Newsletter

October 2007

Kingston Amateur News

Kingston Amateur Radio Club 2007 Executive

President: Les, VE3KFS

va3kfs@rac.ca

Vice-Pres: Robert, VE3RPF

valveman_6146@yahoo.com

Treasurer: George, VE3GHK

ghkennedy@sympatico.ca

Secretary: Bill, VA3OL

ve3kgj@sympatico.ca

Past-Pres: Tom, VE3UDO

ve3udo@sympatico.ca

2007 Committee Chairs

Two Meter Net Manager:

VE3CLQ, Bill Nangle

ve3clq@rac.ca

Newsletter Editor: Joan Clarke

joan.g.clarke@sympatico.ca

Repeater Committee:

VE3KFS, Les Lindstrom

ve3kfs@rac.ca

VA3GST, John Snasdell-Taylor

va3gst@kos.net

VA3KGB, Chip Chapman

va3kgb@rac.ca

VE3JCQ, John Wood

ve3jcq@rac.ca

VE3MNE, Don Gilroy

ve3mne@rac.ca

P.O. Box 1402 Kingston Ontario K7L 5C6

http://www.ve3kbr.com

VE3KAR
VE3KBR
VE3UEL
VE3KER
146.94(-) MHz

The 2nd Repeater is now Operational
147.090(+) MHz

PRESIDENT'S WORDS

Note from the President:

Repeater: 147.090/690 will be operational in a temporary location shortly. You will be required to enable your ctcss on receive to open up on hearing a 151.4hz subaudible. We have not had any communications from our host as yet regarding the relocation to Clarendon Station. More info as we get it.

Sunday Brunch – Well attended, and a well done Roy – 17 signed up and 17 attended. Attendees were in great singing voice – Happy Birthday, Steve – Sorry Hilda and I had to leave early.

Weekly Nets – Continue to grow with FCARES adding an 80-meter net to Tuesday night (2030). You will have to look a bit around the 3.7xx Mhz range to locate them as the band is becoming more active (maybe the propagation gods are starting to co-operate)

Monthly meeting – Come early and enjoy a meal.

Les, VE3KFS

S S S S S S S S S S S S

From the Editor:

I guess that time has come – 'the white stuff' is coming. It won't be too hard to avoid it by doing the newsletter and putting in all the articles the 'good' hams are sending me. (And don't forget, I can use member news as well.) Again, thank you.

Every <u>TUESDAY</u> at 7:30 p.m. **K.A.R.C. Net VE3KBR**

<u>SCHEDULE OF NET CONTROL STATIONS:</u>

NOVEMBER	DECEMBER	JANUARY
Nov 6 VE3NFU	Dec. 4 VE3JPW	Jan. 1 Informal Net
Nov 13 VE3CAK	Dec. 11 VE3VJF	Jan. 8 VE3CAK
Nov 20 VE3MUD	Dec.18 VE3NFU	Jan. 15 VE3MUD
Nov 27 VE3CLQ	Dec. 25 Informal Net	Jan. 22 VE3CLQ
		Jan. 29 VE7JPW

We are looking for two more net controllers……any volunteers?

Thanks……. Bill, VE3CLQ.

If there are any conflicts in the schedule please contact Bill at ve3clq@rac.ca and we'll juggle a few things.

The net script has been posted on the Website

S S S S S S S S S S S S S

<u>Every Saturday - Breakfast at Smitty's. Starts at 8:00 a.m. but come early, chat and mingle.</u>

The Third MONDAY, of every month, at 7:00 p.m. is the A.R.E.S. REGULAR MONTHLY MEETING at the Woodbine Firehall, second floor.

There is a now a repeater, VA3FOY 147.285(+) at Bancroft. Licensee is Doug Peckhover

KARC Web page designed and maintained by:

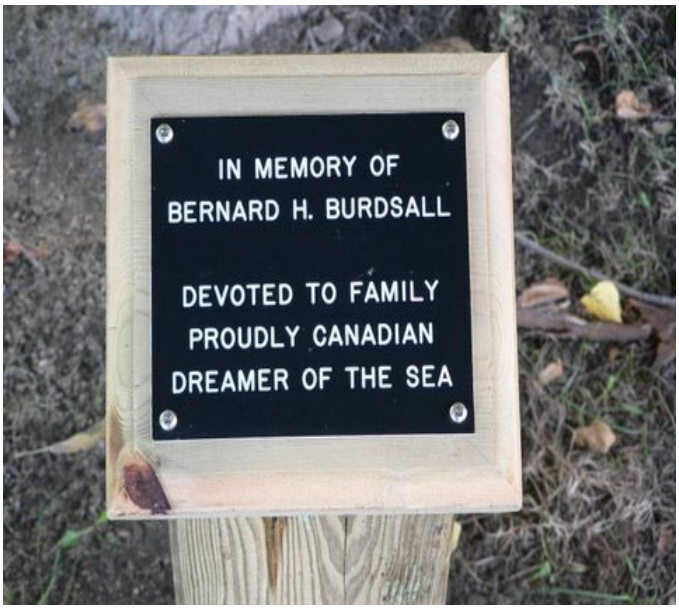
VA3KGB, Chip

http://www.ve3kbr.com

Publication Schedule of the KARC Newsletter will be November 28, 2007

OF INTEREST

On Thursday, October 25th, there was a tree dedication at the Marine Museum to Honour VE3NB, Bernard Burdsall's contribution as a volunteer at the Museum.



S S S S S S S S S S S S S

From Terry, VE3TRM **Winlink 2000 -- ISP or Not?……**

I think this is a long read, but as I gather it, Winlink Pactor 2 and 3 will try to get donations or charge for messages. Would this not be against our Amateur Standing? When you open this page jump down to the comments pro and con - against Pactor 2 and 3. I guess pactor 1 is still used as mode of communications on the ham bands but it looks like (maybe???) winlink will go the charge route and stations will take a freq. and just sit there, never mind if some are using it. Guess I am on the fence...

http://www.eham.net/articles/11000

S S S S S S S S S S S S S

From Bill, VE3CLQ, **"VE2CRA in Ottawa now requires 100hz CTCSS to activate."**

THE 2007 WORLD RADIOCOMMUNICATION CONFERENCE

The 2007 World Radiocommunication Conference (WRC-07) of the International Telecommunication Union (ITU) is set to begin Monday, October 22, running through Friday, November 16 in Geneva, Switzerland. Among the more than 2700 attendees will be the IARU WRC-07 core team headed by IARU President Larry Price, W4RA and including IARU Vice President Tim Ellam, VE6SH; IARU Secretary David Sumner, K1ZZ; IARU Region 2 President Reinaldo Leandro, YV5AMH; Ken Pulfer, VE3PU; Paul Rinaldo, W4RI, and Hans Zimmermann, HB9AQS/F5VKP.

While most of the 28 agenda items under consideration at WRC-07 do not directly affect Amateur Radio, several proposals of particular interest to radio amateurs will be considered during the four weeks of the conference. Heading the list is the possibility of a new, secondary allocation to the Amateur Service just above 5 MHz.

The administration of Mexico has proposed modifying the Table of Frequency Allocations to provide for a worldwide, secondary allocation to the Amateur Service at 5.260-5.410 MHz, with the fixed and mobile (except aeronautical mobile) services remaining primary. This frequency range includes the five spot frequencies that amateurs in the US are allowed to use under restrictions designed to protect federal government operations. Recognizing the need to improve the reliability of amateur communication in emergencies, several other administrations have made similar provisions for their amateurs on a domestic basis.

"Recent natural disasters have again demonstrated the value of the Amateur Service in providing communications in the affected area when other communication infrastructures are unavailable," the proposal from Mexico states. "This highlights the need for reliable amateur communications round the clock, under changing propagation conditions during solar cycles." When the Maximum Useable Frequency (MUF) is below 7 MHz and the Lowest Useable Frequency (LUF) is too far above 3.8 MHz, it is difficult for communication to be supported in the 3.8 MHz band using typical amateur power levels and antennas. The proposal cites experiments demonstrating the value of the 5 MHz band and showing that amateurs can operate there without causing harmful interference to the primary services.

Some European administrations are taking a slightly different approach toward the same objective. A European Common Proposal has been submitted to add a footnote reading, "Administrations may allow stations in the Amateur Service to operate in the band 5260-5410 kHz on a secondary basis. Stations shall not use a radiated power exceeding 24 dBW [250 W]."

Cuba proposes addressing the need for an amateur allocation in the vicinity of 5 MHz by placing it on the agenda of the next WRC, now scheduled for 2011.

According to IARU Secretary Sumner, "The IARU is grateful to these administrations for putting forward their proposals, as well as to other administrations that already have expressed their support. Because of renewed interest in HF communication among government agencies and the military and pressure from HF broadcasters for more spectrum, we know it will not be easy to achieve this allocation."

The conference will also consider a secondary allocation to the Amateur Service of 135.7-137.8 kHz. The Amateur Service currently has no frequency allocations lower than 1.8 MHz. With today's widespread use of digital technology, Sumner said, amateurs can now make use of weaker signals than ever before. "This opens a window of opportunity for amateurs to conduct technical investigations in the low-frequency range." More than 20 governments have already allowed individuals, most of them Amateur Radio operators, to experiment on frequencies between 73 and 200 kHz; 15 European governments allow amateur operations on 135.7-137.8 kHz. There is considerable support for this allocation in proposals from a large number of administrations.

Four items are on the IARU "wish list" of agenda items for consideration at the next WRC, possibly in 2011:

* In IARU Region 1 (Europe, Russia, the Middle East and Africa), allocate 50-54 MHz (6 meters), as is already done in Regions 2 and 3.
The United States and Canada are a part of Region 2.

* Allocate 495-510 kHz to the Amateur Service on either a primary or secondary basis. This will permit the development of reliable groundwave systems for disaster relief and provide a spectrum for experimentation with digital signal processing.

* Continue to allow amateurs access to frequencies at regular intervals above 275 GHz, keeping in mind allocations and protections to other services. The IARU suggests providing specific allocations to the Amateur Service, as established at WARC-79, of "relatively narrow, primary bands adjacent to wider, secondary bands."

* If the ITU Member States decide to review HF allocations at WRC-11, the IARU asks for consideration of expansion of the amateur bands near 10, 14 and 18 MHz in order to better accommodate increased activity. Sumner notes that consideration of HF issues at WRC-11 is by no means certain.

More information about WRC-07 can be found on the ITU Web site.

US Amateur fined by FCC for malicious interference to VE7RPT Repeater

Months of hard work tracking various sources of malicious interference directed at the VE7RPT repeater, owned and operated by the BCFMCA and located on Mt Seymour, just north of Vancouver have finally begun to pay off.

On September 25th the FCC issued a Notice of Apparent Liability, including fines totaling $7,000, to James Grinton, K7VNI, located in Bellingham Washington. Grinton repeatedly and maliciously interfered with the operation of VE7RPTon a frequent basis. During the last 2 years Grinton directed his malicious interference and harassment at the President of the BCFMCA, jammed phone patches and periodically flooded the repeater with music and other forms of intentional interference.

In early 2006 a team of Canadian Hams began tracking the interfering signals and quickly determined they originated south of the Canada/US border. A group of Hams in the US were approached to provide assistance and the source of the interference was identified shortly thereafter. A number of independent confirmations were made to verify the location, the address of which was determined to be that of James Grinton, K7VNI.

A complaint was formally made to the FCC regarding this interference and the information collected by the combined Canadian and US tracking team was provided to the Seattle office of the FCC. An agent from the FCC Enforcement Bureau's Seattle Office independently verified the location and source of the interference during late 2006 and a Warning of Interference to Communications Letter was sent to James Grinton, K7VNI, on January 19, 2007.

Grinton continued to interfere with the operation of VE7RPTafter receipt of the warning letter. In fact, the Seattle agent recorded over 160 violations during the period January 19, 2007to June 23, 2007.

A Notice of Apparent Liability, including fines totaling $7,000, was issued to James Grinton, K7VNI, on September 25, 2007.

This is the second of a series of interference complaints affecting repeaters in the Greater Vancouver area to be brought to a conclusion. Additional interference investigations are on going.

Many thanks to all the people who devoted countless hours tracking and identifying the source of this interference. This is an excellent example of the tremendous spirit of cooperation that exists between Amateur Radio operators in both Canada and the US. In addition, many thanks to the Seattle office of the FCC for their support and subsequent enforcement action.

100 Beeps for Marconi Milestone

Last Updated: Wednesday, October 17, 2007 | 2:57 PM ET
CBC News

Amateur radio enthusiasts in Cape Breton are celebrating the centennial of the first commercial trans-Atlantic wireless message.

In a tent south of Glace Bay, a crowd watched Wednesday as a series of dashes and dots were sent to a similar gathering in Clifden, Ireland. The Morse code message was a greeting from Canada's Governor General.

Moments later, a response came from Ireland's president, Mary McAleese.

"I would like to extend my sincere best wishes to the people of Canada … for this significant date," Jeff Slip, of the Institute of Electric and Electronic Engineers, read out to a round of applause.

On Oct. 17, 1907, Guglielmo Marconi transmitted the first commercial wireless message across the Atlantic Ocean to Ireland from this site.

Though Marconi did a successful test from Signal Hill in Newfoundland in 1901, Henry Bradford, with the Cape Breton Wireless Heritage Society, said the telegraph operators there were afraid of competition.

"Marconi didn't want to waste time with lawsuits, so he left Newfoundland and came to Cape Breton," Bradford said.

Marconi moved to Glace Bay and eventually set up a radio transmission station on the site south of the town, known as Marconi Towers. His grand house still stands.

Russell Cunningham bought Marconi's house in 1946 when the transmitter closed down. His son, Doug Cunningham, who is still there, is very used to knocks on the door from wireless enthusiasts.

"I get them from all over. I just had a gentleman here from Japan. If there was a sign out there ... I'd be busy all the time," he said.

Cunningham's house is full of old equipment from the Marconi days.

As for the transmission site itself, all that's left is a derelict building where messages from around the world were once sent and received.

(This is a link to the Cape Breton celebration : Marconi Centennial 2007)

(Article in Globe & Mail)

Mysterious 'tin whiskers' Imperil Electronics

JORDAN ROBERTSON

Associated Press

October 5, 2007 at 2:32 PM EDT

SAN JOSE, Calif. — They've ruined missiles, silenced communications satellites and forced nuclear power plants to shut down. Pacemakers, consumer gadgets and even a critical part of a space shuttle have fallen victim.

The culprits? Tiny splinters — whiskers, they're called — that sprout without warning from tin solder and finishes deep inside electronics. By some estimates, the resulting short-circuits have levelled as much as $10 billion in damage since they were first noticed in the 1940s.

Now some electronics makers worry the destruction will be more widespread, and the dollar amounts more draining, as the European Union and governments around the world enact laws to eliminate the best-known defence — lead — from electronic devices.

"The EU's decision was irresponsible and not based on sound science," said Joe Smetana, a principal engineer and tin whisker expert with French telecommunications equipment maker Alcatel-Lucent SA. "We're solving a problem that isn't and creating a bunch of new ones."

Enlarge Image

A close up photo shows tin whiskers on the tin-plated steel housing of a variable air capacitor used in a 1960's era Grundig radio in this photo provided by NASA Electronic Parts and Packaging Program. Tin Whiskers are tiny tin strands that sprout without warning from tin finish or solder, short-circuiting electronics. By some estimates, they've caused as much as $10 billion in damage since they were first noticed in the 1940s. *(NEPP/AP)*

Typically measuring under a millimetre long, tin whiskers look like errant strands of static-charged hair, erupting in every direction from tin-based materials like solder. Their cause is hotly debated. Other metals also grow whiskers, but not like tin.

Trouble arises when the whiskers bridge separate parts of increasingly miniaturized circuit boards. They also can flake off and interfere with sensitive optics.

While scientists debate their cause, they agree on one thing: Small amounts of lead mixed with the tin have been remarkably effective at preventing whisker eruptions for decades.

Lead, however, is a serious health concern. In children, it can cause learning or behavioural problems and has been associated with anemia and kidney problems. In adults, exposure has been linked to high blood pressure and reproductive organ damage.

Last year, Europeans barred the toxic metal from most electronics to prevent its being incinerated or accumulating in dumps after computers and other gadgets are tossed out. Similar measures are being considered or are already in place in other countries, including Japan, China, South Korea, Argentina, Australia and the United States.

Some companies say the EU rules threaten the reliability of their products, exposing them to unknown risks and possibly threatening people's safety.

But EU officials say the regulations banning lead, cadmium, mercury and three other hazardous substances are needed to protect people and the environment.

They also note that many types of electronics are exempt from the law, including military and other national security equipment, medical devices, and servers, data storage computers and telecommunications gear that use leaded solders.

Exemptions are also granted when alternatives to the hazardous materials don't exist yet, or because the substances can't be replaced without jeopardizing safety.

Still, even some companies with exemptions say it's getting harder to buy the leaded parts. They worry about the increased risk of pure-tin parts, the culprit behind the most devastating tin-whisker-related failures.

"Over time (the failures) are just going to get worse and worse and worse," said Jim McElroy, executive director of International Electronics Manufacturing Initiative, or iNEMI a group of big electronics makers, government agencies and other parties active in tin whisker research.

"Even if the military is exempt forever, they will be forced to convert because they can't get the components they want," he said. "And that will eventually happen across the board."

Tin whiskers have left a trail of destruction in a string of important machinery, chronicled in an extensive database of publicly disclosed failures kept by researchers at NASA's Goddard Space Flight Center in Greenbelt, Md.

Last year, for example, NASA engineers testing parts for the space shuttle Endeavour discovered that millions of tin whiskers were causing an electronic box to inaccurately point the shuttle's engine, knocking the rocket's trajectory off-kilter, according to Henning Leidecker, chief engineer of the electronic parts office of NASA's Goddard and a tin whisker expert.

It turns out NASA had approved the pure-tin-coated clamps used for holding circuit boards in place back when the electronics were made in the 1980s, before NASA adopted its current rule requiring a small amount of lead in its tin coatings.

"These whiskers have the potential to destroy missions," Leidecker said.

Failures blamed on tin whiskers have run the gamut of devices and manufacturers.

In the 1980s, the U.S. Food and Drug Administration recalled some pacemakers because of a high failure rate caused by tin whiskers.

In 1998, PanAmSat Corp.'s $250 million Galaxy IV communications satellite, which provided service to tens of millions of pagers across North America and thousands of pay-at-the-pump gas station machines, was deemed a total loss after two processors failed. The main spacecraft control processor, which governs the satellite's positioning and other functions, failed for an unknown reason, and the backup couldn't be used because tin whiskers had shorted it out a year before.

At least 10 other satellite failures have been blamed on tin whiskers, according to the NASA database.

Over the past two decades, also according to the NASA database, nuclear power plants have been temporarily shut down at least seven times after tin whiskers in the alarm system circuit boards triggered false alarms, alerting managers to threats that didn't exist. There have been no reported injuries.

"There's a real loss of money because the plant is shut down and stays down, and it also presents a situation where workers are taught not to believe the alarms," Leidecker said. "Are you comfortable with that? I am not."

The military also isn't immune. Whisker-related malfunctions have been reported in the radar used aboard fighter jets, in the target-detection system of certain missiles, along with various unspecified problems in other parts of the U.S. military's missile programs.

Little is known about those failures, other than the part that failed and the cause. Most involve military secrets and are only known because they're revealed in technical forums by defence contractors, who incur heavy repair expenses for malfunctioning tin-whisker-infested equipment and are active in scientific circles looking for a fix that doesn't involve lead.

Tin whisker experts said the industry is working fast to come up with a lead-free solution. So far, other materials have shown to be effective in preventing tin whiskers, but not as powerfully as lead.

One promising remedy is tin-silver-copper solders, said George Galyon, a senior technical staff member at IBM Corp. However, Galyon noted that lead-free solders often require much higher temperatures, which can warp circuit boards and cause materials to degrade.

Despite the setbacks, he said the major players realize anti-lead laws give them no choice.

"It's whistling in the wind if you think we're turning this back," he said. "China's full-bent on it, the major markets are into it. The world flipped over in one fell swoop."

FINANCIAL STATEMENT

Kingston Amateur Radio Club Inc.

For the period – September 18, 2007 to October 16, 2007

Balance at September 18, 2007			**$4871.32**
Income	**MEMBERSHIP**	**$ 180.00**	
	50/50 DRAW AND DONATION	**$ 19.00**	
	DONATION	**$ 10.00**	
	TOTAL INCOME	**$ 209.00**	**$ 209.00**
Expenses	**NIL**		
Balance at October 16, 2007			**$5080.32**

FINANCIAL ASSETS

KCCU ACCOUNT	**$5080.32**
DIVIDEND SAVINGS	**$ 17.97**
KCCU SHARES	**$ 150.00**
TOTAL CLUB ASSETS	**$5248.29**

George Kennedy, Treasurer, KARC
October 22, 2007

KINGSTON AMATEUR RADIO CLUB AGENDA

Wednesday, November 7th, 2007

At Smitty's Restaurant, back room

7:00 p.m.

1. **Introduction of members**
2. **Additions and/or deletions**
3. **Minutes of Monthly Meeting:** Errors/Omissions
4. **Treasurer's Report**
5. **Old Business**
6. **50/50 Draw**
7. **New Business**
8. **Reports:**
   a) RAC
   b) Net Manager - VE3KFS
   c) KARC Newsletter
   d) Web page - VA3KGB
   e) Any other reports
9. **Adjournment**

MINUTES OF THE MEETING OF THE KINGSTON AMATEUR RADIO CLUB

HELD on October 3rd, 2007

At SMITTY'S RESTAURANT, PRINCESS ST.

Les, VE3KFS, opened the meeting at 7PM

1. All members were introduced

2. MINUTES: Tom, VA3ZE, moved that the minutes of the September meeting be accepted. Seconded by Doug, VE3FFR.....Carried

3. TREASURER'S REPORT: George, VE3GHK, presented The Treasurer's Report. Moved by George, VE3GHK, that the treasurer's report be accepted. Seconded by George, VE3SIQ.... Carried

4. **OLD BUSINESS**

1) .09 Repeater: The fan module to cool the repeater is now in place but we still need to add power to the unit. Highland communications has sold out to Time MCI [this is the owner of the repeater site]. If the repeater goes off of the air please advise one of the executive or repeater committee members so that we can notify Time MCI. Time MCI were very pleased that we notified them that the repeater was down as this was the first that they had heard of the problem and they were able to respond to their commercial users that they were aware of the problem and working on it.

5. PROGRAM: Rob, VE3RPF, brought in a Sterling Engine for a demonstration of its capabilities and discussed possible uses for it in the future. Rob also briefly discussed Solar panels and their uses in our hobby.

6. 50/50 Draw: Won by Steve, VE3KC who donated the winnings ($9.50) back to the club.

7: NEW BUSINESS

a) Tom, VA3ZE told the group that Metalcraft, the boat builder was holding an open house on Friday, October 5th from 1 to 4pm. This is to celebrate their 20th anniversary. On display will be 36 and 50-foot fireboats.

8: REPORTS:

a) FLEAMARKET: Doug has reported that the grand prize could not be given out because we are unable to locate the ham who won. We have his call sign but he is not current on the RAC database and we are unable to find a telephone number for him. A letter has been sent to the last known address advising him of his prize.

b) RAC: Nil report

c) NET MANAGER: If there doesn't seem to be a net controller please step in and run the net. If you would like to use the 'Net Script' it is available on the VE3KBR website. The net controller's schedule is on the web. Net manager is Bill, VE3CLQ.

d) IRLP: No report

e) KARC NEWSLETTER: Keep the articles and information coming in to Joan.

f) WebPages: Chip is always looking for errors, dead links, articles (after Joan has had a chance to publish them) and photos. The photo album is being redone to provide photos by activity in an easier to use format.

g) Repeater Committee: Frontenac Amateur Radio Emergency Service has requested permission to use the .94 machine for a Simulated Emergency Test on October 14th from 1 to 3 pm.

h) ELECTIONS: November is election month. Please consider letting your name stand for a position on the executive. The time commitment isn't great and the rewards are many.

9) ADJOURNMENT {8:00}:

Bill Rumball, VA3OL
Secretary KARC