



ZEPHYR

FEBRUARY 1978 FEVRIER



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“ICI RADIOMÉTÉO-CANADA À MONTRÉAL”

par Normand Guérin

Le 18 novembre dernier à 11:58 hres, au volant de ma voiture, en route vers le Mont-Royal, j'entendis sur le petit récepteur VHF à mes côtés, quelques crépitements puis soudain: “Ici Radiométéo-Canada à Montréal”. Je fus alors envahi d'une euphorie bienfaisante et en même temps d'une frénésie que j'avais peine à contenir. C'était le couronnement de six mois de travail de toute une équipe d'ingénieurs, d'électroniciens, de techniciens, de météorologistes, de secrétaires que j'ai consultés, exploités, implorés, harcelés mais surtout que j'ai appréciés.

Pendant près d'un mois nous diffusons des messages qui en plus de familiariser le personnel de Dorval avec le système d'enregistrement explique ce que sera ce nouveau service. Nous demandons aux auditeurs de nous faire connaître l'endroit d'où ils captent nos émissions, le type de récepteur utilisé et la qualité de la réception. Nous offrons de leur faire parvenir un horaire détaillé de la programmation. Nous avons été agréablement surpris par la réponse et les commentaires des personnes qui possèdent déjà un appareil qui leur permet de capter notre fréquence. Cependant nous avons été débordés de travail et il a fallu plusieurs semaines pour nous en remettre. Nous avons reçu plus de 500 téléphones et lettres. La majorité de ces auditeurs possèdent des appareils “multibandes” de qualités diverses. Même ceux qui possèdent des appareils peu dispendieux sont très satisfaits de la qualité de la réception. Une plainte fréquente, c'est l'interférence que cause les taxis sur ce type de récepteurs. Tous se disent très heureux de pouvoir enfin capter le météo de chez nous, étant habitués de capter celle de Burlington au Vermont. Beaucoup ont déclaré avoir été agréablement surpris d'entendre du français. Grâce à ces renseignements et aux essais que nous avons effectués nous-mêmes, nous concluons que la réception est de très bonne à excellente dans un rayon de 70 à 75 km et même, dans certaines régions sans montagnes, elle atteint près de 100 km.

Le 15 décembre, Radiométéo-Canada Montréal fût inauguré officiellement par le Directeur régional monsieur Raymond Fichaud en présence de journalistes et de quelques invités. A 13:33 hres, l'alerte retentit suivie de la première diffusion des prévisions.

Notre programmation est bilingue et comprend un bref exposé de la situation générale, la prévision pour la zone d'écoute de 65 km autour du Mont-Royal (centre-ville) et les régions périphériques, le temps actuel à l'intérieur de la zone d'écoute (renouvelé à toutes les heures) et les données climatologiques de Dorval à certaines heures de l'avant-midi et de la soirée. Le cycle complet des informations varie entre 5 et 8 minutes.

Les météorologistes du Bureau des prévisions du Québec nous ont donné un fier coup de main à l'élaboration de la programmation particulièrement en ce qui concerne la situation générale et la prévision où ils sont directement impliqués. Un comité de 3 météorologistes du BPQ et de 3 techniciens de Dorval a été formé afin d'étudier la programmation actuelle et ses implications et de déterminer la programmation d'été.

La réaction du public montréalais est très encourageante et porte à croire que la popularité de Radiométéo-Canada est appelée à s'accroître rapidement. Radiométéo-Canada est un “outil” formidable et les possibilités d'effectuer un travail efficace et qui réponde à un réel besoin sont vastes, cependant il vient accroître les tâches déjà très nombreuses dont nous devons nous acquitter et il est malheureux que dans le présent contexte économique les nombreuses contraintes que nous subissons ne nous permettent pas d'y consacrer plus de ressources humaines et freinent l'élan que nous voudrions lui donner.

Il va sans dire que l'expérience de Radiométéo-Canada à Vancouver nous a grandement aidés et fut notre pierre angulaire. Nous sommes reconnaissants à la région du Pacifique pour ses judicieux conseils et l'accueil chaleureux qu'elle nous a réservé lors de notre visite.

Je suis convaincu que dans un avenir, peut-être pas si lointain, dans toutes les villes du Canada on pourra entendre; "ICI RADIOMÉTÉO-CANADA".

RADIOMÉTÉO-CANADA MONTRÉAL

DONNÉES TECHNIQUES

- Indicatif d'appel: XLM 300
- Fréquence: 162,55 Mégahertz
- Antenne: RMC est multicouplé sur l'antenne de la Ville de Montréal au sommet de la tour de Radio-Canada sur le Mont-Royal.
Type: Sinclair SRL 234, 6dB, omnidirectionnelle à polarisation verticale.
Hauteur: 560 mètres au-dessus du niveau de la mer.
- Emetteur: Motorola, Micor, service continu (continuous duty). puissance effective de rayonnement: 50 watts.
- STUDIO: Système conçu et assemblé par Radio Service Inc. de Montréal.
- Alerte: générateur de 5 tonalités doubles RSI (Radio Service Inc.)
- Régie (rack): Six magnétophones à cartouches, reproducteurs ITC (International Tapetronics Co.)
Deux magnétophones à cartouches, enregistreurs&reproducteurs.
Moniteur de modulation UREI BO-40
Amplificateur AMCRON D-60
Panneau programmeur RSI
Panneau d'accès SWITCHRAFT
panneau moniteur ALTEC 1598A
Haut-parleur moniteur ALTEC Model 1
- Console (enregistrement): Mélangeur compresseur SHURE SE-30
Chronomètre digital manuel/automatique
Commande à distance pour magnétophones
Deux microphones SENNHEISER MD-421
Casque d'écoute
Haut-parleur moniteur ALTEC Model 1



*The studio is glassed in to enable visitors to watch recordings being made.
Un studio vitré permet aux visiteurs de voir effectuer les enregistrements.*



*The recording console provides remote control of the tape recorders in a soundproof studio.
Une console d'enregistrement permet le contrôle à distance des magnétophones à l'intérieur d'un studio insonorisé.*

*The rack, connected by telephone line to the Mount Royal transmitter.
La régie, reliée par une ligne téléphonique à l'émetteur sur le Mont-Royal.*

"THIS IS WEATHERADIO CANADA IN MONTREAL"

by Normand Guérin

Last November 18 at 11:58, I was driving to Mount Royal when the little VHF receiver beside me crackled a bit and then came the words: "This is Weatheradio Canada in Montreal". Suddenly a mixture of happiness and excitement overcame me; I could hardly contain myself. This was the climax of six months' work by a whole team of engineers, electronics experts, technicians, meteorologists and secretaries. I worked them hard, cajoled them, consulted them and harassed them. More than anything though I valued them for their efforts.

For almost a month we have been broadcasting messages to familiarize the Dorval personnel with the recording system and explain what the new service will be offering. We are asking listeners to let us know where they pick up our broadcast, the type of receiver they use and the quality of the reception. And we are offering to send them a detailed timetable of our broadcasts. The response from people who already had radios capable of picking up our frequency has been agreeably surprising. But it has taken weeks to get the resulting work out of the way. We received more than 500 telephone calls and letters. Most listeners had multiband radios of varying quality. Even those who had inexpensive sets are very satisfied with the reception. However, one common complaint for that type of radio is that taxis do cause interference. Everyone seems to be very happy to receive weather reports from Montreal, instead of from Burlington, Vermont. Many state they were agreeably surprised to hear the program in French. Thanks to this feedback and to tests we carried out ourselves, we can conclude that reception is very good to excellent within a radius of 70 to 75 km and in areas with no mountains close to 100 km.

On December 15, Weatheradio Canada in Montreal was officially inaugurated by the Regional Director, Mr. Raymond Fichaud, in the presence of journalists and a few guests. At 1:35 pm, the alert sounded and there followed the first broadcast.

The program is given in both languages and includes a brief description of general weather conditions, a new report every hour on the present weather within a 65-mile radius of downtown Montreal (Mount Royal), a forecast for the same area, and climatological information from Dorval at certain times in the morning and evening. The entire broadcast lasts between 5 and 8 minutes.

Meteorologists from the Quebec Forecast Office have been a real help in setting up the program, especially with general weather conditions and forecasts, in which they are directly involved. A committee of 3 QFO meteorologists and 3 technicians from Dorval has been created in order to evaluate the present program and decide on the summer program.

The reaction of the Montreal public is very encouraging and leads us to believe that Weatheradio Canada will increase rapidly in popularity.

Weatheradio Canada is a very powerful "tool". With it we should be able to do good work and respond to real needs. However, it will add to our already numerous duties, and it is unfortunate that the present economic cutbacks prevent us from allocating more human resources to the program and thus slow down our plans.

It goes without saying that the experience of the Weatheradio Canada group in Vancouver was of great help to us and provided a foundation from which to

start. We are grateful to the Pacific Region for their sound advice and the warm reception they gave us when we visited them.

I am sure that in a perhaps not-so-distant future, people in cities all across Canada will be able to hear: "This is Weatheradio Canada".

TECHNICAL INFORMATION

Call letters: XLM 300

Frequency: 162.55 MHz

Antenna: Weatheradio Canada is connected to the CBC antenna on top of Mount Royal.

Type: Sinclair SRL 234, 6dB, omni-directional with vertical polarization.

Height: 560 meters above sea level

Transmitter: Motorola, Micor, continuous duty.
Effective radiated power: 50 watts.

STUDIO: System designed and assembled by Radio Service Inc. of Montreal.

Alert: RSI 5 dual tone generation

Rack: Six cassette tape recorders for playback (International Tape-tronics Co)
Two cassette tape recorders, for recording and playback.
UREI BL-40 modulo meter
AMCRON D-60 amplifier
RSI automatic switcher
SWITCHCRAFT patch bay
ALTEC 1598A monitor panel

ALTEC Model 1 monitoring loudspeaker

Recording console: SHURE SE-30 mixer/compressor
manual/automatic digital clock
remote tape recorder control
two SENNHEISER MD-421 microphones
head set
ALTEC Model L monitor loudspeaker

APPLICATIONS OF METEOROLOGY TO LEGAL SERVICES IN ONTARIO

By
R.G. Lawford

1. Introduction:

A great teacher of human morality observed that "He (God) maketh His sun to rise on the evil and the good, and sendeth rain on the just and on the unjust" (Matthew 5:45). In a number of legal cases, the records of the hours of sunshine, rainfall amounts and other meteorological data have been used to assist in establishing the guilt or liability of the evil and the unjust. This particular article provides a review of the ways in which meteorological evidence has been used in Ontario courts. Before proceeding, however, I must mention that most of the illustrations and many of the ideas in this article have come from the experiences of Messrs. Dave Murdoch and Tom Moyer, two climatological technicians who work at the Ontario Climatological Centre.

2. Applications of Meteorological information in criminal proceedings:

The most frequent applications of meteorological information in criminal cases in Ontario involve reconstructing details at the scene of the crime and discrediting or accrediting witnesses giving testimony at a trial. As the following paragraphs indicate, weather records can also be used in investigating crime.

In cases where forensic scientists and investigators are using meteorological information to reconstruct the scene of a crime, they usually combine it with other facts or exhibits collected during the investigation. A forensic soil scientist or investigator studying characteristics of mud taken from the scene of the incident would be concerned about the times when precipitation occurred. This would allow him to estimate the times when tire tracks or foot imprints may have been produced.

Forensic pathologists use temperature data to assist them in estimating the time of death. For example, in one investigation a victim's body was found under a bridge beside a river on the day after a murder. By examining the rigidity of various muscles in the body and then combining these observations with air temperature measurements from a nearby climatological station, the pathologist was able to estimate the time of the victim's death. As would be expected, bodies decompose very rapidly in hot, humid weather, and slowly when air temperatures are colder than freezing point.

Innovative lawyers use climatological information in court to either discredit or accredit witnesses. In these situations, the examining lawyer may ask a witness, who is giving his observations of the scene of the crime, to describe weather conditions. If his description of the weather conditions does not agree with the official weather records for that time, the lawyer will introduce those records to the court and point out the discrepancy. In some cases this will cause a judge or jury to question the credibility of the witness and may even result in the court rejecting the witness' testimony.

This approach is frequently used when the accused raises the defence of alibi. The following example comes from the trial of a man accused of murdering a woman in a wooded area. One witness, who testified at the trial, indicated that he had seen the accused walking with the murdered woman in a field shortly before her death. The accused defended

himself by saying that he and his girlfriend both enjoyed nature and had been in the field on a nature walk. According to his statements, the weather on that day was warm and sunny. The official climatological records were then introduced to the court. These records indicated that a mixture of rain and snow had continued throughout the day. Furthermore, the maximum air temperature at a nearby climatological station was little more than 0°C. Needless to say, the weather information assisted the judge in assessing the truthfulness of the accused's statements.

Weather records have also been used to establish the validity of a witness' testimony. In one such case, a witness testified that he had heard the distressed screams of a rape victim while passing near a park. The defense argued that it was impossible for an audible sound to have travelled the distance between the alleged scene of the rape and the witness. However, the prosecutor introduced meteorological evidence which indicated that a strong wind had been blowing from the rape scene towards the witness. Under these conditions the sound of the victim's cries could very well have reached the witness. As a result, the witness' testimony was accepted and used by the judge in reaching his verdict.

Although each case has its own unique information requirements, there are some weather parameters which are more frequently significant in certain types of investigations and trials. Table 1 lists the meteorological parameters most frequently considered in the investigations and trials with specific transgressions.

Accident investigations may involve Government investigators as well as police investigators. Claims arising from traffic accidents are usually settled by way of civil litigation; generally the only meteorological evidence required is a certified copy of the official weather records. On the other hand, aircraft and marine accidents may involve weather forecasts and the interpretation of weather forecasts. In cases where the forecast weather conditions are involved, a meteorologist is frequently required to provide opinions and explanations.

3. Applications of meteorology in civil litigation proceedings:

Although the applications of meteorological information in civil litigation are very diverse, the following paragraphs are intended to highlight the more significant ways in which meteorology is applied in civil cases in Ontario. In particular, these discussions outline the data requirements most commonly encountered by climatological technicians providing information to the civil courts. They also review the content of studies done to document the possible significance of atmospheric phenomena in the event being considered in the civil suit.

In Ontario, civil litigation cases create a larger requirement for the services of a climatological technician than criminal cases. During 1976, approximately 70% of the court cases in which climatological technicians testified were civil litigation cases.

Civil litigation cases may involve one party demonstrating that the other party was responsible, because of negligence, for a loss of time or money or costs of repairs. Other cases often involve individuals or companies either making claims against their insurance policies or proving that one party violated a contractual arrangement. Table 2 lists types of civil litigation trials where weather records are frequently used. Here in the Province of Ontario, weather records have also been used in examinations for discovery between insurance companies and other litigants and in arbitrational hearings between employees and their employers.

In a number of cases, meteorological studies have been used to determine the validity of the plaintiff's claims. For example, one cottage-owner, who was attempting to establish that the wind had lifted the log, which had damaged his cottage during a storm, requested a study of the meteorological conditions that prevailed on the day when the damage occurred. The study showed that his claim was unreasonable, because the wind speeds that occurred on that particular day were not strong enough to lift the 200-pound log that had caused most of the damage. On the other hand, the study did indicate that the high water levels recorded on that day could readily account for the movement of the log and the damage experienced by the cottage.

In another civil case, a climatological study was carried out in order to assess the frequency of severe March wind and wave storms on one of the Great Lakes. The case against the owner of a small harbour had been initiated by a shipowner who had left his ship there for the winter. During a March storm, the ship had suffered extensive damage. The climatological study was prepared for the defense lawyers, who intended to base their defense strategy on the results. They had hoped to find that the event could either be expected once or twice each year (in which case they would argue that the shipowner should have expected the storm to occur) or had never happened in the last 50 years (in which case no one could have anticipated that a storm of this intensity would ever occur). The study showed that a storm of this severity was likely to occur once every 5 to 7 years.

4. The role of A.E.S. personnel:

At present, the majority of the requests by the legal profession for meteorological data are directed to the A.E.S. In Ontario, these requests are most frequently answered by meteorological technicians at WO4s, and the Ontario Climatological Centre. In general, these technicians initially provide a response by assessing the lawyers' data requirements and then providing them with the most appropriate information. If the case is going to court, the technician will provide certified copies of the weather reports. The lawyer may also subpoena the meteorological technician to appear in court and give testimony regarding the weather conditions at or near the scene of the event being considered. When weather information is to be presented in court, meteorological technicians from the Ontario Climatological Centre, frequently prepare a weather "kit". This kit contains the appropriate surface map(s) and the reports from the relevant stations in both the first-order and the climatological networks. In cases where additional meteorological analysis has been required, the Ontario Region Scientific Services Unit has prepared them on a partial cost-recovery basis.

5. Summary:

In Ontario, meteorological information is being used with increasing frequency in both criminal and civil litigation proceedings. The most frequent uses of the information include reconstructing the scene of the crime; discrediting or accrediting witnesses during a trial and for assessing the plaintiffs' claims regarding the influence of weather on properties and activities. At present, at least 70% of the workload for Ontario Region personnel comes from civil litigation.

TABLE 1

LIST OF METEOROLOGICAL PARAMETERS MOST FREQUENTLY INVOLVED IN CRIMINAL INVESTIGATION						
	TEMPERATURE	WIND	PRECIPITATION	SUNSET/SUNRISE	VISIBILITY	WEATHER FORECASTS
Arson		X	X			
Homicide	X		X			
Rape	X					
Break & Entry			X		X	
Traffic Accidents	X	X	X	X	X	
Marine Accidents	X	X				X
Aircraft Accidents		X	X		X	X

TABLE 2

METEOROLOGICAL PARAMETERS FREQUENTLY REQUIRED IN CIVIL LITIGATION PROCEEDINGS						
	WIND	RAIN	SNOW	TEMPERATURE	SUNSET/SUNRISE	VISIBILITY
Slip and Fall	X	X	X	X		
Property Damage Caused By Atmospheric Phenomena	X	X	X			
Minor Traffic Accidents	X	X	X	X	X	X
Environmental Contamination	X			X		X
Damage to Perishable Produce		X		X		

**OH, TO BE A WEATHERCASTER!
(OR AT LEAST TO HAVE THEIR BUDGET)**

by Nancy Waller

Picture if you will a 2½-3 minute evening T.V. weather show which starts off with a colourful map of Canada showing, through animation, the motion of the weather systems for the last 24 hours. Then we fade to a map backdrop of the local province on which is superimposed a radar picture, *not* in black, white and shades of grey but in colour – different colours for different intensities of precipitation. The backdrop changes again to show the radar echoes with respect to the Trans-Canada and local highways and then, to the smaller scale for the city itself. The weathercaster, having indicated where the weather's coming from for the next few hours, may now throw in a little time-lapse photography to show how this particular weather system developed. Then it's back to animation for the complete forecast, another look at the radar and sign-off.

Blue skying, you say – not really. Although there may be only one or two television stations in the U.S. which have *all* of the above described equipment and facilities, there are an increasing number of them that do have their own radar sets, that are getting colour attachments for them (more than 50 stations have purchased digitizers), that do have some form of animation ranging from film loops to true animated art work and that do make use of time-lapse photography. Compare all that to AES's forecast offices, let alone to the Canadian T.V. weather shows – all 30 or 60 seconds of it which more often than not is roll-up or voice over. Then you can begin to understand some of the enthusiasm, envy and out and out jealousy I experienced attending the Eighth Conference on Weathercasting (Radio and T.V.) January 28-31 in Savannah, Georgia.

Now, before you all start heading south of the border to either watch or present a weather show, let me put things into a little better perspective for you. As I understand it, only 20-25% of radio and T.V. stations have a professional meteorologist, an AMS Seal Holder, on staff. The remaining 75-80% of the stations do as most of the Canadian ones do – use a broadcaster with no specific training as a meteorologist. In addition, the broadcast meteorologist does have some restrictions on his budget. He can basically have anything he wants provided it either cuts costs or raises ratings or both. And those ratings! If the public's fancy should change and the ratings drop, then he is probably out on his ear.

With all this equipment, time and money they have at their disposal; it was interesting and perhaps, somewhat frustrating to listen to the papers they were presenting. There were several papers on different aspects of public weather terminology. Does the public understand what is said when it is said, especially with such phrases as "partly cloudy" or "variable cloudiness" or the difference between a watch and a warning. Does any of this sound familiar? There were reports on several surveys done during the last year, including one done on a T.V. show by Accu-weather and one done by NWS/NOAA through their census bureau on their external users. Two interesting approaches to doing a weather survey and both of them seemed to get reasonable and acceptable response ratios. An update on AFOS displays and implementation – into PHL, PIT and RDU in May or June – as well as on the American Emergency Broadcast System were also discussed.

I gave a paper on our own weathercasting seminars, which was very well received considering that I was probably preaching to the converted. The broadcast meteorologist versus the broadcaster is still very much an unresolved problem with them. Should there or should there not be an associate level of Seal Holder for broadcasters who are not

meteorologists. It is a very competitive business they are in and is it fair or feasible to ask them to train their competition? They were still discussing these and similar questions as their conference ended and the AMS Annual Meeting began on Monday.

I enjoyed the conference very much and returned to Toronto renewed and refreshed and ready to go at it again. There are just a few comments I would like to make before I finish this report. As I've already said, viewing the various video tapes of the weather shows and equipment made me green with envy but then so were some of the NWS people present. And over and above the equipment, their problems of terminology, communication and classification are very similar to our own. In fact, with our weather-casting seminars we are blazing a trail. What all this is leading up to is the following statement; that although we still have problems, some of which we share with our colleagues in the States, progress slow but sure is being made. Further that one of the best means of sharing and increasing this progress is through attendance at conferences such as the joint one held in Savannah. The interchange on a personal level that these conferences provide keep us all from becoming stagnant. The foregoing was a personal opinion not necessarily reflecting anyone else's viewpoint. By the way the hospitality and food of Savannah are great and should you be feeling the urge to buy a radar colour digitizer with 6 level iso-echo contouring, it will only put you back \$37,750 (U.S.) and that includes the radar!

IN MEMORY

MR. BRANKO PAVLICEVIC

Born in Belgrade, Yugoslavia -- October 24, 1921
Passed away in Calgary, Alberta -- November 18, 1977

Branko joined "Atmospheric Environment Service" as a Meteorological Technician, August 31, 1955 and spent the next 4 years in the Edmonton Weather Office. From June 1959 to April 1960 he worked in the Fort St. John, B.C. Office. In May of 1960 he moved on to the Cowley Weather Office, and in August of the same year relocated from Cowley to the present Pincher Creek Weather Station. Mr. Pavlicevic was Officer-In-Charge at Pincher Creek until December of 1960 when he transferred back to the Edmonton Weather Office. In April of 1961 Branko moved to Calgary Weather Office as a Meteorological Technician 3. He resided in this city until his fatal heart attack on November 18, 1977.

Before coming to Canada Mr. Pavlicevic attended and received a diploma from the Nautical Academy in his native country, and also had courses in Sociology and Economics.

During the last Global War Mr. Pavlicevic fought as a guerrilla in the hills and mountains of Yugoslavia against the forces of tyranny.

Branko was an uncomplaining, steady dedicated worker, exceedingly polite to one and all. A kind and generous man with a fine sense of humor. He will be recalled in the Calgary Office for his daily "Hi Guys" greeting and when in a mischievous mood his "Nothing Personal" comments.

An untimely loss to his wife Hazel and near relatives, Branko will always be remembered with affection by members of the Calgary Staff and I am sure by all others who had the privilege of knowing him.

CCGS QUADRA PATROL # 47



The following excerpt is from the Voyage Report (Patrol No. 47, Jan. 6 – Feb. 15, 1978) of Jack Scarlett, AES OIC on the Canadian Weather Ship CCGS Quadra.

“The patrol was remarkable for two very unusual occurrences. Firstly, the weather, for a winter trip, was extremely good – weeks of relatively light winds (below Gale force) and considerable time spent with the ship stopped and drifting – much to the delight of our ardent fishermen who caught over 300 salmon. The other was on the 00Z flight of January 15. The balloon was launched in light winds and the flight was terminated by a burst at 30882 metres (10 MBS) with the balloon at a high vertical angle. Later the whole radiosonde train was found strung across the ship with the balloon neck and launching reel on the starboard side and the instrument and radar target to port. All were recovered. The radar target was in excellent condition and was used on the following flight. The radiosonde instrument, although it tested out as serviceable, was not reused. There was no parachute used in the train. Captain Dykes mentioned that he was considering making the upper decks a hard hat area.”

The Quadra's overall length is 414' and breadth is 50'. Surely the odds of a radiosonde package reaching almost 31,000 metres and then falling back on the ship must be extremely long. A worthy entry for the Guinness Book of Records?

L'ALMANACH

par Alcide Ouellet

L'almanach a été inventé pour donner des renseignements sur tous les sujets, à une époque où la distribution des livres et la littérature étaient réduites au minimum. Ce livre, probablement le plus lu et le plus vendu en Amérique du Nord, vous donnait antérieurement aussi bien la méthode de cuire le pain que de guérir la coqueluche et de prévoir le temps.

Rien de mal à essayer de prévoir le temps ou même à guérir les rhumatismes; mais si vous avez remarqué, on ne donne plus tellement de conseils médicaux dans les almanachs depuis le développement de la science médicale. Pourtant, on continue à donner des prévisions qui n'en sont pas, mais qui combent de satisfaction les gens à la recherche de solutions miracles aux problèmes compliqués du comportement de l'atmosphère.

La croyance à l'almanach, en ce qui concerne les prévisions de la météo, relève de la psychologie pour ne pas dire de la psychiatrie. Les gens ont besoin de se créer des certitudes pour se sentir en sécurité; c'est pourquoi on cherche des explications et des solutions simples à des phénomènes compliqués: machines à pluie, bombe atomique, lune, etc. C'est le même phénomène qui explique la popularité de l'astrologie.

Il n'y a actuellement aucun moyen de faire des prévisions valables à longue échéance, mais il est évident que si je vous dis qu'il fera beau le 13 juin prochain, j'ai 50% de chances de ne pas errer. Ce n'est pas une prévision, c'est tout simplement une donnée statistique. Quoi qu'il en soit, j'ai bien l'impression que si vous avez décidé de vous marier, vous allez le faire quand même et que s'il fait beau vous allez dire, dans l'euphorie de votre nouvelle condition: "L'almanach ne s'est pas trompé" Attendez les événements...

Les prévisions des almanachs sont donc préparées à partir des statistiques, du moins les plus intelligentes, mais il y en a d'autres basées sur les phases de la lune. Les statistiques vous donnent des moyennes qui ne sont même pas le temps le plus probable, mais cela peut tout de même vous aider dans la planification de vos travaux. Par ailleurs, les phases de la lune n'ont rien à voir avec la prévision, tout au moins d'une façon directe. Il existe probablement, dans l'atmosphère, une marée lunaire, de la même façon qu'il existe une marée océanique; mais son influence sur les conditions atmosphériques ne peut être déterminée au jour le jour. De toute façon, depuis les Egyptiens en passant par Aristote et compagnie, on a essayé de déterminer des cycles reliés aux phases de la lune, et en dépit de l'argent investi dans de tels projets, particulièrement par les Américains, on en est au même point que les bâtisseurs de pyramides.

Laissez-nous vous citer une prévision tirée de l'almanach, et vous jugerez par vous-même du degré de précision que vous y trouverez pour organiser votre prochain pique-nique; remarquez bien que ces prétendues prévisions s'appliquent aussi bien à la région de l'Abitibi et du Saguenay-Lac-Saint-Jean qu'au sud du Québec, alors qu'on sait très bien, comme on en a la preuve régulièrement, que les tempêtes peuvent déverser des tonnes de neige à un endroit de notre province tout en épargnant d'autres régions.

Du premier au dix juin: "Soleil ardent et du vent pour la Pentecôte. Ensuite, pluies torrentielles, tonnerre et gros vents, mais évoluant au beau et chaud pour le milieu de la semaine. Généralement ensoleillé et très chaud l'après-midi, mais frais et brumeux chaque matin de vendredi à lundi. Cependant cette fin de semaine commence notre saison estivale. Les vergers fleurissent. Les chenilles et les mouches noires nous arrivent. Ensuite

chaud et humide le jour, mais risque de gel pour les terrains bas. Risque d'orages en soirée en maints endroits, avec grêle. Routes inondées. Tornades dans l'Ontario et autour du lac Champlain. Extrêmement chaud partout en fin de semaine. Température: sud 45 à 85, nord 35 à 75" Donnez-vous la peine d'examiner ça, et vous en conclurez que si le ridicule tuait, il n'y aurait plus de prévisions dans l'almanach.

Ce qui fait la popularité de ce livre, au point de vue météo, c'est en particulier un incident qui s'est produit aux Etats-Unis, lorsque le "Farmer's Almanac", grâce à l'humour d'un typographe qui, voulant s'amuser aux dépens du rédacteur, avait prédit de la neige dans le mois de juin. Coïncidence, à la date prévue il est tombé de la grêle, phénomène totalement différent de la neige, mais que le public, assez souvent, confond. Dès lors, le succès littéraire de l'almanach était assuré pour des années à venir.

Pour juger de la valeur des pseudo-prévisions de l'almanach, prenez un crayon et un papier et vérifiez au jour le jour, si vous le pouvez, les élucubrations qu'on vous sert. Elles sont tellement vagues, d'ailleurs, que vos interprétations deviendront des réalités selon votre état d'esprit.

Un retour dans l'histoire nous apprend que les almanachs ont réellement commencé à circuler au moyen âge, alors que la littérature en vogue présentait des prévisions écrites en latin à partir des règles de l'astrologie.

Au XVI siècle, trois mille publications de ce genre, préparées par à peu près 600 météorologistes amateurs, firent leur apparition. Au cours de cette période, on avait prédit des inondations catastrophiques pour le mois de février 1524. Ces prévisions, largement diffusées par la radio et la TV du temps, c'est-à-dire les itinérants et les troubadours, créèrent un climat de panique. Les arguties portaient sur l'universalité du déluge prévu à partir de la conjoncture de trois planètes de la constellation du Poisson, constellation supposée favorable aux conditions pluvieuses. Les gens, en grand nombre, abandonnèrent leur maison pour se réfugier dans les montagnes jusqu'à ce que le danger soit passé; les capitalistes du temps imitèrent probablement Noé en se construisant un bateau. La date fatidique n'apporta rien de particulier, mais la réputation des météorologistes amateurs et astrologues n'en souffrit aucunement.

Encore aujourd'hui, au siècle de la cybernétique, les almanachs, comme l'astrologie d'ailleurs, trouvent des défenseurs forcenés. La seule chose qu'on puisse faire, c'est de les encourager à suivre à la lettre les principes de leur religion et à prier pour avoir du beau temps.

IN MEMORIAM



E.M. Elsley

Mac Elsley passed away on January 27, 1978, after several months illness.

Mac grew up in Campbellville, Ontario and took his University degree in 1936 at the University of Toronto. He entered the Meteorological Service in 1942 (Short course No. 6) and took his advanced meteorological training in 1945 (Advance Course No. 6). His wartime postings included a number of air bases in western Canada, then Moncton, Centralia and Trenton. He served in the forecast offices at Malton and Gander and became the liaison officer with TransCanada Airlines in Montreal. Since 1960 Mac has been at AES Headquarters, Toronto, and became Head of the Communications Sections.

Mac's contributions to the meteorological communication system are well known. During wartime and the immediate post war period, meteorological traffic had increased in volume and complexity and much of the circuit scheduling had grown up as expedient solutions to specific problems. Mac put the system on a business like basis, by establishing, in consultation with others, the policies and criteria for traffic entitlement. He was able to reduce circuit loadings by 30% and brought the old manual relay system to new levels of effectiveness and efficiency.

It became evident that the entire system could be at least partially automated. A design study, undertaken in conjunction with engineering staff of the wire companies led to inauguration of the present automated system in 1970 whereby the collection of traffic and the compiling and distribution of bulletins are under computer control. The system has served AES well. These same years saw the improvement of facsimile, and its speed up from 60 scans per minute, to the present 240 s.p.m. and the establishment of photo facsimile for satellite data.

Mac was very service oriented. He enjoyed his radio and TV weather programs (serving as alternate for Percy Saltzman, at one time.) He was always strongly motivated in ensuring that the taxpayer got good value for his AES tax dollars.

Mac's integrity not only earned him the respect of his colleagues in AES, but the esteem of others outside the service, especially those in CN/CP, the U.S. National Weather Service, and in WMO communications.

Mac leaves his wife, Joyce, and two sons David and Mark.

**INTRODUCTORY DESCRIPTIVE METEOROLOGY COURSE 78-1
JANUARY 3 – FEBRUARY 3, 1978**

by John Bendall

After five weeks of half-day classes, the smiles you see before you could only be described as relief (both students and Instructors) that it's all over. Actually, there were six more graduates, but mental fatigue prevented them from being there.

The purpose of this course is to provide non-meteorological AES personnel in the Headquarters Building, with an introduction to a variety of concepts in Meteorology.

It is hoped that this will enhance their performance on the job, and give them an appreciation of their place in the organization. In spite of determined efforts on the part of the instructors, most of them still wanted to learn more.

There will be another course of this type scheduled for September and it appears that there is enough interest, in the building, to make this a semi-annual event. If you are interested in learning something about the science you are working in support of, let your supervisor know.

Although everyone was very busy on this course (especially the instructors), it was enjoyed by all. I'm looking forward to seeing *you* on the next one.



Seated left to right/assis de g. à d.: Janet Everson, Marguerite Schurter, Verna Gilchrist, Françoise Jaubert, Mavina Voss, Fern Chiu, Lynne Traves.

Standing left to right/debout de g. à d.: Raymond Gagnon (Instructor), Stan Wong, George Giles, Hugh McLeod, Emil Babijczuk, Bill Silk, Les Torok, Trevor White (Instructor), John Bendall (course director).

Photo/photographie G.W. Kiely

TORONTO BOAT SHOW

by G.T. Meek

The Toronto International Boat Show took place at the Coliseum Building in the C.N.E. grounds from January 13 to January 22, 1978.

From observation it would appear that the attendance was down this year, due to the adverse weather conditions, on all but three days; the weekends being by far the busiest days.

Relocation of the booth to Hall B appears to have been a sensible move, not only is it more spacious but the location is well situated to the main entrance, thus insuring a steady stream of people passing the exhibit.

The A.E.S. display met with the approval of the visitors and received many compliments. The satellite copier was a crowd-gatherer (although we were plagued with breakdowns — 3 different recorders were used, courtesy of Muirhead).

The graphic work prepared by I.S.D. served to indicate that our portion of the booth indicated a weather display; but few people studied the story portrayed. It is suggested that a mural depicting weather would serve the purpose just as well.

It is suggested that the S.C.H. display would be better received if it were mounted in a vertical or angled position. Not only would it save on floor space, but it would be more eye-catching.

Some 10,000 Marine Weather Services — Great Lakes pamphlets were distributed, together with approximately 1,500 lbs of other handout material including Cloud Charts, "What You Can Do About the Weather", etc. It was interesting to note that no requests were received for any publication in French. It is recommended that, if we are to continue distributing the present Cloud Chart, it be re-edited to include more detail, such as the stages and types of precipitation to be expected from the various types of clouds. At present the chart is of little educational use.

Questions asked were numerous this year and indicated that the public is becoming aware and more knowledgeable of our services to the boating fraternity.

It was apparent, from the inquiries, that a booklet, "Weather Facts for Boating Safety", would be beneficial for the boating public. Such a booklet could be made up from the many publications available and should include such subjects as, Seiche, Average Weekly Water Temperatures, Lightning, Thunderstorms, Wave Heights, etc. It is suggested that the Regional S.S.U. be approached with this project and also that the pertinent C.C.I.W. groups, National Headquarters and the Canadian Coast Guard be contacted for input.

Numerous complaints were received regarding the poor radio coverage on the north and east shores of Georgian Bay; these were referred to the M.O.T., Coast Guard Telecom, located in Hall C of the show.

Many queries were also made as to the measurement of pressure in kilopascals and how to convert inches to same. Some dozen conversion tables of inches to millibars have been mailed to these people with pertinent instructions.

Esprit de corps between all the staff members of the various services involved in the D.F.E. booth was exceptional and led to a very smooth operation in erecting and dismantling the booth.

A special "thank you" is due our retirees — Bill Stewart and Ted Wiacek, for the many hours they staffed the Boat Show.

**AMVER AWARD TO PORT METEOROLOGICAL OFFICER,
A.P. Gibb**

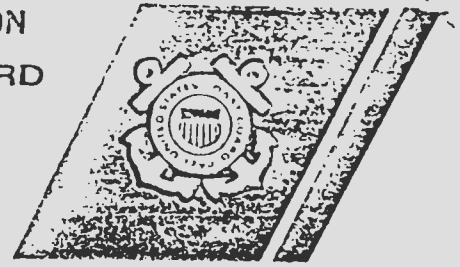
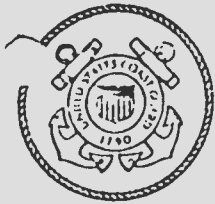
by John Henderson

On 24 January, 1978 in the Pacific Regional Office, Vancouver, Alex P. Gibb, Port Meteorological Officer, was presented with a letter of appreciation from the United States Coast Guard. This was in recognition of his assistance in promoting the AMVER Program (Automated Mutual-Assistance Vessel Rescue system).



The photo, taken at the time of the presentation, shows left to right: Commissioned Warrant Officer, S. Pitro, AMVER Officer, 13th Coast Guard District, Seattle, who made the presentation; A.P. Gibb, Port Meteorological Officer; J. Henderson, Regional Superintendent, Observational Services.

DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD



16 January 1978

Mr. Alex P. Gibb
Regional Port Meteorological Officer
Atmospheric Environment Service
Environment Canada
739 West Hastings St.
Vancouver I, B.C.

Dear Mr. Gibb:

It is with great pleasure that I send you this letter of appreciation and recognition for the assistance and cooperation you have provided over the years in promoting the U.S. Coast Guard's AMVER program.

By visiting the vessels arriving in the Vancouver area in the normal pursuit of your duties and having personal contact with the Masters and Radio Officers of these vessels you have been successful in persuading over 200 vessels to become participants in this international lifesaving program over the past five years. This effort on your part has greatly assisted this District's AMVER Officer in the pursuit of his duties in promoting the AMVER program for the U.S. Coast Guard. It has provided us with a unique advantage of being able to cover an area that otherwise would not be available thus expanding our scope of operations. Thanks to your personal efforts, a valuable input has been provided to the U.S. Coast Guard's AMVER program.

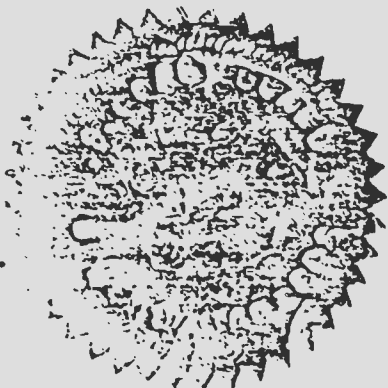
On behalf of the U.S. Coast Guard I would like to extend our appreciation and look forward to your continued cooperation.

Sincerely,

A handwritten signature in cursive script that reads "G. O. Thompson".

G. O. THOMPSON

Rear Admiral, U.S. Coast Guard
Commander, 13TH Coast Guard District



PERSONNEL

The following have accepted positions as a result of competitions:
Les personnes suivantes ont accepté ces postes après concours:

- 77-DFE-WPNA-CC-79 Officer-in-Charge EG-ESS-4
Cape Parry, N.W.T.
Fred Maybroda
- 77-DFE-WPNA-CC-91 Officer-in-Charge EG-ESS-7
Edmonton International Airport
G. Emes
- 77-DOE-WPNA-CC-187 Communication Supervisor CM-6
Arctic Weather Centre, Edmonton
Hilda E. Gutzmann
- 77-DFE-EDM-CC-77 Senior Meteorologist MT-5
Alberta Weather Office
R.B. Thomson
M.D. Drews
- 77-DOE-TOR-CC-381 Chief, Observational Systems Division MT-8
Field Services Directorate
AES Headquarters
D.W. Colwell

The following transfers took place:
Les mutations suivantes ont été effectuées:

J.T. Kotylak	MT-6	From: De AES Toronto
		To : A Regional Office, Edmonton

Retirements:
Départs à la retraite:

- | | | |
|--------------------|---------|-------------------------------------|
| T.A. Donnelly | Retired | Western Regional Office
Edmonton |
| J.L.L. Lafranchise | Retired | Western Regional Office
Edmonton |
| L.R. Layton | Retired | Alberta Weather Centre |
| A.B. Ward | Retired | Arctic Weather Centre |

Deceased:
Décès:

- | | | |
|---------------|----------|--------------------------------------|
| B. Pavlicevic | Deceased | Meteorological Technician
Calgary |
|---------------|----------|--------------------------------------|

TRIVIA

The following was distributed on the High Arctic Weather Station teletype network sometime during November 1977. I am about to depart from Alert for a transfer to Hall Beach, and as I sit here for the final few hours of my tour this poem has a special significance to me. I offer it to you (although it is not my poem and was presented anonymously on the teletype circuit) for publication in ZEPHYR in order to bring a small part of our life in the Arctic to people in the "south".

The Plane

Plane, Plane, where fore are you,
We await in expectation of your arrival,
What fore do you disapoint us for in not
showing your pretty metal snout sooner.

Woe, Woe is me fore I wait with the
expectations of a lover for your pretty
metal snout to appear out of the blackness
of the Arctic night.

Oh Woe is me as I sit here waiting for you.
For what am I to do but wait in expectation
for you to show yourself.

Oh, I sit, I sit
I who wait for you.

Signed
The Lonely Met Tech

PERSEVERE

Nothing in the world will take the place of
perseverance

Talent will not: nothing is more common
 than unsuccessful men with
 talent.

Genius will not: unrewarded genius is almost
 a proverb.

Education will not: The world is full of educated
 derelicts.

PERSISTENCE AND DETERMINATION
ALONE ARE OMNIPOTENT.

LES PROVERBES QUÉBÉCOIS

“Le champ du voisin paraît toujours plus beau”

—Ce qui nous est étranger nous semble toujours préférable.

“La vérité revient à son maître”

—La vérité, tôt ou tard, se fait entendre.

“On sera plus longtemps couché que debout.”

—Le temps presse pour agir.

“On connaît l’arbre à ses fruits.”

—On juge les hommes d’après leurs oeuvres.

“La vérité sort de la bouche des enfants.”

—Proféré à l’endroit de l’enfant qui dit franchement ce qu’il pense.

“Qui aime bien châtie bien.”

—Punir est une marque d’amour.

“Avec les sous on fait les piastres.”

—Les petites économies mènent aux grosses.

“Il faut se garder une poire pour la soif.”

—Il faut se constituer une réserve en prévision des difficultés.

CALL IT CHARISMA

“When you get what you want in your struggle for self,
And the world makes you king for a day;
Then go to the mirror and look at yourself
And see what that person has to say.
For it isn’t your father, or mother or wife
Whose judgement upon you must pass;
The person whose verdict counts most in your life
Is the one staring back from the glass.
He’s the fellow to please, never mind all the rest,
For he’s with you clear up to the end;
And you’ve passed your most dangerous, difficult test
If the face in the glass is your friend.
You may be like Jack Horner and chisel a plum,
And think you’re a wonderful guy;
But the man in the glass says you’re only a bum
If you can’t look him straight in the eye.
You can fool the whole world down the pathway of years,
And get pats on the back as you pass;
But your final reward will be heartaches and tears
If you’ve cheated the face in the glass.”

—Anonymous

REPORT FROM REGINA

A lady called inquiring as to the units used when reporting windchill. When told that we used watts she exclaimed that she had just won a hundred dollar bet with another lady. The second lady took the phone to receive the confirmation of our units. She did not seem very impressed when told. Regina supervisors report January 10, 1978.

GLOSSAIRE DE MÉTÉOROLOGIE

- Zephyr – Vent doux et agréable. Nom grec du vent d'ouest qui est généralement léger. Sur la tour des vents à Athènes, il est représenté par un jeune homme portant une légère mante dont la jupe est remplie de fleurs.
- Ange – Angel – Echo de radar causé par un phénomène physique imperceptible à l'oeil.
- Antan – Yester year – L'année qui précède celle où l'on est; ce mot désigne souvent une époque lointaine.
- Astraphobie – Astrophobia – Peur morbide de l'éclair et du tonnerre.
- Côté du vent – Windward side. Partie du flanc d'une colline ou d'une montagne, ou region située face au vent par rapport à un accident orographique; côté d'un navire frappé par le vent.
- Côté sous le vent – Leeward Side – Partie du flanc d'une colline ou d'une montagne ou région abritée du vent par un accident orographique.
- Coup de chien – Sudden Storm. Tempête subite.
- Embrun; poudrin – Spray; spindrift. Ensemble de gouttelettes d'eau arrachées par le vent à la surface d'une vaste étendue d'eau, généralement aux crêtes des vagues, et emportées à faible distance dans l'atmosphère (voir brume).
- Fée Morgane – Fata Morgana. Dénomination donnée primitivement à un phénomène de mirages multiples, souvent observé au-dessus du détroit de Messine, et que l'on attribuait poétiquement à la fée Morgane; par extension, nom donné à tout mirage multiple spectaculaire.
- Galaxie – Galaxy. Gigantesque groupement d'étoiles ayant approximativement la forme d'une lentille dont le diamètre est de l'ordre de 100,000 années lumière et l'épaisseur de 15,000 années lumière, énorme groupement d'étoiles et d'autres corps célestes, qui comprend notamment le système solaire et toutes les étoiles visibles à l'oeil nu, dont la Voie lactée.