

CQ CQ CQ DE VE3WE

CQ CQ CQ DE VE3WE

CQ CQ CQ DE VE3WE



WAVELENGTH

Official bulletin of
 Scarborough Amateur Radio Club, Inc.
www.ve3we.com

PARTICIPATE – LEARN – ENJOY

February 2008

Volume 2 Issue 2

President:	Bernadine Dinnard-Williams	Sunday
	VE3YDB	
Vice-President:	Open	
Past President:	Bill Catlender	Tuesday
	VE3ILE	
Secretary:	Ray Chow	Thursday
	VE3ZXC	
Treasurer:	Lambert Philadelphia	
	VE3LYP	
Membership:	Joe Ditta	
	VA3JDX	
Communications:	Open	
Field Day:	Rod Long	
	VE3SOY	
Education:	Ralph Muecke	
	VE3CIW	
Examiner:	Nick Blacklock	
	VE3EBC	
Assistant Secretary:	Rudie Toroian	
	VE3OUA	
Archives:	Gord Hogarth	
	VE3CNA	
Elmer:	Tony Fegan	
	VE3QF	
Security:	Gord Gault	
	VE3UFF	

SARC Nets

28.730 Mhz
 CW 10:00 AM
 SSB 10:30 AM
 147.060 MHz (VE3RPT)
 7:30 PM
 28.730 MHz
 SSB 7:00 PM

Everyone is invited to check in on CW before the nets start.

These are open nets. All licensed hams are welcome. Come and join us.

We also want to emphasize that 28.730 MHz is our calling frequency. Please monitor and/or call your friends. 7:00 PM is a good time.

SARC 62nd Anniversary

Anniversary Night for the Club is slotted for April 14th. This is a very special event - please plan to attend.

Change of the guard

With a new SARC executive attempting to proceed, the time to express thanks to the previous executive is at hand. The entire club must appreciate the hard work that Bill Catlender VE3ILE and his executive assistants put forward for directing our affairs. In particular Bill VE3ILE took on the task of President, picnic host, field day advisor & operator, Wavelength editor & publisher, and often gift supplier for our draws. He, and his group of forward thinking club leaders, gave us a new outlook. We are an older club, steeped in traditions. During his Presidency, a new window was opened. Let us not get too reactionary to progress.

For myself, and the Scarborough Amateur Radio Club, it is the time to say thank you.

Yours, Bob VE3IEL,
Co-editor for this term's WAVELENGTH.

Propagation by the numbers and letters

The Solar Flux Index (SFI) is a gauge of solar particles and magnetic fields reaching our atmosphere. Higher numbers mean more solar wind is reaching the earth thus better propagation.

The K - index (or Boulder K) is a gauge of geomagnetic activity relative to an assumed quiet-day curve for Boulder, Colorado. Falling numbers mean improving conditions and better propagation particularly in northern latitudes and areas where aurora activity can occur. (The further you are from Boulder, Colorado, the less exact this information will be.)

The A - index is simply an index of geomagnetic activity derived from a scaled average of the previous 24 hours K - index readings. Use this as a reference for general conditions on the bands. Lower A -index means better propagation.

Current Solar Flux Indices (Feb 6th 2008) = Solar Flux 71, mid-latitude A- index 2, the mid latitude K - index was 0. No space weather storms are expected for the next 24 hours.

It is best to note that each day these numbers change.

Where we are now in the current sunspot cycle is a bit tricky. The current solar cycle reached a low turning point early in 2007; but, it is never possible to be sure that an actual low turning-point has been reached until there has been a substantial rise. It is still possible that a lower low could occur sometime later. It is likely that the general sunspot cycle trend from the low already reached will be upward for the next several years.

Has Solar Cycle 24 really begun? March 2008 is the honest prediction; but, with what is heard in the Amateur circles, it is accepted that this Cycle has officially begun. That means better propagation in the months and years to come. What is good for Radio Amateurs may not be so very good for commercial systems. Soon we shall be hearing about services being disrupted due to increased sunspot activity; and, how that problem shall be costing money.

Never look...directly...at the sun!

A little bit of factual confusion about S-Units

1. An "S-unit" on a receiver's S-meter or in the RST system consists of a 6 decibel increase or decrease of output power received from a transmitter.
2. Power needs to be increased four times or 400% to result in a true 1 S-unit or 6 dB RST gain.
3. Reducing output power down to 25% of previous power should result in an S- Meter or RST drop of only one 6 dB unit.
4. A 10 decibel increase in signal strength requires a power increase of ten times.
5. The RST system was designed originally for the human ear and was based on typical receiver performance of over 50 years ago.
6. Modern receiver design permits signals which are technically "weak" in measured decibels to sound quite good (ie: RST= 569-579) to the ear.

7. The human ear is sensitive enough to appreciate a 1 or 2 dB change in signal strength, which is why moderate changes in output power often result in more dramatic signal report changes. (In fact, the value of a decibel was determined to be that increment of sound change which the ear could detect!)

8. A 1000 watt station which gets a report of "10 dB over S-9" measured on the receiving station's S-meter, other factors being equal, should show a receiver's S-meter of S-6 from a 1.56 watt station.

9. Most commercial transceivers have typical output in the 60 to 200 watt range; and, S-8-9 reports are taken for granted. Actually, 14-25 watts is a far more practical operating power than most amateurs and equipment vendors realize today.

{Thank you Ramsey}

ARRL DX news

This week's bulletin was made possible with information provided by NC1L, VE4GV, WN9O, QRZ DX, the OPDX Bulletin, DXNL, 425 DX News, The Daily DX, Contest Corral from QST and the ARRL Contest Calendar and WA7BNM web sites. Thanks to all.

SRI LANKA, 4S. Ron, 4S7RO has been QRV on 160 meters CW between 1730 and 2100z. QSL via DJ9ZB.

UNITED NATIONS HQ, 4U1UN. Johnny, LA5IIA will participate in the CW WW WPX RTTY contest as 4U1UN. QSL via HB9BOU.

JAMAICA, 6Y. Rob, VE4GV will be QRV as VE4GV/6Y5 from Ocho Rios from February 11 to 18. Activity will be on 80 to 10 meters using CW, SSB and various digital modes. He plans to participate in the upcoming ARRL DX CW contest as well. QSL to home call.

THE GAMBIA, C5. Andre, ON7YK will be QRV as C56YK from February 11 to March 6. Activity will be on 160 to 10 meters using SSB, RTTY, SSTV and PSK. QSL to home call. In addition, Jose, ON4LAC will be QRV as C56JC from February 12 to March 6. Activity will be on all HF bands using SSB, RTTY and PSK. QSL to home call.

DOMINICAN REPUBLIC, HI. Ted, HI3TEJ will be QRV as HI3T during the CQ WW WPX RTTY contest as a Single-Op/All-Band/Low-Power entry. QSL via ON4IQ.

DOMINICA, J7. Look for WI9WI, W9IU, WN9O, N4PN and NF4A to be QRV as J79WI, J79IU, J79KM, J79PN and J79PC, respectively, from February 11 to 19. Activity will be on all bands, but mainly on 160 and 80 meters, and the newer bands, using CW and SSB. They will be active in the upcoming ARRL DX CW contest as J7DX. QSL J7DX via W9IU and all others to home calls.

SVALBARD, JW. Odd-Egil, LA8AW will be QRV as JW8AW from Spitsbergen from February 10 to 18. QSL to home call.

ANTARCTICA. George is QRV as LU2ZD from the Ejercito Primavera Base. Activity is generally on 20 meters around 2200 to 2300z. QSL via LU4DXU.

PERU, OA. Members of the Peru Radio Club will be QRV as OA4O in the CQ WW WPX RTTY contest as a Multi/Single entry. QSL via bureau.

NETHERLANDS, PA. Ulf, DK5TX will be QRV as PA/DK5TX from Goeree Overflakkee, IOTA EU-146, from February 11 to 17. Activity will be on 80 to 2 meters using CW, SSB and RTTY. QSL to home call.

SWEDEN, SM. Members of the Kungälv Radio Club are QRV as SF700BF during 2008 from the city of Kungälv to celebrate the 700th anniversary of the Bohus Fortress. Activity is on 160 to 6 meters, including 70 cm. QSL via SK6NL.

EAST KIRIBATI, T32. Bill, N7OU and Bob, W7YAQ will be QRV as T32OU and T32YA, respectively, from February 12 to 26. Activity will be on 160 to 10 meters using mainly CW with some SSB and RTTY. They will also participate in the upcoming ARRL DX CW contest as T32OU. QSL to home calls.

SAN MARINO, T7. John, T77CD will be active in the CQ WW WPX RTTY contest. QSL direct to I0MWI.

COCOS ISLAND, TI9. A group of operators are QRV as TI9KK until February 14. Activity is on 160 to 6 meters, including 60 meters, with six stations on the air, using CW, SSB, RTTY, PSK and EME on 2 meters and 70 cm. QSL via EA2CRX.

BELIZE, V3. Rick, KT7G and Jake, N7WO are QRV as V31TB and V31WO, respectively, until February 19. They plan to be active as V31TB in the CQ WW WPX RTTY contest and as V31WO in the upcoming ARRL DX CW contest. Activity is on 160 to 10 meters using mainly RTTY the first week and CW the second week. QSL to home calls.

DUCIE ISLAND, VP6. A group of operators will be QRV as VP6DX beginning February 12 until the end of the month. Activity will be on 160 to 6 meters using CW, SSB and RTTY with 7 stations active simultaneously 24 hours a day. This includes an entry in the upcoming CQ 160-Meter SSB contest. QSL direct to DL6LAU.

CAMBODIA, XU. Bernd, DK7TF and Rudi, DK7PE are QRV as XU7DLH until February 14. Activity is on 160, 80 and 40 meters. QSL via DK7TF.

MACAU, XX9. Vong, XX9LT has been active on 20 meters around 1000z. QSL direct.

CAYMAN ISLANDS, ZF. Ed, K3IXD is QRV as ZF2XD until February 11 and will participate in the CQ WW WPX RTTY contest as a Single-Op/All-Bands/Low-Power entry. Activity is on 80 to 10 meters using SSB and various digital modes. QSL to home call.

OPERATION APPROVED FOR DXCC CREDIT.
The following operation is approved for DXCC credit: Palestine, E4/OM2DX, 2007 operation.

World Amateur Radio Day

Each year on 18 April, Radio Amateurs celebrate World Amateur Radio Day. On that day, 83 years ago in 1925, the International Amateur Radio Union (IARU) was founded.

The theme of the celebrations this year is: Amateur Radio: A Foundation for Technical Knowledge.

It is no secret that lot of professionals in the field of radio, TV, communications, electronics, etc. have started their technical education as young Radio Amateurs. Although Amateur Radio has a different face nowadays Digital Communications, Voice over Internet Protocol, Satellite up- and downlinks, etc. it is even of greater value as a foundation for technical knowledge for youngsters. And much more it is and

should be used as unique attraction for future young Radio Amateurs.

The IARU Region 1 Executive Committee would like to use the occasion to promote and publicise Amateur Radio, and appeals to all Member Societies to find suitable ways of celebrating World Amateur Radio Day. Many ways can be considered inviting youngsters to Radio Clubs, showing up on the air with a special callsign, organising a station in public area with media coverage or publicly honouring veterans. Whatever method is chosen, I suggest that you write and publish a Press Release for the media, giving the background to World Amateur Radio Day, and promoting the value of Amateur Radio as a foundation for a technical career.

The Executive Committee will be very pleased to hear how Member Societies chose to celebrate World Amateur Radio Day. Write to us with your stories and send us photos. They will be published on the [Region 1 website](#) and will be of great interest to the amateur radio community.

Ole Garpestad, LA2RR
President, IARU Region 1

Upcoming contests

Feb 16, 0000z to Feb 17, 2400z ARRL INT. DX CW CONTEST

Feb 23, 0000z to Feb 24, 2359z CQ 160M SSB CONTEST

Mar 1, 0000z to Mar 2, 2400z ARRL INT. DX PHONE CONTEST

Propagation Forecast Bulletin 6 ARLP006

From Tad Cook, K7RA
Seattle, WA February 8, 2008
To all radio amateurs

SB PROP ARL ARLP006
ARLP006 Propagation de K7RA

After a solid week of sunspots (January 29 to February 4), the following three days have been

blank. February 2 was an active geomagnetic day, with a solar wind stream spewing from a coronal hole near sunspot 982.

Another solar windstream from a coronal hole is expected to strike Earth on Sunday, February 10, causing unsettled conditions. The predicted planetary A index for February 8 through 15 is 8, 12, 15, 10, 10, 10, 10 and 5. That was from NOAA and the U.S. Air Force, and Geophysical Institute Prague predicts unsettled conditions February 8, unsettled to active February 9-10, and unsettled again on February 11-14. The Australian Space Forecast Centre's geomagnetic forecast expects mostly unsettled to active conditions with storm periods possible at high latitudes on February 9, and mostly unsettled with isolated active periods and storm levels at high latitudes on February 10.

Following this weekend, NOAA predicts the next active conditions around February 28-29. Their prediction for solar flux is flat at 70 for each of the next 45 days, and this probably indicates little or no sunspot activity.

Sunspot numbers for January 31 through February 6 were 15, 19, 16, 14, 14, 0 and 0 with a mean of 11.1. 10.7 cm flux was 72, 71.1, 71.8, 71, 71.3, 70.5, and 71.6 with a mean of 71.3. Estimated planetary A indices were 5, 18, 19, 12, 6, 3 and 4 with a mean of 9.6. Estimated mid-latitude A indices were 3, 10, 19, 10, 6, 2 and 2, with a mean of 7.4.

Upcoming hamfests

[BURLINGTON ARC SPRING FLEA MARKET](#)

Sponsored by the Burlington ARC

DATE: Saturday, February 23

TIME: Vendors 7 am, Public 9 am to 12 noon

PLACE: Royal Canadian Legion Branch 60, 828 Legion Road, Burlington

Cost Public \$6; tables \$10

TALK-IN: VE3RSB 147.21+

[HAM-EX 2008 HAMFEST](#)

Sponsored by the Mississauga and Peel Amateur Radio Clubs

DATE: March 29, 2008

TIME: Vendors 7 am, to 9 am; public 9 am to 1 PM. Exhibits and demonstrations & coffee, 9 am to 1 pm.

PLACE: Brampton Fall Fairgrounds, Heart Lake Road and Old School Road

COST: Public \$6, 8 ft tables \$35 each, 6 ft tables \$30 each (with \$5 discount if ordered before February 28).

Lunch, coffee, Basic, Advanced, and CW examinations available from 9 am.

TALK-IN: 145.430- (103.5 pl tone required).

[DURHAM REGION HAMFEST](#)

Sponsored by the North Shore and South Pickering Amateur Radio Clubs

DATE: Saturday, April 19

TIME: Vendors 7:30 am, Public 9 am to 1 pm

PLACE: Whitby, Ontario, Iroquois Park Recreation Centre, 500 Victoria St W (across from Whitby GO Station)

COST: Public \$6; Tables \$25 (interior aisles), \$50 (hard wall) including one admission. Limited AC hookups available for \$5 each.

TALK-IN: VE3SPA 147.375+

[CNIB HAMFEST](#)

Sponsored by CNIB Amateur Radio Program

DATE: Saturday May 24

TIME: Vendors 7 am, Public 9 am

PLACE: CNIB Headquarters, 1929 Bayview Ave, Toronto - north of Eglinton Ave and south of Lawrence Ave, directly south of Sunnybrook Hospital

COST: Public \$5; Tables \$20 including one admission.

TALK-IN: VE3NIB 443.500 (+) 103.5; VE3RPT 147.060 (+) 103.5 SIMPLEX 146.520

The CNIB Amateur Radio Program is looking for volunteers to help out with this event. Contact Randy VE3WRN by phone 416-486-2500 x7438 or email amateurradio@at.cnib.ca

Elecraft K3 HF/6m, 100-W All-Mode Transceiver

Factory Assembled or Modular, No-Soldering Kit

Elecraft's state-of-the-art K3 transceiver offers a unique combination of ultra-high performance and affordability.

Both 100-watt and 10-watt (upgradeable) models are available. Starting at under \$2,000 for the 100-W assembled model (K3/100), the rig is comparable in both features and performance to transceivers listing at up to six times its price.

In a first for the industry, the K3's identical main receiver and subreceiver each feature a high-dynamic-range, down-conversion analog architecture. This allows Elecraft to provide roofing filters with bandwidths as narrow as 200 Hz, while up-conversion designs have roofing filters typically 3,000 to 15,000 Hz in width.

Unlike some competing down-conversion designs, the K3 also provides 6-meter coverage, as well as continuous tuning from 0.5 to 30 MHz. Each receiver has its own bus-switching mixer, narrow ham-band front-end filters, 32-bit I.F. DSP, low-noise synthesizer, and up to five crystal roofing filters.

Both fixed- and variable-bandwidth crystal filters are available. The variable filters are available in both data/CW and voice-mode bandwidths, and allow close tracking between crystal and DSP filtering — a feature not available on any other rig at any price.

The K3 is the only deluxe transceiver that is targeted at both home and field use. Weighing just 8 pounds and having dimensions of 4" x 10" x 10" HWD (10 x 25 x 25 cm), it's well-suited to demanding DXpedition or Field Day operations. Its receive-mode current drain of less than 1 amp greatly facilitates battery or solar-powered mobile/RV/marine installations. But unlike smaller portable transceivers, the K3's user interface is optimized for ease of use, and its

feature set rivals units many times its size and weight.

The transceiver is offered both factory-assembled and as a modular, no-soldering kit. Either way, K3 owners can start with a basic version of the transceiver, at lower cost, then easily add modules later, such as the internal subreceiver, ATU, and 100-W stage. To ensure identical performance of both pre-built units and modular kits, modules are 100% assembled and tested at the factory. Builders learn the radio theory behind each of the modules during assembly, and acquire skills that will enable them to easily add future modules or upgrades.

Two 32-bit digital signal processors provide true software-defined features, along with expansion memory to handle future signal processing tasks and operating modes. The operator will have full control over any operating situation, with 8-band receive and transmit EQ, stereo speaker/soundcard outputs, binaural effects, and advanced noise reduction. Also included is built-in PSK31, CW, and TTY decode/encode, so the operator can enjoy the excitement of data communications with or without a computer. The rig's rich I/O complement includes an isolated sound card interface, front/rear mic/phone jacks, dedicated serial I/O, and band data. An optional module provides transverter in/out and RX antenna in/out jacks. The latter allow the use of RX-only, in-line filters for extreme operating environments.

Available options include: built-in 100-W automatic antenna tuner with two antenna jacks (KAT3), subreceiver (KRX3), general-coverage filter module (KBPF3), 100-W stage (KPA3), RF I/O unit (KXV3), and digital voice recorder (KDVR3). Orders can be placed via our [web page](#) or directly by phone at 831-662-8345, FAX 831-662-0830.

73, Eric WA6HHQ and Wayne, N6KR



Happy Valentine's Day!