# **Message from the London Amateur Radio Club**

Promoting Amateur Radio in London And surrounding area since 1920



February 10, 2013

#### L.A.R.C. Executive

#### **President**

David Lambert, VE3KGK

#### Vice-President, Membership

John Visser, VA3MSV

#### **Past President**

Doug Elliott, VA3DAE

#### **Treasurer**

Brian Bouckley, VA3ATB

#### Secretary, Flea Market Ruth Dahl, VE3RBO

#### **Director, Flea Market** Ann Rundle, VA3EOR

## **Director, Repeaters**Mike Watts, VE3ACW

#### Director, Field Day Pat Ross, VE3CNX

# Non-Voting Director, ARES & CANWARN

Brett Gilbank, VE3ZBG

## **Appointments**

## Repeater Coordinator

Brad Seward, VE3NRJ

# Repeater Operator/Programmer Vacant

#### Field Day Coordinator Pat Ross, VE3CNX

#### Webmaster

Doug Elliott, VA3DAE Doug Tompkins, VE3IDT

## **Newsletter Editor**

John Visser, VA3MSV

#### Auditor

Rob Hockin, VA3HO

## February L.A.R.C. Meeting

The next meeting will be on Thursday, February 14th and will feature a presentation by Pat Simone, VA3HIS from the Middlesex London Health Unit.

## **Is Your Address Up To Date?**

It has become apparent, through examination of records maintained by Industry Canada and by Radio Amateurs of Canada, that the Canadian callsign database is becoming corrupted by inaccurate information. One of the prime reasons for this is the failure of some Radio Amateurs to advise IC of address changes.

Amateurs are reminded of Section 15 of <u>Regulation By Reference 4</u> (RBR-4), which states:

"The holder of an Amateur Radio Operator Certificate shall notify the Department within thirty (30) days with respect to a change of mailing address."

Please note that this refers to a MAILING address and that it is not an option but **a requirement**.

You can inform Industry Canada of your change of address <u>online</u> or you can contact the Industry Canada Amateur Radio Service Centre at:

Phone: 1-888-780-3333 (toll free) Fax: (613) 991-5575

E-mail: <a href="mailto:spectrum.amateur@ic.qc.ca">spectrum.amateur@ic.qc.ca</a>

Industry Canada Amateur Radio Service Centre

P.O. Box 9654 Postal Station "T"

Ottawa, ON K1G 6K9

If you are a RAC member you will also need to advise RAC of your address change. You can update your address in "My profile" in the member section of the RAC website so that we can keep your copies of *The Canadian Amateur* going to your correct address.

Thank you for ensuring that IC's and RAC's databases are accurate and up to date.

## **Next Meeting is Where and When?**

## Reminder: The next monthly L.A.R.C. meeting on February 14, 2013 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 March 14, 2013. This meeting will feature a presentation by Mike Cook, VE3ZMC.

### **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. <a href="http://www.larc.ca/member-list.htm">http://www.larc.ca/member-list.htm</a>

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** (<a href="http://www.larc.ca/mutual-aid.html">http://www.larc.ca/mutual-aid.html</a>), 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 for the London Amateur Radio Club stand at 92. Of the 16 Honorary Members brought in from the L.S.R.C., 4 have paid for the current 2013/2014 year. For the 2013/2014 year, we so far have 18 new members.

I would like to welcome the following new members.

Zachary Sequin, VA3ZTS

Gary Burton, VE3JEA Don Cameron, VA3AKT
Geoffrey Clark, SWL Tim Clark, VE3WGH

Corbin Lippert, VE3NIS Rob Luzius-Vanin, VA3LTZ

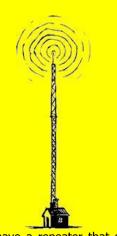
Maryann Mosley, VA3FMV Todd Mosley, VE3FMV
Sarah Nethercoot, VA3AKV Mac Goodyear, VA3MGA

Jason Pollock, VA3QIX Jim Rivers, VA3DVT

Joshua Sandor, VA3EFT Don Stefanik, VA3KBC

Alan Zhang, VA3ZHN Gary Wabersich, VE3XDM

Darrell Smiley, VE3DLY



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

## **Nets**



#### **Daily**

#### **ONTARS Net**

3.755 MHz 7:00 am – 6:00 pm

#### **Trans Provincial Net**

7.055 MHz 7:00 am – 5:00 pm

#### **London Senior's Net**

146.400 MHz 7:00 pm – 7:30 pm

#### Sunday

#### **ARES Ontario Net**

7.153 MHz	1:00 pm
7.055 MHz	3:00 pm
3.742 MHz	7:15 pm
IRLP Reflector 9005	8:00 pm

#### **Monday**

#### **LARC 2m Net**

147.060 + VA3LON 8:00 pm

#### **SATERN Net**

147.180 + VE3TTT 9:00 pm 444.400 + VE3SUE 9:00 pm

#### **Tuesday**

#### **ELMER Net**

147.060 + VA3LON 9:00 pm

#### 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**

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

# 2013/2014 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 2013-2014.

Every May we decide who will be responsible for the handling of the money, physical resources, and determining the future direction of the club.

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 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.

Some of the activities that require planning, 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.

The next page is a snip from the club's by-laws that specifically deal with the election process.

#### **Upcoming Events**

Sat., Feb. 23, 2013 **Burlington Spring Fleamarket -Burlington Amateur Radio Club** Royal Canadian Legion - 828 Legion Rd., Burlington

Sat., Mar. 23, 2013 Ham-Ex 2013 - Peel & Mississauga ARC

Brampton Fall Fair Grounds - 12942 Heart Lake Rd. (43.77121N, -79.8298W)

Sat., Jul. 13, 2013 Ontario Hamfest - Burlington **Amateur Radio Club** 

Milton Agricultural Fairgrounds, Milton, Ontario

Sun., Jun. 2, 2013 **Central Ontario Hamfest &** Fleamarket - Guelph ARC & **Kitchener-Waterloo ARC** 

Waterloo Regional Police Association Recreation Centre, R.R. 2, 1128 Rife Rd. North Dumfries Township. Beside Hwy 401, between exits 268 & 275

#### **Every Saturday Morning**

starting at 8:30 am. Breakfast at the Cottage Restaurant. Located across the street from the London Police Station on Dundas St.

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

add it to the list.

## 2013/2014 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.

Please contact the L.A.R.C. Secretary Ruth Dahl, VE3RBO, if you have any nominees or questions. You can reach me at va3msv@hotmail.com and I'll ragann61@hotmail.com.

## **HF Corner for January 2013**

by David Lambert, VE3KGK

**Editor Note**: You can hear Dave make an HF contact on YouTube at the following link. http://www.youtube.com/watch?v=KQky1tug-MY

Dec 08 to Mar 03 Dec 10 to Mar 03 Dec 17 for 20 wks Feb 01 to Feb 27 Feb 01 to Feb 28	Samoa Island of Kyushu Japan Lesotho Uganda Zanzibar Maldives	5W0RK 8J6HAM 7P8RI 5X8C 5H1Z	20-10 m SSB/Digital modes all bands and using many modes all HF bands CW/SSB/Digital modes 6 stations during 12 days 40m-10m SSB/CW
Feb 01 to Feb 28 Feb 01 to Mar 25	Guadeloupe	8Q7AK FG	SSB & digital
Feb 01 to Dec 31	Russian Antarctic station F	Progress	RI1ANP
Feb 02 to Feb 14	Guadleoupe	FG	40/30 CW
Feb 03 to Mar 11	Seychelles	S79	80-6 SSB/CW
Feb 04 to Mar 15	Togo	5V7JD	
Feb 06 to Mar 08	Grenada	J88RF	mainly digital with some SSB/CW
Feb 07 to Feb 18	Uganda	5X8C	DX-pedition
Feb 08 to Feb 11	San Andres Is	HK0	•
Feb 08 to Feb 12	Cayman Is	ZF2DP	CW/SSB
Feb 08 to Feb 21	Rotuma Is	3D2	mainly cw but some SSB/RTTY
Feb 09 to Feb 13	Guam	KH2	80m to 10m SSB
Feb 10 to Feb 21	Bahamas	C6ABB	PSK31/RTTY
Feb 10 to Mar 02	Guinea Bissau	J52HF	160m - 6m SSB only
Feb 10 to Mar 18	Cambodia	XU7ACQ	SSB/CW
Feb 11 to Feb 20	Antigua/Barbuda	V24A	SSB/CW
Feb 11 to Apr 03	Senegal	6V7S	
Feb 12 to Mar 04	Tonga	A31WH	
Feb 13 to Feb 23	Micronesia	V63ZM	
Feb 14 to Feb 23	Burundi	9U4U	SSB/CW/RTTY
Feb 15 to Feb 23	Curacao	PJ2	CW
Feb 15 to Feb 26	Vietnam	XU2DLH	
Feb 16 to Feb 23	Guantanamo	KG4	
Feb 17 to Mar 03	Guadeloupe	TO22C	all bands, with focus on 160m
Feb 18 to Feb 28	Solomon Is	H44KW	CW
Feb 20 to Feb 26	Cayman Is	ZF2RW	40m - 6m
Feb 20 to Mar 21	St. Kitts/Nevis	V47 JA	SSB
Feb 21 to Mar 07	Burkina Faso	XT2TT	SSB/CW/RTTY
Feb 22 to Mar 02	Burkina Faso	XT	SSB/CW/Digital
Feb 24 to Mar 12	Curacao	PJ2	CW/RTTY
Feb 25 to Mar 08	Cape Verde	D44TIB	160-10m
Feb 26 to Mar 05	Virgin Is	KP2	
Feb 26 to Mar 06	South Sudan	Z8	
Feb 28 to Mar 10	Clipperton Is	TX5K	DX-pedition
Next 3-4 years	Cameroon	TJ3SN	HF bands plus 6 m various modes

Bill Moore, NC1L, ARRL Awards Branch Manager, reports that the current 8Z1Z operation is from the Republic of the South Sudan has been approved for DXCC credit. This operation began on January 8th. Also approved was the 3D2C operation from Conway Reef that took place back in 2012.

TU5KG is once again traveling through the South Indian Ocean on a fishing boat. As in past years, he will be sailing in both the Kerguelen and Crozet Island regions, and may activate the islands if he goes ashore) using his new callsigns. These are FT5XT for Kerguelen and FT5WQ for Crozet. When at sea he will sign TU5KG maritime mobile. QSL via F4DXW, direct only.

ARRL DX SSB contest Mar 2 to 3, 2013.

## **Campbell Island To Be Activated In November**

January 11, 2013

Some breaking news from the world of DX. This with word that the Hellenic Amateur Radio of Association of Australia has announced that it is organizing a DXpedition to Campbell Island to take place between November 17th through the 30th.

The ZL9HR DXpedition team will consist of a total of nine operators including VK2IR and VK3YP. They are inviting experienced operators who might like

to join the team to contact to contact Tommy Horozakis by e-mail to <a href="mailto:vk2ir@vk2ir.com">vk2ir@vk2ir.com</a> for more information.

Campbell Island whose prefix is ZL9 is Number 15 on the current DXCC most wanted list. For updates and further details on this planned operation please visit <a href="www.zl9hr.com">www.zl9hr.com</a> on the World Wide Web. (OPDX)

## **Two Laos Operations Get DXCC Credit**

January 25, 2013

ARRL Awards Branch Manager Bill Moore, NC1L, reports that the 2010 to 2011 XWPA and the current XW4XR operations from Laos have been approved for DXCC credit. Cards for those operations can now be submitted and will be counted toward your DXCC standing.

And yes, XWPA is the correct callsign. There was no number designator in it. For more background on this strange but very legitimate callsign take your web browser to <a href="http://dx-world.net/2010/xwpa-laos">http://dx-world.net/2010/xwpa-laos</a> (DXCC, DX World)

## **Marion Island To Be On By Summer**

February 1, 2013

Some breaking news in the world of DX. Marion Island should be on the air before the start of summer in the Northern latitudes. This according to reports that South African radio amateur David Hartzenberg, ZS1BCE, has been appointed to be the new radio technician to that rare location for one year between April of this year and May of 2014.

Hartzenberg is expected to depart from Cape Town on April 15th, and his amateur radio operations are

expected to begin about four weeks later. Currently, he does not have a Zed-S-8 callsign, but plans to apply for ZS8D. Once set up, his operations will be on SSB on most High Frequency bands.

And less we forget to mention: His QSL Manager will be Pierre Tromp, ZS1HF, who just happens to have been the last operator from Marion Island using the call ZS8M. (OPDX)

## First 24 GHz Contact Between USA And Japan

January 11, 2013

Some names in the news. First up are W5LUA and JA6CZD reportedly made the first 24 GHz EME contact between the USA and Japan on January 2nd.

Their QSO took place at 1430 UTC when both stations had about an hour of common time where each had 15 to 20 degrees of elevation to the Moon. JA6CZD used a 2.4 meter offset fed dish with a 22 watt transmitter. W5LUA also used a 2.4

meter offset fed dish and a Traveling Wave Tube mounted on the feed support providing 100 watts out.

W5LUA's station was GPS locked and JA6CZD uses a Rubidium standard to control frequency. The mutual Doppler Shift placed both at about 24048.108 MHz based on a center frequency of 24048.100 MHz. This shifted down in frequency as the schedule took place. (ANS, W5LUA)

## **Saving Earth From An Asteroid With Paintballs**

January 11, 2013

And finally this week, if an asteroid ever takes aim at our planet one MIT researcher says that shooting paintball pellets at it could bump it off its course.

In the event that a giant asteroid is headed toward Earth, you'd better hope that it's blindingly white. Why you ask? This is because one researcher believes that such a pale colored asteroid would reflect sunlight. So by bouncing a lot of photons off its surface could create enough of a force to push the asteroid into a different direction.

Sung Wook Paek is a graduate student in MIT's Department of Aeronautics and Astronautics. He says that if timed just right, pellets full of paint powder, launched in two rounds from a spacecraft at relatively close distance, would cover the front and back of an asteroid. This would more than double its reflectivity. Paek claims that the initial force from the pellets might bump an asteroid off course and that over time, the sun's photons would deflect it even more.

But there are a few caveats. From his calculations, Paek estimates that it would take up to 20 years for the cumulative effect of solar radiation pressure to successfully pull the asteroid off an Earthbound trajectory. He also says that launching pellets with traditional rockets may not be an ideal option, as the violent takeoff may rupture the payload. Instead, he envisions paintballs may be made in space, in ports such as the International Space

Station. There a spacecraft could then pick up a couple of rounds of pellets to deliver to the asteroid.

Paek's paper detailing this unconventional strategy won the 2012 Move an Asteroid Technical Paper Competition. This is an award sponsored by the United Nations' Space Generation Advisory Council, which solicits creative solutions to space-related problems from students and young professionals.

The challenge put forth by this year's U.N. competition was to identify novel solutions for safely deflecting a near-Earth object, such as an asteroid. Scientists have proposed a wide variety of methods to avoid an asteroid collision. Some suggested launching a projectile or spacecraft to collide with an incoming asteroid. Other suggested detonating a nuclear bomb near an asteroid or equipping spacecraft as "gravity tractors," using a craft's gravitational field to pull an asteroid off its path. But when the judging was complete, Paek's paintball strategy was deemed among the most novel approaches presented to date.

Researcher Paek recently presented his paper at the International Astronautical Congress in Naples, Italy. More about this theoretical way to deflect an asteroid off its trajectory is on-line at <a href="mailto:tinyurl.com/asteroid-paintball">tinyurl.com/asteroid-paintball</a>. (MIT, Science OnLine, others)

## Russia To Launch Moon Probe In 2025

January 18, 2013

Russia appears to be getting back into the spacerace. According to published news reports, that nation will resume its long dormant program to explore the moon by sending an unmanned probe there in 2015.

The spacecraft will be called Luna-Glob which translates to Moon-Globe in English. According to the Interfax news agency, Roskosmos director Vladimir Popovkin said says the exploration payload will be carried by the first rocket to blast off from a new facility that Russia is building in its far eastern Amur region.

Popovkin is the head of Russia's space agency. He and other Russian space officials have said Luna-Glob would consist of an orbital module and a probe that would land on the moon. Once there it will radio back information about samples it takes from the Lunar surface.

The last successful Russian launch of an unmanned probe to the moon was in the 1970s. Unfortunately that nation has suffered setbacks in its space program in recent years, including unsuccessful satellite launches and the failure of a Mars probe in 2011. More is on the web at <a href="mailto:tinyurl.com/russia-moon-mission">tinyurl.com/russia-moon-mission</a>. (Published news reports)

### **Pack Your Ham Gear And Move To Mars**

January 18, 2013

And finally this week, you might want to call this the ultimate one-way DXpedition. While not specifically directed to the ham radio community, the Netherlands based nonprofit organization Mars One, has released its basic astronaut requirements setting the stage for a televised global selection process that will begin later this year.

Mars One hopes to put the first settlers on the red planet by 2023. The organization is not looking for scientists or former jet jockeys as colonists. Rather anyone who is at least 18 years old can apply to become a Mars pioneer.

Officials at Mars One say that the most important criteria are intelligence, good mental and physical health and dedication to the project. Those selected as its astronauts will undergo eight years of training before launch.

Norbert Kraft is Mars One's chief medical director and a former NASA researcher. He is quoted as saying that gone are the days when bravery and the number of hours flying a supersonic jet were the top criteria. Kraft says that now a days space exploration planners are more concerned with how well each astronaut works and lives with the others, in the long journey from Earth to Mars and for a lifetime of challenges that would lie ahead.

Mars One plans to launch a series of robotic cargo missions between 2016 and 2021. These would be used to build a habitable outpost ahead of the arrival of the first four colonists in 2023. More settlers would then arrive every two years thereafter. And less we forget to mention, this will be a one way trip as there are no plans to return the pioneers to Earth.

If you think you have the right stuff to help colonize Mars you can learn more about the selection process at <a href="www.thenextgiantleap.com">www.thenextgiantleap.com</a>. And if we might speculate a bit, it will be interesting to see if anyone from the world wide ham radio community will pack up their station and take advantage of this truly rare and exotic DX location. And we also guess all QSL's would go electronically on this one. (Mars One, space.com, others)

## **NASA To Add Expandable Module To The ISS**

January 25, 2013

NASA has officially signed a contract to attach an inflatable private module to the International Space Station. Under the agreement announced on January 11th, NASA will pay \$17.8 million to the Nevada based private spaceflight firm Bigelow Aerospace for the company's Expandable Activity Module or BEAM which will be attached to the orbital lab as a technology demonstration.

BEAM is likely to be similar to Bigelow's Genesis 1 and Genesis 2 prototypes, which the company launched to orbit in 2006 and 2007, respectively.

Both Genesis modules are 14.4 feet long by 8.3 feet wide, with about 406 cubic feet of pressurized volume.

NASA officials have said that BEAM could be on orbit about two years after getting official approval. The module will likely be launched by one of the agency's contract cargo carriers such as SpaceX or Orbital Sciences Corporation. More is on-line at <a href="mailto:tinyurl.com/new-iss-module">tinyurl.com/new-iss-module</a> and <a href="mailto:bigelowaerospace.com">bigelowaerospace.com</a>. (NASA, Bigelow Aerospace)

## **New Animated UK Video Features UKube-1 And FUNcube**

February 1, 2013

A new animated video has been released that tells the story of the UK Space Agency's first CubeSat UKube-1 slated to launch in the 3rd quarter of 2013. UKube-1 will carry a set of AMSAT-UK FUNcube transponder boards to provide a 435 to 145 MHz linear transponder and a 1200 bps BPSK beacon for educational outreach. For more information on FUNcube and a link to the video please take your web browser to <a href="https://www.amsat-uk.org">www.amsat-uk.org</a> (AMSAT-UK, Southgate)

## Amateur Radio Entering Its Second Century Of Disaster Communications Is Theme Of World Amateur Radio Day 2013

January 11, 2013

The theme for World Amateur Radio Day 2013 is Amateur Radio Entering Its Second Century of Disaster Communications.

Each year on April 18th, radio amateurs around the world celebrate World Amateur Radio Day. In 1913, the first recorded instance of amateur radio being used to provide communications in a natural disaster took place during severe flooding in the Midwest of the United States. This in part led to the

formation of the International Amateur Radio Union in 1925.

Now, event planners say that activities surrounding World Amateur Radio Day 2013 can be a great opportunity to spread the word about what amateurs are doing in the field of disaster communications in the 21st Century. More is online at <a href="https://www.iaru-r2.org/world-amateur-radio-day-2013">www.iaru-r2.org/world-amateur-radio-day-2013</a>. (IARU)

## **Fuel Cell To Power Microsoft Experimental Research Facility**

January 11, 2013

The Fuel Cell Energy Corporation has announced a project using a stationary fuel-cell power plant to support Microsoft's latest data-center research project. The power plant will use renewable biogas generated by a wastewater-treatment facility as the fuel source to generate ultra-clean and carbonneutral electricity to power Microsoft's Data-Plant project in Cheyenne, Wyoming. This sub-megawatt power-plant project will enable Microsoft to evaluate the effectiveness of using FuelCell Energy power plants to efficiently power future sustainable data centers.

The sub-megawatt Direct Fuel Cell power plant will be installed at the Dry Creek Water Reclamation Facility in Cheyenne, Wyoming by the spring 2013. The fuel cell plant will provide 200 kilowatts of power for Microsoft's Data Plant which will be housed in a modular pre-assembled building that will the home of a server farm to recreate a data center environment.

The Direct Fuel Cell power plant will also provide excess power not used by the data center to the water reclamation facility to offset their electric costs. In the event of a grid outage, the Data Plant project and fuel cell plant will be configured to operate independently to provide continuous power. (Fuel Cell Energy Report)

## **Former Ham Radio Company Datong Has New Business**

January 11, 2013

Former amateur radio manufacturer Datong Electronics has been mentioned in the UK press. This following a recent \$12 million dollar order win.

Datong was formed in 1974 by Dr. D. A. Tong, G8ENN. The company initially specialized in the development of Radio Frequency technology for use by amateur radio operators.

In the late 1970's and early 80's Datong was well known for a number of successful amateur radio products that included Filters, RF Speech Processors, Morse Tutor and an HF to VHF receive up-converter. The company's final amateur radio product was its 2 Meter Direction Finding unit

known as the DF One that was produced in 1982. The DF One led Datong into the security and defense sectors where it found a ready market for its products in an era of heightened terrorist activity in the UK. At that point Datong stopped producing equipment for radio amateurs.

Datong PLC, as it is known today, provides a range of advanced high performance covert intelligence gathering solutions, supplying defense, homeland security and law enforcement agencies around the world. More about the company and its current products is on-line at <a href="https://www.datong.co.uk">www.datong.co.uk</a>. (Southgate)

### **KC2UHB On Ham Radio Education**

January 11, 2013

A number of articles written for Make Magazine by Diana Eng, KC2UHB, about getting started in amateur radio are now available on the web. These include Setting Up a Radio Shack; How-To: Set Up an HF Portable Radio While Hiking and Seeing Radio Waves With a Light Bulb to mention only three. Most of these articles date back to 2009 and 2010 but remain relevant today. More information is on-line at <a href="blog.makezine.com">blog.makezine.com</a> or simply do a Google search for Diana Eng. (Southgate)

## **New Sub Micro Memory Unveiled**

January 11, 2013

A major breakthrough in magnetic storage for data has been announced.

An atomically assembled array of 96 iron atoms containing one byte of magnetic information in antiferromagnetic states has been announced.

The findings, being reported in the journal Science, could help lead to a new class of nanomaterials for a generation of memory chips and disk drives that will not only have greater capabilities than the current silicon-based computers but will consume significantly less power. And they may offer a new direction for research in quantum computing.

According to Shan X. Wang, director of the Center for Magnetic Nanotechnology at Stanford University magnetic materials are extremely useful and strategically important to many major economies, but there aren't that many of them. To make a brand new material is very intriguing and scientifically very important.

Until now, the most advanced magnetic storage systems have needed about one million atoms to store a digital 1 or 0. The new achievement is the

product of a heated international race between elite physics laboratories to explore the properties of magnetic materials at a far smaller scale.

Last May, a group at the Institute of Applied Physics at the University of Hamburg in Germany reported on the ability to perform computer logic operations on an atomic level.

The group at IBM's Almaden Research Center here in the United States has now created the smallest possible unit of magnetic storage by painstakingly arranging two rows of six iron atoms on a surface of copper nitride. Such closeness is possible because the cluster of atoms is antiferromagnetic. This is a rare quality in which each atom in the array has an opposed magnetic orientation. In common ferromagnetic materials like iron, nickel and cobalt, the atoms are magnetically aligned.

As this technology matures it could lead to a major breakthrough in magnetic based data storage for many industries as well as in future scientific endeavors. (Science)

## **Sprint Agrees To Make Some Phones FM Radio Receivers**

January 18, 2013

Sprint says it has come to preliminary arrangement with the radio industry to enable an FM radio receiver chip to be included in some Android and Windows smart phones. In announcing the agreement Sprint said that FM radio could be delivered through the NextRadio tuner application or other radio apps or services.

Currently, radio stations can be streamed over phones, but the inclusion of this technology would allow the phones to receive over-the-air broadcasts. This is something broadcasters have been pushing for both radio and digital TV.

The company made the announcement at the recent Consumer Electronics Show in Las Vegas, Nevada. Sprint says that it will begin including this feature over the next three years. This agreement marks the first time a United States wireless carrier will offer the ability to access local FM radio on a broad array of its devices. (B&C)

## Developers Of Codec2 Derived Free DV Say A Rules FCC Part 97 Rules Change Is Required

January 18, 2013

The Codec2 digital voice project has developed a new program called FreeDV. This is a system to encode digital voice on any two-way radio using only 1.125 KHz of bandwidth. But says Codec 2 researcher Bruce Perens, K6BP, FCC regulations aren't up-to-speed with the challenges of software-defined radio and Open Source architecture:

K6BP: "One of the changes we (need to) make is bandwidth based regulation. Rather than what (the) FCC does today in that it grants permission piecemeal to use a different modulation letter (suffix) and if you change the letter you have to go back to FCC for permission."

According to Perens there will be a filing of a 24 page request to the FCC that will propose the regulatory agency make several changes to the Part 97 rules. Among this will be to allow all digital modulation schemes and all published digital codes on the ham radio bands. It will also push for a change to bandwidth-based regulation of the Amateur Service rather than the mode segmented way that the hobby is governed today. And he points to our neighbor to the North and its success with Regulation by Bandwidth:

K6BP: "...Now contrast this to Canada. Canada (regulators) say here's 6 kHz, do what you want with those 6 kHz. Makes more sense today."

You might remember that it was only a few years ago when the ARRL proposed a similar bandwidth based regulatory change that was widely criticized by many of its members as well as the overall United States ham radio community. At that time the League said that its petition would provide the Amateur Radio Service the flexibility to experiment with new digital transmission methods while permitting present operating modes to continue to be used for as long as there were hams who wish to use them.

Back then the overall ham radio community shouted the idea down. But this is 2013 and technology has reached a point where some change may be desired to accommodate digital telephony on the High Frequency bands as well as on VHF and UHF. It will be interesting to see where this takes ham radio in the months and years ahead. (Codec 2 – FreeDV)

## **LED Lights Jam City Buses**

January 18, 2013

The Swedish national amateur radio society the SSA reports on a case of LED lights in a shop jamming the VHF radio used by buses. The lighting in shop windows at a business called Punkt House jammed the city bus system which uses 167.0375 MHz for communications and dispatch.

The lights causing the problem were LED spotlight lamps. It was found they did not conform to the regulations on Electromagnetic Compatibility and they are now being replaced. The full story in Google English is on-line at <a href="mailto:tinyurl.com/LED-VHF-Interference">tinyurl.com/LED-VHF-Interference</a>, (Southgate)

## **Tethercell Bluetooth Remote Control**

February 8, 2013

Looking for a new way to remotely control things? Tethercell may be the answer to your needs. Tethercell is a plastic case the size of an AA battery, embedded with Bluetooth 4.0 transponder, which is powered by an AAA battery that fits inside. The Bluetooth-enabled battery is then synced with an app on your smart phone that allows you to turn

the device on and off, set a timer and even monitor the amount of power remaining.

According to its inventors Trey Madhyastha and Kellan O'Connor, this first version of Tethercell as a test bed for future applications. Its also an opportunity to get the technology in the hands of the public.

## The 21st Century Phone Booth Emerges In NYC

January 25, 2013

In the wake of Superstorm Sandy, the humble phone booth took on renewed importance in the Metro New York area. This as cut-off residents used pay phones to try to connect with one another during and after the emergency. Now, this old but reliable form of public communications is getting a major facelift as we hear from Amateur Radio Newsline's Cheryl Lasek, K9BIK.

New York City has officially launched a plan to transform pay phones into giant touch screens that provide city information, emergency broadcasts and local business deals. Located in the same places as existing phone booths, the new platforms are to be operated as a partnership between New York City, Cisco Corporation and City 24/7.

These smart screens were tested in a pilot project but now are live across the city and appear to be very reliable. Soon, there will be 250 of the new devices in all five New York City boroughs. This means that a person strolling through a given area would only have to pause a moment to tap on the public screen to find information about the closest

subway or a city park. While there, he or she might also tap on the "deals" icon to bring up a list of coupons for nearby shops and restaurants that could instantly be transferred to a smartphone or other wireless device.

But maps and coupons are only one dimension of the new platforms role. Like traditional phone booths they will also serve as a communication tool during emergencies but in a far more sophisticated way. For instance, in the event of another disaster like Hurricane Sandy, the screens will become twoway distress devices that let citizens call for help or receive instructions about how to find safety.

Welcome to the phone booth of the 21st century.

The companies that designed the new system say that they do plan to expand to other cities in the future, but we do not know if Cheryl's hometown will be one of them. That said, lots more about this new dimension in public communications can be found at <a href="mailto:tinyurl.com/new-video-phone-booths">tinyurl.com/new-video-phone-booths</a> (GIGOM.COM)

## **Adapting RFID To Identify And Monitor Human Activity**

February 1, 2013

Australia's University of Adelaide computer scientists are leading a project to develop a novel sensor system to aid senior citizens. One that would help older people to keep living independently and safely in their own homes.

To accomplish this far reaching goal of aiding the senior citizen community, researchers down-under are adapting radio frequency identification better known as RFID sensor technologies to automatically identify and monitor human activity. This in turn makes it possible to determine if an individual's normal routine is being maintained so that timely assistance can be provided if it is needed.

Although RFID technology has been around since World War II and is in common use today in applications such as anti-shoplifting and vehicle identification at toll road collection points, its potential use in interpreting human activity remains largely in the laboratory.

The chief investigator for this project is Dr. Michael Sheng at he University of Adelaide. He says that work will be among the first few projects in the world conducting large-scale common-sense reasoning in automatic human activity recognition. In addition the system will be low-cost and unobtrusive, and without the privacy issues and intensive monitoring of video surveillance. There will be no need for older people to wear anything or turn anything on or off.

The technology will be first investigated in a laboratory setting and then in hospital trials with geriatric patients. More about this possible new use for RFID is on line at <a href="mailto:tinyurl.com/senior-citizen-RFID">tinyurl.com/senior-citizen-RFID</a> (Radio Comms E-zine, VK7WI News)

### **Good News For Scouts Involved In Radio**

January 25, 2013

Some good news for scouts involved in radio and radio communications.

The national Boy Scouts of America is now recognizing any youth or adult who has an amateur radio license with a special patch that can be displayed on the uniform.

The patch, in the form of a strip, has the words: "Amateur Radio Operator" on it and will soon be, if it's not there already, available at local Scout shops or through regional Scouting supply operations.

Jim Wilson, K5ND, is the BSA's director of communications services, but known in the ham community as chairman of the national Radio Scouting Committee and national Jamboree on the Air organizer.

Wilson says the recognition came from discussions that began some months ago with the scout committee that selects awards and insignia for the scout uniform.

He says research shows amateur radio was recognized by the Scouts as early as the 1940s... "There were some proficiency badges or awards that Scouting offered - one of which was a Scout Radioman personal interest badge that was for senior Scouts and Explorer Scouts," Wilson says.

"And, you can actually find those badges in copies of the old handbooks and things like that." Wilson says from those discussions came the first of the recommendations for the recently adopted Morse Code Interpreter strip.

But Wilson says the awards committee came back after that was approved and asked whether the Radio Scouting Committee could draft something else to recognize ham radio. Thus was born the Amateur Radio Operator patch.

"You can put this strip on your uniform and then that way be recognized for your ability to help in communication around events or around emergencies or just as a recognition that you've got this license," Wilson says.

And, where does the patch go?

"The right sleeve of the uniform underneath the U.S. flag there, a patrol or den emblem, and then there's the unit quality award and it goes right under those three items or if you only have two of them under the first two," Wilson says.

Wilson, who also is the volunteer coordinator for this year's K2BSA operation at the national BSA Jamboree at the Becthel Summit Reserve in West Virginia, says you can find out more at the K2BSA website.

We have a link (<a href="http://www.k2bsa.net/operator-rating">http://www.k2bsa.net/operator-rating</a>) to that within this story published on our website arnewsline.org

Last year the Boy Scouts of America Awards and Insignia Committee introduced the Morse Code Interpreter Strip. This based on the recommendation of the organizations National Radio Scouting Committee. (NT3V)

## **That Guy With The Ham Radio**

February 8, 2013

Kraft foods has produced a new set of television commercials called the Velveeta-Eat-Like-That-You-Know campaign, and one of the 15 second spots features ham radio in a very positive light.

The ham radio spot is titled "That Guy with the Ham Radio" and appears to be one of five new commercials for Kraft's Velvita Shells and Cheese lunch and dinner product. Others in the series are titled "That Guy That Drives That Limo," "That Guy

That Paints Those Landscapes," "That Helicopter Guy at the Mall" and "That Guy That Owns That Aquarium Store."

All are fast paced and fun to watch. You can see them on-line at <u>genericbaldman.com/Velveeta-Eat-Like-That-You-Know</u>. But be forewarned, watching any of these spots may leave you quite hungry. (ARRL PR Remailer)

## **MEMBERSHIP INVITATION**

-- 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

<u>PLEASE PRI</u>	<u>NT</u>				
		BERSHIP: \$25.00	RENEWAL		
	FAMILY MEMBERSHIP: \$30.00 NEW MEMBER				
Member # 1	Last Name	First Nar	ne	Call Sign	
	RAC Member? RAC	C Member # ARES	Volunteer? Email Address		
	□ No □ Yes	□ Yes	□ No		
Member # 2	Last Name	First Nar	ne	Call Sign	
	RAC Member? RAC	C Member # ARES	Volunteer? Email Address		
	□ No □ Yes	□ Yes	□ No		
Member # 3	Last Name	First Nar	me	Call Sign	
	RAC Member? RAC	C Member # ARES	Volunteer? Email Address		
	□ No □ Yes	□ Yes	□ No		
Member # 4	Last Name	First Nar	ne	Call Sign	
	RAC Member? RAC	C Member # ARES	Volunteer? Email Address		
	□ No □ Yes	□ Yes	□ No		
Address:					
			P.O. Box		
	City/Town		Province	Postal Code	
_	Phone Number				
	i none number		Data		

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



## **Burlington Amateur Radio Club**

## **Annual Spring Fleamarket**





Canadian Legion - Burlington 828 Legion Road, Burlington, Ontario

Vendors @ 7:00 am

General Admission @ 9:00 am

Admission - \$7.00 each

Admission will be refunded to anyone purchasing a new Radio Amateurs of Canada membership at this event.

**Tables - \$12.00** 

A hot breakfast is available for purchase. Prepared by the Legion staff

Free bottomless coffee available for the duration of the fleamarket.

Website: www.barc.ca

**Spring Fleamarket Flyer** 

**Vendor Registration Application** 

**Information** 

Contact: Greg Trasuk, VA3TSK

barc.springfleamarket@gmail.com