

Message from the London Amateur Radio Club



Promoting Amateur Radio in London
And surrounding area since 1920

June 10, 2012

L.A.R.C. Executive June's L.A.R.C. Meeting

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, Membership

John Visser, VA3MSV

Director

Mike Watts, VE3ACW

Non-Voting Director, ARES & CANWARN

Brett Gilbank, VE3ZBG

Appointments

LARC Repeater Coordinator

Brad Seward, VE3NRJ

Repeater Operator/Programmer

Vacant

Field Day Coordinator

Dave Lambert, VE3KGK

Webmaster

Doug Elliott, VA3DAE

Newsletter Editor

John Visser, VA3MSV

Auditor

Rob Hockin, VA3HO

The next LARC meeting will be **Thursday June 14 at 7:30. Mark Bramwell, VE3PZR** will be giving us a survey of the rapidly developing field of **Software Defined Radio (SDR)**. His discussion will include products, prices, capabilities, techniques and some sample hardware.

RAC Bulletin 2012-031E - Canada Day Contest

June 4, 2012

A reminder to all Amateur Radio Operators that our Canada Day Contest is just over three weeks away. This is a great opportunity have a little fun on the airways and compete with others over a twenty four hour period. What better way to celebrate Canada's birthday!

Whether you choose to operate as an individual or as part of a group, get on the air and see how many Official RAC stations that you can rack up. Also, check with your Regional Director to ensure that all possible RAC call signs for your Section are on the air, giving folks the best possible opportunity to pick up the "bonus points".

RAC Canada Day Contest - 0000 - 2359 UTC - July 1, 2012

For all of this year's rules and details, please visit the [RAC website](#).

The very best of luck to everyone and have fun!

http://www.rac.ca/en/rac/programmes/contests/files/2012_RAC_Canda_Day_Contest_Rules_-_English_and_French.pdf

73

Doug Mercer VO1DTM/VO1DM CEC

Chief Field Services Officer

Vernon Ikeda - VE2MBS/VE2QQ

Pointe-Claire, Québec

RAC Blog Editor/RAC E-News/Web News Bulletin Editor

Next Meeting is Where and When?

Reminder: The next monthly L.A.R.C. meeting on June 14, 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 September 13, 2012.

Area Repeaters

LARC Repeaters

London

VA3LON 147.060 + 114.8Hz

VE3MGI 145.390 - 114.8Hz

SHORT 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

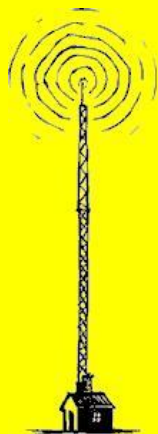
Stratfordville

VE3DPL 146.655 - 131.8 Hz

St. Thomas

VE3STR 147.330 + 114.8 Hz
Echolink Node: 72886

VE3STR 443.825 + 114.8 Hz
IRLP Node: 2482



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.

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 118 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 19 new members. Unfortunately 3 past members of the club became a Silent Key last year.

I would like to welcome the following new members.

Gary Stapleton, VA3YAT

Craig Dixon, VACDF

Ian MacLeod, VE3IRM

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

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

2012/2013 L.A.R.C. Executive

Again this year we have just enough people for the London Amateur Radio Club Executive. The 2012/2013 Executive line-up is still to be determined. The members of the Executive are as follows. Doug Elliott, VA3DAE will be stepping down as President so he will be taking over from Doug Tompkins, VE3IDT as the Past President. Staying on the executive is Dave Lambert, VE3KGG, Brian Bouckley, VA3ATB, Ruth Dahl, VE3RBO, Ann Rundle, VA3EOR, Mike Watts, VE3ACW and John Visser, VA3MSV. Rejoining the executive is Pat Ross, VE3CNX.

Non-Voting Executive Members and Appointments

ARES & CanWarn Director	Brett Gilbank, VE3ZBG
Repeater Coordinator	Brad Seward, VE3NRJ
Repeater Operator	Currently Vacant
Field Day Coordinator	Dave Lambert, VE3KGG
Assistant Field Day Coordinator	Mike Watts, VE3ACW
Flea Market Coordinator	Ruth Dahl, VE3RBO
Assistant Flea Market Coordinator	Ann Rundle, VA3EOR
Newsletter Editor	John Visser, VA3MSV
Webmasters	Doug Elliott, VA3DAE Doug Tompkins, VE3IDT
Auditor	Rob Hockins, VA3HO

Upcoming Events

**Sat., Jun. 23, 2012 –
Sun., Jun. 24, 2012**

[ARRL Field Day 2012](#)

London Amateur Radio Club's Field Day site will be located at Reservoir Park in Bryon

Sat., Jul. 14, 2012

[ONTARIO HAMFEST -](#)

[Burlington Amateur Radio Club](#)

Milton Agricultural Fairgrounds
Milton, ON

Sat., Jul. 28, 2012 –

Sun., Jul. 29, 2012

[Rona MS Bike Tour 2012](#)

The organizers are anxious for our help once again. We hope to have Hams riding in all the Voyageur vans, and will therefore need some additional operators. If you're curious as to what's involved, send an email to

webmaster@larc.ca and we'll do our best to entice you to share in the fun.

Sun., Sep. 23, 2012

[35th Annual 2010 London](#)

[Amateur Radio Club Flea](#)

[Market - London Amateur](#)

[Radio Club](#)

Located at the Western Fairgrounds
Special Events Building. London,
Ontario

Sat., Oct. 13, 2012

[HARC Hamfest 2012 - The](#)

[Hamilton Amateur Radio Club](#)

Ancaster Fair Grounds

Sat., Nov. 3, 2012

[York Region Hamfest 2012 –](#)

[York Region Amateur Radio](#)

[Club](#)

Markham Fairgrounds - located at
10801 McGowan Road on the North
East corner of McCowan Road and Elgin
Mills Road

If you have an upcoming event that you would like to have listed here, please forward the information to John Visser, VA3MSV at va3msv@hotmail.com and I'll add it to the list.

RAC Bulletin 2012-030E - Field Day 2012 Is Just Around The Corner

May 28, 2012

This year's Field Day is just weeks away, and by now your preparations should be well under way. Whether your focus for the event is an Emergency Preparedness Display, a Public Service Demonstration or just an excuse to get on the air, the main thing is to have fun.

This is also a great time to recruit new Hams, or encourage "just licensed" Hams to join you to get their "feet wet" with pile ups, experiencing for the first time the thrill of having the world at their fingertips.

Field Day is also a great time to recruit new RAC members, or to repatriate ones who have not renewed for one reason or another. Why not place some RAC membership forms on your Public Information table.

For full Field Day rules and details, please visit the ARRL website. Have fun!

73

Doug Mercer VO1DTM/VO1DM CEC

Chief Field Services Officer

Vernon Ikeda - VE2MBS/VE2QQ

Pointe-Claire, Québec

RAC Blog Editor/RAC E-News/Web News Bulletin Editor

Heathkit Educational Systems Closes Up Shop

May 09, 2012

For the second time since 1992, Heathkit Educational Services ([HES](#)) has shuttered its doors. Rumors of the legendary kit-building company's demise were [posted on QRZ.com](#), with several readers bringing the news to the attention of the ARRL. In August 2011, Heathkit announced it was [returning to the kit building business](#), and in September, that it would once again be [manufacturing Amateur Radio kits](#).

The ARRL tried to reach Heathkit to confirm that the company is still in business, but their phone and fax numbers have a continuous busy signal, and e-mails to the company have gone unanswered.

On LinkedIn, a popular networking site, HES Chief Executive Officer Lori Marciniak listed her [employment ending at Heathkit as of March 2012](#). Likewise, Heathkit's Marketing and Sales Director Ernie Wake listed his [employment ending in April 2012](#). An [unsubstantiated report on Wikipedia](#) states that "[in] December 2011, Heathkit Educational Systems laid off most employees and in March 2012, the company indefinitely suspended operations."

Tom Ferriter, of Technical Education Products, is an outside sales representative for HES, based in Hampden, Massachusetts. "Heathkit is telling us that they have temporarily closed, but that they are hopeful that they will be able to reorganize," he told the ARRL. "While they're not telling us too much, they did say that they were having poor sales for a myriad of reasons and are hopeful that they will be able to refinance the company and negotiate with the bank to refinance some of the debt." (ARRL)

HF Corner June, July and August 2012

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>

June:

01 to 24	FO	French Polynesia	All modes
03 to 17	TM24H	is a French call that will be on as a special call for the 24 Hours of LeMans car race. QSL via F6KFI	
06 to 14	A52	Bhutan	160 – 6 CW/SSB/RTTY
08 to 12	VP2MRT	Montserrat	80 – 2 SSB
11 to 22	5H9CP	Tanzania	CW only
17 to 29	9H3ZZ	Malta	SSB
17 to 30	TF	Iceland	6m SSB CW
22 to 27	GU	Guernsey	160 – 6 SSB/CW
22 to Jul 03	KH8	American Samoa	40 – 10 SSB
28 to 30	KL7	Alaska	SSB

July:

01 to 04	1A0C	The Sovreign Knights of Malta. That entity has not been on for 30 years	
02 to Aug 25	E51AND	S Cook Is	CW
07 to 21	TK	Corsica	80 – 10 Mainly CW
09 to 17	FP	St Pierre/Miquelon	160 – 6 SSB/CW/RTTY/PSK31
12 to Aug 02	V47JA	St Kitts/Nevis	80 – 6 SSB
20 to 27	MJ	Jersey	
26 to Aug 02	CY9M	St Paul Is	160 – 2 All modes

Aug:

01 to 08	TI5	Costa Rica	10-10 Summer QSO Party (10M)
01 to 31	D64K	Comoros Is	160 – 6 All modes * #
04 to 11	SV5	Dodecanese	SSB holiday style +
09 to 25	VQ9XP	Diego Garcia Is	
10 to 12	JW	Svalbard	CW/SSB/Digital modes

Sep:

03 to 14	8Q7QE	Maldives	
04 to 18	NH8S	Swains Is	All bands/all modes *

* Denotes DX-pedition likely working split frequencies

Exact dates not yet confirmed. Search web for D64K for latest news

+ Holiday style means operator (s0 on vacation and will operate periodically. Check DX Watch for spots.

QSO Parties

July 28 1600Z to July 29 2000Z	New Jersey QSO Party
Aug 11 1600Z to Aug 12 2000Z	Maryland-DC QSO Party
Aug 25 1400Z to Aug 26 2000Z	Kansas QSO Party
Aug 25 0400Z to Aug 26 2200Z	Hawaii QSO Party

Good way to work some hard-to-get States if you are working for your Worked All States

CY0 Sable Is. The op there has had to take down all his antennas due to a dead bird that appears to have been killed by flying into the tower. The island is on a migratory bird route and until a determination can be made about what to do during the tern migration (until August) the station may be off the air.

RI1 ANF is actually the South Shetland Islands and counts as a DX entity. It can be heard fairly frequently on SSB

2012 Topband Most Wanted Survey

Introduction

Several DX Most Wanted Surveys are available worldwide. However, to our knowledge, there exists a need for a Most Wanted Survey for 160 meters ONLY. Such a survey will be useful to DXpedition planners in selecting DXpedition destinations. This in turn will eventually provide you with opportunities to add new entities to your log.

2012 Survey

The 2012 Survey is at

<http://survey.hamdocs.com/?sid=11389>

We (Garry, NI6T and Larry, K8UT) initiated this survey for the 2011-2012 season and received submittals from several hundred North American and European topbanders, but relatively few from the other continental areas. Last year's results can be found at the link listed below. Several DXpedition planners have already incorporated these results in their planning.

For the 2012-2013 season, we expect increased participation by stations in Japan and other Asian entities. We shall continue to seek submittals from other continental areas as this survey becomes more established.

You can help expand the scope of this survey!

The addressee list above is our initial target group and is by no means complete. If you can provide email addresses for additional national amateur organizations, DX clubs and DX publications, we can spread the word and produce a more complete

survey. Particularly needed are South America, VK/ZL, Africa and Asia. Send your info to Garry, NI6T, (garry@ni6t.com) and don't worry about dupes. <garry@ni6t.com>

How to use the Topband Most Wanted Survey

The Topband Most Wanted Survey provides 160m DXers worldwide the opportunity to specify which DXCC countries they "need". For the purposes of this survey, "need" is defined by you, the DXer. Please fill out both **Part I - Ham Contact Information** and **Part II - Most Wanted Entities**. Then press the Submit button. Your personal information will NOT be shared with anyone. Please enter ONLY entities needed on 160 meters.

Please submit your needs list between now and August 31, 2012. Modifications submitted after August 31, 2012 will be used for the following year's survey. The results for 2012-2013 will be available in September, 2012.

Thank you for your participation and Good DX on Topband!

Garry, NI6T and Larry, K8UT

Link to Topband Most Wanted Survey 2011 results:

http://www.k8ut.com/tiki-list_file_gallery.php?galleryId=12

DailyDX mailing list

DailyDX@kkn.net

<http://www.kkn.net/mailman/listinfo/dailydx>

Famed German DX'er DJ6SI Arrested In Greece

June 8, 2012

In what has to be one of the strangest international legal issues involving a ham radio operator, famed German DXpedition leader Baldur Drobnička, DJ6SI, has been arrested in Greece. But in a strange turn of events he was permitted to return to Germany if he promised that he would come back to Greece for trial.

Let me start by saying that it is very hard to know what has really taken place because most of the news sources are foreign language ham radio blogs and other news reports that have been electronically translated into English. Also, as we go to air there comes a purported statement in German from the person in the center of the

controversy, DXer Baldur Drobnička, DJ6SI. It was posted to QRZ.com by YO4PX after being translated by DK5KF. As that is the latest information, let's start there and then take a look at the rest of the story as it seemed to unfold.

The statement credited to DJ6SI reads as follows:

"June 3rd, 2012, 20:46 (UTC 2)

Dear Michael,

I wasn't charged with espionage. As a reason of my arrest it was stated that:

1. I performed radio traffic without the approval of the Greek authorities;

2. I owned transmitting equipment which enabled the reception of other frequencies;

To the accusation was later added an other point:

I hindered the visualization of the content of my notebook.

I would like to ask you to eliminate the information that I was arrested for espionage, or to replace it with my statement.

Vy 73 Baldur DJ6SI"

Now, the back story:

According to news reports, 75 year old Baldur Drobnica, DJ6SI was on holiday on the Greek island of Kos. That's where he was reportedly taken into custody for the crime of espionage which was quickly reduced to operating amateur radio equipment. This, even though both Greece and Drobnika's home country of Germany are both signatories to the CEPT pan-European Amateur Radio licensing agreement.

Even so, Greek news reports appear to indicate DJ6SI was actually arrested under a 1929 Greek law covering illegal operation of radio telegraph equipment even though the CEPT agreement would likely supersede the older law.

According to Greek ham radio blogs the accusation of espionage was based on a complaint that he was "producing strange noises" with his computer. Those strange noises turned out to be CW and RTTY. This was corroborated by many who notice reports of his operation on Internet-based DX spotting clusters.

Quite quickly the espionage charge appeared to disappear and the reduced charge under the 1929

law implemented. And in a strange turn of events, DJ6SI was permitted to return to Germany but he was told that he must return to Greece to stand trial on June 7th. That hearing is likely taking place as this newscast goes to air. But as several Greek hams have pointed out, DJ6SI would have not been permitted to leave the country if there were any real case or even a suspicion that he was engaged in spying activities.

And one Greek ham radio blog took the matter a lot further. The Radio Amateur Association of Greece issued an angry statement defending DJ6SI. It claims that the responsibility for the entire matter should be placed on the to the shoulders of the officer that ignored laws and regulations, arrested DJ6SI and led him to court. They also place blame on the prosecutor who they say was quick to suggest his conviction based on a law passed in 1927, in the year 2012.

The hams also point out that radio amateurs have been complaining for years to the responsible Ministry that public services and institutions and particularly police have not been informed properly about ham radio. The association says that it's the governments duty to inform all relevant authorities about amateur radio and its operations.

Obviously. This story is far from over.

You can read the Aegea News report in Google English at www.tinyurl.com/DJ6SI-Aegea-News. An article by Greek amateurs protesting Drobnika's arrest is at www.radiofono.gr/node/3251

(ARNewline - SV5YR, DK5KF, YO4PX, RadioInfo.gr, QRZ.com, others)

DX News: 7O6T Yemen Operation Approved For DXCC Over Protests Of Israeli Hams

May 11, 2012

Over complaints that were voiced on QRZ.com and other public websites by some Israeli hams, the ARRL DXCC Awards Desk has approved the current 7O6T operation from Yemen for DXCC credit.

A small but vocal number of Israeli hams have been arguing on-line that the 7O6T from Yemen should not be allowed for DXCC because the operators refused to make contact with 4X and 4Z prefix hams. They note that Israel has no banned countries list and as such refusal of the 7O6T operators to contact them was at least a violation

of the principals and the spirit of the DXCC program.

While it's true that Israel has no banned countries list, many of its neighbors consider themselves technically in a state of war with the Jewish state and have been since its creation through partitioning following World War 2. As such these nations ban hams operating under their jurisdiction from making contact with their counterparts in Israel.

The 706T operation reportedly has the support of Yemen's Ministry of the Interior, the Ministry of Information, the Ministry of Radio and the Ministry of Telecommunications and Information Technology. As such it is a pretty good guess that not recognizing Israeli stations was a decree imposed by Yemen on the 706T operating team and not one of their own choosing.

At airtime, it's not known if any of the protesting Israeli hams contacted the ARRL DXCC Desk regarding this issue of if it was just another of those cyberspace only arguments. Either way it came to an abrupt end on Saturday, May 5th. That's when ARRL Awards Branch Manager Bill Moore, NC1L, issued a news release stating that

the current 706T operation from Yemen along with the earlier 603A DXpedition to Somalia have been granted DXCC approval. As such, both will be counted for DXCC credit.

The 706T adventure began at 2100 UTC Monday, April 30th and has been causing massive pile-ups wherever the operators show up. It will continue through 2100 UTC on May 15th.

Up until this operation began, Yemen was ranked as number 5 in the DX Magazine's list of most wanted entities behind North Korea, plus Navassa, Bouvet and Heard Islands.

(ARNewsline, QRZ.com, ARRL DXCC Desk)

Radio Canada International To End Shortwave And Satellite Broadcasts

May 11, 2012



The shortwave bands will soon be a little less entertaining. This after it was announced that an 80% budget cut is forcing Radio Canada International to abandon shortwave and satellite radio broadcasting, leaving the World-Wide-Web as RCI's only delivery method.

From the Radio Canada International website.

Transforming Radio Canada International (RCI)

What You Should Know

In line with plans to modernize the public broadcaster, as outlined in *Strategy 2015*, [Radio Canada International \(RCI\)](#) will undergo a transformation that amounts to phasing out its shortwave and satellite services so it can focus on webcasting. This will account for almost \$10 million in annual savings for CBC/Radio-Canada by 2013-14. RCI's transformation is consistent with currently shifting media consumption behaviours, as well as strategies adopted by other public broadcasters.

"From now on RCI will provide multilingual service broadcasting in English, French, Spanish, Arabic, and Mandarin that strives to help audiences discover and especially understand democratic and

The latest cut of \$10 million takes place on June 26th. Once in effect, a date will be set to end the broadcasts from Radio Canada International's Sackville, New Brunswick, transmission site which will then be abandoned. Besides ending shortwave and satellite broadcasting, Radio Canada International will also lose its news operation and cease producing its own programming. *(RW)*

cultural life and values in Canada," says Hubert T. Lacroix, President and CEO.

As well, RCI will provide national and international audiences with online content in five languages (French, English, Spanish, Arabic, and Mandarin) instead of seven. The Russian and Brazilian sections of RCI will be shut down. This allows us to concentrate our efforts on what are among Canada's largest communities of diverse origins.

Following this decision, CBC/Radio-Canada will be closing its shortwave transmission site in Sackville, New Brunswick.

What this will mean

- End of satellite and shortwave transmission
- End of the production of RCI news broadcasts
- Shutdown of Brazilian and Russian sections of RCI
- Almost \$10 million in annual savings for CBC/Radio-Canada by 2013-14

What it won't mean

- Shutdown of RCI

Logbook Of The World Marks 50,000 Users

May 25, 2012

A Serbian ham is the holder of what can best be described as an electronic honor. On May 1st Dragan Pavlovic, YT3PDT, completed his registration process for Logbook of The World. As such he became the 50,000th person to take advantage of the ARRL's online QSL confirmation system.

According to ARRL Membership and Volunteer Programs Manager Dave Patton, NN1N there are more than 3500 individuals from outside the US in the process of obtaining a digital certificate. There are also numerous hams here in the US who have started the certificate process, but not yet finished. (ARRL, WIA)

Hams Worldwide Asked To Monitor For The HORYU-2 Satellite

June 1, 2012

Hams world-wide are being asked to monitor for Japan's HORYU-2 satellites Morse code beacon and 1200-baud AX.25 packet telemetry at 437.375 MHz.

Japan's HORYU-2 is a research satellite was launched May 17th as part of a mission that also included the JAXA climate observation satellite Shizuku.

HORYU-2 was built by students at the Kyushu Institute of Technology and identifies using the call

sign JG6YBW. Telemetry decoding software is available for download at www.tinyurl.com/horyu-software. This is an executable program so you might want to be certain that it will run on your computer before installing it.

More about the Horyu satellite itself is on-line at www.tinyurl.com/horyu-sat. (ARRL, AMSAT)

Hurricane Watch Net Enters 47th Season

June 2, 2012

Stanley Broadway, N8BHL via QRZ.com

Amateur Radio's Hurricane Watch Net is geared up and ready for its 47th year of activity. Formed in 1965 by Jerry Murphy, (Amateur radio call sign K8YUW), during Hurricane Betsy, the Hurricane Watch Net was an informal group of radio amateurs who recognized a need to provide communications to and from hurricane affected areas. Over the years the net has relayed reports in to the National Hurricane Center and just as importantly out to the many Amateur Radio stations located in the path of hurricanes.

While the net continues to use original HF radio frequencies, typically 14.325 MHz, the inner workings have grown with today's technologies. To the casual listener the net is anchored by a single net control station, but there might be as many as a dozen net control stations located all over the United States and in the islands all connected to an Internet channel while this is going on. This instant "back-channel" communication helps accommodate the shifting radio coverage on the HF bands. It also helps coordinate operation on multiple HF frequencies. When a maritime Amateur Radio operator or one on an island reports weather conditions in a storm all of those net control

stations are listening. At times, the acting control operator will lose propagation and another will pick the report up. The control stations will then coordinate a 'shift' with the better positioned station picking up the net. All together there are 37 control operators, spread from Florida to Arizona to Canada all with the idea of adequate communication into the storm affected area.

The back channel communication also serves as a conversational link to the National Hurricane Center in Miami, FL where hurricane experts can request information and reports from our net stations, and confirm the data we supply.

Many of the tools we use to conduct the net are available to all through the official Hurricane Watch net website, <http://www.hwn.org>. These tools include color graphics of a storm's position and forecast direction, conversion tools to handle different measuring standards, and the latest detailed reports and forecasts from the NHC. The HWN is also working to keep a database of our frequent contributors so that we don't need to repeatedly ask your location and details, but get right to your reporting.

This technology of Internet-relayed satellite pictures, radar positions and statements may raise the question of why maintain contact on "old fashioned" HF radio. The storms of last year again proved to answer that- by taking out power, blocking satellite signals and otherwise interrupting technology. As we've come to expect, it left the Ham Radio Operator who has the ability to put a signal out with trained, detailed observations to keep the rest of the world apprised.

The primary reason for our overwhelming success over the 46 years of our existence is hundreds of fellow amateur radio operators in the affected area

who monitor the storm's progress and voluntarily bring to us that data which is so vitally important. You need not be a member to enable those vital reports to us. Additionally, we often find ourselves needing relay assistance to capture essential information. We always appreciate your cooperation by allowing a clear frequency so that we can hear weak and impaired signals which might be coming from an affected area. For more information on how you can participate in the Hurricane Watch Net, visit <http://www.hwn.org>.
(QRZ.com)

Ham Radio Deluxe v5.22 Released

May 15, 2012

Richard S Ruhl, W4PC

HRD Software, LLC announces the release of Ham Radio Deluxe 5.22. This is the 4th release of software since W4PC, WA9PIE and K0CBH acquired the rights in November of 2011.

Erik Gawtry KC0WWC and Rick Ruhl W4PC have been coding in tandem for the past few weeks and have created this version with more fixes and some new beta features which will be in version 6.x. Version 5.22 includes a significant number of fixes, many that go back several generations of the software. This version also offers a preliminary manual, which is on the web site ready for download.

Mike Carper, WA9PIE, said, "I'm very excited about this release. Many of the functions that never worked before are working now. We had great participation by our group of beta-testers and we've tested every function of the suite that we can. Many of the testers also report that it's faster, and I agree. Erik Gawtry (KC0WWC) has a lot to do with the code-level improvements. Erik has been a great asset to this process."

Rick Ruhl, W4PC, said, "Erik and I as well as the QA team and the beta sites have worked painstakingly for more than a thousand hours to ensure that the software works as intended. It has been a long process that has yielded the results that we were all originally looking for when this venture was started."

Mike adds, "We made a conscious decision to delay feature development for v6.x until after the v5.22 release. We wanted all our development resources focused on the backlog of user requests and on

making 5.22 the best version of HRD yet. Our users asked us for that." Users who take advantage of the discounted pre-buy opportunity for v6.x will continue to receive direct support on the v5.22 product. According to Mike, "It's important to download and use 5.22, as this will be the last free version that is produced. 5.22 will also be the only free version that will continue to receive support."

Version 6.x will have many new features which will include FSK support, a new QSL and awards tracking interface, improved cluster filters, label printing, and the Super Sweeper in Digital Master. Super Sweeper will allow multiple signals to be decoded in the window formerly referred to as "Superbrowser".

HRD Software now has someone new for QA and Tech Support, W1MNK, Jon Maguire, will be leading the phone and email support. Jon has many years of experience in support and is a power user of HRD. This is the first of many hams HRD hopes to have on staff.

HRD Software will be in Audio Alley booths 108-109-100 at the Dayton Hamvention. The company has also created a YouTube site where feature demonstrations will be published for this and other versions.

A discounted pre-buy of version 6.0 is being offered for \$59.95. This includes technical support for v5.2. The retail version of HRD will be \$79.95 when it's released after Dayton 2012. Those that have purchased or will purchase the 5.X support will still get one year of support from the date of the 6.0 release.

You can purchase and download the product at <http://www.ham-radio-deluxe.com>.

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

HRD on YouTube:
<http://www.youtube.com/HRDsoftware>

Ham Radio Deluxe 5.22 is here and it's 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>

HAM TECH

Volume 2, Number 6

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

HF Antennas: Horizontal or Vertical Polarization? - Part 2 of 2

Is there any truth to the old saying that vertical antennas have better low angle performance and therefore yield better DX than horizontal antennas? Last month we looked at three cases of simple 1/2 wave dipoles, one horizontal and two vertical to try and determine the answer. I used the free copy of Roy Lewallen's EZNEC antenna analysis software that is packaged with every recent copy of the ARRL Antenna handbook to do the calculations. In all cases the characteristics of the ground surrounding the antenna out to several miles was what is considered "good soil", typically of what is found in the central part of the US, and is considerably better than what is found in South Jersey. At 5 degrees elevation angle, typical of long range DX launch angles, the low vertical was only 0.23 dB better than the horizontal and the high vertical was 1.17 dB better. Not much improvement considering that the ground characteristics was much better than most of the US experiences.

Let's look at what happens when we vary the ground electrical characteristics. Table 1 lists six different ground conditions and was taken from the ARRL Antenna book.

Ground Desc.	Cond. S/M	D.C.	Typical of
Sea W.	5.00	81	Oceans
Fresh W.	0.001	80	Lakes
Good	0.030	20	Central USA
Avg.	0.005	13	SNJ & EPA
Poor	0.002	12	Mountains
Cities	0.001	5	Cities

Table 1: Conductivity & Dielectric Constants

A quick inspection of this table shows a very large increase in the conductivity of sea water over all other cases. This is due to the salt content which turns the water into an excellent electrical

conductor, almost like a huge sheet of copper. The dielectric constant is a measure of how large a capacitor would be formed between two conductors. Water's dielectric constant is 4 to 16 times greater than the soil values.

So let's plug the values from Table 1 into the EZNEC model used for the horizontal dipole and see what happens. This is the model which supplied Fig.1 in last month's HAM TECH. Table 2 summarized the antenna and ground system total loss, peak gain in dBi, peak gain elevation angle in degrees, gain at 10 degrees and at 5 degrees for the 6 different grounds.

Ground Desc.	Loss dB	Pk.G. dBi	Pk. Angle	G@10 dBi	G@5 dBi
Sea W.	0.11	8.24	30	2.5	-3.2
Fresh W.	0.68	7.79	30	2.3	-3.3
Good	0.80	7.86	30	2.6	-2.9
Avg.	1.31	7.27	30	2.3	-3.1
Poor	1.40	7.10	30	2.2	-3.3
Cities	1.88	6.48	25	2.1	-3.3

Table 2: Horizontal Dipole 1/2 Wave High

The loss column represents how efficient the antenna is in radiating the energy from your transmitter into free space. It is almost perfect for the sea water ground and not bad, -1.3 dB or 74%, for average ground typical of South Jersey. The peak gain for average soil is only down by about 1 dB and 13/4 dB for the worst soil in cities. Note the stability of the peak gain elevation angle and the gains at 10 and 5 degrees elevations. It looks like the changes in performance as a function of ground from the best to almost the worst are in the neighborhood of 1 dB or less. Or said another way, with horizontal polarization the ground is not an important factor. This is a major advantage of horizontal antennas since measuring ground electrical characteristics is a difficult problem.

So let's look at the low vertical case, Fig. 2 in last month's column. The results are summarized in Table 3 in the same way as for the horizontal model.

Ground Desc.	Loss dB	Pk.G. dBi	Pk. Angle	G@10 dBi	G@5 dBi
Sea W.	0.85	5.72	8	5.6	5.6
Fresh W.	3.56	2.69	16	2.1	-0.4
Good	5.44	1.01	16	0.2	0.1
Avg.	6.14	0.07	19	-1.5	-5.1
Poor	5.83	0.31	20	-1.4	-5.1
Cities	6.31	-0.37	22	-2.7	-6.9

Table.3: Vertical Dipole Center 1/4 Wave High

The numbers look great for the sea water ground case but deteriorate rapidly for all other cases including the typical South Jersey soil where 3/4 of your power is burned up in the soil and the low angle DX 5 degree elevation angle gain has dropped by over 10 dB. It should be clear that the vertical is a poor DX antenna except in the rare case where you are located on the ocean beach and have salt water under your favorite azimuth directions.

Let's compare the common 1/4 wave vertical with a radial ground system to a horizontal dipole to see if this vertical has merit over the horizontal. There are two ways to build the radial ground system; one with elevated radials and the second with the radials on or buried below the ground. We will look at both. The horizontal will be exactly the same as used last month to generate the Fig. 1 data except that the ground conditions are changed to the average values typical of SNJ and EPA. The data are part of Table 4 for easy comparisons. The verticals will use the average soil ground to keep the comparisons with the horizontals valid.

The elevation pattern with gain at the peak and at 5 degrees for the quarter wave vertical with 4 radials elevated by 10 feet is shown in Fig. 1. Note that the elevation peak is 19 degrees 3 degrees above that of the low half wave vertical shown as Fig. 2 last month.

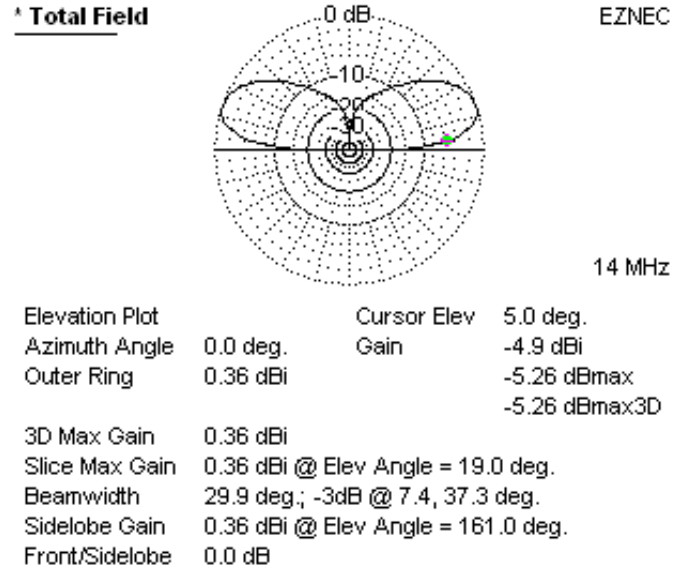


Fig. 1 Elevated Radial Quarter Wave Vertical

When we drop the quarter wave vertical down on the ground several things happen. First the antenna must be retuned to resonance. Second the elevation lobe broadens and its peak rises from 19 to 28 degrees. Third the peak gain drops by 1 dB and the 5 degree gain is reduced by 2.4 dB. Table 4 compares both of the quarter wave verticals to the horizontal at 0.5, 1.0 and 1.5 wavelengths, 34.7, 69.4 and 104.1 ft. heights with the ground characteristics modified to that typical of SNJ and EPA.

Antenna	Height Feet	Pk.G. dBi	Pk. Angle	G@5 dBi	Loss dB
Horz.	34.7	7.30	28	-3.12	-1.31
Elev. Vert	10.0	0.36	19	-4.90	-5.80
Grnd. Vert	0.10	-0.64	27	-7.28	-5.76
Horz.	69.4	7.60	14	2.28	-0.75
Horz.	104.1	7.71	9	5.28	-0.73

Table 4 Comparison of Antennas

Both verticals are significantly inferior to the 0.5 wavelength, 34.7 foot, high horizontal at most elevation angles. In addition the horizontals gain at low angles can be increased by 5 to 8+ dB just by increasing the height to 1.0 or 1.5 wavelengths, 69 to 104 feet. Verticals are not the solution to good low angle radiation and good DX. Horizontals at the right height can get the job done without all the ground losses of vertical polarization.

Field Day Media Coverage

June 7, 2012

Field Day takes place June 23-24 and it's already generated plenty of amateur radio coverage in the media.

Part of the reason for the media coverage is the 100 Field Day bonus points that may be earned for attempting to obtain publicity from the local media - a good way to encourage radio amateurs to publicize the hobby.

Here is a selection of field day news stories:

Hamilton County "Hams" to join national deployment 24 hour field drill

<http://newsfromyou.indystar.com/posts/hamilton-county-hams>

[-to-join-national-deployment-24-hour-field-drill-public-invited](#)

[-to-participate-june-23-24](#)

Norwalk Amateur Radio Club prepares for Field Day

[http://www.thehour.com/community/norwalk-amateur-radio-](http://www.thehour.com/community/norwalk-amateur-radio-club-prepares-for-field-day/article_c407b3e8-87dc-5f5f-9ec9-5a00ca28cec8.html)

[club-prepares-for-field-day/article_c407b3e8-87dc-5f5f-9ec9-5a00ca28cec8.html">club-prepares-for-field-day/article_c407b3e8-87dc-](#)

[5f5f-9ec9-5a00ca28cec8.html](http://www.capemaycountyherald.com/article/community/court+house/83723public+demo+emergency+communications+june+2324)

Public Demo of Emergency Communications June 23-24

[http://www.capemaycountyherald.com/article/com-](http://www.capemaycountyherald.com/article/community/court+house/83723public+demo+emergency+communications+june+2324)

[munity/court+house/83723public+demo+emergency+communications+june+2324](#)

F. R. Sussey Civil Air Patrol Composite Squadron to host ARRL Field Days

<http://oswegocountytoday.com/?p=89059>

Field Day to promote emergency response of amateur radio operators

<http://www.lincolncountyjournal.com/?p=5054>

Ham radio operators to demonstrate capabilities

[http://www.tcpalm.com/news/2012/jun/01/ham-](http://www.tcpalm.com/news/2012/jun/01/ham-radio-operators-to-demonstrate-capabilities/)

[radio-operators-to-demonstrate-capabilities/">http://www.tcpalm.com/news/2012/jun/01/ham-](#)
ARRL Field Day <http://www.arrl.org/field-day>
(Southgate ARC)

Field Day 2011



ARRL Field Day Overview

ARRL Field Day is the single most popular on-the-air event held annually in the US and Canada. Each year over 35,000 amateurs gather with their clubs, friends or simply by themselves to operate.



www.arrl.org

ARRL Field Day is not a fully adjudicated contest, which

explains much of its popularity. It is a time where many aspects of Amateur Radio come together to highlight our many roles. While some will treat it as a contest, most groups use the opportunity to practice their emergency response capabilities. It is an excellent opportunity to demonstrate Amateur Radio to local elected community leaders, key individuals with the organizations that Amateur Radio might serve in an emergency, as well as the general public. For many clubs, ARRL Field

Day is one of the highlights of their annual calendar.

- **Objective**

To work as many stations as possible on any and all amateur bands (excluding the 60, 30, 17, and 12-meter bands) and to learn to operate in abnormal situations in less than optimal conditions. Field Day is open to all amateurs in the areas covered by the ARRL/RAC Field Organizations and countries within IARU Region 2. DX stations residing in other regions may

be contacted for credit, but are not eligible to submit entries.

- **Dates**

Field Day is always the fourth full weekend of June, beginning at 1800 UTC Saturday and running through 2059 UTC Sunday. Field Day 2011 will be held June 25-26, 2011.

- **Bands**

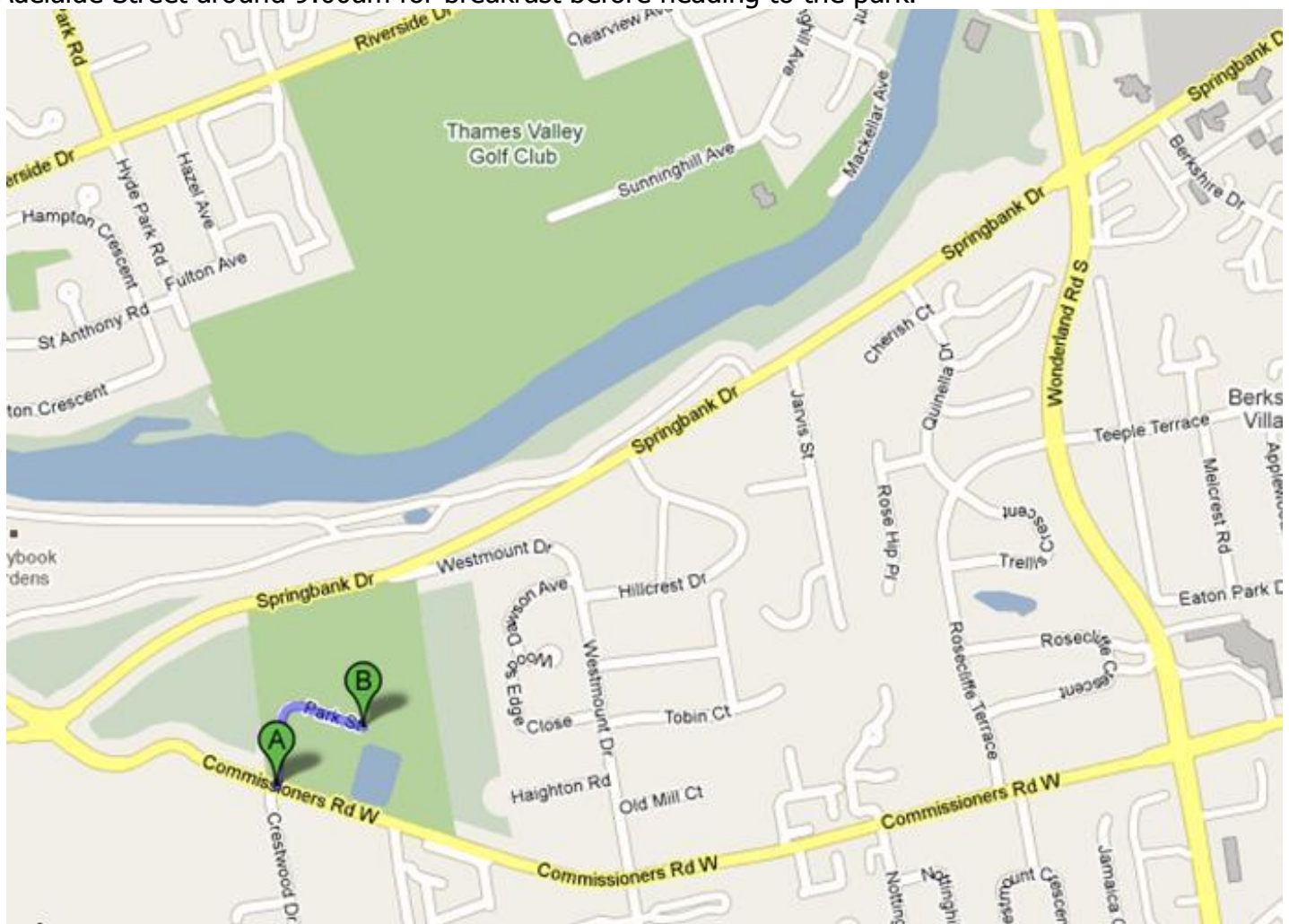
Any Amateur Radio band except 12, 17, 30 and 60 Meters.

- **Awards**

Field Day is not a contest; no certificates are awarded

L.A.R.C. Field Day

Location - Reservoir Park. Most of us will meet at the Cottage Restaurant on Dundas Street at Adelaide Street around 9:00am for breakfast before heading to the park.



Location A shows the location of the gate to Reservoir Park while location B shows the general location of the central point of the Field Day site.



The address for the Cottage Restaurant is 600 Dundas St. Parking is available behind the restaurant. **Parking is no longer available between Babaz Restaurant and the May Court Shop**

Current Band Captains (Subject to change)

80m Phone - Doug Elliott, VA3DAE

40m Phone - Mike Watts, V3ACW

20m Phone - Pat Ross, VE3CNX

15m Phone - Mike Watts, VE3ACW

10m Phone - Bob Rice, VE3HKY

CW - Dave Steel, VE3UZ

Wi-Fi - John Visser, VA3MSV and Mike Argyle, VE3XMA

Anyone wishing to volunteer as Band Captains for any other band please contact Dave Lambert, VE3K GK. Anyone wishing to volunteer as an operator please contact the band captain for the band you wish to operate on. (We could always use night time operators)

Field Day Introduction

Wikipedia defines **Field Day** as an annual amateur radio exercise sponsored by various amateur radio IARU regions and member organizations, in

Note to Band Captains. We will be using a wireless network with 3 Wi-Fi repeaters available to extend the wireless network range if needed and N3FJP's Field Day logging software which will be available on site from Mike Argyle and John Visser. Mike and John will also have a limited number of notebook computers available if you do not have your own to use for logging. If you are going to require the use of a notebook computer, please email John Visser, VA3MSV to insure that there will be one reserved for you.

If you have any further questions about what L.A.R.C. is doing for Field Day, feel free to contact any member of the L.A.R.C. Executive.

order to encourage emergency communications preparedness. In the United States, it is typically the largest single emergency preparedness exercise in the country



with over 30,000 ham radio operators participating each year.



Since the first ARRL Field Day in 1933, Amateur radio operators throughout the United

States have practiced the rapid deployment of radio communications equipment in environments ranging from operations under tents in remote areas to operations inside Emergency Operations Centers (EOCs). Operations using emergency and alternative power sources are highly encouraged, since electricity and other public infrastructures are often among the first to fail during a natural disaster or severe weather.

To determine the effectiveness of the exercise and each participant's operations, there is an integrated contesting component and many clubs also have camping out and cookouts for the participants. Operations are typically for a continuous 24 hours, requiring the scheduling of relief operators to keep the stations going through the night. Additional contest points are awarded for such things as experimenting with unusual modes, making contacts through space satellites and involving youth in the activity.

By way of history, the London Amateur Radio Club (LARC) was formed in 1920 and incorporated in 1978 as a not-for-profit association. Regrettably, records as to when LARC first participated in Field Day activities are not readily available to the writer. However, in speaking to a now Silent Key member John Watson, VE3EZF, who joined LARC circa 1960, he recalled LARC Field Day exercises taking place as far back as 1961 on a farm situated at the Southwest corner of



Fanshawe Park Road and Wonderland Road, which was owned by a fellow-member Joe Jefferies (SK) whose call, VE3GB, was reassigned to Gord Baker, a close friend of the family. Apparently there were about twelve (12) attendees, operating two stations on HF and one on VHF/UHF, which John co-worked. He recalls freezing temperatures in the middle of the night, while trying vigorously to make 2M CW/AM contacts!!

In subsequent years, LARC used the Parkwood Hospital (baseball diamonds), Byron Hill, and since 2003, the Byron Reservoir Park on Commissioners Road west of Wonderland Road. A campsite consisting of tents, tables and a large trailer was setup for 24 hours of radio fun. St John's Ambulance provided a mobile generator equipped with area lighting to illuminate the area, making for a very pleasant weekend of fun.

Anyone interested in ham radio as well as the general public are invited to attend and all are encouraged to participate on the air (under supervision, of course). Children are especially welcome as they represent the future of the hobby and are most impressed with the



campout atmosphere and they rarely decline the opportunity to key the mike and be heard on the airwaves.

The highlight of the weekend is the

dinner on Saturday evening, when family and

friends join with the group in sharing good food, fond memories and quality time.

Thank you to all volunteering to participate in the 2011 Field Day exercise.

Once again the event will take place at Byron Reservoir Park, west of Wonderland Road on Commissioners Road. **Set up**



will commence at 12:00 noon Saturday, June 25th and operations extend through to 2:00 pm Sunday, June 26th. We

anticipate putting at least six (6) stations on the air and operating continuously throughout the 24 hour period. And please, bring your family and friends. There will never be a

better opportunity to show them the advantages/capabilities of amateur radio in an emergency situation.

Don't forget to bring

some food and lawn chairs and join us for the barbecue pot luck starting around 6:00 PM Saturday.

If you wish further information and/or wish to participate/operate one of the stations, please contact one of the people on the cover page of this document. See you there!

73 and Good DX



COME OUT AND JOIN US FOR THE
35TH ANNUAL
LONDON AMATEUR RADIO CLUB FLEA MARKET
SUN. SEPT, 23, 2012
9AM TO 12PM



YOU WILL FIND GREAT BARGAINS



SEE SOME OLD FRIENDS AND



MAKE SOME NEW ONES

GREAT VENDORS INCLUDING
RADIOWORLD
DURHAM RADIO
MAPLE LEAF
A-1 COUNTERPARTS

AT THE
SPECIAL EVENTS BUILDING



WESTERN FAIR
district
be entertained

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	
<input type="checkbox"/> Paid	_____
<input type="checkbox"/> Cash	<input type="checkbox"/> Chq
Membership Card	
<input type="checkbox"/> Needed	<input type="checkbox"/> Rec'd
Sticker	
<input type="checkbox"/> Needed	<input type="checkbox"/> Rec'd

**LONDON AMATEUR RADIO CLUB INC.
MEMBERSHIP APPLICATION**

PLEASE PRINT

<input type="checkbox"/> SINGLE MEMBERSHIP: \$25.00	<input type="checkbox"/> RENEWAL
<input type="checkbox"/> FAMILY MEMBERSHIP: \$30.00	<input type="checkbox"/> NEW MEMBER

Member # 1	Last Name _____	First Name _____	Call Sign _____
	RAC Member? <input type="checkbox"/> No <input type="checkbox"/> Yes	RAC Member # _____	ARES Volunteer? <input type="checkbox"/> Yes <input type="checkbox"/> No
	Email Address _____		

Member # 2	Last Name _____	First Name _____	Call Sign _____
	RAC Member? <input type="checkbox"/> No <input type="checkbox"/> Yes	RAC Member # _____	ARES Volunteer? <input type="checkbox"/> Yes <input type="checkbox"/> No
	Email Address _____		

Member # 3	Last Name _____	First Name _____	Call Sign _____
	RAC Member? <input type="checkbox"/> No <input type="checkbox"/> Yes	RAC Member # _____	ARES Volunteer? <input type="checkbox"/> Yes <input type="checkbox"/> No
	Email Address _____		

Member # 4	Last Name _____	First Name _____	Call Sign _____
	RAC Member? <input type="checkbox"/> No <input type="checkbox"/> Yes	RAC Member # _____	ARES Volunteer? <input type="checkbox"/> Yes <input type="checkbox"/> No
	Email Address _____		

Address: _____

Street/P.O. Box

City/Town	Province	Postal Code
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Phone Number

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