Message from the London Amateur Radio Club

Promoting Amateur Radio in London And surrounding area since 1920



March 4, 2012

L.A.R.C. Executive

President

Doug Elliott, VA3DAE

Vice-President

David Lambert, VE3KGK

Past President

Doug Tompkins, VE3IDT

Treasurer

Brian Bouckley, VA3ATB

Secretary, Flea Market Ruth Dahl, VE3RBO

Director, Flea Market Ann Rundle, VA3EOR

Director, MembershipJohn Visser, VA3MSV

Director

Mike Watts, VE3ACW

Non-Voting Director, ARES & CANWARN

Brett Gilbank, VE3ZBG

Appointments LARC Repeater Coordinator

Brad Seward, VE3NRJ

Repeater Operator/Programmer

David Young, VE3EAY

Field Day Coordinator

Dave Lambert, VE3KGK

Webmaster

Doug Elliott, VA3DAE

Newsletter Editor

John Visser, VA3MSV

Auditor

Rob Hockin, VA3HO

March's L.A.R.C. Meeting

The next LARC meeting will be **Thursday**, **March 8**, with the annual presentation from **Mike Cook**, **VE3ZMC**. His topic will be: **Professor Higgs' Particle** (A brief explanation of the Large Hadron Collider experiment.) Come out and see Mike work his magic to make a complex subject understandable.

David Young, VE3EAY - SK



On February 20, "Big Dave" became a silent key. He was colourful contributor to the London Ham community, and he'll be sadly missed. His nickname came not only from his imposing stature, but also from his rich and resonant voice, which filled the room and garnered attention whenever he spoke. "Big" also described his heart and his constant willingness to help others.

Dave served as President of LARC for several years, and brought his vitality and enthusiasm to the challenging task of leading the club. He also worked tirelessly keeping our repeaters configured and up-to-date despite the aging message generation systems, and was a participant in ARES, REACT, RAC, SORT and CANWARN

More than anything else, Dave was an ambassador for Ham radio, and LARC. He used his extensive media contacts to publicize club events, and was quick to launch into a detailed explanation of our hobby if anyone was curious about ham radio.

It won't be the same without "Big Dave".

Rest In Peace, Dave Young VE3EAY, SK.

Next Meeting is Where and When?

Reminder: The next monthly L.A.R.C. meeting on March 8, 2012 at 7:30 pm

All meetings are normally located at St. Judes Anglican Church, 1537 Adelaide Street North at Fanshawe Park Road East in London, Ontario.

The meetings are **normally** held on the second Thursday of the month at 7:30 pm EST during the months of September to June.

Next Meeting will be April 12, 2012. This meeting topic is still to be confirmed.

Area Repeaters

LARC Repeaters

London

VA3LON 147.060 + 114.8Hz VE3MGI 145.390 - 114.8Hz

SORT Repeaters

London

VE3TTT 147.180 + 114.8Hz Echolink Node 10741

VE3SUE 444.400 + 114.8 Hz IRLP Node 2400

VE3TTT 442.200 + D-Star

Ipperwash

VE3TCB 146.940 - 114.8 Hz Linked to VE3SUE

Grand Bend

VE3SRT 442.050 + 114.8 Hz Linked to VE3SUE

Other Area Repeaters

London

VA3SIX 53.470 - 114.8 Hz

VE3OME 145.450 - 114.8 Hz CANWARN

VA3FEZ 444.100 + 114.8 Hz

Grand Bend

VE3RGB 146.760 + 173.8 Hz

Stratfordville

VE3DPL 146.655 - 131.8 Hz

St. Thomas

VE3STR

VE3STR 147.330 + 114.8 Hz

Echolink Node: 72886

443.825 + 114.8 Hz IRLP Node: 2482

Membership Certificates

The Club has created membership certificates for its current members. You can see your own certificate at the following link. http://www.larc.ca/member-list.htm

Simply click on your surname and it will bring up a PDF of your certificate suitable for printing.

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. To help us all figure who's who, LARC invites its members to submit digital photos of yourself and/or your shack to be published on the membership page of our website. Purely voluntary of course, and if you prefer you can submit just one (depending on whether you think your face or your shack is more presentable).

How will it work? On the membership page, we'll attach your own picture where your first name appears, and the picture of your shack to your callsign. See the entry for Doug Elliott, VA3DAE for an example.

How do you submit your pictures?

Just email them to the LARC site webmaster address, which is: webmaster@larc.ca

Mutual Aid

Would you be willing to answer some questions if a fellow ham needed some advice? Got a problem you can't figure out? Want to try something new but need someone to show you the ropes? Check out our new **Mutual AID page** (http://www.larc.ca/mutual-aid.html), a new way to get people who are looking for assistance together with the folks who can help supply the answers. **Let us know** what you think of this new facility.

Membership Report

Currently the membership is at 109 to the club. Of the 17 Honorary Members brought in from the L.S.R.C., 4 have paid for the current 2011/2012 year. For the 2011/2012 year, have now have 16 new members. Unfortunately 3 past members of the club became a Silent Key last year.

I would like to welcome the following new members.

Perron Goodyear VE3PSG - Public Relations & Development Representative, Salvation Army

From the Middlesex-London Health Unit

Patricia Simone, VE3HIS - Manager, Emergency Preparedness

Ross Graham - Manager, Special Projects

Mark Przyslupski, VA3MPW

Mark Riedl, VA3MWR

Gordon Horner, VA3AEV

Scott McIntosh, VA3AEY

Rosemary Boyd, VA3AEH

Raymond Day, VA3AEU



If you have a repeater that should be listed here, please forward the information to John Visser, VA3MSV at va3msv@hotmail.com and I'll add it to the list.

Nets



Daily Trans Provincial Net

7.055 MHz

London Senior's Net

Sunday

Swap Net

7.055 MHz LSB

ARES Ontario Net

7.153 MHz 7.055 MHz 3.742 MHz IRLP Reflector 9005 8:00 pm

Monday

LARC 2m Net

8:00 pm 147.060 MHz +

Wednesday

ARES Net

145.450 + VE3OME 7:30 pm

ARES Ontario Net

IRLP Reflector 9005 8:00 pm

Thursday

PROCOMM Net

147.180 + VE3TTT	8:00 pm
444.400 + VE3SUE	8:00 pm

Friday

Tech Net

147.180 + VE3TTT	8:00 pm
444.400 + VE3SUE	8:00 pm

Saturday

VE3TTT 2m Net

7 - 5 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	
147.180 + VE3TTT	7:30 pm
444.400 + VE3SUE	7:30 pm
146.940 - VE3TCB	7:30 pm
442.050 + VE3SRT	7:30 pm

If you have a Net that should be information to John Visser, and I'll add it to the list.

2011/2012 L.A.R.C. Executive **Elections**

It is that time of year again for us to think about the lineup for the club's executive members for 2010-2011.

Every May we decide who will be responsible for the handling of the money, physical resources, ^{7:00 am - 5:00 pm} determining the future direction of the club.

146.400 MHz 7:00 pm - 7:30 pm The club's executive requires at least 7 members each year and if you are interested, we request that you make yourself available one night per month to go over club business.

> Some of us have been on the executive for several 7:15 pm years and enjoy the experience.

We have some simple rules

- 1. Any current member of the club can request to be a member of the club's executive and added to the ballet.
- 2. Only members in good standing can vote (must be a paid member)
- 3. We must have a quorum (at least 25 members in good standing) in order to hold a valid election.

activities that Some the require coordination or at least some monthly discussions: Monthly meeting topics, fund raising, flea market, field day, repeaters & other equipment, extra activities.

We currently meet the 4th Thursday of the month from 7:30 pm to about 9:00 pm. All club members are invited to attend any executive meeting. If you have some interest but are unsure, and want to come and see what we do, just check with one of the executive as to where we are meeting.

listed here, please forward the The next page is a snip from the club's by-laws that VA3MSV at va3msv@hotmail.com specifically deal with the election process.

Upcoming Events

Sat., Mar. 24, 2012 Ham-Ex 2012 - Mississauga **ARC and Peel ARC**

Brampton Fall Fair Grounds, 12942 Heart Lake Road (Heart Lake Road and Old School Road) GPS 43.771218 -79.8298

Sat., Apr. 21, 2012 **2012 Durham Region Amateur** Radio Hamfest - South **Pickering Amateur Radio Club** and North Shore Amateur **Radio Club**

Pickering Recreation Complex, 1867 Valley Farm Rd.

Sun., Jun. 3, 2011 **Central Ontario Hamfest &** Fleamarket - Guelph ARC & **Kitchener-Waterloo ARC** Waterloo Regional Police Association Recreation Centre R.R. 2, 1128 Rife Rd. North Dumfries Township

Sat., Jul. 14, 2012 **ONTARIO HAMFEST** -**Burlington Amateur Radio Club** Milton Agricultural Fairgrounds Milton, ON

Sun., Sep. 26, 2012 35th Annual 2010 London Amateur Radio Club Flea **Market** - London Amateur Radio Club

Located at the Western Fairgrounds Special Events Building, London,

Sat., Oct. 13, 2012 **HARC Hamfest 2012 - The Hamilton Amateur Radio Club Ancaster Fair Grounds**

If you have an upcoming event that you would like to have listed here, please forward the VA3MSV at

va3msv@hotmail.com and I'll add it to the list.

2011/2012 L.A.R.C. Executive **Elections**

from the LONDON AMATEUR RADIO CLUB INCORPORATED - BY-LAW #1

- 3. Board of Directors
 - 3.1 The day-to-day affairs of the Corporation shall be arranged by a Board of Directors composed of 7 selected Directors, 1 non-voting Director appointed by the Amateur Radio Emergency Service (A.R.E.S.) and the Past President of the Corporation.
 - 3.3 To be eligible to stand for election to the Board of Directors one must be a member in good standing for at least 30 days prior to the Annual Meeting at which members of the Board of Directors will be elected.

This year's Annual Meeting will be held May 10, 2011

- 3.4 A Nominating Committee shall be struck by the President at least 90 days prior to the Annual Meeting and it shall begin its activities immediately upon being appointed.
 - 3.4.1 The Committee shall be composed of three members in good standing. The Past President shall be the Chairperson of the Committee.
- 3.5 The recommendations of the Nominating Committee shall be presented to the Board of Directors. The Board shall cause such report to be published in the L.A.R.C. Newsletter, which will be sent to all members in good standing as notice of the Annual Meeting. Such report shall also outline the procedure pertaining to additional nominations.
- 3.6 Additional nominations may be received by the Secretary up to 12 hours prior to the Annual Meeting if submitted by a member in good standing supported by the written agreement of 4 other members and the written acceptance of the nominee.
- 3.7 The election of the Board of Directors shall take place at the Annual Meeting of LARC. The Directors shall be elected by a simple majority vote of the members. The Directors shall take office on July 1 of that year.

information to John Visser, Please contact the L.A.R.C. Secretary Ruth Dahl, VE3RBO, if you have any nominees or questions. You can reach me at ragann61@hotmail.com.

[IARU-R2-News 162] Special WRC Report Number Three - The Amateur Radio Service Gains A Band Near 500 kHz

February 15, 2012

[Editors note: Subject to approval by Industry Canada, operation on this band is not permitted in Canada at this time. Radio Amateurs of Canada will be working with Industry Canada through the Radio Advisory Board of Canada (RABC) to work out the various details on amateur usage of this band in Canada.]

472-479 kHz. The worldwide amateur radio service has a new frequency band, 472 to 479 kHz. It is a secondary allocation. There are other services in that portion of the spectrum that must not be interfered with by the amateur operation.

The aeronautical radionavigation service is a primary service in the band 415-495 kHz in the following areas: Australia, China, the French overseas communities of Region 3, Korea (Rep. of), India, Iran (Islamic Republic of), Japan, Pakistan, Papua New Guinea and Sri Lanka.

The aeronautical radionavigation service is a primary service in the band 435-495 kHz in the following areas: Armenia, Azerbaijan, Belarus, the Russian Federation, Kazakhstan, Latvia, Uzbekistan and Kyrgyzstan.

The amateurs are allowed to use the band so long as it does not cause interference to this primary service or the maritime mobile service operating in the 472-479 kHz band. There are some countries that will not allow amateur radio operation in the 472-479 kHz band. The use of the frequency band 472-479 kHz in Algeria, Saudi Arabia, Azerbaijan, Bahrain, Belarus, China, Comoros, Djibouti, Egypt, United Arab Emirates, the Russian Federation, Iraq, Jordan, Kazakhstan, Kuwait, Lebanon, Libya, Mauritania, Oman, Uzbekistan, Qatar, Syrian Arab Republic, Kyrgyzstan, Somalia, Sudan, Tunisia and

Yemen is limited to the maritime mobile and aeronautical radionavigation services. The amateur service shall not be used in the above-mentioned countries in this frequency band, and this should be taken into account by the countries authorizing such use.

The ITU Radio Regulations provide that radio amateurs are limited to 1 watt (e.i.r.p.) however administrations whose territory is beyond 800 kilometers from the borders of the following countries may increase the operating power to 5 watts (e.i.r.p.): Algeria, Saudi Arabia, Azerbaijan, Bahrain, Belarus, China, Comoros, Djibouti, Egypt, United Arab Emirates, the Russian Federation, Iran (Islamic Republic of), Iraq, Jordan, Kazakhstan, Kuwait, Lebanon, Libya, Morocco, Mauritania, Oman, Uzbekistan, Qatar, Syrian Arab Republic, Kyrgyzstan, Somalia, Sudan, Tunisia, Ukraine and Yemen.

The change becomes effective with the adoption of the Final Acts of the Conference. Of course, it will be determined by each administration around the world as to what modes and bandwidths will be used in this portion of the spectrum and when hams in that country will have access to the spectrum.

More activities from the WRC-12 will be reported at the end of the WRC. The WRC continues until 17 February. There is an effort underway to place an amateur radio agenda item on the agenda for the next WRC which will take place in 2015.

Rod Stafford, W6ROD IARU Secreta

WRC 2012 Ends - The Outcome For Ham Radio

February 17, 2012

The 2012 World Radiocommunications Conference, better known as WRC 12 has come to a close.

At its Plenary meeting held on February 14th, the World Radiocommunication Conference approved a new secondary frequency allocation to the Amateur Radio Service from 472 to 479 kHz. Having passed its First and Second Readings it is normally a formality that this change be included in the

conferences Final Acts when the gathering concludes and the Table of Frequency Allocations would then be amended accordingly.

As a secondary user, amateur radio shares 472 to 479 kHz with the Maritime Mobile Service which is the primary user in all three ITU Regions and with the Aeronautical Radionavigation Service which is a

Secondary user except as noted in the following footnotes:

One footnote reads that a number of countries will identify their intent to elevate the status of their Aeronautical Radionavigation Service to Primary as a step in ensuring protection from secondary users.

Also there is a footnote that says that the power which radio amateurs may use in 472 to 479 kHz will be limited to 5 watts effective radiated except for amateur stations within 800 km of the borders of a number of countries. These are principally Russia, many of the former Soviet bloc nations and

the Arab states. For those affected amateurs the power output limit will be 1 watt.

It is, of course, up to individual administrations to authorize use of the band by their amateurs. How long it will before the band is available to hams in the United States? That's up to the bureaucrats in Washington DC. At this point that is unknown.

The new band at 600 meters will represent the return of amateurs to the medium waves. This is an area of spectrum that hams have not had access to since the earliest days of radio regulation. (RAC)

LightSquared vs. GPS: Government Report Says There's No Way For The Two To Co-Exist

February 10, 2012

More problems for LightSquared in its bid to construct a 4 G network in spectrum adjacent to that used by the GPS navigation system.

A joint panel of representatives from nine federal agencies says that it has determined that there are no practical solutions that would allow LightSquared's proposed broadband service to operate without significantly interfering with the Global Positioning System or GPS that operates in adjacent spectrum.

The report was made in a January 13th letter from the National Executive Committee for Space-Based Positioning, Navigation, and Timing to the National Telecommunications and Information Administration. It said that over the past year it has closely worked with LightSquared to evaluate its original deployment plan, and subsequent modifications, to address interference concerns. It said that substantial federal resources were expended and diverted from other programs in testing and analyzing LightSquared's proposals. The report added that no further tests are warranted, as LightSquared has not demonstrated any means that would prevent such interference from occurring.

As previously reported, numerous tests over the past year have shown that signals from LightSquared's proposed 4G network held the

potential to interfere with the weaker signals from space used by global positioning system receivers. As a result, In December 2011, the company offered to limit its signal to lower frequency spectrum farthest away from the bandwidth used by GPS in exchange for immediate access to that spectrum. Then as reported last week LightSquared lashed out at the GPS industry in a Federal Communications Commission filing, claiming poor design of GPS units is solely to blame for the problem.

Not surprisingly, LightSquared immediately issued its own press release calling for the FCC and NTIA to retake the lead on conducting tests of its network, claiming the committee report demonstrated bias and inappropriate collusion with the private sector. LightSquared noted a director for Trimble GPS, whom is called an outspoken LightSquared opponent, served as Director of the Advisory Board. It also claims that government testing has become unfair and shrouded from the public eye.

With the committee decision now on the books, a final ruling from the FCC on whether LightSquared will be allowed to go ahead with its plans to turn on its 4 G could come at any time. (Various News Reports)

FCC Says It Will Seek To Cancel LightSquared Proposed Broadband Network

February 17, 2012

The Federal Communications Commission says that it will seek public comment on revoking LightSquared's permit to build a proposed national high-speed wireless data network. This, after concluding that such a system held the potential in some cases jam personal navigation and other Global Positioning System or GPS devices.

According to news reports, the FCC had seen LightSquared's proposal as a way to make more spectrum available to feed the need of the public and industry for added broadband capability for a wide variety of fixed and mobile devices. But the manufacturers of GPS receivers and those who rely on them feared that GPS signals would suffer from

adjacent spectrum interference caused by the proposed LightSquared network.

As previously reporte, after conducting tests, the National Telecommunications and Information Administration said that it found interference with dozens of personal navigation devices and aircraft control systems that rely on GPS for positioning. The NTIA concluded that there's no way to eliminate the risk of interference with such GPS devices.

As we go to air, LightSquared, which is based in Reston, Virginia, had not made any comment to the press on this latest development. (PC World Blog, Yahoo News, Bloomberg News, others)

LightSquared Plans To Cut 45 Percent Of Workforce

Feburary 21, 2012

By Svea Herbst-Bayliss

LightSquared Inc., the wireless company backed by hedge fund manager Philip Falcone, said on Tuesday it plans to lay off nearly half of its employees to save money.

The Reston, Va.-based company said it will cut 45 percent of its 330-employee workforce and called the planned move a "prudent and necessary cost savings measure to ensure the long-term success of the company."

On Monday, LightSquared failed to pay \$56 million it owed to a British satellite partner Inmarsat,.

A week ago the U.S. Federal Communications Commission dealt the company a severe blow when it said it would revoke permission for LightSquared to move ahead with its wireless network, after tests found that it would interfere with Global Positioning Systems used by airliners and the military.

As speculation has mounted that the company might soon be forced to file for bankruptcy, Falcone has steadfastly ruled that out. One person familiar with the situation said on Tuesday that the company is not considering bankruptcy.

"The company remains committed to managing its core business operations, serving the more than 300,000 government, public safety and commercial users of its satellite service," LightSquared said in a statement.

Last year LightSquared scrambled to make permanent the government's provisional approval to build the network. It spent \$2.5 million on lobbyists in 2011, nearly 10 times the \$265,000 it spent in 2010.

It employed 15 lobbying firms last year, according to OpenSecrets.org which tracks lobbying activities.

Denver-based Brownstein Hyatt, which has offices across the western part of the United States where LightSquared's new network might be especially welcome, was paid the single largest amount of \$310,000. Washington DC firm Patton Boggs collected \$300,000.

LightSquared would not comment specifically on the overall number but said it was forced to spend more because LightSquared's powerful opponents, namely the Coalition to Save our GPS, were also spending more.

OpenSecrets.org does not break out how much the coalition spent on lobbyists, only what the dozens of members ranging from the Aircraft Electronics Association to West Company of Midland Inc paid individually.

"Everyone is lobbying and the reason our numbers went up is because their numbers went up," LightSquared spokesman Terry Neal said, adding "We have been outspent."

For Falcone, who made his fortune on a bet against subprime mortgages and once oversaw \$26 billion, the battle for LightSquared is personal.

He has invested more than 60 percent of his \$4 billion Harbinger Capital Partners' assets in LightSquared and his fund is the biggest equity

owner. Last year Harbinger Capital Partners lost 47 percent of its value after Falcone marked down the value of LightSquared in the portfolio.

(Reporting By Svea Herbst-Bayliss and Sinead Carew; Editing by Matthew Goldstein, Gary Hill and Carol Bishopric)

New 5 MHz Rules Go Into Effect On March 5

February 10, 2012

In the United States, word that the new rules governing ham radio operations in the 5 MHz or 60 meter spectrum take effect on March 5th. This after a notice to that affect appeared in the February 3rd edition of the United States Federal Register.

As previously reported, last November the FCC released a Report and Order detailing new rules for the 5 MHz Amateur Radio band.

The announcement brought with it a number of changes for 60 meter operators. This included substituting a channel at 5 point 358 point 5 MHz for 5 point 368 MHz previously authorized. The effective radiated limit in the 60 meter band will be raised by 3 dB to 100 Watts Peak Envelope Power

relative to a half-wave dipole. Also, three additional emission types are authorized. These are Data, RTTY and CW.

Currently, amateur radio in the United States holds a secondary allocation for 5 MHz and ham radio operations must not cause any interference to the primary users of that band. These include fixed service, as well as mobile stations authorized by the telecommunications regulators of sovereign nations. Access in the United States to the channelized 60 meter spectrum is limited to holders of General class or high FCC license grants. You can read the entire Federal Register item the 5 MHz explaining changes at www.tinyurl.com/6wzsfjm (FCC)

CQ Says Morse Is Alive And Well

February 10, 2012

Finally this we we take a trip back to February of 2007. That's when the Federal Communications Commission took action to eliminate Morse Code testing as a requisite requirement to obtain any class of Amateur Service license in the United States. Now, five years later, CQ Magazine Editor Rich Moseson, W2VU, has published a very pointed editorial where-in he notes that both ham radio and use of the Morse code are alive, well and growing. This despite the ney-sayers who predicted the abandoning of Morse testing would bring a sudden end to the hobby.

In his editorial titled "No-Code Plus Five Years: An Assessment", W2VU, states that ham radio is still here. CW is still here and despite the fears of many CW supporters the universe did not implode on February 23, 2007.

Rather his article was prepared based on research that checked on signs of the state use of Morse by today's ham radio community. It did this by asking manufacturer of keys and paddles about sales, talking to the FISTS Morse preservation group, looking at CW contest results and overall United States licensing statistics. And says W2VU, the article has already brought some interesting response:

W2VU: "We've gotten a lot of good feedback from readers on this already and any ofb them are agreeing with the comment that we had at the end that the only real hiccup that we see and that was pointed out by Nancy Kott, WZ8C, is a difference in the conversion of CW learners to comfortable CW operators. That a lot of the newer hams that are learning the code do not yet feel comfortable on the air with it."

Moseson adds that ham radio has a long tradition of lending a helping hand to newcomers in need of assistance:

W2VU: "The best way to deal with this of course is the way that hams have dealt with learning experiences for decades which is to hook up experienced people with newcomers and helping them one-on-one, either on the air or off to be more comfortable as code operators and they will find a lot more enjoyment in it." Without giving away all the findings in the article, W2VU does note that Morse has a bright future in amateur radio, despite or perhaps because of the elimination of the code test requirement. You can

judge for yourself by reading Rich Moserson's complete article. You will find it on-line in Adobe PDF format at www.tinyurl.com/6rreyxy (ARNewsline TM, VK3PC)

Ham Radio Deluxe 5.1 released!

February 10, 2012

HRD Software, LLC announces the release of Ham Radio Deluxe 5.1. This version incorporates fixes and some new features for DXers.

"This is our first release since obtaining the source code about 90 days ago," said Mike Carper, WA9PIE. "My partner, Rick, W4PC has done an outstanding job at becoming familiar with the code and developing the applications. We were fortunate to have a few key resources like Chuck, K7PT and Terry, G4POP to help us QA the builds as they're developed."

The 5.1 release is being made available at no charge to users registered on the HRD website. The focus for this release was a few items from the ToDo list – bug fixes, added rig support, and a few enhancements.

Mike said, "I think we've taken a balanced approach to getting something out quickly that satisfies a broad range of needs. I hope hams will enjoy the improvements. Obviously, this is only the

beginning. We've got big plans and highexpectations for HRD in the future."

Following the 5.1 release, HRD Software intends to focus on more fixes and significant feature enhancements for v6.x with a target release at the Dayton Hamvention 2012.

As promised, version 5.1 is FREE!

HRD Downloads: http://www.ham-radio-

deluxe.com

HRD Forum: http://forums.hrdsoftwarellc.com

Ham Radio Deluxe 5.11 is here and its FREE.

http://www.ham-radio-deluxe.com

Radio Operations Center for your AEA/Timewave or Kantronics TNC, Now sync's with DM-780

EmComm Ops for Packet TNCs, be ready.

Check it out at http://www.w4pcsoftware.com

Emerging Technology: Spray-On Antenna Unveiled At Google Solve For X Conference

February 8, 2012

By Lora Kolodny

A start-up called Chamtech Enteprises has an answer to the problems of poor cellphone reception and other shortcomings of traditional antennas.



Chamtech co-founders Anthony Sutera and Kristin Raffone-Vasquez pose with an example of their company's spray-on antenna technology at Google's Solve For X event last week. - Steve Jurvetson/Flickr

The company has developed a spray-on antenna that it says is more lightweight, energy-efficient and effective than the old-school version. (Where was this stuff when the iPhone 4 came out?)

The Sandy, Utah-based start-up's nanotechnology, unveiled last week at Google's inaugural Solve For X gathering, can be painted onto a tree, a wall, the ground or even the back of a soldier, enabling a more portable, lightweight way to get reception for a variety of uses.

The company has already patented critical aspects of its technology and begun to sell to government customers, whom it can't identify due to the sensitive nature of the technology's applications.

In 2012 the company plans to expand its focus from government customers to mobile phone and medical device makers. CEO and co-founder Anthony Sutera believes the technology could be

used by weather and oceanographic researchers, underwater welders, rescue workers, military special operatives in the field, airlines, and by manufacturers of cars, phones, TVs, radios and other consumer electronics.

Rhett Spencer, chief technology officer of Chamtech (who joined Sutera and co-founders Kristin Raffone-Vasquez and Eric G. Hernandez in 2011) said the spray-on technology could be applied to cell phones and make them operate with 10% better efficiency.

That could pique the interest of users of the iPhone and other smartphones frustrated by dropped calls.

"Each month, the energy savings that would impart are equal to as much power as all of wind and solar power is generated annually, in the U.S.," Spencer said. "We'd do that 12 times over."

Traditional antennas—the kind that receive radio and TV signals—work OK, but they're beset by problems, Spencer said. They suck up energy, drain battery life and get too hot. They don't send or receive signals as far or as clearly as users would like. They don't work well under water. And they are cumbersome and hard to set up into areas stricken by disasters, or where discretion is required.

Chamtech says it solves all of the above-mentioned problems. Notably, it works well underwater—the company says it was able to send signals more than a mile underwater during testing, much more than normal antennas, and using only three watts as opposed to the thousands of watts normally required.

"Can you imagine the infrastructure side of things?" Spencer said. "Telecomm under the oceans, Internet infrastructure, ships and satellite

communications in the sea— they can do it out under the water."

The company is targeting a large market but a surprisingly fragmented one. To its knowledge, no other direct competitors exist. In the Consumer Electronics Association Electronics Industry Business Directory, 289 companies are listed as makers and sellers of antennas and related services.

Sutera's team invented and honed their spray-on antenna in his living room about two years ago. The company is keeping the details of its technology under wraps for now, but said it is using organic elements and manipulating them to create different kinds of magnetic and radio-frequency fields.

The material allows a user to paint antennas on almost any surface and connect a cable with a flexible circuit.

Sutera and Spencer have coated their family cars' antennas with Chamtech, as a sort of retrofit. They can now listen to Salt Lake City's best radio stations some fifty miles outside the city, with 10,000-foot mountains in between.

The company is just about two years old, and is already approaching a cash-flow neutral position, the co-founders say. In about six months they say they will be considering their financing options, and are likely to take venture capital to help scale their technology.

Steve Jurvetson, who was in attendance at Google Solve For X, took note of Chamtech, and posted a photo of its technology to his creative commons collection on Flickr.

A video from Chamtech's presentation at Solve For X will be available at the <u>WeSolveForX</u> blog this week.

Emerging Technology: Panasonic To Release Text To Speech TV

March 2, 2012

Panasonic plans to release a new line of televisions in March with text-to-speech capabilities. This according to a podcast from the UK-based show Early Edition.

On the netcast, Panasonic's Nigel Prankard is quoted as saying that users will be able to obtain channel information, browse the user guide, and use the built-in electronic program guide among other features.

He went on to explain that the company felt it was the right time to include accessibility features and that Panasonic planned to include it in all models. This based on the company stating that a user shouldn't be limited in the choice of a television by which ones included accessibility features.

Apple is credited in part for proving the technology could be added without much additional cost. This initial release of these new televisions sets appears to be targeted toward the UK market. No word when these sets will be released world wide. More

information is on-line at www.tinyurl.com/first-accessible-tv. (KC9RP via Insight Radio)

New SDR Kit by GenesisRadio: G11 Low Band/HF10W Transceiver

February 17, 2012

Nick Hacko, VK2DX

G11 is the latest Software Defined Radio [SDR] GenesisRadio. transceiver kit by The 10W output all-mode transceiver can be monoband configured as unit either 137KHz or 500KHz (new 630m band) or as a multiband HF transceiver with coverage of up to 5 bands. The band selection based on LP/BP filter choices and there are 19 different filter combinations to choose from.

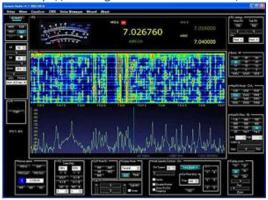


The G11 comes with a partially assembled board with 700+ SMD components already soldered while the remaining 60-70 through hole components can be easily mounted in 8 hours.

G11 would appeal to both LF experimenters and HF operators interested in contesting / DXing who wish to migrate form an entry-level SDR to performance-oriented project.

Price: \$349 plus delivery. For more details see

http://www.genesisradio.com.au/



DXCC News: MV Island Deleted From The DXCC Entity List

March 2, 2012

As of February 17th, Malyj Vysotskij Island, better known as MV Island in ham radio circles has been deleted from the D-X-C-C. This after an announcement by the Finnish Ministry of Transportation and Communication that the Saimaa Canal Treaty between Finland and Russia has been

finalized and that MV Island is no longer included in it.

For amateur radio this means that M V Island was deleted from the DXCC and added to the Deleted Entities List. Also that the entry level for DXCC Honor Roll number has dropped to 331. (NICL)

ARRL Publishes New Recommendations For 60 Meters

March 2, 2012

With new privileges on the 60 meter band beginning March 5th, the ARRL announced some new "Recommended Practices" for operating on that band.

These new suggestions are based on survey results and subsequent research. The committee evaluating the new 60 meter rules declined to propose a specific band plan at this time, but instead created a "Recommended Practices"

document now available in .PDF format at www.tinyurl.com/arrl-sixty-meters

Also, look for the April issue of QST magazine to include an article by ARRL Regulatory Information Manager Dan Henderson, N1ND. It will offer a detailed discussion of the new 60 meter privileges and recommended operating practices for that band. (ARRL)

ARISS Celebrates 700th ISS To Schoolroom Contacts

March 2, 2012

A milestone for manned ham radio operations from Earth orbit. ARISS Operation Team Mentor Charlie Sufana, AJ9N reports that the total number of Amateur Radio on the International Space Station or ARISS sponsored ISS-to-Earth school events has passed the 700 mark.

The 700th school contact was with the Academy at Shawnee City in Louisville, Kentucky. It took place via telebridge with ON4ISS on February 14. The special John Glenn event to commemorate the 50th

anniversary of Perth Australia's, City of Lights on February 20th marked event number 701.

For those hams not aware. ARISS offers an opportunity for students in schoolrooms to experience the excitement of amateur radio by talking directly with crewmembers on-board the International Space Station. Further information on the ARISS program is available at www.ariss.org. (ARISS)

NASA Shuts Down Last Mainframe

March 2, 2012

There was a time when IBM's mainframe computers were the cutting-edge machines for scientific and engineering calculations. Now, for NASA that's all come to an end.

The day of the giant mainframe computer began in the 1960s, when IBM's System 360 rewrote the rules of computing and before humans walked on the moon. When NASA acquired two of the then super-speed System 360 Model 95 mainframes in 1968, IBM touted the machines' mathematical abilities.

But February marked the end of the era in NASA computing. This as the space agency powered down its last IBM Z9 mainframe that was located at Marshall Space Flight Center.

Linda Cureton is a Chief Information Officer who once programmed a System 360 mainframe in assembly language at the Goddard Space Flight Center in Greenbelt, Maryland. She is quoted as saying that mainframes are really not so bad and they have their place. She notes that things like virtual machines, hypervisors, thin clients, and

swapping are all old hat to the mainframe generation though they are new to the current generation of what she termed as cyber youth.

But for many in the industry, mainframes had become so burdened with a reputation for a bygone era of computing that they became synonymous with dinosaurs. To counter this IBM fought back, boosting performance, adding new technology. The company succeeded in that these newer mainframe systems remain a fixture in some corners of the computing industry.

In the old days, mainframes were the size of several large rooms. Today these units are only the size of a refrigerator. And even though NASA has shut down its last one, there is still a requirement for mainframe capability in many other organizations.

By comparison with days gone bye, today's fastest mainframe supercomputers can perform 10.5 quadrillion calculations per second. (NASA, Science OnLine)

Ham Tech

Volume 2, Number 3

John R. Fogleboch, Sr, WY2J, wy2j@arrl.net

HF Propagation & Antennas - Part 2 of 3

This month we dig into the W6EL PROP software and learn what else it will provide, where we get the values that are required to run it and how to set up the variables. But first I am going to fix the typo and errors that crept into last month's article. The typo is

in the URL in paragraph 2. The correct URL is: www.qsl.net/w6elprop.

The errors are in paragraphs 5 and 10 and are the result of my trying to make last minute changes to the manuscript to add information, in this case S units

to the signal levels in Tables 1 and 2 and change the weight of each S unit from the 5 dB used in the W6EL PROP software to the more universally used 6 dB. Believe me this kind of rushed back of the envelope math will just get you into trouble every time. In paragraph 5 change 0.05 microvolts to 0.5 microvolts and replace the text in the parenthesis with the following. (S 2.33, 40 dB below S 9 on a properly calibrated S meter). In paragraph 10 make the same change from 0.05 to 0.5 microvolts and change the S value in the parenthesis from S-6 ½ to S-8.8. Now let's move on to the real subject for this month's column.

Download a copy of W6EL PROP at the URL listed above and open it. Go to the HELP tab, click and scroll down to Contents and then to Fundamentals of Ionospheric Propagation and print it out. Read it thoroughly as it contains a good summary of how HF propagation works and the terms used. It is only 3 ½ pages and well worth your time. While in the Contents section find and print out the following files: 1. W6EL Prop Frequency Map. 2. W6EL Prop Prediction Window. 3. Frequencies and Constants. and 4. Prediction Parameters, both under Options. Item 1 and 2 describe the two main ways that you use this program and items 3 and 4 give you some of the major variables that you will change frequently. But as a starting point you have to do some initialization first.

You are going to need the latitude and longitude of your QTH for the initialization process. Great accuracy is not needed so here in South Jersey you can just enter 40 00 for latitude and 75 00 for longitude. Start up W6EL PROP and click the options tab. Enter your call sign and your latitude and longitude. This is terminal A.

Click on the Frequencies and Constants tab. This window allows you to select the HF (3 to 30 MHz) bands that you use and adjust for your transmitter power on a per band basis. 0 dB is a 100 watts, +10 dB is a kilowatt, -13 dB is 5 watts QRP level and so forth. You could also include antenna gain in dB above a free space dipole, but remember from last month's column that this is not a constant but varies with the launch angle that is determined by the ionosphere. I don't advise it. Be sure to save your selections on each screen.

Click on the Prediction Parameter tab. Enter the minimum useful elevation angle for your antenna. If you don't know it enter 5 degrees. The noise bandwidth is determined by your rig and is a function of mode. I use 2400 Hz for SSB, 300 Hz for CW and 60 Hz for PSK-31. For Signal Suppression enter – 10 dB. This prevents signals that are too low to be useful

from filling up your screen. The Man Made Noise selection is a guess. Pick Residential, you can change It later. Click the Suppress Zero Availability tab and save your selections.

Click User Preferences tab. For Solar Index select solar flux. For Primary Display Signal select S/N. You can easily change it on the user screen. It is your choice of UTC or ULT for time. I recommend UTC but you need a UTC clock. Set Map Auto Upgrade to 3 minutes and Map Resolution to High. Save your selections.

You can start to use the program after you get some up to date solar data. Enter the following ftp into your web browser and save it as a favorite as you will use it every time you start up W6EL PROP. ftp://ftp.sec.noaa.gov/pub/latest/wwv.txt This site will give you the solar flux (SF) and the geomagnetic indices A and K. You need to enter the SF and K but not A into the prediction window. Click the Prediction tab, select On Screen and enter the Solar Flux and K values.

Your QTH should be identified as Terminal A. Select the Prefix or Locator window for Terminal B and then select Atlas. Enter W5 (Dallas, TX) and click OK. The following screen will give you some stats on the path from your QTH to Dallas. Click Show Predictions. You get a table with the MUF, S/N and Availabilities coded as A thru D for each frequency band and for every half hour in the day.

Click the Graph tab and select Signals. The data in the previous table is now plotted. You can easily see the D layer absorption on 40 and 80 meters during daylight hours. Close the graph and click Advanced.

This is the main prediction screen with the most data. Click the Group By Time tab at the bottom of the screen. You now see all of the bands for the same time and can easily see which is most favorable for making a QSO. Remember that the closer the availability comes to 1.0 (100% probability of a band opening) with a S/N of 12 dB (2 S units above noise) or greater with your antenna having at least 0 dBd gain at the listed launch angle, the better the chance of a QSO. What the QSO is not guaranteed? No! HF prediction is statistical in nature and the values in the table are mean values. For the most part they are better 50 percent of the time and worse 50 percent.

Remember that the signal data in the prediction tables are not corrected for real world antenna gains or losses. Next month we will dig into antenna predictions and corrections to W6EL PROP. In the mean time you can have a lot of fun with this piece of free software and learn a lot. Don't forget to read the help files I identified.

<u>MEMBERSHIP INVITATION</u>

-- Membership application and dues are currently requested.

Our term of membership runs from November 1 to October 31 of the following year. Each and every year it is increasingly more difficult to get Amateurs to commit to membership in their local club due to the alternate functions we are asked to fund.

The **London Amateur Radio Club** has a long history of providing technical support, social support and repeater facilities. Public service efforts are currently provided by a club affiliation with Amateur Radio Emergency Services (**ARES**) and **Radio Amateurs of Canada (RAC**).

Your Directors work tirelessly to provide meeting topics that are informative and entertaining, events that are timely (Christmas meeting, field day, bus trip) and participate in events that display and promote Amateur Radio in the community.

To be effective in its pursuits, the Club needs the support of the local Amateur fraternity through membership.

While we obtain financial support from our Annual Flea Market, we require membership support to fund such things as meeting hall rent, repeater sites rent and maintenance, web site fees, membership cards and liability insurance. For what it's worth, none of these things are getting any cheaper.

The cost of membership has not changed for a number of years and even in the face of increased cost, we would like to keep it that way.

With more than 1000 'hams' in the London area, it's inconceivable that less than 10% support a pastime about which most of us are passionate.

PLEASE, make a choice and do your part to keep the **London Amateur Radio Club** alive and well by purchasing your membership at our next meeting (or by mail – details on our web site). The cost is still only \$25.00 (single) or \$30.00 (family residing at the same address).



Office Use Only □Paid □ Cash □ Chq
Membership Card □Needed □ Rec'd
Sticker □Needed □Rec'd

LONDON AMATEUR RADIO CLUB INC. MEMBERSHIP APPLICATION

PLEASE PRI	<u>NT</u>					
		EMBERSHIP: \$29		RENE	WAL MEMBER	
Member # 1	Last Name		First Name		Call Sign	
	RAC Member?	RAC Member #	ARES V	olunteer?	Email Address	
Member # 2	Last Name First Name		Call Sign			
	RAC Member? □ No □ Yes	RAC Member #	ARES V	olunteer?	Email Address	
Member # 3	Last Name	t Name First Name		Call Sign		
	RAC Member? □ No □ Yes	RAC Member #	ARES V	olunteer?	Email Address	
Member # 4	Last Name First Name		Call Sign			
	RAC Member?	RAC Member #	ARES V	olunteer?	Email Address	
Address: _			Street/P.	O. Box		
_	City/To	wn		Provinc	ce	Postal Code
_	Phone Numb	er			Date:	

All information requested should be completed - this will be used for the club's membership database only. All LARC membership information is held in strict confidence.

Please make cheque payable to: London Amateur Radio Club Inc.

Mailing Address: London Amateur Radio Club

c/o Membership Director, VA3MSV

P.O. Box 82, Station B London, Ontario, N6A 4V3