

Lewisville Amateur Radio Association



W5LVC UPCOMING EVENTS

Christmas Party

**Saturday, Dec. 9, 1900 at
Korner Café, 921 W. Main St.**

Business Meeting

**Saturday, Dec. 16, 0800 at
Lewisville Central Fire Station
188 N. Valley Pkwy.**

Swap Meet

**Saturday, Jan. 13, 1000 at
Vista Ridge Park
2950 Lake Vista Dr.**

Winter Field Day

**Saturday & Sunday, Jan. 27 & 28
See Pg. 7 for additional info.**

Weekly Nets

Information and Help Net

Wednesday, 7:00 PM on 145.170 (PL 110.9, -.600)repeater

General & Extra Study Net

Saturday, 7:30 PM on 145.170 (PL 110.9, -.600)repeater

Saturday Breakfast (except 3rd Saturday)

**Tierney's Café & Tavern
208 E. Main St., Old Town Lewisville**

Association Contact Information

**Mailing address: P.O. Box 292282
Lewisville, TX 75029**

Email address: W5LVC.Club@gmail.com

**Membership Questions/Issues contact
Ron, KF5OMH, at club email address or
972-742-7839**

Web Site: W5LVC.com

**Check us out
Facebook facebook.com/w5lvc/
Twitter @W5LVCLUB**

**Calendar of events: [Click Here](#)
and scroll down to Upcoming Events**

LARA NEWSLETTER

Volume 2, Issue 12, December 9, 2017

Words From the President —

Merry Christmas to everyone and your family. I wish you the best Christmas and a very happy New Year.

I would like to say a great big thanks to Ron Ford, KF5OMH for the time he spent making this newsletter what it is today. It's sad to see you hand it off but, I think Ron Bath, KG5VIS will do a great job keep it going as I know your plate is full with all you do for the club. Thanks to both of you guys.

My hopes and prayers are that each one of us try to help someone in need. It could just be something small like lending a ear or just making sure a friend is not on their own for the holiday.

73' Len KC5MPX

LARA Santa Net

Several members have expressed a desire to have a Santa Net on a local repeater. So here goes — we'll conduct a net on the 145.170 repeater on Dec. 15 & 16 from 1800-2000. We'll set-up in the green space between the Wal-Mart parking lot and Main St. in Lewisville with a 2m station where youngsters can talk to Santa.

We can use a few more hands to attract youngsters to the station as they enter/leave the building and/or be a station operator for a period.

We'll also publish the net to other clubs in the area so they can participate. The club call sign, W5LVC will be used for net control who will have contact with the jolly old elf.

2017-2018 Officers & Support

President
Len Shipp, KC5MPX 972-965-9082

Vice President
Jim Lavin, K5VZ 214-629-2327

Secretary
Tim Monk, WZ5TM 972-436-4866

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Ron Bath, KG5VIS 817-980-3165

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Association membership is open to all persons interested in amateur radio. Join at any meeting, by mail or online through our web site. Annual dues are \$25 individual, \$30 family.

Ham Trivia

Who initially figured out how sound waves traveled and how to transmit those waves, wirelessly, from one point to another?

- A. Reginald Fessenden
- B. Samuel Morse
- C. Thomas Edison
- D. Guglielmo Marconi

Extra Pool Question

What is the direction of an ascending pass for an amateur satellite?

- A. From west to east
- B. From east to west
- C. From south to north
- D. From north to south

Answers to Trivia and Pool questions at bottom of next page—no fair looking ahead.

Special Note From the Editor

Effective with the January issue of the LARA Newsletter the editor responsibilities will move over to Ron, KG5VIS. The last 1 1/2 years of publishing this communication have been a lot of fun but I've found that my plate is overflowing and Ron graciously volunteered to take it over. **Thanks Ron.** Over this period of time numerous members have contributed articles for the newsletter; and for that I offer a big **THANK YOU** to each and every one of you. Please continue your support of the newsletter by continuing to submit items to Ron.

73,
Ron KF5OMH

Do you have children or grandchildren that would like to talk to Santa on the radio? Here are two HF nets that I'm aware of. See item on pg.1 for the LARA Santa Net (Ed.)

Band	Freq.	Date(s)	Time	Additional Info
80m	3.916	11/24—12/24	0130 UTC	http://www.tailgatersnet.com/santa-net.html
20m	14.305—14.320	12/23—12/24	1900 UTC—0000UTC	http://pbcskywarn.angelfire.com/santa.htm

A NEW CHRISTMAS POEM

TWAS THE NIGHT BEFORE CHRISTMAS,
HE LIVED ALL ALONE,
IN A ONE BEDROOM HOUSE MADE
OF
PLASTER AND STONE.

I HAD COME DOWN THE CHIMNEY
WITH PRESENTS TO GIVE,
AND TO SEE JUST WHO
IN THIS HOME DID LIVE.

I LOOKED ALL ABOUT,
A STRANGE SIGHT I DID SEE,
NO TINSEL, NO PRESENTS,
NOT EVEN A TREE.

NO STOCKING BY MANTLE,
JUST BOOTS FILLED WITH SAND,
ON THE WALL HUNG PICTURES
OF FAR DISTANT LANDS.

WITH MEDALS AND BADGES,
AWARDS OF ALL KINDS,
A SOBER THOUGHT
CAME THROUGH MY MIND.

FOR THIS HOUSE WAS DIFFERENT,
IT WAS DARK AND DREARY,
I FOUND THE HOME OF A SOLDIER,
ONCE I COULD SEE CLEARLY.

THE SOLDIER LAY SLEEPING,
SILENT, ALONE,
CURLED UP ON THE FLOOR
IN THIS ONE BEDROOM HOME.

THE FACE WAS SO GENTLE,
THE ROOM IN SUCH DISORDER,
NOT HOW I PICTURED
A UNITED STATES SOLDIER.

WAS THIS THE HERO
OF WHOM I'D JUST READ?
CURLED UP ON A PONCHO,
THE FLOOR FOR A BED?

I REALIZED THE FAMILIES
THAT I SAW THIS NIGHT,

OWED THEIR LIVES TO THESE SOLDIERS
WHO WERE WILLING TO FIGHT.

SOON ROUND THE WORLD,
THE CHILDREN WOULD PLAY,
AND GROWNUPS WOULD CELEBRATE
A BRIGHT CHRISTMAS DAY.

THEY ALL ENJOYED FREEDOM
EACH MONTH OF THE YEAR,
BECAUSE OF THE SOLDIERS,
LIKE THE ONE LYING HERE.

I COULDN'T HELP WONDER
HOW MANY LAY ALONE,
ON A COLD CHRISTMAS EVE
IN A LAND FAR FROM HOME.

THE VERY THOUGHT
BROUGHT A TEAR TO MY EYE,
I DROPPED TO MY KNEES
AND STARTED TO CRY.

THE SOLDIER AWAKENED
AND I HEARD A ROUGH VOICE,
"SANTA DON'T CRY,
THIS LIFE IS MY CHOICE;

I FIGHT FOR FREEDOM,
I DON'T ASK FOR MORE,
MY LIFE IS MY GOD,
MY COUNTRY, MY CORPS."

THE SOLDIER ROLLED OVER
AND DRIFTED TO SLEEP,
I COULDN'T CONTROL IT,
I CONTINUED TO WEEP.

I KEPT WATCH FOR HOURS,
SO SILENT AND STILL
AND WE BOTH SHIVERED
FROM THE COLD NIGHT'S CHILL.

I DIDN'T WANT TO LEAVE
ON THAT COLD, DARK, NIGHT,
THIS GUARDIAN OF HONOR
SO WILLING TO FIGHT.

THEN THE SOLDIER ROLLED OVER,
WITH A VOICE SOFT AND PURE,
WHISPERED, "CARRY ON SANTA,

IT'S CHRISTMAS DAY, ALL IS SECURE."

ONE LOOK AT MY WATCH,
AND I KNEW HE WAS RIGHT.
"MERRY CHRISTMAS MY FRIEND,
AND TO ALL A GOOD NIGHT."

This poem was written by a Marine.
The following is his request. I think it
is reasonable.

PLEASE: Would you do me the kind
favor of sending this to as many
people as you can? Christmas will be
coming soon, and some credit is due
to our U.S. service men and women
for our being able to celebrate these
festivities. Let's try in this small way
to pay a tiny bit of what we owe.
Make people stop and think of our
heroes, living and dead, who sacrificed
themselves for us. Please, do
your small part to plant this small
seed.

May God Bless You and Have A
Great Day!

Information and Tips

QRP or 1.5 Kilowatt of RF Power out - QRO?

By: JIM, WB8YWA

There is a place in ham radio for all power levels. We have operators who only use less than 10 watts (QRP) to make their contacts. Then we have those that would never transmit without every watt they can obtain to the point of being illegal.

What is QRP? From Wikipedia, the free encyclopedia



QRP low-power transmitter and receiver that fits inside an Altoids tin.

In amateur radio, **QRP operation** refers to transmitting at reduced power while attempting to maximize one's effective range. The term QRP derives from the standard Q code used in radio communications, where "QRP" and "QRP?" are used to request, "Reduce power", and ask "Should I reduce power?" respectively. The opposite of QRP is QRO, or high-power operation.

QRP plays a large role in our Armature Radio hobby. Go to the web and look up this site

<http://www.qrparci.org/links/qrp-clubs-and-groups>. You will find 19 different clubs that support QRP activity.

One here in north Texas is <http://www.kk5na.com/nortex.htm>. Below is text from their web site.

"NORTEX QRP Club is an informal group of Amateurs who get together to share ideas, stories, technical knowledge and just plain camaraderie in the area of low-power operation and kit building."

The North Texas QRP Club (NORTEX QRP) provides a forum for those who enjoy the thrills and challenges of building and/or operating with low power equipment."

There is a lot to be said when you can work DX using very low power. Below are some modes and activities using QRP.

- CW is probably the most used mode for QRP.
 - ◊ Reason— before digital modes this was by far the best low signal method to make a contact.
 - ◊ When building equipment it is the easiest transmitter to construct.
- Digital Modes
 - ◊ PSK is sometimes used at higher power levels than the 10 watts or below that is considered QRP, but I have used 20 watts to work stations half way around the world and had a real QSO. Not just the call, signal and good bye that most DX is.
 - ◊ FT8 which uses very little power.

Continued on next page

- Weak Signal VHF & UHF
 - ◊ CW & SSB modes on 6, 2, 1.25 meters & 70 cm meters
 - ◊ Most weak signal VHF & UHF operators run high power, but there are a few that love to use very low power to make their contacts.
- HF
 - ◊ CW & SSB
 - ◊ Special QRP Frequency are set aside and are listed below.

Bands	Freq.	Mode	Comment	Sources
160m	1.810	CW		AC6V, ARRL, K3WWP, NJQRP, QRP ARCI
	1.815	CW	VK	VK3YE
	1.843	CW	Europe	AC6V, GQRP, RU-QRP, QRP ARCI
	1.843	SSB	Europe	NJQRP
	1.910	SSB		AC6V, ARRL, NJQRP, QRP ARCI
80m/75m	3.530	CW	VK	VK3YE
	3.540	CW	US	VK3YE
	3.560	CW		AC6V, ARRL, GQRP, K3WWP, NJQRP, RU-QRP, VK3YE, QRP ARCI
	3.690	SSB	Europe	GQRP, NJQRP, RU-QRP, QRP ARCI
	3.710	CW	US Novice	AC6V, ARRL, NJQRP
	3.985	SSB		AC6V, ARRL, NJQRP, QRP ARCI
40m	7.003	CW	(Japan, daytime only)	-
	7.028	CW	VK	VK3YE
	7.030	CW	Europe (& US)	AC6V, ARRL, GQRP, K3WWP, NJQRP, RU-QRP, VK3YE
	7.035	CW	(QRP-L)	AC6V
	7.040	CW	(US)	AC6V, ARRL, K3WWP, NJQRP, VK3YE --- now moving to 7.030
	7.060	CW	(Europe)	AC6V, NJQRP
	7.090	SSB	(Europe)	GQRP, NJQRP, RU-QRP
	7.110	CW	US Novice	AC6V, ARRL, K3WWP, NJQRP
	7.122	SSB		QRP ARCI
	7.285	SSB		AC6V, ARRL, NJQRP
30m	10.106	CW		AC6V, ARRL, GQRP, K3WWP, NJQRP, VK3YE, QRP ARCI
	10.116	CW		AC6V, GQRP, QRP ARCI
20m	14.060	CW		AC6V, ARRL, GQRP, K3WWP, NJQRP, VK3YE, RU-QRP, QRP ARCI
	14.285	SSB		AC6V, ARRL, GQRP, RU-QRP, QRP ARCI
17m	18.086	CW	GQRP	GQRP
	18.096	CW		AC6V, GQRP, K3WWP, NJQRP, RU-QRP, QRP ARCI, VK3YE
	18.130	SSB		AC6V, GQRP, QRP ARCI

Continued on next page

	21.060	CW		AC6V, ARRL, K3WWP, NJQRP, VK3YE, RU-QRP, QRP ARCI
15m	21.110	CW	US Novice	AC6V, K3WWP, NJQRP
	21.285	SSB	Europe	GQRP, NJQRP, RU-QRP, QRP ARCI
	21.385	SSB		AC6V, ARRL, NJQRP, QRP ARCI
	24.906	CW		AC6V, GQRP, RU-QRP, QRP ARCI, VK3YE
12m	24.950	SSB		AC6V, GQRP, QRP ARCI
	24.956	SSB		(some blogs...)
	28.060	CW		AC6V, ARRL, GQRP, K3WWP, NJQRP, VK3YE, QRP ARCI
	28.110	CW	US Novice	AC6V, ARRL, K3WWP, NJQRP
10m	28.355	AM	(Japan)	Japan's 28.305MHz AM Group (28.205-28.355); 28.335, 28.345 too.
	28.360	SSB	(Europe)	NJQRP, RU-QRP
	28.365	SSB	Europe	GQRP, QRP ARCI
	28.385	SSB	US	AC6V, NJQRP, QRP ARCI
	28.995	AM	(Japan)	Japan's 28.855MHz AM Group (28.855-28.995)

Most Radios can be adjusted to be used as a QRP rig, so check out these frequencies and who knows you might get hooked on this part of our great hobby.

What is QRO? From Wikipedia, the free encyclopedia

Shall I increase my power? Anything more than 10 Watts of power output.

More power than QRP of 10 watts. Most think it is power obtained when using a linear amplifier. The FCC states that we can use either 1000 watts CW or 1500 watts PEP when using SSB. They also state to use only enough power as to make the contact or communicate. Rarely does a ham pay attention to the later statement. There are many reasons, with the biggest one being constant changing signals causing fading, not to mention static crashes.

Then we have many hams that go through their radio life and only have a 100 watt rig. They have all kinds of fun and can chat with ham's, at times, all over the world. There is a lot to be said about doing it without the big guns. Most DX'ers and contesters have big antennas and big amps which makes DX using 100 watts a lot harder but it can be done.

What does WB8YWA use for power? It depends. On weak Signal VHF & UHF I use 100 watts. Never had an amp for these bands but always dream it would be nice to have one. Even without an amp I have worked all states on six meters SSB using 100 watts and a homebrew 5 element beam at 40'. On 2 meter SSB I have talked and had QSO's with stations in KA, MO, LA, MS, OK and all over Texas using 100 watts. On HF I mostly use 100 watts with checking into the traffic nets and even try to work DX using just 100 watts. If I make it, great, if they do not hear me after few times, I turn on my 1000 watt amp. Another time I use the amp is every morning when I chat on either 14.274 or 7.281 with close friends around the country (MI, NY, IN, KY, TN FL & TX). During this morning get together I use the amp to help hold the frequency and get through the fades and QSB.

One more comment to make is, it is far better to put money into your antennas then it is an amp. Antennas help both the receive and the transmit, whereas the amp only helps your transmit. With that said, you will be glad your friend a 1000 plus miles away has one while you are in QSO.

Continued on next page

Another comment is, if you are transmitting using 100 watts and a station says you are S6 in strength you need to double your power (200 watts) to increase a mere 3dB. To gain another 3db you again need to more than double (400 watts) your power. If the noise floor is setting at S6 and you can increase another S unit (6 dB) in strength it can make being heard or not.



Picture of a nice QRP only station



Picture of a nice QRO station

Key point is, there is a time for all and Ham Radio is a lot of fun to enjoy?

Operations

Winter Field Day—LARA will be participating in Winter Field Day on January 27 & 28. Setup will begin immediately following our breakfast gathering on the 27th. Operations will start at 1300 and continue until 1300 Sunday (hopefully). We hope to reserve Conner Pavilion again this year but will not be able to confirm the reservation until after January 1. At the same time we will have to confirm our ability to operate for the full 24 hour period. The Winter Field Day rules can be reviewed here—<https://www.winterfieldday.com/rules>.

VARIOUS TIDBITS

Special Events

12/02/2017 |W2W – Pearl Harbor Commemoration

Dec 2-Dec 10, 1300Z-2200Z, W2W, Baltimore, MD. The Amateur Radio Club of the National Electronics Museum (K3NEM). 14.241 14.041 7.241 7.041. Certificate & QSL. W2W Special Event Station, Box 1693, MS 4015, Baltimore, MD 21203. Primary operation will be Dec 2-Dec 3 with additional operation possible Dec 3-Dec 10, 2017. Times are daily.
ww-2.us

12/09/2017 |USS Midway Museum Ship Special Event: Pearl Harbor Remembrance Day

Dec 9, 1700Z-2359Z, NI6IW, San Diego, CA. USS Midway (CV-41) Museum Ship. 14.320 7.250 PSK31 on 14.070 D-STAR on REF001C. QSL. USS Midway CV-41 COMEDTRA, 910 N Harbor Drive, San Diego, CA 92101.

12/11/2017 |NASA On The Air - Apollo 17 anniversary

Dec 11-Dec 14, 0000Z-2359Z, NN4SA, etc, Huntsville, AL. NASA Amateur Radio Clubs. 14.305 various. QSL. Address at QRZ.COM for appropriate callsign, NN4SA only is c/o Don Hediger ES32, Huntsville, AL 35812. Beginning of year long event where 12 clubs at NASA centers and facilities will be operating special events, contests, and casual contacts. Participating calls as of this date: NA6MF; NA6SA; W6VIO; NA1SS; W5RRR; NN4SA; N1KSC; KG4NJA; W4NAN; W4WFF, and NA8A. See URL for complete list of clubs and call signs which will be active and further details of the year-long event which ends in Dec. 2018. We will be self-spotting on the DX clusters and using multiple bands and modes. QSL info available at each call's QRZ.COM page.

12/16/2017 |WX3MAS

Dec 16-Dec 17, 1400Z-2200Z, WX3MAS, Nazareth, PA. Christmas City Amateur Radio Club and the Delaware-Lehigh Amateur Radio Club. 28.465 14.265 7.270 3.850. Certificate. WX3MAS, Greystone Building, 14 Gracedale Ave, Nazareth, PA 18064. CW and PSK31 on 20 and 40 meters; possible 10 and 15 meters depending on conditions. Did you contact WX3MAS? Send a QSL and 9x12 SASE for colorful commemorative certificate. Event runs 1400-2200Z each day
www.dlarc.org

Maker Fair - Maker Faire is a gathering of fascinating, curious people who enjoy learning and who love sharing what they can do. From engineers to artists to scientists to crafters, Maker Faire is a venue for these "makers" to show hobbies, experiments, projects. It is called the Greatest Show (& Tell) on Earth - a family-friendly showcase of invention, creativity, and resourcefulness. Glimpse the future and get inspired! The Denton Mini Maker Faire will be held on Saturday, February 24, 2018 at the Denton Civic Center. The three local amateur radio clubs (LARA, LAARK, and DCARA) will be participating and Scott, KG5RJR, and Ron, KG5VIS will be representing LARA at a joint table with the other two clubs.

Skywarn Training—This training will take place in Denton Saturday, February 24 at the TWU MCL Bldg. 9:00 AM-12 Noon (for the basic training) and 1:00-4:30 PM (for the advanced training). As a reminder, if you are a member of Denton County ARES the basic training is required once every two years in order to maintain your membership.



General and Extra Training—Jim, K5VZ wants to establish a training schedule for 2018 and is asking members to contact him if you would like to see a General or Extra class. If you don't catch him on a repeater you can email him at jlavin@jimlavine.net.

Sci-Tech Discovery Center —The second Saturday of each month is the monthly amateur radio demonstration at the **Sci-Tech Discovery Center** in Frisco. Operators are needed to get kids and their families on the air and to be ambassadors for amateur radio. A background check is required, and the forms can be found at the center's website at www.mindstretchingfun.org. Our next operation day will be Saturday, **January 13th**. We have changed our operating times to 1pm to 4pm to be available to get the public during a busier timeframe over there.

If you can't be there for the entire four hours, you can come for two hours. If you would like to attend, please let Michael Porter know via e-mail (KF5LDJ@GMAIL.COM).

November Meeting Minutes

Recorded by: Heidi Boutwell

Officers Present

Len Shipp, KC5MPX
 Jim Lavin, K5VZ
 Ron Ford, KF5OMH
 Jim Horton, WB8YWA
 Mike Reitz, W5EVT

Voting Members Present

Clark Highsmith, K5LGZ
 Rich Alverson, W5RPA
 Ron Bath, KG5VIS
 Scott Boutwell, KG5RJR
 Mike Beck, WX5MAB
 Marty Wells, KM5OI
 Steve Kline, W5JK
 Ron Swain, KG5VIV
 Dale Finley, KB5NFT
 Brian Ulmer, KC5MPY

Non-voting Members Present

Tom Quinn, KG5VIU

Guests Present

Heidi Boutwell
 Ken Mitchell, KD2KW
 Coby Kline

President Len Shipp, KC5MPX, called the meeting to order at 0804

Pledge to the American flag was recited

Ken Mitchell, KD2KW, from LARK presented a soldering kit project that they are helping to sponsor.

- It is a good intro to soldering project.
- Kit cost \$15-\$20
- Offering LARA the opportunity to participate
- Discussion held and moved to New Business
- LARK will conduct some soldering classes next year

October meeting minutes as printed in the newsletter

Motion to accept by Ron, KF5OMH

Second by Scott, KG5RJR

Approved by the membership

Treasurers Report presented by Ron, KF5OMH – Beginning balance checking account \$2529.92; \$0 income; \$99.00 expenses; ending balance \$2430.92. Savings account remains at \$31.66. Club Assets \$3080.57. Net Value \$5543.15.

LARA is now a member of Amazon Smile. To register LARA as your charity of choice go to smile.amazon.com. Also working on obtaining recognition with other organizations.

Motion to accept by Jim, WB8YWA
 Second by Jim, K5VZ
 Approved by the membership

Technical Report presented by Jim, WB8YWA

- 145.170 operating fine.
- 220 repeater currently non-functioning and located at Jim, K5VZ QTH. (See further discussion under new business)

Operations Report presented by Mike, W5EVT

- LFD Open House was held Oct. 14. Had good participation and numerous contacts made by the Special Event station.
- Boy Scout Jamboree on the Air was held Oct. 21. 23 youth and 26 visitors attended. Received national press coverage through K2BSA.
- Christmas Party will be held Dec. 9, 7:00 PM at the Korner Café in Lewisville. Bring a White Elephant gift valued at \$20.00 or less.
- Winter Field Day is scheduled for Jan. 27-28.
- Reminder that when your ARRL membership comes due for renewal to do it through the club since we receive a \$2.00 allocation for renewals and \$15.00 for new members. See Ron, KF5OMH to obtain forms.

Motion to accept report by unknown
 Second by unknown
 Approved by the membership

Old Business

- Parity act – died in committee
- Communications with North Pole – city moved activity to 11/18 and did not have any advance notice therefore, we will not participate this year
- Window stickers approved at the October meeting have been purchased for \$40.00 for a count of 200. Ron, KF5OMH will handle the stickers along with the shirts.
 Motion by Ron KF5OMH to charge \$1.00 each
 Second by Jim, K5VZ
 Approved by the membership
- Business cards as approved at the October meeting have been purchased for \$20.00 for a count of 500. See Ron, KF5OMH, for your supply. There will be no charge for the cards.

New Business

- Date for next Swap Meet – Set for Jan. 13 at 10:00. Same location as in the past
- Maker Fair in Denton Feb. 24. DCARA has asked LARK and LARA to share a table at the event and split the cost of \$100. Scott, KG5RJR and Ron, KG5VIS volunteered to man the table for LARA.
 Motion by Jim, WB8YWA to allocate \$250.00 for expenses
 Second by Mike, W5EVT
 Approved by the membership
- Winter Field Day, Jan 27-28. 10+ people want to participate
 Motion by Mike, W5EVT to allocate \$200.00 for expenses
 Second by Jim, WB8YWA
 Approved by the membership
- 220 repeater which is currently out of service
 - Discussion
 - ◊ Equipment owned by individuals, not the club
 - ◊ Does the club really want a repeater?
 - ◊ 220 pair is the only thing available
 - ◊ Registered to the club
 - ◊ Possible site on 407

- ◊ Cost of \$2000-3000 to purchase new equipment
- ◊ Only six people at the meeting have 220 capable equipment
- ◊ Issues: location and maintenance
- ◊ Recommendation: establish a repeater committee to explore and make recommendations
- ◊ Len, KC5MPX, purchased equipment for repeater but is not willing to donate or sell it to the club.
- ◊ 440/2m frequencies are oversaturated.

Motion by Jim, WB8YWA, to send email to all members to determine interest in club ownership of a repeater.

Based on the response either form a committee to make recommendations or the issue will die.

Second by Scott, KG5RJR

Approved by the membership

- Ron, KF5OMH suggested we donate \$150 to DCARA in support of the 145.170. Discussion as to who owns the repeater—Denton County or DCARA or someone else. Jim, WB8YWA to contact his counterpart at DCARA to determine who owns the repeater. Tabled until next meeting.
- Jim, K5VZ asked what kind of classes we should be planning for next year. He suggested four Technician Classes and asked for input from the membership as to how many General and Extra classes are desired.
- Junk Box – 1 returned and Ron, KG5VIS will take it. 1 box still out

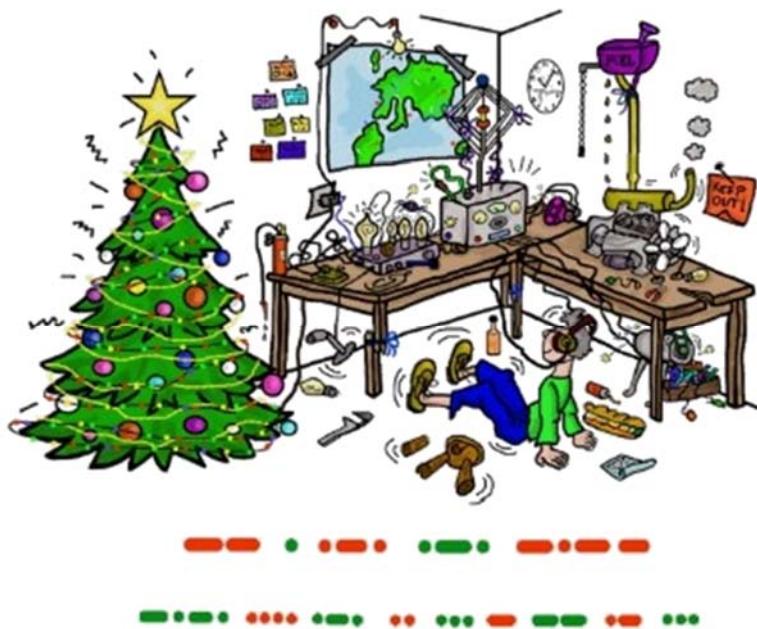
Motion to adjourn by Ron, KG5VIS

Second by Jim, WB8YWA

Approved by the membership

Meeting adjourned at 9:15

Editor note—Thanks to Heidi for recording the minutes in the absence of the Secretary.



November Treasurer's Report

By: Ron, KF5OMH

LARA Treasurer's Report - November 2017**Checking Account**

Beginning Balance	\$2,529.92
Income	
Dues	\$12.50
Donations	\$0.00
ARRL	\$0.00
Stickers	\$21.00
Shirts	\$0.00
Total Income	\$33.50
Expenses	
Fees	\$0.00
Repeater	\$0.00
Miscellaneous	\$99.00
Total Expenses	\$99.00
Ending Balance	\$2,464.42

Savings Account

Beginning Balance	\$31.66
Deposits	\$0.00
Withdrawals	\$0.00
Ending Balance	\$31.66

CLUB ASSETS

For Sale	\$250.00
Stock (Not for Sale)	\$1,374.60
Loaner Equipment	\$1,780.00
	\$3,404.60

LARA NET VALUE	\$5,900.68
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Crossword

By: Chris Codella, W2PA (used with permission)

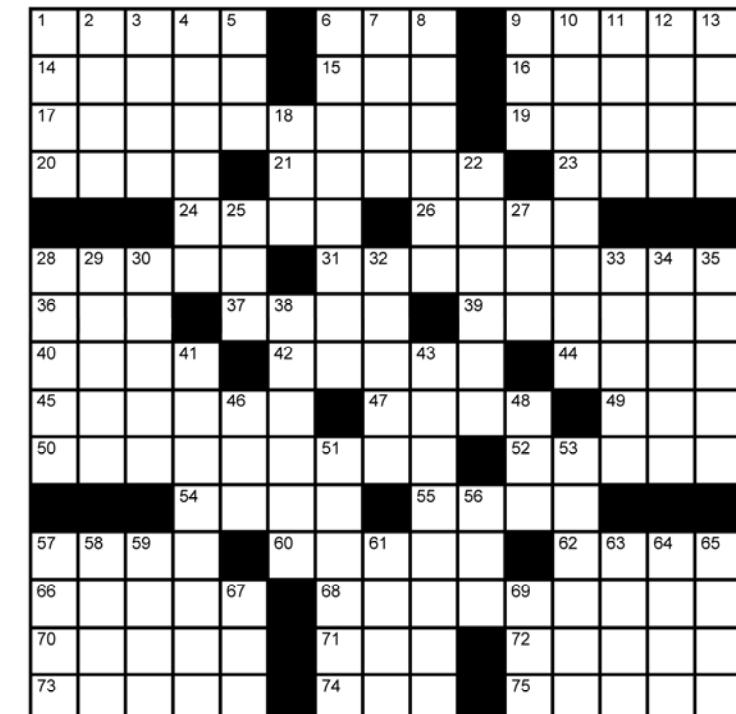
Answers elsewhere in this newsletter

by Chris Codella, W2PA

7/10/2008

Famous Hams**Across**

1. VU metro (not meter)
6. Call to Bo-peep
9. T.O.M.
14. TN made rig
15. Rear panel label
16. 7X neighbor
17. Used before flip tops
19. More unwet
20. Infrequent frame rate mode
21. Major Armstrong, familiarly
23. Wiring harness parts
24. IT9 peak
26. Prefix with -tuner
28. Kind of drum
31. Contact plating solution?
36. Boatanchor unit
37. Part of ARRL: Abbr.
39. Enter

40. Suffix with reson-**42. In reserve****44. Produces radiator supports****45. Giving up****47. GM monster place****49. Viking partner****50. Callsign of 31 across****52. Overcome utterly****54. First QTH?****55. Hand (out)****57. Small fight****60. Field unit?****62. Competent****66. Loafed around****68. Nonphysical, say****70. Met show****71. Feed lines to****72. Partner of 9-across****73. Rocking ham****74. Hockey's Bobby****75. DXpeditioner's instruction****Down****1. Manuals, slangily****2. Times past****3. Fuzz****4. ARRL president, and president's grandson****5. Rev. of out.****6. Wound covers****7. All over again****8. Of a heart chamber****9. Cap. unit****10. Missile type****11. Ancient WARC band?****12. Prof. org. with many ham members****13. Elser-Mathes Cup objective****18. Poetic dusk****22. Pushes, gently****25. Leaves in a bag****27. The one above six?****28. Two or more yagis, say****29. Do and so****30. Tube terminal****32. Gasket****33. Possible Congo prefix****34. ___ alcohol****35. Malyj Vysotskij prefix****38. Suffix with electro-****41. Force-12 element fasteners, say****43. More lethal****46. Homer's neighbor****48. Pre-ham?****51. Int'l org. promoting learning****53. What the shack might do with the amplifier on****56. Crew tool****57. QRS****58. Between Oscar and Quebec****59. Kind of antenna aimer****61. A receiver annoyance, briefly****63. Arrest****64. 47-across is one****65. Exuberance****67. CW word****69. Zone type**

Area Repeaters

Freq.	Shift	PL	Call	Name
145.1700	-.600	110.9	W5FKN	DCARA-Denton County EOC
145.2100	-.600	110.9	N5MJQ	Metrocrest ARA-Carrollton
145.4000	-.600	110.9	NETARC	Grapevine
145.4900	-.600	85.4	WD5U	Rosston Tower
146.9200	-.600	110.9	W5NGU	DCARA - Denton
146.6200	-.600	110.9	N5ERS	Flower Mound
146.7800	+.600	131.8	WQ5A	Wise County Skywarn
147.3800	+.600	110.9	K5LRK	LAARK - The Colony
224.000	-1.6	110.9	K5LRK	LAARK - The Colony
224.080	-1.6	110.9	W5LVC	LARA
224.920	-1.6	110.9	AF5RS	AF5RS
441.3250	+5.0	88.5	W5NGU	Portable DCARA repeater
442.7500	+5.0	110.9	KA5R	Trophy Club
444.5125	+5.0	123	KE5UT	Celina
442.1750	+5.0	110.9	NETARC	Southlake
442.600	+5.0	131.8	WQ5A	Wise County Skywarn
442.6500	+5.0	110.9	N5MJQ	Metrocrest ARA-Carrollton
443.3000	+5.0	110.9	K5LRK	LAARK-C4FM only
443.5250	+5.0	118.8	WA5LIE	DCARA - Denton
443.7375	+5.0	141.3	N6LXX	Rosston Tower
443.8750	+5.0	110.9	NETARC	DFW Airport
444.0500	+5.0	110.9	W5NGU	DCARA-Denton County EOC
444.2250	+5.0	110.9	K5CFD	Coppell
444.7000	+5.0	110.9	NETARC	Southlake
444.8500	+5.0	110.9	N5ERS	Flower Mound
927.025	-25.0	D532	N5ERS	Flower Mound
927.4125	-25.0	432	N5LS	Denton
927.6125	-25.0	110.9	W5NGU	DCARA-Denton County EOC
927.1375	-25.0	131.8	W5FKN	Decatur
1253.6000	none	none	W5NGU-G	DCARA - EOC - D*Star "G"
1293.4000	-20.0	none	W5NGU-A	DCARA - EOC - D*Star "A"
442.9250	+5.0	none	W5NGU-B	DCARA - EOC - D*Star "B"
147.4500	-1.0	none	W5NGU-C	DCARA - EOC - D*Star "C"
1259.2000	none	none	KE5YAP-G	DCARA-Rosston- D*Star "G"
1293.2000	-20.0	none	KE5YAP-A	DCARA-Rosston- D*Star "A"
440.7125	+5.0	none	KE5YAP-B	DCARA-Rosston- D*Star "B"
147.4900	-1.0	none	KE5YAP-C	DCARA-Rosston- D*Star "C"
DIGITAL	====	====	=====	=====
144.9100	none	none	W5NGU-4	DCARA Digipeater-Denton
147.970	none	none	K5YX-10	WinLink Gateway
144.990	none	none	KC5GOI	DCARA Digipeater-Rosston
144.990	none	none	KD5EOC-10	DCARA WL Gateway