From the President’s Desk

I just looked out the window and it looks like fall has arrived. It being October, I suppose it should not be a surprise. However, some days with my state of mind, everything is a surprise.

Now, we know that if you put up a new antenna in warm weather, it will not work as well as if you put it up at -20°C. However, one can always check antennas that are already installed with good results. With our strange weather, an ice storm would not be out of question. Will your antenna hold up with some ice coating? Coax connections and anchors OK? What about the grounding rods etc.?

The letters to the Amateur Radio community informing them of our work with the City of Saskatoon on antenna structures has been sent out this week. We also expressed a desire for the larger community to work with us in developing our future. We already have a positive response! Let us not loose the momentum we have established to this date.

 Scouts Worldwide are having their 56th Jamboree on the air event on October 19 & 20. There is one contest on that weekend, and that is a German WAG Contest. They will keep the following frequencies clear for JOTA. 3650 to 3700 kHz, 7080 to 7140 kHz, 14200 to 14125, & 14280 to 14350 kHz, 21350 to 21450kHz, 28225 to 28400 kHz. Also the complete 17, 12, & 6 meter bands will be available. The time is from 00:00 Saturday until 23:59 Sunday, LOCAL TIME. It would be great if we could invite a scout troop into our shack to participate in this event.

You can contact John, VE5SJA or myself for more information.

C U at the club meeting,

73 Garry VE5SG
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.

Executive

President
Garry Schwartz  VE5SG  2013-2015

Past President
James Cloney  VE5CNB

Vice-President
Sylvan Katz  VE5ZX  2013-2015

Treasurer
Terry Cutler  VE5TLC  2012-2014

Secretary
Ron Ford  VA5RJF  2013-2015

Directors
Bob Tower  VA5BRT  2012-2014
Ken Bindle  VE5KRB  2012-2015
Mike Luciuk  VE5MIK  2012-2014
Ned Carroll  VE5NED  2012-2014

Committees

Repeaters  Bruce, VE5BNC
Property and Assets  Ron, VA5RJF
Training Coordinator  Club Executive
Public Service  Ron, VA5RJF
Sick and Visiting  Club Executive
Field Day  Club Members
Elmer  John, VE5SSJA
Trailer  Ken, VE5KRB
Vacant  Mike, VE5MIK
Space Club

SARC Net  Al, VE5MDC
L.B.L. Rep  John, VE5SSJA
Feedline  Ken, VE5KRB
Web-site  Mike, VE5MIK
50/50 Draw  Bruce, VE5BNC
Terry, VE5TLC

Blue Cover Page?
The sky’s the limit for “The Possible Dream”

Next Club Meeting
October 12th
10:30 A.M.
Western Development Museum
Education Room
Lorne Avenue South
Breakfast after 9 AM at
Boomtown Cafe before the
meeting

COFFEE
Haywood’s Restaurant
Saturdays 9:00 AM
3016 Arlington Avenue
South of Alvin Buckwold School
Everyone is welcome. Hams, non-Hams, it doesn’t matter. We’re there to have good conversation with good friends.
C’mon out and visit!

ARES
Saskatoon
NEXT MEETING
1st Tuesday of each Month
7:00 PM
Fire Department Staff Development Centre on the Corner of 22nd Street and Avenue W
Call in: 146.640-

Any items for Swap ‘n Shop in the Feedline contact VE5MIK.
Contact Bruce, VE5BNC, to put the items on the club website.
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 146.970- Sktn MARS Linked to VE5SKN,VE5DNA, & IRLP node 1360Link code 502*/503*
VE5SKN 146.940- Sktn MARS. 100Hz tone on xmt only    -Linked to VE5CC, VE5DNA and IRLP node 1360.   
   Link code 500*/501*   ARES SAME wx Rcvr

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

APRS 144.390
VE5RHF Saskatoon DIGI    VE5BNC-3 Saskatoon
IGATE & SATGATE VE5XW-1 Rock Point     VE5HAN-4 Hanley DIGI

Local & Regional Nets
Sask. WX 80m 1400Z 3735 Khz
ARES (Sun.) 80m 1430Z 3753 Khz
Aurora 40m 2330Z & 0200Z 7055 Khz
Manitoba 80m 0000Z 3747 Khz
Montana Tfc 80m 0030Z 3910 Khz
Sask. 80m 0100Z 3735 Khz
Alberta 80m 0130Z 3700 Khz
80m YL Net 80m 0315Z 3755 Khz-Sundays
B.C. 80m 0200Z 3727 Khz
SARC Local 2m 0200Z 146.640-
Prince Albert 2m 0330Z 147.150+

Contests
• Oceania DX Contest, Phone  0800Z, Oct 5 to 0800Z, Oct 6
• Oceania DX Contest, CW  0800Z, Oct 12 to 0800Z, Oct 13
• North American Sprint, RTTY  0000Z-0400Z, Oct 13
• Asia-Pacific Fall Sprint, CW Asia-Pacific Fall Sprint, CW
• CQ Worldwide DX Contest, SSB  0000Z, Oct 26 to 2400Z, Oct 27

For a full calendar of contests see: http://www.contesting.com

Dxpeditions
• Sable Island CY0P  October 1 - 9
• Bhutan A52YB  October 5 - 20
   A52YY  October 6 - 10
• Mariana Island NH0J  October 3 - 7
• Juan Fernandez XR0ZR  October 8 - November 20
• Austral Island TX5RV  October 30 - November 6

For a full list of DXpeditions see: http://www.ng3k.com/misc/adxo.html

Be kind and respectful to your fellow hams. After all, without them, all you’d hear on the air is static.
Greetings Fellow Amateur Radio Operator,

The Saskatoon Amateur Radio Club (SARC) would like to inform you of an activity we undertook on behalf of amateur radio operators in Saskatoon and to invite you to participate in the Possible Dream project.

In January 2013 Saskatoon City Council passed Policy C09-037 – a new Antenna Systems Policy. It required that antenna support structures such as towers less than 15 meters in height located within 30 meters of a dwelling needs public consultation with households within 200 meters of the proposed structure and an application fee of $800. The full text of C09–037 can be read on the SARC web site (http://ve5aa.dyndns.org/). These requirements contravened the Federal Radiocommunication and Broadcasting Antenna Systems CPC–02–03 guidelines that exclude antenna support structures under 15 meters from public consultation.

In February the SARC appointed a committee to work with the City to amend C09–037. On August 14, 2013 City Council passed amendments exempting amateur radio towers less than 15 meters in height from public consultation and fees. Also, the fee for amateur radio operators seeking permission to erect a tower greater than 15 meters was reduced to $150. The new version of C09–037 is available on our web site.

Recently the SARC membership initiated the Possible Dream project. The focus of the project is to prepare a plan to move us forward. A plan that looks at ways to acquire and equip fixed and mobile stations with modern equipment, update and expand the repeater network, explore ways to improve our image and visibility in the community and fundraise. Subcommittees will be formed to examine primary areas and prepare detailed plans. The goal is to report back to the membership in the autumn of 2014 for discussion and implementation. Details of the Possible Dream project are on our web site and in the September 2013 issue of The Feedline.

The Possible Dream is a big undertaking. It will require many skills and resources. If you are a dreamer and an innovator who can help build the Possible Dream please tell us. Our club meets the second Saturday of each month in the Western Development Museum at 10:30 AM. Please drop by for a coffee, donut and chat. We sure would like to hear about your dreams for our club’s future. If you cannot attend but wish to contribute please email your ideas and suggestions to tpd.sarc@gmail.com

tnx & 73

Garry Schwartz, VE5SG
Minutes of the September 14th, 2013 Meeting

Meeting called at 10:34 a.m. in the Education room of the WDM.

Acceptance of June meeting minutes. Seconded by Eric. All in Favor.

Repeater Report
Bruce indicated that it had been an interesting repeater summer. The club’s ‘64 repeater has some interesting issues

Lizard Lake, the site is in good shape. Digipeater added. Coverage to Lloyd. Hard climb on the tower.

Luther tower digipeater off. City took all our gear down from that site. We will ask the RCMP if we have an option to have our gear put up. City delivered all the gear to Bruce. City has offered to relocate us to one of their towers. Offering to put antenna on tower at Fire Hall/Water reservoir location on Acadia. Highest elevation in the city.

Rock Point - wind charger died, repaired, short circuit. Mike, MMG repaired it. Digipeater also died. Will be heading out this fall to get it back on the air.

WDM report - Ron. Board is meeting at the end of the month and we are hoping our participation will be on the agenda.

Fireworks Festival Report - Terry TLC - The event was a success - A numbers of hams involved. The group donated 300 dollars to the club.

Balloon Launches - SABRE group - One launch so far this year. Working with the U of S space design team. They’re mission is to have fun and to do an outreach program for school. Weather permitting a flight on 21 Sept. SABRE flying the payload for them. With permission to fly from the Bowl on campus. A keen group to work with.

Glider project. Planning to fly an autonomous glider hopefully for next year and hopefully to fly a voice repeater again.

City antenna support structure policy report. City council has approved the changes to the bylaw. Under 15 meters for height. New policy is in effect. We haven’t seen the new revised version.

It was mentioned that the Eagles are playing in town and one of the members, Joe Walsh, WB6ACU is a ham.

Financial report by Terry. Report is that the club’s finances are in good shape.

The Possible Dream Request for committees to look at the future of the Saskatoon Amateur Radio Club. Club station with modern equipment and a mobile station to use at events, emergencies, educational events. Open the topic up to discussion.

Writing to the over 200 households who have licensed hams to take part in the discussion of the future of the Saskatoon Amateur Radio Club has been proposed

It was decided to proceed with the mailout.

NEW BUSINESS
Item regarding EMO equipment at the Luther site. Item regarding registering for EMO training course. Info at EMO site. - DORIS DJQ

Mike, announcements re: Copper Island event by the Shuswap Amateur Radio Club. A former ham from Saskatoon, Murray (VE5SM now VE5MH) will be one of the operators during the event. Also announced Paul Panchuk’s garage sale.

Bob VA5BRT moved to adjourn meeting. Sean, LF, seconded.

Meeting closed.
This page is a compilation of a series of posts written on the SOTAbeams Facebook page about kite flying. It picks up on some of the things that I have learned after nearly 40 years of using kite-borne antennas.

73 Richard G3CWI

Safety First:
In many areas there are restrictions on kite flying. Check your local and national regulations first.
Kite antennas must never be used if there is any risk of lightning.

Ensure that your kite system will fail safely. Imagine what would happen if a kite towing a long wire came into contact with power lines.

Choice of a kite for antenna lifting: Size matters. I recommend a kite with an area of between 0.8 and 1.2m². Any bigger and you will find yourself fighting to control it. Any smaller and it will not do the job. Look for a kite with a good range of operating wind speeds; ours is 7-31MPH. This allows you to use the kite in a wide range of conditions. Rigid kite structures such as box kites used to be popular but newer designs work much better. You are aiming for a "fly and forget" kite. The newer semi rigid kites have another advantage - if the string breaks they lose lift and fall quickly. Rigid kites fly away!

Attaching antennas to a kite: there are a few things to think about here. For a vertical hung from the kite line you will get best stability if the antenna is well down the line from the kite (at least 10m). You will need a loop to attach the antenna system to the line. Use a knot that will not weaken the line. I will cover knots in another post. Don't tie the wire for the vertical directly to the kite line. Use a length of elastic shock cord (5m is good) - the vertical wire is attached to the lower end of the shock cord. This will reduce the tension in the wire and again will aid stability. Of course using a long wire as the kite line is possible, but this can result in a rather unstable antenna. Much better is to use the kite to support the centre of an end fed 3/8 wave. Again the techniques suggested for the vertical are used to give a stable installation.
Kite Antenna systems: designed to fail (safely). Things go wrong when flying kite antennas; it's a fact. When something goes wrong, you want to be in control of how it fails. It's a good idea to build some weak points into the system. Ideally the point of failure should be at the kite. If the kite separates from the line it will fall fairly fast and with luck you will get it back. I once lost one of mine in a wheat field and got it back three months later when the farmer - who knew it was there - spotted it from his combined harvester. The worst scenario is that you are using the wire as the kite line and it breaks at the ground level. The weight and drag of the wire will keep the kite flying - for miles sometimes. Also, the wire may well get caught in power lines etc - a real hazard. This is the main reason why I prefer to fly verticals dropped off the kite line. In this case I use a thin line at the top of the vertical. This does not need to be very strong as it only supports the antenna weight - not the pull of the kite.

Kites - static discharge: having a static leakage system on your kite antenna is an essential requirement. This needs to present a high impedance to RF and a relatively low impedance to the static charge. The RF impedance of the leakage system needs to be at least ten times the antenna impedance at the lower end. If you work on an end impedance of 10k Ohms (for an end fed wire) you can see that the impedance needs to be high. RF chokes are possible as are parallel tuned circuits (in some cases). However, best performance across all bands is likely to be achieved with a non-inductive resistor of a value of at least 100k Ohms. I would go for 470k or 1 Meg. Use one rated at 2 Watts or so. Across it I would make a spark gap - but if you are seeing sparks you are in trouble!

Kites and Static: Flying kites in thunderstorms is clearly dangerous but even in normal weather huge static charges can build up on kite-borne antennas. I recommend connecting an RF choke from the antenna to a ground stake. Some configurations of antenna tuning unit will have a connection between the antenna and earth. Getting a good ground connection can be tricky. I tend to use several tent pegs all bonded together. On rocky summits you may well struggle to get an earth. A radial laid on the ground will be better than nothing. Static rain can be a real problem with kite aerials. Frankly if it is a problem, you would be safest to abandon the activation. Static rain can make all sorts of odd sounds in your receiver. If the band is just covered in noise and the S meter is hanging at 59+, it’s probably static rain. Oh and it does not have to be raining either. Even microscopic particles get charged.

Go fly your kite: all that running up and down and jiggling kite strings is for amateurs. This is how to fly your kite. Before doing this you will need to have designed your antenna system so that you know exactly how much kite string you need to fly it. I will cover this in another post. In addition to your kite you will need a strong anchor point for the end of the string. Remember, you want to play radio - not fiddle with kites. A dog anchor screw is ideal for this.

Pick one suitable for a big dog - not some puny handbag dog. Fasten the screw in the ground and attach the end of the string to it. Use a good strong knot! Next find which way the wind is blowing to (not from). Walk down wind, paying out the string as you go - all of it not just a bit. Attach the kite to the end. Now facing into the wind (towards the anchor point) hold the kite out and walk back to tighten up the string. Holding the kite open, upright and standing behind it just wait for a nice gust of wind to catch the kite. Then release it and watch it soar into the air. Easy. The reason this works so well is that the kite exits the turbulent airflow close to the ground and enters the higher more stable airflow very quickly. At that point you realize that you forgot to attach the antenna but hey, launching is now so easy you can do it again ;)

Grab a Crab: getting your kite antenna system down again. Burly he-men love this stage of the kite process as it gives them the chance to flex their muscles - and to wear industrial strength safety gloves. However, pulling the kite in is a technique for dummies. It either leaves you with a pile of kite line on the floor (Tanglesville Arizona) or, if you make the mistake of winding the line up under tension, you get a broken winder. The smart activator pulls a carabiner out of his/her pocket at this stage and clips it onto the kite line.

All that is needed then is to walk in the direction of the line (towards the kite) holding the carabiner. The kite is slowly pulled down. This is so easy that you will wonder why you never thought of it before! Once the kite is down, remove it from the line, walk back and wind the line up. On a busy hill this process will gain you gasps of admiration from the onlookers. I have never managed to get a round of applause however.

Choice of Antenna: There is no point in flying a simple vertical that is more than 5/8 wave in length as beyond that, the lobes of the antenna tend to start being less useful for low angle radiation. One antenna that would be interesting might be a co-linear for 20m or above. A "co-co" version made of RG174 for 20m might well be excellent.

Kite Physics: This NASA applet allows you to compare different types of kites. [http://www.grc.nasa.gov/WWW/k-12/airplane/kiteprog.html](http://www.grc.nasa.gov/WWW/k-12/airplane/kiteprog.html)
Ham Radio - A Hacker’s Paradise

The suits at Hack-a-Day reached out to SolderSmoke HQ and asked me to send in a few words about why their readers should take a fresh look at ham radio. Here goes:

First, realize that today’s ham radio represents a tremendous opportunity for technical exploration and adventure. How about building a station (and software) that will allow you to communicate by bouncing digital signals off the moon? How about developing a new modulation scheme to send packets not down the fiber optic network, but around the world via the ionosphere, or via ham radio’s fleet of satellites? How about bouncing your packets off the trails left by meteors? This is not your grandfather’s ham radio.

You can meet some amazing people in this hobby: Using a very hacked-together radio station (my antenna was made from scrap lumber and copper refrigerator tubing) I’ve spoken to astronaut hams on space stations. Our “low power, slow signal” group includes a ham named Joe Taylor. Joe is a radio astronomer who won the Nobel Prize for Physics. He’s now putting his software skills to use in the development of below-the-noise receiving systems for ham radio. Join me after the break for more on the topic.

When you start looking into amateur radio, don’t be deterred if the first hams you meet don’t seem to be as deeply into technology as you are. You have to seek out ham radio’s hard-core technical subculture. It is here that hackers will find kindred spirits. As in the hacker world, there is a kind of informal hierarchy based on technical ability and achievement. The FCC licenses have become so easy to get that they no longer count for much. But if you’ve built from scratch an entire shortwave radio station and use it to shoot the breeze with friends in Australia, well, that will win you amateur radio street cred, as will the computer skills that you’ll bring to the hobby from the hacker world.

Hackers will probably be pleasantly surprised by ham radio’s very strong tradition of mutual support and solidarity. Newcomers are welcome and more experienced hams volunteer to serve as mentors. Especially among people who build their own gear, we have a strong “my junk-box is your junk-box” spirit.

There is also a wonderful social aspect to the hobby. I have in my “shack” a shortwave radio station that I hacked myself from junk-box parts. I routinely fire it up and “calling CQ” look for someone out there to talk to. The response could come from down the street or from the other side of the world. What do we talk about? Well, the conversation usually begins with me talking about my amazing “homebrew rig” and goes on from there. At the risk of reinforcing a stereotype, I’ll note that many of us got into ham radio as teenagers in part because we were a bit socially awkward. I suspect that this is something that many hackers can identify with. You can make a lot of good friends in ham radio.

If you are passionate about electronic technology and are NOT a ham, well, you are missing something important. The Hack-A-Day guys are right: You should take a new look at ham radio.

Bill Meara, N2CQR
SolderSmoke HQ
Field Day 2013 Report

The reporting deadline slipped by me!
John Allen, VE5SJA
SARC Field Day Chairman 2013

Mark your calendars for Field Day, June 28-29 in 2014 (and June 27).

The crowning jewel of Field Day is the report to the ARRL summarizing our activities. Unfortunately, the jewel is a little tarnished this year. I had some conflicting duties and somehow the deadline moved a few days in my mind.

The report that should have been submitted:

**VE5AA**

**Saskatoon Amateur Radio Club**

16 Participants 2 Transmitters in simultaneous operation

- Power Sources: Generator, Battery, Solar

  - Total CW QSOs: 54x2=108 points
  - Total Digital QSOs: 15x2= 30 points
  - Total Phone QSOs: 90x1= 90 points
  - Total QSO points: 228 points
  - Power multiplier: 2 (>=150 watts)

**Claimed QSO Score**: 456 Points

Bonus Points:
- 100% Emergency Power: 200
- Media Publicity: 100
- Set-up in a public place: 100
- Information booth: 0
- NTS Message to RAC/SM: 0
- W1AW Field Day Message: 0
- Formal NTS Messages Handled: 0
- Satellite QSO Completed: 100
- Natural Power QSOs completed: 100
- Site visit by invited elected official: 100
- Site visit by invited served agency official*: 100
- Educational Activity Bonus: 0
- Youth Element Achieved: 0
- GOTA bonus: 0
- Submitted using the b4h.applet**: 50

**Total Bonus points claimed**: 850

**Claimed total score that should have been**: 1306 points

* Representative of Scouts Canada who visited was not counted as served agency.

** Submission by b4h.applet was not done – **actual score 1256** (This is unofficial because it was not submitted, but it may help us ourselves compare our performance to other clubs when their scores are published in QST.)
I took a graphic that Mike, VE5MIK, had made for the Feedline and created a publicity poster from it. Peter, VE5JZ, and I posted a few.

We made a general invitation to interested people in several on-line bulletin boards and community events calendars in newspapers. People mostly responded to the ads in the Saskatoon Express. That resulted in at least 4 visitors including a former Department of Transport operator.

Garry, VE5SG, and I took our operations to Boomtown Park on Friday evening (June 21) to try to capture the ARRL Field Day Message. We did hear the message in various modes but we found out that we need some refinement in equipment and more practice.

It rained pretty hard several times on Saturday, fortunately mostly after we set up. This resulted in our Barbecue Supper turning into a “Let’s order Pizza”. The wet leaves may have attenuated the path to eastern Canada and the northeastern United States somewhat.

Tim Repas, VE5SAT, an American graduate student at the U of S, got us a satellite contact with his hand-held antenna and radio.

Bob, VA5BRT, planned and brought a system for making QSOs with power not from petroleum powered generators nor from the electric main lines. He made some contacts and Garry, VE5SG, completed the making of 10 QSOs so we could legitimately claim 100 points. Thanks to Larry Arnason of Mach1 Motors, Osler, for providing an essentially discharged battery. Thanks, Bob, for fiddling with the solar cells to make this a legitimate score and to Garry who rounded the attempt off with several CW contacts.

An MP, an MLA who is a provincial cabinet minister and the Mayor of Saskatoon visited our operation as a result of letter invitations.

A representative of Scouts Canada came after an invitation via email.

We ran for 24 hours. Thanks to Bob VA5BRT, who kept me company throughout the night and to Peter, VE5JZ, who joined us to make CW contacts, and to Tim, VE5SAT, who came back periodically to check the communication through the FM satellite and to try for the ISS.

So, again, mark your calendars for Field Day, June 28-29, 2014 (and June 27). We will have an even better Field Day.

73

John, VE5SJA

Will you share your photographs of Field Day?

I am mounting some photographic memories in our Guest Book for Field Day 2013. If you have any interesting photos of this event, would you share them with me. Email me a copy at ve5sja@rac.ca or just email me to tell me you will share so I can make arrangements to get them from you. Or you can call me at 306 974-2699.

John Allen, VE5SJA, SARC Field Day Chairman 2014
Visually tune an HF antenna

*Hack a Day* report on how to visually tune your HF antenna using an oscilloscope and signal generator

**Tod Harrison N5VEH** writes on Hack a Day:

Lots of readers are into toying around with RF and ham radios. One thing that is always of concern is tuning the antenna. New equipment is never cheap, so whenever another option comes along that uses existing test gear it gets our attention. **Alan Wolke, W2AEW** covers a process he uses to tune his HF antenna using a signal generator and oscilloscope.

The process is more of a teaching aid than a practical replacement for commercial equipment mostly because proper signal generators and oscilloscopes are large items and sometimes not available or affordable.

Watch the video and read the full story at http://hackaday.com/2013/09/20/visually-tune-your-hf-antenna-using-an-oscilloscope-and-signal-generator/

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**Wetware vs. AI Software - Pursuit of Ultimate Morse Decoder**

In this presentation, Mauri Niininen will be discussing his work using probabilistic neural networks to train computers to understand Morse code. Morse code decoding has a long history as a problem in signal processing and remains an active area of statistical/machine learning research.

Mauri Niininen received his M.Sc in Engineering Physics from Helsinki University of Technology (1986). He has a life long interest in computer science and telecommunications and he works currently as a Director Engineering at Nokia Burlington office. In the past 5 years he has focused on building cloud services for mobile devices, ramping up operations, service delivery and 24x7 support capabilities globally for Nokia HERE business unit.

He received his first ham radio license in 1976 and served as a voluntary examiner 1981 - 1987 in Finland. He is holding FCC Extra Class License (AG1LE) since 2010 and is a member of Wellesley Amateur Radio Society. He is also member of the Finnish Amateur Radio League (SRAL) as well as the American Radio Relay League (ARRL). His current ham radio interests are focused on experiments with Software Defined Radio technology and he is developing Artificial Intelligence methods to improve digital communications, including Morse code.

The presentation can be found at: http://www.youtube.com/watch?v=ckjo-xw-s0w

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**ISS**

NASA astronaut Mike Hopkins, KF5LJG, and Russian cosmonauts Oleg Kotov and Sergey Ryzanskiy are scheduled to launch aboard a Soyuz spacecraft September 25 to join their Expedition 37 crewmates aboard the International Space Station.

Hopkins will be the first member of the 2009 NASA astronaut class to fly into space. While he's aboard the ISS, Hopkins will install the Amateur Radio on the International Space Station (ARISS) ham video gear. He received pre-flight training on how to commission the amateur radio digital video equipment.

Hopkins will join Expedition 37 Commander Fyodor Yurchikhin, RN3FI, and Flight Engineers Karen Nyberg, and Luca Parmitano, KF5KDP. Yurchikhin, Nyberg, and Parmitano arrived in May and will return to Earth in November.
Battery Tips

Laptops are our indispensable lifeline to the majesty that is the Internet. We use them to work and play from anywhere in the world. But if you’re like most people, you probably keep yours plugged in when you’re at work or home. Stop doing that.

In order to squeeze as much life out of your lithium-polymer battery, once your laptop hits 100 percent, unplug it. In fact, you should unplug it before that.

Cadex Electronics CEO Isidor Buchmann told WIRED that ideally everyone would charge their batteries to 80 percent then let them drain to about 40 percent. This will prolong the life of your battery — in some cases by as much as four times. The reason is that each cell in a lithium-polymer battery is charged to a voltage level. The higher the charge percentage, the higher the voltage level. The more voltage a cell has to store, the more stress it’s put under. That stress leads to fewer discharge cycles. For example, Battery University states that a battery charged to 100 percent will have only 300-500 discharge cycles, while a battery charged to 70 percent will get 1,200-2,000 discharge cycles.

Buchmann would know. His company Cadex sponsors Battery University. The site is the go-to destination for anyone interested in battery technology. And it’s not just constant power that shortens your battery’s life. While batteries degrade naturally, heat also accelerates the degradation. Extreme heat can cause the cells to expand and bubble. Kyle Wiens of iFixit told WIRED: “Too much heat to the battery over time, and the battery isn’t going to last as long.”

You can battle this degradation by keeping the lid open and your laptop out of your actual lap while using it.

While those are simple fixes, Buchmann admits that putting the 40 to 80 percent battery-status workflow into practice is easier said than done. Keeping an eye on your computer’s battery level while trying to work can be a pain. “The ideal would be that the laptop would only charge 80 percent,” Buchmann says, “and if you had to travel, you could push a button before you travel to charge it to 100 percent.”

A search of Windows and OS X apps yielded nothing that would alert a user when a computer reached both an 80 percent charge and a 40 percent discharge. A quick DIY solution is to measure how long it takes to go from 80 percent to 40 percent then set a timer. Do the same thing as it charges from 40 percent to 80 percent. If it saves you money and keeps your battery healthy, it’s worth it.
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. Individual submissions make for variety! We need more writers! Electronic submissions are preferred via email. (MSWord, PDF or generic text). Email submissions may be sent to: mluciuk@sasktel.net or mluciuk@gmail.com

SARC 2013 Meeting Dates
October 12  November 9  December 10  
Tuesday Christmas Party

Membership renewal will continue at the October meeting. The Feedline will be emailed out only to 2013-2014 Club members beginning with the November issue.

Santa Claus Parade Tentative Date  November 17, 2013

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**Offers? Contact VE5MIK**
mluciuk@sasktel.net

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**Little Bear Lake Station**
The LBL telemetry address is  [http://dougf.no-ip.com/tlm/test2.txt](http://dougf.no-ip.com/tlm/test2.txt)
The 6 m. beacon is  [http://dougf.no-ip.com/va5mg](http://dougf.no-ip.com/va5mg)

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**Announcements, etc.**

- **Kenwood TS 570**
  - Kenwood MC 60 mic
  - Display LED's are not working in this radio. A blue HAMKIT conversion kit is included.
  - Asking $390

- **Kenwood TS 50**
  - Kenwood AT 50 with hand mic
  - Asking $390

- **TEN TEC RF Speech Processor**
  - (Kenwood adapter - adapters can be purchased for other transceivers)
  - NEW $253.00 US
    - Asking $100

- **Yaesu MC-100A8X Microphone**
  - New $170
  - Asking 100

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MEMBERSHIP APPLICATION/RENEWAL

SASKATOON AMATEUR RADIO Club inc.
c/o Western Develop Museum
Saskatoon Branch
2610 Lorne Ave. S., Saskatoon, Sask S7J 0S6
Membership valid from September 1, 2013 to August 31, 2014

NAME_______________________________________ CALL SIGN [ ] [ ] [ ] [ ] [ ] [ ]

ADDRESS____________________________________ CITY ________________________ SK POSTAL CODE______

TELEPHONE (Home) ___________________ (Business or Cell) __________________

E-mail address: ____________________________ for FEEDLINE email
Print Clearly

LICENSE: (Please check) Basic _____ Advanced _____ Code _____ HF _____

Occupation (optional) ________________________ Name of spouse (optional) ______________________

Family Members (for Family Membership Application)

1. NAME ____________________________________________ CALL SIGN _____________
   Basic _____ Advanced _____ Code _____ HF _____

2. NAME ____________________________________________ CALL SIGN _____________
   Basic _____ Advanced _____ Code _____ HF _____

WHICH CLUB ACTIVITIES CAN WE COUNT ON YOU FOR? Special event or area of interest to you
___________________________________________________________________________

Affiliation (Provide membership number where applicable)

ARRL ______ RAC ______ SARL ______ MARS ______ OTHER ______

MEMBERSHIP FEES

Regular Membership $25.00 $_________
   (must be licensed to operate an amateur station)

Family Membership $30.00 $_________
   (One newsletter per family)

Associate Membership $25.00 $_________
   (Enthusiasts – not eligible for office)

Junior Membership (under 18 years) $12.50 $_________
   (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 $_________

Cheques payable to Saskatoon Amateur Radio Club Inc.
Saskatoon Amateur Radio Club Inc.

Membership Year: 2013-2014  
(Financial period May 1, 2013 to April 30, 2014)

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 on June 8th, 2014 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 2013-2014 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: _______________