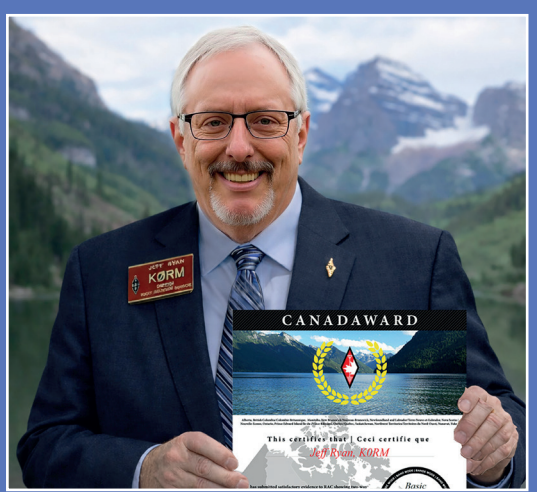
Canada's Amateur Radio Magazine

La Revue des Radioamateurs Canadiens

THE CANADIAN AMATEUR

MAY / JUNE 2026 – MAI / JUIN 2026



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TCA
The Canadian Amateur

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La Revue des Radioamateurs Canadiens

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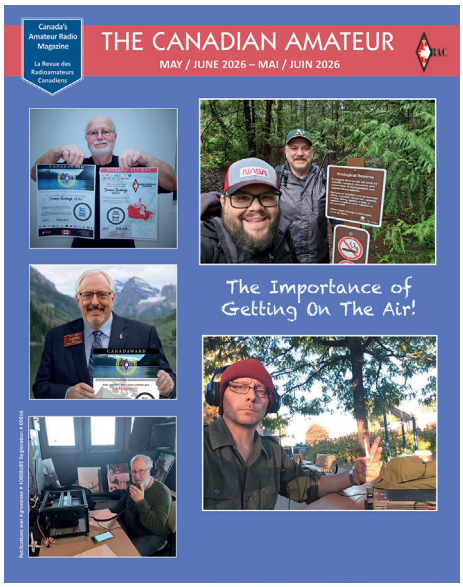

Our Cover Story...

"What an amazing start to the year for our awesome Operating Awards program! In the first two months of 2026, I granted almost half the number of awards I did for the entirety of 2025."

"The 2026 edition of our RAC Challenge has been busy, with our regulars and other non-regulars, showing us that Amateur Radio doesn't always have to be a comfortable affair."

– see pages 59-61 for all the excitement!

"I've been teaching Morse code to high school students in the Montreal area since 2023. It's gratifying to see the experience grow year after year, despite a challenging start." *– see page 41 for complete details*

National & International

Technical

Departments

For RAC Membership Inquiries and Change of Address please contact RAC HQ at: rachq@rac.ca

Operating

Articles Wanted: We would love to receive your articles – both technical and non-technical. The deadlines for the next issues of TCA are May 15, July 15 and September 15.

The Canadian Amateur is published in Canada six times per year to provide Radio Amateurs, those interested in radio communications and electronics, and the general public with information related to the science of telecommunications.

Articles, reviews, letters, features, suggestions, photographs and essays are welcomed. Manuscripts should be legible and include the contributor's name, call sign, phone number(s) and addresses (mail, email and packet, as applicable).

For a complete Author's Guide visit:

http://www.rac.ca/tca/

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The Canadian Amateur, publié six fois par an, est destiné à fournir aux radioamateurs, à toute personne intéressée à la radio et à l'électronique et au grand public, des informations de toute nature relatives à la science des télécommunications.

Nous acceptons avec plaisir tout article, étude, suggestions, photos et lettres. Les manuscrits soumis doivent être lisibles et porter le nom de l'auteur, son indicatif, son ou ses numéros de téléphone ainsi que ses adresses postales, courriel et paquet s'il y a lieu. Si vous avez envie d'écrire pour TCA :

http://www.rac.ca/tca/

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The RAC QSL Bureau System

https://www.rac.ca/qsl-bureau/

National Incoming QSL Bureau
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PO Box 83, Streetsville, ON L5M 2B7
W: https://www.rac.ca/the-rac-national-incoming-qsl-bureau/

RAC Outgoing QSL Bureau
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T: 613-670-3230; E: ve3exy@myrac.ca
https://www.rac.ca/rac-qsl-outgoing-bureau/

The RAC Outgoing QSL Bureau service is available to RAC members, RAC affiliated clubs (club call only) and QSL Managers who are members of RAC. Your RAC membership number must accompany each shipment of QSL cards. There are limits and restrictions for use of the Outgoing QSL Bureau. For more information, surcharges, card sorting details and some handy tips, please visit http://wp.rac.ca/ or http://www.magma.ca/~ve3exy/bureau.html.

Member Societies of the International Radio Union (IARU) operate a worldwide system of QSL Bureaus. Radio Amateurs of Canada, as the Canadian member-society, operates a National Incoming QSL Bureau, and sponsors the Incoming Bureaus for the 12 Canadian call areas.

Cards received by the National Incoming Bureau from IARU Member Societies are sorted and forwarded to the Incoming Bureau in each call area. All domestic cards (VA-VE-VY) to Canadian Amateurs are to be sent directly to the RAC National Incoming Bureau and not to the Outgoing Bureau.

Note: Domestic cards sent to the Outgoing Bureau will experience a delay. Only cards for destinations outside Canada are to be sent to the Outgoing QSL Bureau.

The Incoming QSL Bureau service is a user-pay system, using one of four methods to get cards to you: (A) envelopes; (B) credits; (C) labels; or (D) combination credit with labels.
*Note: Method B is preferred.

VE1 – VE0 Brit Fader Memorial QSL Bureau (B)
Sponsored by the Halifax ARC
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Thank You Volunteers!

Silent Keys – In Memoriam

With regret, we record the passing of the following Radio Amateurs.
Nous avons le regret de vous annoncer le décès des radioamateurs suivants.

VA2OF – Gary Pollock, of Cleveland, Quebec, on July 13, 2025, at age 88

VA3HN – Tom Hamblin, of Campbellcroft, Ontario, on March 5, 2026, at age 82

VA3JGH – Jim Hasler, of North Bay, Ontario, on September 21, 2025, at age 81

VA3ZCR – Raymond Halonen, of London, Ontario, on December 10, 2024, at age 63

VE1DAK – Darrick Killen, of Oakfield, Nova Scotia, on February 19, 2026, at age 62

VE1ENI – Anni Law, of Neil's Harbour, Nova Scotia, on March 25, 2026, at age 87

VE1GG – Art Hamilton, of Kentville, Nova Scotia, on March 12, 2026, at age 80

VE1LV – Hal Rodd, of Salmon River, Nova Scotia, on January 16, 2026, at age 86

VE1NB – Bruce Wade, of Cow Bay, Nova Scotia, on February 5, 2026, at age 65

VE1OL – Aubrey Urquhart, of Quispamsis, New Brunswick, on February 10, 2026, at age 92

VE1YR – Enos Ash, of Sydney Mines, Nova Scotia, on March 17, 2026, at age 82

VE2BGB – Daniel Rosenthal, of Hampstead, Quebec, on December 6, 2025

VE2NGH – George Hedrei, of Laval, Quebec, on January 20, 2026, at age 65

VE3BBN – Peter Richards, of Port Elgin, Ontario, on January 26, 2026, at age 79

VE3CFK – Chet Latawiec, of Sarnia, Ontario, on February 6, 2026, at age 73

VE3CSH – Gord Ball, of Ottawa, Ontario, on February 4, 2026, at age 80

VE3DLL – Dan Magill, of North Bay, Ontario, on November 4, 2025, at age 60

VE3GB – Gordon Baker, of London, Ontario, on March 3, 2025, at age 86

VE3MNC – Norm Campbell, of London, Ontario, on May 2, 2025, at age 84

VE3ZK – Jim De Zorzi, of Grand Bend, Ontario, on April 5, 2025, at age 89

VE5HG – Eric Quiring, of Saskatoon, Saskatchewan, on February 3, 2026, at age 78

VE7OK – Os Kienapfel, of Delta, British Columbia, on January 6, 2026 at age 71

VE7YXX – Harry Hessels, of Abbotsford, British Columbia, on January 20, 2026, at age 74

VE9KG – Gerald Greer, of Lower Brighton, New Brunswick, on February 27, 2026, at age 100

VY1RF – Ray Fugard, of Whitehorse, Yukon Territory, on January 6, 2025, at age 70

The list of Silent Keys is prepared by volunteers. Please send obituary notices by email to rachq@rac.ca with a copy to: ic.spectrumamateur-spectreamateur.ic@ic.gc.ca.

For more information see the Silent Key Submission Guidelines at: https://www.rac.ca/silent-keys/

Note: In the above list an * may be placed to indicate if a call sign has been reissued.

RAC Get On The Air for World Amateur Radio Day Event

On **Saturday, April 18, 2026**, Radio Amateurs of Canada (RAC) once again organized a special on-air event to celebrate World Amateur Radio Day.

The RAC "Get on the Air on World Amateur Radio Day" special event was designed to encourage as many Amateurs as possible to get on the air and contact as many RAC stations as possible. RAC official stations operated across Canada from 0000Z to 2359Z on April 18. Participants simply needed to complete one or more contacts, on any band and mode, with RAC official stations to earn their certificates.

Radio Amateurs of Canada would like to thank everyone who participated in the event. We will be providing information on how to obtain your certificate at: https://www.rac.ca/world-amateur-radio-day-2026-saturday-april-18/

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President's Message / Message du Président

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With the start of summer just a few weeks away, Radio Amateurs of Canada has been very busy with a number of important initiatives.

I hope many of you are also preparing for an active and enjoyable season on the air.

I am pleased to report that RAC continues to do well and is prospering across many areas.

The VE3RHQ Flagship Station at RAC Headquarters in Ottawa has been especially active and Station Manager Mike Kelly, VE3FFK, has been coordinating antenna upgrades and repairs following a long winter season. I would like to extend my sincere thanks to FlexRadio and Icom Canada for their continued support and equipment contributions. I would especially like to thank Mike Walker, VA3MW, who provided valuable training to our RAC volunteers on the latest upgrades to our state-of-the-art FlexRadio station.

We have now added the VE3RHQ call sign to the RAC Operating Awards program so please listen for it on the bands. If you are in the Ottawa area, I encourage you to arrange a visit to VE3RHQ and make a contact from RAC Headquarters. I would also like to thank all stations that participated in World Amateur Radio Day on April 18. It is an excellent opportunity to demonstrate to the world that Amateur Radio remains vibrant and active.

I am very pleased to report that the Auxiliary Communications Services (ACS) Program continues to grow. With more than 100 newly trained operators and a renewed third-year transfer payment from the Government of Ontario, RAC is not only expanding capacity within the province but also demonstrating a scalable model that is attracting interest nationally. This momentum underscores the trust placed in RAC's ability to develop trained, professional auxiliary communicators who are ready to support emergency management partners when conventional systems are compromised.

I encourage you to read the ACS column by RAC Community Services Officer Jason Tremblay, VE3JXT, for complete information on the new developments.

Allan Boyd, VE3AJB – president@rac.ca

Alors que l'été commencera dans quelques semaines à peine, Radio Amateurs du Canada n'a cessé de se consacrer à la réalisation de plusieurs initiatives importantes.

J'espère qu'un grand nombre d'entre vous s'apprêtent également à passer une saison aussi agréable que débordante d'activités sur les ondes.

J'ai le plaisir de vous informer que RAC continue d'accumuler les succès et de se développer dans de nombreux domaines.

La station porte-drapeau VE3RHQ installée au siège de RAC à Ottawa a été particulièrement active, et son administrateur, Mike Kelly, VE3FFK, a coordonné les améliorations des antennes et les réparations effectuées après une longue saison d'hiver. J'aimerais remercier sincèrement FlexRadio et Icom Canada de leur soutien ininterrompu et de leurs contributions en matériels. Je tiens à remercier tout spécialement Mike Walker, VA3MW, qui a fourni une précieuse formation à nos bénévoles pour les familiariser avec les tout derniers perfectionnements apportés à notre station ultramoderne depuis qu'elle s'est dotée de matériel FlexRadio.

Nous avons désormais ajouté l'indicatif VE3RHQ au programme RAC de Prix d'excellence aux opérateurs, et nous vous engageons vivement à lui accorder une attention particulière quand vous vous aventurerez sur les bandes. Si vous vous trouvez dans la région d'Ottawa, je vous encourage à rendre visite à VE3RHQ et à établir un contact avec le siège de RAC. J'aimerais aussi remercier toutes les stations qui ont participé à la Journée mondiale de la radio amateur, le 18 avril. Elle a offert une excellente occasion de démontrer au monde entier que la radio amateur continue de susciter de l'enthousiasme et une multitude d'initiatives.

Je suis très heureux de vous informer que le Programme de services auxiliaires de communications (SAC) continue de prendre de l'ampleur. Avec plus de 100 opérateurs récemment formés et le renouvellement d'un paiement de transfert du Gouvernement de l'Ontario pour la troisième année, RAC augmente non seulement ses capacités à l'intérieur de la province, mais démontre en outre la validité d'un modèle extensible qui suscite de l'intérêt à l'échelle nationale. L'impulsion ainsi générée met en lumière la confiance dont jouit RAC en tant qu'organisation capable de former des communicateurs auxiliaires professionnels qualifiés qui sont prêts à soutenir les partenaires ayant pour mission de gérer les situations d'urgence lorsque les systèmes traditionnels sont dépassés par les événements.

Je vous invite à lire la rubrique que Jason Tremblay, VE3JXT, chargé des Services communautaires à RAC, consacre aux SAC pour en savoir plus sur les événements récents intervenus dans ce domaine.

Les cours des niveaux de base et avancé donnés par RAC continuent de jouir d'une grande popularité. Nous enregistrons un taux de participation élevé en raison de l'afflux de nouveaux venus, à un moment où ils commencent à découvrir « le monde merveilleux de la

Our RAC Basic and Advanced courses continue to thrive. We are seeing strong participation from newcomers – as they begin their journey into the "Wonderful World of Amateur Radio" – as well as experienced Amateurs upgrading their qualifications. Special thanks to our instructors, Al Penney, VO1NO (Basic) and Dave Goodwin, VE3KG (Advanced) for their outstanding work in supporting education and growth within the Amateur Radio Service.

I am also pleased to report that Radio Amateurs of Canada will once again be operating a booth at the Dayton Hamvention on May 15, 16 and 17 at the Greene County Fairgrounds and Expo Center. The theme at Hamvention 2026 is "Radio Adventure" to reflect on how "radio has always been about exploration – of ideas, technologies, distances and possibilities". The RAC booth 2504 will once again be in Building 2 along with the International Amateur Radio Union, the American Radio Relay League and other national organizations. I look forward to seeing you there.

For the 10th year in a row, we will be participating at the Canada-Wide Science Fair (CWSF) and STEM Expo – Canada's largest youth STEM outreach and promotion event – which will be held on May 28 and 29 in Edmonton, Alberta. RAC first became involved in the CWSF in 2017 when we were approached by the Regina Amateur Radio Association (RARA) to see if we would be willing to provide support for their booth. We were indeed very happy to do so. Since then RAC has worked side by side with local Amateur Radio clubs in New Brunswick, Ottawa and Edmonton. This year RAC Director (Alberta/NWT/NU) Stephen Lee, VA6SGL, is working with the Quarter Century Amateur Radio Club (QCARC) and the Northern Alberta Radio Club (TNARC) to organize the RAC booth. RAC Director (BC/Yukon) Hiroshi Takahaski, VA7LET, will also be participating at the event. I'd like to thank everyone who has volunteered to organize this vitally important event, and I look forward to reading all about it in the next issue of TCA magazine.

Looking ahead, I encourage all clubs to participate in Field Day 2026 which is taking place on the weekend of June 27-28. This is a great opportunity to get on the air, build camaraderie and sharpen emergency communication skills – especially important given the increasing frequency of severe weather events. Immediately following Field Day is the RAC Canada Day Contest in which many VA and VE RAC call signs – including VE3RHQ – will be active for additional points. I encourage everyone to get on the air and be heard.

In addition to the preceding events, RAC is preparing for our Annual General Meeting which will be held virtually on Saturday, October 17. I will deliver the President's Report, along with our financial report, and we will open the floor for questions. Please see page 9 for more information.

radio amateur », ainsi que d'amateurs chevronnés désireux d'améliorer leurs qualifications. Nous remercions tout spécialement nos instructeurs, Al Penney, VO1NO (Niveau de base) et Dave Goodwin, VE3KG (Niveau avancé) de la contribution exceptionnelle qu'ils ont apportée en soutenant les projets de formation et de stimulation de la croissance entrepris au sein du Service de la radio amateur.

J'ai également le plaisir de vous apprendre que Radio Amateurs du Canada installera une fois de plus un kiosque à la Hamvention de Dayton, qui aura lieu les 15, 16 et 17 mai au Champ de foire et Centre d'exposition du Comté de Greene. Le thème de l'édition 2026 de la Hamvention est « l'aventure de la radio » ; il a été choisi pour refléter le fait que « la radio a toujours été un moyen de promouvoir l'exploration – des idées, des technologies et des possibilités, quelles que soient les distances ». Le kiosque de RAC (2504) sera de nouveau installé dans le Bâtiment 2, à proximité de ceux de l'Union internationale des radio amateurs, de l'American Radio Relay League et d'autres organisations nationales. Je suis impatient de vous y rencontrer.

Pour la dixième année consécutive, nous participerons à l'Expo-sciences pancanadienne et à l'Expo STIM (ESPC, le principal événement de vulgarisation et de promotion de ce type destiné aux jeunes du Canada) qui aura lieu les 28 et 29 mai à Edmonton (Alberta). RAC a commencé à s'intéresser aux activités liées à l'ESPC en 2017, lorsque la Regina Amateur Radio Association (RARA) nous a demandé si nous serions disposés à l'aider à assurer le fonctionnement de son kiosque. Nous avons accepté avec empressement. Depuis lors, RAC a collaboré étroitement avec des clubs locaux de radio amateurs du Nouveau-Brunswick, d'Ottawa et d'Edmonton. Cette année, Stephen Lee, VA6SGL, administrateur de RAC pour l'Alberta/TNO/NU, collabore avec le Quarter Century Amateur Radio Club (QCARC) et le Northern Alberta Radio Club (TNARC) à la mise en place du kiosque de RAC. Hiroshi Takahaski, VA7LET, administrateur de RAC (CB/Yukon), participera également à cet événement. J'aimerais remercier tous ceux et celles qui ont aidé à organiser cet événement d'une importance vitale, et suis impatient de lire le compte rendu détaillé qui lui sera consacré dans le prochain numéro de la revue TCA.

En ce qui concerne l'avenir, l'encourage tous les clubs à participer à la Journée sur le terrain 2026, qui aura lieu pendant la fin de semaine des 27 et 28 juin. Ce sera là une excellente occasion de vous faire entendre sur les ondes, d'établir des liens de camaraderie et de rehausser le niveau de vos compétences dans le domaine des communications en cas d'urgence – ce qui est particulièrement important vu l'augmentation de la fréquence des événements climatiques graves. Immédiatement après la Journée sur le terrain aura lieu le Concours RAC de la Fête du Canada, dans le cadre duquel de nombreux indicatifs comprenant les préfixes VA et VE RAC – sans oublier VE3RHQ – donneront droit à des points supplémentaires. J'encourage chacun et chacune d'entre vous à participer à ce concours.

Outre les événements mentionnés ci-dessus, RAC se prépare à tenir notre Assemblée générale annuelle, qui aura lieu en mode virtuel le samedi 17 octobre. Je présenterai le Rapport

Lastly, on page 22 you will find an article by Paul Coverdale, VE3ICV (RAC Special Advisor for World Radio Conferences) and Serge Bertuzzo, VA3SB (RAC International Affairs Officer) which provides an update on the hard work that RAC volunteers are doing to prepare for the upcoming World Radiocommunication Conference in 2027. In particular, the article includes the Annual Report for the Defence of Amateur Radio Fund (DARF). The DARF Trust's role is to provide funding for our delegate's travel and living expenses in order to attend these various conferences. Without DARF, there would be no Canadian Amateur presence at these international meetings or in the many preparatory meetings that take place to develop what ultimately becomes Canada's position.

Let me close by thanking all of you for your continued support of Radio Amateurs of Canada. Being part of a strong national organization is more important than ever as we advocate on your behalf at all levels of government.

I wish you all a wonderful summer. If your club would like me to attend a virtual meeting to speak about the benefits of RAC membership and our ongoing work, please feel free to contact me at president@rac.ca I would be pleased to join you.

– 73, Allan Boyd, VE3AJB/VE3EM – RAC President and Chair

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du président, qui sera suivi de nos États financiers, après quoi nous passerons à une période de questions. Veuillez consulter la page 9 pour en savoir plus.

Enfin, à la page 22, vous trouverez un article rédigé par Paul Coverdale, VE3ICV (conseiller spécial de RAC pour les Conférences mondiales de la radio) et Serge Bertuzzo, VA3SB (chargé des Affaires internationales de RAC), qui présente une mise à jour sur les efforts inlassables que les bénévoles de RAC accomplissent dans le cadre des préparatifs de la Conférence mondiale des radiocommunications qui aura lieu en 2027. En particulier, cet article comprend le texte du Rapport annuel du Fonds de défense de la radio amateur (FDRA). Ce fonds de fiducie a pour rôle de couvrir les frais de déplacement et de subsistance de nos délégués, de manière à leur permettre d'assister à ces conférences. Sans le FDRA, personne ne serait présent pour représenter les amateurs canadiens à ces réunions internationales ou aux nombreuses rencontres préparatoires qui ont lieu en vue de définir ce qui, en dernière analyse, deviendra la position du Canada.

Permettez-moi de clôturer en remerciant tous ceux et celles qui se sont dépensés sans compter pour soutenir Radio Amateurs du Canada. L'adhésion à une organisation nationale forte est plus importante que jamais à un moment où nous défendons vos intérêts à tous les niveaux de gouvernement.

Je vous souhaite à tous et toutes de passer un très agréable été. Si votre club souhaite que j'assiste à une réunion virtuelle pour parler des avantages découlant de l'adhésion à RAC et décrire les activités que nous poursuivons actuellement, n'hésitez pas à me le faire savoir en me contactant à l'adresse president@rac.ca. Je serai heureux de me joindre à vous.

– 73, Allan Boyd, VE3AJB/VE3EM, président de RAC

Call for Nominations of Candidates for Regional Director to serve on the Board of Directors of Radio Amateurs of Canada Inc.

Notice to RAC members residing in the Atlantic, British Columbia / Yukon, Midwest and Ontario North/East Regions

The Secretary of Radio Amateurs of Canada Inc. hereby solicits nominations for the positions of Director for the Regions of Atlantic, British Columbia / Yukon, Midwest and Ontario North/East (postal codes K and P).

If required, an election for this position will be held in October 2026. The Director will take office on January 1, 2027 for a two-year term.

Incumbents:

Atlantic: Al Penney, VO1NO

British Columbia / Yukon: Hiroshi Takahashi VA7LET

Midwest: Ed Richardson, VE4EAR/VE4VT

Ontario North/East: Joel Brisson, VA3WBK

1. The Candidate:
   - must be a Full Voting Member of RAC
   - must have reached the legal age of majority
   - must reside in the Region for which he or she is nominated
2. A candidate may not nominate himself/herself.
3. The nomination form will:
   - be printed or typed
   - clearly indicate the candidate's name, call sign and RAC membership number
   - clearly indicate the names, call signs, RAC membership numbers and original signatures of ten (10) or more full voting members of RAC
4. The nominators must have reached the legal age of majority and must reside in the same Region as the candidate whom they are nominating.
5. Each candidate must:
   - sign the nomination form, indicating a willingness to be nominated
   - include with the nomination a brief biographical sketch/CV limited to 500 words succinctly setting out his/her background and qualifications.
   - a candidate choosing to submit a biographical sketch in both English and French languages will be allowed 500 words in each language. The biographical sketch will not include any campaign platform material.

Appel de mises en candidature pour le poste de directeur de région siégeant au conseil de direction de Radio Amateurs du Canada inc.

Avis aux membres du RAC résidant dans les régions de l'Atlantique, de la Colombie-Britannique/Yukon, du Midwest et de l'Ontario Nord/Est

Le Secrétaire de Radio Amateurs du Canada inc. sollicite des candidatures pour le poste de Directeur pour les régions de l'Atlantique, de la Colombie-Britannique/Yukon, du Midwest et de l'Ontario Nord/Est (codes postaux K et P).

S'il y a lieu, une élection à ce poste sera tenue en octobre 2026. Le directeur prendra ses fonctions le 1er janvier 2027 pour un mandat de deux ans.

Candidats sortants :

Atlantique : Al Penney, VO1NO

Colombie-Britannique / Yukon : Hiroshi Takahashi VA7LET

Midwest : Ed Richardson, VE4EAR/VE4VT

Ontario Nord/Est : Joel Brisson, VA3WBK

1. Le candidat :
   - doit être membre en règle de RAC
   - doit avoir atteint l'âge légal de la majorité
   - doit résider dans la région pour laquelle il est mis en nomination
2. Un candidat ne peut se nominer lui-même.
3. Le formulaire de mise en nomination devra :
   - être dactylographié ou imprimé
   - reproduire clairement le nom du candidat, son indicatif d'appel et son numéro de membre chez RAC
   - reproduire clairement le nom, l'indicatif d'appel, le numéro de membre RAC et les signatures originales d'au moins dix (10) membres en règle de RAC
4. Les présentateurs doivent avoir atteint l'âge légal de la majorité et demeurer dans la région du nominé.
5. Chaque candidat doit :
   - signer le formulaire de mise en nomination, indiquant son accord d'être mis en nomination
   - inclure avec la mise en nomination une courte note biographique/CV, limitée à 500 mots, décrivant succinctement ses antécédents et ses qualifications.
   - un candidat qui désire soumettre sa biographie en anglais et en français se verra alloué 500 mots dans chacune de ces langues. Les notes biographiques ne devront inclure aucun élément de la plate-forme électorale.

6. **All original nominations and supporting documentation, including the biographical sketch**, must be received by the Secretary of RAC at the address indicated below by **12 noon on Friday, September 4, 2026.**

It is suggested (but not required) that the nomination forms be sent by *registered mail*.

Faxed or emailed documents will not be accepted.

Clearly indicate on the mailing envelope that Nomination Documents are enclosed.

The envelope will be held unopened until after the closing deadline of **September 16, 2026**. After this date, the Election Committee, under the supervision of the RAC Secretary, will open all submissions, review the documentation for accuracy, completeness and validity, and then announce the results of the Call for Nominations. The decision of the Election Committee is final.

Should a balloted election be required, ballots will be mailed from RAC Headquarters on or before **September 18, 2026**.

Nominations must be sent to the address provided below. Clearly indicate on the envelope: "Nomination Documents".

Secretary, Radio Amateurs of Canada
720 Belfast Road, Suite 217
Ottawa, ON K1G 0Z5

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6. **Tous les documents originaux de mise en candidature et les documents reliés, incluant la note biographique,** devront être reçus par le secrétaire de RAC à l'adresse indiquée ci-dessous avant **12h00 le vendredi 4 septembre 2026.**

Il est suggéré (mais pas obligatoire) que les documents de mise en candidature soient expédiés par courrier recommandé.

Les documents expédiés par courriel ou par télécopieur ne seront pas acceptés.

Indiquez clairement sur l'enveloppe qu'elle contient des formulaires de mise en candidature.

L'enveloppe restera scellée, jusqu'après la fermeture des mises en candidature le **16 septembre 2026**. Après cette date, le comité électoral, sous la gouverne du secrétaire, ouvrira toutes les candidatures soumises, et vérifiera la documentation quant à sa validité, son exactitude et sa complétude, et annoncera ensuite le résultat de cet appel de mises en candidature. La décision du comité électoral sera finale.

Si une élection était requise dans l'une des régions, les bulletins de vote seraient postés du quartier général de RAC le **18 septembre 2026** ou avant.

Les mises en candidatures doivent être envoyées à l'adresse suivante. Indiquer clairement sur l'enveloppe : « Documents de mise en candidature ».

Le secrétaire, Radio Amateurs du Canada
720 Chemin Belfast, Suite 217
Ottawa, ON, K1G 0Z5

TCA

RAC Annual General Meeting

The Radio Amateurs of Canada will be holding its Annual General Meeting (AGM) on Saturday, October 17. It will be held as a virtual event.

Date: Saturday, October 17

Time: 3 pm (Eastern Standard Time)

Agenda items will include:

1) Report of the President

2) Review of the 2025 finances

3) Appointment of auditors for 2027

A Question and Answer period will follow the AGM proceedings.

This is your opportunity to hear what your representatives have been doing over the past year, to raise questions, and to make suggestions about how RAC is managed and where it is going in the future.

The meeting will be attended by members of the RAC Board of Directors and Executive and is open to all RAC members.

Stay tuned for more information.

Assemblée générale annuelle de RAC

Radio Amateurs du Canada tiendra son Assemblée générale annuelle (AGA) le samedi 17 octobre. Elle aura lieu sous la forme d'un événement virtuel.

Date : Samedi 17 octobre

Heure : 15 h (heure normale de l'Est)

L'ordre du jour comprendra notamment les points suivants :

1) Rapport du président

2) Examen des finances pour 2025

3) Nomination des vérificateurs pour 2027

Une période de questions et réponses sera prévue après les délibérations de l'AGA.

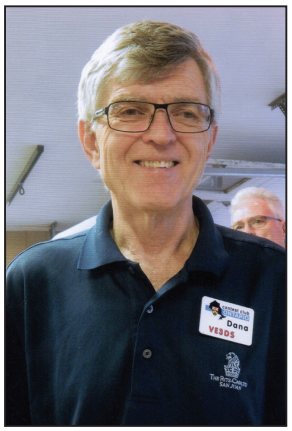
Vous aurez ainsi l'occasion de vous informer sur ce que vos représentants ont accompli au cours de l'exercice écoulé, de poser des questions et de formuler des suggestions sur la façon dont RAC est gérée et sur l'orientation qu'elle compte adopter pour l'avenir.

Les membres du Conseil d'administration et de l'Exécutif de RAC assisteront à l'assemblée, et celle-ci sera ouverte à tous nos adhérents.

Restez à l'écoute pour vous tenir au courant de tout fait nouveau.

– https://www.rac.ca/agm –

COLUMNIST



Dana Shtun, VE3DS
ve3dss@hotmail.com
www.qsl.net/ve3dss

Six Metres and Down...

Spring Air Improves Radio Waves

With the arrival of spring, not only does the northern hemisphere see longer daylight, which is good for propagation, but also with that comes warming of the ground, and the development of layering in the atmosphere which is based on temperature, density and moisture content.

These layers can act like waveguides, trapping VHF and UHF radio signals and sending them over long distances – 1,000 to 3,000 kilometres – and way beyond line of sight.

The VHF community has used these effects for decades now to push the boundaries of what's possible in distance, and it continues to do that today on higher and higher frequencies up into the GHz range. Just look at the records on the American Radio Relay League's (ARRL) website. Canadians are in the forefront there too.

Visit: https://www.arrl.org/distance-records

Multimode and Multiband Make the Most of VHF/UHF

Sadly, many Radio Amateurs remain oblivious to the possibilities, and much of our training material continues to ignore or minimize the possibilities of DX on VHF, leaning to the more pragmatic approach of promoting a monoculture of mode and style. Even there though, handhelds (HTs) are being hacked to enable SSB, CW and FT8 operating HF up to 928 MHz and more.

Then there is the work done by ICOM to promote their IC-705 HF/50/144/440 MHz multimode portable transceiver, and the new IC-905 all mode analog digital microwave ready radio. Yaesu have also joined the party with their new FTX-1 line of transceivers.

For the technically curious, the transverter route, with gear that covers our bands up to 122 GHz, is also an economical option and a great learning experience as well.

Downeast Microwave, Q5 Signal and SG Lab, just to name a few, all manufacture transverter products that will get you into VHF, UHF and Microwave without breaking the bank. Are you up to the challenge?

Here's a link to a review by Andrew, VK3FS, of the new SG Lab 5.7 GHz Transverter:

https://3fs.net.au/sg-lab-5700-mhz-transverter-version-1-4/

Lets not just focus on terrestrial stuff. We also have a constellation of satellites available to us and more coming on stream every year.

Remember in an emergency, it is poor risk management to put one's communications options in only one technology (just look at how the cellphone system chokes in an emergency), especially when we are so technology diverse.

What do you have in your Go Box?

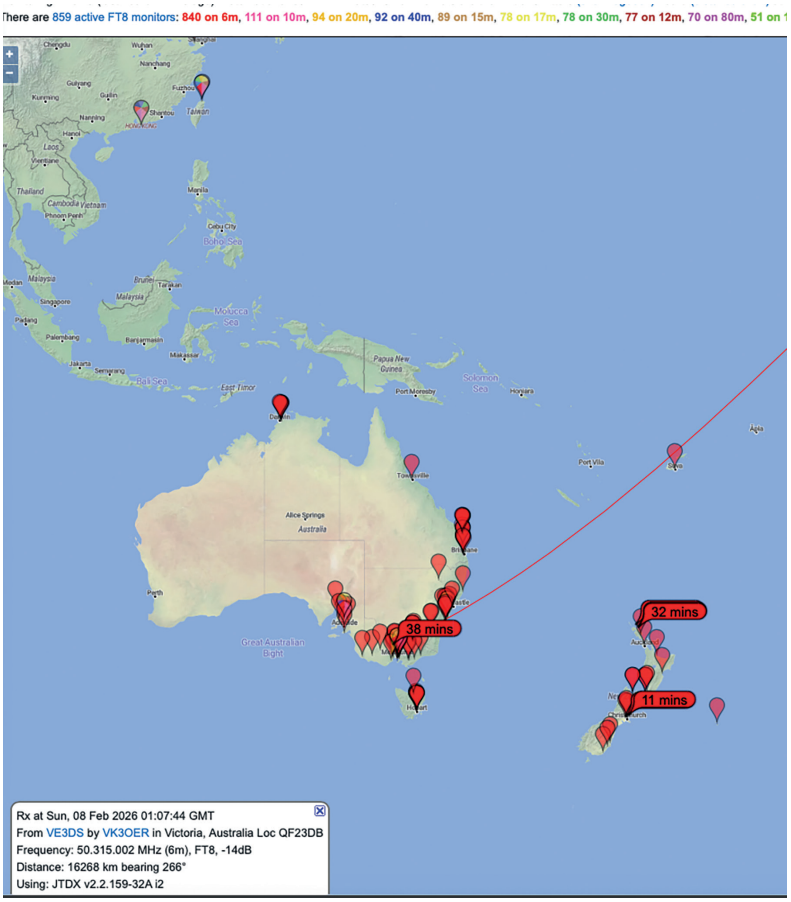
Six Metres

Although it may not be obvious everywhere in Canada yet, it is finally spring – at least technically. With the solar cycle potentially waning now, one has to wonder if the spring Sporadic E season will improve with longer duration openings to Europe and Japan and further afield, or not. Will there be extensive north-south openings into the Trans-Equatorial Propagation (TEP) zone caused by solar storms?

It's all part of the "magic band" mystique, that keeps us coming back for more, hi.

Speaking of magic, after 50 years of trying I finally worked Australia on 50 MHz.

It all started on February 8 with John, VE3EJ, in Grassie, Ontario hearing and working ZL3AIC in Christchurch, New Zealand (RE66). Fortunately, the propagation moved from the south side of Lake Ontario over to the north side and we were happy to work everyone in and around



VE3DS copied in Australia on 50 MHz by VK3OER.

Christchurch including ZL3AIC, ZL3RC, ZL3NW and ZL3AAU between 0016 and 0023 UTC.

ZL3AAU and I went to SSB but unfortunately signals were just not strong enough to confirm a solid contact – likely a few minutes too late. Also in on the action was Glenn, VA3DX, who picked up five ZL contacts.

We did get a flag into VK3OER at 01:07, but with the VK power limits (125-watts digital) and the city noise here, we had no copy.

The band stayed open however, with the ZLs working into the south and the Midwest United States.

Then just before I thought I should shut down and get some sleep, at 0400 UTC (yes 11 pm Toronto Time), John, VE3EJ, called and worked VK2XN for a new DXCC #142 on 50 MHz. Luckily this time, propagation covered both sides of the lake and I was able to just barely (horrible QSB) work VK2XN in QF59 and VK3ZL in QF21 for new DXCC 164. That was quite an evening. Just for fun I left the receiver on all night, but nothing further west popped through.

Since then, the openings have been really sporadic here, with LU7HN worked on February 28 at 0023 and not much else here other than "1 and done" FT8 signals from CX, LU and CE through March.

Meanwhile further south closer to the geomagnetic equator, the propagation has been remarkable, with openings from the southern US and Central and South America to New Zealand, Australia, Japan, Korea, Philippines, Macao, China, Mauritius and Africa – including the DXpedition J51A in Guinea-Bissau.

April 3 started out geomagnetically quiet, but then there was a surprise coronal mass ejection (CME) shock that hit the planet, triggering a strong two-hour long, north-south TEP opening at 2002 UTC – with HC2FG worked in FI07, followed by HC2GRC in FI07, J35X in FK92, HK7OHV in FJ35, HP1VS in FJ08, HP8DPD in EJ98, HK3V in FJ24, YV5GRB in FK60, YV3CFP in FK50, TI2SD in EJ70 and HP1RY in FJ09.

Please see "A Starry Tale" by Robert Mazur, VA3OM, for more information on this celestial event!

During the opening there was some very strong distortion of signals via TEP, where despite being very strong, they were not decoding on FT8.

With conditions like that, SSB, CW or some of the other digital modes like Q65 would be more appropriate. I'm sure the guys on the southern end of the opening also had to contend with the US wall of QRM as well, hi hi.

Sporadic E season, as I mentioned, is just around the corner so let's hope for some interesting DX activity over the summer.

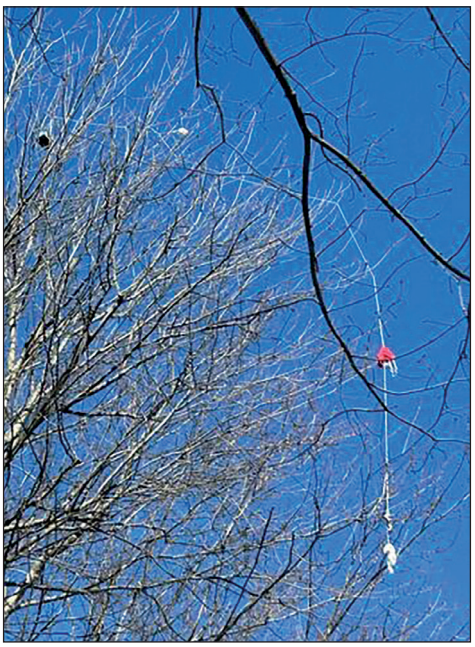
Balloon Launch – UHF Transponder

Sasha Timokhov, VE3SVF, our intrepid teenage balloonist, launched another UHF balloon transponder that reached 12,581 metres altitude over the Niagara area.

Helping track the high altitude balloon (HAB) were VA3EON, VA3FMB, VE3DMU, VE3MDX, VE3OYN – all on 434.65 MHz.

Sasha, VE3SVF notes as follows:

"I suppose everyone here is interested in how the recovery turned out! Fortunately, the payload narrowly avoided the easily recoverable fields and decided to go for the top of a stand of trees that were probably over 40 metres tall (phew!). As such, it currently remains at-large while we figure out a way to get it down.



The latest high altitude balloon (HAB) by Sasha, VE3SVF, launches in Toronto and lands in a tree in the Niagara area.

The location is over an hour and a half away, however, so we may just have to abandon any more recovery attempts, since our hour-long trudge through the bush a few days ago definitely didn't make anything overly enjoyable, though if anyone lives in the area or has tips on how to get stuff down from really tall things, we may try again!"

Sasha plans a bigger launch effort with a homebrew, HF CW beacon on 14.3 MHz and a sturdier balloon. More on that later.

Microwave Update

Every year, there is a gathering of microwave enthusiasts from around the planet – and those interested in microwave – called Microwave Update, or MUD for short.

This year's event will be held on October 23 and 24 in Rochester New York and is sponsored by the Rochester VHF Group.

The Ontario VHF Association (OVHFA) will have a table at the event, as well as presenters and volunteers.

There will be a test range for antennas and test lab for radios/preamps. L3Harris is providing the presentation venue and tour. If you are there early on Thursday, head to the Antique Wireless Museum for a tour. There will be a mini fleamarket and a hospitality suite with lots of food and camaraderie.

If you are interested, please check out https://microwaveupdate.org/ for details, registration and hotel bookings at special rates.

Rochester is an easy drive from Toronto, Montreal, Ottawa, Hamilton and Niagara so consider taking the trip over!

Your support for this event is important, not only to exchange and learn, but to share the camaraderie that comes from those QSOs on the air!

Microwave Activity Day

Don't forget, the first Saturday of the month is designated as Microwave Activity Day (MAD).

With the arrival of warmer weather, the local microwave guys will be busy.

– 73, Dana, VE3DS

COLUMNIST

Allen Wootton, VY1KX
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"QUA – A Topical Digest":

QMX and QMX+ Transceivers...

In the March/April 2026 QUA column I wrote quite extensively regarding polar modulation, especially as it is implemented in the QRP Labs QMX and QMX+ transceivers, but also with some mention of its use in the FlexRadio Aurora transceiver.

The QRP Labs transceivers were of most interest to me because they are sold as kits and seem to offer many opportunities for testing and experimentation while providing very good value. Consequently, I ordered one of the QMX+ kits and since its arrival I have spent enjoyable time building it and exploring its capabilities.

There are two QMX transceivers – the QMX and the QMX+. The QMX is a tiny, face up QRP transceiver with 5-band coverage. It comes in three different versions:

- 80, 60, 40, 30 and 20 metres
- 20, 17, 15, 12, 11 and 10 metres
- 60, 40, 30, 20, 17 and 15 metres

Scott Sheppard, VY1CO, kindly lent me his QMX for a photo as shown in Figure 1.

The QMX+ controls face the front rather than the top. Although it is still quite small, there is a lot more room in its case for the required low-pass filters and it covers all the bands from 160 to 6 metres. The circuitry for both the QMX and QMX+ are identical except for the change in band coverage. Figure 2 shows the QMX+.

Both transceivers come without a microphone and their very nice

Figure 1: QMX transceiver courtesy of Scott Sheppard, VY1CO.

Figure 2: The QMX+ transceiver

aluminum cases are extra cost. Prices on the QRP Labs site are listed in US dollars. For my QMX+ the cost was $125 plus $25 for the case and $21 for the optional GPS module.
I also ordered an experiment board that fits the QMX+ case. It was an added $8. With shipping, taxes and exchange the total price was $300 Canadian. The QMX with the case is $122.47. With the optional GPS module I estimate it would be close to $200 Canadian.

QMX+ Construction

After ordering, my QMX+ arrived, nicely packed, in about three weeks (see Figure 3). The main six-layer circuit board has all the surface mount parts soldered to the board. The parts for the kit builder to add

Figure 3: QMX+ kit components. In the photo the circuit boards are packed under the front and back panels on the left and other components are in the plastic bag shown on the right.

are some diodes, a few moulded inductors, final amplifier transistors and associated transformers, connectors and filter toroids.

Before starting I read through the excellent online construction manual to make sure I was familiar with the construction process.

As usual, there were warnings to make sure that diodes were installed in the correct direction.

Other warnings emphasized how important it is that parts are in the correct holes and with the correct orientation before soldering otherwise it can be very difficult to remove, salvage and reorient the parts.

I also checked the parts list against the parts I received and found everything was in order.

Most of the construction of my QMX+ went smoothly.

As you can see in the photo of the completed QMX+ transceiver shown in Figure 4, there are a lot of toroids and two transformers to be wound and installed. This took time but it was straightforward and just required care and magnification to check that the number of turns on each toroid was correct.

I did make one mistake by placing a wire from one of the 6 metre toroids in the wrong hole. I found and corrected this error later during my testing of the radio. A much more serious error occurred shortly after the wrong hole event when I soldered three multi-pin right-angle connectors to the board backwards.

The result of this error was several tedious hours removing and reinstalling these parts in the correct orientation. I mention this because it occurred in spite of my determination not to make mistakes during the construction. Anyone who carefully follows the construction manual should not have trouble, but I was trying to do that and yet, for a number of reasons, still made this (in retrospect) really obvious error.

Hans Summers, G0UPL, the designer of the radio has a YouTube video called "52 Tips for Building your QMX!" about the construction of the smaller QMX. The video is specific to the QMX, but it also contains many helpful tips for any electronic construction project.

You can find it at https://www.youtube.com/watch?v=pBZ_SXO-LIM.

There are also other YouTube videos that show the construction and operation of the QMX and QMX+. There is also a very knowledgeable and helpful user group available online and Hans is very prompt in answering email questions.

An indication of the high efficiency of the final amplifier can be seen in the manner in which the four final amplifier BS170 MOSFET transistors are mounted in the QMX+.

Figure 5 shows them part way through the construction process. The flat face of each of the transistors is bent down against the circuit board and it is the circuit board that acts as the heat sink for these transistors.

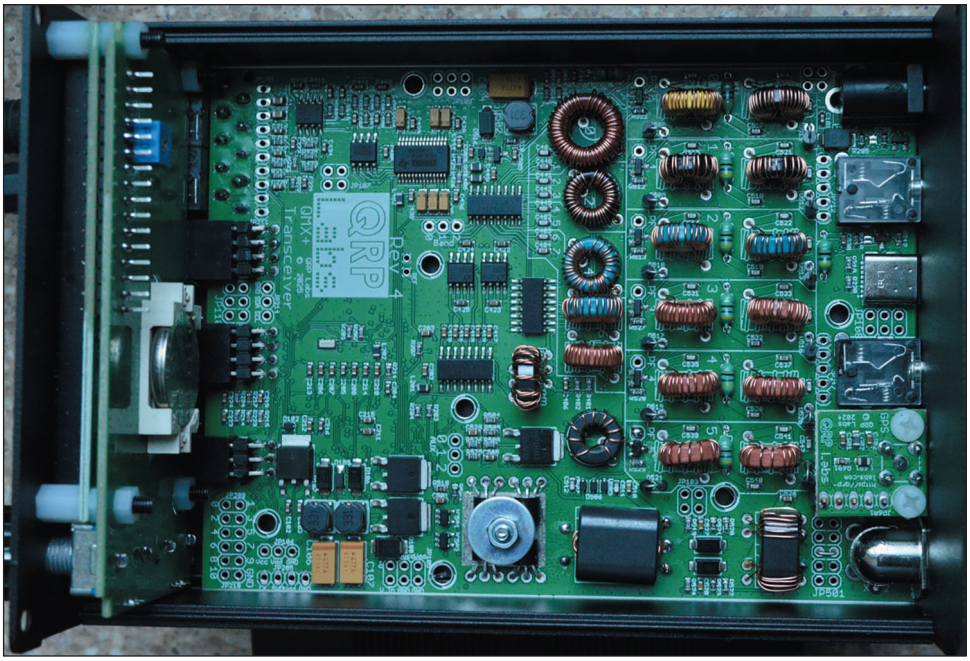

Figure 4: The completed QMX+ transceiver. The optional GPS module can be seen at the bottom right, near the BNC antenna jack. The final amplifier transistors are located under the washer at the bottom middle.

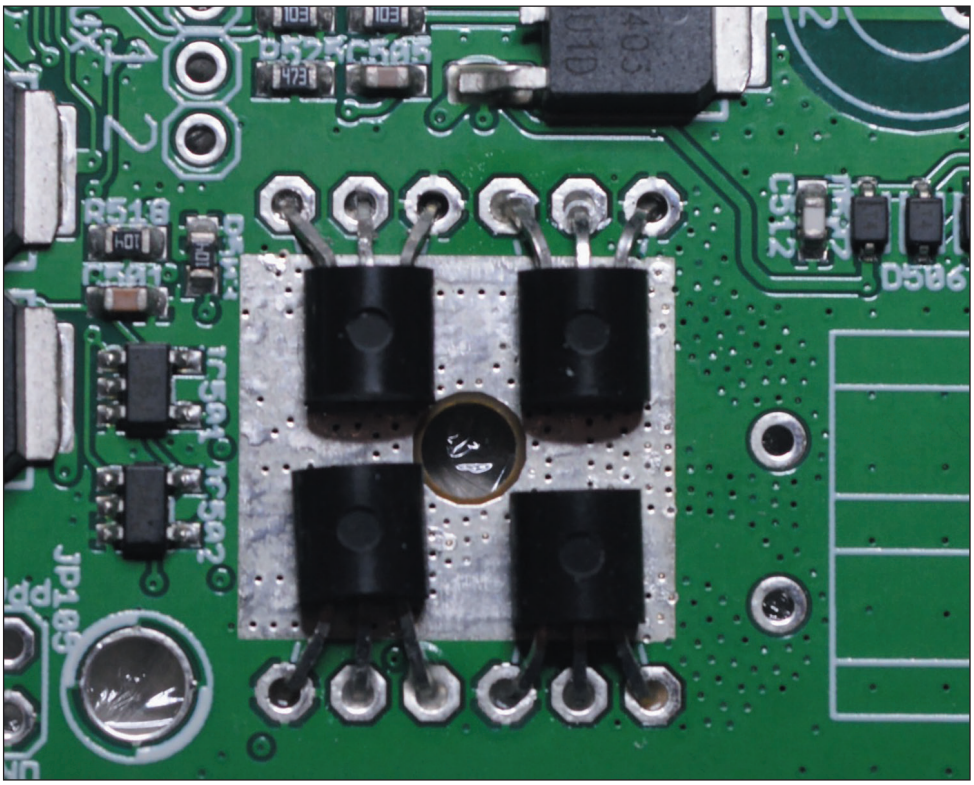

Figure 5: The four final amplifier BS170 MOSFET transistors installed with their flat faces against the circuit board where they will be held in place by a bolt and washer inserted through the central hole. That the circuit board acts as the heat sink gives an indication of the high efficiency of the final amplifier.

The bolt and steel washer that holds them firmly in place has not yet been installed but you can see it in Figure 4 above.

The amplifier can be constructed for a maximum 12 volts or 9 volts, depending on the winding of the output transformer. I used the 9-volt configuration.

QMX+ Operation

Once my QMX+ was complete, I updated the firmware following the procedure outlined in the operating manual. This requires connection to a computer and even though I never feel too at home with computers I found this to be an easy process.

Along with "Update firmware" another item in the QMX extensive menu system is "Hardware tests" and within this category are a whole range of tests that can be performed utilizing either the QMX two-line screen or through a USB connection to a computer. I tried both methods and found the tests very informative and straightforward to perform. Everything looked good except for 160 metres where the image and Analog-to-Digital Converters (ADC) I/Q results were poor. This was due to a known firmware problem that will be resolved soon through firmware updates. Power output was between 4 watts and 6 watts, except for the 12 and 17 metre bands where the power was 2.4 watts and 3.5 watts respectively.

The QMX can operate as a beacon. Following the directions in the operating manual for Weak Signal Propagation Reporter (WSPR), I tried this and was pleased to find it worked without any problems. Then, during an RTTY (radioteletype) contest, I used MMTTY to decode signals.

Note: *MMTTY is a free software tool that allows a computer with a sound card to work with a transceiver to receive and send baudot RTTY signals.*

Once again I didn't experience any problems. The QMX uses upper sideband for digital modes, however, so it was necessary to check the reverse box in the MMTTY set up.

Until now I had never used FT8. I found it easy to set up WSJT-X for FT8 operation following the directions in the QMX operating manual. With this mode I was pleased to have my first FT8 contact with a station in Japan.

Since there is no speaker in these radios and their audio amplifiers have insufficient power for a speaker, headphones are required for CW and sideband operation. For CW, a range of filters from 50 to 500 Hz is available. These filter bandwidths are implemented by overlapping two sequential bandpass filters and the offset frequency is automatically varied slightly to match the centre frequency of the filter. I found the filtering very effective.

The internal keyer works well and provides a choice of straight key, iambic A or B and ultimatic modes. There are message memories too. Dual VFOs, RIT and split operation are all possible.

A CW decoder that can be enabled for both receive and transmit is included in these transceivers. I found the decoder quite effective although, as others have noted regarding decoders in general, none of them are a substitute for good CW skills. With strong signals I was surprised that the decoder gave nearly 100% correct copy, but as the signals became weaker or if the decode parameters were set inappropriately, the level of correct copy dropped sharply. The decoder can be used with a practice mode too. I tried it with the keying set to "straight key" so I could assess the quality of my timing.

Figure 6: Microphone for the QMX+ transceiver made from a scrap piece of PVC pipe. The microphone element is glued on the inside back of the thin plywood end cap. A second end cap seals the back end of the pipe. The plunger of the push-to-talk push button protrudes through the side wall of the pipe while the switch itself is held firmly in place with a wooden wedge inside the pipe.

It's necessary to make a microphone for the QMX transceivers. Adam Kimmerly, K6ARK, has a 3-D printer model that can be used to make one. I used the same microphone element (DigiKey 668-AOM-5024L-HD-F-R-ND) and push button switch (2449-CT11027.0F100-ND) that he lists in his bill of materials and installed them in a scrap piece of PVC pipe.

The microphone element works well but I found the 7.0 mm plunger height of this switch a bit short for its use in my PVC pipe. I had to trim away some of the inside of the pipe with a chisel so that when the switch was installed the plunger was slightly above the outer surface of the pipe. Similar switches with longer plungers are available. You can see my finished microphone in Figure 6.

On sideband I received good reports. Transmit and receive bandwidth can be adjusted as can transmit compression and base and treble transmission.

Tuning the QMX transceivers is accomplished by turning a small knob attached to a click type encoder, one of the two rotary controls on these transceivers. Tuning step sizes are chosen with a momentary push and then turn of this same encoder. The tuning step size is indicated on the display. In Figure 2, for example, the tuning step is 100 Hz as indicated by the line under the 100 Hz digit.

With the appropriate step size, tuning can be slow or rapid and once set to a particular frequency, the encoder provides enough turning resistance that accidentally bumping the control will not cause the frequency to change. The tuning procedure works very well, but it does not give the same pleasure as does tuning across a band with my main station transceiver. I can see advantages, however, for portable, digital mode and beacon operation. This encoder is also used for selecting menu items.

The second rotary encoder serves as a volume control. A single short push of this encoder turns on the radio; a long push turns it off. With the radio turned on, two quick pushes access band change mode.

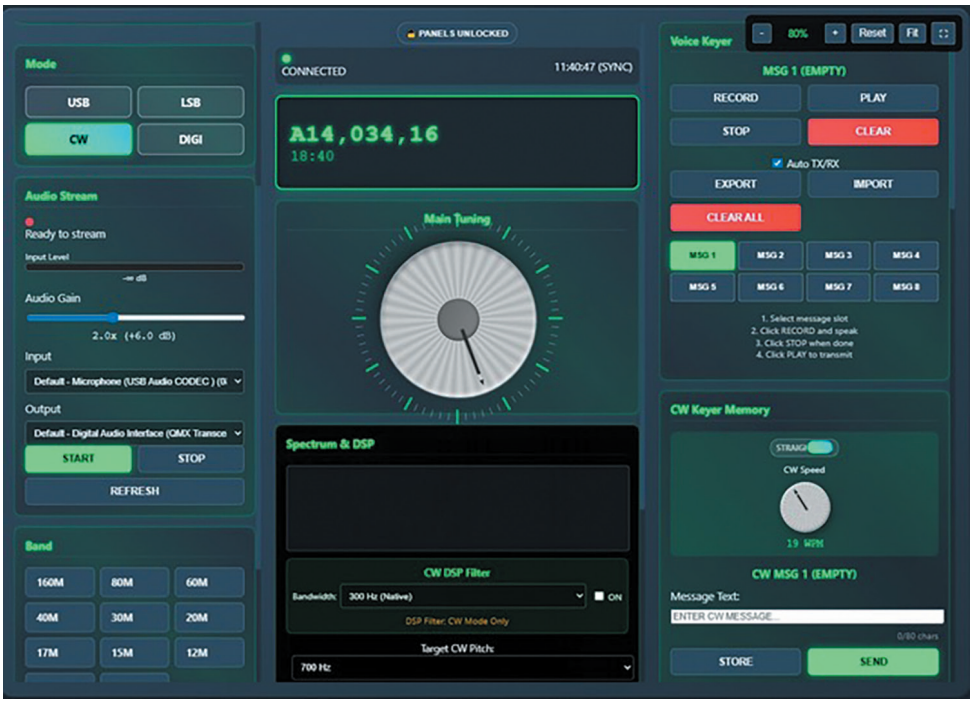

Figure 7: QMX interface controlling the transceiver on the Google Chrome browser.

I found the default 300 ms for the double push too short for my reactions so I changed the time limit to 500 ms with an adjustment in the system menu and found this time limit to be much easier to manage. Other times are available.

I was surprised to read of a browser-based interface that is available for the QMX transceivers. It can be found at tinyurl.com/QMX-new-GUI. This interface is shown in Figure 7. There is more to the interface than is shown there, but this is all I could fit in one screenshot. With this interface on Google Chrome or Microsoft Edge, all the QMX controls and messages can be adjusted using a mouse. It was very easy to set up once I realized that it was not fully functional on my usual Mozilla Firefox browser.

QMX+ Conclusion

From what I understand, the QMX+ and QMX transceivers are much the same except for band coverage and layout, so I expect that most of my comments regarding the QMX+ could generally be applied to the QMX. I am very impressed with the QMX+ transceiver and I think either of these transceivers could provide much pleasure in operation.

The QMX+ in particular is a great platform for learning and experimenting – more so than the QMX – because of its larger circuit board and enclosure. The QMX seems to me to be especially suitable for the types of portable operation for which small size and light weight are prioritized.

I found the receiver to be very good on all modes and the reports I received on transmit were very positive. The many adjustments and test procedures available within the radio provide a lot of opportunities for tailoring the radio to a particular use or interest.

I know from my experience with QRP operation that it does require more patience than is needed for operation at higher powers, but it can also provide great satisfaction when distant contacts are made. Building the radio can provide great satisfaction too, as well as an enhanced appreciation of its many features and design choices. At extra cost they can also be purchased fully assembled and tested.

Multiband Dipoles

There are a number of different designs for multiband dipoles. I've used fan dipoles, for example, in which two or more dipoles for different bands are connected to the same feedpoint, relying on their different impedances to act as a sort of automatic band switch.

A 20 metre dipole operated on 20 metres will have an impedance somewhere near 73 ohms, but a 40 metre dipole connected at the same feedpoint will have a much higher impedance so that the current flow to the 20 metre dipole will be large while that to the 40 metre dipole is very small. The opposite situation occurs when the antenna is operated on 40 metres. Now the 40 metre impedance should be around 73 ohms whereas that of the 20 metre dipole is very high.

Trap dipoles also have a sort of automatic band switch, one in each dipole leg formed by parallel resonant circuits that isolate end sections of the dipole. I have a 20/40 metre trap dipole that I made for portable operation. On 20 metres the active section of the dipole extends from the feedpoint to the traps. On 40 metres the full length of the antenna is active, but due to reactance introduced by the traps its length is slightly shorter than that of a single-band 40 metre dipole.

There are many references available that describe the construction of trap dipoles, but while I was writing this I received an email from DigiKey advertising their online publication "We Get Technical", and the particular issue "Wireless Volume 26 | DigiKey" has a good explanation of them. If you enter the phrase in quotes into a search engine it will bring up this issue. It also contains an interesting article entitled "The First Car Radio".

Another way to make a multiband antenna is to use some kind of switch with which to add length for the band of interest. Antennas of this type are often called "link dipoles" because they can be made with a central higher frequency dipole extended past its end insulators with additional wire. Short jumper wires (the "links") placed across these insulators can then be connected or disconnected to provide operation on a particular band

For example, to make an antenna for 20 and 40 metres, a dipole cut for 20 metres is extended from the insulators at its ends by additional wire to make the right length for the 40 metre band. With jumper wires placed across these insulators, the antenna is set for 40 metre operation while with the jumpers removed the antenna functions on 20 metres. This can be fine for portable operation where the antenna may be easily raised and lowered so as to attach or remove the jumper wires.

Some people have used simple switches across the insulators instead of jumper wires, but changing bands still requires access to the switches. However, quite a long time ago I remember seeing an article in which the author made an antenna that used remotely-controlled switches for this purpose. He ran lightweight plastic tubing up the feedline and out along the antenna wires to the mid-length insulators, and he connected pneumatically-controlled switches across these insulators. In this way bands could be changed with the appropriate application of air pressure. I found this solution to making a multiband dipole so intriguing that I have remembered it, but unfortunately I don't remember the reference.

All these thoughts concerning dipoles were inspired by an article in the February 2026 issue of *RadCom*, the journal of the Radio Society of Great Britain. This article by Paolo Guatelli, IK4PKK, and Vittorio Bussoni, IK4CIE, is entitled "Multi-band Dipoles Using Switches Rather Than Traps". Instead of fans, traps, manual or pneumatic switches, these Amateurs had the ingenious idea of using remotely-controlled switches of the type used for garage door openers to add or subtract length from the dipole legs. They made a triband dipole (20/30/40) using pairs of QIACHIP wireless remote switches and two remote controllers, one for each pair of switches.

Figure 8 shows my adaptation of a diagram they include with their article. They used ZYGY 7.4V 500 mAh rechargeable batteries to provide power to the switches, and each switch and battery had a combined weight of 57 grams. In their set up the batteries lasted about eight hours when continuously powering a relay.

They mention that other battery packs are available that have greater capacity but are not much larger or heavier than the ones they used. They also point out that battery drain depends on whether or not the switch is activated, and they suggest that the use of latching relays might be a possibility to further limit the battery drain. I don't have the remote switches in hand but, from their appearance in the many websites that offer them for sale, it looks to me like it would be a fairly easy job to replace the stock relay with a latching one. Paolo and Vittorio carried out tests with their antenna and found no malfunctions at a power level of 500 watts.

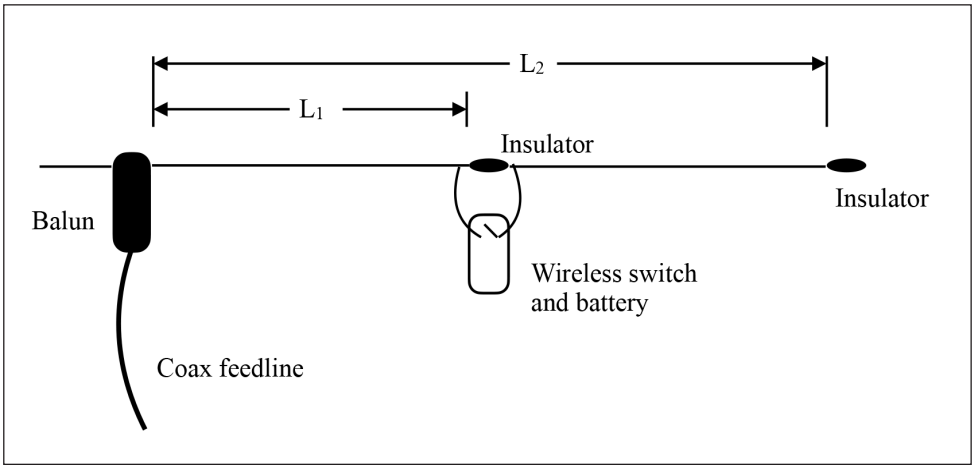

Figure 8: The diagram shows one-half of a two-band dipole. Length L_1 is the quarter wavelength of the higher frequency band; L_2 is the quarter wavelength of the lower frequency band. The antenna IK4PKK and IK4CIE made was for 20, 30 and 40 metres. For that antenna there would be an additional insulator and wireless switch in each dipole leg and two separate controllers.

More Photovoltaic Information

Denis Coolican, VE6AQ, sent me a very interesting email description of the photovoltaic system he and Evan Cameron, VE6FI, installed at their amazing VE6FI station.

Denis says:

"At VE6FI we used 96 solar panels for 8 kW of power to 12 volt batteries. We did not use new commercial equipment, but built our own. Instead of using Pulse Width Modulation (PWM) we used a different concept.

We allowed the batteries to be charged directly from the solar panels. We did not limit the charging capacity. We monitored the battery output voltage, but did not try to regulate the charging current.

We adjusted the load on the AC side of the inverter. So if the voltage started to get too high on the batteries, we just put on more AC load. That way, the energy was charging the batteries, but any excess was used on the inverter, and the inverter load was on the AC side and was heating elements. That way we didn't have any switching and we didn't have any noise due to switching at DC.

We really did not have any noise at all. We operated some 48-hour contests with two stations at 2 kW without any noise.

We use some Microchip controllers that would be set to different values depending on how much load we had to put on. The input to our 8 kW inverter was 240 V DC so we had micro controllers that could be set at 245, 250 and 255 volts. This allowed us to dump the excess charging capacity to the AC load bank."

In his email Denis also mentioned that there is information regarding the VE6FI station on QRZ.com. If you look there you will see a very impressive station.

Please contact me at vy1kx@myrac.ca if you have comments.

TCA

Keith Baker, VA3KSF/KB1SF
kb1sf@yahoo.com

Amateur Radio Satellites

Feedlines, Preamps, Coax and Connectors

I use a pair of "long boom" M2 crossed Yagi antennas and about 8 metres of Times LMR-400 feedline. This arrangement precludes the need for mast-mounted preamps, as the internal preamplifier in my TS-2000 radio has proven to be sufficient. (Courtesy: VA3KSF)

Feedlines for Satellite Work

Wow! I've been getting a *lot* of email questions from readers in response to my satellite columns here in TCA. These questions range from "What radios should I use?" to "Do I need a large antenna to work the satellites?" However, the *vast* majority of the questions I receive from readers revolve around "Which coax should I use?" and "Whether (or not) I need a preamp" for my home station.

In this column, I'll discuss some of the various types of feedlines and connectors that are particularly suited for satellite operation as well as whether (or not) you need to consider adding a preamplifier (or two) to your antenna system.

The feedline is what connects your antenna to your radio. Most veteran satellite operators know that otherwise excellent antennas can be rendered quite useless if they are linked to your station equipment with poor quality feedline.

While the proverbial "wet noodle" feedline might work well for local VHF/UHF repeater or scanner activity, because satellite work is *weak signal work* many types of feedlines used in the former activity are *not at all* suited for the latter.

The principal concern with feedlines is *loss* – and every feedline has it to some degree. That is, if you insert 50 watts into a feedline at your station, you'll have *less* than 50 watts once your signal gets to your antenna. The rest of the power is lost somewhere in the feedline, usually in the form of heat.

Unfortunately, these characteristics are also at work when you receive signals as well. And because the signal from one of our satellites is *already* weak when it strikes your antenna, it follows that you can ill afford to waste any of that horrifically weak downlink RF power heating up your feedline! What's more, those losses usually increase as the line length and operating frequencies being transmitted or received increase.

Most of us working the birds these days are using some form of coaxial cable (or simply "coax") for feedline. There are about as many varieties of coax as there are companies manufacturing them. However, most of us use some form of low-loss coaxial cable such as Belden 9913 or Times LMR-400 as opposed to RG-8, RG-8X, RG-58 or RG-213 used in most other Amateur Radio work.

Veteran satellite operators use low-loss coax cable in their Earth stations because, as the name implies, this coax exhibits much lower losses (particularly at VHF and UHF frequencies) than those used for other (primarily HF) Amateur activities. In the past, I've used a variety of Belden 9913 coax for my various satellite stations. It exhibits a relatively low loss (on the order of about 2.6 dB at 400 MHz) per 100 feet, which is roughly half that of a similar length of RG-8 coax (about 4.1 dB).

The magic number to always keep in mind when comparing feedlines is 3 dB. That's because, for every 3 dB of loss roughly *half* of your signal is being wasted in the feedline. In the example above, at frequencies close to one of our satellite uplink or downlink frequencies (400 MHz), using a 100-foot length of RG-8 means that well over *half* of your uplink power (or downlink signal) will be lost in the coax. Ouch!

Unfortunately, for all of its wonderful low-loss attributes, Belden 9913 also has a dark side. Because the dielectric in this coax is largely made up of air, it tends to attract moisture. And even though you can try your best to completely seal connection points from the elements (using various "coax seal" products or lots of electrical tape), over time the normal heating and cooling of the atmosphere *will* result in moist air getting inside and then condensing inside the cable. The technical term for this effect is called "diurnal pumping". For this reason, veteran satellite operators sometimes derisively refer to 9913 and its variants as "garden hose".

Status of satellites in orbit: https://www.amsat.org/status/

Fortunately, a relatively new cable on the market, Times LMR-400, offers almost the same loss characteristics as Belden 9913 at about the same price – but without the "garden hose" issue.

An excellent source of information on various types of transmission lines, including their loss characteristics, can be found at: www.w4rp.com/ref/coax.html

Preamplifiers

As I've previously noted, the downlink signal from most of our satellites is already weak when it strikes your antenna. Another "nice to have" (but sometimes not absolutely necessary) addition to your base station setup is a receive preamplifier to boost the satellite's downlink signal. These preamplifiers (or simply "preamps") come in many shapes and forms. Some are integrated into the radio itself (or into external so-called "brick" amplifiers) while others are designed to be mast-mounted nearer to your antenna.

Over the years, I've found the mast-mounted variety are best because they boost the satellite's weak downlink signal where it is strongest – *before* any of that weak satellite downlink signal is lost in the feedline to your station. However, unless the receiving preamp is specifically equipped with internal switching relays, it is *very* important to remember that transmitting through one of them will often destroy the device. I've "smoked" more than one of these in my time this way!

Do I Need One? The short answer is: "It depends". As I mentioned earlier because satellite work is weak signal work, building your satellite station to consistently receive "S9+" downlink signals from the birds is absolute overkill. What is important is that you simply be able to hear your own downlink signals – and those of the other stations that wish to make contact with you – coming through the satellite. Period.

How strong those downlink signals will be at your radio will depend on the length and type of feedline that you are using and the gain in your antenna system. If your low-loss coax run is less than 10 metres or so and your antenna gains are in the 5 dB to 10 dB gain ballpark, you *may* be able to get by just using the preamp built into your radio on the downlink.

My own eggbeater antenna setup uses the preamplifier in my Kenwood TS-2000 radio with just a short run (10 metres) of LMR-400 low-loss cabling. On 70 cm, that setup gives me just enough gain for downlinks to be reliably heard on mostly overhead passes.

Mast-mounted preamps, such as this one from SSB-Electronics, boost weak satellite downlink signals at the antenna feedpoint where those signals are strongest. While they are no longer being manufactured by SSB, these items can now be found on the used market (Courtesy: SSB-Electronic)

I'm also currently using a pair of "long boom" crossed Yagi antennas from M2 and about 8 metres of LMR-400 coax feeding my Kenwood TS-2000. While the received signals on 435 MHz satellite downlinks are a bit weak at the horizon, I still have absolutely *no* trouble hearing (and being heard) on the satellites using just the internal preamp built into my TS-2000.

Bottom line: I suggest you *first* build your satellite Earth Station using the best antennas and feedlines you can afford. In addition, try to keep those low-loss coax runs between your antennas and radio as short as possible and see if that arrangement is sufficient. If you find you are still having trouble hearing your own signals (or those of others) on the downlink, you might consider adding a preamp into your system.

Unfortunately, with the loss of MFJ Enterprises and their extensive line of preamps – which were marketed under the Mirage name – the other manufacturers of such items have now also dropped those lines. For example, SSB-Electronic used to manufacture a whole line of mast-mounted preamplifiers, but they have also apparently been sold and are catering to a larger commercial market with mostly coaxial cabling for the cellphone industry. Your best bet to find one of these older preamps is to scour the used online swaps for such items.

A Word About Connectors

In addition to using a high quality, low-loss feedline to and from your satellite antenna and keeping that feedline length as short as practicable, it is important to use the very best connectors you can afford. If you try to skimp on the connectors, you could lose a significant portion of your signal through those connectors as well.

Remember, every dB of attenuation that weak satellite signals encounter while travelling from your antenna to your radio is a bit of the downlink you won't hear. A 3 dB to 6 dB loss from using cheap, HF-only rated coax and poor quality connectors can turn a marginal VHF or UHF downlink signal into one that simply isn't there.

Connectors add to line losses by creating impedance "bumps" that act like little resistors in the line. At HF (and to some extent at 6m and 2m) you can usually get by with using the common SO-239/PL-259 connector combination. However, at higher frequencies (such as at 70cm and above where many of our Amateur Radio satellites operate) most satellite-capable equipment now comes equipped with a Type-N connector for those frequencies. The type-N connector, when properly installed, will help minimize these small mismatches in the feedline which, in turn, will allow a greater portion of that (already weak) satellite downlink signal to make its way to your operating position from your satellite antenna.

As I've also noted, it is critically important to make sure that these connectors are *well seated* and *well sealed* when installed at your antenna. Otherwise, your coax will very quickly become waterlogged and then you'll really have line losses to contend with! One popular method is to wrap electrical tape tightly around the connectors, or use one of the many available hand-mouldable compounds sold just for this purpose.

Wrap Up

In future editions, I'll be continuing to share some helpful hints to assist you with your exploration of this absolutely fascinating aspect of Amateur Radio. I'll also bring you up to date on the status of our Amateur satellite fleet. See you then.

Dave Goodwin, VE3KG
Regulatory Affairs Officer
regulatory@rac.ca

THE REGULATORY ROUNDUP

Topic: Electromagnetic Compatibility (EMC)

Electromagnetic Compatibility (EMC)

Electromagnetic Compatibility (EMC) is the term for certain kinds of interference. EMC covers situations where:

- Radio devices, such as your neighbour's TV, react to your transmissions
- Non-radio electronic devices, such as loudspeakers, react to your transmissions
- Your receiver reacts to nearby non-Amateur transmitters
- Your receiver reacts to nearby non-radio electronic devices such as switching power supplies

EMC has nothing to do with other kinds of interference we may experience – such as crowding on the Amateur bands – nor does it apply to situations where two Amateurs are competing for use of the same frequency.

Innovation, Science and Economic Development Canada (ISED) has a policy on EMC that provides guidance on who is responsible for resolving interference problems related to the operation of our transmitters. The policy is set out in Electromagnetic Compatibility Advisory Bulletin 2 (EMCAB-2), titled "Criteria for Resolution of Immunity Complaints Involving Fundamental Emissions of Radiocommunications Transmitters." It establishes criteria for interference resolution based on measured field strength at the location of the affected equipment and sets a standard for acceptable field strength levels (see Table 1)

The three broad types of equipment are:

- Broadcasting receivers including TVs, AM radios, FM radios, and any other receiver used to receive broadcasting
- Associated equipment including speakers, headphones, and audio amplifiers that are connected to and working with broadcasting receivers
- Radio-sensitive equipment including: computers and their associated monitors; speakers or other accessories; household appliances; lighting systems and garage door openers; and many others. Note that the field strength standard for radio-sensitive equipment is higher.

"If the level of the transmitted signal exceeds the applicable field strength value on the premises of the affected equipment, it will be deemed that the transmission is the cause of the problem. If the field strength is less than the applicable value, the affected equipment's lack of immunity will be judged the cause. These criteria are not applicable to incidents involving the transmissions of AM, FM or TV broadcasting transmitters. Those occurrences are subject to the provisions incorporated in the Broadcast Regulations and Procedures."

The policy recognizes that some radio equipment may have inadequate filtering to suppress out-of-band energy. It also recognizes that some equipment not intended for radio reception may be affected by nearby transmitters.

The policy provides a nuanced way of dealing with interference problems. If your transmitter is found to be the cause of the problem, you may be required to reduce power, pay for and install devices to suppress the interference, or take some other measure to reduce the interference.

It is also possible that the responsibility may lie with the owner of the affected equipment to take measures and pay for suppression.

Amateur Radio Question Bank

There are four possible questions in the Basic Question Bank on this policy.

The following are the questions, with the correct answers:

B-001-025-001

Q – Your neighbour's stereo system malfunctions when you are transmitting. What provision in Electromagnetic Compatibility Advisory Bulletin EMCAB-2 deems the stereo system's lack of immunity is the cause?

A – The field strength of your emissions, on your neighbour's premises, is below Innovation, Science and Economic Development Canada's specified immunity criteria

Table 1

Type of Equipment	Current	
	dbuv/m	V/m
Broadcasting Receivers	125	1.83
Associated Equipment	125	1.83
Radio-Sensitive Equipment	125	3.16

In the "Regulatory Roundup" column in each issue of *The Canadian Amateur* magazine, I will provide an overview of our regulatory priorities and also discuss some topics of interest.

B-001-025-002

Q – Your neighbour's television receiver malfunctions when you are transmitting. What provision in Electromagnetic Compatibility Advisory Bulletin EMCAB-2 deems your transmission is the cause?

A – The field strength of your emissions, on your neighbour's premises, is above Innovation, Science and Economic Development Canada's specified immunity criteria

B-001-025-003

Q – When determining the field strength criterion per Electromagnetic Compatibility Advisory Bulletin EMCAB-2, what type of equipment describes devices often used in home entertainment systems, but not strictly speaking radio apparatus?

A – Associated equipment

B-001-025-004

Q – Your neighbour complains that your transmissions interfere with their garage door opener. When determining the applicable field strength criterion in Electromagnetic Compatibility Advisory Bulletin EMCAB-2, what type of equipment is the garage door opener?

A – Radio-sensitive equipment

Anyone writing the Basic exam will get one of these four questions. The purpose of the questions is to ensure that all Amateurs understand they may have responsibilities to remedy EMC problems. The questions, however, do not provide insight on how to resolve situations.

What About EMC Solutions?

There are three sections of the Basic exam that test knowledge on technical measures to deal with EMC problems:

B-008-002 – Audio rectification, bypass capacitors, ferrites

B-008-004 – Harmonics, splatter, transmitter adjustments

B-008-005 – Use of filters, low-pass, high-pass, band-pass, band-reject

There are 11 questions in each of these sections for a total of 33 possible questions on resolving EMC problems.

Each person writing the Basic exam will get one question from each of these three sections on mitigating EMC problems.

Who vs How

All told there are four questions everyone trying the Basic exam will get on EMC matters:

- One question on who is responsible for fixing the problem
- Three questions on the technical means to resolve the problem

Most of the interference problems we experience are with our immediate neighbours. Television Interference (TVI) and pickup of RF in speaker leads are typical examples, but there are many, many more variations.

Technical + Diplomacy

The field strength measurements mentioned in EMCAB-2 are beyond the ability of most Amateurs to measure. These measurements would be made by ISED officers at the location where the interference happens.

ISED document GL-01 provides "Guidelines for the Measurement of Radio Frequency Fields at Frequencies From 3 kHz to 300 GHz". This will only happen if an interference complaint goes official.

Going official means that relations between you and your neighbour have already broken down.

The best solutions to EMC problems require not just technical knowledge, but also good manners. Most of the time, you and your neighbour can resolve an interference complaint with good humour and good will.

If we must get into ISED making precise field-strength measurements, that may indicate that relationships have already broken down and that you and your neighbour are now playing the blame game. This represents a failure of diplomacy: sometimes neighbours are unreasonable, sometimes it's the Radio Amateur who is being unreasonable, and sometimes there may be an unrelated grudge between neighbours. In these cases, the interference problem becomes a metaphorical stick with which one rival beats the other.

Do your best to be diplomatic and accommodating with your neighbour, even if you have grounds to believe their equipment is more vulnerable to your RF than it should be. As an Amateur you will likely have greater knowledge and support from experienced fellow Amateurs than your neighbour.

Other EMC-related policy

ISED has nine publications on "Interference-Causing Equipment Standards" (ICES). Here is the list:

- CES-001: Industrial, Scientific and Medical (ISM) Equipment
- ICES-002: Vehicles, Boats and Other Devices Equipped with Internal Combustion Engines, Traction Batteries or Both
- ICES-003: Information Technology Equipment (including Digital Apparatus)
- ICES-004: Alternating Current High Voltage Power Systems
- ICES-005: Lighting Equipment
- ICES-006: AC Wire Carrier Current Devices (Unintentional Radiators)
- ICES-008: Cable Distribution Networks
- ICES-Gen: General Requirements for Compliance of Interference-Causing Equipment

You can find the list online at:

https://ised-isde.canada.ca/site/spectrum-management-telecommunications/en/devices-and-equipment/interference-causing-equipment-standards-ices

These set the standards for radio emissions from these non-radio devices.

A Case of Interference

A few months ago, a Radio Amateur in Ontario contacted me for advice on an interference problem he was having. After extensive research and Direction-Finding, he identified the source of a persistent broadband noise he heard at his Amateur station. This noise interfered with this reception on all bands from 7 MHz to 144 MHz. The source of the problem was a large, illuminated sign for a fast food restaurant. The sign was 1.2 kilometres from his home!

This is clearly beyond the capacity of an Amateur to resolve. Fixing noise from a large commercial sign will take qualified and insured electricians and service people with access to the malfunctioning device. The insurance implications alone would inhibit even the most confident Amateur from shinnying up a commercial light standard and working on that commercial equipment.

I suggested he contact the owners of the restaurant to make them aware of the problem and remind them that there are rules their equipment must meet as outlined in ISED's policies ICES-GEN and ICES-005.

I also suggested he offer to demonstrate the problem by using a portable broadcasting receiver.

Another approach is to try to get the owner to see that it is in their best interest to fix the problem. In this case it could be done by making the owners aware that the noise caused by their lighting was a malfunction which was wasting energy and adding to the costs of their electricity bills without improving the visibility of the business.

If the owner is unresponsive or unwilling to cooperate then the Amateur should contact ISED by email and inform them that he has identified equipment violating the ISED standards in ICES-GEN and ICES-005.

If broadcast reception is impeded, he should emphasise this while also providing information about the impact on reception in the Amateur bands.

He should also document his attempts to deal with the owner of the equipment. ISED will want to know if the owner is aware and what action the owner is willing to take.

Note: *You should only write to ISED if engaging the owner fails.*

Any complainant should be prepared to wait patiently for a response from ISED. We never know what priorities or staffing challenges the local ISED office may have.

RAC EMC Committee

You are not alone. There are many resources on EMC issues including several publications specifically oriented to Amateur Radio. Sometimes finding the right solution requires context. While books are great, you can't ask a book a question but you can ask RAC.

As I indicated in my last column, Radio Amateurs of Canada has revived its EMC committee. We have four dedicated Amateurs with personal and professional experience in resolving EMC problems.

The members of this committee are:

- Jason Pasetka, VA5JEP, of Regina
- Ed Richardson, VE4VT, of Winnipeg
- Norm Rashleigh, VE3LC, of Ottawa
- Glenn MacDonell, VE3XRA, of Ottawa

Jason, VA5JEP, is a civilian employee with the Royal Canadian Mounted Police "F" Division (Saskatchewan) in the Protective Technical Services Section (PTSS) of the Electronic Security Unit.

For many years, Ed, VE4VT, was a microwave design engineer and he is now employed as the Communication Systems Engineer for the City of Winnipeg. He is also RAC's Midwest Director.

Norm, VE3LC, worked with the Royal Canadian Mounted Police for 30 years where he designed and implemented public safety mobile radio systems. He is an Accredited Examiner.

Glenn, VE3XRA, worked with Industry Canada for 18 years serving as a Director in areas such as Environmental Industries, Energy Industries and Aerospace. He is a former RAC President and Director and continues to serve Canadian Amateurs as RAC's representative on the Radio Advisory Board of Canada (RABC), where he chairs the EMC committee.

The committee's goal is to "deliver accessible, knowledgeable assistance to diagnose, pinpoint and resolve interference problems, fostering a stronger, quieter radio environment where every operator can thrive."

The committee members can be reached by email at emc@rac.ca.

With time, your questions and experiences will provide the stock for a library of best practices for resolving EMC problems. We hope to make these available on the RAC website.

TCA

World Radiocommunication Conferences (WRC-27) and the Importance of the Defence of Amateur Radio Fund

Paul Coverdale, VE3ICV
Special Advisor for
World Radio Conferences

World Radiocommunication Conferences (WRC) are organized and held by the International Telecommunication Union (ITU) every four years to update the Radio Regulations, the international treaty that, sets out the frequencies and rules on which radio services such as the Amateur Radio Service may operate. WRC-27 will be held in Shanghai, China in October and November 2027.

The detailed preparatory work for WRC-27 takes place in individual Working Parties of the ITU Radiocommunication Bureau. In particular, Working Party 5A (WP 5A) – "Land mobile service excluding International Mobile Telecommunications (IMT); amateur and amateur-satellite service" – provides a "seat at the table" for the worldwide Amateur community to influence the outcome of the Conference.

Radio Amateurs of Canada participates in ITU-R and WRC meetings under the auspices of Innovation, Science and Economic Development Canada (ISED), and works in collaboration with the International Amateur Radio Union and amateurs from other countries. For WRC-27 there are no major threats to Amateur Radio, but there are a number of Agenda Items which could result in potential threats or opportunities which need to be followed by RAC including:

1) Consideration of possible additional spectrum allocations to the radiolocation service on a primary basis in the frequency range 231.5 – 275 GHz, and

– continued on the next page

Defence of Amateur Radio Fund Annual Report 2025

Serge Bertuzzo, VA3SB – RAC International Affairs Officer

The Defence of Amateur Radio Fund (DARF) is an independent legal Trust, which is administered by Radio Amateurs of Canada to:

1) Ensure that there are sufficient funds on hand for the Amateur delegate's expenses to attend WRC meetings. WRC-23 was held in Dubai and the WRC-27 is being held in Shanghai, China.

2) Support travel to Preparatory Meetings in Geneva, Switzerland – if sufficient funds are available – when issues directly affecting Amateur Radio spectrum are being debated. Our delegates typically attend two of these meetings each year, each lasting 10 to 12 days. Even with discounted airfare and hotel rates, it is expensive to send a person to Geneva to work and live for two to four weeks each year.

The Financial Summary provided in the above table shows that although DARF is still viable, inflation and the trend that new donations are less than expenses continue to be worrisome in the longer term.

The insatiable demand for mobile device connectivity means continued and increasing pressure on spectrum from large corporate and government interests as well as from other Radio Services such as the Satellite and Space Sciences Services.

Only a strong and consistent Amateur presence at the ITU table to defend the bands we already have will protect the future of Amateur Radio. Without sufficient funds, our voices will not be heard.

– 73, Serge Bertuzzo, VA3SB

DARF Financial Summary 2025	
Starting balance	**$8,131.31**
Donations	**$9,963.83**
Disbursements	**$1,246.63**
Ending balance	**$5,638.51**
Net change	**– $2,492.80**

List of Donors 2025

Amateur Radio Clubs:

Delta Amateur Radio Society	$201
Central Alberta Amateur Radio Club	$100
Ottawa Valley Mobile Radio Club	$200
Sudbury Amateur Radio Club	$100
Kingston Amateur Radio Club	$300
QCWA Wild Rose Chapter 151	$300
Calgary Communications Club	$300
Club Radio-Amateur de Granby	$200

Individuals:

Mike Kelly, VE3FFK	$1,000
Robert Paxton, VE7RPX	$25
Harold Rodd, VE1LV	$50
Richard Parlby, VE7ZEP	$44
Eric Brown, VA6EBR	$100
Thomas Godden, VE3TWG	$62
Yves Isabelle, VA3YVE	$200
Jerry Spring, VE6TL	$500
Stiig Larsen, VE3LBX	$25
Francois Daigneault, VE2AAY	$500
Rick Van Gastel, VE3HVA	$75
Dave Goodwin, VE9CB	$200
David Parks, VE3AV	$100
David Green, VE3TLY	$50
Frank Andersen, VE7GCO	$85
John Lediett, VE3FVC	$100
Victor Morenec, VE3VAR	$100
David Rosner, VE4DAR	$35
Richard Helm	$100
Walter Szyc VE3SYZ	$25
Scott McNutt, VE1CHL	$25
Ronald Vadeboncoeur ,VE3REV	$223
Sandy Wohl ,VE7SFW	$54
Eric Alexandre ,VE7KEX	$100
Dave Goodwin, VE9CB	$600
Brian Alexander, VA3AZA	$20

– continued on the next page

possible new identifications for radiolocation service applications in the frequency bands within the frequency range 275 – 700 GHz for millimetric and sub-millimetric wave imaging systems.

The frequency range 231.5 – 275 GHz conflicts with an Amateur secondary allocation from 241 – 248 GHz, and a primary allocation from 248 – 250 GHz. However, the opportunity also exists for new Amateur allocations in the range 275 – 700 GHz in the future (possible Agenda Item for WRC-31).

2) Studies on possible new allocations to the mobile-satellite service for direct connectivity between space stations and International Mobile Telecommunications (IMT) user equipment to complement terrestrial IMT network coverage.

One band under discussion overlaps the band 2300 – 2400 MHz which is allocated to the Amateur and Amateur Satellite Service on a secondary basis, but it is also allocated to the Mobile Service on a primary basis and is identified for IMT. The band is also used by several other services.

3) Studies on frequency-related matters, including possible new or modified Space Research Service (space-to-space) allocations, for future development of communications on the lunar surface and between lunar orbit and the lunar surface.

Frequencies under study for lunar communications by the Space Research Service (SRS) include 420 – 430 MHz and 440 – 450 MHz, 2400 – 2690 MHz, 5570 – 5725 MHz and 5775 – 5925 MHz, all of which conflict with current terrestrial Amateur secondary allocations.

Not all of the use cases likely to be used by SRS for lunar communications will impact the use of the current Amateur terrestrial secondary allocations, and the scope of this Agenda Item opens the door for developing a future regulatory framework (during WRC-31) for other services, including Amateur, for operation on the lunar surface.

4) Consideration of regulatory provisions for receive-only space weather sensors and their protection in the Radio Regulations, taking into account the results of ITU Radiocommunication Sector studies. There is a concern that two of the proposed allocations for receive -only space weather sensors are directly adjacent to the 28-29.7 MHz Amateur band, which could result in interference. Some time has also been spent on updating several ITU-R documents related to Amateur Radio:

- Work was completed on a major draft revision including a number of RAC contributions, to the Amateur and Amateur-Satellite Services Handbook
- Revision of Rec. M.1042-3 "Disaster communications in the amateur and amateur-satellite services" has been completed
- A new report has been initiated in WP 5A "Report on experimental activities in the millimetric wave bands by stations of the amateur service". This report is almost complete and takes into account several RAC contributions.

Donations to the Defence of Amateur Radio Fund (DARF)

We thank those clubs and individual Amateurs listed in this report who have made their DARF contribution.
Your support is much appreciated.

Donations can be made online by clicking on the "Donate" link at the top of the RAC website or sent to RAC HQ. One easy way to donate is to include an extra $10 or $20 or more when you renew your RAC membership. Please make your cheque payable to "Radio Amateurs of Canada" and note in the memo field "DARF donation".

If you wish to donate by other payment methods or have a question on how to donate please email RAC HQ at rachq@rac.ca.

For more information about DARF and the World Radiocommunication Conferences visit:

https://www.rac.ca/darf/
https://www.rac.ca/wrc/

TCA

– List of Donors 2025 continued –

Paul Martin, VE3VCO	$10
Chris Howell	$5
Harold Keevil	$100
Jeffrey Johns	$25
Kenneth Delmonico, VE7KRD	$50
Eric Todd, VE3XET	$5
Michael Smith	$20
Ivan Letic, VE6BDF	$10
Patrick Buick, VE9ES	$5
Ryan Watson	$50
Lawrence Hobbs, VE3FQE	$25
Estate of Alan Goodacre, VE3HX	$550
Steve Perpich	$10
Geddie Pawlowski, VE3CJX	$100
Ronald Vadeboncoeur, VE3REV	$111
Ron Schwartz	$250
Wayne Stacey, VE3QO	$100
David Niemi, VA3NIE	$25
Philip Mendelsohn, VE4STG	$5
Mike Kelly, VE3FFK	$1,000
David Steels, VE3UZ	$100
Kevin Britton, VA3KBX	$10
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John Lorenc, VA3WM	$25
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Gerald Welch, VE6WCE	$25
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Janusz Juryk, VE2ZHP	$25
Stuart Allan, VE3STY	$50
Robert Bond, VE4BJZ	$100
Jeff Dale, VA3ISP	$10
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Matthew Bryan	$10
John Moon, VE3SFK	$100
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Tony Simonetta	$50
Erland Kirste, VE7EFK	$50
Paul Wilson, VE6KWI	$50
Bruce Atchison, VE6XTC	$10
Kenneth Koronovich, VE3RMK	$20
Donald Haggart, VE3HAZ	$10

Thank You For Your Support!

Phoenix HF RF Amplifier: Rebuilding and Modernizing the Icom IC-PW1

Don Westacott, VE6HQ

Amateur Radio is an experimental science. As enthusiasts, we conduct radio frequency communications experiments, develop new technology and construct electronic equipment and radio antenna systems. In addition, we often troubleshoot and repair the electronic equipment we use in our radio operations. This article describes troubleshooting, repair and upgrades to an Icom IC-PW1 RF amplifier (Figure 1). Without going into specific details, I was asked if I could repair two separate PW1 amplifiers owned by two Amateurs here in Alberta.

Figure 1

The IC-PW1 is a solid-state RF amplifier that was first manufactured by Icom in 1999. The IC-PW1 was one of the first commercially available solid-state 1 kW HF amplifiers and quickly became popular among contest and DX operators. This product was discontinued by Icom and thus replacement components, especially circuit boards, are difficult to impossible to obtain.

The Icom IC-PW1 had many innovative features including:

- One (1) kilowatt nominal output power
- Operation for ten (10) Amateur bands, 160 metres through 6 metres
- Built-in automatic antenna tuner
- Switchable input (2) and output (4) RF connections
- Firmware monitoring of all important operating parameters
- Remote control head connected by cable
- CI-V control available

Figure 2

Both amplifiers suffered from multiple failures including a defective power supply, control circuitry issues and damaged interface electronics. It was reasonable and time-effective during the troubleshooting process to simply replace defective components in one amplifier with parts obtained from the other.

The IC-PW1 has many well documented failure points within its overall system architecture and internet information searches greatly assisted in the diagnosis of the multiple electronic failures that had occurred on both amplifiers. In a fairly short time frame, a working amplifier was returned to its owner in Edmonton. Unfortunately, the second amplifier was essentially gutted with non-functional power supply, control head and main control board. I realized that replacement and repair to original factory condition was problematic. It was decided a practical path forward was to rebuild and modernize the amplifier while removing a significant number of non-essential or defective components (marked with Red X below in Figure 4 on the next page).

Figure 3

The rebuilt amplifier is shown in Figure 3 along with a web-based control interface (Figure 5) that controls and monitors the amplifier using Ethernet LAN connection and remote Windows-based computer.

Figure 4

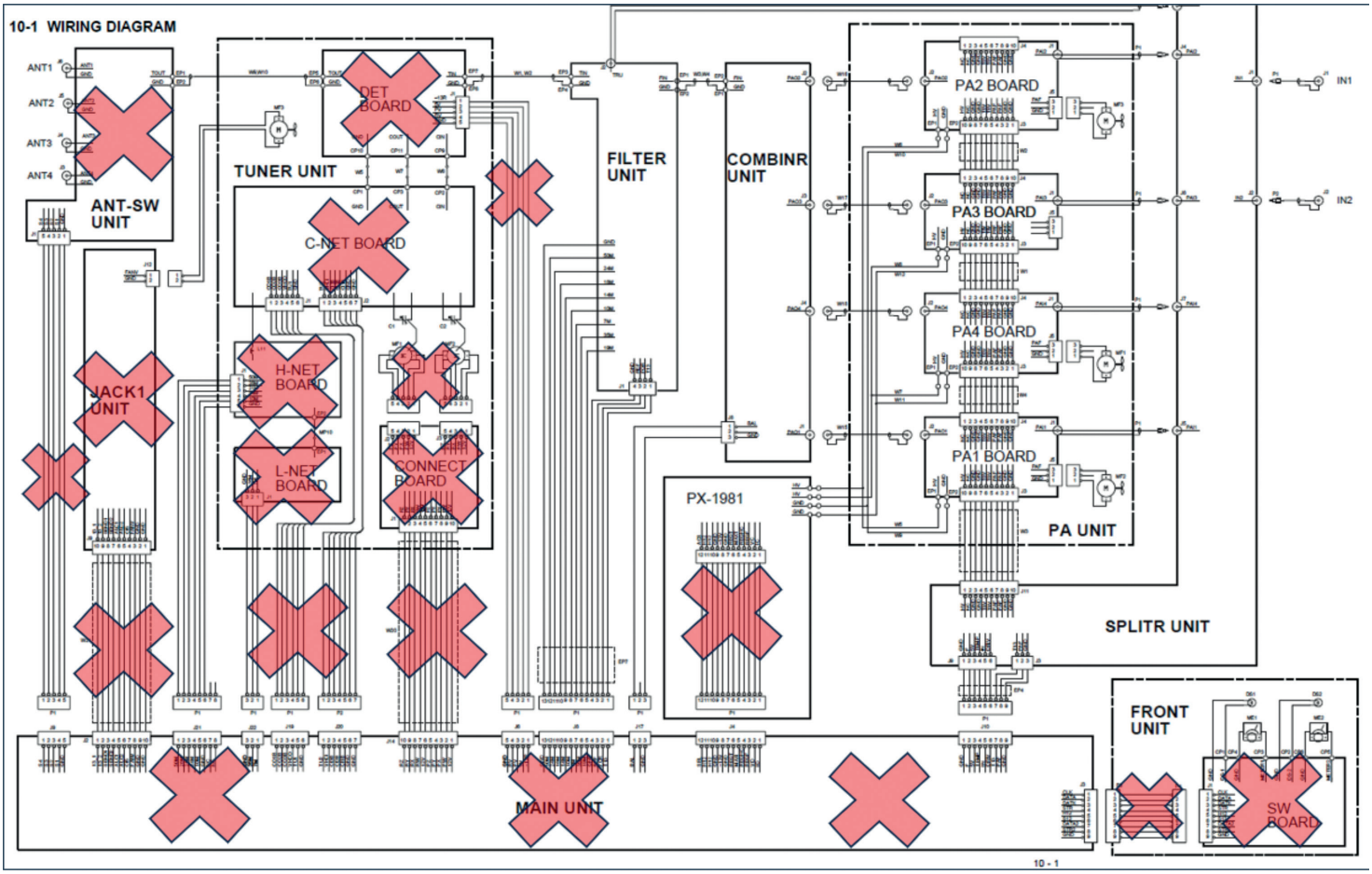


Figure 5

The amplifier is controlled by an Arduino UNO R4 microcontroller, running C++ firmware and a JavaScript-based web interface. I had zero expertise in software programming and graphical user interface development prior to this project.

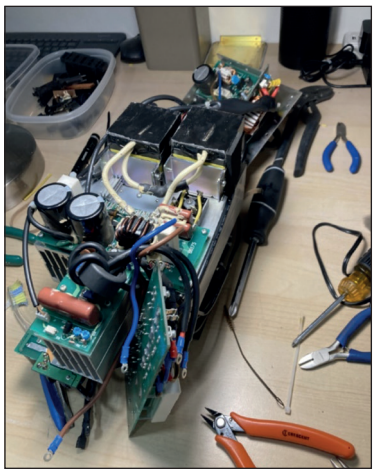
Amateur Radio provides an environment to learn and develop new skills that provided considerable enjoyment to me during this PW1 rebuild and update. To be clear, this was not an easy project and presented considerable technical challenges with the occasional frustration when "*things*" simply did not work. However, as I learned through many years working in the energy sector, *"it is best to focus on the solutions rather than dwell on the problems"*.

Power Supply

The IC-PW1 power supply is known to be problematic and many articles are available that document both technical issues and solutions.

The nonfunctional power supply was removed from its case and is shown in Figures 6 and 7.

Figure 6



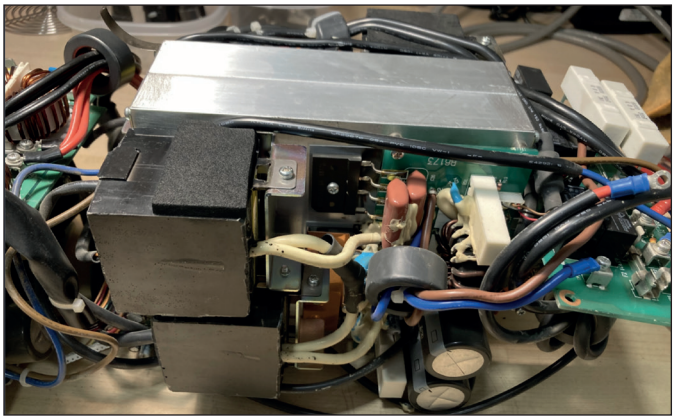


Figure 7

Several modular switching power supplies were available and I proceeded to replace the defective power supply with this device.

The Cordex CXRF-HP series (Figure 8) of 48-volt, 1.2 kW, rectifier modules employ high frequency, switch mode technology featuring high power conversion efficiency. All internal semiconductor devices operate under "soft-switching" conditions and exhibit very low power loss. The reduced power loss leads to lower thermal stress on the semiconductors and thus improves reliability.

Figure 8

Four Cordex rectifier modules were installed in parallel within the PW1 power supply chassis, providing 48 VDC at approximately 100 A (4.8 kW capacity). The PW1 RF deck operates from a high-current 48-volt DC supply, making telecom rectifier modules an excellent replacement option.

A 48-volt DC to 12-volt DC converter module was also placed within the power supply chassis. This 12-volt source would be used to power the Arduino R4 microprocessor and band-switched low-pass filters within the amplifier. The rebuilt power supply has significant capacity and overcomes many of the limitations of the original factory unit. (Figures 9 and 10).

AC and DC filters obtained from the original PW1 power supply were reused within the rebuilt power supply.

A solid-state relay is controlled by front panel on/off switch to energize/de-energize all power supplies.

Thermal cooling is provided by front and rear fans (Figure 11).

Figure 11

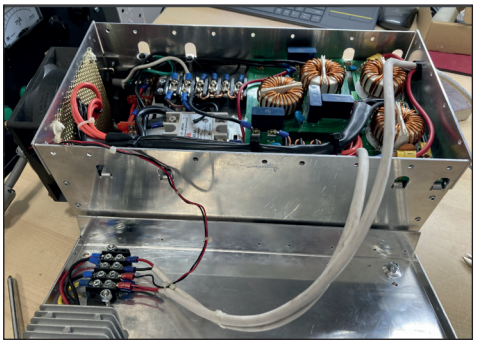


Figure 9

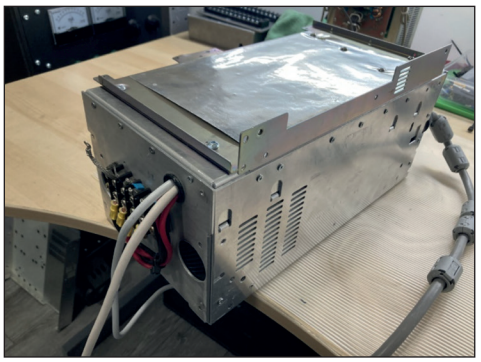


Figure 10

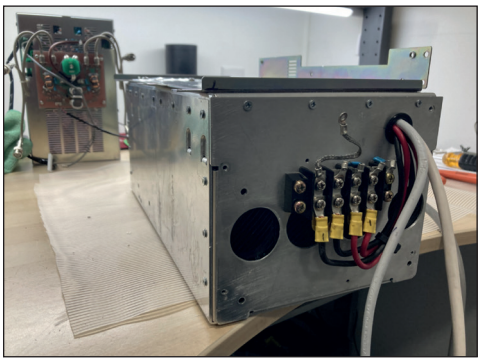


Figure 12

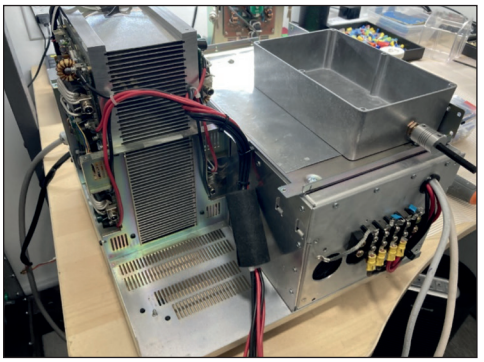


Figure 13

Telecom rectifier modules such as the Cordex series are widely available on the surplus market, highly reliable and designed for continuous high-current operation. Fan intake ports are shown for the rebuilt power supply (partially hidden by external wiring). It was somewhat coincidental that the four Cordex power modules were a "perfect fit" within the existing power chassis. Using this construction method the new power supply could simply be a direct "drop-in" replacement within the overall PW1 amplifier.

The RF low-pass filter is illustrated at the rear of the photograph (Figure 12). Eight selectable filters are used for the 10 operating bands. A common filter is used for both 17m/15m and 12m/10m bands.

Figure 13 illustrates an early "mock-up" assembly. An aluminum box placed on top of the power supply was to contain a rotary 10-position switch used to control the low-pass filter selection. After some time and thought, I discarded this control procedure and started a much more ambitious plan to provide control of the amplifier.

Microprocessor Control

Today, some form of central processing unit (CPU) is present in almost all electronic devices – from the vehicles we drive, to the phones we use, to kitchen appliances that supply us with the essential coffee. Amateur Radio is no exception, microprocessors are common in modern RF transceivers, amplifiers and many other hardware items that we use during our radio communications activities.

I had purchased an Arduino UNO R4 WiFi sometime in the past with the objective of learning how to use this type of device. Sadly, the microprocessor sat in my parts bin and was neglected due to other priorities that appeared. Fortunately, I remembered that I had this device and wondered if I could use it to both control and monitor the PW1 that I was rebuilding (Figure 14). This seemed reasonable – especially with the sub $50 price tag for the device – and it appeared to be a low-risk endeavour. However, a microcontroller without software simply consumes power and performs no useful function.

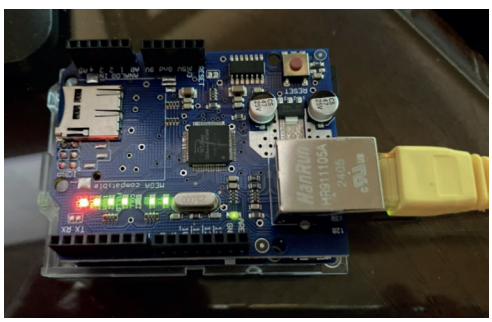


Figure 14

As previously indicated, I had zero expertise in writing software to control complex operations and monitor hardware functions. In addition, I wanted a modern graphical user interface (GUI) to which I had even less experience or knowledge how to create or code.

Software Solution

Significant technological changes have occurred since my beginning in Amateur Radio with construction of a crystal radio receiver and 6V6 vacuum tube transmitter. Today, as Radio Amateurs, we enjoy access to information and technology that is truly remarkable. One such technology is the AI platforms that are widely available through the internet.

I commenced a process to develop PW1 control software with the assistance of the AI program ChatGPT. Through software development the following specifications were identified:

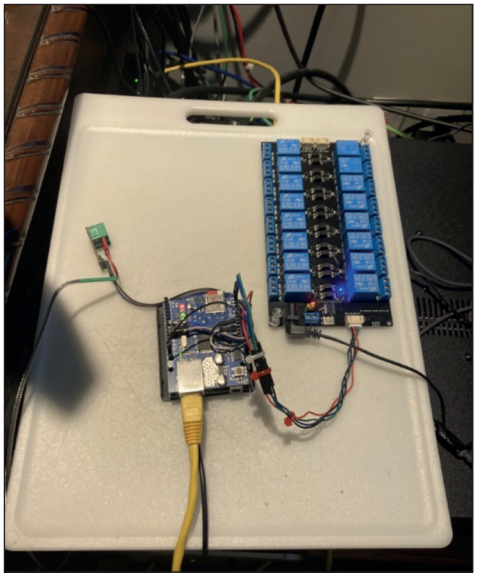
- Control of the amplifier either from front panel push buttons or a web-based GUI operating through a LAN on a remote windows computer.
- Web-based GUI to provide band change functions for low-pass filter selection.
- Realtime display of amplifier output power, VSWR, PA Voltage, PA Current and Temperature.
- Monitoring of VSWR, Voltage, Current and Temperature and automatic amplifier shutdown if any parameter exceeds defined limits.
- Band hot switch protection to disable amplifier in case a band change is activated during transmission. This was an earlier defect in the original PW1 design which resulted in amplifier damage for numerous operators.

ChatGPT was used as an engineering assistant during development, helping generate code examples, debug problems, and suggest hardware interface approaches. However, it was an extended interactive and iterative process with some 30 to 40 versions of software being created and tested before the system worked adequately.

My experience using ChatGPT may be described as dealing with two unique individuals – one a brilliant technical expert, the other a rebellious teenager that does not follow instructions.

Gradually, I learned to communicate effectively with the ChatGPT application, however in the initial weeks Microsoft seemed to have the teenager working most of the time rather than the technical expert.

Figure 16



I breadboarded the Arduino Uno R4, an Ethernet shield, a temperature sensor, and an I2C-controlled 16-port relay module during software testing. (Yes, that is a real breadboard borrowed from my XYL!)

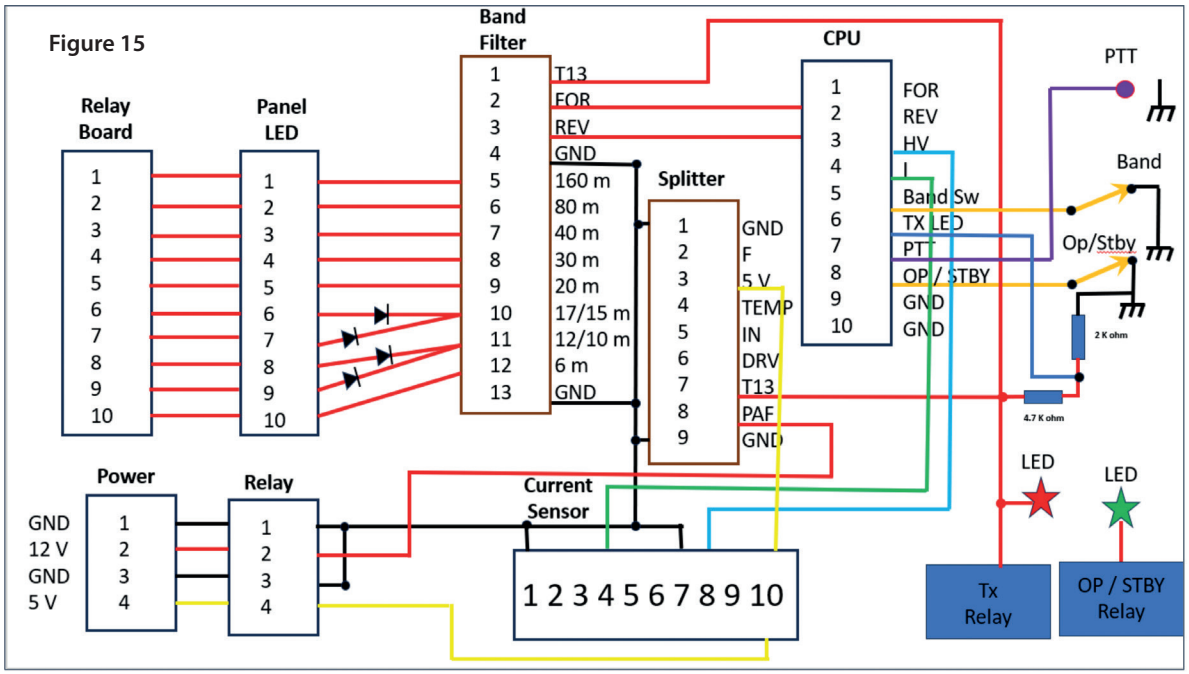
Through the hardware/software development a multitude of challenges occurred with the selected Uno R4 device. While they are too numerous to document in this article, I will state that ChatGPT was very helpful in solving these problems that first appeared unsolvable to me.

Hardware Interface

After achieving a workable software application, I created a circuit diagram to show the interface connections between the microprocessor i/o ports and the PW1 hardware. I was familiar with the original PW1 circuit diagrams through my extensive review of them while repairing the first PW1 amplifier. Voltage, current, temperature and RF power are monitored using a combination of analog sensors and existing PW1 measurement circuits interfaced to the Arduino controller.

An objective of the PW1 rebuild was to simplify the overall design and enhance the robustness and reliability of the entire system. In addition, modifications to component layout enhanced the ability to troubleshoot, repair or modify the amplifier if required.

Figure 15



Hardware Assembly (Figures 17-21)

The antenna tuner unit (ATU) and main board chassis were removed from the original PW1 components. An aluminum case was sourced and would be used to contain the Arduino Uno R4 microprocessor and related sensor and control circuitry. This case was selected to provide RF shielding between the high-power RF amplifier and the electronics section of the amplifier. The Uno R4 and relay board were mounted on the inner top lid of this case. The interface board was mounted to the inner bottom of the case and provided all connections plus voltage and current sensors.

The amplifier may be controlled either by front panel push buttons or remotely from a computer via a wired Ethernet LAN connection. Amplifier PA voltage, PA current and temperature are displayed on the front panel. Power, standby/ operate and band change buttons with corresponding band LED indication (Figures 22 and 23).

A Hall-effect sensor is used to measure final amplifier current and transfer data to the UNO R4 for monitoring and display (Figure 24). This sensor was a cost-effective and practical method to measure the high DC current values present during amplifier operation.

Appropriate grounding, shielding and RF bypassing were implemented to ensure stable operation and to prevent RF interference with the control electronics.

Summary

The IC-PW1 rebuild was an extensive project with many technical challenges that required innovative solutions. This project provided significant technical learning as well as an introduction to modern software development and programming skills. Like many projects undertaken by Radio Amateurs, I concluded upon completion of this project that I would likely design it differently if I were to repeat the process again. However, important technical factors were addressed during this RF amplifier construction that included:

- **RF Isolation**

Because the amplifier operates at high RF power levels, particular attention was given to RF isolation between the control electronics and the RF amplifier section.

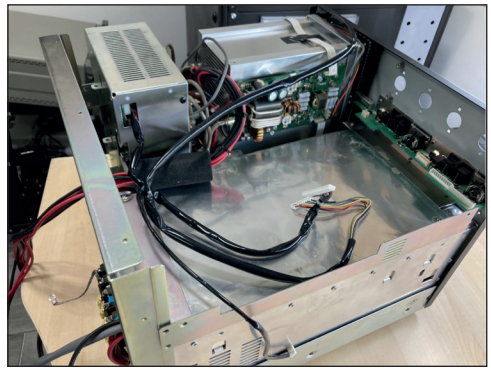


Figure 17

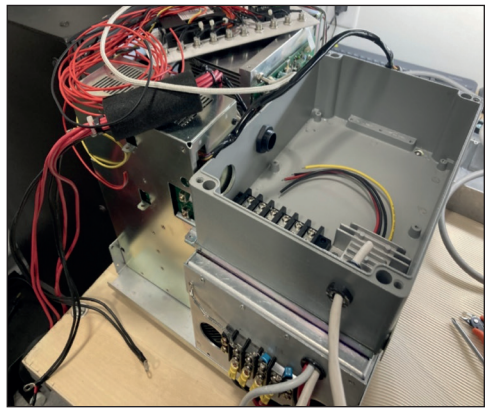


Figure 18

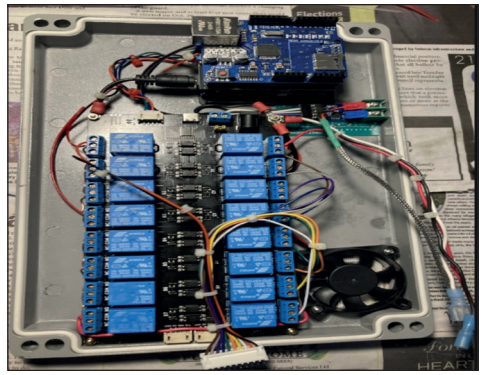


Figure 19

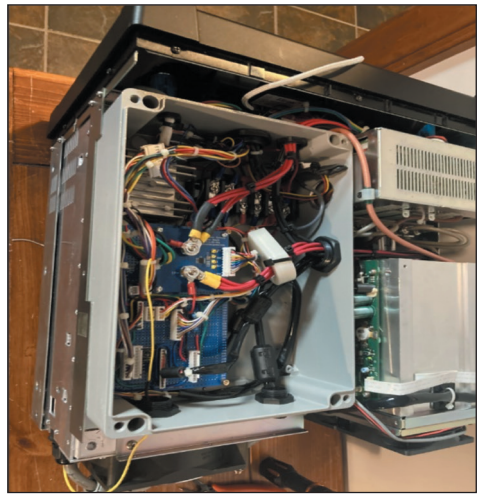


Figure 20

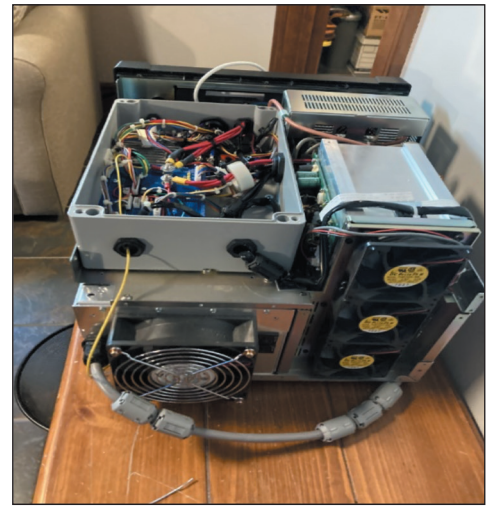


Figure 21

Figure 22

Figure 23

Figure 24

Figure 25

```
RF Deck
    |
Low Pass Filters
    |
Arduino UNO R4
    ├── Ethernet Interface
    ├── Relay Control (PCA95x5)
    ├── Temperature Sensor
    ├── Voltage Monitor
    └── Current Hall Sensor
```

The Arduino controller and interface circuitry were installed in a separate aluminum enclosure which provides effective RF shielding.

Feedthrough wiring between the RF deck and control electronics was carefully routed and bypassed to prevent RF coupling into the control system.

- **Protection and Fault Handling**

The control software continuously monitors operating parameters including PA voltage, PA current, temperature and VSWR.

If any parameter exceeds predefined limits, the amplifier is immediately switched to standby and the fault condition is reported on the web-based GUI. This provides an additional layer of protection beyond the original PW1 hardware protection circuitry.

- **Control Architecture**

The Arduino UNO R4 functions as the central control processor for the amplifier.

Digital outputs control the band-switching relays for the low-pass filters, while analog inputs monitor amplifier voltage, current, and temperature sensors.

Ethernet connectivity allows a remote computer to access a web-based graphical interface for monitoring and control.

I consider this project successful in restoring a non-functional amplifier back from the ashes to an enhanced and fully functional RF HF high power amplifier.

The rebuilt amplifier demonstrates how modern microcontrollers and software tools can extend the useful life of legacy RF equipment while adding new monitoring and control capabilities.

All modifications were performed for experimental and educational purposes by a licensed advanced class Amateur Radio operator.

Don Westacott, VE6HQ, has pursued a lifelong interest in science and engineering beginning as a youth in western Canada.

He received his first Amateur Radio licence at the age of 15 while attending high school in Edmonton, Alberta.

He continued this interest and graduated from the University of Alberta receiving a Bachelor of Science in Electrical Engineering.

During the last 41 years he has worked in the Energy Exploration industry in Canada, the United States, Europe, South America, the Middle East and the Far East.

He was granted the KI5KGX call as an extra class USA Amateur operator. Subsequently, he moved to Canada and reinstated his Canadian Amateur Radio certificate and obtained his current call sign VE6HQ.

He is currently active on 20 metres and the VHF/UHF bands.

Don and his wife Marilyn enjoy the success of their sons Matthew and Andrew.

In 2023, Don presented a webinar on UHF Test Equipment, which may be found at:

https://vimeo.com/906428996

Canadian Amateur Radio Hall of Fame Award Nominations

Radio Amateurs of Canada recognizes deserving Amateurs by appointments to the Canadian Amateur Radio Hall of Fame. The Constitution of the Hall specifies that the appointment as Member of the Hall is for "outstanding achievement and excellence of the highest degree, for serious and sustained service to Amateur Radio in Canada, or to Amateur Radio at large".

Nominations must be prepared using the Canadian Amateur Radio Hall of Fame Nomination Form provided on the CARHOF webpage. Nomination documents may be submitted to the Board of Trustees by email or by regular mail, but the preferred method is by email in PDF format as these are much easier to process.

Please send the PDF documents directly to the CARHOF Chair at: carhof@rac.ca

All nominations for Member of the Canadian Amateur Radio Hall of Fame must be received at RAC Headquarters at the address provided below by **Friday, September 30**.

Late nominations will be considered in the next year. Once received, all handling shall be conducted in a secure and confidential manner.

For information please visit:

https://wp.rac.ca/carhof/

RADIO MAGIC

A Starry Tale...

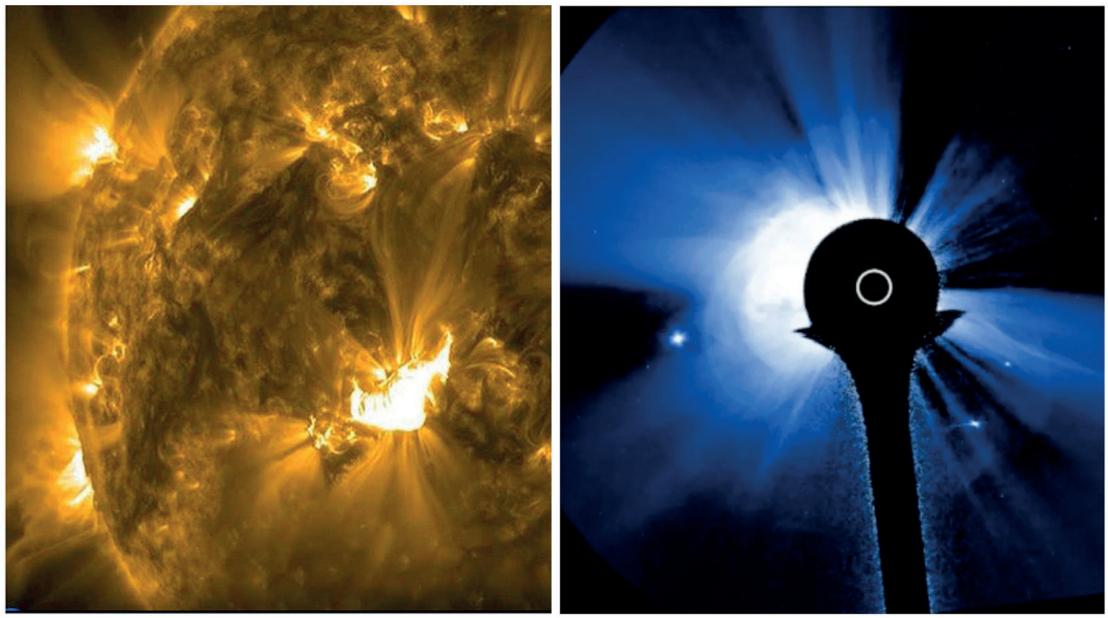


Figure 1: Sol Breaking Bad. Composite image of the January 18, 2026, X1.95 solar flare event in progress (left) followed by the coronal mass ejection or CME (right). The bright specs are planets Venus, Mercury and Mars. Credits: NASA SWPC and NASA SDO.

Introduction

Once upon a time in Solar Cycle 25, on its descent toward minimum, old Sol proved there was still some life left in this cycle. On January 18, 2026, a large, magnetically twisted sunspot group called Active Region (AR) 14341 centred Earth in its crosshairs.It was a monster: complex, unstable and "juiced" by intense magnetic shear, which occurs whenever neighbouring magnetic field lines point in different directions.

Then suddenly, Sol broke bad when an X1.95 solar flare erupted, unleashing roughly 10^{25} joules of energy – enough to power all of humanity's needs for the next 10,000 years! It was so intense that the Geostationary Operational Environmental Satellites (GOES) X-ray flux sensors were briefly saturated (flux is measured in watts per square metre).

The National Oceanic and Atmospheric Administration (NOAA) reported the start of the flare event at 1726Z, peak at 1809Z and end at 1850Z. A huge coronal mass ejection – at least a billion tonnes (or 1.1 billion tons) of solar material – was blown into space with an estimated velocity of over 2000 kilometres per second (see Figure 1)!

Travelling at the speed of light, "soft" X-ray photons sliced through the Earth's magnetosphere down to the ionosphere like a hot knife through butter at 1809Z. Earth's magnetic field cannot stop X-rays because they are not charged particles.

Radio propagation suddenly collapsed because the ionosphere's absorption layer (D-region) was hit hard by ionizing radiation and instantly became over-ionized – meaning free electrons and ions are being created faster than they can recombine – triggering an R3-strong (out of 5) radio blackout and sudden ionospheric disturbance (SID). However, if you were not on the air shortly before and afterward that time, you would never know anything had happened because the effects were short-lived.

The real menace with real teeth and bite is the coronal mass ejection (CME) – a superheated, fast-moving cloud composed mostly of charged particles (plasma). Normally, CMEs take a pedestrian two or three days to reach and hit us – if Earth's orbit happens to cross through its path. Solar scientists calculated the trajectory and determined that the "interplanetary shock arrival" (NOAA's term) would be in about 25 hours (a very moving CME), followed by the main plasma particle

COLUMNIST

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stream. The prediction was for a G4-severe (out of 5) geomagnetic storm (see Figure 2 on the next page) along with more R3-strong radio blackouts on the daylight side.

X-rays and SIDs

NOAA's start, peak and end times describe how a solar flare's X-ray flux evolves over time – not when Earth's ionosphere actually reacts. The "start time" occurs when four consecutive minutes of rising X-ray flux are recorded, but the ionosphere only responds when the flux intensity becomes strong enough to over-ionize the D-region.

This threshold is near the flare's peak, but the energy required is astonishingly small: only about one hundred-millionth of the solar ultraviolet flux hitting our faces on a bright sunny day! After the peak, X-ray flux declines and the ionosphere recovers, although solar scientists still classify the flare "in progress" until the GOES measured flux drops to the normal background radiation level.

Solar flares emit electromagnetic radiation across the entire spectrum from infrared to gamma rays, which naturally includes "soft" and "hard" X-ray ionizing radiation.

Soft X-ray photons (wavelengths between 0.1 and 10 nanometres) over-ionize the D-region. This sudden surge of free electrons absorbs or scatters high-frequency (HF) radio waves (3 – 30 MHz) passing up through it, causing a sharp drop in signal strength and SID.

Only the higher HF frequencies retain enough energy to reach the F-region to be weakly refracted back to Earth or not, because they have to pass back down though the absorption region.

In the very low frequency (VLF) range (3 – 30 kHz), radio waves do not penetrate the D-region. Instead, they are reflected and guided between its lower boundary and Earth's surface. Besides becoming suddenly over-ionized, it also drops in altitude becoming more reflective to VLF signals, producing the distinctive "shark-fin" signature. These HF/VLF disturbances are collectively called SIDs (see Figure 3).

The hard X-rays emitted – the type used in medical imaging – have shorter wavelengths (< 0.1 nanometres), more energy, and penetrate down to the denser,

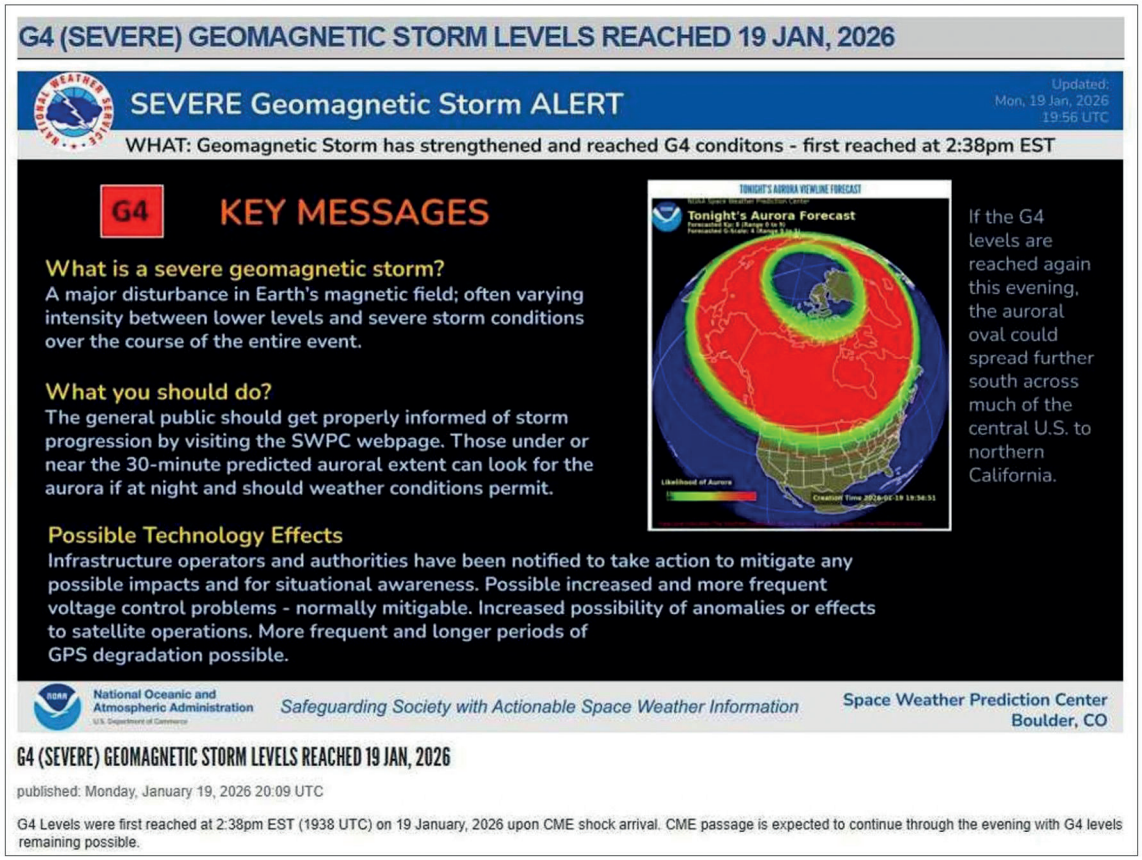

Figure 2: Geomagnetic Solar Storm Alert. Credit: NOAA SWPC.

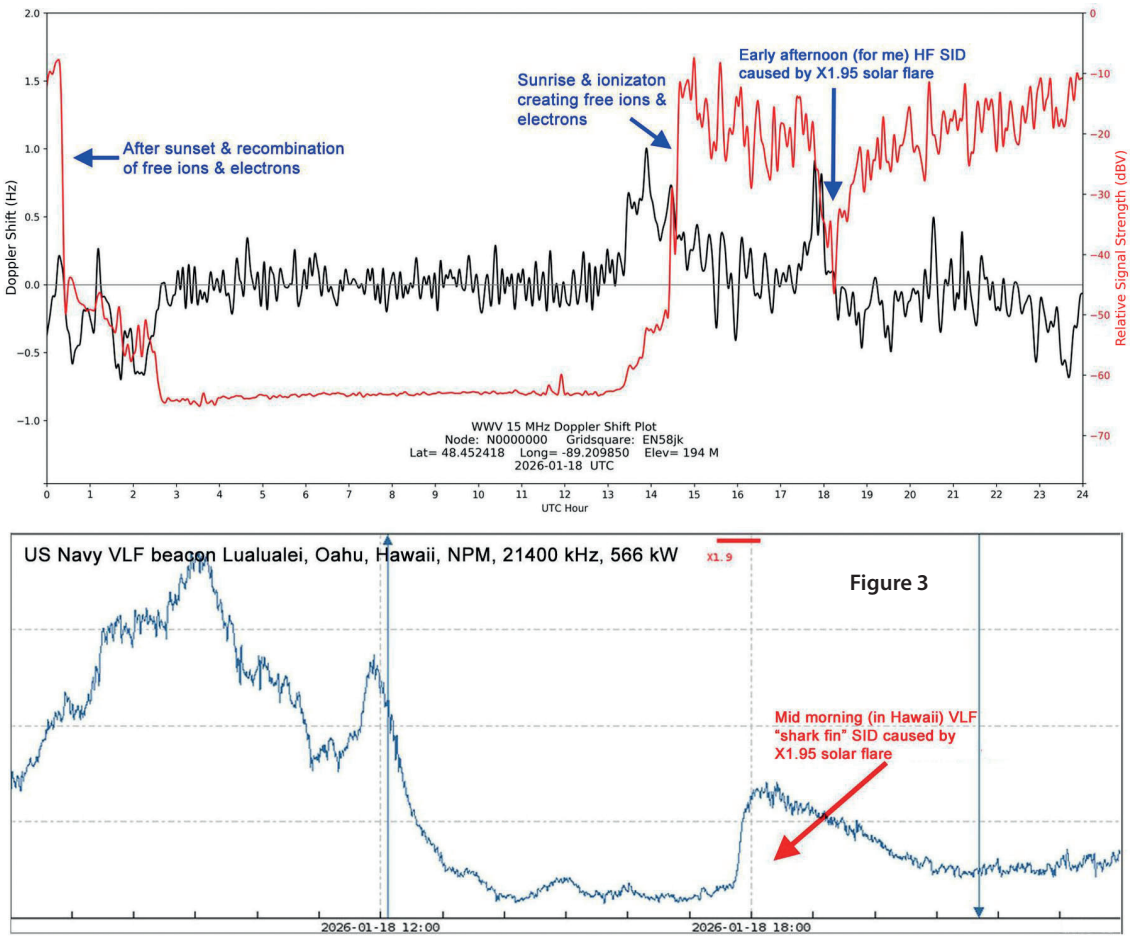

Figure 3: Solar Flare Induced HF/VLF SID January 18, 2026.

Top: My newly-built HamSCI Grape 1 receiver clone was up and running monitoring WWV's 15 MHz carrier when it detected the solar flare-induced SID.

Bottom: Classic VLF shark fin SID. A unique shape created by two reflective processes: sudden D-region over-ionization then slow recombination of surplus ions and electrons. Credit: Stanford University SID Server.

neutral atmosphere, which does not affect propagation, but does expose high-flying aircraft (avionics) and people to above normal background levels of ionizing radiation – which is not a good thing.

The Solar Wind

In 1958, astrophysicist Eugene Parker presented a radical mathematical theory based on prior observations and speculations made by Carrington, Eddington, Biermann, *et al.* He theorized that our star was hot enough to produce a thermal pressure and accelerate mass particles – protons, electrons, ions, neutrons, and so on – faster than solar escape velocity (618 kilometres per second), generating a supersonic "solar wind" (his simple term for "solar capillary radiation") throughout the solar system and beyond. Therefore this solar wind interacted with Earth's magnetic field.

He introduced the "Parker spiral", describing how the Sun's magnetic field lines form a three-dimensional spiral carried outward into space by the solar wind creating an "interplanetary magnetic field" or IMF (see Figure 4).

More shockingly, his theory also applied to the majority of stars in the universe! This was a cosmic bridge too far for most mainstream astrophysicists – "Utter nonsense!", exclaimed one.

Parker's now-famous paper with just four lines of algebra was nearly rejected, but the Editor of *The Astrophysical Journal* believed the math and overruled the peer review referees (a rare thing) and published it, which was a good thing.

The first confirmation and measurements of the solar wind (among other firsts) were made the very next year by the Soviet Union's (now Russia) *Luna 1* spacecraft.

The Parker spiral was first verified in 1975 by the National Aeronautics and Space Administration's (NASA) *Helios 1* when it measured the IMF inside Earth's orbit.

In 2004, NASA's *Voyager 1* still detected an extremely weak solar wind nearly 14 billion kilometres from home – before crossing the termination shock – the region where it suddenly becomes subsonic because of backpressure from the interstellar medium, which itself carries the plasma and magnetic field remnants of other stars!

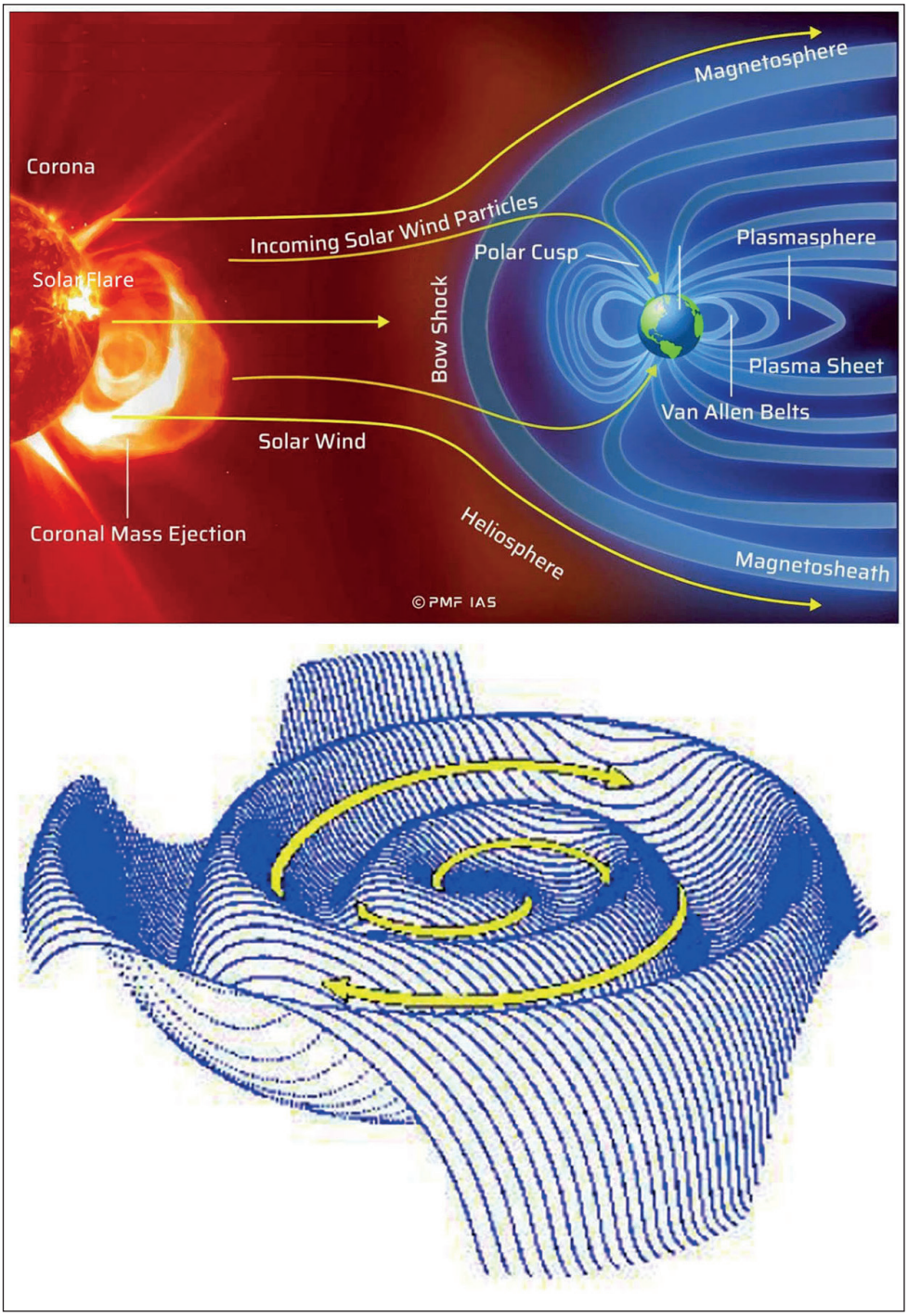

Figure 4: Solar Wind v. Earth and Parker spiral. Top: Solar wind interaction with Earth's magnetic field. Bottom: The Parker spiral (simplified). As the solar wind flows outward and Sol rotates, the IMF is wound into a three-dimensional spiral pattern. Credits: PMFIAS India and Wilcox Solar Observatory.

In 2017, NASA named the *Parker Solar Probe* after the world-renowned "father of heliophysics".

The solar wind's magnetic field has three components: Bx, By and Bz, but the north-south oriented Bz is the most important.

When Bz points north (Bz > 0 nanotesla), it is aligned with Earth's magnetic field, which is a good thing.

When it points south (Bz < 0 nanotesla) it is problematic, but the normal solar wind's Bz is never negative enough to cause problems. However, each CME carries a separate magnetic field structure "frozen" into the plasma the instant it is explosively blown into space.

Whenever the faster CME overtakes the slower (normal) solar wind and reaches Earth, it establishes a stronger local solar wind and IMF. If a CME's Bz component is south, it is usually very negative and strongly opposes Earth's magnetic field, which is not a good thing. This is what induces then drives geomagnetic storms.

Note 1: Solar scientists knew geomagnetic storms were caused by the Sun, but without detailed, continuous satellite imaging, the how was speculated as being solar flares or high-speed solar wind streams or theoretical "plasma clouds". Take your pick. What we now call CMEs (plasma clouds) were first directly observed in real-time coronagraph images taken by NASA's OSO-7 spacecraft in late 1971.

"I will huff…"

Just over 25 hours later, on the afternoon of January 19, 2026, (Eastern Time), a CME whirlwind barreled through the solar wind, causing the IMF to tumble wildly. Its north-south component (Bz) was tumbling north then south then north like a solar knuckle ball:

- Proton flux and the Kp (planetary) index surged.
- HF propagation began to decrease, first starting at higher latitudes.
- Bz tumbled south again and stayed.

Sol was the "Big Bad Wolf" banging on the front door, but our planet's natural solar wind defense systems kicked in, absorbing, deflecting or diverting this initial surge of charged particles (see Figure 5).

"I will puff…"

However, by early evening, the Earth's magnetosphere was in turmoil:

- The Kp index (Figure 6) hit 9- (out of 9).
- The Bz was minus 58.4 nanotesla, blowing the front door open – allowing the CME's magnetic energy to roar in – overloading Earth's magnetosphere.
- Evermore positively charged protons – instead of flying through – were trapped in the magnetosphere, drifting westward around the Equator, intensifying the ionosphere's ring current – strongly opposing and weakening Earth's magnetic field – allowing evermore protons to flood in, become trapped – increasing the ring current…
- Intense auroras were seen around the world (Figure 7 on the next page).

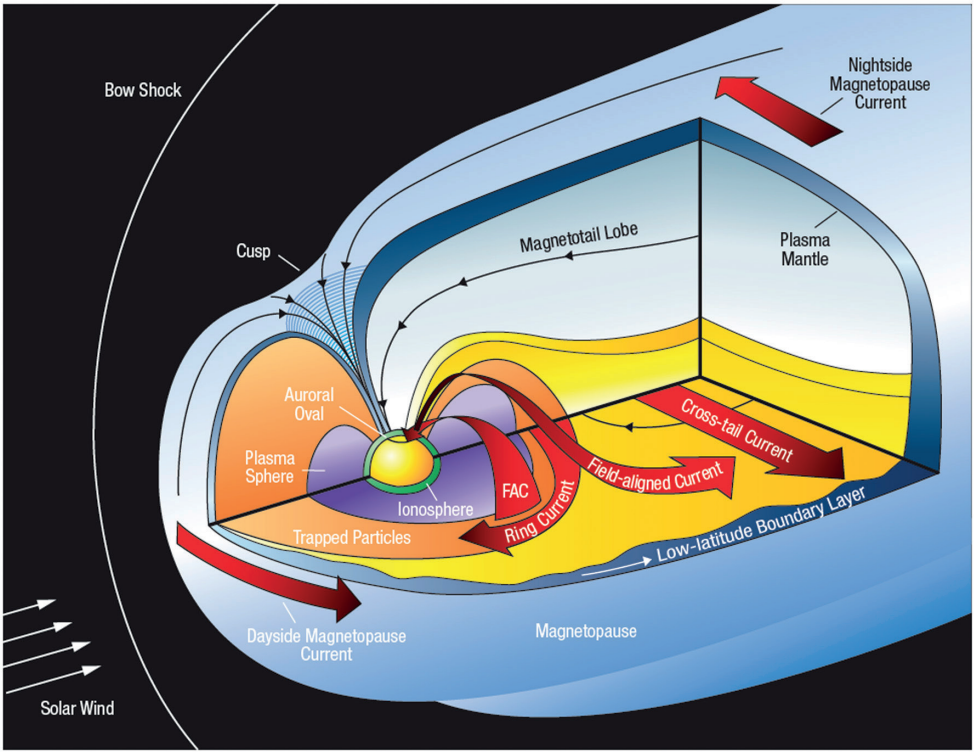

Figure 5: Solar wind–magnetosphere–ionosphere coupling Ionized plasmas are whispery and diffuse and are invisible to our eyes but not electromagnetic energy. They drive a powerful system of electric currents that, during the peak of major geomagnetic storms, dissipates power equivalent to well over 100 billion joules-per-second (100 gigawatts)!

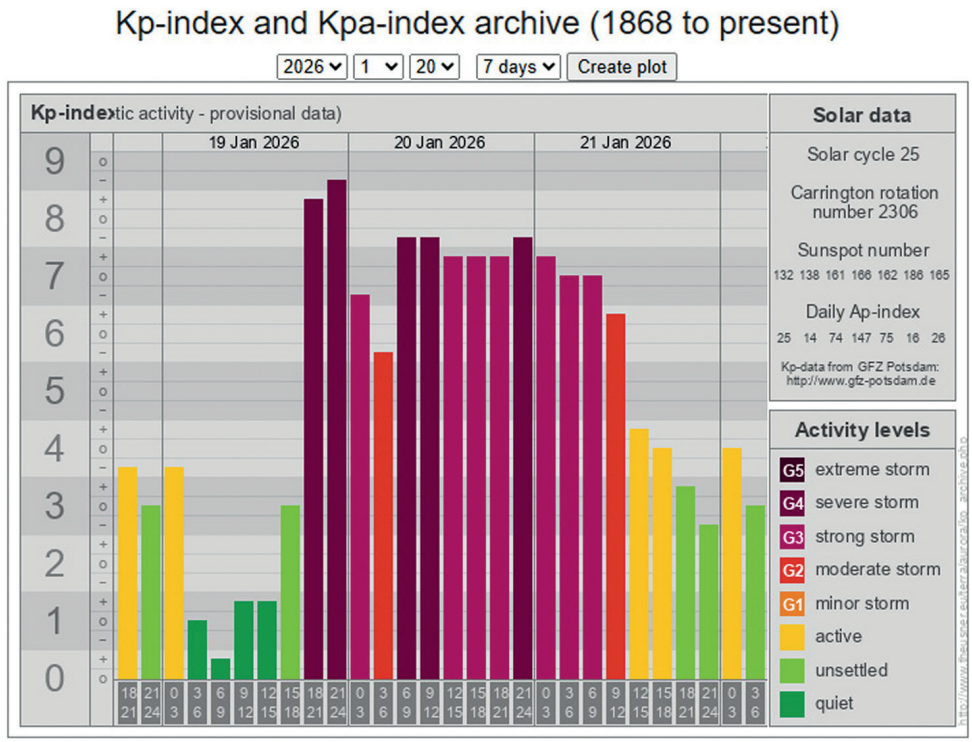

Figure 6: Kp Progression. Kp progression from January 19 to January 21, 2026. Credit: Michael Theusner.

Note 2: The Kp index measures global geomagnetic activity every three hours on a quasi-logarithmic scale (0 to 9). NOAA's G-scale is related but it also incorporates additional factors such as storm duration, regional impacts, and overall effect on technology and infrastructure. Although the Kp index reached 9 minus, the other criteria were not met to make it a G5-extreme storm.

Figure 7: Spectacular Aurora Borealis. Beiji Village, China, January 20, 2026. Credit: Chi Shiyong/VCG via Getty Images.

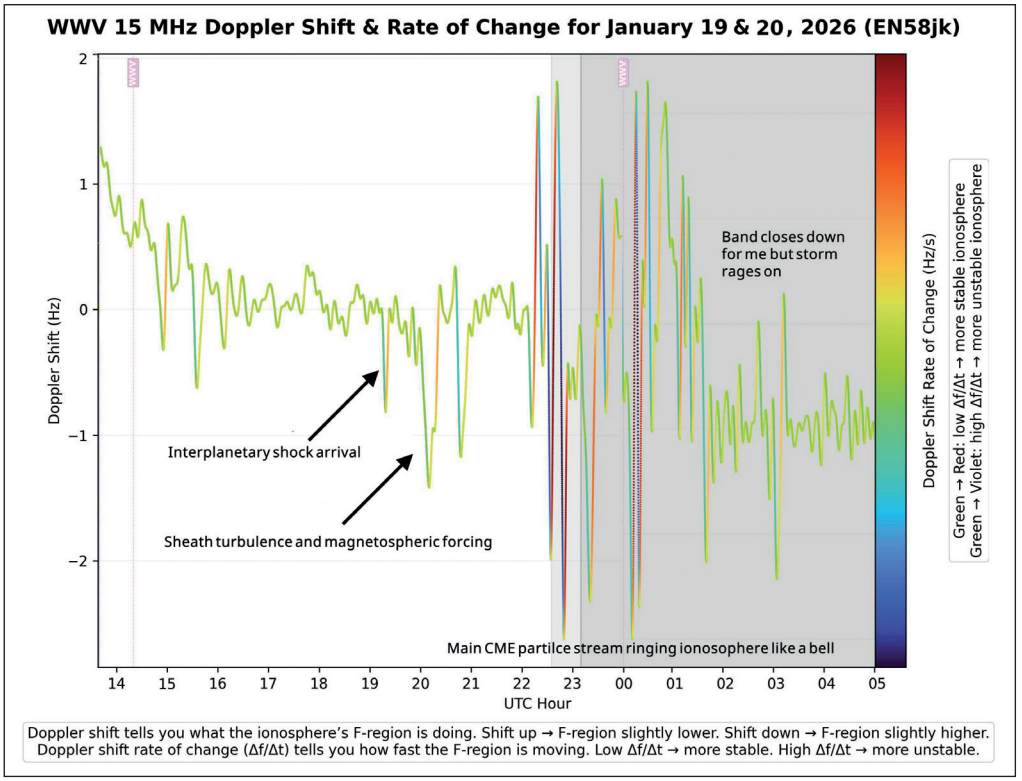

Figure 8: CME Induced Doppler shifts (January 19 to 20, 2026). My heat map composite of CME-induced Doppler (frequency) shift and rate of change (df/dt in hertz per second) of WWV's 15 MHz carrier.

"And blow your house down!"

The CME-driven solar wind was howling at 1178 kilometres per second – twice the normal average – ringing the ionosphere like a bell (see Figure 8). Proton flux peaked at S4-severe (see Figure 9 on the next page).

Earth's magnetosphere was on the teeter-totter knife-edge of a runaway regenerative magnetic feedback loop – the kind that powered the famous Carrington Event of September 1859. Then Bz suddenly flipped north! That field reversal prevented a full-scale magnetosphere meltdown because had it remained south for much longer, we would have experienced:

- A Carrington superstorm trifecta of G5-extreme, S5-extreme and R5-extreme.
- Auroras streaming down or up from each Pole to near the Equator turning midnight into midday à la the Carrington Event.
- Global cascading electrical grid brownouts, blackouts and surges caused by geomagnetically induced currents (GICs).
- Total GPS collapse.
- Polar region no-fly zones.
- Multiple satellite system shutdowns and/or failures.
- Increased atmospheric drag on hundreds or even thousands of low Earth orbiting (LEO) satellites because increased levels of extreme ultraviolet (EUV) and X-ray radiation are absorbed by the thermosphere, heating and causing it to expand upwards into space. Many that cannot be boosted to higher orbits would have to be deorbited so that whatever pieces survived re-entry splashed down in the South Pacific Ocean Uninhabited Area (SPOUA) – the "spacecraft cemetery".

What Did We Experience?

Even without going full "Carrington", the G4-severe geomagnetic storm of January 19 and 20 – continuing as a G3 through January 21, 2026 – caused:

- An S4-severe radiation storm.
- R3-strong shortwave radio blackouts with wild propagation swings.
- Intense auroras appearing farther south and north than normal.
- Strong daytime D-region absorption.
- Rapid IMF fluctuations.
- Minor power-grid fluctuations mostly across northern latitudes because magnetic-field variations were stronger.
- Some GPS degradation and satellite-communication anomalies because of ionospheric scintillation.

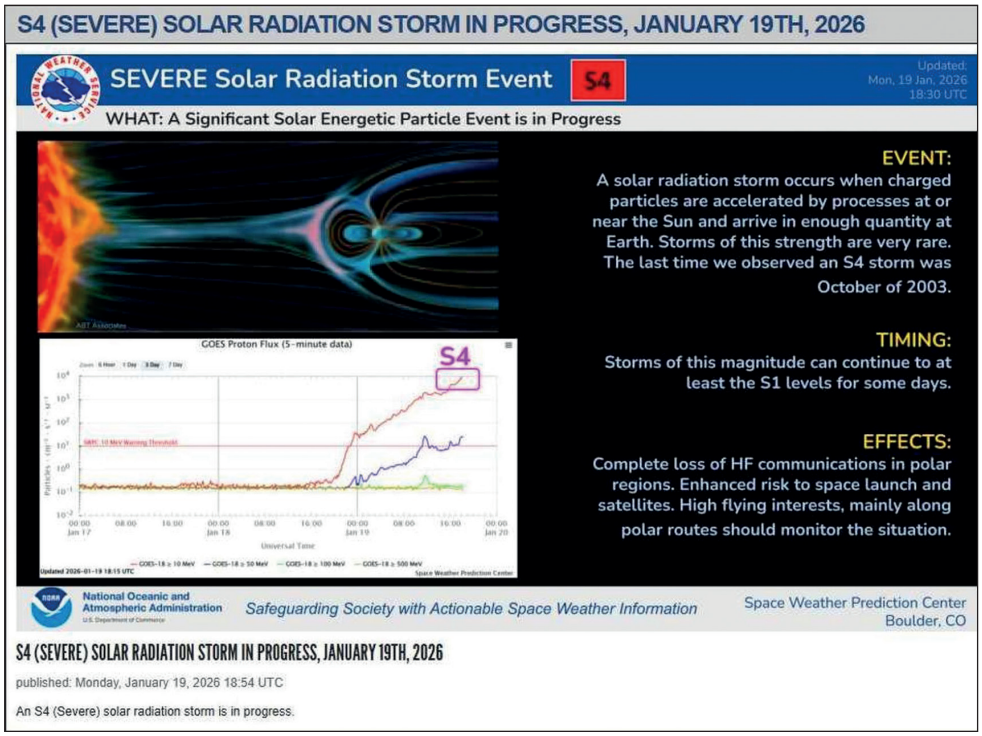

Figure 9: Severe Solar Storm Radiation Alert. Credit: NOAA SWPC.

Note 3: Ionospheric scintillation affects radio wave amplitude and phase but is often masked by other effects at lower frequencies. It occurs whenever radio waves pass through small, irregular moving electron patches or clouds of varying electron density – ranging from tens of metres to tens of kilometres across, which act like tiny refractive lenses that bend, scatter or distort the wavefront causing signals to fluctuate rapidly and unpredictably. It is most disruptive in the L-band (1 – 2 GHz) used by GPS satellites and other satellite services. GPS receivers need extremely stable phase tracking to lock on and determine accurate positions from a few metres for civilian use to a few centimetres for military use.

For Radio Amateurs, it was a day when:

- 10 metres suddenly became wide open then suddenly died.
- 20 metres was too distorted for even digital signals like Weak Signal Propagation Reporter (WSPR) and FT8 to be decoded, including other "all of nothing digital modes".
- 40 metres became a long-haul pipeline one minute then a dead zone the next.
- 80 metres was swallowed by daytime absorption.
- VHF (144 and 440 MHz) auroral propagation was unusually strong because of intense reflection from auroras.

For the Ham Radio Science Citizen Investigation (HamSCI) group, this event became a living, breathing laboratory. The hardware, software, webservers, social media platforms and amazing AI tools we have today allow citizen scientists of all ages to become solar scientists and:

- Experience, study and analyze the raw power of a significant space-weather event in real time like a solar scientist
- Observe how Earth dynamically deflects and/or absorbs CME magnetic energy.
- Hear the magnetosphere audibly "groan" under the strain.
- Write and publish papers or articles describing the event in varying degrees of technical detail.

My Final

For all we know, Earth is unique. Without its serendipitously just-near-enough to Sol distance, just-strong-enough magnetic field, just-right-enough atmosphere, there is no "happily ever after" – or us. It would be like Mars is now, after it lost its protective magnetic field then atmosphere eons ago – cold, dry and sterile.

Eugene Parker's contemporary and friend, astronomer John A. Eddy, wrote:

"If solar magnetic fields are the gunpowder, flares the muskets and prominences the horse-drawn cannons in the venerable solar armory, coronal mass ejections or CMEs are truly the heavy artillery.

Indeed, interplanetary CMEs are the primary driver of all space weather disruptions, including highly accelerated plasma streams and most major geomagnetic storms, with potential impacts on a wide range of human activities." –73

References & Resources

- HamSCI – https://hamsci.org
- Kp Index and Archive – http://www.theusner.eu/terra/aurora/kp_archive.php
- NASA Solar Dynamic Observatory (SDO) – https://science.nasa.gov/mission/sdo
- NOAA Space Weather Prediction Center (SWPC) – https://www.swpc.noaa.gov
- Parker Solar Probe – https://science.nasa.gov/mission/parker-solar-probe
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- The Sun, the Earth and Near-Earth Space, John A. Eddy, for NASA, 2009.

COLUMNIST

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Handhelds (HTs)...

Squelch features: CTCSS and DCS

Welcome to the column.

As you may know, in most cities across Canada there are multiple repeaters scattered throughout the area. In most major cities, there could be dozens of repeaters that you can use.

But how do these repeaters keep interference between them at bay? To do this, Amateur handhelds use two features to keep radios and repeaters from accidentally receiving unwanted signals. Enter CTCSS and DCS, that keep the audio of a radio quiet and allow only intentional transmission to trigger repeaters.

Before diving into the specifics of CTCSS and DCS, it's important to understand the feature of Squelch. A radio's squelch circuit is designed to mute the speaker when no signal is present. Without it, you would hear a constant, jarring "hiss" of static.

Standard squelch (Carrier Squelch) opens the speaker whenever any signal of a certain strength hits the antenna.

The problem? It can't distinguish between your friend's handheld radio and a burst of interference from a nearby LED light or a distant station skipping across the atmosphere. This is where "Selective Calling" or "Tone Squelch" comes in.

CTCSS: The Continuous Tone-Coded Squelch System

Commonly referred to by the Motorola trademark PL (Private Line), CTCSS is the older and more widely used of the two systems. It operates by adding a low-frequency audio tone to your voice transmission.

When you press the PTT (Push-to-Talk) button, the radio generates a specific sub-audible tone (ranging from 67.0 Hz to 254.1 Hz). This tone is mixed with your audio. Because the tone is so low in frequency, it is filtered out by the receiving radio's speaker so you don't hear a constant hum, but the radio's internal circuitry "hears" it perfectly.

If the receiving radio is set to "Tone Squelch" mode with a matching frequency, it will only unmute the speaker when it detects that specific tone. If a signal arrives without the tone – or with the wrong tone – the radio remains silent.

Most HTs use a set of 38 tones, though many manufacturers include up to 50.

Common tones include:

- 100.0 Hz
- 141.3 Hz
- 123.0 Hz

Why use CTCSS?

Most Amateur Radio repeaters require a specific CTCSS tone to "wake them up".

This prevents the repeater from being keyed up by random noise or interference, or radios trying to access a different nearby repeater.

It's a common misconception that CTCSS encrypts your call. It doesn't. Anyone tuning to your frequency can hear you; CTCSS simply allows you to ignore them.

In areas where many groups share one frequency, different tones allow them to coexist without hearing every conversation.

DCS: Digital Coded Squelch

As radio technology evolved, DCS (also known as DPL or Digital Private Line) emerged as a more modern alternative. Instead of a continuous analog tone, DCS uses a continuous stream of digital data.

DCS transmits a low-speed digital word. This word consists of a code that repeats continuously during the transmission. Because it is digital, it is much more resistant to falsing – accidentally opening the squelch due to noise – than analog tones.

Advantages of DCS:

- **More Codes**: While CTCSS usually offers around 50 tones, DCS offers 104 standard codes (represented as three-digit octal numbers like 023, 411, or 734).
- **Speed:** DCS squelch often resets faster than CTCSS when a signal drops out, leading to a "sharper" end to a transmission.
- **Reliability:** It is generally less susceptible to being "tricked" by voice harmonics that might mimic a low-frequency CTCSS tone.

Operating Modes: "Tone" vs. "TSQL"

When configuring your radio, you will likely encounter several different modes. Understanding these is crucial for successful communication.

Tone (Encode Only): Your radio sends a tone, but its receiver remains wide open. This is the most common setting for accessing repeaters. You send the "key" to open the repeater, but you can hear everything that comes back.

TSQL (Tone Squelch / Encode-Decode): Your radio sends a tone and requires a tone to be present to hear anything. This is great for blocking out interference, but if the repeater isn't sending a tone back, you won't hear anything at all!

Tone Search/Scan: A handy feature where the radio listens to an active transmission and identifies which CTCSS or DCS code is being used.

Hamstudy Basic Study Guide 2026

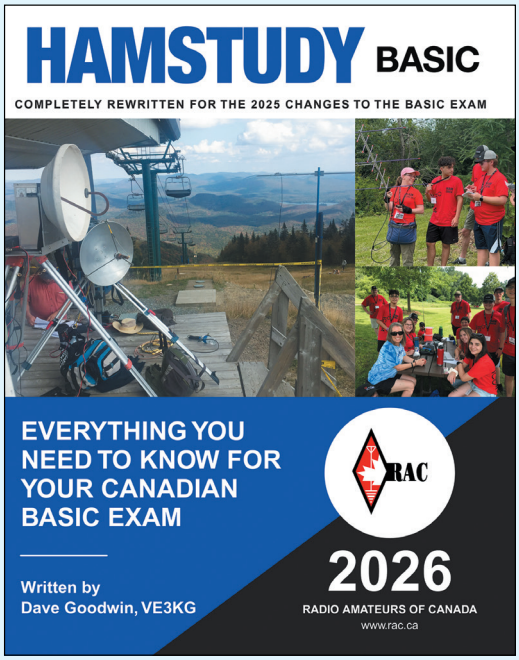
The Hamstudy Basic 2026 is the 5th edition of a Study Guide published by Radio Amateurs of Canada. It is the perfect reference for new Radio Amateur enthusiasts and provides everything needed to qualify for the Basic Qualification Amateur Radio Exam.

- √ **Innovation, Science and Economic Development's complete examination Question Bank effective July 15, 2025**
- √ **The content mirrors the subscription-based self-study course offered online at http://www.hamstudy.com**

Key information:

- √ **Basic qualification is required to obtain your call sign**
- √ **Exams are multiple choice – 70% to pass**
- √ **80% or higher marks gives you access to the HF bands**

For more information visit http://www.hamstudy.com/



Don't worry even seasoned Amateurs get tripped up by tone settings. If you can't hear someone or can't get into the repeater, check the following:

- **The "Reverse" Problem:** Sometimes you have "Tone Squelch" (TSQL) turned on, but the repeater is only configured to receive a tone, not transmit one back. The Result: You trigger the repeater, but you can't hear yourself or anyone else because your radio is waiting for a tone that isn't coming.
- **Incompatible Tones:** Ensure both radios are using the same standard. Some older European or military equipment might use non-standard tones outside the 67 – 254 Hz range.
- **Over-Deviating:** If your voice volume is set too high (over-deviation), it can sometimes "smear" the CTCSS tone, causing the receiving radio to drop the squelch intermittently.

CTCSS and DCS are the unsung heroes of the VHF/UHF bands. They turn a chaotic, noisy spectrum into a manageable and professional-feeling communication environment.

Whether you're trying to hit a distant repeater on a mountaintop or just trying to keep your home station quiet while you wait for a friend to call, understanding these "silent" signals is a hallmark of a proficient Amateur Radio operator.

We will look at more HT features in the next column. In the meantime, why don't you write to me all about your HTs. What brand and model, what features it has, why you like it, why you hate it, and any stories or pictures where HTs have saved your butt or been instrumental in your Amateur operations.

Write to me through the column or send an email to phillipjboucher@gmail.com.

TCA

Better-ICR: A Tool for Improving Your CW

John Merkel, AJ1DM

Instant Character Recognition

"CW" is the term Amateur Radio operators use to describe communication using Morse Code. CW is an abbreviation for Continuous Wave. But to put it simply, CW consists of short and long tones (respectively called dits and dahs) arranged so as to encode messages during radio communications.

Up until a few decades ago, most Amateur Radio licensing agencies required an operator to demonstrate the capability to send and copy CW as a condition of granting a licence. Today those requirements have been largely eliminated so operators only learn CW if they want to use it for their radio communications.

There are many tools to help operators learn CW and increase their speed. This article is about a tool I created which is called Better-ICR., but before I can explain what it does let's discuss the concept of Instant Character Recognition (ICR).

In 2012, Nancy Kott, WZ8C (SK) wrote an article in "The Keynote" – the newsletter of the FISTS CW Club – entitled "Instant Recognition." Nancy stated: "… to copy CW at higher speeds requires more than merely recognizing characters: the recognizing must be instantaneous. By instantaneous recognition I mean the ability to recognize a CW character within a half second after hearing its completion." You can find the article online at: https://www.fistsna.org/pubnewsletters/keynote_2012_4.pdf

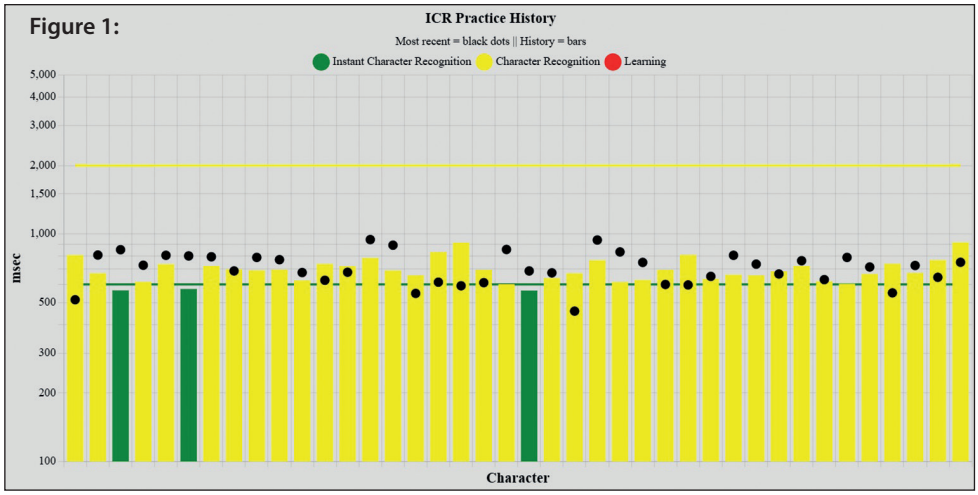
Her article also referenced "The Art and Skill of Telegraphy," by Bill Pierpont, N6HFF (SK), who suggested we need to "Associate the code signal with the printed letter so intimately that when you hear or think of one, the other immediately pops into mind."

Achieving ICR allows you to copy CW with reduced effort at greater speeds, resulting in more fun on the air with CW. ICR is a foundational skill for aspiring CW operators.

Measuring ICR

Better-ICR is a web application I developed that helps you measure and improve your ICR. To do that, Better-ICR sends you semi-randomly chosen characters in CW, then measures how long it takes you to speak each character out loud.

Figure 1:



You might think that a person who has achieved ICR would be able to speak a character immediately after hearing it. However, it's not as simple as that. Having recognized a character, it takes time for your body to organize your diaphragm, lungs, vocal cords, lips, tongue, etc, to speak that character. How much time? I've collected quite a bit of data to suggest that it takes about 400 to 600 milliseconds (msec) for the vocalization process – a timeframe that aligns well with Nancy WZ8C's notion that you need to recognize a CW character within a half-second.

If you take more than 600 msec to speak a character, the excess above 600 msec is time you spent decoding the character. For example, if your response time was 1000 msec, it took you 400 msec to decode the character, then another 600 msec to vocalize it. To achieve ICR, you have to reduce that 400 msec to 0 msec, giving you an overall response time of 600 msec.

Of course, response time means nothing if you decoded the character incorrectly. To confirm accuracy, Better-ICR requires you to type the character after vocalizing it. If you type in a different character than it sent, Better-ICR flags the response as incorrect. I advise students using Better-ICR to vocalize the character as quickly as they can, then take their time to find the key on the keyboard corresponding to the character they spoke. Following the proper sequence ensures Better-ICR calculates a meaningful response time for you.

You might ask, why not cut out the middleman and just let you type the character, without vocalizing, then measure the time between code and keystroke? My feeling, shared by many of my fellow CW Academy Advisors, is that exercises of the form "hear-a-character-type-a-character" are anathema to developing head copy – the ability to understand Morse code directly in your mind without writing it down.

It seems that typing the character bypasses the cognition part of your brain You develop a muscle memory for typing CW and not an understanding of what you just heard so I'm naturally distrustful of typing as a measure of ICR.

Unfortunately, many of the CW practice applications available to us require you to type in your response. Having developed a habit of hear-it-type-it with these other apps, many students find Better-ICR's requirement to speak first, then type, challenging. Fortunately, after a bit of practice, the hear-speak-type sequence becomes second nature.

Graphic Feedback

Better-ICR displays your response time on a graph, updated in real time as shown in Figure 1.

The vertical axis of the graph is your response time, in msec. On the horizontal axis are the 40 characters (26 letters, 10 digits and 4 punctuation marks – period, comma, slash and question mark) we study.

The black dots show the response time Better-ICR measured the last time it sent you that character.

The vertical bars represent something a bit more complicated. The height of each bar is a weighted moving average of all your past results. That weighted moving average takes much of the jitter out of your results so it's a better indication of your current capability than the black dots.

In the illustration above, three of the bars are green, whereas all the others are yellow. The bars shift from yellow to green when you fall below the 600 msec threshold. The green bars represent those characters where you have achieved ICR.

If you are just getting started with CW, you will see all red bars. Red indicates you're still Learning CW. Once your response time falls below 2000 msec, the bar turns yellow, to indicate you have achieved Character Recognition (CR) – you can accurately identify the character, but it still takes a bit of thought. I don't have quite as much data to support the 2000 msec CR threshold as I do for the 600 msec ICR threshold, but it seems to work fairly well in practice.

Typical Student Progression

As you improve your CW you will see your bars turn from red to yellow and finally to green, as shown in the progression on the right.

- Here you are still learning your characters – all red bars (see Figure 2)
- Now you recognize all the characters (CR, not ICR) (see Figure 3)
- You've achieved ICR in many, but not all, characters (see Figure 4)
- Congratulations – you've achieved ICR! (see Figure 5)

Better-ICR Features

Because Better-ICR generates this colorful graphic and updates it in real-time, many people say Better-ICR feels like a video game. That's a good thing – by gamifying the experience, CW practice feels more like play and less like work. However, the video game feel has resulted in an unexpected problem: students sometimes describe practising with Better-ICR up to an hour or more. It's almost too much fun!

I strenuously discourage practice sessions of longer than 10-15 minutes in duration, for any CW exercise, because our brains can only absorb so much at a time – we need time to assimilate new learnings. I have added a session timer and after 10 minutes, Better-ICR gives you a friendly reminder that you should take a break.

Figure 2:

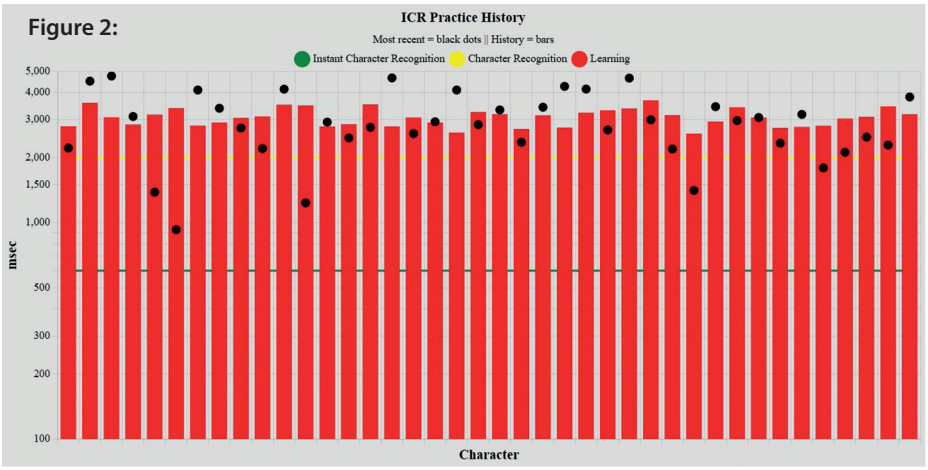


Figure 3:

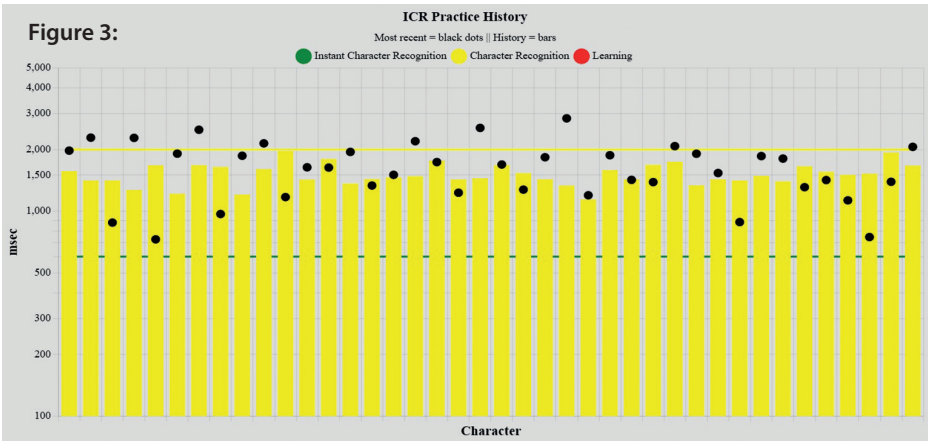


Figure 4:

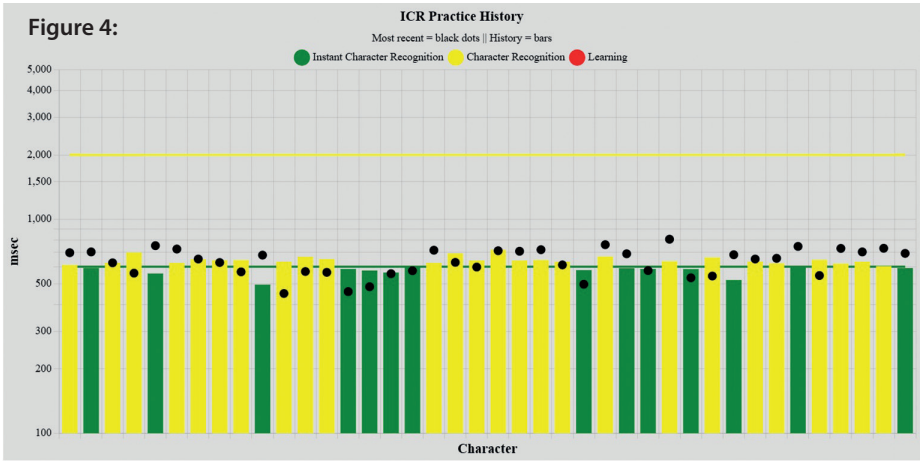
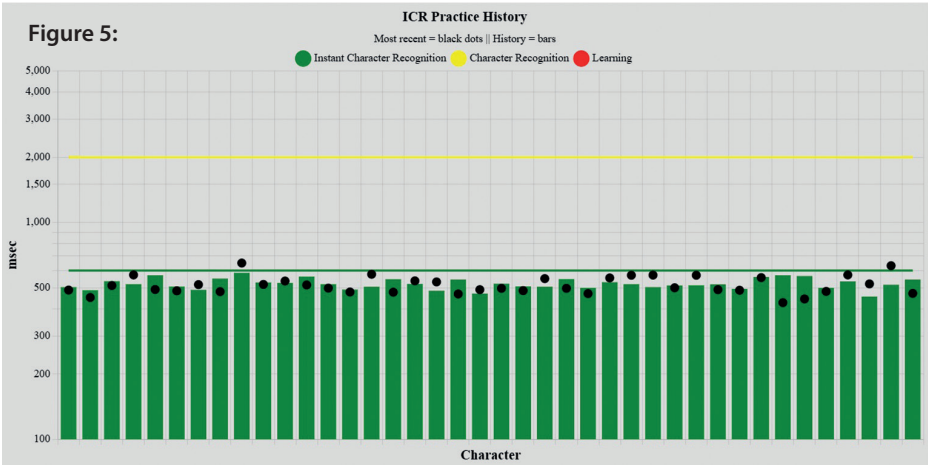


Figure 5:



I originally set the timer for 5 minutes, but students complained that 5 minutes was too short! Clearly, Better-ICR makes improving CW enjoyable.

I mentioned ealier that Better-ICR chooses the next character it sends semi-randomly. What I mean by that is that Better-ICR does not send all the characters with equal frequency. It sends the characters with longer response times (higher bars) more frequently than the ones with shorter. As your strong and weak characters shift, Better-ICR adjusts to send the new weak characters more frequently – it adapts to your unique learning path.

Better-ICR for Beginners

Better-ICR was originally developed for use with students who are already familiar with CW characters and just want to improve their recognition speed. To make Better-ICR useful for beginning students, I had to make some changes.

Beginners generally start with a few characters at a time, adding other characters gradually. Better-ICR now includes a user interface that allows a student to select any subset of the 40 standard characters. Only the characters the student selected are displayed and only those characters are sent to the student.

At the very beginning of learning CW it's not enough to know you guessed wrong – you need help knowing what the correct character was. So Better-ICR now displays a Most Recent Character box. The box is blank until you've made your guess, then it displays the character just sent. That character is green if you guessed right and red if you guessed wrong. Now you have feedback to help you get it right the next time. Better-ICR clears the box just before sending you the next character.

Originally Better-ICR used just red and green for the history bars: green if you had ICR for that character, red if you didn't. To give beginners a more achievable milestone, I added yellow bars for CR, as described above.

Final Thoughts

Better-ICR runs in your web browser. There is nothing to download. You don't need an id or password. Just point your browser at https://better-icr.herokuapp.com.

For best results, review the Student Guide (link at the top of the page) thoroughly before you start using Better-ICR.

One warning: Better-ICR is not designed to be a stand-alone tool. If you are an aspiring CW op I strongly recommend that you join a class. Your advisor/instructor will provide helpful guidance and can recommend additional tools to facilitate your progress. Your fellow students will provide encouragement and accountability.

I'd like to thank the many advisors and students who have provided creative suggestions and insightful feedback that helped me develop Better-ICR into the robust tool it is today.

John Merkel, AJ1DM, was first licensed in the USA in 2011, holding an Extra Class License. He has been an Advisor in the CW Academy program (sponsored by the CWops organization) since 2018, having advised over 100 students. His interests in Amateur Radio include contesting, rag-chewing, POTA, QRP operations, DXing, traffic handling, and just about anything else that involves CW. His contact information can be found on QRZ.com.

Teaching Morse Code to High School Students in Montreal

Rémi Deroy, VA2KFU

I've been teaching Morse code to high school students in the Montreal area since 2023. It's gratifying to see the experience grow year after year, despite a challenging start.

In the 2025-2026 school year, we made a major breakthrough at the Anjou High School Club (VE2UPI). Thanks to online tools, students are progressing much faster. This year, I have students who can decode in 15 words per minute!

The method isn't too complicated. I've been able to develop my teaching methods using two tools. The first is the use of VBand from Ham Radio Solutions. This tool allowed us to work on words and decode them in Farnsworth Morse code gradually. We were working at 10 words per minute (wpm), with a speed of 5 wpm for each character. The students progressed quite quickly, reaching 15 wpm. Next, using the Morse Walker website, we ran POTA (Personal Operational and Technical Assistance) simulations to practise decoding call signs. Again, the 15-wpm target quickly became the standard. The students' progress is impressive.

To practise sending the code, we play Battleship! As for operating over the airwaves, propagation and the weather weren't on our side. We're waiting for spring! Respecting their understanding allows us to better connect with them.

How can we explain this improvement in student progress? The first reason is the connection between the teacher and the students. What I've noticed after three years is that the students who attend Morse code classes are the same students who are in my Sociology classes. Some students who don't know me also attend, but the majority come primarily because they know me.

The second reason – and I'm not necessarily happy about it – is the smartphone. Thanks to these technologies, students have access to practice tools 24/7. Students don't have to wait for the next class to practice Morse code and this makes practising Morse code for 15 minutes a day much easier! They can practice POTA (Personal Operational and Technical Assistance) whenever they want with Morse Walker.

The third and final key is the most important: respecting their learning style. Many Morse code veterans will say that you shouldn't learn with dots and dashes. The reality is quite different. Often, they already know Morse code in dot and line form. The goal, therefore, is to start with what they already know and guide them to go further. In my first year, I tried to break this habit of using dots and dashes among the students. I finished the year with no students still using them. Now that I've stopped, the students are progressing!

In conclusion, and this is very interesting, students often insist on learning with the straight key. Few are inclined to use paddles. They prefer the good old straight key! All the better, I'm from that school too! – 73!

Rémi Deroy, VA2KFU, has been a secondary school teacher of history, geography, ethics and sociology since 2002. He has been an Amateur Radio operator and QRP user since 2022. He is involved in networks, the CanWarn weather network and emergency response. He has also practised Chinese martial arts since 2009.

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RAC Amateur of the Year Award Nominations

Through the Amateur of the Year Award, Radio Amateurs of Canada recognizes the outstanding contributions made by Canadian Amateurs. It is the intent of the Board of Directors of Radio Amateurs of Canada to recognize the outstanding Canadian Radio Amateur of the Year, each year such candidates are nominated.

To qualify for the title "Amateur of the Year", an individual should have made an outstanding contribution to Amateur Radio in the past year, or have contributed consistently to the welfare of Amateur Radio over several years. RAC Directors, Officers and Section Managers are not eligible for the award while in office, and not in respect to their term(s) of office.

Nominations with supporting documentation are to be addressed to the RAC Corporate Secretary and received at RAC Headquarters by **Friday, September 30** for consideration for the current year.

Please send Nominations to the attention of the RAC Corporate Secretary at secretary@rac.ca and to RAC Manager at racgm@rac.ca

For more information please visit: www.rac.ca/rac-amateur-of-the-year/

RAC Scholarship and Grant Program

The RAC Foundation is now accepting Scholastic Grant applications from eligible Amateurs for the 2026-2027 school year.

The application deadline for all grants is October 31.

Through the RAC Foundation Program, Radio Amateurs of Canada provides grants and scholarships to worthy community programs and to young Canadian Amateurs who are studying at the post-secondary level.

It is thanks to the continued generosity of Amateurs and Amateur Radio clubs from all parts of Canada that we can support talented Canadian Amateurs who will contribute to the Amateur Radio Service for years to come.

Contributions to the RAC Foundation are tax deductible and are most welcome!

For more information please visit:

https://www.rac.ca/grant-information/

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Gordon Lowick, VE7YMJ
James Ludwar, VE6JWL
Mark Lunn, VE6MXL
Eric Lusk, VE7EMI
Trevor Lyons, VE9CBC
Jory Maccan, VE6JBM
Richard MacDonald, VA1UAV
Charles MacDonald, VA3CPY
Barry MacDonald, VA3FCQ
Ian MacDonald, VA6MCI
Mike MacGregor, VE3QMM
Darcey MacInnes, VA7DKY
John MacKay, VE7EEX
Robert MacKenzie, VA3RKM
Neil Macklem, VE3SST
Terrence MacLean, VE9ATM
Drew Maddison, VA3DDM
Frank Maddix, VA3FMM
Rudy Maharaj
Pierre Mainville, VA3PM
Alan Mallett, VA7AWM
Eric Manning, VA7DZ
Pierre Marcoux
Nicholas Marengere, VE3WBT
Bruce Marshall, VA6BRM
Sean Martin, VE7TVM
Darie Marza, VA3HFC
Gregory Mason, VE4AMN
Marc Masson, VE2MMH
Jan Matusewicz, VA3TCN
Clark May, VA6CWM
Gabriel Mazzeo, VA3CWT
Hayden McAleese, VA1HJM
Phil McBride, VA3QR
Michael McCabe, VE6MIK
Colin McCaffrey, VA7KKY
Don McCallan, VA3GFD
David McCarter, VE3GSO
Hugh McCully, VE3AYR
Henry McDavid, VA7HHM
Trevor McDonald, VA7TCM
Brian McDonnell, VA3CBG
Doug McDougall, VE3DGY
Ian McEachern, VA7IM
Steve McEdwards, VA3TPS
Allan McElroy, VE3EBN
William McEvoy, VE3NEF
Ken McIntosh, VA7KBM
Steven McIvor, VE3MVK
Andrew Allan McKay, VA4XRY
David McKinlay, VA3IR
James McKinnon, VE7JJZ
Patrick McLean, VE3ZGG
Nicholas McLean, VE7NMX
Cam McLelland, VE5MCR
Tammy McLeod
Tim McMullin, VE3TCS
Andrew McPhee, VA7ASI
Jerry McPhee, VE3NXT
Carlos Ernesto Medeiros, VA3VIE
Barry Middlebrook, VE6TN
Robert Millar, VE3LNV
Eric Mills, VE1AST
Michael Milosevic, VE3EQM
Lou Milrad, VE3TRY
Vladimir Milutinovic, VE3JM
Andrew Mitchell, VA3CW
J.T. Mitchell, VE6OH
Austin Mitchell, VE7XPP
Paresh Mody, VE3PQX
Marcel Mongeon, VA3DDD
Andrew Moore
Robert Moore, VE3AVU
Andrew Morgan, VA3ANM
Donald Morris, VE7AMU
John Moylan, VA3YOM
Harry Mueller, W1HMM
Alan Muir, VE7BEU
Wilf Mulder, VE7OHM
Vaughn Munden, VO1RVM
Gordon Murray, VE3JSJ
Jeremiah Nahwegahbow, VE3EJN
Robert Nash, VE3KZ
Jim Nelson, VE6ACR
Joseph Nicholson, VY2JTN
Chris Nielsen, VA6JCN
Allan Niittymaa, VA3KAI
Brian Nilsson, VE3SLB
Trevor Nisbet, VA7TLN
David Nixon, VA7NIX
Mark Nowicki, VE3MNA
Trevor Oke, VA3OKE
Keith Olson, VE4VO
Richard Osborne, VE3OZW
Jack Parker
Jason Pasetka, VA5JEP
Ed Pasetka, VE5AM
Gordon Passmore, VA7GAP
Russell Pastuch, VE3FSN
Bruce Patten, VE7PTN
Bruce Patterson, VE7XBP
Tony Pattinson, VE2KM
Zak Pawliuk, VE7ZAX
Irmgard (Geddie) Pawlowski, VE3CJX
William Pearce, VA7WCP
Doug Peckhover, VE3ATP
Tim Pekkonen, VE3UO
Steve Pengelly, VE3STV
Paul Peters
Brent Robert Petersen, VE9EX

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John Philpott, VA3TYM
Paul Pickering, VA3BHU
Richard Pierik, VE1RPX
Dale Pilsworth, VA6OK
Don Plunkett, VA6FH
Bruce Poirier, VA3WBO
Marc Poitras, VE3VEB
Pieter Poll, VA7SFV
Ryan Pollard, VA6RJP
Craig Pollock, VA7CBP
Gregory Popelas, VA3CBN
Peter Potjewyd, VE3WYD
Terry Potts, VE3TEP
John Potts, VE6JWP
Evan Pratten, VA3UJF
Gianna Pratten, VA3FZY
Tim Pychyl, VA3PYC
Theodore Arthur Rachwal, VE9AQM
Victor Rowell Radovan, VE4RWL
Michael Rak, VA6RAQ
Norman Rashleigh, VE3LC
Chris Recoskie, VE3VMP
William Redmond, VA3WBR
James Reed, VE7APF
Steve Regan, VA3MGY
David Reid, VE6BIR
Adam Reynolds, VE8ADR
Matthew Richard, VE3DYV
Cam Richard, VE3IGX
Earl Richardet, VE7QJ
Simon Rizzardo, VE7RIZ
Jeff Robb, VE3MDC
Jeff Robbins, VE3JTR
James Roberts, VE7ZO
Donald Robinson
Stephen Rodgers, VE1SBR
Leonard Rodrigues, VA7KLV
Samuel Ross, VA3RUC
Lynn Ross
Neil Rowe, VA6AK
Don Rowed, VE3KII
Dave Rowlinson, VE3ZDR
Ken Rusnak, VE3EFZ
Patrick Ryan, VE1PHR
Robert Ryll, VA7RYL
Ted Rypma, VE3TRQ
Chris Sakellis, VE3XCS
Mike Saker, VE3MGD
Mason Salmon, VE7PMD
Edward Samborski, VE3TAS
Dan Sanchez, VE7EOZ
David Sangwin, VA3NSC
Olivier Savoie, VE9OLI
Lee Sawkins, VE7CC
Chad Scarborough, VE3NGN
Kim Schaffer, VA3ZXC
John Scheeringa, VE3JXX
Mern Scheidl, VA6MER
Mark Schellenberg, VE7JWU
Shawn Schenkey, VE6NS
Derek Schmidt, VE5PPR
Gregory Schmor, VE7CXQ
Bill Scholey, VE7QC
Trevor Schriver, VE3VVB
Mark Scola, VA3HES
John Scott, VE1JS
David Scott, VE3ZZU

New Members: February/March | Nouveaux membres : février/mars

Matthew Auld,
Stephanein Boulet, VE4SNB
Ken Carter
Christopher Childerhose, VA7OCM
Stephen Churchill
Shawn Corey
Andrew Coulas, VA6SEL
Phil Coulson, VA2XOK
Angela Danchuk, VA3TGE
Xavier Demers-Bouchard, VA2XRS
Aaron Drever
Gordon Drewitt, VE3NGB
Kevin Jr Duska
Roselle Ebrahimi, VA7RXR
David Elliott, VE3OJU
Bob Fraser, VE4RBF
Michael Gallinger, VA3MGZ
Simon Giguere, VE4GIN
Daniel Griffith,
Claude Hamel
Robert Hartle, VA3RWH
Eiliv Haugland
Felix Hurtubise, VA1THU
Emil John
Najib Khalaf, VA3NFK
Peter Kufeldt, VA3PKF
Pierre Laflamme, VE2PLH
Steve Larson, VE6TOW
Pinsonn S Laverdure
Andrew Legun, VE7ZPT
Larissa Lemoine, VA1QLL
Rayfield Locke
Ryan Louden, VE5RJL
Antonio Martins, VE3WRT
Christopher Menchions, VO1AAK
Tom Moreau, VA3YTM
Vaughn Munden, VO1RVM
Joshua Murphy, VO1RFX
Mykola Nenakhov
Guy Painchaud, VE3GOI
Steve Parravano, VE3YHW
Andrea Patten, VA7VST
Zak Pawliuk, VE7ZAX
Chris Pfefferle, VA6RDJ
Scott Pike
Ryan Pollard, VA6RJP
Michael Pratt, VE3ZYQ
Kishor Prins, VA7GKA
Jason Racine, VE3PRY
Tommy Redditt, VA3GEL
Elizabeth Rennie, VE7DUY
Alberto Richards-Rosales, VA3GQQ
Joshua Roy, VE3NEM
Marc Russell
Crys Sanichar, VA1CAS
Mayur Sarode
Eleanor Settle, VY1ELF
David Siddall
Patrick Taylor, VE7TUD
Manuel Teigeiro, VE2TQM
Mark Tindall, VA3MWT
Rick Wells

Welcome! Bienvenue! | Thank You! Merci!

Don Scott, VE7DLD
Ian Seddon, VE3HUT
Zachary Seguin, VA3ZTS
Randy Shaw
Ian Shaw, VE3IJS
Ronni Shino
Pietra Shirley, VE9PXL
Kevin Short, VE3KJS
Joseph Shynn, VA3GOC
Terry Siklenka, VA7CXK
James Simeone, KC2AOF
Steve Simon, VA3SBI
Antonio Simonetta, VE3WZM
Gary Simpson, VE1KL
Glenn Simpson, VE3GTS
Jack Sinclair, VA3WPJ
Gord Singbeil, VA7YGS
Craig Skinner, VA3YBW
Ihor Skotar, VE3GXV
Curtis Smecher, VE7CAS
James Smith
D. Smith, VE3OUI
Brant Smith, VE3UME
Michael Snarr, VE3WNX
Emmett Snyder, VA3EHS
Bentley Sorsdahl, VE3FBX
William Sotomayor
Lily Spanjevic, VE3SJL
Patrick Speer, VE7PJS
Gary Spence, VE2GK
Ron Spencer, VA3RSX
Mark Spencer, VE7AFZ
Edward Spingola, VA3TPV
Luc St Jean
Mike Stafford, VE6MEX
Peter Stec, VE3TOT
Alan Steele, VA3STL
Al Stephens, VE3NXP
Bruce Stevenson, VA3BSR
Mark Stevenson, VE3EVF
Jeff Stewart, VA3WXM
David Stewart, VA4DJS
Ross Stockwell, VE3VVI
Patrick Stoddard, VA7EWK
Gary Stortz, VE7GSZ
Brock Strahan, VE7WYO
Edmund Strange, VE2MPP
Nathan Strongman, VY2OE
Brian Summers, VE7JKZ
Walter Szyc, VE3SYZ
Robert Taillon, VA3KTU
Hiroshi Takahashi, VA7LET
Raymond Tanguay, VE2RZQ
Ian Taylor, VE6IK
Brent Taylor, VY2HF
Richard Tervo, VE9AS
Marc H. Tessier
Jim Thiessen, VA3KV
Jeff Thomas Godden, VA7CVT
William Thompson, VE3WTK
Mark Tindall, VA3MWT
Doug Tompkins, VE3IDT
Steeve Tremblay, VA2YZF
Michelle Tribe, VA3PZA
Gerry Trueman, VE7GGT
Phil Turcotte, VA3UX
Ian Turnbull, VE7TGI
Robert Turzo, VA3RTU
Paul Twa, VE7KWA
William Underwood, VE1WLU
Michael Van Kuyk, VE7KPZ
John van Loenen, VA3FVL
Robert Vanderminnen, VA3RMV
Pierre Vella-Zarb, VE3VZP
Steven Verhoef, VE3WLX
Maurice-André Vigneault, VE3VIG
Stephen Vinokuroff, VE7WCZ
Earnest Vinson, VA3EWV
Stanley Voogt, VA3AAA
Marc Waddell, VE7MWG
Scott Waller, VE3OCB
Jeff Watkins, VE3OWT
Ryan Watson, VA3WTN
John Weale, VA7ZMR
James Webb, VE3WA
Andrew Webb, VE6EN
Joel Weder, VE6EI
Gerald Welch, VE6WCE
Rick Welsh, VA3ZYW
David Wendt, VE3EAC
K. Westerhof, VA3TBT
David Westerman, VE7DVQ
Ronald Whaley,
Derek White, VA3RFQ
Alfred Whitehead, VA3ZTB
Donald Whitty, VE9XX
Brice Wightman, VE3EDR
James Wilkins, VE7UVL
Caiden Willey, VA4YYZ
Stephen Williams, W0ML
Wayne Willis, VE5WFW
Alan Wilson, VE1AWW
Maureen Wilson, VE3MWL
Rodney (Rod) Wilson, VE3RXN
Calvin Winter, VE4AJ
Bruce Winter, VE7HBW
John Wiseman, VE7BVS
Richard Wodzianek, VA7RLW
Elizabeth Wolf, VE3AOA
Justin Wood, VA3BIU
Jeffrey Wood, VE6PAI
K. Scott Wood, VE1QD
Allen Wootton, VY1KX
Norman Woram, VE3NLW
Robert Wortman, VE9RLW
John Wowk, VA3OWK
Clayton Wozney, VA3WOZ
Bin Yuan, VA3BYC
Giancarlo Zaghini, VA3FGD
Tamara Zagustin, VE7ZTZ
Michael Zastre, VA7ZKE
John Janusz Zawierucha, VA3OKZ
John Zawierucha, VE3OKZ
Jeffrey Zeck, VE3ZCK
Mark Zepik, VE4XTZ
Mark Zidner, VE3ZID

"Kim's Convenience"

Spring Into Portable Season!

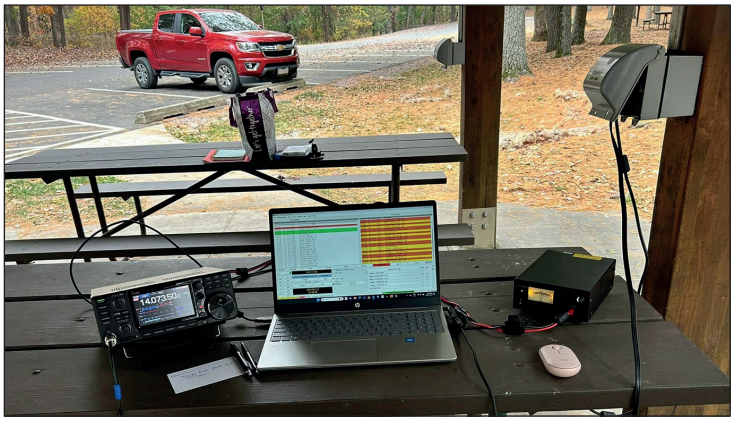
Kimberly Kostescu, VE3KKA
RAC Membership Officer
membership@rac.ca

Safety First for Amateur Radio Operators

As winter loosens its grip and the first hints of spring arrive, Amateur Radio operators everywhere begin to feel a familiar excitement. The smell of fresh air, the return of warmer temperatures, and longer daylight hours (Yay!) signals the start of the portable Amateur Radio operating season. Radios that have been tucked away for months are brought out again, antennas are unpacked, and Amateurs begin planning their summertime outdoor adventures.

Whether participating in Parks on the Air (POTA), climbing a summit for Summits on the Air (SOTA), or gathering with fellow Amateurs for Field Day, the opportunities to operate outdoors while working stations around the world are plentiful. Portable Amateur Radio activations combine the thrill of radio communication with the enjoyment of nature and exploration.

However, before heading out to the park, trail or campground, it is worth taking a moment to review a few important safety reminders. Even experienced Amateurs can overlook simple precautions, so a little preparation at the beginning of the season can prevent unnecessary stress and grief during what is often the busiest time for outdoor activity. You know the saying! "Better safe than sorry!"



Let's start with your equipment. If you have separate gear for your portable radio activations, and it has been packed away for several months, now is the time for a careful inspection.

- Take everything out of its storage case and set it up on a table in a garage, driveway, backyard or any space where you have room to spread out your gear.
- Check cables, power supplies, connectors, batteries and antennas.
- Assemble your station and give it a test run.
- Confirm that everything works as expected and that nothing was damaged or misplaced during storage. Discovering a faulty cable or dead battery at home is far better than discovering it at the top of a hill or deep inside a park several kilometres from your home QTH.

No successful outing happens without preparation! A few minutes spent checking equipment, planning and staying aware of potential hazards can make all the difference between a successful outing and one that fails to meet your expectations.

As part of your preparation, do not disregard the importance of a personal safety plan! Regardless of whether you are participating in an organized event or simply exploring a local trail with your handheld (HT), basic personal safety should always be part of the plan.

A few simple considerations can make a big difference:

- Always tell someone where you are going and how long you expect to be away.
- If possible, activate with a partner or friend.
- Stay aware of your surroundings.
- Keep water and snacks in your vehicle.
- Make sure your phone is fully charged before you leave. Keep it with you at all times!
- Plan for potential medical emergencies such as a diabetic attack or allergic reaction to a bee sting.
- Create a "what if" plan. What if I experience a fall while carrying my equipment to or from the site? What if an unexpected thunderstorm moves in?
- Trust your instincts – if a location feels unsafe, it probably is.

One of the most important factors to monitor when planning an outdoor Amateur Radio activation is the weather. Conditions can change quickly, especially during the spring and summer. Check forecasts frequently and watch for developing storms. If lightning is present in the area, pack up immediately and leave. Activating during a thunderstorm is never worth the risk!

Site selection is equally important. In the excitement of completing as many QSOs as possible, attention to surroundings is not always top priority. Before you head out, always research the park, trail or summit that you are planning to activate from. Consider if the site is more likely to be private or if there is an expectation that you will encounter others around you.

Choose antenna locations carefully. I may be aging myself here, but I always think of Bob Homme, the Friendly Giant!

Before inviting his viewers into his castle, he always said "look up, look waaaay up!" Before setting up any antenna, regardless of size, "look up, look way up!" – especially if that location is new to you.

Don't assume that because you may have been to that location before, nothing has changed. Look up! Overhead hazards such as power lines or tree branches must always be considered before raising any antenna.

Avoid placing ground wires or cables where someone might trip over them. Use caution flags if you have them. Ensure that your activating position allows you to keep an eye on both your equipment and nearby activity.

If you wear a headset while activating, be mindful of the fact that you may not hear advance warning sounds. Consider, if possible, using headsets only if you are activating within a group, where others can alert you if necessary. In addition, always ensure that you bring along essential supplies such as water, food, sunscreen, insect repellent and any medication – especially during long outdoor activations.

Programs like POTA and SOTA offer incredible opportunities for adventure, but they also present unique safety challenges. Many Amateur Radio operators participate alone, often in remote areas they are not familiar with, and during early morning hours or late at night – all of which introduce additional safety considerations.

Preparation, communication and awareness are essential so before going out on your first activation, learn from others! Ask more experienced POTA activators in your area what kind of safety precautions they have implemented. Ask if they have activated from that location before and if they have any advice they can pass on to you. Ask if you can tag along to watch and learn from them. I am confident that most would welcome the opportunity to mentor another up and coming POTA/SOTA activator!

It can also be beneficial to watch and learn from Amateur Radio operators who post their activations to social media such as YouTube. Oftentimes you will learn what *not* to do! But for the most part, you will pick up good tips and tricks. For example, in his YouTube video, Jim Reed, N4BFR, shares "real-world examples and lessons learned about antenna safety, power lines, and situational awareness while operating outdoors". It is worth watching: https://youtu.be/hr22QMRbgOs?si=WpG9kZlBGGgt6kHr

Neither POTA nor SOTA have a single, mandatory safety checklist, however, you will find that in each of their Activation Guides a reasonable emphasis is placed on personal safety and site set-up safety. Both organizations place the responsibility on each individual Amateur to assess their own risk level.

Another very popular and much anticipated outdoor summertime event is the annual Field Day. Amateur Radio clubs that participate in Field Day can receive an extra 100 points by appointing a Safety Officer! This individual – and/or their designated assistants – must remain onsite throughout the event and ensure that proper safety procedures are followed.

Responsibilities may include:

- Ensuring generators have sufficient fuel
- Confirming fire extinguishers and first aid kits are readily available
- Monitoring changing weather conditions
- Checking that temporary antennas are properly secured
- Identifying and marking potential tripping hazards
- Ensuring stations are properly grounded
- Ensuring a safe environment for all participants and guests
- In general, overseeing the event with a focus on overall safety

The Safety Officer also serves as the primary point of contact for police, medical personnel or other emergency responders if assistance is required. So the next time that you attend a Field Day event, ask to speak to the Safety Officer! Get to know the Safety Officer! This is the person you will report to should there be an emergency. If you are planning a future Field Day event, make sure to earn 100 points by appointing a Safety Officer.

Field Day is not just a club event and individual Amateurs can participate as a portable/mobile station. Many portable/mobile Field Day stations combine their activities with a POTA or SOTA activation. With attention hyper-focused on each

QSO, it remains imperative that a safety plan has been implemented before the beginning of each event.

Keep in mind that even when activating with other Amateurs, do not assume someone else has considered safety planning. Group members may wander off or leave without realizing someone else is still operating alone. Every Amateur should maintain their own safety awareness and ensure that, at minimum, a basic plan is in place.

Amateur Radio has always been about exploration, learning and community. Portable activations add an extra element of adventure, allowing Amateur Radio operators to combine their love of the hobby with travel, nature and discovery.

As a new portable season begins, we cannot talk about safety enough! Take the time to put safety first! Will every activation be without its trials? No! But by preparing a safety plan, you set out with the expectation that every activation, every contact, and every outdoor experience remains safe and enjoyable, not only for yourself but for everyone around you.

After all, the goal here is simple: get on the air, get outside, enjoy the adventure, and return home safe and ready for your next outing.

I am always looking for new ideas and topics to include in this column. If you have a topic you'd like to see covered, please write me at: membership@rac.ca.

– 73, Kimberly Kostescu, VE3KKA
BCRC (Border City Radio Club) VE3WHT
SPARC (Sun Parlour Amateur Radio Club) VE3SPR

Todd Bendtsen, VE5MX
ve5mx@sasktel.net

The Sports Page
The Canadian Contest Scene

Contest Results and Contest Calendar:
Stan Leschinsky, VE3TW

An Update on RAC Contests

Welcome back to the Sports Page!

I mentioned in the last column that there has been a change in the management of the RAC Contests. For the first time in 22 years, someone other than Bart Ritchie, VE5CPU and Sam Ferris, VE5SF, will oversee managing the RAC Canada Day Contest and the RAC Canada Winter Contest. I thought this would be a very good time to look back at some of the accomplishments and changes that have occurred under the watchful eye of these two long-term volunteers.

Bart and Sam took over the reins from Dave Shipman, VE7CFD/VA7AM, and for more than two decades have shepherded both contests through consistent growth, although the Canada Day participation is more variable when the contest falls during the week depending on the calendar.

In the early years Bart, VE5CPU, undertook to develop custom software to perform the checking of points and validation of multipliers. At the time upwards of two-thirds of logs received were scored incorrectly by the logging software used by participants.

Starting with the Canada Day Contest in 2021 RAC implemented a new online contest log submission system in which log checking moved from Excel databases to the latest version we see on the RAC Web Log System at contest.rac.ca. One of the time and cost savings that came from this was the emailing of certificates to category winners. With roughly 200 to 275 certificates generated and distributed for each contest there were notable savings over the traditional mailing costs, not to mention the time to do up each certificate.

How have the contests grown?

The contests have enjoyed a strong following that have shown a growth rate of more than 10% annually. The RAC Canada Day Contest in 2004 had 277 logs submitted, while in 2025 there were 505 logs reported, just down from the 10-year average of 643 logs.

CONTEST CALENDAR: MAY TO MID-JULY

Contest	Start	End
ARI International DX Contest	1200Z, May 2	1159Z, May 3
7th Area QSO Party	1300Z, May 2	0700Z, May 3
Indiana QSO Party	1600Z, May 2	0400Z, May 3
Delaware Qso Party	1700Z, May 2	2359Z, May 3
New England QSO Party	2000Z, May 2	2400Z, May 3
CQ-M International DX Contest	1200Z, May 9	1159Z, May 10
Canadian Prairies QSO Party	1700Z, May 9	0300Z, May 10
VOLTA WW RTTY Contest	1200Z, May 9	1200Z, May 10
His Majesty King of Spain Contest, CW	1200Z, May 16	1200Z, May 17
Arkansas QSO Party	1400Z, May 16	0200Z, May 17
CQ WW WPX Contest, CW	0000Z, May 30	2400Z, May 31
VK Shires Contest	0000Z, Jun 6	2359Z, Jun 6
Atlantic Canada QSO Party	1200Z, Jun 6	0200Z, Jun 7
Kentucky QSO Party	1300Z, Jun 6	0100Z, Jun 7
ARRL Inter. Digital Contest	1800Z, Jun 6	2400Z, Jun 7
Asia-Pacific Sprint, SSB	1100Z, Jun 13	1300Z, Jun 13
Portugal Day Contest	1200Z, Jun 13	1159Z, Jun 14
ARRL June VHF Contest	1800Z, Jun 13	0300Z, Jun 15
All Asian DX Contest, CW	0000Z, Jun 20	2400Z, Jun 21
Stew Perry Topband Challenge	1500Z, Jun 20	1500Z, Jun 21
West Virginia QSO Party	1600Z, Jun 20	0400Z, Jun 21
His Majesty King of Spain Contest, SSB	1200Z, Jun 27	1200Z, Jun 28
ARRL Field Day	1800Z, Jun 27	2100Z, Jun 28
RAC Canada Day Contest	0000Z, Jul 1	2359Z, Jul 1
Marconi Memorial HF Contest	1400Z, Jul 4	1400Z, Jul 5
IARU HF World Championship	1200Z, Jul 11	1200Z, Jul 12

– For other contests visit https://www.contestcalendar.com/ –

Meanwhile, in 2004 the RAC Candada Winter Contest had a total of 328 entries, compared to 805 in the 2025 contest, down from the long-term average of 920. Both examples point to the advantages of having a steady hand on the rudder of the contest management. I believe this is a great example of the commitment to giving back to the hobby which is still so prevalent in Amateur Radio today.

Many of us have only known one set of managers for the RAC Contests. Bart and Sam have certainly earned a well-deserved "atta boy" and our thanks for a job that was certainly well done!

So that brings us to a crossroads. Out with the old, in with the new as it was. I thought the short introduction of Jim Roberts, VE7ZO and Vlad Milutinovic, VE3JM in the last issue of TCA did a very good job of giving us the contest background of the pair taking over the reins of contest management.

I was curious what the vision for the new management team was and what plans they had in store for future contests. I sat down with them and had a conversation about plans to maintain consistent growth across both contests.

One common theme that we kept circling back to was promotion, and ways that other groups have used to increase awareness of the approaching contest. I think the guys have some really good ideas here and you should see some results of those efforts soon. With so many things competing for our time these days, it seems like a simple contest announcement and a recurring listing in the various contest calendars can sometimes get "lost in the noise".

One of Jim and Vlad's big changes that is happening right away is the addition of team contesting to the RAC contests. Those of you who have been following this column for a while know that this is right up my alley! Gather a few of your friends and put together a team, just like we do for the NAQP's and various other events.

The other topic that received its fair share of discussion was one that I covered in the last issue regarding sponsorship of plaques and various other ways to give back to the Amateur community. There is always room for more volunteers to come forward and acknowledge the accomplishments of the participants.

I look forward to seeing the path these two gentlemen chart for the RAC contests. They are our opportunity to "host" the world's contest community in a uniquely Canadian contest. Whether you're a big gun or a little pistol, it lets us showcase our abilities and to say hello to our many friends across the country and around the world. If that isn't the very definition of Amateur Radio, I don't know what it is.

With the calendar flipping over to May, we have a whole host of QSO Parties as you can see in the Contest Calendar (see page 47), including my "home" contest, the Canadian Prairies QSO Party. Early June incorporates a relative newcomer, the Atlantic Canada QSO Party, this will be the second time for this event. May also has the last of the year's WPX contests with the running of the CW version. The weekend after the ACQP, the VHF guys get their big one for the year with the June VHF Contest. At the end of the month, we have the highlight of the RAC contest calendar, the RAC Canada Day Contest, which will fall on a Wednesday this year.

Until next time – 73! *Todd, VE5MX*

TCA

NAQP WINTER, RTTY – February 2025

Call	QSOs	Mult	SEC	Category	Score
VE2FK	598	182	QC	SO(A)	108,836
VE6RST	539	187	AB	SO(A)	100,793
VA7XH	597	162	BC	SO	96,714
VE3WUE (W1UE)	429	201	ON	SO(A)	86,229
VA6RCN	501	160	AB	SO	80,160
VE7KAJ	342	138	BC	SO	47,196
VE3FH	269	113	ON	SO	30,397
VE3PJ	189	115	ON	SO(A)	21,735
VE3LVW	193	103	ON	SO(A)	19,879
VE5MX	159	117	SK	SO(A)	18,603
VA3PC	154	93	ON	SO	14,322
VE3MGY	114	62	ON	SO(A)	7,068
VE2EZD	100	52	QC	SO	5,200
VE3TM	95	54	ON	SO	5,130
VE2HEW	71	59	QC	SO(A)	4,189
VA3WW	77	44	ON	SO	3,388
VE2NMB	61	44	QC	SO(A)	2,684
VE3DZP	58	37	ON	SO	2,146
VA3IK	53	36	ON	SO(A)	1,908
VE3NE	30	21	ON	SO(A)	630
VE7BGP	27	23	BC	SO	621
VE9WH	18	18	NB	SO(A)	324
VE2GT	6	6	QC	SO	36
VY2LI	1	1	PE	SO	1

ARI INTERNATIONAL DX CONTEST – May 2025

Call	QSO	Mult	Category	Score
VE9CF	474	126	SOSSB HP	190,260
VA3TNM	95	71	SOCW HP	45,795
VE3DZ	54	46	SOCW LP	16,698
VO1GO	46	42	SOSSB LP	13,272
VE9CZ	55	37	SOSSB LP	11,507
VY2LI	39	30	SOCW LP	6,360
VE3TM	33	26	SOCW LP	5,330
VE1GN	16	16	SOCW LP	1,728
VE3TAZ	9	9	SOCW HP	747
VE2IAA	14	8	SOSSB LP	576
VA2AAB	8	7	SOSSB LP	462
VE3KTB	9	9	SOCW LP	414
VE9WRS	6	6	SOSSB LP	276
VE2GT	5	5	SOMIX HP	200

Checklog: VA3IK

7 QP – THE 7TH CALL AREA QSO PARTY – May 2025

Call	QSO	Mult	Category	Score
VE5MX	166	70	SOCW HP	34,860
VE7ZO	159	61	SOCW HP	29,097
VE3AQ	86	40	SOCW LP	10,320
VE9VIC	75	41	SOCW LP	9,225
VE3YT	69	42	SOCW HP	8,694
VA3FN	62	33	SOCW LP	6,138
VA2EBI	49	36	SOCW HP	5,292
VA6RCN	46	30	SOMIX LP	3,750
VE2FK	36	24	SOCW HP	2,592
VE3MGY	31	23	SOCW LP	2,139
VE3RGO	34	24	SOMIX LP	1,992
VE2GT	32	22	SOMIX HP	1,826
VE7IAD	27	22	SOMIX LP	1,716
VE3TM	32	17	SOCW LP	1,632
VE3KTB	27	16	SOMIX LP	1,248
VE3INE	22	17	SOCW LP	1,122
VA3TMV	18	17	SOMIX LP	850
VE7BGP	19	16	SOMIX LP	752
VE3HZ	16	12	SOMIX LP	552
VE3JZT	14	13	SOMIX LP	520
VA1MM	11	11	SOCW HP	363
VE9RLW	13	11	SOPH LP	286
VA3IJK	4	4	SOCW LP	48
VE3SIF	3	3	SOCW QRP	27

INDIANA QSO PARTY – May 2025

Call	QSO	Mult	Category	Score
VE3YT	62	47	SO HP	4,512
VE3HZ	50	43	SO LP	2,623
VE5MX	36	21	SO HP	1,512
VE2FK	29	24	SO HP	1,392
VE9VIC	35	18	SO LP	1,260
VE3RGO	28	27	SO LP	1,080
VE3TM	20	17	SO LP	680
VA3FN	19	16	SO LP	608
VE3MGY	17	14	SO LP	476
VA3IJK	12	12	SO LP	192
VE2GT	11	9	SO HP	144
VA3HYM	11	10	SO LP	140
VA6RCN	9	7	SO LP	91
VA1MM	7	5	SO HP	70
VE9RLW	9	7	SO LP	63
VE3INE	4	4	SO LP	32
VE3SIF	4	4	PORT	32
VE3SDF	6	5	SO HP	30
VE9CZ	5	5	SO LP	25
VA2KD	4	3	SO LP	12
VE3JZT	2	2	SO LP	6
VE7BGP	1	1	SO LP	2

NEW ENGLAND QSO PARTY – May 2025

Call	QSO	Mult	Category	Score
VE9VIC	182	51	SOAB LP	18,564
VA1MM	196	56	SOAB HP	18,368
VE3TG	170	57	SOAB LP	16,359
VE3TW	150	46	SOAB HP	12,236
VE2FK	125	40	SOAB HP	10,000
VE3MV	110	45	SOAB LP	9,900
VE7ZO	116	40	SOAB HP	9,280
VE3TM	92	42	SOAB LP	7,728
VA3FN	78	40	SOAB LP	6,240
VE3YT	90	39	SOAB HP	6,201
VE1ZAC	95	39	SOAB LP	6,084
CK3A (W1UE VE3RZ N2WQ)				
	80	36	MO	5,760
VA1RST	61	37	SOAB HP	3,996
VE3HZ	67	38	SOAB LP	3,800
VE5MX	60	28	SOAB HP	3,360
VE3RGO	45	32	SOAB LP	2,272
VE3MGY	40	27	SOAB LP	2,160
VE2GT	46	32	SOAB HP	1,984
VE9RLW	38	26	SOAB LP	988
VE3INE	18	14	SOAB LP	504
VA2EBI	15	13	SOAB HP	390
VA6RCN	13	12	SOAB LP	300
VA3HYM	13	7	SOAB LP	175
VE3KTB	10	9	SOAB LP	135
VE7BGP	7	6	SOAB LP	66
VE3JZT	2	2	SOAB LP	8
VA3IJK	2	2	SOAB LP	6
VE3SIF	1	1	SOAB QRP	2

Checklog: VE7IAD

CANADIAN PRAIRIES QSO PARTY – May 2025

Call	QSO	Mult	Category	Score
VE5MX	1217	147	SOHP	178,899
VE6TL	569	115	SOHP	65,435
VE4EA	428	96	SOHP	41,088
VE5SF	373	98	SOLP	36,554
VE6AO	417	74	MS	30,858
VE6PR	347	56	SOHP	19,432
VA6RCN	205	76	SOLP	15,580
VE4GV	222	68	SOHP	15,096
VA4HZ	186	71	SOLP	13,206
VE5CPU	151	66	SOHP	9,966
VE4XT	82	42	SOLP	3,444
VE6LB	75	35	SOLP	2,625
VA6RB	73	35	SOHP	2,555
VE6BBP	82	30	SOLP	2,460
VA6AN	36	21	SO Rover	756
VE3EJ	32	22	SOHP	704
VE7ZO	28	24	SOHP	672
VE3WG	31	19	SOLP	589
VE7XF	24	20	SOHP	480
VE3HZ	26	17	SOLP	442
VE7CV	25	16	SOLP	400
VE2NTT	24	15	SOHP	360
VE7KAJ	19	15	SOLP	285
VA3SP	19	14	SOLP	266
VE3VN	16	13	SOLP	208
VE3MV	15	13	SOLP	195
VE3IDT	13	14	SOLP	182
VE3YT	15	12	SOHP	180
VA3KRJ	13	7	SOLP	91
VE9RLW	9	9	SOLP	81
VE7JKZ	9	8	SOLP	72
VA3FN	8	7	SOLP	56
VE5WD	9	6	SOLP	54
VE6FT	8	6	SOHP	48
VA6DM	9	5	SOLP	45
VE4VT	7	6	SOHP	42
VE6JY	8	5	SOHP	40
VE2GT	7	5	SOHP	35
VA3IK	5	5	SOHP	25
VE7BGP	5	5	SOLP	25
VE3SIF	5	5	SOQRP	25
VE6MCL	5	4	SOLP	20
VE3JZT	5	4	SOHP	20
VE1RGO	5	4	SOLP	20
VA3HYM	4	5	SOLP	20
VA6BED	5	3	SOLP	15
VE6CSX	3	1	SOHP	3

Checklog: VA3PNL

HIS MAJESTY KING OF SPAIN CONTEST, CW – May 2025

Call	QSO	Mult	Category	Score
VE3NNT	148	83	SOABHP	18,758
VA2EBI	72	41	SOABHP	4,018
VE1GN	48	23	SO20	1,288
VA3FN	12	3	SO40	48

Checklog: VA3IK

CQ WW WPX CONTEST, CW – May 2025

Call	QSO	Mult	Category	Score
VA2WA (VA2KI VA2WA W5MOT WB2AA)				
	3,763	1,295	MS	16,328,655
CK3A (K1XM KQ1F N2WQ VA3WB VE3RZ W1UE)				
	4,000	1,294	M2	16,150,414
VY2TT	3,496	1,179	SOAB HP	12,778,002
VE3EJ	3,063	1,163	SOAB HP	11,353,206
VE3NNT	2,228	970	SOAB HP	7,166,360
VE7ZO	2,204	1,002	SOAB HP	6,873,720
VE5MX	2,331	1,078	SOAB HP	6,672,820
VE7JH	1,616	946	SO20 HP	3,810,488
VE3NE	1,477	766	SOAB HP(T)	3,604,796
VA3TNM	1,384	743	SOAB HP(T)	3,356,131
VE9ML (VE9BK VE9ML)				
	1,066	590	M2	2,352,920
VA3OKG	1,098	603	SOAB LP	2,275,722
VE3VN	1,022	643	SOAB HP	2,222,208
VE6BBP	1,219	702	SOAB HP	2,127,762
VE3YT	1,084	582	SOAB LP	2,080,650
VB7MAN (VA7OM VA7VJ VA7XB VE7LWW VE7NX VE7SRF VE7WO)				
		1,225	622	MS
1,833,656				
VG2Z (VA2CZ)	953	609	SOAB LP	1,653,435
VA3SB	990	526	SOAB HP	1,640,068
VE3TM	925	509	SOAB HP	1,481,190
VA7DX	1,102	595	SO15 HP	1,477,385
VE1ANF	791	583	SO20 LP	1,172,996
VE1GN	780	431	SOAB HP	1,032,676
VE6UM	804	539	SOAB HP	1,031,646
VA3AR	762	444	SOAB HP(T)	957,708
VA7ST	732	363	SOAB LP	775,005
VA1MM	464	352	SO40 HP	772,288
VA3FN	564	337	SOAB LP	620,754
VE7WO	632	383	SOAB HP	599,778
VA3SP	498	418	SO15 LP	535,040
VE3KOT	490	327	SOAB LP	533,664
VA3FH	534	302	SOAB HP(T)	476,556
VA7OM	477	377	SO20 HP	456,170
VE7XF	399	397	SOAB HP(T)	417,644
VE3KTB	384	285	SOAB LP	369,360
VE6KC	400	310	SOAB HP	341,620
VE7MR	281	234	SO40 HP	278,460
VE3AQ	389	285	SOAB LP	277,875
VE7IO	483	292	SOAB HP(T)	277,400
VE4EA	353	246	SOAB HP	271,830
VA4ADM	398	279	SO20 LP(T)	247,194
VC7A (VA7XU)	409	240	SOAB HP	240,960
VA2UR	301	239	SOAB HP	217,490
VO1HP	247	197	SOAB LP	211,184
VE3EY	282	214	SOAB LP(T)	180,188
VE1RSM	252	206	SOAB QRP	168,920
VA3TMV	257	210	SOAB LP	159,180
VE7JKZ	291	179	SOAB HP	158,057
VE6WR	286	218	SOAB LP	156,306
VA3GE	265	204	SOAB LP(C)	153,408
VE2FK	299	216	SOAB HP	152,928
VA7KK	241	214	SOAB HP	132,038
VE6WQ	263	216	SO15 HP(T)	128,952
VE2ZDX	227	188	SOAB LP	128,028
VE6RST	256	195	SOAB HP	126,165
VE7CV	226	190	SOAB HP	112,290
VE1ANU	219	210	SO15 LP	111,090
VA3RTG	241	184	SOAB LP	110,768
VA6WWW	245	191	SOAB LP(C)	109,634
VE2ZQ	222	198	SO20 LP	104,742
VE5UO	222	185	SOAB LP	99,530
VE3LC	213	148	SOAB LP	98,864
VA1TTY (AC8Y)	153	138	SOAB LP(C)	91,356
VE7IRU	202	162	SOAB HP	89,100
VY2OX	186	173	SO15 LP	88,922
VA7VK	237	136	SOAB HP	88,264
VE2IR	196	176	SOAB LP	81,664
VE3BXG	203	163	SOAB LP	80,359
VE3INE	195	143	SOAB LP (R)	76,362
VE3RGO	190	144	SOAB LP (R)	62,784
VE3TW	155	128	SOAB HP(T)	58,112
VE3NFN	169	137	SOAB LP(C)	57,814
VE2/UR7QC	179	153	SO15 LP	57,528
VA3CY	136	136	SOAB LP	54,944
VA7JC	180	130	SOAB HP	52,780
VE2EZD	146	139	SOAB HP	52,125
VA7UI	154	127	SOAB HP	42,545
VA3FF	146	117	SO10 LP	41,535
VA1CC	120	114	SOAB HP	36,138
VA3XOV	135	115	SOAB LP(T)	35,880
VA7YYW	120	117	SO20 LP(T)	34,749
VE3CM	128	97	SOAB HP	32,495
VE7IAD	162	120	SOAB LP	31,080
VA7RN	123	92	SOAB HP (C)	26,128
VA3HYM	116	104	SOAB LP (R)	23,608
VY2LI	96	86	SOAB LP(C)	22,532
VE3MGY	97	80	SOAB LP(T)	22,400
VO1KGZ	101	90	SOAB LP	21,780
VE3WA	97	90	SOAB LP	21,240
VE3JO	100	87	SOAB LP	20,358
VE2HEW	88	80	SOAB LP	20,160
VA3PM	105	94	SOAB LP	20,116
VE7AX	90	84	SOAB LP	19,908
VA3NB	83	71	SOAB HP	17,892
VE7UF	86	82	SO10 HP	17,302
VE7IMI	92	82	SOAB LP (R)	16,646
VA3IK	85	80	SOAB HP	16,480
VA3TAR	88	75	SOAB LP	15,525
VE6LB	86	73	SOAB LP(T)	12,483
VE3MDX	64	54	SOAB HP(T)	10,800
VE3GMZ	74	71	SO20 QRP	10,082
VE5SF	62	61	SOAB LP(T)	9,821
VE7BGP	77	70	SOAB LP	9,310
VA7RY	52	50	SO20 LP	7,500
VE3EIB	56	53	SOAB LP(T)	5,671
VE7AF	53	50	SO20 LP	5,650
VE2VY	54	50	SOAB HP	5,600
VA7MM	48	41	SOAB HP	5,576
VE3BR	40	40	SOAB LP(T)	4,720
VE3JZT	41	41	SOAB HP	4,633
VE6AO (UR3GU)	45	42	SO10 HP	4,620
VA3EC	42	41	SO20 QRP	4,100
VE7AP	48	39	SOAB QRP	3,744
VA3OOL	39	38	SOAB LP	3,458
VE4VT	37	36	SOAB HP	3,384
VA3IIF	43	41	SOAB QRP	3,116
VA1RST	23	23	SO80 HP	2,944
VE3HZ	30	30	SOAB LP	2,280
VE3TAZ	21	19	SO15 HP (C)	1,197
VE7PAE	23	20	SOAB LP	800
VA7VJ	16	16	SO20 LP	560
VE2QV	16	16	SOAB LP	544
VE3WG	20	20	SO20 LP	460
VE3NKL	9	9	SO20 QRP	243
VA3RKM	9	9	SO20 LP (C)	189
VA3RXB	5	5	SO20 LP	70
VE3OU*	3	3	SO40 LP	54
VA6RCN	5	3	SINGLE-OP LOW 160M	33
VE2KLW	2	2	SOAB LP	4

Checklog: VA2KFU VA2NW VE3KG VE3LDP VE7KAJ VE9HF VE9OA
Rookie (R): licensed less than 3 years
Classic (C): single op, no assistance, 1 radio, max 24 hours
TB-Wires(T): tribander for 10-20m and single-element wire antennas for 40-80m
Youth (Y): Operator 25 years old or less
* Score was received after the 5 day deadline and is not eligible for awards.

ATLANTIC QSO PARTY – June 2025

Call	QSO	Mult	Category	Score
VE9CF	1117	127	SOPH HP	156,425
VY2TT	846	164	SOMIX HP	148,090
VE9XX	442	128	SOMIX HP	64,140
VE1ZU (VE1GY VA1RST VA1PYE)				
	393	109	MOMIX HP	51,523
VO2RAC(VO2AC)				
	344	97	SOMIX HP	39,256
VO1GO	514	65	SOPH LP	39,109
VO1RAC (VO1OPVO1IV)	3			
	65	81	MOMIX HP	33,970
VY2OM	534	48	MOMIX HP	29,375
VY2OX	294	86	SOCW LP	27,965
VA1MM	278	75	SOMIX HP	25,631
VE9DXC	292	79	SOCW HP	25,429
VE9RAC (VE9MLVE9BK)				
	258	69	MOMIX LP	23,022
VE9CZ	252	57	SOPH LP	16,657
VE9RA	278	38	SOPH LP	13,071
VE1RPX	175	55	SOPH LP	11,410
VY2RAC	152	62	SOMIX LP	10,969
VE1OR	136	37	SOPH LP	5,712
VE1ARM	90	39	SOPH LP	3,875
VE1UW	105	30	MOPH LP	3,815
VE1BSD	122	29	SOPH LP	3,787
VE9TK	85	33	SOPH LP(M)	3,245
VE9TK	85	33	SOPH LP(M)	3,245
VE1BAB	79	32	SOCW LP	2,948
VE3EJ	50	42	SOMIX HP	2,170
VE3CT	58	35	SOMIX HP	2,125
VE3WG	55	35	SOMIX LP	2,005
VE3TW	48	31	SOMIX HP	1,543
VE3HZ	46	32	SOMIX LP	1,532
VE1FSM	49	14	SOPH LP	1,309
VE9QR	33	23	SOCW QRP	759
VE1ANU	33	17	SOCW LP	675
VA3PC	27	23	SOPH LP	641
VA3IDD	26	21	SOMIX LP	581
VE3YT	27	19	SOMIX HP	543
VE6BBP	27	17	SOMIX HP	494
VE3MV	24	18	SOMIX LP	472
VE3IDT	21	18	SOPH LP	398
VE5KS	19	17	SOMIXLP	348
VY2GF	24	3	SOPH LP	294
VA3TMV	19	13	SOMIX LP	267
VE5MX	17	14	SOMIX HP	263
VE7CV	15	14	SOMIX HP	235
VE3INE	14	14	SOMIX LP	226
VA3KRJ	14	13	SOMIX LP	202
VE2ZQ	13	12	SOMIX LP	181
VE3MYO	12	12	SOPH LP	154
VA3LML (VA3LML VE3KTB)				
	12	11	MOMIX LP	152
VA3PMH	13	10	SOPH LP	140
VE3BQ	12	10	SOPH LP	135
VA3PAF	11	9	SOMIX LP	124
VE3TM	9	9	SOCW HP	96
VE1AO	10	6	MOPH LP	95
VA3HYM	8	7	SOMIX LP	61
VA3IK	7	7	SOCW HP	59
VA3FN	6	6	SOCW LP	51
VA3PNL	6	6	SOPH LP	41
VE1DFC	10	0	SOPH LP	35
VE3JZT	7	5	SOMIX LP	35
VA3SP	4	4	SOCW LP	26
VE1JCS	10	0	SOMIX LP	25
VE2DM	5	4	SOPH LP	25
VA6RCN	5	5	SOMIX LP	25
VA3DBE	5	5	SOPH LP	25
VA1SIW	5	4	SOPH LP	20
VE9RLW	11	0	SOPH LP	15
VE2GT	2	2	SOPH HP	9
VE4KL	3	3	SOPH LP	9
VE1JS	1	1	SOPH HP	6
VE3RKS	1	1	SOPH LP	6
VE9WS	2	2	SOCW LP	4
VA3IIF	2	2	SOCW QRP	4
VA3EC	1	1	SOCW QRP	1

Checklog: VE1RAC VE0MMA VE0CMN

KENTUCKY QSO PARTY – June 2025

Call	QSO	Mult	Category	Score
VE3HZ	34	24	SOLP	2,852
VE3YT	17	12	SOHP	796
VE2FK	12	11	SOHP	564
VA3SP	8	7	SOLP	424
VE3INE	8	7	SOLP	424
VA6RCN	6	6	SOLP	408
VE3MV	6	6	SOLP	344
VA3FN	7	7	SOLP	296
VA3TMV	5	4	SOLP	256
VA3PMH	3	3	SOLP	218
VE1RAC	3	3	SOLP	218
VA3HYM	4	4	SOLP	164
VE2GT	4	4	SOHP	116
VE9RLW	1	1	SOLP	102

ARRL INTERNATIONAL DIGITAL CONTEST – June 2025

Call	QSO	Category	Score
VE5MX	163	SO1R LP	2,008
VA5KEN	299	SO1R LP	1,977
VE3MGY	295	SO2R LP	1,833
VE2EBK	110	SO1R LP8H	1,278
VE2DM	189	SO1R LP8H	1,179
VE3AVP	110	SO1R LP8H	732
VE3EID	78	SO1R LP8H	698
VE2PI	97	SO1R LP	565
VE1GN	33	SO1R LP8H	354
VE7BGP	46	SO1R LP	346
VE2GT	19	SO1R LP8H	100

PORTUGAL DAY CONTEST- June 2025

Call	QSO	Score
VE9CZ	35	915

ARRL VHF CONTEST – June 2025

Call	QSO	Mult	Category	Score
VE3WCC (VA3IQ VE2VAB VE2ZAZ VE3FN VE3IRR VE3JGL VE3XRA)				
	553	237	MO(U)	166,611
VE3OIL/R	353	169	Rover(C)	109,343
VE3VHF	301	160	SOLP	72,960
VE3KH	245	106	SO LP	61,798
VA2CY	264	165	SO 3B	42,900
VE5MX	246	135	SOHP	32,535
VA3IKE	193	134	SOHP	31,758
VE3SMA	212	97	SOLP	29,003
VE3LRL	249	117	SOHP	28,314
VA3ELE/R	208	51	Rover(C)	24,684
VE3WJ/R	85	93	Rover(C)	21,576
VA3HES	200	92	SOLP	21,528
VA3ECO	179	90	SOLP	16,020
VE7DAY	174	94	SOHP	15,792
VE2PN	162	92	SOHP	14,720
VE3RX	140	97	SOHP	13,192
VA2BN	115	78	SO 3B	9,048
VE6BMX (VE6UM)	113	71	SOHP	8,307
VE2NR/R (VE2DDZ)	103	63	Rover(C)	8,064
VA7FBS (VA7FC VA7USD)				
	137	48	MO LIMITED	6,432
VA6AN/R	111	47	Rover(C)	5,875
VE2CSM	105	55	SOLP	5,445

VE6WQ	97	56	SOHP	5,208
VE3KG	80	55	SO ANALOG HP	4,235
VE3KI	66	57	SOHP	3,648
VE3MDX	82	44	SOHP	3,608
VE4VT	76	48	SOHP	3,600
VE3MSC	75	39	SOLP	3,315
VE7KAJ	87	39	SO 3B	3,315
VA2YLB	63	49	SOLP	2,989
VE3OUO	53	43	SO 3B	2,236
VE3KOT	65	33	SOLP	2,112
*VE3KGC/R	43	31	Rover(C)	2,015
VE7DX	61	33	SOHP	2,013
VA2TXZ	51	37	SOLP	1,887
VE3TM	48	35	SO ANALOG 3B	1,680
VA6RCN (VE3RCN)	50	31	SO 3B	1,550
VA3RTG	49	33	SOLP	1,518
VE6RST	52	29	SO 3B	1,508
VA2WA	43	34	SOHP	1,462
VE3SST/R	36	16	Rover(C)	1,424
VE3ELL	40	27	SOHP	1,215
VO1HP	50	22	SOLP	1,100
VE3EJ	35	24	SO ANALOG 3B	840
VE3RWJ	84	7	SO FM	805
VA7RKM	41	18	SOHP	792
VE3SST	31	22	SOHP	748
VA7OTC/R	37	16	Limited Rover	736
VA3EON	35	19	SO 3B	684
VA7ST	28	20	SOLP	560
VE3RSA	35	18	SO 3B	558
VE2GT	27	22	SOHP	550
VE3UIQ	24	22	SO ANALOG 3B	506
VA3RMV	22	22	SO 3B	440
VE1CWJ	22	20	SO 3B	440
VE3WWN	23	22	SOLP	440
VA3WU	27	15	SOLP	360
VE3LFS	19	17	SO 3B	306
VE2NTT	19	16	SOLP	304
VE3ZY (VE3FFK)	21	14	SO ANALOG 3B	294
VA3CDD	13	9	SO ANALOG(P)	270
VE2JCW	18	15	SOHP	255
VE3AVP	18	9	SOLP	162
VE3EG	9	5	SO ANALOG(P)	145
VA3WW	11	10	SOHP	110
VE3HPC	5	3	SO ANALOG LP	60
VA3CW	8	7	SOHP	56
VA3TIC	10	8	SOHP	56
VA3GPH	19	2	SO FM	52
VA2XRS	12	2	SO FM	32
VA3SK	6	5	SO ANALOG HP	30
VA3RKM	7	4	SO 3B	28
VE3KDC	7	2	SO 3B	12
VA3WGN	9	1	SO ANALOG LP	8
VE3BR	5	3	SO 3B	6
VE3XKJ	3	3	SO ANALOG LP	6
VA3PC	2	2	SOHP	4
VA5KEN	2	2	SOLP	4
VE3AYR/M	1	1	SO FM	2
VE7BGP	2	1	SO 3B	2

* received after the deadline and/or are not eligible for awards

ALL ASIAN DX CONTEST, CW – June 2025

Call	QSOs	Category	Score
VE7ZO	206	SOAB HP	28,280
VA7DZ (VA7KH)	219	SO20 HP	20,088
VE7IO	147	SOAB HP	13,395
VA7OM	167	SO20 HP	13,035
VE5MX	138	SOAB HP	11,340
VE6BBP	116	SOAB HP	9,280
VA2EBI	86	SOAB HP	5,440
VE3CT	86	SOAB HP	5,418
VA7VK	55	SOAB HP	2,322
VA7RY	6	SO20 LP	2,226
VE6TL	99	SO20 HP	480
VE7BGP	18	SOAB HP	221
VE3BR	12	SO20 LP	132
VE1GN	24	SO20 HP	100
VA3TAZ	10	SO20 HP	25
VA3SP	5	SO20 LP	25
VE3CWU	5	SO20 LP	25
VA6WWW	2	SOAB HP	1

Checklog: VE3TM

STEW PERRY TOPBAND CHALLENGE – June 2025

CALL	QSO	Mult	Category	Score
VE3MGY	92	3	SOLP	374
VE6WZ	22	4	SOHP	140
VE7ZO	20	2	SOHP	87
VO1NA	3	2	SOLP	17

Checklog: VA3OKG VE3JZT

WEST VIRGINIA QSO PARTY – June 2025

Call	Category	Score
VE3HZ	SOLP	1,048
VA3HYM	SOLP	540
VO1GO	SOLP	430
VA3PMH	SOLP	270
VE2GT	SOHP	268
VE3INE	SOLP	198
VE1RGO	SOLP	191
VE3TW	SOHP	176
VA6RCN	SOLP	163
VE3JZT	SOLP	132
VE3SIF	QRP	132
VE3YT	SOHP	124
VE2FK	SOHP	32
VA3PNL	SOLP	4

HIS MAJESTY KING OF SPAIN CONTEST, SSB – June 2025

Call	QSO	Mult	Category	Score
VC9DT	436	166	SOAB HP	107,236
VE9CZ	62	54	SOAB LP	6,156
VE2GT	1	1	SO15 HP	1

MARCONI MEMORIAL CONTEST – July 2025

Call	QSO	Mult	Category	Score
VA3AR	207	65	SOAB HP	13,455
VE3NNT	191	67	SOAB HP	12,797
VE3CT	129	61	SOAB HP	7,869
VA3TNM	100	61	SOAB HP	6,100
VE2FK	50	25	SOAB HP	1,250
VE6BBP	46	18	SOSB 20	828
VA3IK	14	11	SOAB HP	154
VE3TW	9	8	SOAB HP	72
VE5GC	7	3	SOAB LP	21
VE7BGP	1	1	SOAB LP	1

IARU HF WORLD CHAMPIONSHIP – July 2025

Call	QSOs	Mult	Category	Score
VY2TT (K6LA VE3AT)				
	2,525	215	M2 LP	1,993,050
VE3JM	2,478	202	SOCW HP	1,890,114
VE7ZO	1,403	191	SOCW HP(U)	903,621
VE3TM	1,093	179	SOCW LP	693,625
VE7UF (VE7JH)				
	1,393	143	SOCW HP	666,666
VA3RAC (VA3RAC VE3KG)				
	1,127	142	IARU HQ	556,640
VE3NNT	989	161	SOCW HP(U)	549,332
VA2EBI	846	186	SOCW HP(U)	510,198
VE3NE	991	157	SOCW HP(U)	499,731
VE9CF	781	124	SOPH HP(U)	348,192
VA3SP	706	137	SOCW LP	310,853
VE2NTT	1,021	98	SOPH HP(U)	298,606
VA7DZ (VA7KH VA7VK)				
	827	116	MOST HP	296,728
VA1MM	695	112	SOCW HP(U)	271,488
VE3CT	494	137	SOCW HP(U)	235,640
VE3TW	586	125	SOMIX HP(U)	234,250
XM2I (VE2FK)				
	712	105	SOCW HP(U)	226,170
VE3YT	491	110	SOCW LP(U)	170,610
VA3TNM	386	124	SOCW HP(U)	169,136
VE7BC	536	102	SOMIX HP(U)	167,688
VE3MA	511	105	SOCW LP(U)	166,005
VE2CSM	585	83	SOPH HP(U)	151,226
VA3SB	554	79	SOCW HP(U)	148,757
VE3MV	426	116	SOCW LP(U)	147,900
VA3AR	535	75	SOCW HP	145,425
VE9CZ	468	93	SOPH LP	139,686
VE3MGY	509	93	SOCW LP(U)	134,478
VE3FH	441	93	SOCW LP	125,271
VA7ST	537	70	SOCW HP	115,080
VE3AQ	316	87	SOCW LP(U)	83,085
VA3IDD	216	92	SOPH LP(U)	63,848
VE4SG	373	51	SOPH HP	58,344
VE6SH/7 (VA7DXX VE6SH)				
	348	62	IARU Admin	57,660
VE1ANF	266	58	SOCW LP(U)	56,376
VE6RST	244	68	SOCW HP(U)	48,484
N2KHH/VY2	470	26	SOMIX HP(U)	43,160
VE2IAA	193	70	SOPH LP	41,090
VA3TMV	191	69	SOCW LP(U)	38,295
VY2OM (VY2BG VY2MG VY2OL VY2OM)				
	165	60	MOST HP	37,860
VA1CHP	132	90	SOCW LP(U)	35,190
VA3ZNQ	149	69	SOPH HP	31,257
VE3INE	160	64	SOCW LP	30,208
VE1ANU	206	47	SOCW LP(U)	28,905
VE3RHQ (VE3FFK VE3TLY)				
	179	53	M2 LP	27,295
VE3KP	137	60	SOCW HP	25,620
VE6BBP	214	37	SOCW HP	25,049
VA6WWW	145	53	SOCW LP	24,804
VE6KC	129	52	SOCW HP(U)	21,476
VY0ERC (VE3KTB)	148	44	SOMIX HP(U)	20,416
VE3EY	158	33	SOCW HP(U)	19,635
VA3FN	110	50	SOCW LP	14,850
VE3RGO	90	56	SOPH LP(U)	14,224
VA3PM	122	38	SOCW LP(U)	13,072
VE1GN	93	45	SOCW HP(U)	12,960
VY2GF	103	32	SOPH LP(U)	11,712
VE6AO (VA6CTC VE6AID VE6CCL)				
	212	19	MOST HP	11,495
VE3OZO	104	33	SOCW LP(U)	11,022
VE6TL	77	47	SOCW HP(U)	10,904
VE3RVZ	84	50	SOPH LP	10,800
VE7CV	97	36	SOMIX LP	10,188
VE9RLW	85	37	SOPH LP	10,175
VE3GJP	83	39	SOPH LP	8,658
VE3UZ	96	31	SOMIX HP	8,556
VA7XU	144	20	SOMIX HP	8,480
VE9KK	143	18	SOCW LP	7,614
VE5GC	139	14	SOCW LP	5,740
VE2QV	68	30	SOCW LP(U)	5,160
VA3OOL	65	23	SOCW LP	4,807
VE2ZDX	57	27	SOMIX LP	4,563
VA2UR	45	29	SOPH HP(U)	3,886
VE3UIQ	47	20	SOPH LP(U)	3,840
VA3UG	45	30	SOPH HP(U)	3,840
VE3YV	44	26	IARU R2	3,432
VA3CK	47	25	SOCW HP	3,225
VA3CBU	36	29	SOPH LP	3,045
VA6DM	55	16	SOCW LP	2,192
VE7IO	37	24	SOCW HP(U)	2,184
VE7BGP	41	19	SOMIX LP	2,071
VA7MM (VA7MM VE7CNF)				
	37	15	MOST HP	1,710
VE4IM	30	18	SOCW LP	1,584
VE9WRS	27	25	SOPH LP	1,525
VA3LML	32	16	SOPH LP	1,472
VE6LB	40	14	SOCW LP	1,456
VE9OA	28	17	SOCW LP	1,428
VE2/UR7QC	48	10	SOCW LP	1,400
VE3UZX	26	17	SOPH LP(U)	1,224
VA6RCN/VA5	47	9	SOMIX LP	1,170
VE3EDE	23	18	SOCW QRP	900
VA1TTY	21	20	SOCW LP(U)	840
VA7KBM	19	11	SOPH LP	627
VE6CLG	16	14	SOPH HP(U)	616
VA3PC	20	13	SOPH LP(U)	572
VE2GT	22	9	SOPH LP	522
VE3GMZ	18	11	SOCW QRP	517
VE3BFU	19	9	SOMIX QRP(U)	441
VE2NDB	12	12	SOPH LP	288
VE3CWU	20	5	SOCW LP(U)	280
VE7KAJ	13	6	SOCW LP(U)	234
VA7NRC	13	7	SOPH LP	217
VE4NOL	5	4	SOPH LP	68
VA3PNL	2	2	SOPH LP	16

Checklog: VA7RFX

Community and Disaster Services

Jason Tremblay, VE3JXT
Community Services Officer
community@rac.ca

The RAC Field Organization was established 30 years ago to assist communities by supporting local clubs or organizations.

Radio Amateurs of Canada has always been interested in local activities across the country.

Through the reports in the Community and Disaster Services and the Club Corner and Coming Events columns in TCA magazine and on the website, we are pleased to assist community groups, clubs and disaster service groups in sharing information about what is taking place in their region.

Message from Community Services Officer

Strengthening Resilience Through Amateur Radio

Amateur Radio and community resilience are inseparable allies in ensuring the safety of Canadians from coast to coast to coast.

As the RAC Community Services Officer, I am excited to share this message reflecting our commitment to enhancing emergency preparedness within our communities.

This message underlines the vital role Amateur Radio operators play during crises and introduces our vision for the Auxiliary Communications Service (AuxComm) as we look forward to impactful milestones in our expanding national program.

Emergency Preparedness Week: May 3 – 9

Each year, Emergency Preparedness Week (EP Week) in Canada, typically observed in early May, serves as a national reminder that preparedness is a shared responsibility. Coordinated by Public Safety Canada EP Week encourages individuals, families, organizations and communities to take proactive steps toward building resilience before a disaster strikes.

For Amateur Radio operators, EP Week transcends mere awareness. It is a rallying call to action and an opportunity for our community to showcase the irreplaceable value of radio communications when conventional infrastructure fails.

EP Week also fosters strong relationships among radio clubs, municipal emergency management offices and community organizations. Activities ranging from public demonstrations to participation in local preparedness fairs, allow our community to shine and emphasize the critical importance of preparedness.

Have you and your club reached out to your community to take part in events or made plans to introduce Amateur Radio to them?

We wholeheartedly encourage every RAC member to actively engage with their local communities during this week, reinforcing the message:

"Preparedness matters, and Amateur Radio is a vital part of the solution."

Learn more at: https://tinyurl.com/y3r46pvd

Amateur Radio & Emergency Preparedness: A Historic Partnership

Emergency preparedness has been fundamental to Amateur Radio since its inception. From the early days of wireless communication, Amateurs have been at the forefront, providing essential communications support when all other systems fail. This legacy not only continues today but thrives with renewed strength. Amateur Radio operators possess a unique arsenal of skills and tools essential for effective emergency management. Unlike commercial communication systems, Amateur Radio operates independently of public infrastructure.

With the ability to establish communications using battery power, solar panels or generators, Amateurs remain remarkably resilient amid power outages and infrastructure damage. From high-frequency (HF) radio that connects continents to local VHF and UHF networks, our range and versatility are unparalleled by any other volunteer communications resource.

However, it is the dedication and expertise of our operators that truly make Amateur Radio an irreplaceable asset. These individuals are not just volunteers, they are trained, certified and passionate contributors who invest countless hours honing their skills and enhancing their stations. Many hold advanced certifications and participate in regular exercises to maintain equipment ready for deployment at a moment's notice. In collaboration with modern emergency management frameworks, these operators form an organized, professional auxiliary communications service, poised to support municipalities, provinces and federal agencies. If you are one of those individuals who pride themselves on giving back, whether through church groups or community-based organizations, I encourage you to get involved.

The Emergency Readiness and Capacity Building (ERaCB) Fund

At the heart of RAC's commitment to Auxiliary Communications Service and community emergency preparedness here in Ontario is the Emergency Readiness and Capacity Building (ERaCB) Fund. Understanding the barriers individual clubs and operators face – such as equipment costs, training materials and exercise coordination – this fund has been established to

provide targeted, meaningful financial support from the province so organizations like RAC can build and support programs within emergency management.

The ERaCB Fund backs a diverse array of capacity-building initiatives. Eligible projects may include procuring portable emergency communications equipment, developing training programs, executing emergency exercises, and integrating Auxiliary Communications Service volunteers into formal emergency management partnerships. By investing in these foundational elements, we are ensuring that Canadian communities can rely on well-equipped, well-trained and well-connected auxiliary communications when it matters most.

This fund reflects a vital philosophy: building emergency preparedness capacity requires sustained, long-term investment – not just enthusiasm. We are immensely grateful for the support that sustains this fund, and we are dedicated to directing every dollar towards tangible improvements in community readiness here in Ontario. Together, let's harness the power of Amateur Radio to enhance our emergency preparedness efforts. Your involvement and commitment can make a monumental difference in safeguarding our communities.

As in the past few years, detailed plans were submitted to the province and I am pleased to report that RAC has been approved for ERaCB funds for 2026/2027. We will continue with train individuals and exercise teams across the province. One requirement this year is a mandatory joint operational exercise with our Ontario Corp partners. This will be a welcome extension to our January exercise.

AuxComm Exercise: Sudbury

In January 2026, Radio Amateurs of Canada organized a successful ACS Exercise in Sudbury, Ontario which brought together Amateurs from across the region to test their ability to establish and maintain emergency communications under simulated disaster conditions.

The event represented one of the first formal, structured deployments under the AuxComm framework and marked a significant milestone for the ACS program. Participants practised deploying portable stations, establishing nets across multiple frequency bands, integrating communications with a simulated Emergency Operations Centre, and managing message traffic using standardized formats consistent with Incident Command System (ICS) principles. The exercise was carefully planned, professionally executed and – most importantly – it worked.

Among the key outcomes of the Sudbury exercise were a clearer understanding of local deployment challenges, the identification of equipment gaps that could be addressed through ERaCB funding, and the strengthening of relationships between ACS volunteers and local emergency management partners. Participants came away with greater confidence in their abilities and a stronger sense of shared purpose.

The event and delivered exactly the kind of real-world experience and lessons learned that our program needs to grow and proved that ACS is not just a concept on paper – it is a real, operational capability that Canadian communities can rely on. For more information about the event please see the article on page 49 of the March/April 2026 TCA and read the reports in the Section News on pages 55-58 of this issue.

Fall 2026 Multi-Agency Exercise

Building on the success of the Sudbury exercise in January, we are thrilled to announce that our next ACS will be held this fall and it represents a major step forward for the program. This will be our first multi-agency exercise conducted with Ontario Corp partners, marking a genuinely historic milestone in the evolution of ACS as a recognized auxiliary service within Canada's broader emergency management ecosystem.

Multi-agency exercises are considered the gold standard in emergency preparedness training. They require participating organizations to coordinate across different chains of command, communicate using interoperable systems, and resolve the inevitable friction that arises when diverse teams work together under simulated pressure.

Working with Ontario Corp partners introduces a new level of complexity and opportunity. These organizations possess deep experience in emergency operations, structured command hierarchies, and demanding performance standards. For ACS volunteers, integrating into a multi-agency exercise with such partners requires being able to meet these standards. The training and preparation that have gone into building the ACS program over the past years have been designed with exactly this kind of moment in mind.

Beyond the operational value of the exercise, the end result will include a detailed report describing lessons learned which will significantly benefit the ACS program. In addition, the multi-agency collaboration will introduce an understanding of interoperability, document procedures for integrating ACS into multi-agency operations, build relationships that will support future collaboration, and demonstrate to emergency management partners across Ontario and Canada that Amateur Radio volunteers are a serious, capable and professional auxiliary resource. We look forward to building on this foundation for many years to come.

Final Thoughts

Recently, John Brunstien, VE7JBX and Doug Steventon, VE7EPT, from Vancouver, British Columbia submitted an article on an interesting topic: "Do Amateur Radio operators in Canada Actually Do Emergency Communications?" We have talked about this here in my column for years now, mainly because of the developments in Ontario. You can find the article on page 53.

This is a reminder that as we look ahead here in Ontario and across Canada BC, Yukon, Nova Scotia, and Quebec all have programs in which amateur operators have either taken part in emergency exercises or are now being sought after to assist in emergency Communications. The lessons learned during the development of the Auxiliary Communications Service lay the foundation for this program to grow nationally.

– 73, Jason Tremblay, VE3JXT

Do Amateur Radio Operators in Canada Actually Do EmComm?

John Brunstein, VE7JBX and Doug Steventon, VE7EPT

Recently, John, VE7JB, was monitoring a popular local 2 metre repeater in the Vancouver, British Columbia area when they overheard a QSO which posed an interesting question which might be of general interest.

To paraphrase, the operators were conversing about whether Amateurs in Canada "actually do any EmComm (Emergency Communications)", as opposed to just talking about it as a potential use and justification for its existence.

Having been an active Amateur Radio operator for some years in both urban and rural settings, two thoughts immediately came to mind. First, it's a valid question to those operators (and non-Amateurs) who don't have exposure to how, where and at what frequency (no pun intended) actual EmComm activities occur with the assistance of fellow Amateurs.

Second, the answer is a definite "yes, they do!", but in our experience, the form this takes and how often it occurs is quite different between urban and rural settings. This article will attempt to address the first of these points by considering the factors driving this difference, and providing just a few examples of how and where Canadian Amateurs have provided EmComm support in "real life" to illuminate the second point.

The examples highlighted here are based on our personal involvement so we'll be drawing from a limited pool in "VE7-land" only – with the Greater Vancouver Area (GVA) as the urban example, and the Bulkley Valley in northwestern BC as the rural example. These serve as illustrations for a pattern which we're confident however plays out across the rest of the country.

When you consider a highly urbanized centre like the GVA, you've got a lot of population but also a lot of supporting infrastructure. The area is large enough to have dedicated communications resources (such as mountaintop repeaters) owned and maintained by formal Search and Rescue (SAR) organizations or other official entities – Fire Departments, Canadian Armed Forces and Provincial Emergency Program Emergency Operations Centres (EOC) come to mind. Basically, in the event of most "small scale" emergencies – that is, ones involving at most a handful of people and not a widespread problem – there really isn't a lot of call for Amateur Radio operator involvement because there are already people and resources to handle it.

It's worthwhile to note, however, that even in this communications resource-rich environment, there's still some reliance on Amateur infrastructure. For example, the Lower Mainland EOCs are all set up to use at least one major Amateur repeater – such as VE7RPT, primarily on Mt. Seymour with very wide coverage and multiple dispersed voting receivers in multiple sites – as an emergency connection hub. This is routinely tested every month and Amateurs are encouraged to check into these tests as well.

When a small earthquake hit the Pacific Northwest in February 2025, there was an immediate request put out to suppress idle chatter on this repeater and use it to provide updates and allow for any emergency systems coordination.

In most situations, in urban settings there is not a lot of Amateur Radio involvement in day-to-day emergencies – it mostly consists of readiness exercises and planning for how and when to use Amateurs and their infrastructure in the event of something large enough to overwhelm specialized EmComm capacity.

Now let's shift gears and consider a rural setting. In this case, we'll use the area around the Bulkley Valley as our setting. Here, communities can be far apart from one another, communications infrastructure is limited, and many of the designated emergency support organizations (Fire Departments, Search and Rescue) are crewed by volunteers and systems with limited budgets.

If there's a missing hunter, child, downed aircraft or anything of that nature – chances are there's no existing governmental or commercial terrestrial communications coverage over the area of interest. Fortunately though, thanks to years of dedication, work and coordination by Amateur operators and their clubs representing the Bulkley Valley and adjacent regions – Central Cariboo, Prince George and Terrace/Kitimat – there's a vast and largely interconnected network of Amateur repeaters covering not just major roadways, but vast distances – sometimes hundreds of kilometres – into remote, sparsely populated areas.

When an emergency on a small scale – such as a missing person – occurs in this setting, Amateur Radio operators and systems often get requested to help for two key reasons. First, even in the few places where official communications systems are available, the volunteer emergency response crews can appreciate additional communications volunteers in the form of Amateurs to help staff and operate non-Amateur communications hubs. Secondly, in many cases, Amateur repeaters are the only viable terrestrial communications link in an area, and assistance from the Amateur community in accessing this infrastructure is a vital first step in establishing a response.

Three memorable examples from recent memory serve to highlight these sorts of activities.

Perhaps the most spooky was in 2019 when two young men went on a killing spree in northern BC. Initially, it wasn't known if they were victims or suspects after their burned out truck was found along the highway near the Stikine River, close by to the killing of a university botanist.

Bulkley Valley Search and Rescue were tasked with assisting in the search on either side of the highway and along the river. Given the lack of any cellphone service or even Royal Canadian Mounted Police (RCMP) repeater coverage in the area, the Bulkley Valley Amateur Radio Society (BVARS) was asked to provide communications assistance to two club members headed north. We assisted in operating the field-HQ SAR radios, provided an HF Winlink email link to the Emergency Coordination Centre in

Victoria, and relayed communications from field crews to HQ due to terrain limitations. We even pitched in providing shuttle rides for an RCMP Tactical team!

The second example was in 2023. A large wildfire prompted evacuation orders for the remote community of Fort Babine, and surrounding cabins and fishing camps. We again assisted Bulkley Valley SAR who were tasked with notifying the public of the order. We set up base at Fort Babine and, using our Amateur linked Shoulder Mountain repeater, relayed messages from the field crews to the managers in Smithers. We also set up Starlink Internet including Voice over Internet Protocol (VoIP) in/out of a SAR base radio.

Our third example is the September 2024 search for a missing 6-year old girl of the Skin Tyee First Nation on the Southside of Francois Lake. This turned into the largest ground search in BC history. Again two members of the Bulkley Valley Amateur Radio Society were tasked with assisting radio communications. With the scale of the search, there were two field HQs.

For three days we manned the primary search HQ radios for all field crew check-ins, and relayed messages on a separate channel between search managers. An amateur crossband repeater was also used for a day to relay back from a difficult field site. Once again we deployed Starlink at the primary HQ. Hope of success was waning, and a scale down was being considered when late in the third day – as a cold rain front was moving in – we took the call from a field crew that she was found and being brought out! It took a few seconds to sink in as we relayed the message. The response of the local community to all who helped in the search was overwhelming.

Outside formal tasks, our close tie with SAR keeps us busy. We installed and maintain a SAR repeater near Telkwa that can be linked into our Amateur network (under our control) if needed. Additionally, we provide VoIP access to it for managers to direct field operations. We help maintain their radio equipment and deliver the radio portion of their Basic Amateur Radio training course.

We also host a Winlink RMS gateway station (VE7RBH) which receives much practise and occasionally real, emergency use primarily from stations in southern BC and the US west coast.

Finally, one last example, this time from an urban setting but one which illustrates that real life EmComm activities can occur when and where you least expect it.

Last summer, John, VE7JB was sitting at home late at night in East Vancouver with a radio monitoring a multimode linked radio network – SkyHubLink, based mostly out of Colorado.

A distress call suddenly came over the system from a camper in a remote part of Kansas who had just had a lightning strike start a forest fire. Their only option for communications was Amateur Radio to a distant FM analog repeater, luckily attached to SkyHubLink. John, VE7JB, was able to place a telephone call from Vancouver to a small Sheriff's department in Kansas, relaying the location and situation information. They were highly appreciative, even following up with additional thanks the following day.

Coming full circle: were the fellows on our opening QSO right? Well, unless you're in the know, particularly in an urban setting, it may seem like Canadian Amateurs don't really do much "real EmComm". The truth though is there actually is a constant need for this capability even when there's no significant widespread emergencies – and when (not if!) one of those does occur, these needs will occur in urban settings as much or more than rural. You don't necessarily know you need it *until* you do!

Taking part in exercises – like the Great British Columbia ShakeOut, Winlink Wednesday, and the monthly EOC system checks help to hone skills and validate equipment function and message passing protocols for when they need to work under less than ideal conditions. However, Canadian Amateur Radio involvement in EmComm isn't just something we talk about, it actually happens.

It could happen to you!

John Brunstein, VE7JBX

After a career as biochemist in academia , healthcare, and industry, John, VE7JBX retired northward into the lakeside village of Granisle, BC where he now spends his time enjoying Amateur Radio, gardening, fishing, photography, cooking or anything else which piques his interest. He currently serves on the Board for BVARS, and his CW slowly improves.

Doug Steventon, VE7EPT

A retired wildlife biologist, Doug, VE7EPT, has been pursuing Amateur Radio in Smithers, BC since 1985. He is a founding member and Director of the Bulkley Valley Amateur Radio Society (BVARS), repeater system technician, and volunteer Emergency Radio Coordinator for Northwest BC. The BVARS serves Amateurs and provides volunteer communications services over a wide area of northwest and central BC.

TCA

RAC will be at Dayton Hamvention

Radio Amateurs of Canada will once again be operating a booth at the Dayton Hamvention, the world's largest Amateur Radio gathering, on May 15, 16 and 17 at the Greene County Fairgrounds and Expo Center.

The theme at Hamvention 2026 is "Radio Adventure".

The RAC booth 2504 will once again be in Building 2 along with the International Amateur Radio Union, the American Radio Relay League and other national organizations.

We are looking for volunteers to help us staff the booth during the event.

So come visit the RAC booth 2504 and talk to your RAC volunteers. Better yet why not contact us and volunteer to work at the booth.

RAC Headquarters at racgm@rac.ca or by telephone at 1-877-273-8304.

Dayton: https://hamvention.org/

RAC Community and Disaster Services Reports

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Ontario North (ONN)
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Saskatchewan (SK)
Vacant

Territories (TER)
(Northwest Territories/ Nunavut)
Vacant

Yukon (YT)
Scott Sheppard, VY1CO
Box 21186
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yukon@fieldorg.rac.ca

BRITISH COLUMBIA:

Acting SM: Vacant
A/SM: David Musselwhite, VY1XY
A/SM: Neil King, VA7DX
STM: Vacant
SEC: Acting Al Munnik, VA7MP
OOC: Dennis Wight, VE7IJJ
ACC: Karla Wakefield, VA7KJW
CEC: Gursimran Gill, VA7GUR
SBM: Fred Orsetti, VE7IO

January-February SM Report:

January and February are quiet months in the area, with lots of planning beginning for the summer activities.

A quick trip up to Kelowna gave an opportunity to meet with some of the member of the Orchard City Amateur Radio Club.

Winter Field Day garnered some on-air activity, but plans are being made for World Amateur Radio Day in April and summer *OTA activities

If you have an item of interest to include in this Section Report, please send it to Acting Section Manager Bill Gipps, VE7XS, at british.columbia@fieldorg.rac.ca and to the TCA Editor at tcamag@yahoo.ca.

Public Service Honour Roll

January: VA7MPG 160; VE7BEF 110; VE7GN 110; VE7WJ 84

February: VA7MPG 150; VE7BEF 135; VE7GN 110

YUKON:

SM: Scott Sheppard, VY1CO
ASM: Yuuri Daiku, VY1YU

January-February SM Report:

Yukon Amateurs Pamela, VY1PJB, Michael, VY1MGS, George, VY1GP, Richard, VY1RSS and Wendy, VY1WJS, facilitated the RAC HamStudy Basic Radio Course and eight students met several times/month as they progressed through the material.

The Question Bank revisions have been well received to date by both students and instructors alike. A shout-out to Dave, VE3KG, for his work in refining the course examination material.

This year marks the Yukon Amateur Radio Association's (YARA) 50th Anniversary in the territory. Among the adventures, YARA has been called to Carmacks to deal with alleged aliens, provided territorial emergency communication support in crises, and fostered several budding Amateurs by offering regular classes.

Historian Linnéa Rowlatt, VY1YLR, is rooting through broken-down cardboard boxes and hidden online sites to compile and catalogue all the old papers and online archives available. The goal is to produce a history of YARA which will include a broad account of the organization and the individuals who make it special. Watch for more information in the autumn!

– SM Scott Sheppard, VY1CO

ALBERTA:

SM: Ron Pettigrew, VE6RWP
SEC: Brian vies, VE6CKC
STM: Don Moman, VE6JY
OO: Don Moman, VE6JY
albertasm@winlink.org

January-February SM Report:

ACS Calgary – John Jardine, VE6ONO

On Wednesday January 14, ACS Calgary (formerly Calgary ARES) held an in-person meeting to discuss the Auxiliary Communications Service in Calgary and how the organization may be requested to assist.

We discussed three scenarios:

1) Local: Assist City of Calgary during an emergency event by providing radio operators, potentially using our own equipment.

2) Regional: Assist the Province of Alberta during an emergency event by providing radio operators, potentially using our own equipment.

3) Mixed: Assist with event communications such as MS fundraising events, car rallies and sports events like 5K runs.

All three of the above scenarios would require periodic drills to confirm not only our own abilities and readiness, but demonstrate that we integrate into Emergency Management Agencies and events quickly and competently so that we are always seen as an asset.

– SM Ron Pettigrew, VE6RWP

MANITOBA:

SM: Jan Schippers, VE4JS
SEC: Vacant
DECs: Jeff Dovyak, VE4MBQ (Capital Region and CanWarn); Gord Snarr, VE4GLS (South-East Central Region / South-West Region); Wayne Warren, VE4WR (North Region and Special Projects); Vacant (North-Eastern Region); Vacant (North-West Region). EC Ron Wlliscroft, VE4QE (Selkirk and District) Bill Boskwick, VE4BOZ for RM of Grey, RM of Dufferin & Town of Carman. EC Jason Coombe, VE4JYC, for Brokenhead ARES. EC Grant Delaney, VA4GD for LGD of Pinawa and surrounding municipalities. Vacant (Portage la Prairie area)

January-February SM Report:

Winnipeg ARES – Jeff Dovyak, VE4MBQ

Our January General Meeting was an online only Business Meeting.
Our February meeting was an in-person event as we had a guest speaker, Steven Harrison, VE4FTS, who provided a report on the Klondike Derby.

Traffic Totals:
January: 4
February: 4

ONTARIO – GOLDEN HORSESHOE:

SM: Ian Clarke, VA3KCP
ontario.golden.horseshoe@fieldorg.rac.ca

January-February SM Report:

York Region Amateur Radio Club – Rob Schuetze, VE3XBI

This winter, our EmComm group also took the opportunity to test our equipment and operating capabilities in truly challenging conditions. Present were Mike Crabtree, VA3MCT, Barry Byrom, VA3LLT and Rob Schuetze, VE3XBI.

On one of the coldest days in Ontario, with temperatures reaching –26°C, we compared the performance of our communications trailer against a portable pop-up shelter equipped with a diesel heater. The results were eye-opening.

Heating the trailer with its heat pump proved difficult, and a portable electric heater offered little help. Computer screens froze, and even starting the generator required chipping ice away first. Meanwhile, the portable ice hut with the diesel heater performed exceptionally well – in fact, it became so warm inside that jackets were no longer needed.

Exercises like this are invaluable because they show us what works, what does not, and where improvements are needed. It is one thing to assume equipment will perform in severe winter conditions; it is another to prove it in the field. By testing in real-world environments, we are better prepared for the day when reliable communications may be needed most.

Between community events, emergency preparedness outreach, stakeholder meetings, training courses, and practical field testing, 2026 is off to a strong start. We look forward to another active year of service, learning, and readiness.

– 73, SM Ian Clarke, VA3KCP

ONTARIO NORTH:

SM: Allan (Al) Boyd, VE3AJB
ontario.north@fieldorg.rac.ca
STM: Patrick (Pat) Dopson, VE3HZQ
dopsonp@vianet.ca
SEC: Stiig Larsen, VE3LBX
slarsen@vianet.ca
OBM: Paul Caccamo, VA3PC
va3pc@ciinet.org
Web: http://ontario.racares.ca

January-February SM Report:

I want to thank everyone who attended the ACS Comms Expo & Exercise which was held from January 23 to 25 at the Dr. Edgar Leclair Arena in Azilda in the Sudbury area. The event featured interactive workshops and a large-scale emergency communications exercise called Operation Claybelt Response.

We could have not chosen a colder weekend, but emergencies happen in all types of weather. It was a great exercise and Emergency Management Ontario (EMO) was on hand to observe.

I want to convey my gratitude to Pat Dopson, VE3HZQ as ONN Section Traffic Manager. Pat has been a long-time CW operator and has managed thousands of message traffic over many decades. He has asked to step down for personal reasons and I am deeply sorry to see him go, but he has done his due diligence many times over. I wish Pat all the best and know he would step in if an emergency should arise.

I am looking for a new Section Traffic Manager so please contact me if you know of anyone who is interested in this position.

Albany District

Sault Ste Marie –

It has been a busy few months for the Algoma Amateur Radio Club and activities are increasing. Many of our members are working with the new FT2 mode and seeing what opportunities that will bring to servicing the emergency support needs of our area.

Neighbouring communities are increasing their interest and coordination with the Sault Ste Marie team to bolster their emergency communications plans – both as a review as to what their communities should set up for equipment, but also how to have members available to operate when the need arises.

Amethyst District

Thunder Bay –
EC Woody Linton, VE3JJA

On January 24, several Northwest Ontario EOC stations participated in a Simulated Emergency Test (SET) called Operation Claybelt which was held in the Sudbury area. Although there was no radio contact with Sudbury there was a good net established in Northwestern Ontario and standing by.

Use of Vara Chat during all nets has given station 100% reliable communications. Work continues on the standard operating procedures for comms during different propagation scenarios and also to have the Vara FM system work between the hospital and the Emergency Operations Centre (EOC).

Atikokan – EC Warren Paulson, VE3FYN

The VA3EOA Winlink RMS station was down for a while, but I have upgraded it and it is back online. The Town Hall station remains ready. All worked well in the Atikokan area in February.

Fort Frances – EC Rod Davis, VE3RYD

On January 24, Fort Frances participated in Exercise Clay Belt and it went very well on our end in Northwestern Ontario.
We are continuing to do our exercises on Wednesday nights.

Dryden – EC Bob Ernewein, VE3YDN

On January 24, Dryden participated in Exercise Clay Belt using our dedicated EMO facility at the City of Dryden Fire Service Hall-1. Along with the other NWO EMO sites and Emergency Coordinators, under the direction of Woody Linton, VE3JJA, Amethyst District Emergency Coordinator, we donned our winter garb to deal with the –35C temperatures, energized our EMO facility and were able to measure a good degree of success.

Kenora – EC Chris Bigelow, VA3ECO

On January 24, Kenora and several Northwest Ontario EOC stations participated in Operation Claybelt. Unfortunately, there were no HF stations in Sudbury to communicate with in our operating window, but we had good "local" HF communications, both voice and digital, from Manitoba, Kenora, Sioux Narrows, Dryden, Fort Frances and Thunder Bay – about 650 kilometres total distance.After the event in January further interest has been shown by the Kenora Fire and Emergency personnel in what we are doing.

Sioux-Narrows – Nestor Falls – EC Woody Linton, VE3JJA

On January 24, during Exercise Clay Belt Voice Comms were done on the Bravo Frequency as well as our digital VARA Chat on the same assignment. All Emergency Operation Centres reported in. All stations did very well and stuck to very disciplined radio procedure.

In February, there were several instances of severe cold with temperatures in the –30s and several power outages occurred in the Sioux Narrows/Nestor Falls area. Thankfully, backup power was activated and there were no calls as a result of these outages.

Killarney District

Manitoulin Island and North Shore – EC Allan Boyd, VE3AJB

The Manitoulin Amateur Radio Club has been active over the winter preparing for the contests this spring including Field Day, Canada Day and the MARC Annual Picnic which is being held on Sunday, July 5 July 26 at noon at Low Island Park located in Little Current. Everyone is welcome to attend as it is a potluck picnic. Please contact me for further details.

We are also working in conjunction with the local Municipality and the Manitoulin Expositor in hosting an Emergency Services Day in June which will include a display of emergency service equipment to the public.

DECs Reporting:
VA3s: PC
VE3s: JJA

ECs reporting:
VA3s: ECO
VE3s: AJB, ETE, JJA, MXJ, RYD, SNA, TGI, YDN and ZDR

ONTARIO EAST:

SM: Michael Hickey, VE3IPC
Email: ontario.east@fieldorg.rac.ca
SEC: Michael Hickey, VE3IPC
STM: Vacant
OBM: Paul Caccamo, VA3PC, va3pc@ciinet.org
Web: http://wp.rac.ca/ares/

January-February SM Report:

I am pleased to provide some excellent reports despite the winter months normally having less activity. Now is a great time to participate in outdoors activities including Parks On The Air, Summits On The Air and the upcoming Field Day. It is always great to take notes and photos for future TCA reports and club reports. Great experiences are awaiting for you.

ARES EmComm Group Leadership Reports:

Submitted by the Prescott-Russell ARES Group Coordinator Lance Peterson, VA3LP

The Prescott-Russell (PR) ARES Group Coordinator Lance Peterson, VA3LP, reports that the PR-ARES Group and the PRARC members held their Winter Field Day on the weekend of January 23-24 at the Larose Forest reception centre near Bourget. This is a great place to hold the event as it is warm inside with all the amenities.

Outside, we constructed several antennas, two End-Feds, a Vertical, and a telescopic mast with a 2m/70cm vertical. As this was a registered park, we also did a POTA activation and made 427 QSOs with a multiplier of 8 for a total score of 3,456. We also sent out a few emails via Winlink through the VE3PRV Gateway. It was a nice balmy –15C for the daytime and colder at night. The cold provided a few challenges for putting up and taking down the antennas. A great time was had by all.

The following operators were involved: Mickael, VA3PAI, Chad, VE3OUO, Joel, VA3WBK, Jim, VA3KV, Harry, VA3ZAK, Hunter, VA3HWF, Jason, VE3PRY, Earnest, VA3EWV and Lance, VA3LP.

In February, the Auxiliary Communications System (ACS) Ottawa Group held several meetings in preparation for upcoming training and exercises. This included a review of the exercise in December, identifying areas for improvement and first steps in developing training related to those areas. Some areas that were prioritized for training were: Winlink, Safety, Net Operations and Net Control, as well as mapping and GPS. Training will be provided to prepare for an exercise in June.

On February 21 and 22, CSO Jason Tremblay, VE3JXT and Jack Benes, VE3ZPW, travelled to Embrun to provide ACS AUX-C training to 19 highly motivated Amateurs. Utilizing several scenarios, we were guided through various performance criteria that an ACS member would be required to function in a real EmComm situation. As these criteria are based on the Canadian ICS standards, it provided real-world perspective on support to government and non-governmental organizations during emergency events. A plus during the exercises was the use of a EXRSIM, a program that provides a way to develop and execute scenario based exercises that specifically uses the ICS standards. We would like to thank the Municipality of Russell for the use of their council chambers to provide this training.

The following were trainees on the course: Aurele, VE3RDI, Bob, VE3MP, Stephen, VA3ISE, Eric, VA3DXP, Paul, VE3PRB, Monique, VA3NTB, David, VA3UDA, Mike, VA3MGZ, Reg, VE3AWN, Don, VA3ZDH, Alan, VA3IAH, Alan, VE3VTT, Randy, VE3AX, Mickael, VA3PAI, Jason, VE3PRY, Ted, VE3TD, Paul, VE3PSV, Jocelyn, VE3JCT, and GC and organizer Lance, VA3LP. Stuart, VE3SMF, attended to provide photographic evidence.

Submitted by Renfrew County West ARES Group Coordinator Bob Howard, VE3YX

The Renfrew GC Bob Howard, VE3YX, reports that on the evening of February 28, the RCW-ARES group provided Comms for the Pembroke Coldest Night Of the Year (CNOY) walk to raise funds for "The Grind" which provides services for homeless people.

Yvonne, VE3RYA, operated the base station at Algonquin College while Dwight, VE3ZLO, Linda, VA3LDA and GC Bob, VE3YX, were all mobile patrolling, looking for anyone that needed assistance.

Fred, VA3FPB, coordinated between ARES and the CNOY officials.

Submitted by the Stormont, Dundas & Glengarry Group Coordinator Earle DePass, VE3IMP

The SD&G RAC (ACS) ARES GC Earle DePass, VE3IMP, reports that the members of the Seaway Valley Amateur Radio Club (SVARC) new Executive are as follows:

President: Earnest Vinson, VA3EWV
Vice-President: Dan Cullen, VE3DIT
Treasurer: Roger Bélanger, VA3GBV
Secretary: Earle DePass, VE3IMP
Ex-Officio Members are Doug Pearson, VE3HTR (Technical Director) and Jim Richardson, VE3AFV (Newsletter Editor).

On January 17, several Amateurs built 6 metre antennas at the home of Peter, VE3TOT, in Alexandria.

The SVARC held Fox Hunts on January 11 and February 8 as well as a meeting on February 25.

Almonte Amateur Radio Club (AARC)

The Almonte ARC's Repeater Manager Phil, VE3HOA, reports that their repeater on 147.270 MHz was moved from the Almonte hospital site due to interference issues. It is now operating in Corkery with call sign VA3ARE, 147.270 MHz+, 100 Hz CTCSS. Visit the AARC website for more information.

Submitted by the Lanark North Leeds ARES Group Secretary Richard Buckley, VE3YSH

The LNL-ARES Group Secretary Richard Buckley, VE3YSH, reports that the group participated in the EmComm II course which was held online on January 18.

The 14 Amateurs who attended engaged in a tabletop exercise to address an emergency scenario involving a tornado, with participants assigned to breakout rooms to develop communication and coordination plans.

The session concluded with discussions about disaster response exercises, the role of Amateur Radio operators in emergencies, and updates to Standard Operating Procedures, while also touching on the importance of training in the Incident Management System (IMS) and the potential for collaboration with the Canadian Forces Affiliated Radio Service (CFARS).

The subject discussed were: Amateur Radio Interoperability Goals; Table Top Exercise: Operation Sudden Impact; VHF Emergency Communications Planning; Canadian Forces Affiliated Radio Service (CFARS); Emergency Communications and Interoperability; Amateur Radio in Emergency Response; and SOP Updates and Training Initiatives.

A round-table discussion was then held in which participants reflected on the most valuable and challenging aspects of the presentation, emphasizing the importance of understanding one's role and staying within it during emergencies. The course ended with a fitting tribute to John Christensen, VA3IAO, a long-time member of Almonte AARC who recently passed away.

Districts Reporting:

Eastern Ontario and Severn

GCs (ECs) or Assistants Reporting:

VE3YX, VA3LP, VE3IMP, VE3HOA and VE3YSH

OBS Reporting: VE3IQZ

RAC FIELD ORGANIZATION REPORTS

National Traffic System (NTS) Net Reports

Net (Manager)	Sessions	QNI	QTC
January 2026			
Alberta ARES (VE6JY)	4	366	19
APSN (VE6JY)	31	2095	7
AAN (VE7GBO)	31	3751	0
BCEN (VE7OM)	29	122	11
BCYTN (VE7WJ)	31	482	56
CECA (VE7DTO)	4	85	35
MEPN (VE4JS)	31	882	1
MMWXN (VA4GD)	31	468	1
MSMN (VE4AJ)	21	422	0
RAM (VE4HK)	9	279	0
Saturday (VE4AJ)	5	121	0
February 2026:			
Alberta ARES (VE6JY)	4	266	16
APSN (VE6JY)	28	2287	11
AAN (VE7GBO)	28	3588	0
BCEN (VE7OM)	28	435	8
BCYTN (VE7WJ)	28	381	56
CECA (VE7DTO)	4	80	15
MEPN (VE4JS)	28	875	1
MMWXN (VA4GD)	28	443	1
MSMN (VE4AJ)	20	465	0
RAM (VE4HK)	8	248	0
Saturday (VE4AJ)	4	101	0

PRINCE EDWARD ISLAND

SM Bill McMaster, VY2WM – prince.edward.island@fieldorg.rac.ca

January-February SM Report:

During the winter, the Amateur Radio community relies on the continued participation in our various nets. The weekday morning Wake-Up net takes place on a number of linked repeaters throughout the Maritimes. The Wednesday evening 2m net and the 2m Virtual Breakfast nets are hosted on the VE1CRA repeater.

There is also the 80m Rag Chew net that happens every Thursday night on 3727 kHz. This net typically sees check-ins from New Brunswick, Nova Scotia as well as PEI. The Summerside ARC has continued to hold several 2m nets on local repeaters as well as a once-a-month 2m simplex net.

Summerside Amateur Radio Club

Joe Nicholson, VY2JTN, the Outreach Officer for the Summerside Club (SPARC), reports that Ken McCormick, VY2RU, is keeping Amateurs updated on DX info at www.summersidearc.com. Monthly nets take place every Sunday evening at 8 pm, every third Tuesday of the month for a repeater net using 4 repeaters, and on the fourth Tuesday of every month at 7 pm SPARC has a simplex net.

Doug Silliker, VY2DS, participated in Winter Field Day and made 459 contacts – his personal best. Congratulations Doug.

On January 31, the club held a Fox Hunt at the Summerside rotary library for the Chipmunks ages 4-5.

Summerside ARC held its simplex net and contacts were made with three stations in Nova Scotia and New Brunswick.

Charlottetown ARC held their simplex net and Summerside Amateurs were able to contact two stations in Charlottetown and area.

SPARC President Aaron Boeker, VY2EK, made progress on talks about the Emergency Management Office (EMO) and Amateur operators to help in emergencies. The club held its meeting on Wednesday, February 11 and discussions included the EMO, repeaters, nets and the Basic Amateur Radio Course.

Joe, VY2JTN, had the first online meeting with the Terry Fox Foundation and they were happy and excited to work with the amateur community, so that we can do activations for them. They are looking at other ways that we can support each other. We are all excited to see where else this cooperation will go.

– 73, Bill McMaster, VY2WM

RAC Challenge | Operating Awards Update

RAC Awards Manager – Ante Laurijssen, VA2BBW

Greetings from the Nation's Capital Region. The 2026 edition of our RAC Challenge has been busy, with our regulars and other non-regulars, showing us that Amateur Radio doesn't always have to be a comfortable affair.

Sure, January and February aren't usually the busiest of months, but I'm always happy to see that there are some brave souls out there willing to go out year-round, and honing their skills for the summer months when they will really be cooking!

So let's take a look together at how the sixth edition (yes, six years already!) of our RAC Challenge has started.

January 2026 Results

Six provinces were represented in January, from British Columbia to Nova Scotia, with 12 Amateurs taking part. While POTA and WWFF parks are still the most popular source of multipliers, we had one ARLHS lighthouse and one IOTA island activation, while Paul Mower, VA6MPM, activated three SOTA summits and Eric, VA2EO, activated two.

January also saw the return of a few previously very active participants, with James, VE3JLN, making his first appearance since ending his monster of a run last August, and Pierre, VE2GT, returning after being absent from the scoreboard since July of 2025. I'm sure Pierre has been very busy since taking on the role of incoming QSL Manager for the province of Quebec, and I must say he has been doing an awesome job!

Russell, VE3OIL, has also popped up again, with his call sign last showing up back in January of last year. Hopefully we'll get to see more from these operators!

RAC Operating Awards: January-February

What an amazing start to the year for our awesome Operating Awards program! In the first two months of 2026, I granted almost half the number of awards I did for the entirety of 2025.

Not only that, but we have achieved a few notable milestones including the presentation of the 250th Canadaward since RAC took the award over from the Canadian Amateur Radio Federation (CARF) back in 1993 – it was issued to Jeff Ryan, K0RM, as shown in the photo on the right. Congratulations Jeff!

Canadaward

Number	Call sign	Name	Date	Band	Mode
251-L	VE4XTZ	Mark Zepik	2026-02-28	Basic	Digital
250-L	K0RM	Jeff Ryan	2026-02-16	Basic	Digital
249-L	VE7CZ	Zachariah Crow	2026-02-09	Basic	Digital
248-L	W5HPA	Gary Wilson	2026-01-23	Basic	Digital
247-L	VE3LC	Norman Rashleigh	2026-01-21	Basic	Mixed

I also issued the 25th Canadian Century Club award to Gabor Horvath, VE7JH, which I find very encouraging. When I introduced it in the fall of 2023 to replace the previous Trans-Canada Award I wasn't sure how much traction it would get, but the numbers speak for themselves!

Canadian Century Club

Number	Call sign	Name	Date
025-L	VE7JH	Gabor Horvath	2026-02-28
024-L	VE4XTZ	Mark Zepik	2026-02-28
023-L	VA4PVK	Sergiy Pavlyk	2026-02-10
022-L	KD2RSF	Charles Rush	2026-01-15
021-L	VE3JZT	Jeff Zimmerman	2026-01-12
020-L	VA3CBU	G. Bradley Yhard	2026-01-04

It looks like the same is also true for the Worked All North America Award, which is just a couple shy of 25 issued so far, with five given out in January and February alone. And with the recent success of the Desecheo Island DXpedition, I wonder if I might be seeing some more applications for the Silver and Gold levels in the coming months?

Worked All North America

Number	Call sign	Name	Date	Level	Band	Mode
023-L	VE4XTZ	Mark Zepik	2026-02-28	Bronze	Basic	Mixed
022-L	VA3PVK	Sergiy Pavlyk	2026-02-10	Bronze	Basic	Mixed
021-L	VA6CNC	Michael Stagg	2026-01-10	Silver	15m	Mixed
020-L	VE6RST	Max Stagg	2026-01-10	Gold	20m	Mixed
019-L	VA3CBU	G. Bradley Yhard	2026-01-24	Bronze	Basic	Phone

Showing no signs of ever slowing down, our friend Earnest, VA3EWV, took first place, followed by John, VA3WP, and Phil, VE1MDF. The full results are shown below.

RAC Challenge Top 5: January 2025		
Place	**Name/Call**	**Points**
1st	Earnest Vinson, VA3EWV	84,300
2nd	John McGrath, VA3WP	22,908
3rd	Phil Cummings, VE1MDF	18,501
4th	Stuart Crawford, VE9CF	13,032
5th	Dino Moriello, VA6DM	10,550

February 2026 Results

February was another pretty good month despite the challenges of winter. There were 12 participants across five provinces from Nova Scotia to Alberta. Again, Paul, VA6MPM, and Eric, VA2EO, were kings of the hills with their SOTA summits, while Peter, VE9CZ, Chris, VE3CBK, and Earnest VA3EWV, chose ARLHS lighthouses instead.

Looking at the results, I think we are in for another close and very heated race this year, with the usual suspects already positioning themselves strongly and making a stand. But as we've seen many a time, one big push by someone can change the outcome of the entire year. I think this will be fun to watch.

I'd also like to welcome Randy, VE3JO, who submitted his first report this month. It's always nice to see that this program is still attracting new participants. Here are the results for February:

RAC Challenge Top 5: February 2025		
Place	**Name/Call**	**Points**
1st	Earnest Vinson, VA3EWV	67,590
2nd	Peter Siemsen, VE9CZ	50,139
3rd	Stuart Crawford, VE9CF	29,889
4th	Dino Moriello, VA6DM	4,617
5th	Eric Gosselin, VA2EO	3,888

Worked All RAC

Number	Call sign	Name	Date	Band	Mode
88-L	VE3LC	Norm Rashleigh	2026-01-21	20m	Mixed

But please don't forget about our very fun Worked All RAC Award, which has been around since 1999. The latest one was awarded to Norm Rashleigh, VE3LC, who received our 88th WARAC certificate. I would love to see us get to 100 by the end of the year, after the next two RAC contests. Norm also earned the Canadaward in January as shown in the photo on the right. Congratulations Norm!

And what about the IARU Worked All Continents Award? That's also off to a great start, as I've already issued five awards – the same number I issued from August to December last year.

IARU Worked All Continents

Call sign	Name	Date	Band	Mode
VE4XTZ	Mark Zepik	2026-02-28	20m	Digital
VE3SMA	Steve Kavanagh	2026-02-16	80m	CW
VE3ICH	Jeff Tranter	2026-02-06	17m	Digital
VA3PVK	Sergiy Pavlik	2026-01-11	20m	Digital
VA3WP	John F. McGrath	2026-01-05	Basic	Mixed

So don't hesitate to challenge yourselves and take a look at the rules and information for all of our current operating awards at https://rac.ca/rac-operating-awards.

"Coureurs des bois" Award

The Coureur des Bois Award is based on the number of reports submitted to the RAC Challenge, with the Bronze level awarded for 25 submitted activations, the Silver level for 50, and the ultimate Gold level for 100.

Sometimes we (I) make mistakes and things fall through the cracks. So don't hesitate to get in touch with me if you think I may have missed one of your achievements, which is what John, VA3WP, did.

Despite him being one of the most active participants in our RAC Challenge from the start, he told me he had never received the Coureur des Bois award!

I looked through back issues of TCA, trying to find if maybe he had been mentioned but just never got the certificates, or maybe got it under his three-letter call sign, but it truly seems we made a glaring omission.

So it is with a sincere apology that I present John McGrath, VA3WP, with all three levels of the coveted Coureur des Bois award. Congratulations!

Coureur des Bois: January 2026
Bronze/Silver/Gold: 100 Activations
John McGrath, VA3WP

In addition, one of our most active Quebecois participants, Eric Lefebvre, VA2IDX, has finally earned his gold level Coureur des Bois award after starting his participation in 2025. We always appreciate his reports and pictures and look forward to hearing more from him in 2026.

Coureur des Bois: February 2026
Gold: 100 Activations
Eric Lefebvre, VA2IDX

You can find out more about the Coureur des Bois Award at: https://rac.ca/coureur-des-bois.

RAC Challenge Reports

I always love to read what our participants are up to, and I think it helps inspire others as well to get started. Let's see what our friends were up to in the first two months of 2026.

Matthew Borghese, VA7USD

January 3-4 – "I spent a day roaming around Vancouver Island for the POTA New Year's activator and hunter awards.

Hiked to the top of a small hill, only to see endless fog.

It was great to get out and see an old friend as well. Logged more than a hundred QSOs from seven unique parks. Great way to start the year!"

Stuart Crawford, VE9CF

February 18 – "Today I had the pleasure of operating portable from a truly special spot – the CF-101 Voodoo Fighter Memorial at the entrance to the former CFB Chatham military base in Miramichi, New Brunswick. As someone who loves activating military locations around the province, this was a real highlight for me. This memorial is part of the New Brunswick Military Award program and its location number is NB-0005.

The weather was a treat for February – our first genuinely nice day in a while – with the temperature finally climbing above freezing. Despite some snow flurries drifting in and out, I set up my station and settled in for four hours of radio fun. The bands were in great shape and I ended up logging 624 QSOs, with an even split between DX and North America on both 20m and 15m."

February 28 – "I recently had the profound privilege of activating the Afghanistan Memorial in Bouctouche, New Brunswick, as part of the New Brunswick Military History Sites On The Air program. Setting up right next to the JK Irving Centre at the town's newly developed Veterans Park, the airwaves were incredibly kind to me. I was absolutely thrilled to work a total of 483 stations during the activation! While the pileups and the sheer volume of contacts made for an unforgettable day on the radio, operating from this specific site added a deep sense of reverence and reflection to the event."

Earnest Vinson, VA3EWV –

January 1 – "I'm happy to state that I'm back in action after being out the last two months of 2025 with a surgery that prevented me from driving the past 12 weeks. Today was just getting the gear organized and trying to motivate myself to get back out. I'm out here chugging away and this year I will be doing more CW activations as I am now enrolled in CW training with CWOPS."

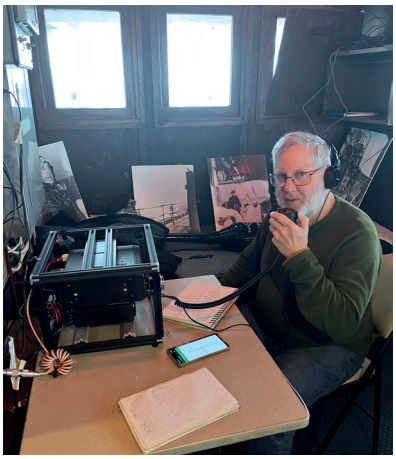
January 5 – "Today was a snow day :) so we headed back to CA-6514 Battle of Crysler's Farm National Historic Site. I brought my grandson Knox and he had fun taking his snow glider up and down the big hill. He then sat in the car with me and I worked CW, FT8 and SSB. He is in quite a few of my videos and while we ran FT8 we jammed out to my Ham Radio Songs. We will definitely be going back to the big hill and doing more activations with all of this good snow."

Sounds like Earnest had a nice time with his grandson. Who ever said Amateur Radio isn't a family activity?

January 24-25 – "I participated in Winter Field Day with another club. We had loads of fun and I got to use Winlink and sent and receive emails for the first time over FM VHF."

February 22 – "I went on a wee rove today and got to also try my new antenna setup that my friend VE3PRY crafted for me and that my POTA buddy VA3HWF helped me test and get that antenna into operation. It worked like a charm and the SWR was 'as low as you can go'. I even put it on the hood of my car and made contacts. The band conditions said 'Fair' all over but again I wound up with over 200 QSOs working SSB, FT4 and FT8. Thanks again for all the folks in my life that help me have so much radio fun."

Phil Cummings, VE1MDF



I also received a photo from Phil Cummings, VE1MDF, who was operating from the *HMCS Sackville*.

It was a Flower-class corvette that served in the Royal Canadian Navy and later a civilian research vessel – and is now a museum ship located in Halifax, Nova Scotia.

Operating from the ship, experienced Amateur Radio operators help keep the Sackville's communications legacy alive by making contacts across Canada and around the globe.

So there you have it folks! A nice start to the RAC Challenge this year, with many more stories to come. And don't forget to go out and make your own stories and operate away from home. For more information about the RAC Challenge, its rules and results and FAQs, please visit https://rac.ca/rac-challenge.

– 73, Ante Laurijssen, VA2BBW

Coming Events | Hamfests

Please visit the RAC Events Database for other events and for more information about the events listed below: https://hambone.ca/rac/events/upcoming.php

Rideau Lakes Hamfest
Lanark North Leeds ARES
Date: Saturday, May 2
Place: Smiths Falls, ON; Smiths Falls Civitan Club, 12468 Highway 15 North.
Time: Vendors: 7 am; Public 8 am to noon.
Cost: Tables $15; Public $5 (includes 1 door prize ticket / person). Under age 16 admitted free.
Talk-in: 147.210 MHz, tone 151.4,
Info: Tables contact ve3rlr@gmail.com.
W: https://www.ve3rlr.ca/p/httpsgoo.html

2026 Spring Swap Meet
Maple Ridge Amateur Radio Club
Date: Sunday, May 3
Place: Pitt Meadows, BC; Heritage Hall, 12460 Harris Road.
Time: Vendors 7:30 am; Breakfast 8 am; Earlybird 8:30 am; Public: 9 am.
Cost: Vendor & Table $25; Public $10; Earlybird $20; Breakfast $7.
Talk-in: VE7RMR 146.800 (-) Tone 156.7
Info: Reserve a table swapmeet@mrarc.ca
W: https://www.mrarc.net/swap-meet/

10th Simcoe County Hamfest
Simcoe County Amateur Radio Enthusiasts
Date: Saturday, May 9.
Place: Barrie, ON; Grenfel Comunity Centre, 1989 Sunnidale Road (Simcoe County Road 40).
Time: Vendors 8 am; Public 9 am.
Cost: Vendors: $5. Public: Free admission. Donations go to Grenfel Community Centre building fund and SCARE radio. Vendors this is a tailgate event. Bring your own tables and chairs.
Talk-in: 146.55 MHz Simplex
Info: Contact: ve3ume@scare-radio.com
W: https://scare-radio.com/Scare-Radio.com/Home.html

Hamfest du Quebec a Sorel-Tracy
Club Radio Amateur Sorel-Tracy VE2CBS
Date: Sunday, May 31
Place: Sorel-Tracy, QC; Curling Aurele-Racine, 3010 Place des Loisirs.
Time: Open for Inside Vendors 6:30 am; Public 9 am.
Cost: Vendors: Inside tables $10, admission not included. Public $10 (free under 12).
Talk-in: VE2RBS 145.370 MHz FM 103.5 Hz VE2RBS TG9 local mode DMR.
Info: ve2cbs@gmail.com
W: https://ve2cbs.com/hamfest/

Kemptville Hamfest & Flea Market
Kemptville Amateur Radio Group
Date: Saturday, June 6
Place: Kemptville, ON; WB George Centre 48 Shearer Street, Kemptville, ON K0G 1J0.
Time: Public 9 am to 12 pm.
Cost: Tables $15. Admission $5; Ages 15 and under admitted free.
Talk-in: The Kemptville repeater VE3NRG, 145.250 MHz, -0.600 TX, CTCSS 110.9 Hz both TX/RX.
Info: Tables contact Rob@solacity.com
W: https://ve3ngr.ca/

50th Annual Central Ontario Amateur Radio Fleamarket & Hamfest
Guelph & Kitchener Amateur Radio Clubs
Date: Sunday, June 7
Place: Cambridge, ON; 1128 Rife Road. (North Dumfries Township) Cambridge.
Time: Indoor vendors 7 am; Tailgate 8 am; Public 9 am to 12 noon.
Cost: Public $10; Ages 12 & under are admitted free. Inside 8-foot tables $25 includes 1 admission. Additional inside tables $15. Tailgate Pads $20 includes one admission. Additional Tailgate Pads: $10.
Talk-in: VE3KSR 146.970 (-) 131.8 Simplex 146.520.
Info: Contact info@hamfest.on.ca
W: https://hamfest.on.ca

Grimsby Tailgate Treasures
Hamilton Amateur Radio Club
Date: Saturday, June 13
Place: Grimsby, ON; St. Joseph RC Church, 135 Livingston Avenue. All parking is free on site after going through "Admission".
Time: Vendors 7:30 am; Public 9:00 am
Cost: Public: $5 each; Children admitted free. Vendors $15 per space (includes admission for you and your helper. Bring your own tables.
Talk-in: UHF wide area link: 442.525 MHz +5.00 MHz 131.8 tone Linked to the HARC repeater.
Info: This is a "tailgate only" event. Vendors book your space/table with Barry, VE3ISX, at ve3isx@gmail.com
W: https://www.hamiltonarc.com/Grimsby/index.html

52nd Annual Ontario Hamfest
Burlington Amateur Radio Club
Date: Saturday, July 11
Place: Milton, ON; Milton Fairgrounds.
Time: Tailgating vendors 7 am; Robert Street approach from the west only; Public 9 am at North Thomas Street gate.
Cost: Public $10; Tailgate space $10 plus $10 each admission.
Talk-in: 146.52 Simplex No Tone.
Info: buckmelbuckmel@gmail.com
W: https://www.barc.ca/ontario-hamfest

Parry Sound Hamfest
Parry Sound Amateur Radio Club
Date: Saturday, August 15
Place: Parry Sound, ON; Foley Community Hall, 60 Rankin Lake Road, Seguin ON.
Time: Vendors 7 am; Public 8:30 am.
Cost: Admission $5. Children under age 12 admitted free. Vendors first table $15 includes admission. Additional tables $10.
Talk-in: VE3RPL 145.49rx 144.89tx pl 156.7
Info: Email psarc@ve3rpl.com.
W: https://www.ve3rpl.com

London Amateur Radio Club Hamfest
London Amateur Radio Club
Date: Saturday, September 5
Place: Dorchester, ON; 4939 Hamilton Road.
Time: 9 am to 12 noon.
Cost: Admission $8; Tables and Tailgating $7 plus $8 admission.
Talk-in: VE3OME 145.450 PL 114.8.
Info: Contact LARChamfest@gmail.com
W: http://www.larc.ca

Ottawa (Carp) 2026 Hamfest
Ottawa Amateur Radio Club
Date: Saturday, September 12
Place: Ottawa (Carp), ON; 3882 Carp Road, Carp Agricultural Fairgrounds (in the West Erskine Johnston Arena at north end of the fairgrounds).
Time: Commercial Vendors: 7:30 am; Private Vendors: 8 am; Public: 9 am to noon.
Cost: Public: $6. Ages 12 and under are admitted free. Tables: $17 per 8-foot table.
Talk-in: VE2CRA, 146.94-, 100 Hz.
Info: Contact hamfest@oarc.net. Volunteer and table reservation form on website.
W: https://oarc.net/hamfest/

Eastern Ontario Hamfest
Prescott-Russell & Seaway Valley ARCs
Date: Saturday, October 3
Place: St-Albert, ON; 201 Principale Street, St-Albert, ON K0A 3C0.
Time: Vendors: Commercial 7:30 am; Private 8 am; Public: 9 am to 12 pm.
Cost: Public: $10 includes door prize ticket. Children 12 and under admitted free. Tables: $15 includes admission for 1 person, door prize ticket not included.
Talk-in: VE3PRV, 147.330+, 110.9Hz or VA3PRA, 145.470-, 110.9Hz (Linked).
Info: Table reservation and Volunteer registration can be done online.
W: https://eohamfest.com/

Delta ComFest Swap Meet
Sponsor: Delta Amateur Radio Society
Date: Sunday, October 4
Place: Tsawwassen, BC; South Delta Recreation Centre, 1720 – 56 Street.
Time: Vendors 9:15 am; Public 10 am to 1 pm.
Cost: Public $5; Tables $25 each. Free parking. Coffee by donation.
Info: info@deltaamateurradio.com
W: https://deltaamateurradio.com

Please send your event information to the TCA Editor at tcamag@yahoo.ca

World Cup Special Event Station #wc2026ses

CQ Soccer! CQ Football!

Amateur Radio operators across North America will be on the air this summer as part of Football/Futbol on the Air, a Special Event Station activity marking the 2026 World Cup. The international tournament will be held from June 11 to July 19 in Canada, Mexico and the United States, with Canadian matches taking place in Toronto and Vancouver.

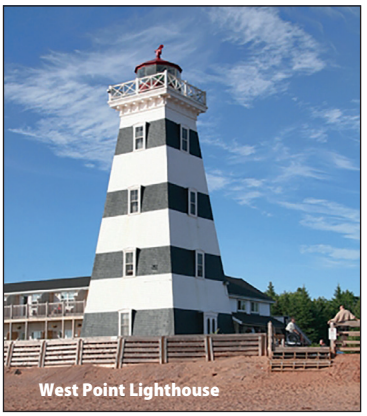
During the event, Amateur Radio operators in participating host cities will use special event call signs and operate on HF and VHF, including CW, SSB and digital modes as conditions allow. The event is expected to include collectible QSL cards and a downloadable multi-city certificate with endorsements for contacts made with participating stations.

Organizing the Amateur Radio special event had its beginnings in a very local moment. Earlier this year, the Lake Whitney Amateur Radio Society in central Texas was faced with scaling back its big plans for Winter Field Day after a major ice storm struck the region. Ron Franklin, AA5HK, who is the soccer event coordinator, said that after that greatly downsized Winter Field Day, a number of club members were still primed for a big-scale activation. With the World Cup matches coming to Dallas, the opportunity presented itself. Members secured support from the group president, Robert Tear, N9KGL. The outreach then began to Amateurs in other host cities including those in Canada and Mexico.

The Special Event Station activity begins at 0000 UTC on June 11 and ends at 2359 UTC on July 19. Full details, including participating stations, schedules, QSL information and volunteer opportunities, are available at www.wc2026ses.org

International Lighthouse Lightship Weekend

Each August, usually the third full weekend, over 500 lighthouses/lightships located in over 40 countries take to the air for the International Lighthouse Lightship Weekend. (ILLW).
This year the event will commence at 0001 UTC on August 15 and run for 48 hours.


West Point Lighthouse

It is one of the most popular international Amateur Radio events probably because there are very few rules and it's not the usual contest type event. It's simply a relaxed weekend where Amateur Radio makes the public aware of the cultural and operational aspects of lighthouse/lightships and the profound effect they have on the communities in which they are located.

This year three lighthouses on Prince Edward Island will take part in ILLW. Two of them have their own call signs and associated Parks On The Air (POTA) location. Another lighthouse has a POTA in close proximity. The three lighthouses and their operating call signs are Point Prim VY2PLH, Cape Bear VY2CBL and West Point VY2WPL.Cape Bear and West Point are listed on QRZ.com.

The PEI Lighthouse Society lists all the lighthouses on PEI and has their accessibility status listed. With a couple of exceptions all locations are accessible by vehicle and there are even a couple of locations where the operators will allow occupancy overnight. Fellow Amateurs interested in activating a lighthouse at any time can contact George Dewar, VY2GF at dewarg@bellaliant.net, who will assist in making the necessary arrangements. For more information visit https://illw.net/

Cape Bear – https://capebearlighthouse.com/blog/about-us/
West Point – https://westpointlighthouse.ca/
Point Prim – https://pointprimlighthouse.com/
PEI Lighthouse Society – https://peilighthousesociety.ca/

RAC Canada Day Contest Rules: July 1

RAC Contest Managers
Jim Roberts, VE7ZO and
Vlad Milutinovic, VE3JM

Radio Amateurs of Canada sponsors two radiosport contests each year.

The RAC Canada Day Contest celebrating Canada's Birthday on Confederation Day (July 1) and a celebration of the winter holiday season with the RAC Canada Winter Contest.

Amateurs all over the world are invited to join us in these celebrations.

Please review the contest rules carefully to ensure full understanding of the contest categories and requirements.

If you have questions about these rules, need help with preparing or submitting your log or have any other questions, please contact the contest manager for each contest:

- **Jim Roberts, VE7ZO, at canadaday@rac.ca for the Canada Day Contest**
- **Vlad Milutinovic, VE3JM, at canadawinter@rac.ca for the Canada Winter Contest**

For the previous year's contest results, visit the RAC website in the Contest section at:

https://www.rac.ca/contesting-results/

Contest Periods:

RAC Canada Day Contest:
Canada Day Wednesday, July 1, 2026 – 00:00:00 UTC to 23:59:59 UTC

RAC Canada Winter Contest:
Sunday, December 27, 2026 – 00:00:00 UTC to 23:59:59 UTC

Objective: For Amateurs around the world to contact Canadian and other Amateurs within the framework of the contest. Contacts with Canadian provinces and territories provide multipliers and result in increased QSO point value.

Table 1: Score Calculation

Description	Examples		
Canada QSOs (excluding RAC)	QSOs X 10	50 X 10	500
RAC QSOs	QSOs X 20	12 X 20	240
QSOs outside Canada	QSOs X 2	35 X 2	70
Sub-Total	**Sum of Points**		**810**
Multiplier	Times Mults	20	20
Claimed Score	**Sum of Points X Mults**		**16,200**

Bands and Modes: 160, 80, 40, 20, 15, 10, 6 and 2 metres, CW and phone (SSB, FM, AM, etc.)

Suggested frequencies: CW – 25 kHz up from the band edge and for SSB – 1850, 3775, 7060*, 7225, 14175, 21250 and 28500 kHz. Check for CW activity on the half-hour.

***Note:** For 7060 kHz please watch for conflicts in the band plan where there are overlaps with other modes of operation.*

Exchange: Stations in Canada send RS(T) and province or territory. VEØs (maritime mobile Canadian stations) and stations outside Canada send RS(T) and a serial number.

QSOs: Contacts with stations in Canada or VEØs are worth 10 points. Contacts with stations outside Canada are worth 2 points. Contacts with RAC official stations are worth 20 points. RAC official stations are: VA2RAC, VA3RAC, VE1RAC, VE3RHQ, VE4RAC, VE5RAC, VE6RAC, VE7RAC, VE8RAC, VE9RAC, VO1RAC, VO2RAC, VY0RAC, VY1RAC and VY2RAC.

You may work any station once on each of the two modes, on each of the eight contest bands. It is prohibited to make CW contacts in the conventional phone sub-bands and phone contacts in the conventional CW sub-bands.

Contacts or soliciting QSOs through a repeater during the contest period is not allowed. Contacts in the RAC Canada

Contests also count towards the RAC Canadian Portable Operations Challenge Award.

Multipliers: Thirteen in total, Canada's 10 provinces and three territories. Each multiplier may be counted once on each mode on each of the eight contest bands. The multipliers, with their postal abbreviations and prefixes are:

- Nova Scotia [NS] (VE1, VA1, CY9, CYØ)
- Quebec [QC] (VE2, VA2)
- Ontario [ON] (VE3, VA3)
- Manitoba [MB] (VE4, VA4)
- Saskatchewan [SK] (VE5, VA5)
- Alberta [AB] (VE6, VA6)
- British Columbia [BC] (VE7, VA7
- Northwest Territories [NT] (VE8)
- New Brunswick [NB] (VE9)
- Newfoundland and Labrador [NL] (VO1, VO2)
- Nunavut [NU] (VYØ)
- Yukon [YT] (VY1)
- Prince Edward Island [PE] (VY2)

Certain special Canadian prefixes in use at the time of the contest may also apply; however, there may be no more than 13 multipliers on each band/mode. Please use the multiplier abbreviations, in square brackets, noted above.

***Note:** in the event a station is unable to make a contact with a Canadian station, there will be granted a multiplier count of 1 to facilitate the proper calculation of the final score since a multiplier of zero (0) would not create a valid calculation of a final score.*

Final Score: The total sum of QSO points (2, 10 and 20-point QSOs) from all bands multiplied by the total number of multipliers from all bands. Table 1 above provides an example score calculation.

– For the complete rules visit: https://www.rac.ca/contesting-results/ –

Categories:

All categories are designed to be multi-mode, Phone and CW categories, except for the two single operator single mode categories. It is required that single operator all bands categories have at least one contact in both modes to differentiate those categories from the single mode categories. All other categories may operate single mode if so desired recognizing that it reduces their potential contacts and multipliers.

Special thanks to all of our sponsors for their support of the RAC Canada Day and RAC Canada Winter Contests. The following categories are eligible for plaques or certificates as detailed in the Awards section of the rules.

Single Operator Categories:

One person (the operator) performs all operating and logging functions. There is no limit on operating time or band changes. Only one transmitted signal is permitted at any time.

1) Single Operator All Bands High Power (SOABHP) >100 watts – **Radioworld**

2) Single Operator All Bands Low Power (SOABLP), <= 100 watts output – **Contest Club Ontario**

3) Single Operator All Bands QRP (SOABQRP)*, <= 5-watts output All Bands & Single Band – **Radioworld**
***Note:** QRP entries from Single Band and Single Mode will be reclassified to this category.*

4) Single Operator All Bands CW only (SOABCW only), any authorized power – **Gary Bartlett VE1RGB Memorial by the Maritime Contest Club (see Note 3)**

5) Single Operator All Bands Phone only (SOABPH only), any authorized power – **Saskatchewan Contest Club (see Note 3)**

6) Single Operator Single Band (SOSB), any authorized power – **Radioworld (see Note 3)**

Single Operator Assisted:

Entrants in this category may use QSO finding assistance.

1) Single Operator Assisted High Power (SOAHP) > 100 watts – **Radioworld Central**

2) Single Operator Assisted Low Power ** (SOALP), <= 100 watts output – **Radioworld Central**

Multi-Operator Categories:

More than one person (operator) perform all operating and logging functions.

1) Multi-Operator Single Transmitter High Power (MOSTHP), >100 watts – **Alfa Radio**

2) Multi-Operator Single Transmitter Low Power (MOSTLP), max. 100 watts output – **Tony Allsop VE3FTA Memorial by the Mississauga Amateur Radio Club**

11) Multi-Operator Multi-Transmitter (MOMT), any authorized power – **Radioworld**

Contest Sponsors

Radioworld

GPS CENTRAL

contest club ONTARIO

MCC Maritime Contest Club

Alfa Radio Ltd.

RAC affiliated MISSISSAUGA amateur radio club VE3MIS

Saskatchewan Contest Club

Radio Amateurs of Manitoba

Table 2: Summary of Category Elements, Limitations and Eligibility							
Category	**Power Level**	**Logged Band Requirement**	**Mixed Mode Contacts Required**	**Assisted Use Allowed**	**Transmitted On-air Signals**	**10 Minute Rule Applies**	**Rookie Plaque Eligible**
SOABHP	>100 W [2]	2 or more	Yes	No	1 at any given time	No	Yes
SOABLP	>5 to<=100 W	2 or more	Yes	No	1 at any given time	No	Yes
SOABQRP	<5 W	1 or more	Yes	No	1 at any given time	No	Yes
SOABCW only	Any legal power [1,2]	1 or more	No, CW only	No	1 at any given time	No	No
SOABPH only	Any legal power [1,2]	1 or more	No, Phone only	No	1 at any given time	No	No
SOSB	Any legal power [1,2]	1 only	Optional	No	1 at any given time	No	No
SOAHP	>100 W [2]	1 or more	Optional	Yes	1 at any given time	No	No
SOALP	<=100 W	1 or more	Optional	Yes	1 at any given time	No	No
MOSTHP	>100 W [2]	1 or more	Optional	Yes	1 run, 1 multiplier on different band	Yes	No
MOSTLP	<=100 W	1 or more	Optional	Yes	1 run, 1 multiplier on different band	Yes	No
MOMT	Any legal power [1,2]	1 or more	Optional	Yes	1 per band	No	No

[1] QRP stations that enter in the SOABCW, SOABPH or SOSB categories will have their entry reclassified and recorded as part of the SOABQRP category as none of the mentioned categories have a suitable power class.

[2] Maximum high-power levels used must comply with legal requirements of the entrant's jurisdiction.

Sub-Categories

1) Rookie:

For the Canada Day and Canada Winter Contests there is a **"Rookie"** subcategory plaque sponsored by **Radio Amateurs of Manitoba**. For detailed information regarding the qualifications for the Rookie Plaque, please refer to item 7 of the General Rules. Previous rookie winners of this contest are ineligible for an additional Rookie Plaque in this contest.

Additional details on contest categories, limitations, exceptions, callouts and Rookie Plaque eligibility appear in the Category Notes and in Table 2 above.

2) Foreign Entries:

For the Canada Day Contest, the **Bart Richie VE5CPU Plaque** is awarded for the highest Single Operator (no power classification, assisted or unassisted categories) Foreign Entrant.
(Sponsor, **Jim Roberts VE7ZO**)

For the Canada Winter Contest, the **Sam Ferris VE5SF Plaque** is awarded for the highest Single Operator (no power classification, assisted or unassisted categories) Foreign Entrant.
(Sponsor **Vlad Milutinovic, VE3JM**)

3) Team Competition:

The new team competition component of the contest allows the creation of teams of two to four Amateurs to compete for a certificate for the top three team scores from around the globe.

Participants in any of the Single Operator categories can form part of the team whose individual scores are added together to produce a team score. There are no club membership, distance or meeting requirements for a team entry.

Teams must be registered prior to the start of the contest.

The team's registration form is directly available at https://contest.rac.ca/team_registration.php or from the main menu at https://contest.rac.ca.

Contest Awards:

Special thanks to our sponsors for their support of the RAC Canada Day and RAC Canada Winter Contests!

Plaques will be awarded to the top-scoring entrants in each category, as noted above in the category list.

Certificates will be awarded to the top-scoring entrant in each category, where a log containing a minimum of 50 gross QSOs has been submitted, in each of the following:

1) Canadian provinces or territories, including VE0.

2) Continental US call districts, W0 through W9 as well as Alaska and Hawaii. US Commonwealths, Territories and Possessions such as Puerto Rico, US Virgin Islands, etc will be treated as equivalent to a DXCC country.

3) DXCC country, excluding Canada and the United States.
Note: The areas identified above will not receive a certificate if that area had a plaque winner.

To facilitate the proper allocation of certificates, all US stations should indicate their actual US call district based on their actual address, as provided in the Cabrillo header, if different than indicated by their call prefix.

DX stations should indicate the actual country of operation if different than indicated by their call prefix by indicating the country as part of the portable call sign designator.

RAC stations will compete and be considered the same as any other entrant for eligibility to plaques and certificates.
Note: QRP entrants who wish to use assistance will be placed in the Single Operator Assisted Low Power category.

Category Notes:

Please check the RAC website for any revisions.

1) The contents of a log that is submitted for a specific category must reflect that category including any multimode or single mode QSO requirement that may apply to the category. In the event of a conflict between the actual content of the log and the stated category in the Cabrillo header or contained in other elements of the entry material, the actual contents of the log will be used to determine the category of entry where possible.

In the event this cannot be determined or in the event where a log does not identify the entry category, the entry will be classified into the Multi-Operator, Multi-Transmitter, any authorized power category.

Any entrant who wants to enter a specific category (i.e. Single Band entry) but who also worked additional contacts outside that category **may** submit those additional contacts in a **separate** check log file with a different name than the primary entry. Do not include them in the main entered category log file.

2) Where the categories have a power class and the submitted log does not clearly identify the power class entered, then the log will be treated as if the highest power class for that category was entered.

3) **Single operators** who receive assistance in identifying potential new QSOs and/or multipliers from an Amateur Radio Spotting Network – including Reverse Beacon Network, Skimmer and similar technologies or any type of Packet Cluster system – during the contest must classify their log as being in one of the two **Single Operator Assisted** categories. To indicate an assisted entry, use the Cabrillo heading "Category-Assisted: Assisted" in your log file to identify this entry classification. Any QRP entrant claiming "Assistance" will be placed in the SOALP category as there is no QRP assisted class.

4) **Multi-Operator Categories** allow the use of spotting assistance without special identification. For all multi-transmitter categories, all transceivers, transmitters and receivers operated by the multi-station participants/entrants must be within a single 500-metre diameter circle and the antennas must be physically connected by RF transmission lines to the transceivers, transmitters and/or receivers.

Operators in either the Multi-Multi or Multi-Single categories should note that a distributed contest station is permitted in the RAC contests, however such operations are not eligible for awards. A distributed station is defined as a station which does not have all transceivers, transmitters and/or receivers operated by station operators/participants/entrants located within a single 500-metre diameter circle of each other. Distributed Multi-Multi operations must identify such operations as part of their Cabrillo form log submission as a Soapbox comment or summary sheet document. Those individuals using distributed station operations must do so in accordance with the regulations governing Amateur Radio operation in their jurisdiction.

5) **Multi-Operator Single-Transmitter Low Power (MOSTLP) and Multi-Operator Single-Transmitter High Power (MOSTHP) Categories** permit up to two signals (one **Run** and one **Multiplier**) to be transmitted at the same time **if, and only if,** each signal is on a different band **and** with the following limitations:

a) The Run Station is intended to be the primary and most active station for any Multi-Operator Single Transmitter operation. The Run Signal may be transmitted on any band and may solicit contacts (call CQ, QRZ, TEST, etc) with all other stations as well as seek multipliers within the limitations which follow. The Run signal must remain on the band for at least 10 minutes but may change mode within the Run Station active band within the 10-minute minimum time period.

The 10-minute period begins when the first QSO (contact) on the run station band is logged and the time is recorded by the logging software. A Run Signal may not be transmitted on a "new band" until the 10-minute period has been met or exceeded as measured by the time difference recorded in the logging software.

The Run signal QSOs will be designated with a "0" in the transmitter column of the Cabrillo log if the logging software supports this feature (preferred).

b) It is intended that the Multiplier Station only "hunt" new Multipliers. The Multiplier Signal may be transmitted on any band other than the current Run Signal band, but may only contact another station **if, and only if,** it is a new multiplier on that band and mode.

The Multiplier Signal may only call other stations. The Multiplier Signal may not request or attract any QSO by calling CQ, QRZ, TEST, etc., other than requesting a new multiplier worked to change modes on the same Multiplier Station active band if the contact would be a new multiplier on that band and mode combination. The Multiplier Signal must remain on one band for at least 10 minutes.

The 10-minute period for the Multiplier Signal begins when the first QSO with a new multiplier on that band is logged and the time is recorded by the logging software. A Multiplier Signal may not be transmitted on a "new band" until the 10-minute period for the Multiplier Signal has been met or exceeded as measured by the time difference recorded in the logging software. The Multiplier Signal QSOs will be designated with a "1" in the transmitter column of the Cabrillo log if the logging software supports this feature (preferred).

c) The designation of "0" (Run) or "1" (Multiplier) may not be assigned to an actual physical radio, although that is possible. The signal designation of "0" and "1" is a **functional** designation. Rig "A" or "B" (or "C," etc., if more than two radios) can be assigned either "0" or "1" according to its function (role) at the time of the QSO.

Operators should ensure that logging software is capable of designating each Run and Multiplier Station contact in the described manner. Please check your logging software in advance of the contest to ensure capability to comply. This is a desirable feature to properly adjudicate logs in these categories but if your software does not support this function, the log will still be accepted. Both Run Signal and Multiplier Signal station transmissions must comply with the maximum power limit for the power category entered.

d) All QSOs must be logged **immediately** upon completion of a QSO for proper time stamping of the QSO.

e) If an unintended contact is made with a non-multiplier station using the Multiplier Signal, operators are strongly encouraged to designate such QSOs as unclaimed within their Cabrillo log by marking that QSO with "X-QSO:" at the beginning of the line for each such logged QSO to avoid creating Nil QSOs with the station they contact, being assessed penalties or recategorization for QSOs that are out of compliance with the category. Doing so will allow the other station to continue to receive points credit.

Likewise, should either the Run Station or Multiplier Station log QSOs outside of the active band before the 10-minute band change limitation period expires, such QSOs should be marked as X-QSO: to avoid score and or possible multiplier reductions.

f) Multi-operator, Single Transmitter QRP entries will be included within the Multi-Operator, Single Transmitter Low Power Category.

Failure to comply with the above noted category specifications may result in reclassification of an entry to the Multi-Operator Multi-Transmitter category or Checklog category.

6) **Multi-Operator Multi-Transmitter** category stations may operate the eight contest bands simultaneously, but only one transmitted signal per band is permitted at any time. All power levels are mapped into this single category. Multi-Operator Multi-Transmitter QRP entries will be included within the Multi-Operator Multi-Transmitter category results as there is no QRP power level for this category.

General Rules

1) The Single Operator All Band QRP (SOABQRP) category is the only official single operator QRP category supported in the contest. Any Single Operator using a Single Band or Single Mode entry that claims QRP power levels, other than a QRP Assisted entry, will be recategorized and reported in the SOABQRP category as that is the only entry class supporting QRP power levels. An entry that claims QRP Assisted will be recategorized and reported in the Single Operator Assisted Low Power (SOALP) category as that category defines the operating benefit of using assistance. A Multi-Operator Single-Transmitter Low Power (MOSTLP) entry claiming QRP power levels will be left in the MOSTLP category as that category defines the operating benefit of using multiple transceivers. A Multi-Operator Multi-Transmitter (MOMT) entry claiming QRP power levels will be left in the MOMT category as that category defines the operating benefit of using multiple transceivers.

2) Although there is only one Single Operator Single Band category that qualifies for a certificate or award, it is intended that the published results would show High Power or Low Power. To facilitate this break out of the listings, your entry should indicate the power class you used.

3) Operators who have participated in any multi-operator category entries may not contact the station they have participated in if they were to operate as part of another entry in the same contest. In addition, guest operators at any station regardless of entry category may not claim contacts with the station host owner or host station mobile call for points or multipliers.

4) Remotely controlled operations of a **single station** under the same call sign where all transceivers, transmitters and receivers are within a single 500-metre diameter circle – the antennas must be physically connected by RF transmission lines to the transceivers, transmitters and/or receivers – **is permitted**. Those operators using remote operations must do so in accordance with the regulations governing Amateur Radio operation in their home and remote station jurisdiction(s).

Remote operation of more than one station under the same call sign, or remote operation of more than one station by the same licensee or contest entry under differing call signs, is prohibited during the contest period.

6) Self-spotting is **permitted** for assisted and multi-operator entries. Self-spotting and requesting other operators to spot your station by any means for unassisted entries is prohibited.

7) **"Rookie"** is defined as a single operator who was first licensed as a Radio Amateur less than 36 calendar months (three years) prior to the date of the contest. Any level of Amateur Radio licence available from the licensing jurisdiction of the entrant qualifies for the category.

The three supported categories that qualify for the "Rookie" Plaque have a multi-mode requirement as differentiation from the single mode categories. Further, we are trying to encourage entrants to explore both SSB (Phone) and CW aspects of the contest thus **requiring a minimum of one CW and one SSB contact** to be made in the qualifying single operator categories that qualify for adjudication for the "Rookie" Plaque.

The participating licensed Amateur is required to self-declare their eligibility, but the RAC Contest Management Committee reserves the right to request proof of eligibility to assist in resolving any disputes.

Eligible Categories for Rookie Plaque:

Participants are eligible for the Rookie Plaque in the following categories.

Note: *only one plaque is available across the three categories designated below.*

- Single Operator All Band Low Power (SOABLP)
- Single Operator All Band High Power (SOABHP)
- Single Operator All Band QRP Power (SOABQRP)

Log Identification of Rookie Overlay Category:

Your submitted log will need to indicate your entry in the Rookie category by indicating with a **"Category-Overlay: Rookie"** line in the Cabrillo log file header. You may need to manually enter this line if the logging software you use does not support this category overlay. This can also be selected when submitting a log via the RAC Web Log Submission System.

In addition, "Rookie" entrants will need to indicate the date they were first licensed by adding a comment with that information in a "Soapbox:" field in the Cabrillo header. An example would be: "Soapbox: First licensed in January of XXXX, no greater than 36 months prior to the date of the contest"

While the scores from the single mode, unlimited and multi-op "Rookie" entries will be noted in the contest results, only Rookie entrants in the SOABHP, SOABLP or SOABQRP categories will be eligible for the Rookie Plaque.

While there is only a single Rookie Plaque determined by the results from the three eligible single operator categories, a Rookie entrant will still be eligible for the plaque for the single operator category they have entered should they achieve the highest score for that category. Should they qualify for a certificate based on the normal criteria for certificates, they will be further awarded that certificate.

Results: Will be published in *The Canadian Amateur* magazine published by the Radio Amateurs of Canada. The results will also be published on the RAC website.

Entries: For the **RAC Canada Day Contest** all entries must be electronically submitted by 23:59 UTC 14 days after the end of the contest (**July 15, 2026**). For the **RAC Canada Winter Contest** all entries must be electronically submitted by 23:59 UTC 14 days after the end of the contest (**January 11, 2027**).

The preferred method is to submit logs via the Web Log Submission system at: **https://www.contest.rac.ca/**

For the current contest year, we will also accept logs sent via email to **canadaday@rac.ca** or **canadawinter@rac.ca** as appropriate for the specific contest.

Email entries will be confirmed by return email by the contest manager. This is a manual process, so do not expect an immediate reply.

Special Note:

1) **We are no longer accepting paper logs.** Those entrants using paper logging who would like to enter the contest can convert their paper logs to a Cabrillo electronic log using the process to create a RAC Cabrillo log file that has been provided by Bruce Horn, WA7BNM. The links to this service are available from the RAC Web Log homepage at **https://contest.rac.ca**. Each contest has its own link.

2) Any entry with 100 or more contacts should be submitted in digital format using the contest log submission system or, while supported, via email.

3) The required electronic format is the RAC Cabrillo format. The files must be submitted in plain ASCII/Text format. The current Cabrillo logging format / standard is available from the RAC website at: **https://www.rac.ca/contesting-results/**, under the heading of RAC Cabrillo V3.3.

4) When submitting any electronic log please use a **unique identifier** by naming the file using your call sign with a file extension of .LOG, .CBR or .TXT (e.g., yourcall.LOG). If you email your log, please send the file(s) as **attachments**. Do not paste the log file into the text of your message as there may be issues with the formatting making it difficult to properly extract the log. Large files may be zipped if necessary.

If you have questions about these rules or need help with preparing or submitting your log or have any other questions about the **RAC Canada Day Contest**, please contact **Jim Roberts, VE7ZO, at canadaday@rac.ca**.

If you have questions about these rules or need help with preparing or submitting your log or have any other questions about the **RAC Canada Winter Contest**, please contact **Vlad Milutinovic, VE3JM, at canadawinter@rac.ca**.

For the previous year's contest results, visit the RAC website in the Contest section at: **https://www.rac.ca/contesting-results/**

We look forward to your participation in the RAC Contests.

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