

Nacogdoches Amateur Radio Club

2015 CLUB OFFICERS

Pres: John Cechin - W5FWR

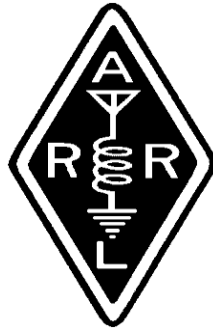
Sec/Treas: Army Curtis - AE5P

Visit our web site at

<http://w5nac.com/>

MISSION STATEMENT

The Mission of the Nacogdoches Amateur Radio Club is to support and promote Amateur Radio by public service, offering training to unlicensed interested parties and licensed Amateurs, mutual support of other Amateurs, engaging events that promote Amateur radio to the general public and other Amateur radio operators, and continuing fellowship by regularly scheduled organized meetings and events.



MAY MINUTES

The May meeting of the Nacogdoches Amateur Radio Club (NARC) was held as scheduled on May 6th. **President John W5FWR**, opened the meeting at 7:00 p.m. in the Parish Hall of Christ Episcopal Church. Eleven members and two guests were present. Each person present introduced himself. Minutes of the previous meeting were approved as published. The Treasurer's report was read.

Old Business:

Field Day: Discussion held on putting together a Field

Day operation this year. Field Day is scheduled for June 27 - 28. With no interest shown, the club will not be participating in Field Day as a club. Individual members will be participating from their home stations.

The now annual NARC Ice Cream Social will be held on our regular meeting night in July. Start planning now on what flavors of the cold stuff you want to bring. The club will furnish bowls, spoons, and napkins. Several members expressed their disappointment that Blue Bell is temporarily shut down.

The Neches River Rendezvous is scheduled for Saturday, June 6. A few more volunteers are needed. Editor's Note: Because of the continuing

rain, the NRR has been cancelled.

The Timpson ISD high altitude balloon launch is scheduled for late May. NARC will again be providing APRS tracking of the balloon. Editor's Note: Due to the continuing rain, the balloon launch has been cancelled.

Robert KD5FEE noted that solar activity has been causing radio blackouts recently on the HF bands.

New Business:

North Texas now has a new Section Manager. **Nancy McCain K5NLM** was appointed effective May 1 to complete the term of Chris Brewer N5GMJ who resigned due to increased work and family commitments. Nancy spent time in Nacogdoches during the Shuttle Columbia disaster, and recently retired from a career in Emergency Management.

Army AE5P reported on House Bill 939 in the

Texas Legislature which is being supported by ARRL. HB939 would allow homeowners to install and operate standby emergency generators at their residence, where CC&R's currently prohibit them. Editor's Note: HB939 has passed and been sent to the Governor for signature. Kudos to West Gulf Division Vice-Director **John Robert Stratton N5AUS** and others for their hard work in getting this measure passed.

Tom W5TV reported on the new HRO store in Plano across the street from Fry's Electronics.

Meeting closed at 7:44 p.m.

Program: Marshall K5QE presented a program on his recent EME expedition to the Falkland Islands.

MY 2 CENTS

FOX WILLY ROGER

JUNE 2015:

Summer is upon us once more, and along with it are the summer storms, is all our emergency equipment up to standards? May be someone should make up a go bag list once more and get it in the NL, how about it Robert? I understand that one of the slackers is in need of a good ICOM radio, so he can check into the club nets, I guess that Yaesu radio just isn't getting it done? **GET ER DONE BILL.**

FLASH: Bailey Curtis is out of danger, although he is still in recovery and lost a few of his nine lives. Please send your good wishes and get well cards to:

Bailey
c/o AE5P

Let us all wish him a better tomorrow.

WOW, what a great program we had at the last meeting. **K5QE** gave us a rundown on his latest **DX**, I would have liked to have made contact with him,

and I guess I will have to get off my backside and look into moon bounce, or just get a bit smarter with what I have. What **K5QE** didn't say is how he stayed on the ground, being on the bottom of the world?

The club programs keep getting better and better, I feel sorry for the next president, how will he or she top these programs, I can hardly wait.

Of course I am the last to find out that **MIB** is back in town, this club just keeps getting better all the time, I for one am happy "and that not one of the seven" to have you back, welcome John.

As reported on the Monday night net, Rosemary will improve one's memory, it wasn't mentioned if you smoked, chewed, or just smiled it, having that information in hand, I proceeded to the store, let's see, cat food, cat litter, breakfast fruit, ice cream, practicing for next month, and some cat food. Got home and remembered the

rosemary, maybe next time.

It has been reported to me, a lot of things get reported to me, that the club's 84 repeater is sicker than previously thought, it looks like a new coax is needed, remember any volunteers will need a signed permission slip from the **XYL**, so get those slips into **AE5P** ASAP, tickets are only \$20, that does not include lunch. Take pics for the **NL**. **AE5P** might have about 300ft of coax for sale after the climb, or maybe it should be cut up into sections so that everyone can purchase a piece for his or her shack wall, if I do some moon bounce, I will need some in a bit longer section.

I'm sure that somewhere some place someone has something good to say about **MAY**, I just don't know what it is right now, but I am sure it will come to me, sooner or later. Well now did everybody have fun on the 15th? It seems to come around faster and faster these

days. The "TWT" is still a little weak and unsure if it should bring forth its harvest, uncertainty of the weather has the TWT holding back, and I can't blame her one bit, can you?

The fire place got another chance to shine the other day, I burnt almost every bit of wood I could find, the only logs left were the water soaked ones, and I guess I will have to wait till next season to use them.

As you can see, as with last time I am using more spaces, this system seems to work well, so why not use it till it drops?

PHASE II.V.V:....

I have been watching **CU** lately, how is it that cats know how to find the middle of the path, I have gotten much exercise of late stepping over, around and doing other maneuvers to avoid stepping on them. I do everything I can to keep them happy, I even have an **AM** and a **PM** Song

for them and they still make me go the extra mile. **LG** got on the top of my car the other day, to take a nap you see, and stayed on there while I drove out the driveway and started down the block before she jumped off, I had to drive slow, that's what I mean, going the extra mile. The inside bunch as well as the outside bunch has their warm weather routine, eat sleep and sleep some more, each one trying to outdo the other. The other day I was getting some ice from the frig and a piece fell on the floor, so I picked it up and put it in the cats water bowl. It so happened that **CU** was watching me and went to investigate, this was all new to her, she looked and looked and knew that something was in the bowl but just couldn't see it, looked and looked again, got a little closer and looked again, got closer yet, almost putting her nose on the cube, and then trying to scoop it out of the bowl, I guess to get a better look at it, go figure.

THOUSANDS OF YEARS AGO CATS WERE WORSHIPED AS GODS, THEY HAVE NEVER FORGOTTEN THIS

The century plant is still standing, yes you heard me, still standing, I don't know how, and I am still waiting for it to fall onto the power lines. The birds seem to stay well back from it; I think they don't want to be the one to topple the tower. If anybody wants an offspring, I still have a few left, a cactus trade would be nice, let me know. Be sure and hug a cactus today, they need love too.

WHY IS IT?

Here is one for you radio experts, why is when you are doing a road trip the radio station fades out with all its power, and you have to go looking for a new station, but a radio signal can be heard from Mars and beyond on just a bit of power?

Ever wonder what happens to Superman's clothes when he is in hero mode and comes back again at a

different location from where he started?

And what about these pre-approved credit card letters, when opened only to find paperwork to fill out to apply for the card, what's all that about?

HMMMM

GREAT INVENTIONS OF ALL TIME:

The twenty mile per hour bumper on the cars that came out many years ago, the auto special interest groups got that reduced to a five mile per hour, does anyone know what it is today?

The end is here, **TWT** and I thank you all for tuning in and remember to shop our spongers.

Remember: keep your powder dry and your head below the horizon.

Happy Trails

73 Enjoy, what do you think, let me know?

John Cechin W5FWR
Carrots4ever2u@suddenlink.net

VE TESTING

Our next VE testing is scheduled for Wednesday, June 17 at 7:00 p.m. in the Parish Hall of Christ Episcopal Church. Applicants should bring a picture ID, the original and a copy of their current Amateur license, the original of any CSCE's and \$15 to cover the cost of the exam(s). Correct change is always very much appreciated. 73 de AE5P

email: ae5p@arrl.net

CLUB NETS

Remember to join us each week for the nets sponsored by NARC. Each **MONDAY** is the **NARC ARES/RACES** net, at 8:00 p.m. on the club's 146.84 repeater (PL 141.3). Second, on **THURSDAY** evenings at 8:00 p.m. is the **Deep East Texas Skywarn Emergency Weather Net** on the 147.32 repeater (PL 141.3). Please join us for one or both.

The actual operating frequency for each net is at the discretion of the net control operator. The Monday night nets have been meeting recently on the club 444.050 UHF repeater or the 147.32 VHF repeater. Stay alert to other possibilities such as a simplex frequency or even HF.

NEXT MEETING

The next meeting will be on **Wednesday June 3rd** at **7:00 p.m.** in the Parish Hall of Christ Episcopal Church. The church is at the corner of Starr and Mound Streets in Nacogdoches. Please join us and bring a friend. A program is planned.

84 REPEATER UPDATE

On May 26, two young fellows from Tower Specialists climbed the City Tower for us to try and solve the continuing problems we have been

experiencing. The testing is pointing to the problem being in the main run of 1-1/4" heliax, and the next step will be to arrange its replacement. With the weather being like it has been, Tower Specialists is backed up in their work and it is unclear at this point when the work can be done.

In the meantime, 84 continues on the air with a temporary antenna about 15 feet high instead of the permanent antenna which is 300 feet high.

UPCOMING EVENTS OF NOTE

Mark your calendars for the following events coming up in the next few months:

CQ WW WPX Contest, CW
0000Z May 30 to 2400Z May 31
<http://www.cqwpw.com/rules.htm>

HAMCOM HAMFEST
Irving TX Convention Center (New Location)
June 12 - 13
<http://www.hamcom.org/>

ARRL June VHF Contest
1800Z Jun 13 to 0259Z Jun 15
<http://www.arrl.org/june-vhf>

ARRL Field Day
1800Z Jun 27 to 2100Z Jun 28

<http://www.arrl.org/field-day>

IARU HF World Championship
1200Z, Jul 11 to 1200Z, Jul 12

<http://www.arrl.org/iaru-hf-championship>

CQ Worldwide VHF Contest
1800Z, Jul 18 to 2100Z, Jul 19

<http://www.cqww-vhf.com/2014VHFcontest%20rules.pdf>

North American QSO Party, RTTY
1800Z, Jul 18 to 0600Z, Jul 19

<http://www.ncjweb.com/N AQP-Rules.pdf>

North American QSO Party, CW
1800Z, Aug 1 to 0600Z, Aug 2

<http://www.ncjweb.com/N AQP-Rules.pdf>

North American QSO Party, SSB
1800Z, Aug 15 to 0600Z, Aug 16

<http://www.ncjweb.com/N AQP-Rules.pdf>

ARRL Rookie Roundup, RTTY
1800Z-2359Z, Aug 16

<http://www.arrl.org/rookie-roundup>

ARRL September VHF Contest
1800Z, Sep 12 to 0300Z, Sep 14

<http://www.arrl.org/september-vhf>

Texas QSO Party
1400Z, Sep 26 to 0200Z, Sep 27 and
1400Z-2000Z, Sep 27
<http://www.txqp.net/>

Baluns, Part 1

By

Thomas Atchison, W5TV

As you can tell by the title of this article I plan to write several articles on the topic of baluns. While the concept of a balun may seem very straight forward and perhaps even simple, it is NOT. There are volumes of literature on the internet concerning baluns and how they should be used and there is not total agreement in the literature. Actually, you will find that there is a lot of 'folklore' out there about baluns! I'm not sure how long this series will be, but I will do my best to present what I have discovered about baluns.

First, if we do a key word internet search on the word 'balun' we get something like the following:

A **balun** is an electrical device that converts between a balanced signal (two signals working against each other where ground is irrelevant) and an unbalanced signal (a single signal working against ground or pseudo-ground).

As you can see from this definition we have several terms that are not easily understood. For example, what does it mean to say that 'two signals are working against each other' or what is a 'pseudo-ground'?

At this point I will warn you that I do not plan to attempt to explain every such statement. It is my hope that I can present to you some practical ideas regarding baluns and some sources of information that will allow you to explore the *world of baluns*.

A balun can take many forms and may include devices that also transform impedances but need not do so. Transformer baluns can be used to connect lines of differing impedance. The origin of the word balun is "**balanced to unbalanced**".

One basic diagram of a balun from Wikipedia is shown in Fig. 1.

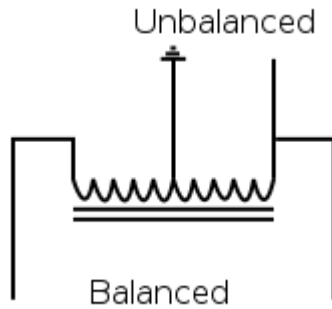


Fig. 1

Generally, a balun consists of a transformer that is wound on a toroid core. The nature of the windings may be such that impedance matching can occur. Physically, it may look like the picture in Fig. 2, also from Wikipedia.



Fig. 2

For amateur radio operators, the main use of a balun is to connect coaxial transmission line (thought to be unbalanced) to parallel wire transmission line (thought to be balanced). The latter may be of the form of 450 ohm ladder line, 600 ohm open wire line, or twinlead. Notice that I used the word 'thought' in the parentheses. Depending on the circumstances, not all coaxial line is unbalanced, and not all parallel line is balanced! If the windings are accomplished in different ways, the balun can also serve as an impedance matching transformer (perhaps 4:1 or 6:1, etc.).

Another form of balun can be constructed using lengths of coax. In Fig. 3 we have an example of a 4:1 coaxial balun.

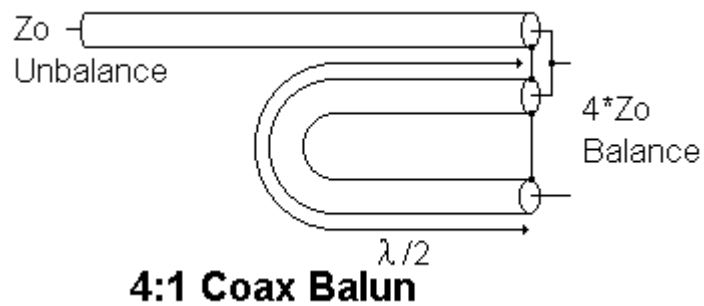


Fig. 3

Here Z_0 is the characteristic impedance of the coax and $\lambda/2$ is an electrical half-wavelength at your operating frequency.

In the next parts I plan to give you some specific examples of how and why I have used baluns at my station. If you want to get some idea of what others debate, do an internet search on the key words 'balun', 'balanced transmission line', 'unbalanced transmission line', or 'balanced vs. unbalanced antennas'.