



ZEPHYR

FEBRUARY 1972 FÉVRIER

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ICE RECONNAISSANCE ASSISTANCE IN THE NORTH WATER PROJECT

In the beginning of February, 1972, the *Louis S. St. Laurent*, the largest of the Canadian Coast Guard's fleet of icebreakers, left Halifax harbour and set its course north for Baffin Bay and beyond. Its difficult mission was to transport a team of scientists, co-sponsored by the National Science Foundation (U.S.) and the Defence Research Board (Can.), to the "North Water" in the north Baffin-Bay – Smith Sound region for research activity. The operation demanded the total commitment of one of the AES Douglas DC-4 ice reconnaissance aircraft in support of the ship for the entire project. The assignment was a challenging one for the Ice Reconnaissance Unit in view of the necessity for operations under the extremely cold temperatures and low ambient light conditions of the Arctic winter. A team of seasoned ice observers and top rated aircrew were carefully selected for assignment to the charter aircraft CF-KAE for the project. In addition, two experienced observers were assigned for duty on the icebreaker during the voyage. The aircraft was equipped with special remote sensing instruments capable of providing data in real time to aid the visual observer in his analysis of ice conditions during periods of twilight and darkness. Because of the reliance which would have to be placed on remote sensors for data acquisition under these conditions, the Unit's Remote Sensing Meteorologist accompanied the team to assist in operation of the sensors and to provide guidance in interpretation of imagery.



A 70 mm aerial panoramic photograph of the *Louis S. St. Laurent* in heavy first year ice at $70^{\circ} 20'N, 63^{\circ}W$ (Feb. 11, 1972). The 130° angle view provided in the photograph shows both the wing tip and the tail of the aircraft. The curved horizon is due to camera distortion. Several icebergs are visible in the background.

In preparation for the project authority was obtained through diplomatic channels from Denmark and the United States for the use of airbase facilities at Thule, Greenland and at one of the Dewline sites. Accordingly, the base of operation for reconnaissance support was moved northward from Gander to Frobisher and finally to Thule, Greenland as the ship progressed, with the effect of decreasing duration of daylight and falling temperatures becoming increasingly apparent. Thule Air Force Base, with its temperatures dropping to $-40^{\circ}F$, was still in the grips of its winter darkness, although the long twilight already indicated that the first appearance of the sun was not far off.

On the reconnaissance flights, the laser profilometer, a remote sensor capable of operating both day and night, was very successfully used to provide accurate measurements of heights of ice ridges and to aid the visual observer in identifying the ages of the sea ice by presenting the surface roughness patterns. The laser data was recorded on an oscillograph type recorder for immediate analysis. An infrared line scan system, complete with a



Infrared real time display of various stages of ice growth in the North Water region - Feb. 10, 1972.



Infrared real time display of icebreaker St. Laurent in first year ice recorded at midnight Feb. 19, 1972 from an altitude of 7,000 feet. The ship is discernible at the head of the track through the ice which appears as an open lead.



The icebreaker as it appears on infrared real time display from an altitude of 500 feet.

real time visicorder chart paper data output, was leased for the project to provide thermal imagery of the ice surface. This was the first time a real time hard copy readout allowing immediate inflight data analysis was used with the scanner system. The chart paper presentation proved very successful, allowing identification of at least five gray tones and materially assisted in the compilation of ice information for broadcast on radio facsimile direct to the ship. In addition, an aerial panoramic camera, loaded with high speed Tri-X aerial film, was used for photographic coverage under marginal light conditions.

Ice conditions encountered during the project were found to be unusually heavy, with few leads running in a north-south direction. There were indications of this in advance of the project as identified in regular ice reconnaissance flights and by ice observers who were participating in Department of National Defence Northern Patrols. In fact, Marine Operations of MOT had expressed some doubt about releasing the icebreaker for the northern probes since this was contingent upon requirements for icebreaker support in the Gulf. The ship made slow progress through the ice along the Greenland coast reaching the area north of 72°N. At the ship Captains's request, an ice reconnaissance flight was made over the area of the ship's proposed area of operations in the north Baffin Bay – Smith Sound region. The area where scientists had expected to find significant amounts of open water or light ice was found to be mostly covered with young ice ranging from several inches to one foot thick. At this time, a decision was taken not to carry out the full program that had been planned because of the heavy fuel consumption of the ship and deteriorating ice conditions in the Gulf. On February 11, word was passed to the ice reconnaissance crew that the ship would carry out a few probes in the immediate area before returning south. After several days of battling the icepack slowly southward, the ship entered looser ice and finally on February 19, reached open water off the coast of Newfoundland. The aircraft continued its support, changing its base from Thule to Frobisher to Gander and finally to Summerside, P.E.I., to end its North Water Operation and resume its routine winter operations in the south.

NEWS FROM KEITH MCLEOD IN TEHERAN

Dear Reed:

How goes everything with you? Well, I hope. I have no real complaint, tho I hear quite a few here and there. We had a straight forward interesting trip here from Geneva stopping at Venice (cold and windy) next Belgrade Yugoslavia, next Sofia Bulgaria, Istanbul Ankara and various points in Turkey. Plenty of police about in Yugo, and Bulgaria and Turkey and a bit unusual but we got thru without trouble. Teenagers threw stones but little kids waved hands wildly. Iran was a welcome change with law and order, and pleasant courteous people. Roads new and very well done. All farming from Istanbul thru Turkey and Iran is pretty primitive with wooden plows and oxen in many cases. Camels were wandering the fields like sheep in one area in Iran. Teheran is a thriving busy, congested city, growing from 300,000 about 15 – 20 yrs ago to 3½ million now, and no sewage system at all in the city. Water seems OK. So far we've been quite healthy except for a throat condition first week we were here that got me down for a few days.

Finally got down to the Persian Gulf last week (the week here runs from Sat. to Thurs. with Fri. off (Muslem Sunday). Had 5 days at 2 places. Its quite a job arranging communications as equipment is all radio with SSB that is not bad but only fairly reliable.

Observers are more unreliable actually. Couple of weeks ago some wanted to take observations up to 3 hours early, so they could go on home. They seem to love being away sick or whatever and put things off if an excuse can be found and even if one can't be found. So our job is largely concerned with motivation and responsibility, which are singularly lacking in middle-East countries. Was same in Egypt, but worse than here. Iran is doing a tremendous job trying to modernize in a few years, with new dams, factories, schools etc. everywhere.

In the Gulf area a British Consulting Firm has 7 meteorologists working under contract with oil companies so I have to tread carefully and get cooperation instead of competition. We are in a 2 room flat, but rooms are 25 feet long 12 wide and 12 high with large kitchen, bathroom - extra washroom.

We are in a blind street so I can leave my car outside fairly safe but pilfering is quite the thing here. Buildings all have heavy steel grills and big locks, over windows, on all streets. The traffic defies description. Cars are increasing in number at about 1500 a month in the city and streets are packed now during the day from 7:30 to 10 p.m. 40% or less have car insurance and I think they take driving lessons by mail. They all seem to drive like kids at a circus in those cars that move over a metal floor, veering every which way. Nearly every car has big dents in the sides and fenders. Lights bashed and what not. They drive like fiends cutting into every space and pushing thru a mass of cars without hesitation. I marvel that there aren't 1000's killed a day as pedestrians walk everywhere green - red and light, day or night. Your help in getting me set up and away is a big help to me and I'm grateful. Thanks again Reed. We had a lot of good fun together and I'm looking forward to getting back for some more chats at the new A.E.S. So long for now Reed.

Regards, Keith.

THE SCIENCE OF FORECASTING

(by Ed Gould - The Victorian)

It's a fact that there's nothing you do - indoors or out - that isn't affected by the weather.

And that's why the Department of the Environment weather office at Victoria International Airport gets hundreds of calls every day and night from contractors, pilots and little old ladies.

"If it's gonna rain I better not pour that concrete," the contractor says.

"Think it looks good enough to fly in?" the weekend pilot asks.

"The radio said it was going to rain so do you think I should take my umbrella downtown?" the little old lady asks.

The phone rang in the weather office so much the first month the automatic answering system was installed, the equipment broke down and had to be repaired.

Even with the recorded, up-to-date information, about 300 of the 900 daily calls are handled personally. Some callers want specific information. Like what height the waves might be in a certain area at a certain time of day, week and month.

"We are consultants to marine engineers like those who want to know the conditions they might encounter while laying undersea cable," said Allan McQuarrie, head of the DOE weather office, a professional weatherman with 31 years of experience.

The nine meteorological technicians who work with Mr. McQuarrie man the weather office 24 hours a day, seven days a week. They have a minimum of 15 years experience and they all could use an extra pair of arms and legs because answering telephones is only a small part of their job.

"We supply weather information to the public on request, for all the newspapers and radio and television stations, and aviation and marine services," Mr. McQuarrie said.

The weathermen, professional as they are, don't rely strictly on their own judgement. They have rooms full of delicate equipment to aid them.

A weather ship and a satellite help fill in the jigsaw puzzle. At present, the satellite information comes from Seattle which has an antenna and is relayed to Victoria International Airport through a direct land line.

"We expect to have our own antenna and associated tracking equipment within the next two months," Mr. McQuarrie said. It will be located in Vancouver.

Other improvements are on the way and whether you believe or not, the system is pretty darn accurate. "The weather system is the best communications network in the world," Mr. McQuarrie said. The discovery of the jet streams and the use of computers have helped immeasurably.

Even accurate, up-to-date information is available from the Soviet Union and China. "Weather is the only thing that's not political," he said. "And we're not concerned how it comes, as long as it arrives."

Listening posts in Alaska supply much of the information from behind the Iron and Bamboo Curtains that isn't already available from the weather satellite.

Some of the equipment the technicians at the DOE office use includes a mercury barometer for measuring the pressure exerted by air. A barograph is used to obtain the barometric pressure at a specific time.

Readings from a temperature thermometer in a field are registered inside on a remote indicator. The dew point is found by determining the temperature of a wet bulb thermometer, which is a bottle of water with a wick attached. The amount of evaporated water is measured.

A transmissometer records visibility. A light focuses on a photoelectric cell 600 feet away. The results are converted into visibility in miles. The equipment is adjacent to the main airport runway.

There are wind indicators for direction and speed, a rain guage which marks a chart every time one one-hundredth of an inch of precipitation falls. A sun recorder is on the roof of the building. The height and amount of clouds are estimated visually during the day and by focusing a powerful light on them at night.

All the data is recorded and every three hours the results of the forecasts are checked to see how accurate they were. In other words, did it rain when we said it was going to?

The information is transmitted on an eight-tract teletype to Toronto for distribution around the world.

A LA DÉRIVE DES NUAGES

par Alcide Ouellet

Regarde attentivement le ciel et les nuages
Et tu y trouveras de la vie une image.
Les châteaux en Espagne des cumulus bourgeonnant
Que l'instabilité de l'air
En colère détruit
En déversant ses abats
Sur les amours faciles
Des étés fragiles;
Les formes adorables des altocumulus mammatus
Modifiées constamment
Par Eole au souffle puissant;
La grisaille des stratus au ras du sol
Qui emprisonne les humains
Dans les réalités du quotidien;
Les cirrus échevelés
D'un idéal trop élevé
Que l'approche d'une tempête
Viendra bientôt crever.
Pourtant, si tu peux voler
Au-delà des nuées,
Le soleil t'attend
Et tu peux redevenir un enfant
Qui s'émerveille des horizons illimités,
D'un monde où tout serait amour et liberté. . .

WEATHER COURSE FOR FORESTRY PERSONNEL

The first weather course for Forest Fire personnel was completed on February 11 at the Air Services Training School. The students consisted of one from Yukon Forest Service, three from Forest Protection Service Quebec, six from Ontario Department of Lands and Forest and two from Canadian Forestry Service.

TRAINING COURSE IN COMPUTER APPLICATIONS TO FORECASTING

The Professional Development Unit of the Training Section will conduct a two-week course in computer applications to forecasting during May 1972. It is intended primarily for operational meteorologists with little previous training or experience in this field. The course content will illustrate applications to forecasting from statistical and numerical analysis and in numerical weather prediction. The participants will spend much of their time writing programs for the solution of problems which arise in forecasting. These will then be executed on various types of equipment available at the AES Headquarters building.

Considerable interest has been expressed in this course and it is anticipated that it will be repeated a number of times to allow all those concerned to participate.

LOW-LEVEL AIR CIRCULATION STUDY INITIATED IN THE FORECAST RESEARCH SECTION

A study in technique development to determine the detailed low-level air flow patterns has been undertaken using airborne remote sensing of plumes from chimneys. These plumes, of hot air, smoke or condensation emitted from the chimneys, will be used as tracers of air flow and are to be detected by the use of aerial photographic and infra-red sensing techniques in a co-operative project with EM and R Remote Sensing Centre in support of AES research.

A pilot test program, using DC-3 and CF-100 aircraft, will be conducted and evaluated to determine the optimum combination of altitude and sensor characteristics necessary to detect the plumes. If results are encouraging, semi-automatic procedures will be developed to average and digitize the plume directions for appropriate mapping. The flow pattern data will be used in support of Forecast Research projects dealing with meso-scale terrain influences and their effects on the transport of air-pollutants.

WEST GERMAN DOCTORS CAN DIAL SPECIAL WEATHER FORECAST THAT GUIDES THEM IN TREATING PATIENTS

West German doctors can dial a telephone number and get a special weather forecast to guide them in treatment decisions.

A typical forecast, provided by the German Meteorological Service, says:

"Tomorrow we expect penetration of humid warm air masses coming from the Mediterranean.

"It is advisable to pay particular attention to patients with circulatory ailments."

According to Dr. Erich Sussenberger, president of the meteorological service, surgeons are the most frequent users of the number.

"Quite a few surgeons are concerned about meteorological conditions on days they operate," Dr. Sussenberger maintains, adding that hot, humid weather, for example, is believed to be conducive to hemorrhage.

The telephone number is kept secret from the general public to prevent patients from trying to interpret the information.



LA POLLUTION

THE WINTER (BLUSH) THAT UNIDID US

(By John Nichol – Victoria Times – Feb. 16/72)

The winter of 1971–72 has been a most embarrassing one for British Columbia. The land of milk and honey was frozen solid for two months.

Not only was it frozen but, worse than that, the rest of Canada knows all about it. The TV news has carried pictures of trapped railroad trains and snow blocked highways. Ice storms cut off hydro power. Wind storms toppled campers off the roads and entangled freighters in Vancouver Harbor.

On January 26, St. John's, Newfoundland, Halifax, Fredericton, Charlottetown, Ottawa and Montreal were all warmer than Vancouver! Victoria, the home of winter roses, was the same temperature as North Bay, Ontario! The whole image of the banana belt is being destroyed, and, as they say in Victoria, "It's just not flipping well good enough! "

There are further humiliations. Because major power transmission lines collapsed in the mountain valleys to the North and East of Vancouver, B.C. Hydro bought hydro power from the Yanks! ! Here we are – Canadians – rich in natural resources, neighbours to the rapacious energy-short colossus to the south – actually buying power from America! It's hard to believe! Are British Columbians really ready to swallow their pride and go cap in hand to the U.S. power monopolies just for the sake of a little heat and light? You're damn right they are! But that's beside the point.

The real problem is that the freezing weather takes away the British Columbian's right to gloat. And a British Columbian who cannot gloat is like a sky diver without a 'chute. Depressed.

After all, why do people live in B.C.? There is no economic advantage. Everyone knows that Canada is run both from and for Toronto and Montreal. No, people live in B.C. for three reasons. First, because of the climate. Second, because of the scenery. And third, and most important, because they can boast to their fellow Canadians about the climate and the scenery.

But things are serious. The Tahitian music from the waterfront Polynesian restaurant drifts across the ice pack. The sea-gulls sit like frozen stockbrokers in a bear market. Nobody gloats. Meanwhile statistics come in from other stations to Victoria, including 76 weather maps a day from Montreal. A computer in the Eastern city not only transmits the maps, it also draws them!

Weather balloons with delicate transmitting instruments soar aloft to measure temperature, pressure and moisture at 5,000 10,000 18,000 30,000 and 100,000 feet every 12 hours.

This information is of particular interest to pilots who really need to know what is happening weatherwise upstairs. Some pilots come into the office to get the information first hand. Others phone in. Some don't check the weather at all.

A bulletin board of aircraft accident reports indicates what happens when they don't. "The pilot attempted visual flight rules (as against instrument flight rules) in unsuitable weather conditions."

Another one reads: "The pilot had not checked the weather nor filed a flight plan." This one was lucky. He walked out of the bush several days after an extensive search for him was finally given up.

Some pilots (very few) must feel they can rely on their own judgement. "Red sky at night is a pilots delight. But red sky in the morning, pilot take warning!"

"That bit of weather lore contains a bit of truth," Mr. McQuarrie said. He still advises pilots and boasters (the least informed travellers) to check the weather forecast for accuracy.

"We live in some of the most hazardous weather country in the world."

As for the groundhog legend, "there's nothing to it. Except maybe it means something to the groundhog."

Mr. McQuarrie said the weathermen are not always right but are getting better and better all the time. He pointed out that Canada was the first completely computerized weather communications network in the world. The United States has still to achieve that status.

As for the criticism the weatherman sometimes gets when he goofs, he said: "If we are so bad, we wouldn't be in business. And, believe me, we really are busy!"

It's too late to do anything about this winter but if it ever happens again, (this is a most unusual winter - everyone agrees) B.C. must be prepared. Several alternatives:

1. Preserve the right to gloat. Copy the world's great propaganda machines. Tell the rest of Canada only what it needs to hear. "There is no snow in the mountains. The trains are running. The daffodils are up. The crummy pinko liberal newscaster have been only running snow pictures to undermine the British Columbian's confidence in himself. They have been trying to destroy the tourist business and the B.C. way of life."
2. Start a "Snow is Beautiful" Campaign with slogans: "Take an Avalanche Victim to Lunch," "Snow is Never Having to Say You're Sorry."
- or 3. The federal government could start an Opportunities for Winter Travel Overseas Program - to be known, naturally, as OWTOP. For about \$300,000,000 the entire population of B.C. could fly to Hawaii, sit on the beach, and initiate meaningful innovative programs in response to developing needs. (As they say in Ottawa.)

WEATHER RECORD AWARDS FAMILY

Winnipeg Free Press – Feb. 9/72

The Criddles of St. Albans, Manitoba did more than just talk about the weather.

From January, 1885 until August, 1941, the Criddle family kept an official record of weather observations at St. Albans, the family home about four miles north of the junction of the Souris and Assiniboine Rivers.

But the unofficial records go on even longer than that.

Maida Criddle, continuing the work of her father, Percy, and brother Norman, kept a personal weather record until 1960, when she moved to Sidney, B.C.

Miss Criddle was presented with the centennial plaque of the Canadian Meteorological Service at a Manitoba Naturalists Society meeting, in recognition of her family's work.

The official records, spanning 56 years, are the third longest weather records kept by any one family in Canada.

Adding Miss Criddle's own accounts, the total number of years covered is 75.

The instruments used at first were not very sophisticated. Her father used to guess at the wind velocity and, through long practice, was accurate, Miss Criddle said in a telephone interview.

Every day, the maximum and minimum temperatures, barometer reading, humidity and wind would be recorded.

Miss Criddle estimated that there are 20 to 30 record books, which will now be given to the Manitoba provincial archives.



Maida Criddle, 88, With Centennial Plaque

SYMPOSIUM ON REMOTE SENSING

The first Canadian Symposium on Remote Sensing was held in the Ottawa Conference Centre, February 7 - 9, 1972. AES personnel - Dr. R.A. Olafson, Dr. G.M. Shah, Mr. E.G. Morrissey of Research and Training division and Mr. W. Klink of Instrument division were among the 450 who attended the meeting. Sessions were held on such topics as Agricultural Crops, Forestry and Wildlife, Oceanography and Limnology, Methodology, Terrain Analysis, Sensors and Instrumentation and Economic Analyses, Programs and Plans. Amongst the papers presented were two by AES staff members - "Operational program measuring surface water temperature by airborne radiation thermometer (ART) survey" by J.G. Irbe and "The use of satellite photographs to determine the time of freeze-up and break-up of Canadian Lakes" by H.L. Ferguson and H.F. Cork.

THE CANADIAN NORTHERN PIPELINE RESEARCH CONFERENCE - Ottawa, February 2 - 4, 1972

This Conference sponsored jointly by the Associated Committee on Geotechnical Research (NRC), several government departments and the Oil and Gas Industries in Canada was attended by several AES staff members. At the technical sessions consideration was given to ecological and sociological problems, terrain and land-use regulations, permafrost and ground ice problems and pipeline research progress reports of interested pipeline consortia. Throughout the Conference industry stressed that when it comes to protecting the terrain, it must construct a pipeline in such a way as to not disturb the permafrost since, if it does, it will lose both the pipeline and its investment. On the other hand, government indicated that it was impressed with the research being conducted and that there is little doubt that a pipeline can be built along the Mackenzie route, and that answers on potential environmental impact will be ready early in 1973.

PUKASKWA NATIONAL PARK - CLIMATIC INVENTORY

The Federal National Parks Service recently received a 725-square-mile tract from the Province of Ontario which is situated in a very rugged area on the north shore of Lake Superior. To assist in the development of this largest of the national parks, the AES has agreed to provide climatological data and information. Work on this project will be carried out by Mr. W.D. Wyllie, Ontario Regional Scientific Support Officer, with Mr. B.F. Findlay of Headquarters' Climatology Division acting as a consultant. The first phase of this report will be completed by March 31, 1972, with a target final completion date of September 30.

HOAR FROST PHOTOGRAPHY

These unusual and interesting photographs of heavy hoar frost deposit were taken by Mr. K.T. Berry, Meteorological Inspector, Ontario Region, at the Simcoe Weather Station at 1400 GMT on December 2, 1971.

Frost on the indicator at Simcoe was first reported at 2300 GMT on December 1, 1971. Favourable conditions for frost deposit occurred continuously for 15 hours until 1400 GMT on December 2nd when the relative humidity dropped to 88% and the air temperature rose from the minimum value of 3°F. to 9.2°F. Relative humidity was otherwise in excess of 90% for the period of the frost deposit. Winds were from the north-west at about 5 m.p.h. and the skies were essentially clear.



AES GOES NAUTICAL

With winter nearly over in southern Canada, the public begins to think of summertime recreational activities. Boating comes high on the list and small craft operators are able to get a preview of what is in store on the water by attending the annual boating expositions such as the Toronto International Boat Show and the Salon Nautique in Montreal's Place Bonaventure. The AES had a display in each of the above shows this year.

The Toronto Boat Show ran from February 3 – 13 and the Salon Nautique from February 26 – March 5.

The Exhibits were co-ordinated under the direction of the two Port Meteorological Officers in the Ontario and Quebec Regions – Jeff Meek and Denis Blanchard. The display in both cases consisted of a model of Canada's "Weathership" the CCGS Vancouver which was on loan from MOT Headquarters in Ottawa and a revolving module unit displaying large-size colour transparencies of weather/water scenes. Attractive graphics completed the two exhibits. In addition, the Ontario display was shared with the Canada Centre for Inland Waters in Burlington which showed a model of the LIMNOS research vessel.

Both displays were manned throughout the hours during which the shows were open. Visitors to the exhibits received cards and pamphlets detailing the weather services which are available to boaters in their respective regions. In addition, they were able to ask questions and inquire about weather matters affecting their own activities.

Attendance at the Toronto Boat Show was 117,000 while the Salon Nautique had an estimated 70,000 visitors.

AES HEADQUARTERS REVISITED

by – N.N. Powe

Now don't make any mistake, I think the building at 4905 Dufferin in Downsview is a fine looking structure and worthy of the hundred years tradition of the Weather Service. Ron Baird's sculpture should become an attraction that is most intriguing. I spent a most enjoyable week at the Symposium in the fall mingling with friends and distinguished visitors and enjoying the facilities of its fine hall. But I visited it again recently on business and I left it in a state of befuddlement.

When I arrived on a dull wet morning I walked boldly into the lobby, put my things in the cloakroom and came out confidently to find my way to my first appointment. I asked the advice of the commissionaire, who told me I could find climatology on the fourth floor "through the double doors." The elevator rose only two floors and therein began my confusion.

Perhaps you don't know that in the Province of Quebec you enter a building from off the street on the "ré-de-chaussée" and you know that the first, second, and other floors are above you. In the new building you enter on the second floor.

Having concluded I was on the fourth floor I stepped off the elevator, I saw no sign of any double doors until someone suggested I peak around the corner. With the aid of a few additional hints I finally located the office I wanted.

When ready for my next appointment I figured I'd get my directions ahead of time so I phoned my man and asked him how to find his office. He started talking about the north end and the east side, but I like to see the sun or the north star to orient myself that way and from the elevator you can't see out of doors. I asked how to proceed assuming that I had just stepped off the elevator. That was easy he said: "turn to the right and come through the green doors. Now I'm all for colour coding but what good is it if just off the elevator all you see is dull grey stone walls. I finally found a wing where all the doors are painted green.

Everyone at HQ who rates an office has a name plate on the door which is black, about three inches wide and stretching most of the way across his door. It indicates his department, name and specialty. I'm sure that visiting Cubs and people in wheelchairs are going to appreciate having these name plates at eye level but its rather tough on a tall man, especially when his reading glasses are hidden away in his inside pocket and he has to stoop away over to read the half-inch lettering.

The architects sure didn't waste any space in that part of the building and the approach angle for the doors is so small you can't see them till you are close to them.

After a two day visit I have a few comments to make on finding your way around. Nobody seems to have developed a practical way to give directions. There are some display boards here and there with large numbers that look like Quebec license numbers, and have the names of the specialists in small letters. When you see a familiar name you at least know you are getting warm.

Asking male employees directions doesn't pay off very well since they realize its going to be too complicated. All they give is the next clue. A better way to find your destination is to stop one of the ladies. She will stammer a few instructions then give up and guide you there.

The best method of all is to end your conference at coffee or lunch time, go to the cafeteria, way-lay your next appointee and have him guide you back to his office. You'll find the cafeteria easily. Just follow everyone else down the back stairs to the "second" floor.

SUMMARY OF ATLANTIC REGION CENTENNIAL PROJECT

M.J. Perry

On October 1, 1971, a 30 ft. trailer which contained the Atlantic Region Centennial Project arrived back as its starting point, the Moncton Airport, covering just over ten thousand miles on its visit to some 60 communities in New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland.

The purpose of the project was to acquaint the public of the Atlantic Provinces with the Meteorological Service. Between 18 and 20 thousand people received a 15-20 minute conducted tour of the trailer, and received explanations on the operation of all the basic meteorological instruments, teletype and facsimile equipment, forecasting and services to the public. Each person also received an ample supply of all the publications and pamphlets.

Three sound-on-film TV programs were done in the trailer through the facilities of CBC Moncton, CBC Halifax and CBC Saint John. Live television interviews were given at CKCW-TV Moncton, CBC Sydney, N.S. and CBC Halifax. Radio stations, in general throughout the Atlantic Provinces, were very co-operative in granting free air time to promote the display and newspapers in Moncton, Saint John, Campbellton, Sydney, Montague, P.E.I., Grand Falls, Nfld. and St. John's Nfld. published articles with pictures on the trailer.

The project had a target date of June 1st, and the date was met. Only two scheduled stops were missed; one due to staff sickness; and one due to mechanical reasons. The only problem encountered with the trailer was one flat tire and a bit of a problem with weight distribution, which was solved within the first week.

I was extremely pleased with the co-operation we received from the various offices throughout the whole Region; without their help the project could not have been carried out. I also would like to express my thanks to the Regional Office staff for giving me a free hand to plan and complete the project. Mr. Guy Gagne, a student from the University of Moncton, was selected as driver, however, due to his willingness to work and his eagerness to learn, he played a major role in conducting the public through the trailer, as well as keeping the show on the road.

Many comments were received from the public with regard to the display and with the Service in general. I am pleased to say that very few adverse comments were given to the display. Surprisingly enough, the public of the Atlantic area seemed very aware that we were in a difficult locality in regards to forecasting the weather. The people of P.E.I. probably had more criticism toward the daily forecasts than those of other areas.

Based on my observations, this was probably due to the fact that the Meteorological Service does not have a person stationed there to look after the tailoring of the forecasts. Educators were unanimous in suggesting that a display of this type should be made a permanent project which could travel around the Region visiting the schools as the curriculums contain much more about weather than in the past. A noted increase in requests for weather literature has been received from the schools.

Amusing requests were also received. With our Centennial Logo painted on both sides of our trailer, people came in requesting eye examinations, dentures repaired, artificial limbs adjusted, chest X-Rays, heart checks, fresh fish, and to see Joey Smallwood. I wonder what "Atmospheric Environment Service" would bring?

Many of the people expressed amazement over instruments such as the tipping bucket, rain gauge, and sunshine recorder. They also expressed, many times, that they had no idea there was so much involved in putting out a forecast.

I personally feel that the idea of the Mobile Display Unit was an excellent choice for our Centennial Project. It gave us a chance to talk to the man on the street, and

show him what we have been trying to do in his interest. Although some may consider the 18 - 20 thousand people a small number, we point out that a very large percentage received a personal tour of the display, in which each and every phase was explained in detail. The literature taken into the household was sure to be read by some other family members, coupled with TV, radio and newspaper coverage, a great many people were made aware of the Meteorological Service.

I would like to thank those responsible for selecting me to undertake this Project.

My sincere thanks to our Office Stenographer, Miss Nelda Gautreau, for her many hours of typing letters of thanks and reports. It is greatly appreciated.

PERSONNEL

The following have accepted positions as a result of recent competitions.

- | | |
|--------------|--|
| 71-MET-CC-33 | Meteorology (MT) 7
Shift Supervisor
Prairie Weather Central
Winnipeg
J.F. McMorran |
| 71-MET-CC-58 | Meteorology (MT) 7
Chief Prognostician
Extended Forecast Unit
Central Analysis Office
A.A. Boucaud |
| 71-MET-CC-53 | Meteorology (MT) 4
Operational Supervisor
CFWO Edmonton
Correction to December note
competition not yet completed. |

A.J. (ART) CHILDS RETIRES

The Oak Room, Union Station in Toronto provided the setting for a buffet dinner on January 10, 1972, at which 165 guests gathered to pay tribute to A.J. "Art" Childs on the occasion of his retirement.

At the Head Table with Art and Mae and daughter Debra, were Mr. J.R.H. Noble (ADMA) and Mrs. Noble, Mr. & Mrs. R.C. Graham and Mr. & Mrs. P.A. Saltzman. Bob Graham, on behalf of F.W. Benum and Forecast Division, paid tribute to Art's years of service to Meteorology, in building the Communications system to its present efficient state. Des Kennedy, DMETOC tendered a tribute and best wishes on behalf of DND. Gord Desclouds and Jim McDaniel brought greetings and best wishes from Canadian Pacific and Canadian National Telecommunications, in recognition of a long and harmonious relationship. Master of Ceremonies Percy Saltzman, a long-time friend and associate of Art's, regaled the meeting with anecdotes involving Art and his "Mafia." If a certain amount of irreverence was noticed in some speeches, it could only be attributed to "malice aforethought", and Art appreciated it as much as his friends. The big turnout of guests, several from out of town, and several who left "Met" as long as 20 years ago, is in itself a tribute to the regard in which Art was held.

Mr. Noble, in making the presentation to Art also paid tribute to Art's long and valued service. On behalf of Art's friends both in "Met" across Canada and in associated services and business, Mr. Noble presented Art with a matched set of golf clubs, a bag, cart, golf balls and a cheque.

From the date he was hired, in 1931, as the first Teletypist in the Meteorological Society, Art has played a leading role in the development of the Meteorological Communication System. The system now comprises a computer-controlled teletype network of 37,000 miles serving 380 offices, and a nation-wide facsimile system covering 19,000 miles of based facilities, serving 100 offices. During the development of the Communication networks Art travelled extensively from coast to coast and in the U.S. He combined a rare good judgement with a well developed sense of humour, and made a host of friends while furthering the interests of Meteorological communications. His contribution to the Canadian Meteorological Society was recognized in 1961 when he was awarded the Patterson medal. All of Art's friends, outside as well as inside "Met" extend their wishes for a long, happy and healthy retirement.



*J.R. II. Noble, ADMA –
Making presentation to Art Childs*



A.J. (Art) Childs



Art Childs and family

TRIVIA

UNUSUAL REQUESTS AND REPORTS

Peace River (A) W.O. 4 Alberta

Request by RCMP for AES Technician to read official temperatures and wind speeds for Dec. 21/71. This court case involved transportation of cows in an open van at speeds of 45 mph, temperature during this trip minus 14 below. Animals suffered severe frostbite to faces and solidly frozen ears on arrival at destination. Wind chill factor, minus 69 degrees F. Man pleaded guilty and was convicted on a number of charges.

Peace River (A) W.O. 4, Alberta

Phone call from a very irate lady requesting the name of the Jet Pilot who was flying too low and too fast in a military plane over her trailer court. She wanted his address so she could write to Ottawa and report him. Told us not to hang up on her or she would report us too for not showing enough courtesy to the public. We advised her to try Aeradio station as we had no way of knowing who the unfortunate pilot could be.

Saskatoon, Sask.

During ATC strike a mercy flight carrying blood plasma was held up at Saskatoon due to ice fog producing below VFR conditions at Calgary Airport. Phoned OIC of Calgary Wx. Office re local conditions and he advised that YC trml. was likely to remain below VFR for some time, but that Springbank airport just west of Calgary was not being affected by the ice fog. On the basis of this information the crew departed and completed the flight to Springbank without incident.

Churchill Weather Office

A telephone enquiry was received from a caller in Virginia, U.S.A. requesting the amount of snow on the ground and road conditions at Rankin Inlet, N.W.T. The caller was advised of the amounts of snow and the fact that there were no roads to Rankin Inlet. He then enquired about the roads at Eskimo Point, N.W.T. and was advised that there were no roads to there either. In the short conversation with the caller following the above enquiries, the Presentation Technician, who handled the enquiry, was so taken aback by the whole thing that he failed to mention that there were in fact no roads to Churchill either.

Regina Weather Office

A telephone call was received from Alaska enquiring about weather conditions for driving to New York.

HANEY EAST

Observation of Interest

"Mothers Arthritis re-acted in her knee causing her leg to kick involuntary 1/2 hour before thunderstorm. Thunderstorm caused damage to Micro Wave station by knocking out their transformers."

ISACHSEN

The wind charts for November forwarded from Isachsen had the first 5 days missing. The following note explained "Charts destroyed by hungry husky."

SATELLITE SNIFFER

Vancouver Sun - Feb. 4, 1972

Now it's Space Narc

CAPE KENNEDY, Fla. - Marijuana and opium poppy growers beware! You may soon fall victim to the space narc - an orbiting satellite capable of detecting your fields from 100 miles up.

An earth resources satellite scheduled for launching in May or June could provide the first evidence of whether the idea is feasible.

The U.S. treasury department's bureau of narcotics and dangerous drugs is spending about \$2 million dollars to find out.

The money will pay for a one-year project aimed at determining the peculiar "signature" of the marijuana plant so that large crops of it around the world can be detected by remote sensing devices in satellites.

The signature is the pattern by which a plant reflects heat and light during various phases of growth and under different soil and climate conditions.

Dr. Robert Miller of the agriculture department, which is co-operating in the project, said three large fields of marijuana will be grown for the test, simulating different soils and climates of the world.

Miller said the project also may involve signature determination of the opium poppy, the source of such drugs as morphine, heroin and cocaine.



It may look like it but the weatherman hasn't got a 'morning-after' head. He's preparing to release a weather balloon to check the cloud ceiling.

—Citizen photo by Dave Milne