This Month

- Minutes June Meeting
- WSPR
- Visitors from Down Under
- Field Day 2015 pics
- Hamfest 2015 pics
- Remotes
- Wayback Time Machine
- Announcements, etc.

The Saskatoon Amateur Radio Club is a great way to become acquainted with amateur radio. Our club has much to offer the beginner, as well as the seasoned veteran. Please join us at an upcoming meeting or for our Saturday breakfast, and discover the SARC.

Saskatoon Amateur Radio Club
326 Anderson Crescent
Saskatoon, Sk.
S7J 4A3

Club Email
ve5aa@rac.ca

Club Repeater
VE5SK 146.64-

2m Net
Nightly at 8:00 pm

Club Website
http://ve5aa.dyndns.org
The mission of Saskatoon Amateur Radio Club is to enjoy amateur radio through the development, promotion, and expansion of amateur radio in and around Saskatoon.

**SARC Executive**

**President**  Ned, VE5NED chair as needed

**Past President**  Garry Schwartz  VE5SG

**Vice-President**  Sylvan Katz  VE5ZX  2013-2016

**Treasurer**  Terry Cutler  VE5TLC  2014-2016

**Secretary**  Ron Ford  VA5RJF  2015-2017

**Directors**
- **Lawrence Dobranski**  VA5LD  2014-2016
- **Mike Luciuk**  VE5MIK  2014-2016
- **Ned Carroll**  VE5NED  2014-2016
- **Stuart Kasdorf**  VA5KAS  2015-2017
- **Ron Slind**  VE5RS  2015-2017

**Committees**

- **Repeaters**  Bruce, VE5BNC
- **Property and Assets**  Club Executive
- **Training Coordinator**  Ron, VA5RJF
- **Public Service**  Club Executive
- **Sick and Visiting**  Club Members
- **Field Day**  Club Members
- **Elmer/Mentoring**  Ken, VE5KRB
- **Trailer**  Club Members
- **Space Club**  Mike, VE5MIK
- **New Hams Liaison**  Stuart, VA5KAS
- **SARC Net**  Club members
- **Feedline**  Mike, VE5MIK
- **Web-site**  Terry, VE5TLC
- **50/50 Draw**  Bruce, VE5BNC
- **Little Bear Lake**  Terry, VE5TLC
- **Amateur Radio/Physics Research Station**  Ken, VE5KRB

**Next Club Meeting**

September 14, 2015

7:00 P.M.

McClure United Church

2nd Floor Meeting Room

Elevator Available

1825 McKercher Drive

(Corner of McKercher & Taylor)

**COFFEE**

Haywood’s Restaurant

Saturdays 9:00 AM

3016 Arlington Avenue

South of Alvin Buckwold School

**OR**

Smitty’s Market Mall @ 9:30 am

Listen to Friday’s 2m SARC Net for details

Everyone is welcome. Hams, non-Hams, it doesn’t matter. We’re there to have good conversation with good friends. Come on out and visit!

The Feedline is the official publication of the Saskatoon Amateur Radio Club. This is your newsletter! Amateur radio information of general interest, club member project descriptions and doings, radio applications to other activities, corrections, or suggestions are all welcome.

If you wish to contribute articles, photos, comments, cartoons or perhaps you want to let your fellow members know about some rare DX contact you have made, or pictures of your shack or antenna installation, or anything else that interests you, then please submit these to the editor at mluciuk@gmail.com

Be kind and respectful to your fellow hams. After all, without them, all you’d hear on the air is static.
LOCAL AREA Repeaters

VE5SK 146.640- Saskatoon, SARC
VE5XW 146.730- Rock Point
VA5LLR 145.390- Lizard Lake
VE5ZH 147.270- 2 MHz offset, Saskatoon, Auto Patch
VA5SV 145.330- (100) Ridge East of Saskatoon
VE5RPD 145.190- Elbow/Davidson
VE5CC 146.940- Saskatoon MARS 100Hz tone on xmt only -Linked to VE5CC, VE5DNA and IRLP node 1360.
VE5SKN 146.940- Saskatoon MARS. 100Hz tone on xmt only -Linked to VE5CC, VE5DNA and IRLP node 1360.
VE5ZH 147.270- Saskatoon, Auto Patch
VE5XW 146.730- Rock Point
VA5SV 145.330- (100) Ridge East of Saskatoon
VA5LLR 145.390- Lizard Lake
VE5RPD 145.190- Elbow/Davidson
VE5CC 146.940- Saskatoon MARS. 100Hz tone on xmt only -Linked to VE5CC, VE5DNA and IRLP node 1360.

APRS 144.390

VE5RHF Saskatoon DIGI VE5BNC-3 Saskatoon
IGATE & SATGATE VE5XW-1 Rock Point VE5HAN-4 Hanley DIGI

IRLP NODE
1360 Hard linked to VE5CC UHF Hub (444.975 +5M) & available to VE5CC, VE5SKN and VE5DNA VHF repeaters when linked.

LOCAL & REGIONAL NETS

Sask. WX 80m 1400Z 3735 Khz Alberta 80m 0130Z 3700 Khz
ARES (Sun.) 80m 1430Z 3753 Khz 80m YL Net 80m 0315Z 3755 Khz-Sundays
Aurora 40m 2330Z & 0200Z 7055 Khz B.C. 80m 0130Z 3729 Khz
Manitoba 80m 0000Z 3747 Khz
Montana Tfc 80m 0030Z 3910 Khz SARC Local 2m 0200Z 146.640-
Sask. 80m 0100Z 3735 Khz Prince Albert 2m 0330Z 147.150+

LITTLE BEAR LAKE

• The LBL telemetry address is dougf.no-ip.com/tlm/test2.txt  • The 6 m. beacon address dougf.no-ip.com/va5mg

CONTESTS

• SKCC Weekend Sprintathon 1200Z, Sep 12 to 2400Z, Sep 13
• CQ Worldwide DX Contest, RTTY 0000Z, Sep 26 to 2400Z, Sep 27
• Peanut Power QRP Sprint 2000Z-2200Z, Sep 27

For a full list of contests see: WA7BNM Contest Calendar

DXPEDITIONS

• Cocos Keeling Sept. 19 to Sept 25
• Tuvalu Sept. 24 to Oct. 14
• Mariana Is Sept. 30 to Oct. 16

For a full list of DXpeditions see: Announced DXpeditions

Design • Experiment • Explore • Research • Communicate • Create • Invent • Build • Test • Enjoy
That's Amateur Radio!
June 11th, 2015 Meeting Minutes

Call to Order: Meeting was called to order by President Garry (VE5SG)

Present: Michael (VE5WD) (guest) +15 members

Regrets: Stuart (VE5KAS) (to arrive at 8:00)

Minutes of last AGM as published in Sept 2014 Feedline
Acceptance Sylvan (VE5ZX)/Richard (VE5RNP) cd

Constitutional changes (mailed May 14, 2015)
re: (terms of office for treasurer and Secretary)
Discussion followed
Motion: That the two term limit for Secretary and Treasurer be removed:
Sylvan(VE5ZX)/ Roly (VE5RO): cd unanimously

Financial Report: Terry (VE5TLC)
Finances are stable and healthy
Acceptance: Terry (VE5TLC)/Richard (VE5RNP) cd

Motions
Approval of annual statement as circulated
moved: Terry (VE5TLC)/Peter (VE5JZ)  CD

Waiving formal audit:
motion: That the Members of Saskatoon Amateur Radio Club waive the requirement for a formal audit for the coming fiscal year.: Terry (VE5TLC)/Jack (VE5JAC)  CD

Membership fees:
motion: that the membership fees for 2015-16 be the same as 2014-15: Terry (VE5TLC)/Richard (VE5RNP)  CD

Budget Approval:
That the budget for 2015-16 be approved as presented with receipts of $3,870, and expenses of $3,870. Terry (VE5TLC)/Richard (VE5RNP)  CD

Hamfest – Vince (VE5VS)
Theme centres on Saskatoon EMO vs ARES and hams.
Ray Unrah is a guest speaker. The focus is on how hams can help out in emergency situations. Keynote speaker is Lawrence Dobranski speaking on Security and the Digital Ham.

Another speaker on Canwarn.
There will be a two part presentation on D-Star.
Supper Sat night.
Radio World will be there
Several prizes from dealers.

50-50: Tim (VE5TWM) won $14.50 prize and returned it to the Club.

Elections
Directors:
to replace Ken (VE5KRB) Ron (VE5RS):
Ned (VE5NED)/Ken (VE5KRB)
No further nominations. cd by acclamation
ELMER: Stuart (VE5KAS): Sylvan(VE5ZX)/ Barry(VE5BPS)
No further nominations . Cd by acclamation

Secretary: Ron (VA5RJF): re-elected by acclamation

Vice President: Sylvan (VE5ZX) has another year in his term.

President – Ned (VE5NED) (a director) is willing to fill in in an acting capacity until such time as a President can be found.

Motion: That SARC accept the offer of Ned (VE5NED) to serve as Chair in the interim: Ken (VE5KRB)/Sylvan (VE5ZX)  CD

Donations to U of S Rover Project
U of S Engineers have entered an international Lunar Rover competition. In a recent competition, the U of S team took fourth place, behind 4 Polish teams. Ken (VE5KRB) proposed that we provide a donation to assist the U of S team to attend a coming international competition in Poland.

Motion: Roly (VE5RO)/Sylvan (VE5ZX): That SARC make a donation of $200, plus whatever other Club members choose to add, to the UofS Rover team by July 31. CD

Pride Parade
SARC is providing communications for the parade on Saturday, June 13.
We have 12 signed up, and room for 10 more. We will be using 147.390. Parade starts at 12:45pm. Setup starts at 9:00am.

Field Day
Site has moved to VA5RON's farm south of town on Hwy 219. There is a distinct possibility that this could be a joint activity with MARS.

September Meeting Place and Date
Meeting night choice seems difficult. Suggestion that the Exec do a phone tree to canvas members. Possibly use two different nights alternating?

Misc: Peter (VE5JZ) – we need people monitoring the repeater fairly constantly. The repeater is of no use during the day for emergencies or calls for help UNLESS people are monitoring it.

Adjournment: Ken (VE5KRB)
One of the things that makes communicating with amateur radio more fun than using the Internet or the phone is that you never know where your signals will be received. Short wave radio propagation is never completely predictable, and can often surprise you. If this is an aspect of radio that fascinates you, then you'll enjoy using WSPR.

WSPR is a piece of software that enables you to participate in a world-wide network of low power propagation beacons. It enables your radio transceiver to transmit beacon signals, and to receive beacon signals from similarly-equipped stations in the same amateur band. Because participating stations usually upload spots that they receive in real time to a web server, you can find out within seconds of the end of each transmission exactly where and how strongly it was received, and even view the propagation paths on a map.

If you left WSPR running while you were doing something else, you can also search the database to find out later where your signals were received during the day. You can analyze past signal reports to see the effect of seasonal propagation changes or antenna improvements.

What is WSPR?
WSPR stands for Weak Signal Propagation Reporter, but it's pronounced "Whisper" - quite an appropriate name as it is all about sending and receiving signals that are barely audible.

WSPR is a software application written by Joe Taylor, K1JT, a Nobel Prize-winning Princeton physicist. It was first released in April 2008. It uses a transmission mode called MEPT-JT. The "JT" stands for Joe Taylor, while MEPT stands for Manned Experimental Propagation Transmitter.

MEPT is not something specific to WSPR. MEPTs are very often simple home-built QRP transmitters that send beacon messages using very low-speed Morse (QRSS). Their very weak signals are copied visually using software called a "grabber" - a horizontal waterfall display capable of detecting and highlighting signals well below the noise threshold. The content of a transmission is determined - as with many other weak-signal QRSS modes such as EME (moonbounce) - by literally reading the dots and dashes as they are displayed on the waterfall.

The "manned" aspect of MEPT simply relates to the operator's license conditions. It is not necessary to obtain a special dispensation to operate a MEPT station because you are present while it is in use, just as you would be when using CW, SSB or another data mode. In fact, some MEPT enthusiasts discourage the use of the term "beacon" because beacon operation without a special permit is prohibited by some licensing authorities.

Once set up, operation of WSPR is completely automated. The software logs every transmission you make, as well as all the "spots" (decoded MEPT-JT signals) received. So this is something you can do when you are otherwise engaged and not able to get on the air and make normal QSOs. Just how "hands-on" you need to be when operating WSPR is a matter between you, your license authority and your conscience, but some people leave their WSPR beacons running 24/7 and some of that time, one assumes, they must be asleep.

Principles of operation
WSPR itself does not use slow Morse. The signal is frequency shift keying (FSK) with a very small shift and a very slow rate. In fact, some people have mistakenly thought that the software wasn't working because they listened to the signal and heard what sounded like a pure tone, with no modulation at all. The bandwidth occupied is only about 6 Hz, so many stations can operate within the 200Hz WSPR window without interference.

Each MEPT-JT transmission lasts for just under two minutes, and starts at the beginning of each even-numbered minute. It is important that transmitters and receivers are in sync, so one of the fundamental prerequisites of success with WSPR is an accurately-set computer clock.

The beacon transmission contains the transmitter's callsign, locator and power (in dBm.) The data is encoded to reduce the number of data bits needed, with the result that only standard callsigns can be used - no prefixes, suffixes or special calls. Forward error correction is used to improve the chances of copy even under adverse conditions while eliminating false "spots".

The WSPR software incorporates both a receiver/decoder as well as a transmitter. How much transmitting you decide to do is up to you. It is not necessary to transmit at all, so this is an activity that even SWLs can participate in - and many do. Most operators set the
software to transmit once in every four or five two-minute segments. This is a random probability, so that two stations which start off at the same time with the same probability will not always transmit in the same segment.

Syncing the clock
As mentioned earlier, it is vitally important that your computer clock is accurate, as this governs when WSPR starts each transmit or receive period, and nothing will be decoded if your clock is more than a couple of seconds out.

If you are using Windows XP, open the Date and Time window in Control Panel and select the Internet Time tab. There, you should see an option to synchronize the clock using an Internet time server, time.windows.com. Select this option, and do an immediate sync to see if it works.

If you have a radio-controlled clock or a GPS you can compare your computer clock with it to see how accurate it is. Do this every day over a period of a week. Windows only synchronizes the clock with the time server once per week, and many computer clocks drift several seconds per day which is just not good enough for this application. If you need to make Windows synchronize more often then here is a link to a utility (untested by me) that allows you to change the time sync interval. Alternatively if you have a permanent Internet connection you can disable the Windows time synchronization altogether and use NTP for Windows.

Transceiver setup
WSPR needs connections between your computer sound card and your radio transceiver in order to decode received beacon signals and send your own transmissions. It also needs to be able to control your transceiver's PTT using the serial port RTS control line, unless you want to use audio VOX.

If you are already set up to use data modes such as PSK31 then you probably have all the necessary connections already in place. However if you have a full serial connection between the computer and radio in order to allow full computer control, your data mode software may be using computer commands to control TX/RX switching. WSPR only knows how to use RTS to control PTT so you may need to enable this within your transceiver's configuration menu or make a transistor switch to interface between the PTT and the RS-232 RTS signal. See here for more information about interfacing a computer and transceiver. If you can't easily use a serial port to control PTT then you can try VOX.

Because MEPT-JT is a very narrow band mode, it is desirable - though not essential - that your transceiver's dial calibration is accurate to within at least a few Hz. If you don't have any accurate frequency calibration equipment then an easy way to do this is to tune in some AM short wave broadcast stations in SSB mode, while monitoring the received audio using a spectrum analyzer program or data mode software with a waterfall display, and using this to measure the frequency of the carrier heterodyne.

Short wave broadcast stations transmit on exact multiples of 5KHz, and their frequencies are usually accurate to within a Hz or two. Tune 1kHz above or below the frequency the short wave station is supposed to be on (for example, 5.984000 MHz or 5.986000 MHz if the station is on 5.985 MHz) and measure the frequency of the tone produced by the carrier, which should be exactly 1000 Hz.

Repeat this check with several other short wave stations, to be sure that you didn't pick one that happened to be off-frequency.

Setting up WSPR
Once you have your computer clock and transceiver interfacing sorted out it's time to install WSPR. You can download WSPR from here. It installs in the usual way for a Windows application. WSPR can also be compiled (with not a little difficulty) for Linux, which we'll talk about later.

Once WSPR is installed, start it. Note that a console window (often, incorrectly, called a DOS Window) will appear just before the user interface window shows. This is normal. Don't close it! However, unless you have problems - in which case it might display some helpful information, such as error messages - you can ignore it. You can't hide it, but you can minimize it.

Open Setup, Options. Enter your callsign and full six-character locator. Enter the number of the serial port that will be used to control PTT (for COM1, enter 1.)
Enter 0 to disable PTT control if you will be using the transceiver's VOX.

Select the power you will be using, in dBm. The dBm values are encoded in the software, so you can only use the values listed, e.g. 30dBm (1W), 33dBm (2W), 37dBm (5W), 40dBm (10W). Most people use 1W, which is 30dBm, so this would be a good start. Remember to set the transceiver's power control to the same value. The WSPR software cannot set it for you. Then close the Options window.

Now you are almost ready to go. We'll start on 30m, since that's the most popular band for WSPR users and you're bound to hear a signal.

Set your transceiver to the 30m band, and set the mode to whatever you use for sound card data modes. This mode should use upper sideband, in order that the audio tones are the right side of the suppressed carrier frequency. Set the transceiver to 10.138700, and enter this frequency into the Dial freq box on the main window of WSPR.

The latest versions of WSPR have a Bands menu that lets you pick the band you want to operate on and select the correct Dial freq box automatically. This is just a convenience so you don't have to remember the right frequency to use on each band. WSPR does not set your transceiver to this frequency, even if you do have a CAT connection. You must set the dial manually!

The frequency calibration to the right of the waterfall in WSPR shows a range of 100 to 300. This represents the frequency range 10.140100 to 10.140300 - the dial frequency plus 1.5KHz, plus or minus 100Hz. This is the 200Hz band segment that WSPR will monitor for signals. All other WSPR users on the 30m band will be listening to the same segment of band.

Receiving

Now click the Rx radio button in the T/R cycle control, and wait. When the next even numbered minute starts, WSPR will display Receiving in the bottom right of the status bar. It will continue receiving for one minute and 54 seconds, during which nothing will appear in the waterfall display. After that, it will display Waiting to start, and a couple of seconds after that a chunk of waterfall will appear in the display. If you see any faint (or not-so-faint) horizontal traces, these are probably signals from other WSPR users, and if you are lucky, WSPR will have decoded them and will have displayed the details in the Band Map and in the log list in the lower half of the window. As the clock ticks over to 00 seconds, WSPR will start receiving again.

If nothing is received then look hard at the waterfall segment that was displayed. If it shows faint "noise" then it is probable that no stations were transmitting. If it is completely blank then there may be a problem with the audio connection from your radio, or your mixer settings. Since using a waterfall that only updates once every two minutes to check the result of changes can test your patience, use a regular data modes program to verify that audio is being received by the sound card and that signals appear on the waterfall.

If you have more than one sound card you will probably need to specify the soundcard number in the setup options as well. The console window mentioned earlier will help you decide what number to put.

When you have verified that your receiver is working correctly, tick the checkbox marked Upload spots. This will cause details of the spots you receive to be uploaded to the WSPR Spots Database at WSPRnet.org. This is what makes WSPR fun, interesting and useful. It enables transmitters to know where their signals have been received, and at what strength. It also helps you get a picture of what propagation is like.

Transmitting

Now you are almost ready to send your first MEPT transmission. Before you do, you must enter your transmit frequency in the Tx freq box of WSPR. The easiest way to do this is to double-click in the waterfall. Pick a spot that is not being used by any of the stations you have already received. This should result in a frequency somewhere between 10.140100 to 10.140300.

Double-check that you set the transceiver's output power to the level you specified in the settings, earlier: if you entered 30dBm the power should be set to 1 watt.

Now click the 20% button in the T/R cycle control and wait. Eventually, when a new 2 minute segment starts, WSPR will display something like Txing: G4ILO IO84 30. This means that it is sending the information specified - your call, locator and transmitter power, as you entered in the Setup window when you started.

After one minute and 54 seconds it will display Waiting to start again, and then go back to receiving. At each new 2 minute segment your station will transmit with a probability of 20%. If activity is low, you can increase the frequency of transmissions by selecting 25% or 33%.

After your transmission has finished, wait a few seconds and then open (or refresh, if it is already open) the WSPR Spots Database. With luck, your signal will have been received and decoded by other WSPR users, and will appear as spots in the database. Congratulations!
You are now a fully fledged member of the WSPR Network!

**Operation on other bands**
Currently, most WSPR operation takes place on the 30m band. This makes 30m the best band to start off on, as it is the one that has the most receivers operating on it, so it is the band most likely to produce the greatest number of spots.

However, there is a lot of interesting propagation research that can be done on other bands. WSPR could be used to determine the incidence of grayline propagation on the LF bands, for example. At the other end of the HF spectrum, WSPR could be used to detect openings on 15m or 10m. It could even be used to detect and alert operators to Sporadic E openings on 6m and 2m. All it takes is for enough people to set up their stations to receive and transmit on the appropriate frequency.

At the time of writing, the following frequencies appear to be recommended for use:

<table>
<thead>
<tr>
<th>Band</th>
<th>Dial freq (MHz)</th>
<th>Tx freq (MHz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>160m</td>
<td>1.836600</td>
<td>1.838000 - 1.838200</td>
</tr>
<tr>
<td>80m</td>
<td>3.592600</td>
<td>3.594000 - 3.594200</td>
</tr>
<tr>
<td>60m</td>
<td>5.287200</td>
<td>5.288600 - 5.288800</td>
</tr>
<tr>
<td>40m</td>
<td>7.038600</td>
<td>7.040000 - 7.040200</td>
</tr>
<tr>
<td>30m</td>
<td>10.139700</td>
<td>10.140000 - 10.140200</td>
</tr>
<tr>
<td>20m</td>
<td>14.095500</td>
<td>14.097000 - 14.097200</td>
</tr>
<tr>
<td>17m</td>
<td>18.104500</td>
<td>18.106000 - 18.106200</td>
</tr>
<tr>
<td>15m</td>
<td>21.094500</td>
<td>21.096000 - 21.096200</td>
</tr>
<tr>
<td>12m</td>
<td>24.924600</td>
<td>24.926000 - 24.926200</td>
</tr>
<tr>
<td>10m</td>
<td>28.124600</td>
<td>28.126000 - 28.126200</td>
</tr>
<tr>
<td>6m</td>
<td>50.293000</td>
<td>50.294400 - 50.294600</td>
</tr>
<tr>
<td>2m</td>
<td>144.485000</td>
<td>144.489900 - 144.490100</td>
</tr>
</tbody>
</table>

However, there may not necessarily be anyone else listening on any of those bands. One way to check whether anyone is operational is to use the Propagation Map at WSPRnet.org. If WSPR does not receive anything during a 2 minute segment then it reports the receiving station details to the Spots Database. So to check whether anyone is monitoring a band, just select that band from the map and click Update. Any stations that are active will be shown on the map, and you can click on the callsigns to see their details such as their transmit frequency and transmitter power.

You can also use the Chat/Sked Page at WSPRnet.org to arrange skeds. This could be particularly useful for carrying out antenna tests.

**WSPR for Linux**
As mentioned above, getting WSPR to run under Linux is quite a challenge. The GUI version described here does not run under wine, although the older command line version does. To use the latest version you must download the source code and compile your own version, as described here. Be warned, it's a lot more involved than running `configure, make and make install`.

Because I wanted to run WSPR on my Asus Eee PC, I tried to compile it and was eventually successful! I also hacked the user interface so it fits on the 800x480 Eee PC screen. You can download my version of WSPR for Linux here. The archive includes some instructions to help you get it running.

This version may run under other versions of Linux besides the Eee PC standard Xandros Linux, but you will have to try it and see. If it doesn't work then I can't help, and you will probably have to compile it for yourself on your own system to overcome the errors.

**Conclusion**
WSPR is an easy and fun way to take part in some real radio propagation experiments. It's also a good way for people who are too busy to get on the air very often and make regular contacts to get more use out of that expensive equipment that would otherwise be sitting idle in the shack.

I hope to see your call on my list of recent WSPR spots very soon!

G4ILO
Tony VK3CAT and his wife Nan are on holidays in Canada and he is taking every opportunity to activate SOTA peaks. Here, at right, he is setting up on the summit of the famous ski resort Whistler's Peak.

This was the first ever activation in the SOTA summits on the air program of Whistler, SOTA designation VE6/EC-001. All contacts were via CW using an Elecraft KX3 kit radio. Power was 8 watts and a magnetic loop antenna completed the station.

Contacts were made to Los Angeles, San Francisco, Florida, Arizona, and a few other places in the USA. Tony suggested to the guy who took the photo that it was an attempt by 50+ blokes to keep fit. Tony further says "I was explaining what I was up to whilst sending on a preset memory. Then the Reverse Beacon Network picked me up and it was off to work."

Tony had to ask the chasers to QRX while the photo was taken and again whilst adjusting the rock that was stopping the tripod from being blown over. The weather on top at 2,470 m was sunny but with some wind chill. Contacts were made on 20m and 15 m cw. Under the conditions Tony remarked that SSB would have been a real struggle. The FISTS group were using his nominated frequency so he went down 1 kHz and tightened up the filters.

Tony did try 10m first but nothing was heard (including beacons). There was no phone coverage on the summit although it was back in service at the Top Station of the Jasper Sky Tram.

This was his highest altitude activation to date but for only 4 points. Forget a motor bike or Four Wheel Drive, a helicopter would be the ultimate access vehicle for here he said.

Tony says that in NA it has been very warm, there was also "bugger all" snow over the winter so the weather pattern is a bit ominous and of concern to locals.

Still he and Nan were enjoying the sunshine and long mild evenings. No bears seen that evening but they did have Elks over breakfast and Deer on the way back home.
Congratulations and thank you to the Meewasin Club for all their hard work in putting on a successful 2015 Hamfest!
Remotes

There has been a lot of discussion lately regarding the upcoming ARRL's review of DXCC requirements regarding, amongst other things, the use of "remote" stations. It seems that most folks are either dead against them or all for them, with little middle-ground. But one thing is for certain ... remotes are here to stay and are growing by leaps and bounds.

The biggest controversy seems to be whether DX worked via a remote should count the same as DX worked from one's home station. Many think that DX worked via a remote should still be countable for your DXCC credits but should be in a separate class or have a separate endorsement indicating such ... others see no separation is needed.

I guess a lot depends on how one views the DXCC program overall. Some see it as a competition against other stations while others view it is a personal challenge for one's own satisfaction and the only competition is with one's self.

For example, if a New England 160m amateur spends many years perfecting his system and struggles for those hard-fought Asian or South Pacific contacts, should these contacts be held in the same regard as the New Englander's 160m neighbour who works all of the Asian-Pacific with ease via a remote station on the west coast? Should both DXCC certificates be the same? There is also the question of remote stations "for rent" and the overall ethics or "legality" of such within the amateur radio service.

The only direct exposure I have had to remote station operation is hearing what was clearly an east-coast remote being operated by an amateur on the west coast, while working Europeans. No problem with that, however, the operator was giving his location as CN87, Washington state ... clearly deceptive, as many Europeans were delighted to think that they had just worked a new state in "7-land"!

I suppose that no matter how strict the "rules" for remote operations eventually become, there will always be those willing to play by their own rules, as is human nature.

The genie is out of the bottle and there is no going back. I think the ARRL has some tough decisions to make ... hopefully they will be well-thought out and not based solely on financial interests.

Steve, VE7SL
SARC Wayback Time Machine
Do You Remember?

September 2005 Feedline, Saskatchewan’s 100th Birthday, and the Saskatchewan Centennial Hamfest

Field Day 2005

Field day was held by SARC this year at the Wester Deveopment Museum parking lot. Thanks to John (VE5RJA) the trailer was brought from Ron’s (VA5RON) farm Friday. The station, Field Day was over for another year.

RAC Bulletin 013-05
July 29, 2005
Industry Canada Introduces Alternatives to Morse Requirements for HF

Per Canada Gazette notice DGRB-003-05 22 July 2005, Industry Canada has adopted elements of the RAC "Proposal on Morse Code and Related Matters" and has removed the mandatory requirement for the Morse Qualification for access to the HF bands below 30 MHz.

Effective immediately, amateurs certified with BASIC Qualification prior to 2 April 2002, and amateurs certified with both BASIC and ADVANCED Qualifications, may operate on HF. Amateurs with BASIC only Qualification certified after 1 April 2002, and who achieved a pass mark of 80% or greater, will also be allowed to operate on HF. Amateurs certified BASIC only Qualification after 1 April 2002 having achieved less than 80% pass mark, will either have to qualify in Morse, write the Advanced or re-write the Basic examination to obtain HF privileges. This latter requirement is related to a decision to increase the BASIC examination pass mark to ensure that candidates have been tested in all areas of the syllabus.
SARC Important Dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 14, 2015</td>
<td>Club Meeting</td>
</tr>
<tr>
<td>Oct.</td>
<td>Club Meeting &amp; Flea Market</td>
</tr>
<tr>
<td>Nov.</td>
<td>Club Meeting</td>
</tr>
<tr>
<td>Nov. 15, 2015</td>
<td>Santa Claus Parade</td>
</tr>
<tr>
<td>Dec.</td>
<td>Christmas Banquet</td>
</tr>
</tbody>
</table>

Flaunt Your Face - Show Your Shack

In our hobby it's not always easy to put a face to all the fellow hams you talk to on the air or see at meetings/events. To help us all figure out who's who, SARC invites its members to submit digital photos of yourself and/or your shack to be published in the Feedline. Include a brief description of your shack and your involvement in amateur radio, how you got involved, your interests. If there are any other bits of information to fill in, I'll email you.

This is purely voluntary, of course, and you can just send in a picture of just the shack. Email to mluciuk@sasktel.net

Route 66 On the Air 2015

September 12 - 20

This is the 16th year to relive the ride on the “Mother Road”, a road that made coast to coast travel possible. Consisting of 20 radio clubs and mobile stations that are on or around the route. http://w6jbt.org

Party Balloon

On 28-July Dave VE3KCL launched a balloon (in fact two hydrogen-filled foil "party" balloons tied together) carrying a 39g payload. The balloon is currently cruising East across the Atlantic at just over 8,000m.

The electronics payload Dave built has a GPS, battery, solar panels, QRP Labs Si5351A Synthesiser module, and Arduino Nano (for low weight) that runs the QRP Labs Ultimate3S QRSS/WSPR transmitter firmware, but a slightly modified version.

The balloon uses WSPR on 30m (20mW power) but encodes telemetry data onto the WSPR protocol, in three sequential messages. The additional data carries 5th and 6th Maidenhead locator characters, altitude, speed, battery, temperature, GPS status and satellite status. The balloon is also sending JT9 plain text, and CW to the reverse beacon network. The WSPR messages logged to the WSPRnet database are decoded automatically and plotted on the map at http://qrp-labs.com/ultimate3/ve3kcl-balloons/ve3kcl-s3 .

There are more details and photos on http://qrp-labs.com/ultimate3/ve3kcl-balloons/ve3kcl-s3

Sylvan, VE5ZX

A Flea Market will be featured at the October SARC Meeting. Bring your “junk”, bring your “treasures”. Bring your “junk” that will become someone else “treasures”. Flea Market will take place after a short business meeting.

Name Tags

Orders for Club Member Name Tags will be taken at the September and October Meetings. Name tags will have a magnetic attachment. $10 per name tag.

Arduino CW Decoder Project

Dan Trudgian M0TGN has been blogging recently about his latest project, an Arduino Morse decoder. He wanted to create a project that would “inspire” young electronically minded students that might have an interest in radio – (i.e the Morse code) some coding experience and some construction / electronic interest..

He is using a very simple single tone detector interface between his radio and the Arduino microcontroller board. Single tone detector circuits first became popular in the UK around 1980 when they were used for RTTY as well as CW. The UK produced IGADUMA terminal unit was one such example. The circuit Dan is using is based on one published in QST magazine and only needs a few components. Read Dan's blog http://www.m0tgn.com/

A Flea Market will be featured at the October SARC Meeting. Bring your “junk”, bring your “treasures”. Bring your “junk” that will become someone else “treasures”. Flea Market will take place after a short business meeting.
Atlantic Hurricane Season 2015

On the IARU Region 1 site Greg Mossop, G0DUB reports on frequencies to listen to now the Atlantic Hurricane Season is underway.

Tropical Storm Danny moving over Puerto Rico and towards Cuba marks the first notable storm of the Atlantic Hurricane Season this year. So it is time to remind the wider Amateur Radio community that the following frequencies may be in use by nets in North and Central America to track and deal with the consequences of these severe weather events. Radio Amateurs in Region 2 play their part in gathering and distributing information for the weather and emergency services as they do every year.

Radio Amateurs are reminded it is possible to cause unintentional QRM to these nets so please listen carefully if operating near these frequencies:

Caribbean Emergency & Weather Nets: 7.162 & 3.815 MHz
Eastern Caribbean Narrow Band Emergency System Net: 7.036 MHz USB (Olivia & MT63)
Caribbean Emergency: 14.185 MHz
Republica Dominicana: 7.065 & 3.780 MHz
Cuba: 7.045, 7.080, 7.110, and 3.740 MHz
Central America: 7.090 & 3.750 MHz
Nicaragua: 7.098 MHz
Guatemala: 7.075 MHz
Panama: 7.085 MHz
Mexico: 7.060 & 3.690 MHz

USA:
Maritime Mobile Service Net: 14.300 MHz
Hurricane Watch Net: 14.325 MHz
Salvation Army Team Emergency Radio Network (SATERN): 14.265 MHz
Other local emergency communications groups may also activate if a hurricane approaches their area and those frequencies would be announced at the time.

HELP NEEDED
Looking for experienced tower climber to help repair 15m feedline and inspect tower.
Will donate $100 towards purchase of radio equipment for the assistance.

Background
Last summer a strange high SWR condition has developed on the 15m feedline when the outside temperature is above about 6 C and the antenna if the antenna is pointed within the arc NNE-W-SSE. When the temperature is below 0 C the antenna handles a KW in all directions with no problems. Dave, VE5UO, offered to help solve this problem this summer. Unfortunately, he hurt his knee and cannot climb at the moment.

If you can help please contact
Sylvan - VE5ZX
jskatz@sasktel.net
(306) 934-4638

SARL Membership information can be found at the following http://www.sarl.ca/index.php/forms
The Peanut Power Sprint, the closeout of the Summer QRP Contesting/Operating season is scheduled for Sunday, September 27th. Jim W4QO has been posting this notice on the e-mail reflectors:

The Bees have swarmed and the Skeeters have been hunted. Now it time for a snack - The Peanut Power Sprint!

Everyone plays... Outdoors, indoors, lo/hi power, ... there is even a QRO category.

http://www.hornucopia.com/contestcal/contestdetails.php?ref=571

Sponsored by the North Georgia QRP Club (NoGaQrP), this sprint will be held on Sept. 27, 2015 from 4PM to 6PM EDT (Sept. 27 - 2000z to 2200z). Full rules are on the NoGaQrP website - nogaqrp.org Your QSO will be worth more if you have a PEANUT number; assigned NEW each year (see below).

The club is making this one different from most other QRP QSO events.

1. It is open to all amateurs at any power level. This is to attract some new folks to QRP while running their comfortable power - QRO (<100 watts pls) All are welcome and there is a QRO category. This is a FUN event. Not cut-throat!

2. It is a short sprint lasting only two hours; not tying up the entire afternoon. Although brief, run reasonable CW speeds for all to copy.

3. It starts late in the day (right after close of TX QSO party!) which will mean those on the west coast will begin at 1PM PDT, later than most contests.

4. There are categories for all situations - the prestigious category is the Peanut Power category - 1w CW or less, 2W PEP SSB or less - operating from the field! This is the GOOBER CLASS! SOTA anyone?

5. Plaques will be awarded for each of 5 category winners (minimum 3 entries).


6. Sprint encourages SSB as well as CW contacts. The exchange: RS(T), State/Province/Country(SPC) and your Peanut Number or Power. Call CQ NUT and have FUN!

7. Multipliers count each band/each mode. Work GA ( or any SPC) on 3 bands and 2 modes each = 6 multiplier. Puts emphasis on switching bands and modes during the event. Check SSB on the quarter hour. (SPC means State Province Country)

8. This will encourage activity on the 3 permitted bands - 40, 20, and 15M. There are suggested frequencies for each band/ mode. Notice we are encouraging the now almost dead portion of 40M - 7061 khz and up.

9. Logs are not submitted - simply a score - but keep handy in case requested for verification. Watch website for results. There is an online score calculator. It's all on the website - nogaqrp.org

10. Work stations holding a Peanut Power Number (PPN) for 7 points. Stations worked who do not hold a PPN (will send their power) yield 3 points. Yes, QRO stations can request and receive a PPN. You do not declare your category until you decide to send in your entry. If you get halfway through and change your power, simply enter under a different category than you originally thought!

To request a PPN, send an email to NoGaNuT PeTe at pete@nogaqrp.org Requests for special numbers may no longer be accommodated. See the current list via the website. Or click here to see the latest list: http://byjimeny.com/PPN2015.pdf

Include the word PEANUT POWER NUMBER in the title of your request please.

NoGaNuT JiM, W4QO

This is a really fun Sprint/Operating Event. If you have EVER been intimidated by QRP Contesting, this is the contest for you!

Just In!
U of S Engineering Team has won the championship in the European Rover Challenge. They beat out Poland & McGill. They used amateur bands on their systems up into the microwave spectrum.

More to follow in the October Feedline.
MEMBERSHIP APPLICATION/RENEWAL

SASKATOON AMATEUR RADIO Club inc.
326 Anderson Cres, Saskatoon SK, S7H 4A3

Membership valid from September 1, 2015 to August 31, 2016

NAME ___________________________ CALL SIGN ☐ ☐ ☐ ☐ ☐ ☐

ADDRESS ___________________________ CITY __________________ SK POSTAL CODE ______

TELEPHONE (Home) ___________________ (Business or Cell) __________________

E-mail address: ____________________________________________________________ for FEEDLINE email
(By providing your email address you are agreeing to receive group emails for Club business)

LICENCE: (Please check) Basic ____ Basic+ ____ Advanced ____ Code ____

Occupation (optional) ___________________________________ Name of spouse (optional) ______________________________

Family Members (for Family Membership Application)

NAME ___________________________ CALL SIGN __________________
Basic _____ Basic+ _____ Advanced _____ Code _____

WHICH CLUB ACTIVITIES CAN WE COUNT ON YOU FOR? Special event or area of interest to you
Emergency Response Team _____ Field Day _____
Communication: MS Walk _____ Sask. Marathon _____ Fire Works Festival _____ Santa Clause Day Parade _____
Other: _________________________________________________________________________

Affiliation (Provide membership number where applicable)

ARRL ______ RAC _______ SARL ______ MARS ______ OTHER ______

MEMBERSHIP FEES

Regular Membership –

RAC Member $30.00 - Non RAC Member $40.00 $__________
(must be licensed to operate an amateur station)

Family Membership - RAC Member $35.00 $__________
- Non RAC Members ($10.00 per ea) $10.00 X _____ $__________

Associate Membership $30.00 $__________
(Enthusiasts – not eligible for office)

Junior Membership (under 18 years) $15.00 $__________
(Full privileges if licensed to operate a station)

SARL Membership $20.00 $__________

RAC Membership Check for details $__________

Donation _______________ $__________
(Towards developing, maintaining, upgrading programs/equipment)

TOTAL REMITTED $__________
Saskatoon Amateur Radio Club Inc.

Membership Year: 2015-2016
(Financial period May 1, 2015 to April 30, 2016)

Subject: Membership Vote for Waiver of Formal Financial Audit / Review of the Clubs Financial Books

Amendments to the Non-profit Corporations Act and Regulations:

Effective June 15, 2006 amendments to The Non-profit Corporations Act, 1995 became law. Changes to the Act affect financial reporting requirements as follows:

a. Financial statements must be prepared in accordance with generally accepted accounting principles as set out in the Canadian Institute of Chartered Accountants (CICA) Handbook.

b. A membership corporation (Our Club) may resolve by a 2/3 majority not to appoint an auditor or a person to review the financial statements.

c. Any person appointed to audit or review financial statements must be a member in good standing of a recognized accounting profession (CA, CMA, or CGA) or be a person approved by the Director of Saskatchewan Justice, Corporations Branch.

The cost incurred by the club for a formal audit / review would be substantial. Normally an audit for club like ours would cost between $500.00 to $1000.00 plus. With fees of this magnitude, the club finances would mostly go to supporting this activity.

Vote Question:

‘YES’ vote means you agree to Waive the Formal Audit / Review of the Club Books.
‘No’ vote means you wish for a Formal Audit / Review of the Financial books of the club.

At the Annual General Meeting Held in June 2015 the club books will be available for inspection by all members in good standing and the Financial Statement that will be prepared for Fiscal year 2014-2015 will be presented to the club for acceptance. Once accepted, the Financial Statement will be submitted to the Saskatchewan Corporations Branch of the Justice Department as required by law.

As a member in good standing I __________________________ vote ________ to the motions stated above.

Signed: ___________________________    Date: _______________