations where sound, radio and light signals require daily attendance. In addition there are more than 4,000 automatic lights of various types serving navigation. All told the department maintains more than 16,000 lighthouses, lights, buoys, beacons and other markers of all types.

Tending lighthouses and other aids to navigation is one of the major tasks carried out by ships of the Canadian Coast Guard. Helicopters based aboard some of the larger ships are used frequently for ship-to-shore transfer of lighthouse personnel and light cargo. This service has speeded up operations considerably, particularly where the approaches by water are difficult and sometimes impossible in times of adverse weather.

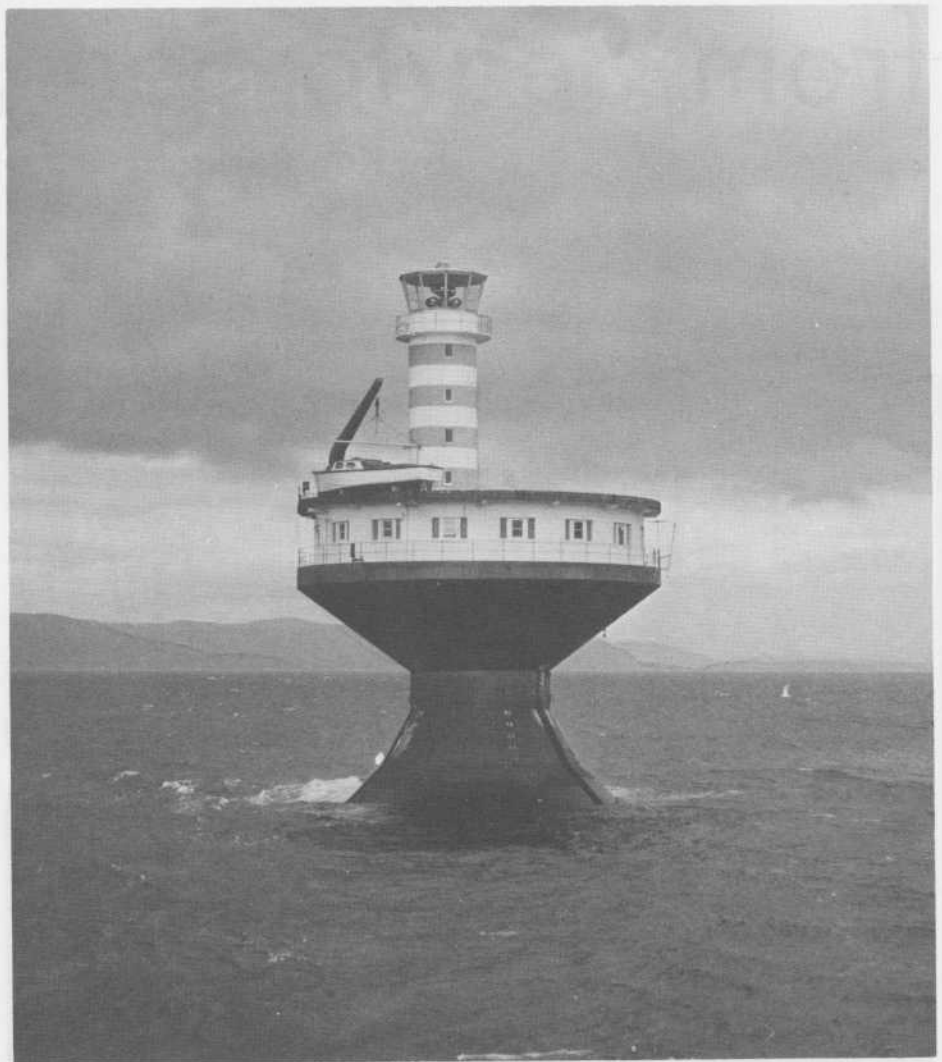
At such locations the department has constructed "landing pads" for helicopters to make safe landings possible. Some lighthouses, such as the new "wasp waisted" structure at Prince Shoal in the St. Lawrence River at the mouth of the Saguenay, have a helicopter landing deck incorporated into the design of the tower. The Prince Shoal light is one of the most powerful in North America, with a total light intensity of 48 million candlepower. The light is located in an area of frequent fog conditions and the full intensity of the light is used only when needed in times of poor visibility.

As the older lightstations near the end of their economically useful life they are replaced by new structures of modern design. The installations at lighthouses vary with their location and the traffic they serve. Some have only a light. Some have lights and fog horns; others are also equipped with radio beacons.

Canada's marine lights are to be found from Cape Spear on the easternmost tip of Newfoundland to Iphigenia Point on the northwest shore of Graham Island in the Queen Charlottes, and from Middle Sister Island in Lake Erie to Tuktoyaktuk on the shores of Beaufort Sea, 200 miles north of the Arctic Circle.

As each new night begins, they turn their Cyclops eyes seaward and resume their endless task of blinking out the message that in any language means:

"Sailor, take care!"



The "wasp-waisted" lighthouse at Prince Shoal in the St. Lawrence River.



Sambro Lightship, stationed at the entrance to Halifax harbor.

The Oilman Calls Twice A Day

by Yvonne McWilliam

As another winter draws to an end, the head of the house in many a Canadian home tallies up his heating bill for the year, puts hand to head and bemoans the fact that he didn't emigrate to the "wilds of California or Florida" while he was still young enough to make a go of it.

It took, perhaps, nearly 900 gallons of oil to heat his six-room bungalow this year and it was a comparatively mild winter as Canadian winters go.

How, we wonder, would his heart hold out if he had to greet—and pay—a man delivering 7,000 gallons of oil twice a day, three or four months running? That's what happens at Montreal International Airport.

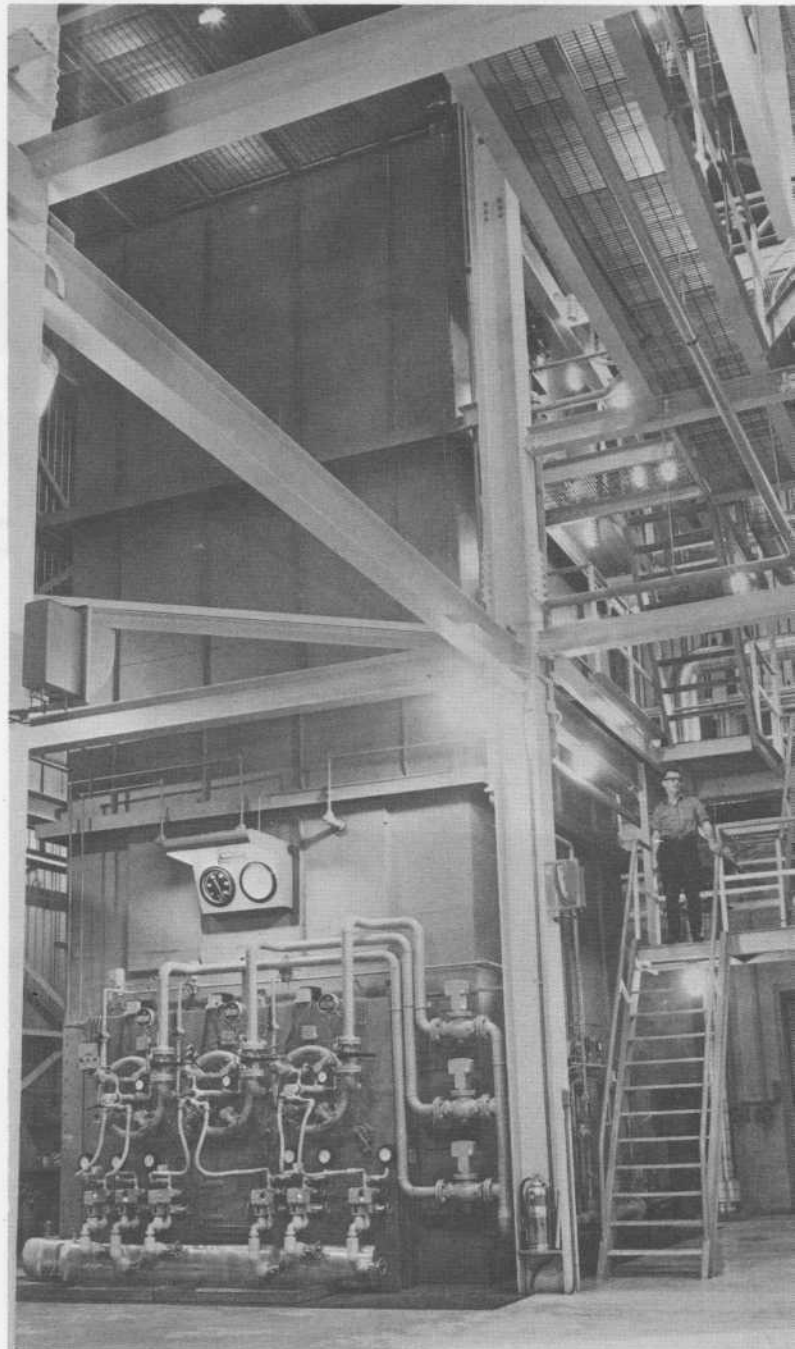
D.O.T.'s central heating plant there gobbles up nearly a million gallons of bunker fuel oil and tops it off with 208,000,000 cubic feet of natural gas every year. It, of course, does so to heat an area equal to five city blocks and to provide hot water and steam for kitchen utilities for the village-like complex and its 3,000-odd employees.

Housed in a separate building and constructed in 1960 at the same time as the terminal, the plant and distribution system cost about \$3,000,000. Then as now, it was the largest of its kind in North America and its high temperature water system included many pioneering innovations. After four years of operation these have proved themselves. So much so, in fact, that the man in charge, Chief Operating Engineer Louis Phillippe Bertrand, says in his 25 years' experience with heating plants he has never before seen one operate to within a hair's breadth of maximum efficiency as this one does.

So efficient is the plant that every year an average of 500 engineers and architects from all over the world come to see it in operation.

The consulting engineers, Wiggs, Walford, Frost and Lindsay of Montreal, were given the task of designing a plant to serve the terminal and other government buildings. Asked to maintain the aesthetics of the overall terminal design and not create a hazard to air navigation with either high smoke stacks or smoke contamination, they proposed a central heating plant large enough to produce heat, not only for the government buildings, but to sell to owners of private buildings at the airport should they want to buy. As it has turned out, the system has expanded to serve more private users each year reducing D.O.T.'s heating bill to only slightly more than the cost of the fuel. Revenue takes care of salaries, operating costs and so forth.

This view of No. 4 generator, a 70,000,000 BTU unit, gives an idea of its immense size. Stationary Engineer A. Le Brasseur comes down from the upper level, where the induced draft fans, de-aerator and make-up tanks are located, to check the individual burners, fuel oil and gas lines seen at the front of the generator.



Designed to operate 24 hours a day, 365 days a year the plant has done so except when shut down for additions and alterations in the summer of 1964. At that time Mr. Bertrand inspected the inside of most of the system's pressure points and was delighted to find their condition excellent—no corrosion, no pitting or damage of any kind. An auxiliary diesel electric plant is operated one hour each week to ensure that it would be capable of assuming the full load in case of emergency.

It takes a staff of 25 men working five shifts to man the maze of boilers, generators, pumps, control panels and assorted other equipment, including four separate oil-fired boiler plants and all evaporators for steam production located throughout the distribution system.

The four high temperature water generators have the capacity to produce a total continuous output of 220,000,000 BTU's (one British Thermal Unit is the amount of heat required to raise one pound of water one degree Fahrenheit). When you realize that 50,000 BTU's will heat the average six-room bungalow, you can appreciate that the amount of heat being produced at the Montreal plant is enormous. In fact, it's enough to heat some 2,500 average-sized homes.

Located several hundred yards from the terminal building, the plant is quite close to the next largest user area, the administration and industrial building. Heat is distributed through a mile of underground tunnels, which wind back and forth to allow for smooth, quiet and economical expansion of the pipes. Some 120,000 gallons of water circulate through the system at a

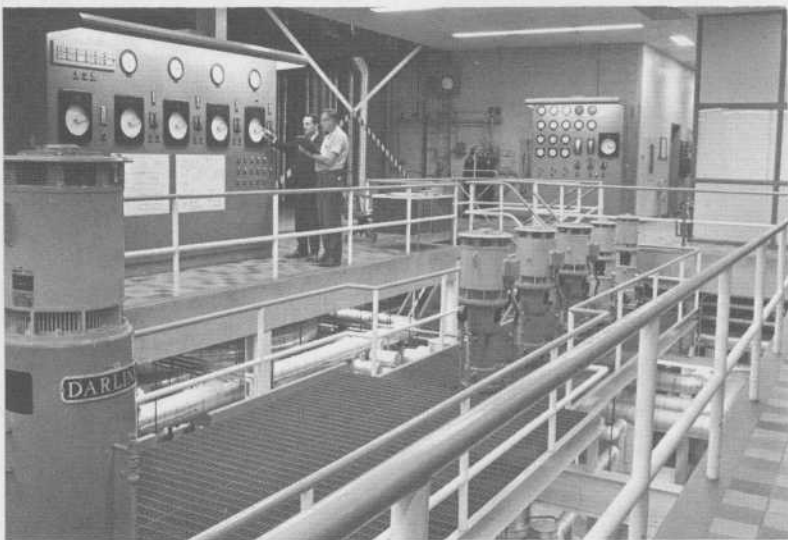
temperature of 400 degrees Fahrenheit. A layman's first thought is how come if water boils at 212 degrees F. at sea level it doesn't turn to steam in this system? In a high temperature hot water system, water is heated and maintained under sufficient pressure to prevent it from boiling and turning to steam. The whole system is pressurized either with steam or an inert gas such as nitrogen.

Both bunker oil and gas are used in the burners, depending on which is more economical at any given time. Switching from one fuel to another is done often several times a day.

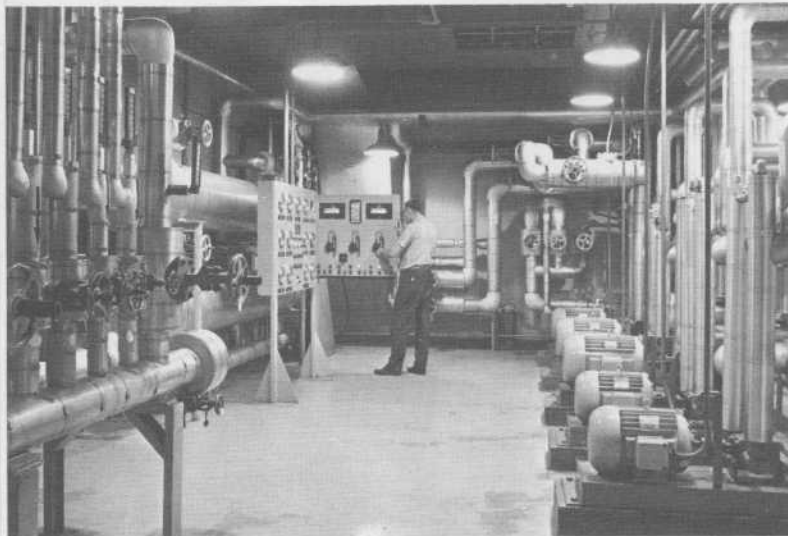
Testing the water in the system and treating it with the proper chemicals is, perhaps, one of the most important preventive measures taken by the staff to ensure efficiency of the equipment. All water goes through de-alkalizers, softeners and, if necessary, a de-aerator. It is tested once during every shift.

As in all things, though, there are times when in spite of everything, something goes wrong. A classic example of this is recalled with some amusement by Mr. Bertrand. When the plant first went into operation he noticed a forced draft fan was very noisy. Investigating, he located a fair-sized hole inside of which was found a real honest-to-goodness "monkey wrench in the works." However, constant vigilance by the entire central heating plant staff keeps the equipment in A.1 shape.

During off-winter months when heating operations are not so time-consuming, part of the 25-man staff busy themselves with maintaining the refrigeration equipment for the airport's various air conditioning systems.



Top left: Chief Operating Engineer Louis P. Bertrand and Shift Supervisor A. Morrow discuss temperature differential of No. 4 circuit on main distribution panel. Here, water flow, BTU load and temperature differential to each circuit may be observed.



Bottom Left: Mr. Morrow checks fuel oil level in No. 2 reserve tank. This view of fuel oil pump room shows the intricate pipe work necessary to this type of heating system where uninterrupted operation is so essential.

Bottom Right: Proper chemical concentration in high temperature and evaporator feed water is strictly controlled. Daily water test in plant lab is made by Shift Supervisor Morrow.





Fishing Vessels Have A Friend In Gander Weather Office

by Frank Roe, *Officer-in-charge,*
Torbay Meteorological Observing Station

Scant hours after the weather office at Gander International Airport issues a hurricane warning, the port of St. John's prepares for a friendly invasion.

From a vantage spot on Signal Hill, where Marconi received the first wireless signals from across the ocean, the flotilla of 150-odd vessels can be seen looming on the horizon. Heading for harbor with the hurricane on their heels, they include the ships of the famed Portuguese fishing fleet. The hurricane's name might be Cleo or Dora or Ethel, but the men of the Grand Banks fishing fleet don't want to be introduced to her. In late summer or early fall hurricanes force the fleet to head for St. John's harbor as often as three or four times a season.

Many nations fish the Grand Banks throughout the year, but the Portuguese probably have the greatest number of vessels in the area.

Seventy ships sail each year from Portugal, accompanied by their modern trim-looking hospital ship the "Gil Eannes". Their crews, along with those of Spanish and French fishing vessels, are a familiar and welcome sight to the citizens of St. John's. Their white-hulled fleet, which combines both steam and sail, is perhaps the last of its kind in the world and many people go to the waterfront to take photos of it.

This year for the first time marine area forecasts issued by the Gander weather office were broadcast in Portuguese by the CBC

at St. John's. As well, the "Gil Eannes" maintains an active liaison with D.O.T.'s meteorological service by taking and transmitting weather observations regularly.





International Co-operation Year — 1965

"The world depends on co-operation and not on conflict. . . ."

With these words of the late Prime Minister Nehru of India in mind, the United Nations has designated 1965 as International Co-operation Year. The move aims to emphasize the extensive areas of global co-operation that now exist and to encourage groups and organizations never before involved to initiate international activities.

The idea of a year of international co-operation was first advanced by Nehru at the UN in 1961. His proposal was to devote a year "not to speeches about peace, but to the furtherance of co-operative activities in all fields."

He continued: "We live in this world of conflicts and yet the world goes on, undoubtedly because of the co-operation of nations and individuals. Little is known, or little said, about this co-operation. . . . so the conflicts go on and we live on the verge of disaster. Perhaps it would be a truer picture if the co-operation elements in the world today were put forward."

The fact is, international co-operation has worked and will work. It is fitting that 1965, the 20th anniversary of the United Nations, should be chosen to throw a spotlight on it.

The United Nations is providing the impetus, but it is up to member nations to make the most of the unique ICY opportunity.

Canada has been closely associated with preparations for ICY since its inception—the UN resolution calling for the designating of 1965 as ICY was co-sponsored by India and Canada—and a public information and education campaign has been launched to familiarize Canadians with the ICY concept.

Many projects are proposed for the year. They range from those implemented by international authorities, national governments and municipal councils to those which will be participated in by Canadians in private or industrial organizations or as individuals. For instance, one committee has been active on international road signs and driving licences; several committees are collecting used tools and electronic equipment for shipment to developing countries; Canadian schools are "twinning" with schools in other nations and a two-way exchange of books and school material has begun; the Voice of Women has arranged a tour of Canada for a delegation of Soviet Union women; the B.C. Credit Union is fostering a community development program in association with the University of British Columbia's project in Rajasthan, India; the Post Office Department issued a special Canadian ICY stamp in March.

And, of course, each specialized agency of the United Nations, whose very existence is based on international co-operation, is

gearing its 1965 program to the ICY theme. These agencies include the World Health Organization (WHO), the World Meteorological Organization (WMO), the International Telecommunication Union (ITU), the Food and Agriculture Organization (FAO), World University Service (WUS), Save the Children Fund and many others.

The Department of Transport is represented in several of these agencies—WMO, ITU and the Intergovernmental Maritime Consultative Organization (IMCO), to mention but three—and is directly concerned with their activities during this year of international co-operation.

World Meteorological Organization

The old adage that everyone talks about the weather but no one does anything about it is no longer true. Weather is being harnessed to man's needs in many places on earth, thanks largely to the efforts of the World Meteorological Organization (WMO) of which Canada is a member.

A specialized agency of the United Nations, the WMO has been in existence since 1951 and has some 125 member states.

With its headquarters in Geneva, Switzerland, it standardizes meteorological activities throughout the world and acts as a tie between national weather services such as D.O.T.'s meteorological branch.

An important aspect of the organization's work is the development of a world weather watch. It will include an increased world-wide network of observing stations and a weather satellite system.

The WMO also boosts research, observations from ships at sea, the international exchange of weather reports and programs of water resource development.

Of the eight technical commissions of WMO, two are headed by Canadians. C. C. Bougner, chief of climatology, was elected president of the WMO commission for climatology, while Keith T. McLeod, superintendent of public weather services, was elected president of the WMO commission for maritime meteorology. Election of Canadians to these two important posts demonstrates Canada's leadership in international meteorology and the high regard in which Canadian meteorologists are held by their fellow scientists.

On March 23 Canada joined other member states in officially observing World Meteorological Day. The theme for this year's observance was Tropical Meteorology and throughout the year,

to coincide with ICY, the WMO will make special efforts in the field of meteorology in Africa.

International Telecommunications Union

"Telecommunications span the world. Yet, although they easily traverse vast distances and physical obstacles, they often have difficulty when it comes to crossing the man-made frontiers between." So says the International Telecommunication Union's pamphlet published this year to mark the union's 100th anniversary.

In 1849 the first telegraph was used internationally; in 1876 the telephone was invented, and then, towards the close of the 19th century, radio. Each new communication medium required international organization.

Today, more and more people merely lift a telephone receiver and call another country or turn a knob and listen to a foreign radio program. This is possible through the co-operation of the countries concerned which has been achieved through their membership in ITU.

With the reality of communication through space, international agreement is more important than ever.

The ITU is the oldest of intergovernmental organizations which have become specialized agencies of the United Nations. It was born in 1865 when the spread of the telegraph made it necessary to reach agreement on the technical system to be used, on uniform methods of handling messages, on the collection of charges.

First came bilateral understanding between regional groups of countries, ending in an inter-European association. Other European countries were drawn in and a truly international organization came into being in Paris on May 17, 1865. Called the International Telegraph Convention, member countries agreed to a set of basic telegraph service regulations.

International telephone service came much later and its progress was much slower. It was not until 1927, when radio provided the means to carry the human voice from continent to continent, that this service became world-wide. In 1932 the union was renamed the International Telecommunication Union.

The number of members is ever increasing as new countries gain their independence. Today, the ITU roster numbers 124 member countries and 2 associate members. The list includes such new African states as the Republic of Dahomey, the Islamic Republic of Mauritania, the Republic of Chad, the Kingdom of Burundi and many others.

The members of the ITU meet at intervals of normally not less than five years at a plenipotentiary conference. This is the supreme authority of the ITU itself and lays down general policy. It reviews the union's work since the last conference and revises the convention if necessary. As well, the plenipotentiary conference elects the Secretary-General and the Deputy Secretary-General, who hold office until the following conference. The plenipotentiary conference also chooses the 25 members who are to serve on the administrative council.

Canada has been a member of this council since its inception in 1948 and at the last plenipotentiary conference in Geneva in 1959 was re-elected. The council meets annually to supervise the administrative functions and co-ordinate the activities of the four permanent organs of the ITU—the general secretariat, the international frequency registration board, the international radio consultative committee and the international telegraph and telephone consultative committee.

Decisions adopted at plenipotentiary and administrative conferences govern the use of telecommunications throughout the world.

This year the plenipotentiary conference has been scheduled to coincide with the union's 100th anniversary. It will be held at Montreux, Switzerland.

Inter-Governmental Maritime Consultative Organization

Created in 1958 as a specialized agency of the United Nations IMCO, as it is known, is mainly concerned with shipping engaged in international commerce. Since more passengers and freight are carried by ships than any other means of transport, this is a most important field.

The organization's 21 members include not only the traditional maritime countries, but also those which rely largely on the shipping services of other nations. Its functions are consultative and advisory—to achieve the highest practicable standards of maritime safety and efficient navigation, with a special responsibility for the safety of life at sea. As well, IMCO provides for the wide exchange of information between nations on all technical maritime subjects, the prevention of pollution of the sea by oil and the unification of regulations for the tonnage measurements of ships.

Another purpose is to discourage discriminatory, unfair and restrictive practices affecting ships in international trade, so as to promote the freest possible availability of shipping services to meet the needs of the world for overseas transport.

There are four main bodies in IMCO: the assembly, the council, the maritime safety committee and the secretariat.

The assembly, consisting of delegates from all member states, elects the IMCO council, chooses the secretary-general, approves financial and staff regulations and determines policies and work.

The council of 16 members (which will be increased to 18 within two years) meets as often as necessary, normally twice a year, and between sessions of the assembly performs all functions of IMCO. Among other things it appoints, with assembly approval, the secretary-general.

The maritime safety committee consists of 14 members from the countries having an important interest in maritime safety of which not less than eight must be the largest ship-owning nations. Members are elected for a four-year term. Canada is a member of the council and the safety committee.

The secretariat is composed of the secretary-general, the secretary of the maritime safety committee on a number of international civil servants. Its headquarters are in London, England, where this spring the conference on the facilitation of international travel and transport will be held.

ITU headquarters, Geneva, Switzerland.





No matter the weather, Montreal runways are

Open for business 24 hours a day

With air travel no longer a luxury but a necessity to modern business, today's airports must operate round-the-clock, round-the-year. Canada, along with other northern countries, spends long hours during winter months fighting a major enemy to keep the planes a-flyin'.

In 1962 nearly 3,000,000 tons of snow was cleared from the runways, aprons, parking lots and surrounding area at Montreal International Airport alone.

Although there are other cities in the world as large as Montreal at the same latitude or higher, none of them has the peculiar combination of circumstances which makes its battle with snow such a gigantic task.

Montreal lies in the snowbelt of the St. Lawrence River and Ottawa River valleys. Weather systems which gather moisture along the eastern seaboard of the United States or across the expanse of Hudson Bay often swing across Montreal because of opposing low pressure areas. A particularly severe clash of systems can bring as much as 24 inches of snow to the area within a matter of hours. Yet, because of the efficiency of the department's snow removal corps at Montreal International Airport, the runways are open at all times—even when vehicular traffic has come to a virtual standstill on city streets.

Many of the foreign airlines that use Montreal facilities for passenger and cargo handling have written to Montreal Airport Manager Pete Goulet complimenting him on the excellent snow removal techniques used to keep the runways clear.

Snow removal is imperative to safety, but heavy traffic at large airports makes it difficult to find time for it. On peak days

at Montreal, for instance, planes land and take-off at the rate of one a minute from morning to night. Friday, is usually the busiest day of the week and as everyone knows it always snows on Fridays!

D.O.T. snowblowers and sweepers are usually standing by waiting for the first break in traffic to get at the job of cleaning the runways. It's pretty costly to make a four-engined jetliner wait in the air until the runway is cleared—a 20-minute delay means burning hundreds of dollars worth of fuel.

As soon as a half inch of the white stuff accumulates on the runways an army of snow removal men and equipment is out cleaning it away. It takes about 40 minutes to clear one inch of snow using a convoy of plows followed by steel-bristle sweepers. The trucks can plow at 30 or 35 miles per hour but the brooms are most effective pulled at a speed of 15 or 18 miles per hour. This combination produces the perfectly "black" surface essential to jet operations.

Modern airliners reach a ground speed of close to 150 miles per hour just before take-off and after touching down. If the runway surface is slippery, their nosewheel steering is difficult to control.

Slush in particular can be a problem. If it splashes on the undercarriage, it could freeze up and cause the landing gear to lock. Also, it can pile up in front of the wheels and act as a brake. Since wet snow is very heavy it decidedly changes the take-off characteristics of a jet. So much so, in fact, that if there is a half inch of slush on the runway a heavy passenger jet is not



A convoy of plows and sweepers clean off Montreal's No. 24R runway, while aircraft land and take-off on a parallel one.

allowed to take off fully loaded. An inch or more grounds the jet, loaded or not.

Raoul Plourde, the man in charge of field maintenance operations at Montreal Airport, commands a crew of 85 men and 50 major pieces of equipment—snow-blowers, plows, sweepers, graders, loaders, bulldozers and three-ton trucks. The men, 45 permanent D.O.T. employees and 40 seasonal, normally operate on two eight-hour shifts, but in cases of severe storms each shift works an additional three hours. They have enough to do to keep the runways, taxi-ways, and aprons clean so other snow clearance jobs at the airport are let out on contract.

One of the worst storms Mr. Plourde can recall during his three years with the department was in 1963 when 14 inches of snow fell in a 10-hour period. That entire winter was a bad one—121.9 inches of snow fell, some 24 inches more than the average winter's nine feet, and each piece of the airport's snow removal equipment operated an average of 700 to 800 hours compared to the usual 450 to 600 hours.

Although he's been supervising snow clearance for D.O.T. only three years, Mr. Plourde's experience with the white powder goes back much farther. As a general contractor in Chicoutimi

for 25 years he held contracts to clear a 150-mile stretch of northern Quebec highway.

"I'll take runway clearing any day. If the equipment breaks down it's a simple matter to haul it the short distance to the well-equipped maintenance garage at the airport. On a northern highway, though", he says, "half-way to nowhere, a breakdown can be much more serious and uncomfortable."

This winter has been a comparatively easy one with only 40 inches of snow up to February 1. However, until April rains replace the snow Mr. Plourde and his hardworking staff won't heave any premature sighs of relief. Often their hardest work comes in March when the weather is not as cold and the type of snow is wet and heavy, easily compacting on the runways. Then it can be as heavy as sand to remove.

From April to November the field maintenance staff turn their efforts to other things. There are runways to repair, drainage ditches, manholes and catch basins to clean and grassy areas to keep free of weeds and brush.

Mr. Plourde, a big man with a soft voice and sparkling blue eyes, has one ambition—to make Montreal the nicest airport in the world by 1967. "With so many people coming to Montreal that year, our airport must be the very finest."

Raoul Plourde, field maintenance supervisor, frequently goes out on the runways to check on conditions after a storm and direct the crews manning the heavy snow removal equipment.



1965 —

Année de la Coopération Internationale

«L'avenir de l'humanité est fondé sur la coopération et non sur la discorde. . . .»

A la lumière de ces paroles de feu le Premier ministre de l'Inde, M. Nehru, l'Organisation des Nations Unies a décidé que 1965 serait l'Année de la coopération internationale. Elle désire ainsi souligner la coopération internationale qui existe à l'heure actuelle dans de nombreux domaines et stimuler les groupements et les organisations, qui ne s'y sont pas encore intéressés jusqu'ici, à promouvoir certaines initiatives sur le plan international.

L'idée d'instituer une Année de coopération internationale a été préconisée pour la première fois par M. Nehru aux Nations Unies en 1961. Il proposait de consacrer une année «non à discourir sur la paix, mais à promouvoir la coopération dans tous les domaines».

M. Nehru poursuit ainsi son discours: «Nous vivons dans un monde où se produisent de nombreux conflits et, malgré tout, le monde continue d'exister, sans doute grâce à la coopération des nations et des individus. Cette collaboration est bien peu connue et on en parle fort peu. . . de sorte que les conflits subsistent et que nous vivons au seuil du désastre. On aurait peut-être une idée plus juste de la situation si on soulignait davantage la coopération qui se manifeste aujourd'hui dans le monde».

En réalité, la coopération internationale a produit des fruits et elle en produira encore. Il convient qu'on choisisse l'année 1965, vingtième anniversaire des Nations Unies, pour la faire mieux connaître.

Ce sont les Nations Unies qui assurent l'élan nécessaire, mais il revient aux nations membres de bénéficier au maximum des avantages qu'offre cette Année de la coopération internationale.

Le Canada s'est intéressé étroitement aux préparatifs de l'Année de la coopération internationale. Au tout début, il a présenté, de concert avec l'Inde, la résolution des Nations Unies visant à désigner l'année 1965 comme année de la coopération internationale, puis il a lancé une campagne pour renseigner et instruire les Canadiens et leur faire connaître cette idée.

On prévoit au cours de l'année la réalisation de plusieurs projets par les autorités internationales, les gouvernements nationaux, les conseils municipaux, et des projets auxquels participeront les Canadiens au sein de groupements privés ou d'entreprises industrielles ou à titre personnel. Par exemple, un comité s'intéresse particulièrement à l'établissement de la

signalisation routière et des permis de conduire internationaux; divers comités recueillent des outils et du matériel électronique usagés en vue de les expédier aux pays en voie de développement; les écoles canadiennes se jumellent avec des écoles d'autres pays et ont commencé à s'échanger réciproquement des livres et des fournitures scolaires; la Voix des Femmes a organisé une tournée du Canada par une délégation de femmes de l'Union Soviétique; la Credit Union de la Colombie-Britannique est à réaliser un programme de développement communautaire dans le cadre de l'oeuvre poursuivie par l'Université de Colombie-Britannique à Rajasthan, en Inde; le ministère des Postes a émis en mars un timbre canadien spécial pour commémorer l'Année de la coopération internationale.

En outre, comme il se doit, chaque institution spécialisée des Nations Unies qui, de par sa nature même, doit favoriser la coopération internationale, organise son programme pour 1965 d'après le thème de l'Année de la coopération internationale. Ces institutions comprennent l'Organisation mondiale de la santé (OMS), l'Organisation météorologique mondiale (OMM), l'Union internationale des télécommunications (UIT), l'Organisation des Nations Unies pour l'alimentation et l'agriculture (FAO), l'Entraide universitaire mondiale (WUS), le Fonds de secours à l'enfance, et plusieurs autres.

Le ministère des Transports a des représentants au sein de plusieurs de ces institutions, l'OMM, l'UIT et l'Organisation intergouvernementale consultative de la navigation maritime (IMCO), pour n'en mentionner que trois, et il participe directement aux initiatives de ces organismes durant cette Année de la coopération internationale.

L'Organisation météorologique mondiale

Le vieil adage selon lequel tout le monde parle du temps mais personne ne s'en occupe, n'est plus vrai. On modifie le temps en fonction des besoins de l'homme à plusieurs endroits du globe, grâce surtout aux efforts de l'Organisation météorologique mondiale (OMM) dont le Canada fait partie.

L'OMM, qui est une institution spécialisée des Nations Unies, existe depuis 1951 et compte environ 125 États membres.

Son siège social est à Genève (Suisse). Elle normalise les initiatives météorologiques dans le monde entier et entretient la liaison entre les services météorologiques nationaux comme la Direction de la météorologie du ministère des Transports.

L'établissement d'une veille météorologique mondiale constitue un aspect important des travaux de l'Organisation. Celle-ci augmentera le réseau mondial de stations d'observation et établira un système de satellites météorologiques.

L'OMM favorise également les travaux de recherche, les observations effectuées par des navires en mer, l'échange sur le plan international de messages météorologiques et la réalisation de programmes d'aménagement des ressources hydrauliques.

Deux des huit commissions techniques de l'OMM sont dirigées par des Canadiens. M. C. C. Bougner, chef de la Division de la climatologie, a été élu président de la Commission de climatologie de l'OMM, tandis que M. Keith T. McLeod, surintendant des services météorologiques publics, a été élu président de la Commission de météorologie maritime. Le fait que des Canadiens aient été élus à ces deux postes importants démontre que le Canada joue un rôle de premier plan dans le

domaine de la météorologie internationale et que les savants des autres pays tiennent les météorologistes canadiens en très haute estime. Le 23 mars, le Canada et les autres membres ont observé officiellement la Journée météorologique mondiale. Le thème choisi pour cette année est celui de la météorologie tropicale. Au cours de l'année, dans le cadre de l'Année de la coopération internationale, l'OMM favorisera la réalisation en Afrique d'initiatives particulières dans le domaine de la météorologie.

L'Union internationale des télécommunications

«Les réseaux de télécommunications encerclent le globe. Toutefois, bien qu'ils franchissent facilement de longues distances et surmontent de nombreux obstacles topographiques, ils éprouvent souvent des difficultés à franchir les frontières artificielles entre chaque pays.» Le passage qui précède est extrait de la brochure publiée cette année par l'Union internationale des télécommunications en vue de commémorer le centième anniversaire de l'établissement de l'UIT.

C'est en 1849 que le premier télégraphe a été utilisé sur le plan international; le téléphone a été inventé en 1876, puis la radio vers la fin du dix-neuvième siècle. L'implantation de chaque nouveau moyen de communication a dû être organisée sur le plan international.

De nos jours, un nombre de plus en plus grand de personnes n'ont qu'à décrocher le récepteur et acheminer un appel vers un autre pays ou tourner un bouton et écouter une émission radiophonique en provenance d'un pays étranger. Ceci est possible grâce à la coopération des pays en cause qui sont membres de l'UIT.

Maintenant que les communications à travers l'espace sont devenues une réalité, la coopération internationale s'impose de plus en plus.

L'UIT est la plus ancienne des institutions intergouvernementales qui sont devenues des institutions spécialisées des Nations Unies. Elle a été établie en 1865 alors que, à cause de l'expansion de la télégraphie, il fallait s'entendre sur le système technique qui devait être utilisé, sur l'uniformité des méthodes d'acheminement des messages et sur la perception des taxes.

Il y eut d'abord des ententes bilatérales entre des groupes régionaux de pays, qui ont donné naissance à une Association intereuropéenne. D'autres pays d'Europe s'étant joints à l'Association, une organisation vraiment internationale a été formée à Paris le 17 mai 1865, nommément la Convention télégraphique internationale dont les pays membres sont convenus d'observer une série de règlements fondamentaux concernant le service télégraphique.

Le Service téléphonique international a été établi beaucoup plus tard et son évolution a été beaucoup plus lente. Ce n'est qu'en 1927, alors que la radio permettait de transmettre la voix humaine d'un continent à l'autre, que ce service est devenu mondial. En 1932, l'organisation est devenue l'Union internationale des télécommunications, pour tenir compte de son expansion.

Le nombre des membres de l'Union s'accroît de jour en jour à mesure que de nouveaux pays acquièrent leur indépendance. De nos jours, l'UIT compte 124 pays membres et deux membres associés. Elle comprend notamment les nouveaux États africains de la république de Dahomey, la république islamique de la Mauritanie, la république du Chad, le royaume de Burundi et plusieurs autres.

Les membres de l'UIT se réunissent au moins à tous les cinq ans lors de la Conférence de plénipotentiaires, organisme suprême de l'UIT qui établit la ligne de conduite générale. Elle passe en revue les travaux de l'Union depuis la dernière conférence et revise au besoin la Convention. C'est également au cours de la Conférence de plénipotentiaires que sont élus le secrétaire-général et le secrétaire général adjoint, dont le mandat n'expire

qu'à la conférence suivante. On y choisit également les 25 membres qui doivent faire partie du Conseil administratif. Le Canada est membre du Conseil depuis sa fondation en 1948 et a été réélu membre lors de la dernière Conférence de plénipotentiaires tenue en Genève en 1959. Les membres du Conseil se réunissent chaque année en vue de surveiller l'exécution des fonctions administratives et de coordonner les activités des quatre organes permanents de l'UIT, le secrétariat général, le Comité international d'enregistrement des fréquences, le Comité consultatif international des radiocommunications et le Comité consultatif international télégraphique et téléphonique.

Les décisions adoptées lors des Conférences de plénipotentiaires et administratives régissent l'utilisation des télécommunications dans le monde entier. Toutefois, les membres reconnaissent le droit souverain de chaque pays de réglementer ses propres télécommunications.

Cette année, la Conférence de plénipotentiaires coïncidera avec le centenaire de l'Union. Elle se tiendra à Montreux (Suisse).

L'Organisation intergouvernementale consultative de la navigation maritime

Constituée en 1958 à titre d'institution spécialisée des Nations Unies, l'IMCO, ainsi qu'on l'appelle, s'occupe surtout de la navigation maritime internationale. Étant donné qu'un plus grand nombre de passagers et qu'un plus gros volume de marchandises voyagent par navire plutôt que par d'autres moyens de transport, il s'agit là d'un domaine des plus importants.

Les 21 membres de l'Organisation groupent non seulement les pays maritimes traditionnels, mais également ceux qui dépendent dans une grande partie des services de navigation d'autres nations. L'Organisation joue un rôle consultatif qui vise à faire appliquer les normes effectives les plus élevées dans le domaine de la sécurité maritime et de l'efficacité de la navigation, en veillant tout particulièrement à la sauvegarde de la vie humaine en mer. En outre, l'IMCO assure un vaste échange de renseignements entre les nations sur tous les sujets maritimes techniques, la prévention de la pollution des eaux par les hydrocarbures et l'unification des règlements concernant le jaugeage des navires.

Une autre fin qui a été établie par la Convention de l'IMCO mais qui ne constitue pas présentement une de ses activités, consiste à décourager l'emploi de pratiques restrictives injustes à l'égard des navires affectés au commerce international, afin que le plus grand nombre possible de services de navigation puisse être assuré pour répondre aux besoins qui se posent dans le monde dans le domaine du transport transocéanique.

L'IMCO se compose de quatre organes principaux: l'assemblée, le conseil, le comité de la sécurité maritime et le secrétariat.

L'assemblée, formée de délégués des États membres, élit le conseil de l'IMCO, choisit le secrétaire général, approuve les règlements concernant les finances et le personnel et arrête les lignes de conduite et le programme des travaux.

Le conseil, qui compte 16 membres, se réunit aussi souvent qu'il est nécessaire, habituellement deux fois par année, et exécute toutes les tâches de l'IMCO durant les intersessions de l'assemblée. Il nomme entre autres le secrétaire général, sur approbation de l'assemblée.

Le comité de la sécurité maritime comprend 14 membres délégués par les pays pour lesquels la sécurité maritime constitue une question importante, dont au moins huit doivent être les nations possédant le plus grand nombre de navires. Les membres sont élus pour un mandat de quatre ans.

Le secrétariat comprend le secrétaire général, le secrétaire du comité de la sécurité maritime et un certain nombre de fonctionnaires internationaux. Son siège social est à Londres, où aura lieu ce printemps une conférence sur les moyens à prendre pour faciliter les voyages et le transport sur le plan international.

D.O.T. Scholarships Increase in Amount and Number – Will YOU Help Increase Them More?

When the department's scholarship program came into being two years ago, annual interest earned on investments was approximately \$1,200—enough to provide three \$400 scholarships to dependents of D.O.T. personnel. However, the principal has since been increased by the return of additional money from Travelers Insurance Company. The annual rate of interest earned in future years will be approximately \$3,000 and the Board of Trustees has announced an increase in the number and amount of the scholarships awarded in 1965 to five \$500 awards.

To date more than 80 young people from across Canada have made formal application (many more have inquired) for these scholarships. All had marks averaging over 70 per cent. The scholarship committee of the Canadian Universities Foundation, whose job it is to assess each entry on the basis of scholastic standing and personal qualities, complimented the department on the extremely high calibre of the candidates. Unfortunately, financial assistance could be offered to only six girls and boys due to the limitations of the fund.

The scholarship program was set up in 1962 with money donated by employees who had belonged to the department's group insurance plan prior to the introduction of the government's surgical medical insurance plan. Surplus money was returned to the department by the Travelers Insurance Company and contributors to the plan were given the opportunity of receiving a prorated refund or donating it to a scholarship fund. In all, some \$60,000 was donated and a Board of Trustees was set up to administer the fund, comprised of the assistant deputy ministers of air, marine and general, with the director of administration and personnel as chairman.

To be eligible for a D.O.T. scholarship a student must first be a dependent of an active or retired D.O.T. employee. As well he or she must not be in receipt of scholarships valued at more than \$1,000. He can receive \$500 in other awards and the D.O.T. one, or \$500 to \$900 in others and an equally reduced portion of the D.O.T.

scholarship. Since the current cost of university tuition plus books for first year students across Canada averages \$625 to \$750 these scholarships are of real financial value to those earning them.

For the relatively small number of students who attain marks in the 90's many valuable scholarships are available. However, the keen competition for every scholarship dollar available exists among students who have first class marks in the 70's and 80's. Our scholarships are usually sought by students in this group.

With the thought in mind that the more students D.O.T. can give a financial assist to the better, the Board is currently considering the future of the plan. Since the interest rate on the funds invested will be fairly stable over the years ahead, the number and amount of the scholarships will necessarily remain at the 1965 figure of five worth \$500 each unless the principal is increased substantially. For instance, an increase of \$10,000 would provide interest for one additional \$500 scholarship.

It may seem that \$10,000 is a lot of money to raise so one youngster can get started on a university career, but it actually means that one student a year ad infinitum will benefit. Too, when you realize that \$10,000 is less than \$1.00 contributed per employee, it doesn't seem like an impossible amount to aim at.

Members of the Board believe that since many, many Dot'ers generously gave their insurance refunds to establish the program in the initial instance, there is a possibility that others who did not take the opportunity would now be interested in donating through a fund-raising drive. Also there are those who were not insurance subscribers but would like to be identified with the scholarship plan by making a donation.

If you would like to help more D.O.T. youngsters receive financial assistance during their first year at university, why not make a contribution to-day? Make cheques payable to the Chairman, D.O.T. Scholarship Fund and mail to the Director of Administration and Personnel, Department of Transport, Ottawa.

Statement of Annual Interest Revenue and Expenditures of D.O.T. Scholarship Fund

1. Interest Revenue

Date of Purchase	Type of Security	Amount	Int. Rate	Annual Int. Revenue
Dec. 27/62	Prov. of Ont. Bonds (Dec. 1/82).....	\$ 12,500	5½%	\$ 656.25
Dec. 27/62	C.N.R. Bonds (Oct. 1/87).....	12,500	5%	625.00
Jan. 18/65	Ont. Hydro Bonds (Feb. 1/85).....	35,000	5½%	1,837.50
	Totals.....	<u>\$ 60,000</u>		<u>\$ 3,118.75</u>

Bond Interest received in 1963..... \$1,281.25
 Bond Interest received in 1964..... 1,281.25

Bond Interest will become due in 1965 as follows:

Apr. 1/65—C.N.R. Bonds.....	\$ 312.50
June 1/65—Prov. of Ont. Bonds.....	328.13
Aug. 1/65—Ont. Hydro Bonds.....	918.75*
Oct. 1/65—C.N.R. Bonds.....	312.50
Dec. 1/65—Prov. of Ont. Bonds.....	328.12
Total.....	<u>\$2,200.00*</u>

*In subsequent fiscal years, bond interest will be due in this amount on February 1, as well as August 1, and the total annual interest due on all bonds will be \$3,118.75

2. Administration Expenditures

The expenditures incurred in the administration of the plan for the past two years were as follows:

	1963	1964
Cost of Civil Service Co-op. Membership.....	\$ 5.00	\$
Rental of Safety Deposit Box.....	5.00	5.00
Canadian University Foundation expenses in convening Award Selection Committee.....	73.97	103.93
Honoraria of \$25 each, to Selection Committee Members.....	100.00	100.00
Totals.....	<u>\$183.97</u>	<u>\$208.93</u>

3. Total Value of Scholarships Awarded

Scholarships awarded in the past two years were as follow:

1963—(3 × \$400).....	\$1,200
1964—(2 × \$400) + (1 × \$200).....	1,000

4. Cash on Hand at March 31, 1965

Cash Balances presently at the credit of the Scholarship Fund are as follow:

In Bank of Montreal.....	\$ 415.88
In C.S. Co-op.....	650.85
Total.....	<u>\$1,066.73</u>

5. Cash Available for Scholarship Awards in 1965

Estimated amount available for Scholarship Awards, as at August 1, 1965, is \$2,613.88.

Appointed Montreal Regional Director



Maurice Baribeau was appointed regional director of air services at Montreal effective February 1. He had been acting regional controller of civil aviation in the same region since August 1963.

Born at Lac Ste. Marie, Quebec in 1912, Mr. Baribeau was educated there and at Bourget College, Rigaud, Quebec. In 1931 he began his government career with the Dominion Bureau of Statistics in Ottawa.

He left in 1940 to enlist in the RCAF as a pilot and was appointed assistant chief flying instructor of No. 13 elementary training school operated at St. Eugene, Quebec under the Commonwealth Air Training Plan.

Early in 1943 he attended a general reconnaissance course at Summerside, P.E.I. and then went overseas as an operational pilot with 404 squadron. In September 1944 he was shot down and captured and spent nine months as a prisoner of war in East and West Germany.

Mr. Baribeau returned to Canada and accepted a position as chief flying instructor of the Ottawa Flying Club. In 1948 he joined the Department of Transport as a civil aviation inspector in charge of personnel licensing. He was promoted to superintendent of regulations and licensing in 1956 and in that capacity attended a number of meetings of the International Civil Aviation Organization in both Canada and Europe.

Mr. Baribeau was on leave of absence in 1962-63 to attend the annual National Defence College course at Kingston, Ontario, which acquaints senior military and civilian officials with military, economic political and organizational aspects of national security.

Now a resident of Point Claire, Quebec, the new regional director is married and has three sons. He is a charter member of the Rotary Club and a past chairman of the aviation group of the Professional Institute of the Public Service of Canada.

ICAO Training Aid Developed by D.O.T.

Student air traffic controllers in developing nations will soon be using a table top trainer designed by D.O.T. at the request of the International Civil Aviation Organization (ICAO).

The device uses tape-recorded conversations between aircraft captains and controllers in imaginary situations.

Developed in the air services training school at Ottawa International Airport, the trainer relieves instructors of much repetitious drilling and allows each student to learn at his own pace. It is particularly suitable for countries where air traffic control students have a minimum education and must also learn English.

ICAO makes the trainers available at about \$800 a unit. Each unit consists of a stereophonic tape recorder, seven half-hour taped lessons, 24 metal TV tables and 30 student's desk sets.

Each desk set contains a manual with a complete transcript of the tapes in the student's native language, 14 pictorial desk sheets depicting an airport layout plan with typical traffic situations, and three magnets. The magnets, representing aircraft, cling to the metal table and are moved over the layout sheets according to recorded instructions.

The taped lessons are in English—the universal language of air traffic control. They contain the voices of the instructor, several air traffic controllers and a dozen foreign pilots.

Pilots' and controllers' voices are played back through two different loudspeakers, giving a back-and-forth effect. A final touch of realism lies in the voices themselves; the Air France captain speaks with a French accent, the Lufthansa pilot with a German one, and so on.

Later on in the course students can block out the controllers' voices and give the instructions themselves. The seven lessons end with a tape-recorded examination.

The trainer is designed to be used over a period of six to ten weeks, according to each student's progress. However, in a recent test at the D.O.T. school, 14 students who had never had any air traffic control training at all took the entire course in a single day and scored an average of 58 per cent in the final exam.

It took six months to develop the lessons for the new table-top trainer. They are designed to let the student practice as many traffic situations as possible in a short time and in ascending order of complexity.

School Superintendent Art Johnson, Air Traffic Control, Chief Instructor Archie Novakowski and Instructors Bob Hamilton, Ed Lesage, Scott Hainer and Tom Taylor prepared and recorded the lessons in their spare time. In the final ICAO version the voices of professional actors were used.

Close co-operation between ICAO, a U.N. agency with headquarters in Montreal, and the air services training school has

come naturally ever since the school's inception in 1959.

The prototype of an ICAO-sponsored tower and radar trainer, developed in co-ordination with the Department of Transport several years ago, is still in use at the school. Discussions about mutual problems take place regularly, and recently part of an ICAO film about typewriting was shot in the Ottawa school.

Answers to Crossword on Page 23

- | | |
|-----------|------------|
| 29. Be | 31. Money |
| 28. No | 30. Mason |
| 27. C.O. | 28. Nab |
| 26. A.A. | 26. ATC |
| 24. Tan | 25. To |
| 22. Is | 23. MST |
| 17. But | 20. Sun |
| 16. Elm | 19. Plane |
| 15. Son | 18. VOR |
| 13. Memos | 17. Be |
| 11. Brass | 16. Era |
| 9. Civil | 14. Is |
| 8. E.G. | 12. C.C.G. |
| 7. Ice | 10. Run |
| 6. P.C. | 5. Spiel |
| 4. On | 1. Apron |
| 3. Rug | |
| 2. P.R. | |
| DOWN: | ACROSS: |

More than \$400 Awarded to 23 Suggestors

In recent months 23 D.O.T.'ers, including one pensioner, received cash or merchandise awards valued at \$415 for ideas which will save the department time, money or effort. Leading the list with a \$50 award was R. Peterbaugh, a packer at Edmonton regional stores.

Mr. Peterbaugh designed and built a cable reel lifter as a safe convenient way to lift full reels of cables. When tested, his device allowed one man to lift with ease a reel weighing nearly 1,000 pounds. Several D.O.T. stores depots across the country are now using the lifter and Mr. Peterbaugh was rewarded for his efforts with a \$50 cheque, less income tax.

Another winner, Russell R. Travers, a Lethbridge, Alberta radio technician, earned \$40 for recommending a modification to the VOR control system. He noted that voltage pulses, caused by electrical storms, actuated the control circuits of the equipment and turned the transmitters on and off unnecessarily. The modification he suggested eliminates this possible hazardous situation. He chose three items—an overnight case, golfballs and a writing case—valued at \$40 as his award-in-kind.

Other winners of awards-in-kind are:



Mr Peterbaugh receives his award cheque from G. E. McDowell, regional director of air services, Edmonton.

NAME	POSITION	LOCATION	AMOUNT
Frank Adams	technician, electronics	Ottawa	\$10
Mrs. H. J. Carson	clerk	Ottawa	\$10
Derek W. J. Challis	meteorological technician	Frobisher Bay, N.W.T.	\$15
R. W. DeLong	stationary engineer	Halifax International Airport	\$10
G. W. Elliott	radio operator	Baker Lake, N.W.T.	\$20
P. G. Ervin	technician, electronics	Moncton, N.B.	\$30
J. R. Ferguson	technician, electronics	Montague, P.E.I.	\$10
J. E. R. Gagne	meteorological communicator	Montreal International Airport	\$10
J. G. Gauthier	radio technician	Arvida, Que.	\$20
J. Gordon Graham	technician, electronics	Abbotsford, B.C.	\$15
W. A. Haigh	technician, electronics	Winnipeg, Man.	\$10
Thomas W. Hurst	radio technician (retired)	Ottawa International Airport	\$10
J. Maher	technician, electronics	Halifax, N.S.	\$30
Mrs. Brenda McDonald	stenographer	meteorological liaison, Ottawa.	\$15
I. A. Mihalicz	meteorological technician	Churchill, Man.	\$10
P. J. Purdy	air traffic controller	Vancouver, B.C.	\$20
J. A. Redick	engineer	Civil Aviation, Ottawa	\$10
Melvin D. Reid	meteorological technician	Toronto, Ont.	\$25
W. B. Skea	meteorological technician	Inuvik, N.W.T.	\$15
Robert E. Stiles	radio operator	Abbotsford, B.C.	\$20
H. F. Strathie	maintenance craftsman	Bonavista, Nfld.	\$10

Retirements

Col. Keith Dixon, well-known Victoria district marine agent, retired early in January after 24 years of government service.

First appointed district marine agent at Prince Rupert in 1941, Col. Dixon did not take up his duties until 1946 because he was on active duty with the Canadian Army. After three years at Prince Rupert he was appointed superintendent of lights at Victoria in 1949. In 1954 he became district marine agent there.

Born at Yorkshire, England in 1898, Mr. Dixon was educated at Doncaster Grammar school and Sheffield University. During the First World War he served in Egypt, Palestine and Syria with the British Forces. Two years after the end of the war he came to Canada and joined the engineering department of Canadian Pacific Railway Company. He left there in 1933 to join the Ontario Department of Highways. In 1937 he moved to Victoria where he once again was employed by the CPR.

Joining the Canadian Army at the outbreak of the Second World War, Col. Dixon rose to the rank of lieutenant colonel.

Along with his busy daily routine as district marine agent, Col. Dixon has been active in the Boy Scout Movement in British Columbia. From 1949 to 1954 he was assistant provincial commissioner. As well, he is a member of the Engineering Institute of Canada, an honorary member of the Royal Victoria Yacht Club, patron of the Victoria Power Squadron and a member of the Canadian Club of Victoria.

As evidence of the high esteem in which Col. Dixon is held by D.O.T. employees and business associates alike, several luncheons and dinners were held in his honor. The district marine agency staff presented him with an aluminum greenhouse and held a dinner at the Oak Bay Marina dining room. Luncheons were given by the interdepartmental training group, Johnston Terminals Ltd. and Island Tug and Barge Limited. and, as well, he was guest of honor at a private dinner at Government House.



Col. Dixon (left) says thank you to I. M. Campbell, deputy district marine agent, who made the presentation of an aluminum greenhouse to the retiring district marine agent on behalf of the Victoria agency staff.

R. Edgar Adams (right) retired as office supervisor of Saint John District Marine Agency on January 12 after completing six months retiring leave.

Mr. Adams began his career in 1926 as a seasonal clerk with the old Department of Marine and Fisheries. During the next 20 years or so he received successive promotions until becoming supervisor of office services in 1954.

Mr. Adams has had a distinguished career in the Boy Scout Movement dating back to 1917. In 1938 he became assistant district commissioner and was presented with the Medal of Merit for outstanding service to scouting. In 1957 he was selected to attend the Jubilee Jamboree held at Sutton, England to commemorate the 50th birthday of scouting.

Other activities to which Mr. Adams has devoted much time and energy include the Credit Union Movement and the Saint John District Council Civil Service Association. He was recently elected an honorary life member of the latter.

At a buffet luncheon held in his honor, Mr. Adams was presented with a slide projector and screen by George L. Smith, acting district marine agent.



Charles A. Whittet (below), a technical officer with the electrical engineering division, air services construction branch, retired in December after 35 years of government service.

A native of Northampton, England, Mr. Whittet came to Canada at a young age and finished his education here. In 1913 he apprenticed to a Regina electrical firm. Three years later he enlisted in the Canadian Army and served 18 months in France.

After the war he became a journeyman electrician and was employed by Imperial Oil Ltd. from 1922 to 1930 as a maintenance electrician. He left to join the staff of the civil aviation section, air services branch of Department of National Defence as beacon supervisor.

With the formation of the Department of Transport in 1936, Mr. Whittet became an airways serviceman with this department. During the Second War, with the establishment of the Commonwealth Training scheme, he moved to Lethbridge as senior airways serviceman in charge of crews installing lighting equipment on airport training sites. When the Alberta sites were completed he moved to Vancouver air services and remained in that region until 1954, when he was transferred to Ottawa as a technical officer.

In 1953 Mr. Whittet was awarded the Coronation Medal in recognition of his work during World War II.



Alfred K. Smith, inspector of radio regulations at Saint-John, N.B., retired in February after 39 years of government service.

Mr. Smith was presented with an engraved wrist watch on behalf of friends and associates within the department. Charles

M. Williams, regional superintendent of radio regulations, made the presentation.

Above, left to right: Mr. Smith, Miss Mary O'Conner, stenographer, Saint John; Mrs. Smith and Mr. Williams.



After 24 years of service with air services construction branch K. W. Krumm (above right) retired at the end of November. A well-known personality at headquarters, his early retirement was the result of poor health.

Bill Krumm graduated from high school in Toronto and spent the next few years in the United States Army serving in Nicaragua. In 1938 he joined the Department of

Public Works in Toronto as a draftsman. Two years later he moved to Ottawa with the Department of Transport.

On November 30, at a celebration in his honor, Mr. Krumm received gifts and best wishes from fellow employees. W. P. Weatherall, officer-in-charge, properties, zoning and landscaping section, made the presentation.

Cross-Canada Dateline

Halifax—On January 31, a reception was held aboard the CCGS *John A. Macdonald* to honor the touring West German hockey team.

The gathering followed a game between the visitors and the Glace Bay Mooseheads, which ended in a tie. The West Germans had recently won games at Charlottetown, Fredericton, and St. John's, Nfld., and tied others at Halifax and Saint John, N.B. to remain unbeaten in their tour of the Maritimes.

Captain Paul Fournier, as host of the gathering aboard the *Macdonald*, extended a warm welcome to players and officials of the West German and Canadian amateur hockey clubs, as well as to Mr. Robert Muir, Member of Parliament for Cape Breton North and Victoria, Mr. Donald MacInnis, Member of Parliament for Cape Breton South, Mayor Russell Urquhart of Sydney, and D.O.T. Ice Operations Officer E. L. Kelso.



Standing left to right: E. Trauturen and M. Egan, captain and coach of the West German team, Mr. MacInnis, Mr. Urquhart, Captain P. M. Fournier, Mr. Kelso and Mr. Muir. Seated: J. Coleman of the *Macdonald*, N. Batten, coach of Glace Bay Mooseheads, E. George of the *Macdonald*, V. Ryan, Captain of Mooseheads and D. Hughes of the *Macdonald* holding "Midnight".

Ottawa—The damage caused by fire to air services property in 1964 was a record low of \$12,214.50. Assistant Deputy Minister, Air, G. A. Scott congratulated the regions and said that he felt the record was achieved largely by good administration practices supported by fire prevention campaigns, airport emergency staffs and the attention of every employee to fire prevention measures.

Losses and numbers of fires in the regions were as follows:

Place	Amount	No. of Fires
Moncton.....	\$ 5.00	6
Montreal.....	7,628.50	14
Toronto.....	nil	2
Winnipeg.....	435.00	5
Edmonton.....	3,971.00	4
Vancouver.....	175.00	2
Total.....	\$12,214.50	33

Ottawa—reprinted from the *Ottawa Citizen*—A civil servant is a person who draws anywhere from \$500 to \$175,000 in annual pay and is most commonly stuck behind a desk. Who says so? Several thousand high school students.

Civil servants are located mainly in the post office department, say the students, but some can be found in national employment or unemployment insurance offices, in national revenue (income tax branch), health and welfare, agriculture and emergency measures.

The students—6,000 of them in senior high school grades across the country—gave their answers in questionnaires sent

out by the Civil Service Commission to study the public image of the civil service.

Noted the commission, in a preamble to its report on the survey: "Today, thousands of Canadian Civil servants, who, during the years 1939-1945, also served their country but in a military capacity, must find the contrast between the public's image of the value of their two social roles absolutely astounding.

"Then, they were cast in an heroic mold; today, if not ignored, they may be viewed as inefficient parasites."

Startling replies—The Commission posed many questions, in an attempt to determine the kind of information it should make available to students, and got some startling replies. What is the main advantage of a civil service job? asked the commission.

B.C. boy: "You don't have to serve on a jury."

B.C. girl: "You cannot be fired."

Ontario boy: "Your licence plates do not have a letter on them."

Alberta boy: "Civil servants do not pay income tax."

Newfoundland boy: "He does not have to work but merely gives the orders." What is the main disadvantage?

Alberta girl: "Civil servants get no holidays except Armistice Day."

B.C. boy: "Civil servants are held lowly in public opinion."

Newfoundland boy: "In a civil service job you can be voted out."

Quebec girl: "The principal disadvantage is that everyone knows the salary of a person."

Saskatchewan girl: "Civil service jobs are degrading."

Ontario girl: "How can any poor secretary in the civil service ever expect

to marry when the ratio of women to men is 4-1 in Ottawa?"

The students, as a whole, cited security and stability of employment as the main advantages, then went on from there to mention fringe benefits, good pay, good working conditions, the opportunity to do one's patriotic duty, the opportunity to travel and meet interesting people.

Conversely, they put poor pay as the number one villain in their list of disadvantages and then cited slow advancement, elements of red tape and routine work, less favorable working conditions than in industry, and forms of political interference. Despite the wide range in estimating salaries, the average concept was of starting salaries almost twice those paid and lower maximum salaries than is the case.

The general tendency was to over-estimate the length of the work week and under-estimate vacation leave.

Most students correctly identified Ottawa as the centre with the largest number of civil servants, though a few expected to find the largest group in Washington or New York.

But if they are posted abroad, then they would be:

"... employed in the diplomatic service at embassies in the capacity of clerks or informants."

"... in the armed forces spying."

"Travelling salesmen, insurance companies."

And in what kind of jobs would artistic ability be a prime qualification?

"Drawing on the paper money which is made in the mint," said an Ontario girl.

"In the advertising signs like help keep Alberta green," said an Alberta girl.

Edmonton—A semi-automatic message switching centre was recently installed at Edmonton International Airport. (photo at right)

Incoming aeronautical messages on punched tape for relay to one or more other destinations used to be torn off one machine and fed into another by hand. Now operators in foreground push buttons that route messages electronically. Consoles in the background produce copies for records.

Similar centres are in use at Vancouver and Winnipeg, and will be installed at Toronto, Montreal, and Gander.



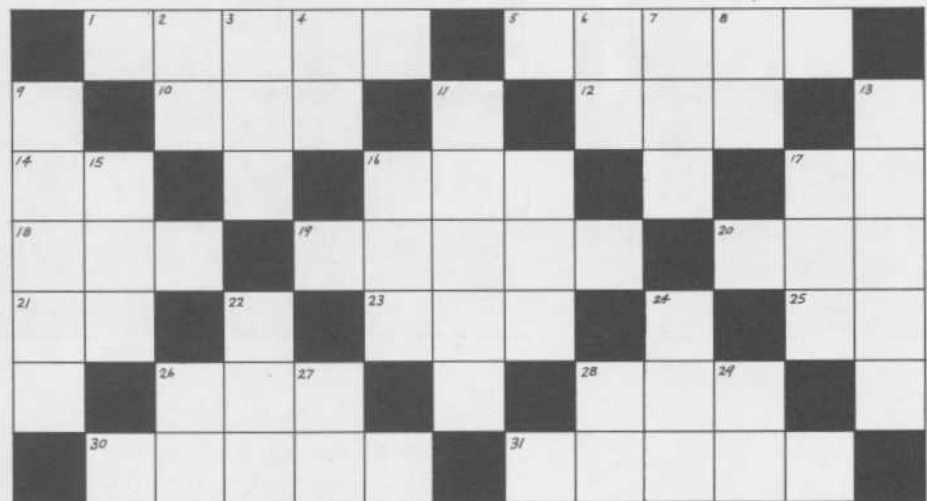
Vancouver—The "Doc Quealy Award" for the best entry in the Fire Prevention Week contest was won this year by Penticton Airport. The presentation was made to Airport Manager Stewart Jackson by H. K. Jenns, the B.C. deputy fire marshal. In his remarks Mr. Jenns said that people generally dislike instructions or orders in matters affecting fire safety and the best approach seems to be an indirect one. He complimented Mr. Jackson on his imaginative approach to the problem.

Mr. Jackson, airport manager at Penticton for the past 18 years, used a humorous approach. Situations were staged, photographed and mounted in an illuminated "peek box" complete with fire prevention placards. The "peek box" was placed in the terminal waiting room with the slogan, "Fire Is Hell In The Wrong Place", visible to all. Local papers ran stories and photographs of the exhibit and many people visited the airport to see it.

Mr. Jackson says his respect for fire dates back to his days as a mate aboard a merchant marine vessel. The crew worked night and day for three days to save the vessel after fire broke out in 2,000 tons of coal from spontaneous combustion. On yet another occasion, as mate aboard the "Baychimo", he experienced a similar thing when coal being carried to Arctic outposts caught fire.

Toronto—At meteorological headquarters they are still chuckling over two recent requests from students:

An Alberta student asked, "Would you send me a 24 x 20 paper picture of a meteor, a meteorite and the sun and earth in the background . . .". Another, from Nova Scotia, wasn't quite so explicit. "I have heard of your wonderful offer and would like very much for you to send it to me"!



Across

1. Parking area for aircraft
5. Story
10. Flee
12. Coast Guard
14. Exists
16. Period
17. Exist
18. Radio aid
19. Aircraft
20. Total amount
21. Preposition
23. Mountain time
25. Preposition
26. Function of D.O.T.
28. Apprehend
30. Worker in stone
31. Current coin

Down

2. Public relations
3. Floor mat
4. Preposition
6. Privy Councillor
7. Frozen water
8. For example
9. Non-military
11. Copper alloy
13. Notes
15. Child
16. Tree
17. Only
22. Possessive
24. Sunburnt color
26. Anti-aircraft
27. Commanding Officer
28. Not any
29. Exist

See page 18 for answers



Canadian Coast Guard ALBUM



An unusual buoy-tending vessel, designed for operation on the Mackenzie River system where the waters are frequently deep and fast, CCGS "Tembah" has a draft of only three feet and has four rudders to ensure steering control. She was built at the yards of Allied Builders Ltd., Vancouver, cut into sections for delivery by rail to Waterways, Alberta, and reassembled. She entered service in September, 1963.

CCGS TEMBAH

LENGTH: 123 feet, 10 inches

BREADTH: 26 feet

DRAFT: 3 feet

POWER: Diesel, 920 B.H.P., twin screw

GROSS TONNAGE: 178