



QSOX



Volume XIX Issue 1
Editor: Howard; KC2OJO

January 2012

The next Executive Board and General meetings of the Larkfield ARC will be held on Thursday January 12, at the Huntington Senior Citizens Center at 7:00 PM and 7:30 PM, respectively.

The December Holiday party was a great success with over 30 members present. At the party (holding their Honored Member awards) were Roger W2GLE, Bruno KC2ESI, Larry N2BKJ and Jack K2JX. Executive Board members also shown with the Honored members in the picture below are: Front row, 2nd from left, Howard KC2OJO, rightmost two, Fred K2LDC, and Danny KC2TFS. In the back row, are Gary K2TVN, Chuck N2JIY, Steve N2PQJ and Neil KC2TAF.



All Photos in this issue taken by Stan N2YKT. Thanks, Stan

The President's Column

by

Gary McDowell K2TVN



The feedback from the LARC holiday party was very good. We had a good turnout and the food obtained by our Stan Mehlman and Bruno Gentile

was excellent. I thank everyone who helped out with the party.

I also want to thank the LARC Executive Officers and Board members, who served this year, and welcome the new board for 2012. We have accomplished a lot in one year and look forward to continuing and improving the club, as well as growing the membership.

I also wish to thank the chairpersons involved in membership, Cow Harbor, VE's, repeater team, Races and Field Day for their dedicated volunteer work as well as those members who attended the various events and made it a success. If I left anyone out, please note it was not intentional.

As you know, we are working on the new 2 meter antenna install, APRS and other modes of transmission in 2012, so we can increase our communication on the air with fellow members and Ham's.

Our next event is Ham Radio University on Sunday 1/8/2012, at Briarcliff College in Bethpage, NY. I signed us up for a meet and greet table. We will give out membership forms, frequency charts for our repeaters, a few QSX copies and be available to spread the good word about our club throughout the day. So far Vic, Steve, Howard, Fred and myself have volunteered to man our table with our club banner displayed. We could use a couple more people, so we all can attend a few of the multiple lectures being offered. Please call or E-mail the writer directly if you wish to help out.

I started this message shortly after the holiday party and I know that by the time this is published, time will have marched on, and some of the holidays will have taken place.

I wish everyone a Merry Christmas, Happy Holidays and a Happy New Year and I urge you all to help out in a positive way by volunteering and spreading the work among many in 2012..

73's
Gary K2TVN

December 8th Executive Board Meeting

The meeting started at 7:00 PM. Steve N2PQJ, Danny KC2TFS, Neil KC2TAF, Fred K2LDC, Roger W2GLE, Gary K2TVN, Chuck N2JIY and Howard KC2OJO were present. Many aspects of the .210 Antenna replacement were discussed including technical subjects, insurance, the contractor and the additional (up to \$1060) cost. The Executive Board had previously approved the additional (over budget) expenditure via an email vote. The proposed 2012 Budget was discussed and approved. Alan N2ZUU proposed several improvements to club operations including 1) Having a "sell" table at each meeting, 2) giving members the opportunity to report on ham activities during Introductions and 3) having a 6 month "most QSOs" contest.

The meeting was adjourned at 7:25 PM.

December 8th General Meeting.

The General Meeting Started at 7:25 PM. It included the Treasurer's and Secretary's reports, the presentation of Honored Member awards (see page 1), discussion of the upcoming Ham Radio University and the .210 antenna budget, and ended with the auction of a clock donated by Fred K2LDC.

It was reported that Steve N2PQJ had verified and updated a list of the club's repeaters and Jack K2JX and Chuck N2JIY were moving the club's APRS from Dix Hills to Huntington. The updated information had been added to the club's website.

After a detailed report by Gary K2TVN the members present unanimously approved the increase in the budget for installation of the .210 antenna replacement. At 7:42 PM the meeting adjourned.

2012 Membership Renewal

Payment is due by January 1, 2012

Name: _____ Call Sign: _____

Address / Phone / email – If Changed:

Address: _____

Phone: _____

e-mail: _____

<input checked="" type="checkbox"/> X	Member Type (X only one Type)	Dues
<input type="checkbox"/>	Regular	\$ 35.00
<input type="checkbox"/>	Age 65 or Older	\$ 25.00
<input type="checkbox"/>	Age 17 or Less	\$ 25.00
<input type="checkbox"/>	Disabled	\$ 25.00
<input type="checkbox"/>	Living Outside of Suffolk, Nassau, NYC	\$15.00

QSX

Please send me QSX by US Mail - **Add** \$10.00

Total enclosed: \$ _____

Make check payable to: **LARC** and send with this form to:

Larkfield Amateur Radio Club Inc.

P.O. Box 1450

Huntington, NY 11743

Date Submitted _____

Please get your 2012 Dues in by December 31st so that we all have an early opportunity to make sure that our budget and expenses are balanced. This is particularly important before we erect our new antenna

Addenda to November Meetings Minutes

The following members had their status changed to Honored by unanimous votes in the Executive Board and General Meetings.

Bruno KC2ESI, Jack K2JX, Larry N2BKJ and Roger W2GLE. Congratulations to All!

LARKFIELD INFO-CHAT

**Monday nights at 8:00 PM on the .210 Repeater (147.420 simplex if the repeater is down)
147.210 MHz, Plus 600 kHz Offset, 136.5 PL Tone**

Holiday Party — Two of Many Tables



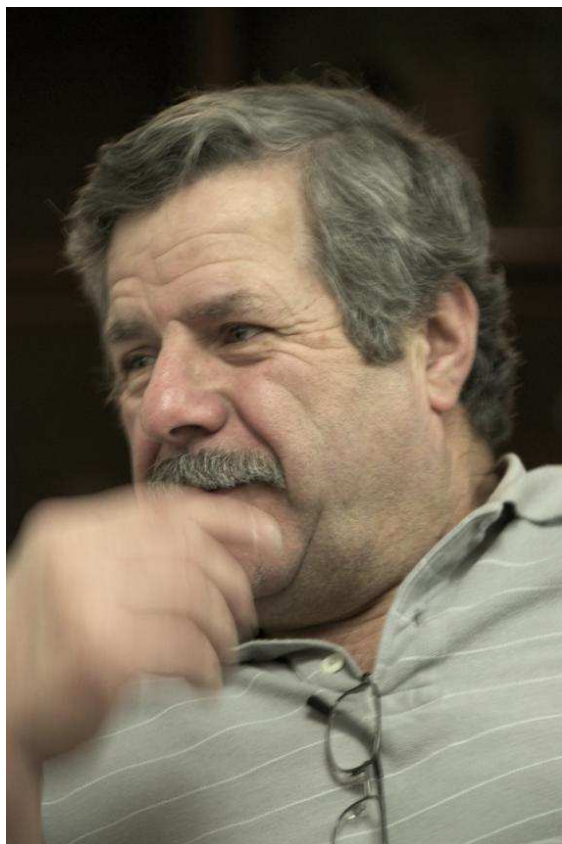
Clockwise from front left: Bill W2YKT, Al N2ZUU, Art KC2JFU, Jim KB2ZBY, Bob KC2LTX, Fred K2LDC, Barbara WA2VQJ



Left to Right: Donald AB2BN, Steve N2PQJ, Tom N2XTE

Portraits — Holiday Party — 2011

CW from upper left: Rich KA2LHK, Jim KB2ZBY, Fred K2LDC, Bob KC2LTX



THE ISSUE OF PRE-EMPHASIS, DE-EMPHASIS, CLIPPING AND REPEATER AUDIO QUALITY.
BY PAUL SEXAUER K3VIX. — PART 2 OF 2 PARTS — Slightly Shortened to Fit
Continued from the December 2011 issue of QSX

At this point, let's put some numbers on the pre-emphasis circuit along with the splatter filter. For normal voice communications, the FCC specifies (in commercial radios) that the pre-emphasis be a 6 dB per octave rising response beginning at 300 Hz. The FCC further specifies that the pre-emphasis be within +1 and -2 dB of the 6 dB per octave response. This effectively defines a "box" which the TX audio must fit in. Above about 3000 Hz the FCC requires the audio response roll off at a minimum of 12 dB per octave. This is the response of the splatter filter. Generally, the splatter filter begins to have an effect at around 2500 Hz. At that point, the rising audio response will begin to flatten out and then begin the 12 dB per octave roll-off at around 3000 Hz.

The way the transmitter audio response is measured is to apply a fixed modulating signal level which produces 60% of rated system deviation (3 kHz in our case) at 1000 Hz. Holding this level constant, the frequency is then swept from 300 Hz to about 10 kHz and the output of a calibrated receiver discriminator is plotted. The pre-emphasis and splatter filter responses are then clearly visible.

On a side note, the received audio quality is largely controlled by how "hard" the clipping in the transmitter is. If the clipping is "soft" i.e., it only occasionally goes into significant clipping, the audio will sound very clean. If the clipping is "hard", the intelligibility suffers greatly. Some manufacturers allow for this by providing a deviation set pot (IDC in Motorola) which is set to the rated deviation with the modulating signal in full clip, and then also provide a mic level or line level control to adjust how hard the modulating signal

hits the clipper. Proper setting of this control is imperative if good audio is to be maintained. We will see the importance of this in setting repeater levels shortly.

In the case of most amateur transceivers I've seen, the clipping circuits are quite poor which means that deviation may not be limited as much as might be desired, but it does result in very clean sounding audio. The ham market is not subject to the same technical requirements as the commercial folks. Clean audio is, however, achievable with good commercial clipping circuits.

Now we get to the question of how to obtain good quality repeater audio. As was discussed above, in a mobile or base it is important that we control how hard we go into clip on audio peaks. Harder clipping yields degraded intelligibility. With a repeater, the problem is compounded. This is because we have a clipper in the mobile and another in the repeater. It all comes down to properly setting repeat audio levels. Let the pre-emphasis and de-emphasis circuits do their job (it really results in a fairly flat response) and pay attention to the clipping levels. You'll have great audio and you will keep your deviation within spec, which is mandatory in today's FM bands.

To see the missing material and learn exactly how to adjust the Micom repeater for great sound, see the full article on the web at <http://www.repeater-builder.com/tech-info/fmtheorydiscussion.html>

Many thanks to Bruno KC2ESI for spotting this informative article.

Some Interesting Observations from the K7RA Solar Update for December 16, 2011

Solar activity dropped this week, with the average daily sunspot numbers declining more than 39 points to 94.7. It's been 13 weeks since the average daily sunspot number for the week was that low or lower, when we reported an average of 91.7 in the [September](#)

[16 edition of the Solar Update](#). The daily sunspot number has been lower than this week's average, starting December 12 when it was 70, and has since been 77, 65 and 44 through December 15.

Continued on page 8

Ham Radio University 2012

Sunday, January 8, 2012

Briarcliffe College 1055 Stewart Ave Bethpage, NY 11714

Spreading Ham Radio Knowledge and Know How

A day of education to share ideas, experiences, knowledge and fellowship
among Amateur Radio operators

Featuring Keynote Speaker --- Norm Fusaro W3IZ
ARRL Assistant Manager Member and Volunteer Programs

Suggested donation \$3 - no preregistration is required!
Doors open at 7:30 AM with first forums at 9:00 AM

Forum Schedule as of December 8, 2011

Time	Room A	Room B	Room C	Room D	Room E	Room F
9:00am – 9:50am	Scanner Forum	Political Advocacy in NYC/LI	QRP low power fun	Transmitter Hunting	Remote Station Operating	
10:00am – 10:50am	Antenna Forum	NLI EmComm	Intro to DXing	Six Meters during Cycle 24	Software Defined Radios Overview	
11:00am – 11:50am	Intro to D-Star	The Nat'l Traffic System in NYC/LI	DXing II	Working Satellites with your HT	Ham Radio Deluxe	
12 noon – 1:00pm					Keynote Speaker Norm Fusaro W3IZ	
1:30pm – 2:20pm	Advanced D-Star Build it Yourself	Telefunken – Long Island Wireless History	Contesting 101 – What Newbies Need To Know	Emergency Power for home	Dealing with Radio Frequency Interference	VE Session
2:30pm – 3:20pm	Meet your local radio clubs	Young Ham Forum	Logbook of The World	Grounding for the Ham Radio Station	IRLP	VE Session (continued)

Please contact info@HamRadioUniversity.org for further info.

Continued from page 6

The latest USAF/NOAA forecast has the solar flux for December 16-19 at 124, then 122 on December 20 and 120 on December 21-23. Then it jumps to 150 on December 24-26, 140 on December 27-28 and 145 on December 29-January 4. It then rises to a maximum of 160 on January 8-14, 2012. The predicted planetary A index is 5 on December 16-25, 8 on December 26-29, 5 on December 30 through January 4, 2012, 8 on January 5-6, and then 5 on January 7-21. Geophysical Institute Prague predicts quiet conditions December 16-18, quiet to unsettled December 19, unsettled December 20 and quiet December 21-22.

Propagation reports for the ARRL 10 Meter Contest last weekend were positive. Randy Crews, W7TJ, of Spokane, Washington, commented: "Conditions during the ARRL 10 Meter Contest were great as expected with the higher solar flux. Personally, I feel 10 meter propagation has not been this good for the contest since 2002." He noted that for 2002 and 2003, the solar flux in early December was approximately 150 and 102. For 2010 and 2011, it was 87 and 140. "What a great change!" Randy noted. "Listening to the QSOs, it was like we all had a new horse to ride."

Rick Cincotta, KI4FW, of Arlington, Virginia, noted some curious short skip propagation last weekend: "During the ARRL 10 Meter Contest on the East Coast in the morning and early afternoon (both days), when the band was opened to Europe and the US West Coast (S9+), I could hear stations, very weakly, calling from locations nearby, closer than the usual E-S 'doughnut' that I'm familiar with from 6 meters (these guys were from Eastern Ohio, Southern New York and northern New Jersey, Rhode Island, Connecticut and North Carolina). They never got louder than S1, but I could make out their call signs if I cleaned the wax out of my ears and held my breath -- so to speak. I'm QRP, so I was only able to work a couple of them in New York."

Extract is Courtesy of the ARRL, full text at:

<http://www.arrl.org/news/the-k7ra-solar-update-196>

THE LARKFIELD AMATEUR RADIO CLUB OPERATES:

WR2ABA HUNTINGTON REPEATER

2 meters

147.210 MHz out/147.810 MHz in
4z/136.5 Hz PL

W2LRC HAUPPAUGE REPEATER

2 meters

145.430 MHz out/144.830 MHz in
4z/136.5 Hz PL

W2LRC HUNTINGTON APRS

2 meters

144.390 MHz In/Out

USA EASTNET FLEXNET NETWORK

2 meters

WA2PNU (0-15) Nodes 145.070 MHz
WA2PNU (-4) Node 145.070 MHz (BBS)

Members of the Larkfield Amateur Radio Club are invited to use the W2RGM Dix Hills Repeater System:

2 meters

147.075 MHz out/147.675 MHz in
4z/136.5 Hz PL

70 centimeters

448.500 MHz out/ 443.500 in
2a/114.8 Hz PL

If any member of the Larkfield Amateur Radio Club is interested in setting up an Echolink or IRLP station in their home they should contact Bruno KC2ESI for details on what would be required — besides the basic wideband Internet connection.

The Larkfield Amateur Radio Club
Affiliated with American Radio Relay League

Officers (one year terms)

President Gary McDowell K2TVN (2012)
 Vice-President Chuck Hartley N2JIY(2012)
 Secretary Howard Stern KC2OJO (2012)
 Treasurer Roger Rapp W2GLE (2012)

General Directors (two year terms)

Neil Harris	KC2TAF	(2011-2012)
Pat McPartland	WS2A	(2011-2012)
Steve Hines	N2PQJ	(2011-2012)
Scott Conover	AC2FV	(2012-2013)
Fred Kruger	K2LDC	(2012-2013)
XXXX	XXXX	(2012-2013)

WA2PNU Station Trustee Roger Rapp W2GLE
 WR2ABA Station Trustee Roger Rapp W2GLE
 W2LRC Station Trustee Roger Rapp W2GLE

Larkfield ARC January Birthdays

<u>CALL</u>	<u>Name</u>
KB2KKT	Eugene C. Box
N2UAR	Donald Buckland
W2GLE	Roger Rapp
KB2ZBY	James C. Schmidt

Thanks to Bruno KC2ESI, Jack K2JX, Chuck N2JIY and Steve N2PQJ

The list of the Larkfield Amateur Radio Club repeaters and facilities has been updated after careful verification by Steve. The old list had been allowed to get way out of date. Jack, Bruno and Chuck have completed the work of moving our W2LRC APRS system from Dix Hills to Huntington and have completed the effort of getting our equipment into an all “new” condition.

General Meetings 7:30 PM

January 12, 2012	June 14, 2012
February 9, 2012	September 13, 2012
March 8, 2012	October 11, 2012
April 12, 2012	November 8, 2012

Board Meeting 7:00 PM

January 12, 2012	June 14, 2012
February 9, 2012	September 13, 2012
March 8, 2012	October 11, 2012
April 12, 2012	November 8, 2012

GOOD AND WELFARE

Attention members: Our Good and Welfare Chairperson is Helene Lazarus (XYL of Arnie N2PLS). Please inform her (499-2837) of news about club members so she may make submissions to this publication.

ARES/RACES NET

Attention to all members: The weekly ARES/RACES net is active, meeting every Monday evening at 1930 on 147.210. Check in with our net control, John Allocca WB2LUA, at www.wb2lua.com to learn of any ARES/RACES news and to help maintain your proficiency in emergency communications procedures.

2012 DUES SCHEDULE

Regular Membership: \$35.00

Members Age 65 or older: \$25.00

Members Age 17 or less: \$25.00

Disabled Members: \$25.00

Living Outside Club's Operating Sphere: \$15.00

Add \$10.00 if you want QSX via U.S. Mail

Make your check payable to: LARC

And Mail to:

Larkfield Amateur Radio Club Inc.

PO Box 1450

Huntington, NY 11743

**VE SESSION SATURDAY Feb. 11th
HUNTINGTON TOWN HALL
100 MAIN ST., ROOM 114
WALK-Ins WELCOME**

Team Liaison is Ed KC2E. Contact is Stan N2YKT. Fee is \$15. All elements will be offered and exams start at 9:00AM.

Must have 2 forms of ID, one of which includes a photo. If upgrading, bring an original and a copy of your license and an original of any CSCEs.

The next Executive Board and General meetings will be on Thursday, January 12th at 7:00PM and 7:30PM, respectively.

The weekly Larkfield Info Chat is on Mondays at 8:00 PM on the 147.210 repeater (+0.6 MHz offset, 136.5 tone) or on 147.420 MHz simplex if the repeater is down.

**Larkfield Amateur Radio Club, Inc.
Post Office Box 1450
Huntington, NY 11743**