



Canada's Amateur Radio Magazine La Revue des RadioAmateurs Canadiens

VOLUME 45 NUMBER 2 – TCAMAG@YAHOO.CA – WEB ADDRESS: HTTP://WP.RAC.CA/TCA

MARCH & MARS &
APRIL AVRIL
2017

Editor / Rédacteur en chef
Alan Griffin
Email: tcamag@yahoo.ca

Advisors / Conseillers
Dave Green, VE3TLY
Frances Roach, VE3HKG
Gerry Trottier, VA3GLT
Norm Rashleigh, VE3LC
Mike Kelly, VE3FFK
Richard Ferch, VE3KI
Bill Karle, VE1YY
Ken Grant, VE3FIT
Bob Kavanagh, VE3OSZ

Translation / Traduction
Ante Laurijssen, VA2BBW
Alan Bulley, VA2UK
René Levesque, VE2CNJ
Claude Lalande, VE2LCF

**Technical Diagrams /
Schémas technique**
Stan Smith, VE3DDX

The Canadian Amateur
is published by Radio
Amateurs of Canada Inc. /
The Canadian Amateur est
publié par la société Radio
Amateurs du Canada Inc.

Indexed in the Canadian
Periodical Index /
Enregistré à l'Index des
publications canadiennes :
ISSN 0834-3977

Publications Mail Agreement
Accord de publications
diffusées #40028682.
Registration / matricule
#09866

The Canadian Amateur
720 Belfast Road,
Suite / Bureau 217
Ottawa, ON, Canada
K1G 0Z5
613-244-4367;
1-877-273-8304
tcamag@yahoo.ca
http://wp.rac.ca/

Printed in Canada by
St. Joseph Communications
Ottawa, ON, Canada
Imprimé au Canada sur
les presses de St. Joseph
Communications
Ottawa, ON, Canada

Return Undeliverable
Canadian Addresses to
Circulation Department:
217-720 Belfast Road
Ottawa, ON K1G 0Z5



“Canadian Amateurs in the past have used special event prefixes for various events, centennials and currently Canada 150. Never has one call sign been used by all Canadian call sign areas in a coordinated special event like the Vimy Centennial commemoration. Truly, the Vimy activators and their contacts are making Canadian Amateur Radio history.” – see page 34 for the complete story.

DEPARTMENTS

TCA Advertising Index.....	2
Silent Keys.....	3
RAC QSL Bureau System	3
Defence of Amateur Radio Fund.....	9
RAC Membership	44
Adhésion de RAC.....	44
Youth Scholarships.....	21, 42
Canada 150.....	5, 63
Coming Events	62

RAC Notifications (eTCA, Bulletins)

Would you like to be notified when an issue of The Canadian Amateur (eTCA) or The RAC Report has been posted online? Do you want to receive RAC news and receive information about your membership such as renewals information? If so please subscribe to our mailing list by completing the form on the RAC website at: <http://wp.rac.ca/rac-notifications/>

NATIONAL & INTERNATIONAL

RAC Management Team	4
RAC President's Message, Glenn MacDonell, VE3XRA	5
Un message du président, Glenn MacDonell, VE3XRA.....	5
Phil Anderson, VE3FAS, Inducted into Canadian Amateur Radio Hall of Fame at Contest Club Ontario Luncheon, Ed Frazer, VE7EF and John Sluymmer, VE3EJ	10
William James "Bill" Gillis, VE1WG: A Tribute	11
Radio Amateurs of Canada welcomes new Deputy Director	12
RAC will be at Dayton!	12
RAC Members now receive a discount on Survivormate Emergency Products, M. Paul Cook, VA7JHW.....	20
RAC Announces granting of Scholarships, Bill Unger, VE3XT and Brian Jackson, VE6JBJ.....	21
Scholarships Available in 2017, Bill Unger, VE3XT	21
Brit Fader Scholarship Trust announces 2017 Call for Applications, D. Howard Dickson, VE1DHD	42
2016 Annual Report on Defence of Amateur Radio Fund, George Gorsline, VE3YV and Bryan Rawlings, VE3QN	47
Message from the RAC Community Services Officer.....	58

TECHNICAL

Amateur Radio Satellites, Keith Baker, VA3KSF	14
QUA – A Topical Digest, Allen Wootton, VE7BQO.....	18
All Things Digital – Amateur Radio for the 21st Century, Robert C. Mazur, VA3ROM.....	24
The Development of the Scanning RF-Seismograph, Alex Schwarz, VE7DXW.....	35
Making Waves, Bill Karle, VE1YY.....	40

NEWS

RAC Welcomes new Deputy Director – Atlantic Region	12
Alphonse Penney, VO1NO, Appointed HF Manager for IARU Region 2	12
Correction to 2016 RAC Canada Day Contest Results.....	12
Fraudulent Messages and Phishing Attempts	12
2017 AMSAT Space Symposium and Annual Meeting	13
FCC Approves New Emergency Alert System "Event Codes" for 2017 Hurricane Season.....	13
New "Amateur Radio Parity Act" Bill Introduced in US House of Representatives	13

OPERATING

<i>Six Metres and Down, Dana Shtun, VE3DS</i>	8
<i>Reflections on a Historic Visit by Marconi's Daughter to Newfoundland, Frank Davis, VO1HP</i>	17
<i>Getting Started on 630 metres, Steve McDonald, VE7SL</i>	28
<i>The "Wireless Room" brings both Marine and Amateur Radio to the Maritime Museum of the Atlantic, Frederick Archibald, VE1FA</i>	31
<i>VE100VIMY: Be a Part of History / Making Canadian Amateur Radio History, Hugh McCully, VE3AYR</i>	34
<i>Fresh On The Air – Adventures for the New and Beginning Ham, Phil Boucher, VE3BOC</i>	43
<i>International System of Units (SI) Checklist, J Bruce Prior, VA7TO</i>	46
<i>Random Thoughts..., Dirk Moraal, VY1NM</i>	47
<i>Public Service / ARES Column</i>	48
<i>Amateur Radio and Emergency Communications in the 21st Century, Andy Woodsworth, VE7PT</i>	48
<i>Amateur Radio Direction Finding: A New Club Activity, Les Tocko, VA7OM, Keith Witney, VE7KW and Joe Young, VE7BFK</i>	50
<i>The Sports Page – The Canadian Contest Scene, Tom Haavisto, VE3CX</i>	52
<i>Section News – The RAC Field Organization Forum</i>	58
<i>Message from the RAC Community Services Officer</i>	58
<i>RAC Field Organization Reports / National Traffic System Net Reports</i>	60
<i>Coming Events: The Hamfest and Fleamarket Calendar</i>	62
<i>Canada 150 Events</i>	5, 63
<i>160th Anniversary of the City of Owen Sound and Georgian Bay ARC Challenge</i> ...63	

PLEASE SUPPORT OUR ADVERTISERS

<i>Begali Keys</i>	23
<i>Coax Publications Inc.</i>	15
<i>Fleetwood Digital</i>	9
<i>Hamstudy.com</i>	12
<i>H.C. MacFarlane Electronics Ltd.</i>	63
<i>Maple Leaf Communications</i>	62
<i>Radio Amateurs of Canada</i>	13, 42, inside back cover
<i>Radioworld</i>	39, outside back cover
<i>RFinder</i>	64
<i>Radio Society of Great Britain</i>	39
<i>Survivormate</i>	20, 61
<i>The Personal Home & Auto Group Insurance</i>	inside front cover
<i>Yaesu</i>	33

ARTICLES WANTED

We would love to receive your articles – both technical and non-technical. Please send them to the TCA Editor at tcamag@yahoo.ca. The deadlines for the next issues of TCA are March 15 and May 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://wp.rac.ca/tca/>

The contents of this publication are copyright, and may not be reproduced without prior consent except by a bona fide Amateur Radio organization which may reproduce them provided the author and *The Canadian Amateur* are acknowledged.

The Advertising Department of *The Canadian Amateur*, on behalf of the magazine, wholly disclaims any responsibility for the content of any advertisement contained herein and makes no representations on behalf of *The Canadian Amateur* as to the truth of any statement contained in any such advertising.

Radio Amateurs of Canada Inc., and the publisher and editor of *The Canadian Amateur*, hereby disclaim any responsibility for any statement of opinion or other statement that may be contained in any article published by *The Canadian Amateur* and any such statement of opinion or other statement contained in such article is solely the opinion of the author of the article and not that of Radio Amateurs of Canada Inc., or the publisher or editors of the magazine, unless it is specifically stated to be the case therein.

The Canadian Amateur is published by Radio Amateurs of Canada Inc., 720 Belfast Road, Suite 217, Ottawa, ON K1G 0Z5

Indexed in the Canadian Periodical Index: ISSN 0834-3977.

Publications Mail Agreement No. 40028682.

Registration No. 09866.

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://wp.rac.ca/tca/>

Le contenu de la présente publication est protégé par copyright, tous droits réservés et ne peut être reproduit sans autorisation préalable dont est toutefois dispensé tout groupement reconnu de radioAmateurs sous réserve que ladite reproduction paraisse avec les mentions du nom de l'auteur et soit identifiée extraite de *The Canadian Amateur*. Le service publicité de *The Canadian Amateur*, agissant au nom de la revue, décline toute responsabilité quant au contenu des annonces publicitaires publiées et ne se porte en aucune façon garant de la véracité des propositions contenues dans lesdites annonces.

La compagnie Radio Amateurs du Canada Inc. ainsi que l'Éditeur et le Rédacteur en chef de *The Canadian Amateur* déclinent par les présentes toute responsabilité quant aux opinions exprimées ou autres déclarations pouvant apparaître dans tout article publié par *The Canadian Amateur* et déclarent en outre que toute expression d'opinion ou déclaration figurant dans un tel article représentent uniquement l'opinion de l'auteur dudit article et non l'opinion de la société Radio Amateurs du Canada Inc., ou celle de l'Éditeur ou du Rédacteur en Chef de la revue à moins qu'il soit spécifié que ce soit le cas en l'occurrence.

The Canadian Amateur est publié par la société Radio Amateurs du Canada Inc., 720 rue Belfast, Bureau 217, Ottawa, ON K1G 0Z5.

Enregistré à l'Index des publications canadiennes sous le numéro ISSN 0834-3977.

Accord de publications diffusées par courrier : 40028682.

Numéro de matricule 09866.