

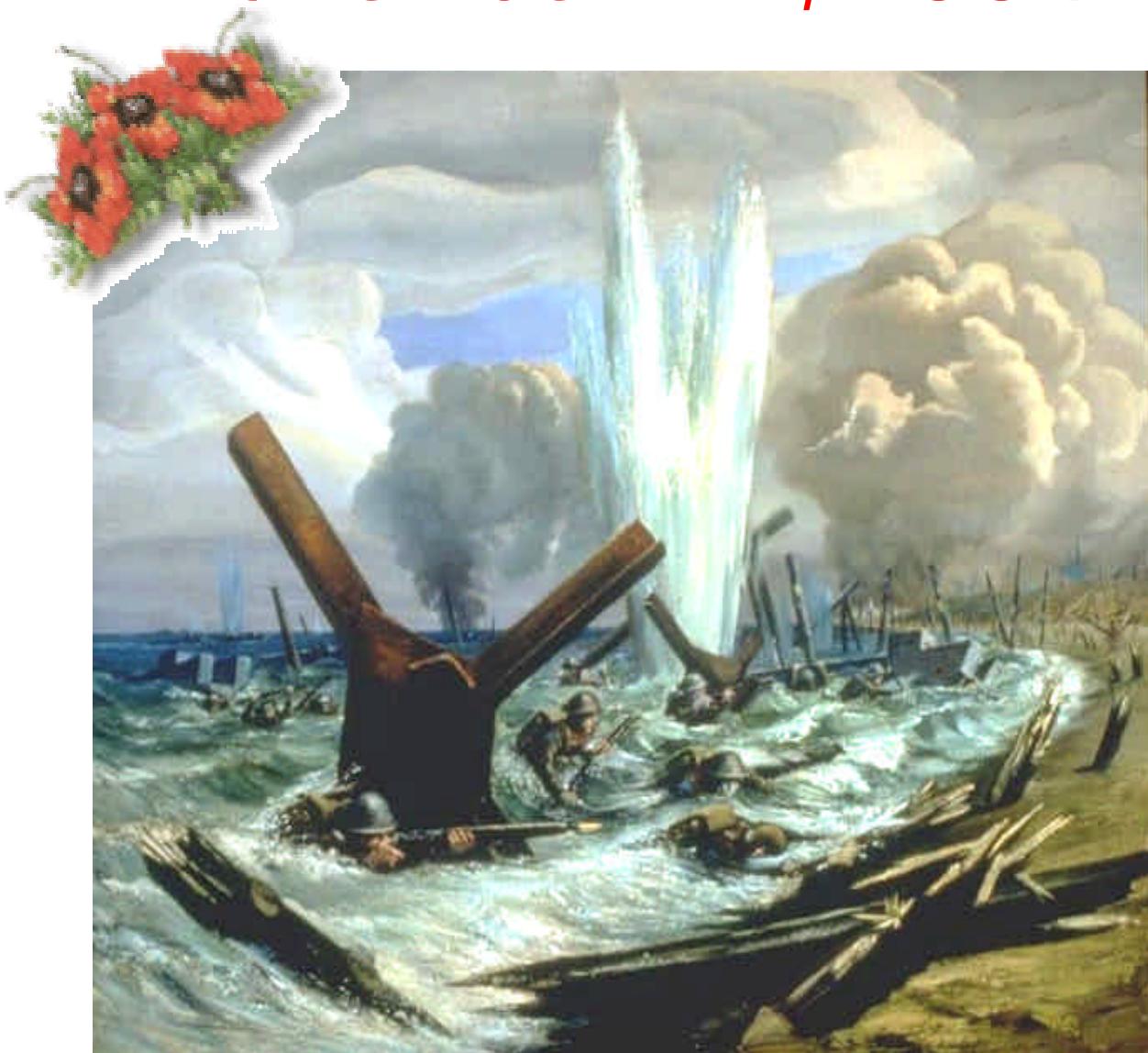
VE5AA

November 2004

The Feedline

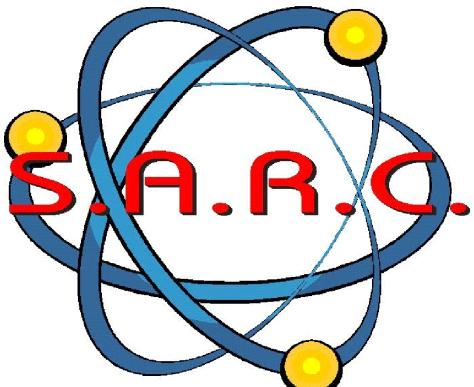
SASKATOON AMATEUR RADIO CLUB

**Rememberance Day
November 11, 2004**



D-Day - the Assault by Orville Norman Fisher (12469)

© Canadian War Museum



Saskatoon Amateur Radio Club

P.O. BOX 751

Saskatoon, SK S7K 3L7

ve5aa@qsl.net

<http://www.qsl.net/ve5aa>

Saskatoon Amateur Radio Club
Meetings are held the 2nd Tuesday
of each month September til June.

Our meeting location is Alvin
Buckwold School
715 East Drive – West entrance
Meeting is 0130Z (7:30PM local)

**VISITORS AND GUESTS ARE
ALWAYS WELCOME!**



ARES
Saskatoon

**NEXT ARES
MEETING**
Monday, Nov. 15, 2004
7:00 PM
9 Firehall
870 Attridge Dr.

Talk in 146.640-

<http://www.ares-saskatoon.ca/>

NEXT CLUB MEETING

Tuesday, Nov. 9, 2004

7:30 PM

ALVIN

BUCKWOLDSCHOOL

715 East Drive

West entrance

BE THERE!

Contests

Nov 6 Ukrainian DX CW,SSB,
RTTY Contest

Nov 6-8 ARRL CW Sweepstakes

Nov 20-22 ARRL SSB Sweeps

Nov 27-28 CQ WW DX CW
Contest

For further information on contests
please check TCA, CQ or QST
magazines.

COFFEE

Saturdays at 10 A.M.

Thomas Cook

Restaurant

Saturdays 9:00 AM
Idyllwild & 24th St.

**Everyone is welcome. Hams,
non-Hams, it doesn't matter.**

**Were there to have good
conversation with good
friends.**

C'mon out and visit!

SASKATOON AMATEUR RADIO CLUB VE5AA

November 2004

EXECUTIVE

LOCAL AREA REPEATERS

VE5SK 146.640- Saskatoon SARC
VE5SCA 146.940- Saskatoon
VE5BRC/1 147.240+ Lizard Lake
VE5RPA 147.150+ Bellevue to PA



**MINUTES
SASKATOON AMATEUR RADIO CLUB
October 12, 2004-10-18**

The meeting was opened at 7:37 by our President, Ron, VE5RMS. One guest was present, Fred, VE3FG.

The minutes of our September meeting were approved as circulated in The Feedline on a motion by Eric, VE5HG seconded by Gus, VE5SPI.

The Treasurer's report was presented by Al, VE5MDC and has been filed with the minutes. The treasurer also explained our fee structure and how the funds from the fees were used. His report was accepted on a motion by Barb VA5BRB seconded by Andy, VE5APD.

School access: other than regular meetings and events during the time that a caretaker is available to open the front door, we are to gain entry to our clubroom via the rear door with the key provided to our designated member.

New repeater site: nothing new at this time. Derek, VE5SD spoke on a proposal which would permit the Saskatoon Amateur Radio Club to use facilities at St. Paul's for another repeater. It was agreed that the proposal would be reviewed by the executive and also published in The Feedline for members to review and make comment on.

Fund raiser: our last fund raiser, a steak night, raised \$112.65. It was agreed that another such event would be held in mid to late February thus giving more ample time to encourage participation.

Hamfest 2005: The president reported that Dale Heath, VE5DTH will serve as M C for the hamfest and Al Pippan will be the keynote speaker. A raffle is also planned.

Programs: Peter, VE5JZ has contacted both the city and University re possible speakers and has supplied this information to the president.

Regina Amateur Radio Association Flea Market Saturday November 13 - SGI Claims Centre

Community service: Gus, VE5SPI reported attending meetings of the Santa Claus Parade committee. The parade to take place November 14. The portable repeater will be checked out and located at CN Tower for the parade.

Ham classes: Ned, VE5NED reported that classes began October 7th with four students and others apparently interested. Herb, VE5HE reported that CW classes were scheduled to begin October 13 with three interested persons.

New advanced operator: Bob, VE5NFG is the latest member of our club to achieve the level of Advanced status. Congratulations Bob.

Highway signs: nothing back from the Highways department on this matter.

Hobby Show: Our club will again participate in the Hobby Show on the Exhibition grounds, November 5th and 6th; we need to be set up to open at 4 P.M. on the 5th and operate to 10 P.M. as well as 9:00 A.M. to 6:00 P.M. on the 6th. This project will require lots of people power so plan to help out!

Bob, VE5RGM reported that the club has two ATV down converters which he asked be placed in our inventory.

The 50/50 draw was won by Barry, VE5BPS. Congratulations Barry! That'll buy a lot of coffee!

The meeting adjourned on a motion by Les, VE5LPP.

Herb Essenburg - VE5HE
Secretary



Is that mobile or portable?

There seems to be some confusion about when a station is mobile and when it's portable. There are basically three types of stations.

The first one is self explanatory, that's the base station. The base station is your permanent home station.

Then there's the portable station. This is a temporary base station, such as at field day or at the cabin for a week, etc.

Last is the mobile station. This is the station in your vehicle, boat, airplane, etc. Any handheld is a mobile.



RAC Bulletin 04-026E
Date: 10/14/04
Subject: RAC
Board of Directors
Appoints New
President and First
Vice-President

In response to the resignations of RAC President Daniel Lamoureux, VE2KA, and RAC First Vice-President Bob Nash, VE3KZ, for medical reasons, the RAC Board was convened at a Special Meeting on Tuesday, 12 October, 2004, to appoint replacements for the remainder of their terms of office (31 December 2005).

The Board elected Mr. Earle Smith, VE6NM, as President for the remainder of Mr. Lamoureux's term, effective 15 October, 2004. Mr. Smith has been the RAC Director for the Alberta/NT/NU Region. In due course the Board will appoint a replacement to complete Mr. Smith's term as Director.

The Board elected Mr. John Iliffe, VE3CES/VA3JI as First Vice-President for the remainder of Mr. Nash's term, effective immediately.

**** Comments to: rachq@rac.ca

Still time to get into classes!

The Ham Basic course started on Thursday, October 7th at 7:00 PM at the Club Room. They will be conducted by Ned (VE5NED) & Al (VE5MDC) and supported by other volunteers.

The CW classes started Wednesday, October 13th at 7:30PM at the Club Room. They will be conducted by Herb (VE5HE) & Les (VE5LPP).

There's still time to get into these classes and catch up.

FOR SALE

**64ft Delhi tower
On the ground in
sections.**

All hardware.

\$400.00

Jerry VE5JLO

549-2297

berryhill@sasktel.net

A few URL's of interest to hams

- Canora Amateur Radio Club
 - Manitoba Repeater Society
 - Lakeland Amateur Radio
 - Moose Jaw Amateur Radio Club
 - Regina Amateur Radio Association
 - Saskatchewan Amateur Radio League
 - Southwest Amateur Radio Club
 - Unity Amateur Radio Club
 - Weyburn Amateur Radio Club
 - Winnipeg Amateur Radio Club
 - Calgary Ladies Amateur Radio Network
-

Hams in Canada

There are a total of 47,750 amateur radio operators in Canada. 20,045 with Advanced Code qualifications, 2,321 with Advanced No Code, 4,478 Basic with Code and 20,906 Basic No Codes.

Source: Compiled on September 17, 2004 by Guy Charron, (VA3FZA) from the latest Industry Canada Database

Hobby show November 6 & 7

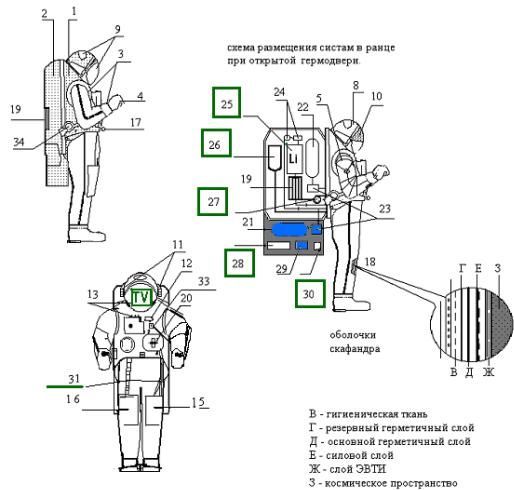
The Hobby Show takes place Friday November 5, from about 4:00 P.M to 10:00 P.M. and Saturday November 6, 9:00 A.M. to 6:00 P.M.

We will need help with set up, tear down and operations for the two days.

After November first, anyone available to help can contact Herb (VE5HE) at 374-4337 or: herb.essenburg@sasktel.net

Russia Proposes SuitSAT

12 Oct,04:- Storage space on the ISS has become an issue and some items will be jettisoned overboard rather than send them down in the Progress supply vehicle. One item to be jettisoned is a Russian Orlon EVA suit, which has a large storage backpack. The Orlon suit is fully functional, but has 'expired', meaning that it is no longer trustworthy to support human EVA.



A proposal is being developed by Sergey RV3DR, the Russian ARISS delegate to place an amateur radio repeater and other systems in the Orlon suit. When jettisoned, the suit would become a fully functional satellite. It will also be possible to install a video camera system in the suit helmet that will provide SSTV imagery.

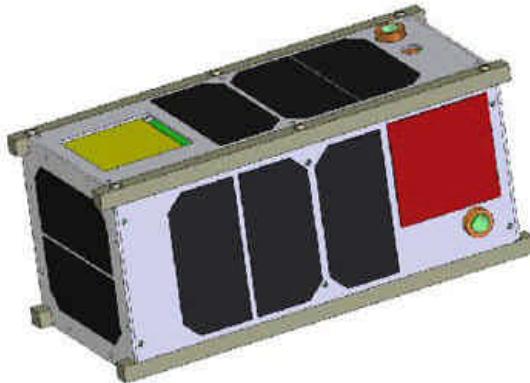
Expected time frame for SuitSat launch is Autumn of 2005.

Source: <http://www.amsat.org/amsat-new/symposium/updates/>

"If you must choose between two evils, choose the one you've never tried before."

The CanX-2 Mission

CanX-2 is currently planned for completion in 2005. In collaboration with researchers from across Canada, its primary mission will be a GPS radio occultation experiment to determine vertical profiles of atmospheric properties. It will also perform a number of additional experiments including mobile ad-hoc networking, autonomous control, nanoscale ferro-electric memory evaluation, advanced surface material testing, and atmospheric spectrometry and imaging. The satellite bus will contain Integrated Bus Electronics, nano reaction wheels and an S-Band radio system.



The design (a "double cube") will advance upon the original Stanford CubeSat concept and adopt the lessons learned from its predecessor, CanX-1.

Source: <http://www.utias-sfl.net/>

**SWAP AND SHOP
ADS
ARE FREE
TO ALL HAMS**

100 Hz CTCSS tone on VE5CC

Recently we discovered that there is a receiver squelching problem on the 146.970 - repeater (VE5CC). With this happening it prompted us to enable a CTCSS tone access of 100 Hz on the repeater. It is now tied in with VE5SKN for 24/7 until we get a chance to reinstall a replacement repeater up at the hill.

So with this in mind for VE5CC, as well as with VE5SKN please remember to key up the radio for at least 2 seconds before speaking (with a CTCSS encode tone of 100Hz). This should not affect things too much, since most of us are already accustomed to this procedure with IRLP.

We are looking for any comments on audio quality, signal quality, etc. with this configuration.

Over the coming weeks and months we hope to get things sounding very good on the provincial network as well as VE5SKN.

It looks like the provincial linked network is encouraging the use of CTCSS access on the linked repeaters, especially if there is any intermod, squelch issues etc... The standard of 100 Hz access province wide is also being encouraged.

73 Derek - VE5SD
Eric - VE5HG



2005 is the Centennial Celebration for Saskatchewan and the Saskatoon Amateur Radio Club

and the Meewasin Amateur Radio Society of Saskatoon are hosting the Saskatchewan Amateur Radio League annual Hamfest for 2005.

Join us at the Travelodge Saskatoon for our Centennial Celebrations July 22-24, 2005. The theme of the Saskhamfest 2005 will be the last century of amateur radio, a look at the role of amateur radio in Saskatchewan and discussions about the future of ham radio operations in Western Canada.

All proceeds of the Saskhamfest 2005 will be contributed to the Amateur Radio Emergency Service.

Anyone who wishes to participate in the Saskhamfest 2005 may contact the Saskatchewan Amateur Radio League at:

www.sarl.ca

Visit the hamfest website at:
<http://www.saskhamfest.com/>

Santa Claus Parade Nov.14



The Santa Claus Parade will be held Sunday, November 14. Volunteers will be needed to help put together the parade and provide communications along the route. To help, contact Gus (VE5SPI) at 249-3996 or e-mail him at :
guss@sasktel.net

"Warning! Never come to a complete stop at a stop sign. No one expects it and it will result in you being rear-ended."

Some more URL's

Open Course Ware

Basic electronics course

Electrical engineering classes

Big list.

US Patent office

Quick search site

Canadian Patents

Canadian Geographical
database

A Funny Thing Happened on the way to the Tower (Or, how many hams does it take to screw in a light bulb?)



A friend asked if I could help replace the marker lights on a tower. Sure I said. And oh by the way you will need another climber as it is a

commercial venture. Bruce want to come on a quick trip to a tower? I asked where we would be going. Oh just over an hour east of town. Great, get in quick change the light and have the afternoon to do other things. Saturday arrives and the weather is less than perfect. Cold, cloudy, and drizzle. About a half hour out of town fog sets in as well. This is great but its Saturday! It will improve.

Can we stop to pick up an extra "ladder hook" near Drake? Done and which way now? I know a short cut says Jamie! I think you can see where this is going. The road deteriorates rapidly. What the map shows as a hard surface road was fast becoming a nightmare of gravel and potholes covered with slush and snow with the occasional patch of asphalt. Sign says "broken pavement next 5 KM" okay not so bad but I would have settled for the broken pavement only there was none. 5 KM later a new sign "broken pavement for the next 20 KM" someone had a sense of humour. Finally a good road and the fog and drizzle is lifting and sunshine!

Oh Oh should be around here somewhere but nothing in sight. "I have the co-ordinates", says Jamie! Gus put these into your GPS! Okay but I don't have the book and can't remember how. Bruce to the rescue he has a GPS and actually knows how to use it. Turn around and go west young man and maybe a little north. Fog and drizzle sets in. Fog gets heavier. Can't see very far oh well its just a little further. We there yet? It is lunch time I was supposed to be on my way home by now!

Tower is over there

somewhere about 400 meters. FOG! A Honda CRV is a compact SUV not a tank; let's walk its only a couple of hundred meters down the hill. If I drive down we will not get back up, I know this from 25 + years of driving in the west. Bruce says its about 150 meters that way up the hill. Hey there is a three phase power line, the site has three phase power! 110 meters north of us and finally at about 90 meters there looming out of the fog was a beautiful sight! A 160 ft. Rohn series 80 tower complete with shelter and microwave dishes and a burned out light bulb. Walk back to the CRV, fall in the slush, drive to the gate thru a farm yard. Climb the tower and find out 160 vertical feet in cold, icy, wet weather is not much fun. Also find out that you are not as young as you used to be! Wet gloves equal half frozen hands! Change the bulb not working!!!#*%\$ Take everything apart (do not drop the screws as it is a long way down) haul bag gets stuck half way up the tower. Bruce climbs up to it, frees it, and then gets a shower of ice bits as it ascends to the top. Are we having fun yet!

Eureka!! The bulb lights. Hey the fog has lifted! Drive north to Wynyard to find out you only had to drive 15Km on an icy,slushy, grid road not 150! Find a Subway and some hot coffee and nourishment. Then homeward bound arrive home at 18:30 so much for the quick and easy trip. Know anyone that wants to buy a decommissioned ATT tower site complete with generator, batteries and a new light bulb?

Gus (VE5SPI) & Bruce (VE5BNC)

"Which came first? The Chicken McNugget or the Egg McMuffin?"

Build your own TDR

This fall Gus and I replaced the antenna and feedline on the APRS digipeater in Davidson. In preparation, I picked up one of the longer pieces of Heliax that had been removed from the old RCMP building. Before putting it to use I tested it with my antenna analyzer and was very surprised at what I found. Even with a high quality 50 ohm terminator on the far end, this cable showed a very high SWR on just about any frequency. I knew there was something wrong but I needed more equipment to tell me any more.

The ideal piece of equipment I needed was a Time Domain Reflectometer, more commonly known as a TDR. A TDR is a device that sends a very short pulse down a cable and listens for an echo, much like a radar works. If there are any points along the cable where the impedance changes, some of the pulse will be reflected back. This output is then displayed on a built in screen or oscilloscope. I had the opportunity to use a TDR in previous job but that unit cost over \$30,000 and none of us have that kind of cash laying around. So I did the same thing I always do when I'm too "frugal" to pay full price. I checked Google!

I found an article about building your own TDR at <http://www.elecdesign.com/Articles/ArticleID/6260/6260.html> . I first thought was that it probably wouldn't work nearly as well as the article described but I was to be proven wrong. After forking out for the \$1.85 chip and finding the rest of the parts in my junk drawer, I was able to build

my own TDR for less than the price of a Big Mac.

I plugged it into the cable with a terminator on the end and things just didn't look right. There at the end where the terminator was, I saw a reflection. Since a properly terminated cable shouldn't reflect anything, I thought my terminator was bad, so I put another one on and it looked exactly the same. Now I knew there was either something wrong with my new TDR project or something wrong with the cable. I switched to the other end of the cable there it was. A big reflection from something near the end of the cable that was originally connected to the antenna. So now I knew there was something very near one end that was causing the problem. By expanding the display on the oscilloscope and doing some calculations, it was telling me that the problem was about 6 feet from the end.



I visually inspected the cable but couldn't see anything out of the ordinary such as kinks, for cuts. There was a grounding strap attached at just about the right place but a visual inspection showed nothing there either. After double and triple checking, I took a pipe cutter and cut 7 feet off the end of this very expensive cable. I carefully re-attaching the connector, took another deep breath and plugged the my TDR back in. To my relief I display now looked completley normal and shown below. If you look closely at the After Repair image you'll notice that the little reflection from the far end is a bit closer because of the 7 feet I cut off. I never did find out what the problem was but I know it's somewhere in that 7 feet of cable I cut off and I would never have found it without a TDR.



73, Bruce

Flea Market
&
Silent Auction
January General Meeting
There will be a general Flea
Market and Silent Auction of Club
surplus equipment. Get your fleas
together and bring them along.

Repeater Proposal

Dear Saskatoon Amateur Radio Club member and Meewasin Amateur Radio club member,

Recently, I was asked to formulate in clear language a concept of benefit to the amateur radio community of Saskatoon. A concept of mutual benefit that helps foster the amateur cooperative spirit, improve communications ability, technical competence, and make use of the resources available to us. From its humble beginnings of an idea, to a discussion paper, and now in the form a formal identical motion to be discussed and voted on by both clubs membership. I present this motion, to the different club memberships for their consideration an ultimately their approval.

Notice of motion:

"That the **Saskatoon Amateur Radio Club** (SARC) and the **Meewasin Amateur Radio Society** (MARS) cooperatively install, operate and maintain two VHF repeaters, one on 146.940 - frequency (owned by SARC), the second one on 145.210 - frequency (owned by MARS) at the St. Pauls Hospital location. Both clubs would need to negotiate and arrange all details of the installation, operation, and maintenance with Eric Quiring - VE5HG or his designate.

The purpose of the installation and operation of the two **independent** repeaters is to provide autopatch, link to provincial terrestrial network, IRLP, IPARN, and remote bases if so desired by either club. Each club would cover the costs associated with the installation, which would include the cost of upgrading the existing S-Com 7K controller (\$98.00 American) and each would pay equally the ongoing costs of the "commercial rate" telephone line costs with the autopatch, antenna systems, feedline etc... Either repeater would be made available for ARES activities as first priority.

This motion also expects that at least a group of club members from each club volunteer to participate in the upcoming "**Controller Class**" offered by the **Saskatchewan Amateur Radio League** (SARL). This class is designed to go through the ABC's of repeaters, linking, remote bases, and "**control**" of these and other radio systems. This is an elmering course designed to get more amateurs to understand, operate and maintain communication networks. Each club is anticipated to install a Motorola Micor repeater at the site, and the class will start with the fundamentals involved in obtaining a frequency, ordering crystals, synthesized radios, tuning up equipment, programming repeater controllers, setting appropriate audio levels, troubleshooting, installation and repair, as well as ongoing maintenance of these systems. Upon successful completion of the course, a "**control operator**" designation will be awarded to the successful candidates. This prestigious "**new distinction**" will be recognized at the SARL Annual General Meeting, with the first presentations planned at the Centennial Hamfest both clubs are co - hosting."

Respectively submitted by,
Derek Bereza - VE5SD

Member of Saskatoon Amateur Radio Club
President of Meewasin Amateur Radio Society
President of Saskatchewan Amateur Radio League
Radio Amateurs of Canada MidWest Region Assistant Director
RAC Youth Education Project "Murray Project" Coordinator
Saskatoon-ARES Assistant Emergency Coordinator
IRLP node host 1350, 1360
IPARN Node VE5TNK host
Internet Remote Base Enthusiast