



The E-VOX

The Official *On-Line*
Newsletter of the



Lehigh **V**alley **A**mateur **R**adio **C**lub - W3OI / KB3SYV
Allentown, Pennsylvania (Lehigh County) - USA

Officers

President: Rod Wolfe, Jr. - N3XG (rjwolfe@rcn.com)
Vice President: Brian Klock - KW3K (BRIAN@STCP.COM)
Secretary: Phillip Bigg - KB3HMK (philbert17@verizon.net)
Treasurer: Brian Snyder - KB3QHA (brian@teamsnyder.net)

Board of Governors

Gary Decker - W3GRD (SCOUTIH79@YAHOO.COM)
Dorian Gable - KB3GZW (kb3gzv@arrl.net)
Robin Gable - KB3GZV (kb3gzv@arrl.net)
Paul Ryan - N0KIA (N0KIA@arrl.net)
Jeff Willett - KB3OCP (JJEFF2W@RCN.COM)



E-VOX Editor - Mark S. Miller (AK3M)
AK3M@rcn.com

Webmaster- Paul Ryan (N0KIA)
(n0kia@arrl.net)

LVARC Repeaters

146.34 / 146.94 (PL 71.9)
147.735/147.135 (PL 167.9)
447.775 (PL 71.9)
Club Simplex Freq. - 147.420

LVARC/RACES/ARES Net

Every Monday at 7:30 (ET)
146.940 (PL 71.9)

D-Star

W3OI Dstar repeaters are now on W3OI at 147.165, W3EPE at 445.225 and W3OK at 145.110




Join us for a Mid-Atlantic regional net Tuesdays on the 147.165 port

To register for the Gateway or need information on setting up the radio, please visit <https://24.229.28.14/Dstar.do>

W3OI Home Page: <http://www.w3oi.org>

May 2012 Contents



Meeting Information	INFORMATIONAL	... page 3
L.C. RACES Net Information	INFORMATIONAL	... page 3
Minutes of the April, 2012 Meeting		pages 4-5
This Month In Ham Radio	INFORMATIONAL	... page 6
VE Report		... page 7
Upcoming LVARC activities.....		... page 8
Joystick Antenna Project page 9
Simple Effective Antennas.....	READER SUBMISSION	... pages 10-11
Constitution and ByLaws pages 12-14



Memorial Day



IMPORTANT

LVARC E-VOX CHANGES COMING IN JUNE, 2012

Come June, 2012, the **EVOX will only be available electronically**. After June, 2012, I will not have access to a copy machine anymore and will **not** be sending the E-VOX via US mail to a select few, as I have in the past. Provided I have a viable email address for you, you will receive the EVOX via email in a pdf format or it will be available on the club's website as always. -- *Mark (AK3M) ed.*

Newsletter submissions can be sent to Mark (AK3M) at AK3M@rcn.com

Your submissions can be text and/or graphics.





The May, 2012 LVARC meeting will be held on **May 1, 2012** at the Tri Clover Fire Company at 7:30 pm.

LVARC / RACES NET

Don't forget to check into the Monday Night LC/LVARC/RACES Net on 146.94 (PL 71.9) with an alternate frequency of 147.735/147.135 (PL 167.9)
The Net begins at 7:30 pm local time (ET).

Many club announcements will be heard there !

Monday Night RACES/ARES Check-In Summary - 2012

<u>Month</u>		<u>Number of Check-In's</u>		<u>Number of Nets/Mondays</u>
January		113		4
February		104		4
March		97		5



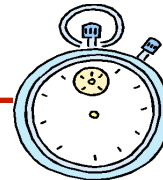
REMEMBER:

Registration for the monthly test session, must be made **NO LATER THAN THE SUNDAY BEFORE THE TEST!**



Contact Mark (AK3M) at AK3M@rcn.com or call 610-865-9183

Minutes of the April, 2012 LVARC Meeting de - Phil (KB3HMK)



The meeting was called to order by President Wolfe at 1934 Hrs, (EST).

The meeting opened with the Pledge of Allegiance, and then a moment of silence was observed for Silent Keys.

There were a total of 17 members in attendance, and the club was joined by 1 guest. The following Board Members were present at the meeting: Rod - N3XG, Brian - KW3K, Phil - KB3HMK, Brian - KB3QHA, Paul - NOKIA and Gary - N3GRD.

Guests: Joseph Sirotnak - WF2O

Corrections additions to the minutes: None noted
Approved by: Gary - W3GRD
Second by: Chuck - WB6CDY
Carried (Y/N) Y

Treasurer's Report (Brian - KB3QHA)

Starting Balance: \$4,431.55

Ending Balance: \$4,165.87

Approved by: John - KB3VNS
Second by: John - AB3LZ
Carried: (Y/N) Y

Committee Reports:

Repeater: Lehigh County has offered to buy the 147.135 repeater antenna. This is a big help for the club, since we won't have to purchase the antenna. No other problems to report.

Program: Tonight's program is Brian (KW3K). He will do a presentation on Skywarn. April 17 is the hands on night. It will be on APRSIS and APRS tracking. The May program will be on "Oscilloscopes" and the May hands on will be "More Oscilloscopes".

Volunteer Examiners: One person tested for March that person passed. If you wish to test, contact Mark (AK3M) to reserve your spot. Rod encouraged members to become VE testers. Contact Mark if interested.

Old Business: Rod can get the foreign HT's for \$40. The only problem is they won't have the batteries. He can get the batteries for \$22. He will see if he can get that reduced.

The club's annual picnic will be August 25 this year. It will be at the Upper Macungie Township Park. This is on Rt. 100 and we have the Hawk pavilion. There is disc golf available and Rod will do a fox hunt again. We will extend an invitation out to the Lehigh County office staff for their purchase of the 135 repeater antenna.

(Minutes cont. on page 5)

(Minutes cont. from page 4)

New Business: Rod asked for a motion to research batteries for the radios and upon finding a good deal, make the purchase not to exceed \$200. The motion was made by Chuck (WB6CDY) and seconded by John (KB3VNS). The motion passed.

Good of the Order: The club received a letter from Mark Petrino (K3MP). He will be moving to Florida and thanked the club for the good memories. He will take some equipment with him. Hopefully there aren't any restrictions for antennas.

Brian (KB3QHA) will be doing another vest order. If interested in purchasing one, please contact him.

There will be a Skywarn class on April 14 at Lehigh Valley - Muhlenburg campus. If you are not a Skywarn spotter or need to renew, this is a good time to do it. They are now requiring spotters to recertify every three years. If interested, please contact Brian (KW3K).

April 28 there is the Hanover Twp. 5k run. It will be at the Hanover Twp. Community Center. If interested in helping, contact Charlie (N3WXO).

April 29 there is the Lehigh Valley Roadrunners _ marathon. If interested in helping, please contact Mark (AK3M).

May 12 there is a 5k run in Palmerton. If interested in helping, please contact Brian Eckert (W3SG) at w3sg@w3sg.org.

June 9 there is another 5k run at the Hanover Twp. Community Center. If interested in helping, please contact Charlie (N3WXO).

The *Super Outbreak* of Tornadoes that spawned 148 tornadoes including 30 F4 and 6 F5 happened 38 years ago today. If interested in learning more, you can Google "Super Outbreak 1974."

The LVARC Monthly Business Meeting Closed at 2035 hrs, (EST.)

Motion by: Chuck - WB6CDY

Second by: John - AB3LZ

In favor: Y

Respectfully Submitted de KB3HMK, Secretary.

See pages 12-14 for the second reading of the proposed changes to the Constitution & Bylaws that were presented at the April meeting.

\$\$\$ W3OI Finances \$\$\$	
Balance ending March, 2012 - \$4,165.87	

This Month In Ham Radio

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
May		1 LVARC Meeting Tri-Clover 7:30	2 Dist. 2 RACES Net - 7:30 147.255	3	4	5
		6	7 ARES RACES Net 7:30	8	9 Dist. 2 RACES Net - 7:30 147.255	10
13 Mother's Day Deadline to schedule test	14 ARES RACES Net 7:30	15 LVARC Activity Night 7:30	16 Dist. 2 RACES Net - 7:30 147.255	17	18 LVARC Test Session 7:00 pm	19
20	21 ARES RACES Net 7:30	22	23	24	25	26
27	28 ARES RACES Net 7:30	29	30 Dist. 2 RACES Net - 7:30 147.255	31  Memorial Day	2012	

LVARC Meeting - Tuesday May 1 - 7:30 - Tri - Clover FC

Test Session - Friday May 18 - 7:00 pm - Red Cross Building

LVARC Activities/Events

Mark your Calendar

PRINT, CLIP and POST



Tuesday May 1 --- LVARC Meeting (7:30 - Tri Clover FC)
Monday May 7 --- LC RACES/ARES Net - 7:30 pm (146.94)
Sunday May 13 --- Deadline to schedule for license exam
Monday May 14 --- LC RACES/ARES Net - 7:30 pm (146.94)
Tuesday May 15 --- LVARC Activity Night (7:30 - Tri Clover FC)
Friday May 18 --- LVARC Test Session (Registration required)
Monday May 21 --- LC RACES/ARES Net - 7:30 pm (146.94)
***** NO MONDAY NIGHT NET - May 28 - Memorial Day Holiday**

There may be additions and deletions to the above dates. Listen to the Monday Night Net, the newsletter and announcements at meetings for changes.

LVARC VE Report

de Mark (AK3M)

At the March 16, 2012 test session,
one tested and one passed.

CONGRATULATIONS to:
Thomas Bentz who
earned his Technician license.



VE's in attendance were Mark (AK3M) Frank (W3FTU) and Walt (KE3SP)

REMEMBER: The LVARC offers amateur radio testing. If you want to obtain your entry level license or if you wish to upgrade, the LVARC can help.

Test sessions are given the 3rd Friday of each month.

REGISTRATION IS REQUIRED!!! Registration must be made no later than the Sunday before the Friday test session.

To schedule a test or for more information, contact Mark (AK3M) at AK3M@rcn.com or call 610-865-9183.



Have an article, diagram or an opinion you would like to share with the LVARC members in this newsletter? Send it to Mark (AK3M). You can submit VOX material in any form. Send it via email (AK3M@rcn.com) or US mail (5508 Hale Ave - Bethlehem, PA 18017). You can send pictures, diagrams or text. **The newsletter needs YOUR material to continue!**

2012 LVARC/ARES Events

June 23-24, 2012 - Field Day
September, 2012 - LVHN/VIA Marathon
October, 2012 - Women's 5K Classic
December, 2012 - Operation Ho Ho



Field Day is **June 23 - 24, 2012**. Details of the LVARC Field Day plans in the June issue of the EVOX.



What is special about the following sequence of numbers?

8 5 4 9 1 7 6 10 3 2 0

(eight, five, four, nine, one, seven, six, ten, three, two, zero)
The numbers are in alphabetical order.

CW on your Smart Phone?- de Chuck (WB6CDY)

<http://mail.google.com/mail/help/promos/tap/index.html>



From the ARRL (3/20/12)

We are excited to announce two new ARRL membership benefits that will be introduced in June 2012.



In addition to the print copy of QST, all members will have access to an online, digital edition of QST at no extra cost. You will be able to access QST from anywhere--on nearly any computer, laptop, mobile device, smartphone and tablet (including Apple iPad, iPhone, and devices using the Android operating system).

Login Instructions

Please follow these personalized, step-by-step directions below to login to the ARRL website:

- Go to www.arrl.org
- At the top, center of the page in "**Site Login**", enter your **Username**: and the password you selected during registration.

READER SUBMISSION

“JOYSTICK” Antenna Project

de Ike (N3IK)

I used the "Joystick" or "Little Wonder", as I knew it (from an article in an old magazine from the 70s, cant find the article so I don't really know which magazine anymore), back in the late 70s and early 80s. I had other antennas of course, a tri-band beam and a long-wire and I used all of them interchangeably. This antenna was always my favorite though, simple, omnidirectional and it worked. --- **WA3WZR**

“For love of country they accepted death”... ~James A. Garfield



SWR ????? This is the best explanation of SWR that I've ever heard. You can learn a lot from this instructional video...

<http://www.youtube.com/watch?v=zOOihiLLS4I&feature=related>

READER SUBMISSION



de Erik (AI3D)

Enter the Seventh Annual ARRL Photo Contest!

Have you ever wanted to see a photo of yours in QST, the annual ARRL Amateur Radio Calendar or another ARRL publication? Well, here's your chance!

Deadline: Photos must be received at ARRL HQ by May 31, 2012.

See the ARRL web site for rules and details.

<http://www.arrl.org/news/enter-the-seventh-annual-arrrl-photo-contes>



ARES Deployment Hat (from the ARRL shop)

Reflective hat, with ARES logo embroidered on front. Perfect for public service and emergency communications support activities. Order No. 0099 - \$14.95



How well do you know history? Take the history quiz from the History Channel at <http://quiz.history.com>



Simple effective antennas - de Ike (N3IK)

The dipole is perhaps the most popular HF antenna. It is a very effective HF antenna and will allow you to rag chew with locals or work some DX. After you build one or two dipoles it is easy to progress to more complex and specialized wire antennas.

I have included a chart of dimensions for the HF bands. The lengths are longer than required to allow you to trim them to exact length for best match. You can allow the ends of the dipole to slope towards the ground but length will be a bit different and this is noted in table 2.

Gather the Parts

You will need a length of wire a few feet longer than the required length. The extra is to provide for trimming to resonance. 3 insulators, coax cable to reach from antenna to your rig. Wire cutter, slip joint pliers, Solder gun or iron, solder, electrical tape, sharp knife and a tape measure (100 ft is best).

Decide if your antenna will run straight or will the ends drop towards ground. There will be a slight difference in length for sloping antennas. Table one is for flat run and table 2 is for sloping elements. (NOTE: L1 is total length, L2 is one half of L1) Start by cutting two lengths of wire for L2. Now connect a insulator to one side of each L2, Wrap wire and solder. The other end of this wire will connect to the center insulator. There are insulators made just for the center connector and if you are using one of these connect it now to the un-terminated ends of L2.

Note: I do not like most center insulators so I use a standard insulator. The reason for this is that most center insulators that use a so239 connector do not provide adequate strain relief for the coax and cost is very high. Using a regular insulator lets you wrap the coax with electrical tape to reduce strain on the cable. Now we need to connect the coax to the antenna.

If using a center insulator just connect the coax with the standard coax connector. If you use a standard insulator you will need to strip about five inches of insulation from the coax. To do this use a sharp knife or razor blade. Next step is to get the center conductor separate from the braid part of the coax. Use a small screw driver and make a small hole in the braid near the bottom of the stripped end. Use the screw driver to pry the inner conductor out and strip and tin the inner conductor. (if you find this difficult simply unbraid the shield and wrap and tin it) Now lay coax along the insulator and solder the braid to one side and the inner conductor to the other. Wrap the entire center conductor with two solid coats of electrical tape. Now pull the antenna up (let one end of the rope you use easy to untie to let antenna down for pruning) connect the rig and check swr, If swr is better at lower frequency the antenna must be shorter at each end, if it better at a higher frequency then wire must be added. Let antenna down and do your trimming. You may need to repeat this several times. An easier way is to use an antenna analyzer. You can connect this and raise the antenna a few feet off ground and trim till you reach a good match. When the antenna is in place, chances are the swr will be different, but as long as it is under 2:1 you are fine (if you use a transmatch you will easily be able to find a near perfect match.

Table 1 Flat Top length in feet.

	L1	L2
160	257.14	128.7
80	124.82	62.41
40	65.91	32.955
30	45.33	22.665
20	33.10	16.55
18	28.85	14.43
15	22.18	11.09
12	18.79	9.38
10	16.36	8.18

Table 2 Sloping

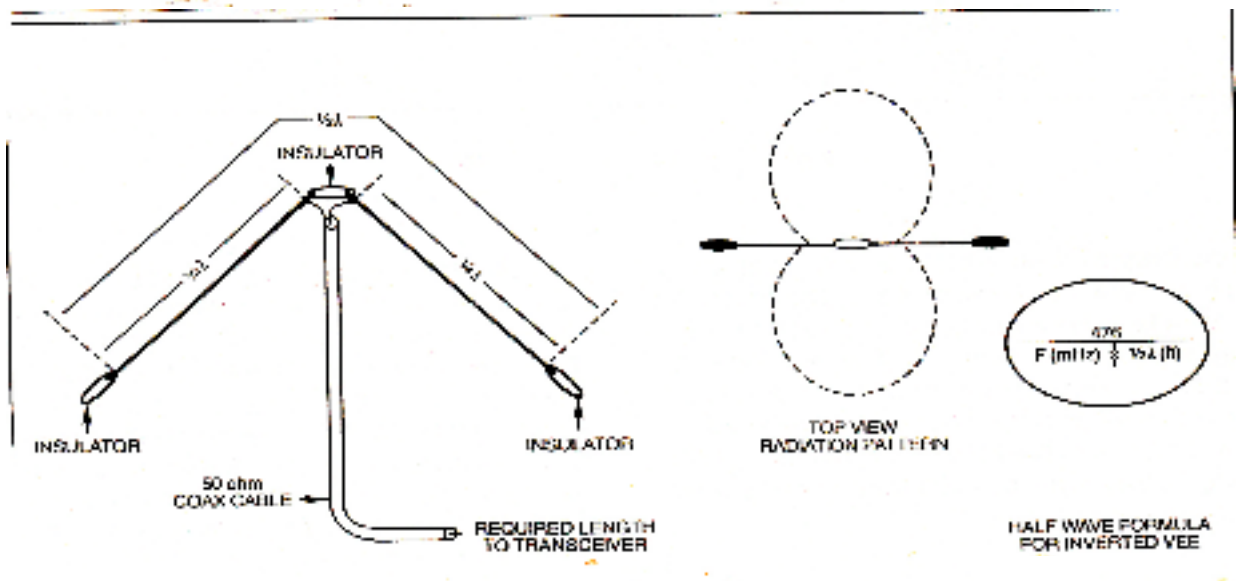
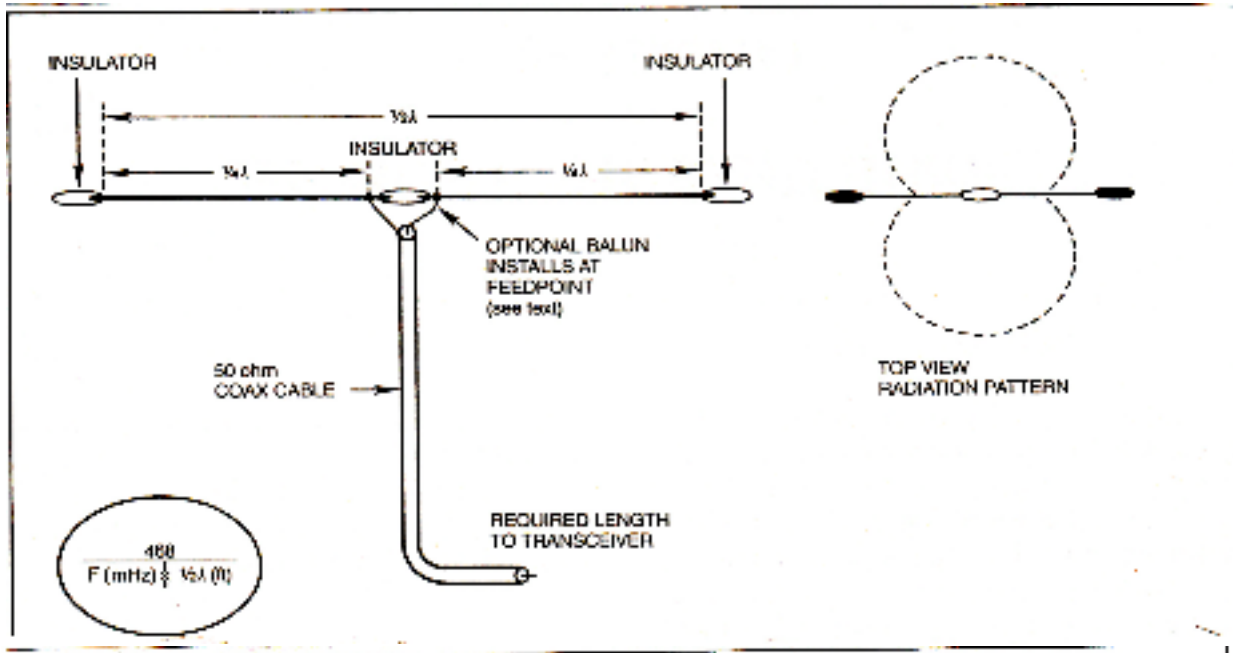
	L1	L2
160	261.53	130.765
80	125.53	63.265
40	67.04	33.52
30	47.12	23.56
20	33.75	16.74
18	26.29	13.15
15	22.55	11.25
12	19.11	9.56
10	16.64	8.32

The lengths are cut for center of the band. If you do prune antenna for a specific frequency the swr will rise as you move away from that frequency. As long as swr remains below 2:1 everything is ok. To simplify the whole thing you can simply cut to the calculated length and use a transmatch to keep swr low.

Now you have the basics, the next step is to look at specific designs to do the job you want. Next article will discuss, gain, directional antennas, horizontal vs vertical and provide information on high gain wire antennas. If you have questions please contact me via email, my address is n3ik2000@yahoo.com. In addition if I can get to a activity meeting I will be glad to demonstrate and answer your questions.

I do have an antenna analyzer you can borrow to tune your antenna. And if possible I'll be glad to show up at your antenna party.

(See page 11 for diagrams)



Credit to K4TWJ, Dave Ingram's "Wire antenna handbook"

CONGRATULATIONS to **Thomas Bentz** who tested at the March 17, 2012 LVARC test session. Tom received his call, **KB3YJN**, on March 23, 2012!



S

Paul did the second reading of the proposed changes to the Constitution & Bylaws. After reading each one, the President asked for a motion to accept. Numbers 1 to 10 relates to the Constitution and numbers 11 to 21 relates to the Bylaws. They are as follows:

1. Article 1 - Section 1
Motion by: Charlie - N3WXO
Seconded by: Chuck - WB6CDY
All in favor: Y
2. Article 2 - Section 1
Motion by: John - AB3LZ
Seconded by: Gary - W3GRD
All in favor: Y
3. Article 3 - Section 2
Motion by: Chuck - WB6CDY
Seconded by: Charlie - N3WXO
All in favor: Y
4. Article 3 - Section 3
Motion by: Brian - KW3K
Seconded by: Walt - KE3SP
All in favor: Y
5. Article 4 - Section 1
Motion by: Chuck - WB6CDY
Seconded by: John - AB3LZ
All in favor: Y
6. Article 5 - Section 1
Motion by: Chuck - WB6CDY
Seconded by: Charlie - N3WXO
All in favor: Y
7. Article 5 - Sections 2 & 3
Motion by: Walt - KE3SP
Seconded by: Gary - W3GRD
All in favor: Y
8. Article 5 - Section 4
Motion by: Chuck - WB6CDY
Seconded by: John - KB3VNS
All in favor: Y
9. Article 6 - Section 6 (New)
Motion by: Brian - KW3K
Seconded by: John - AB3LZ
All in favor: Y

10. Article 6 – Section 7 (Was Section 6)
Motion by: Chuck – WB6CDY
Seconded by: Gary – W3GRD
All in favor: Y
11. Article 1 – Section 1
Motion by: John – KB3VNS
Seconded by: Walt – KE3SP
All in favor: Y
12. Article 1 – Section 1 F & G
Motion by: Gary – W3GRD
Seconded by: Chuck – WB6CDY
All in favor: Y
13. Article 2 – Sections 1, 2, 3, & 4
Motion by: John – AB3LZ
Seconded by: Walt – KE3SP
All in favor: Y
14. Article 2 – Section 5
Motion by: Chuck – WB6CDY
Seconded by: Don – N0VGA
All in favor: 10 In Favor and 4 Opposed
(It was recommended to delete this section, the members voted to keep it)
15. Article 2 – Section 6
Motion by: Chuck – WB6CDY
Seconded by: John – KB3VNS
All in favor: Y
16. Article 2 – Section 7
Motion by: Chuck – WB6CDY
Seconded by: Don – N0VGA
All in favor: Y
17. Article 3 – Section 2
Motion by: John – AB3LZ
Seconded by: Chuck – WB6CDY
All in favor: Y
18. Article 3 – Section 6 A, B, C, F, H, J, & K
Motion by: Chuck – WB6CDY
Seconded by: Gary – W3GRD
All in favor: Y
19. Article 4 – Section 1
Motion by: Walt – KE3SP
Seconded by: John – KB3VNS
All in favor: Y

- 20. Article 5 – Section 1
Motion by: Chuck – WB6CDY
Seconded by: Brian – KW3K
All in favor: Y

- 21. Article 5 – Section 3
Motion by: Bob – WB3W
Seconded by: Chuck – WB6CDY
All in favor: Y

Paul did the first reading of four more proposed changes to the Constitution and Bylaws. He will do the second reading at the May meeting and they will then be voted on.



Its that time of year ... Spring and Summer is when the LVARC provides communications support for many community activities (see page 8).



If you can help with one of more of these, contact Mark (AK3M) at AK3M@rcn.com. Even if you have never participated in an ARES event, you are welcome to volunteer. Our services could without your help!



I am happy to report that reader submissions to the newsletter have increased over the past few months!

Remember, this is YOUR newsletter and cannot survive without your input. Send your graphics and/or text to Mark (AK3M). - *Mark (AK3M)*



Need a road trip? Visit [Hamvention, 2012.](#)
May 18-20 2012

