September 2014 Volume 09-2014

Nacogdoches Amateur Radio Club

2014 CLUB OFFICERS

Pres: John Cechin – W5FWR

VP: John Chapman – KC5MIB

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.

AUGUST MINUTES

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

Old Business:

Army AE5P reported on the Central States VHF Society conference he attended in Austin. A good turnout; excellent presentations; much learned.

Bob K5ME reported on working the NAQP CW contest, where he managed 385 Q's with 114 mults. An excellent showing.

New Business:

Chuck KF5ETJ in San Augustine is moving to Virginia to be closer to his son. He requested assistance in removing his GAP Triton antenna that several club members assisted in installing a few years back. **Army AE5P** with assistance of **Rusty KD5GEN** worked with the San Augustine VFD to remove the antenna and bring it back to Nacogdoches. **Robert KD5FEE** now has it installed at his QTH.

The **Texas QSO Party** is scheduled for September 27-28. W5NAC will participate from the AE5P shack. All are invited to operate the event. Discussion groups are also welcome, but will be outside the operating shack.

Meeting closed at 7:45 p.m.

Program:
Phillip Blackburn WB5TAL presented a fascinating program on the ultra-miniature transmitters he builds to allow tracking wild animals. Not so hard to build a transmitter to track deer or moose. Phillip builds transmitters to track dragon flies and snakes. Incredibly tiny components are used, and he hand solders everything under a microscope. Many thanks to Phillip for an outstanding presentation.

MY 2 CENTS
FOX WILLY ROGER

SEPEMBER:
September, what a great month, why do I say that, because in September a great person was given to the world, ME, September is my birth month, and you can't get any better than that. If you feel that you must give me gifts, then do so, but my policy is "I don't accept gifts, but my trunk is always open", so let your pocket book be your guide.

WOW what a program, thank you **MIB**, and thank you **PHILLIP BLACKBURN WB5TAL**. Only two slackers were missing, number 3 and 5, or were it number 2 and 5, I can't keep them straight. Talk about a small world, for the folks that don't know, the program was on **SMALL** transmitters. Small is not the word I would use for these TX's. I understand that the government has smaller ones but these are small enough. Some of the equipment shown was a soldering tip, I've had bigger sewing needles, and when the TXs are assembled with the use of a microscope under 10 and 30 power is amazing to me. As it turns out, these TXs are used to track wildlife from Quails to Snakes, as a rule, Phillip does not do the tracking just the building. Thanks again **WB5TAL**.

As reported last month, the winds and rains that took its toll on my word tree are still evident. The word tree has not recovered as of this writing, maybe if all would donate to "**SAVE THE WORD TREE"** at the next meeting and it will flourish once more.

Are you thinking about being a club officer, remember I said I would bring the subject up again?

PHASE II.V.V:….
At the tender age of 11 months and 7 days, GB made good her escape to the great outdoors, I guess she got tired of **TB's** type of welcoming, so off she went, I guess the old

saying is true, "you can take the kitten out of the country, but you can't take the country out of the kitten". **GB** now lives with her brother **HM**. Both still reside very close to my house and yard. The latest thing for **GB** is to climb a tree and look down at me from the roof, I tried to tell her about falling elements, but she doesn't listen, such is life living with a woman. **GB** seems to be quite happy living outdoors. **TB** and **CU** have settled into a type of routine. **TB** walks on me until I'm up and then she bounces around with **CU** not far behind her. Feeding time and some more bouncing around and **GB** and **CU** retire to their secret places to nap for about 8 hours. Sometime CU lies by my feet when I am at the computer. In the evening the bouncing starts once more, **TB** bounces while **CU** lays by the front door waiting, hoping for a bug to slip into the house, this seems to be a great deal of fun for her, playing with them till no more movement, this is busy time until bed time, my bed time that is. At this point I go to bed and the kittens stay up and look for bugs, and they don't mind one bit tearing up the house getting to them.

IN DAYS OF OLD, CATS WERE WORSHIPED AS GODS
AND THEY HAVE NEVER FORGOTTEN IT

The century plant is still standing, how or why I don't know, I am still waiting for the next step, whatever that is? Sometimes it's hard to see with all the trees growing up thru the plant, guess I will have to do some more pruning, and that takes some long reaching.
Be sure and hug a cactus today, they need love too.

The word tree is finished for this trip and it thanks you all for enjoying its words.

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

Happy Trails

73 Enjoy
What do you think, let me know?

73,
John Cechin W5FWR
Carrots4ever2u@suddenlink.net

VEEPS CORNER

Its Labor Day weekend, the summer is now done, well maybe except for the weather. Fall arrives on the 23rd. Nights are getting longer. Are your 160m, 80m and 40m antennas ready for the overnight long haul DX as winter sets in?

WYFR a short wave group in Florida has been sold to WRMI another shortwave group in Florida. Please take a look at this link, especially the drawings for the antennas they use and some of the descriptions of the radios.
http://www.radioworld.com/article/massive-shortwave-site-gets-a-new-lease-on-life/272037

And take a look at this guy's receiving rack, I don't know if he has a

transmitter rack as impressive. He has a little article about each piece of this rack and how it was made. Some pretty neat stuff in that rack. www.bobsamerica.com/swl.html

We still aren't out to the weather yet, hurricane season is fully upon us until 1 November. Have you checked your batteries, and the rest of your radios? What is the condition of your bail out bag, AWOL bag or whatever you call it?

73 de
John
KC5MIB
jlchapman2@juno.com

VE TESTING

Our next VE testing is scheduled for Wednesday, September 17th 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 2-meter 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. We are always looking for folks who would like to become net control operators. If you are interested, please contact any of the existing net controls. We will be pleased to help you in any way we can.

NEXT MEETING

The next meeting will be on **Wednesday September 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 come and bring a friend.

UPCOMING EVENTS OF NOTE

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

33rd Annual 2014 ARRL/TAPR DCC (Digital Communications Conference) – Sept 5-7 in Austin.
http://www.tapr.org/dcc

ARRL SEPTEMBER VHF CONTEST – Sept 13-15
http://www.arrl.org/september-vhf

ARKANSAS QSO PARTY – Sept 23
http://www.arkqsoparty.com/

TEXAS QSO PARTY – Sept 27 – 28
http://www.txqp.org/
W5NAC will participate from the AE5P shack. All are welcome to come over and operate.

CALIFORNIA QSO PARTY – October 3 - 5
http://www.cqp.org/index.html

CQ WW DX CONTEST SSB – October 25 - 26
http://www.cqww.com/index.htm

ARRL SWEEPSTAKES CW – November 1 – 3
http://www.arrl.org/sweepstakes

ARRL SWEEPSTAKES SSB – November 15 – 17
http://www.arrl.org/sweepstakes

CQ WW DX CONTEST CW – November 29 - 30
http://www.cqww.com/index.htm

Folded Dipoles

By
Thomas A. Atchison W5TV

The basic form of a folded dipole consists of a dipole antenna with a second wire close to, and parallel to, the dipole with the ends connected to each other, forming a loop (Fig. 1).

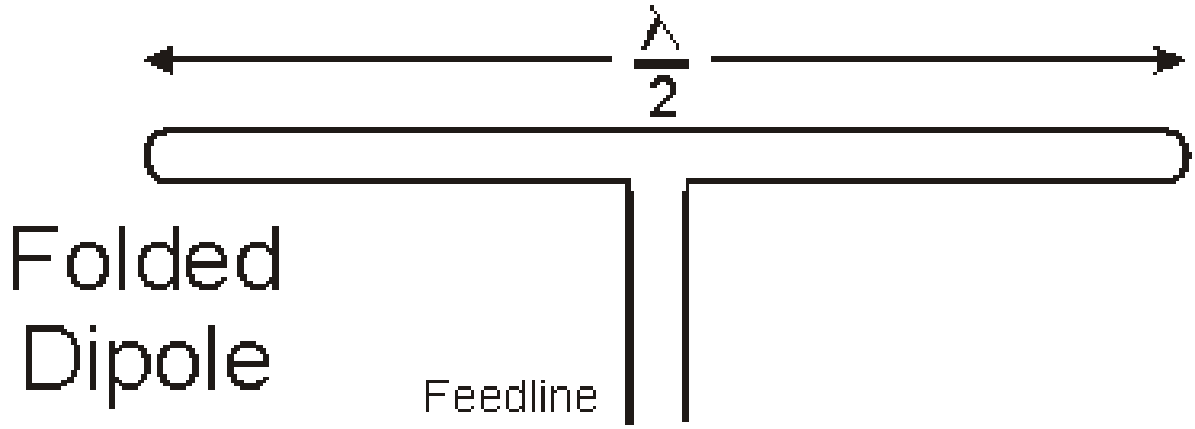

Fig. 1

Notice that the folded dipole is a closed loop, however, the currents can reinforce one another instead of canceling each other out creating the possibility of some gain.

The folded dipole is resonant and radiates well at odd integer multiples of a half-wavelength when it is fed in the middle as shown in Fig. 1. The input impedance for a half-wave folded dipole is approximately 300-ohms. The radiating portion can be constructed using 300-ohm twin lead or it can be constructed using two wires with spacers. The feed line can be 300-ohm twin lead into the shack or we can use a 4:1 balun and 75-ohm coax as feed line into the shack. I have used such an antenna on 80 meters with 300-ohm twin lead into the shack and a 4:1 balun in the shack. A short coax run from the balun to the transmitter completed the antenna system. The results were excellent.

The radiation pattern for a half-wave folded dipole has the same form as the radiation pattern of a half-wave dipole. One of the advantages of a folded dipole antenna is that it has a wider bandwidth than a simple dipole.

We can extend this concept by adding another conductor parallel to the other two for a three wire folded dipole (Fig. 2). This has the effect of increasing the impedance to approximately 600-ohms.

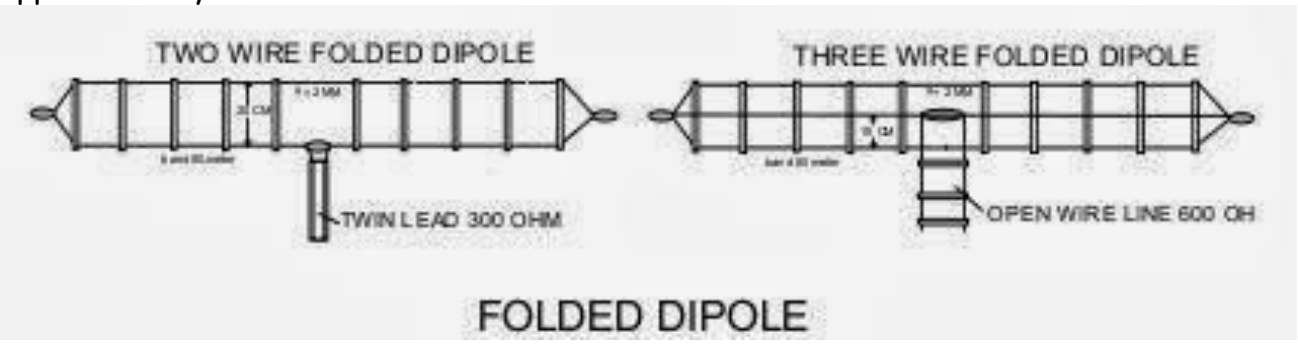

Fig. 2

If these antennas are mounted horizontally as shown in the figures, the polarization is horizontal. If they are mounted vertically, the polarization is vertical.

Some of the variations are shown in Fig. 3. If we separate the added wire at the center and leave it open it is called an open folded dipole.

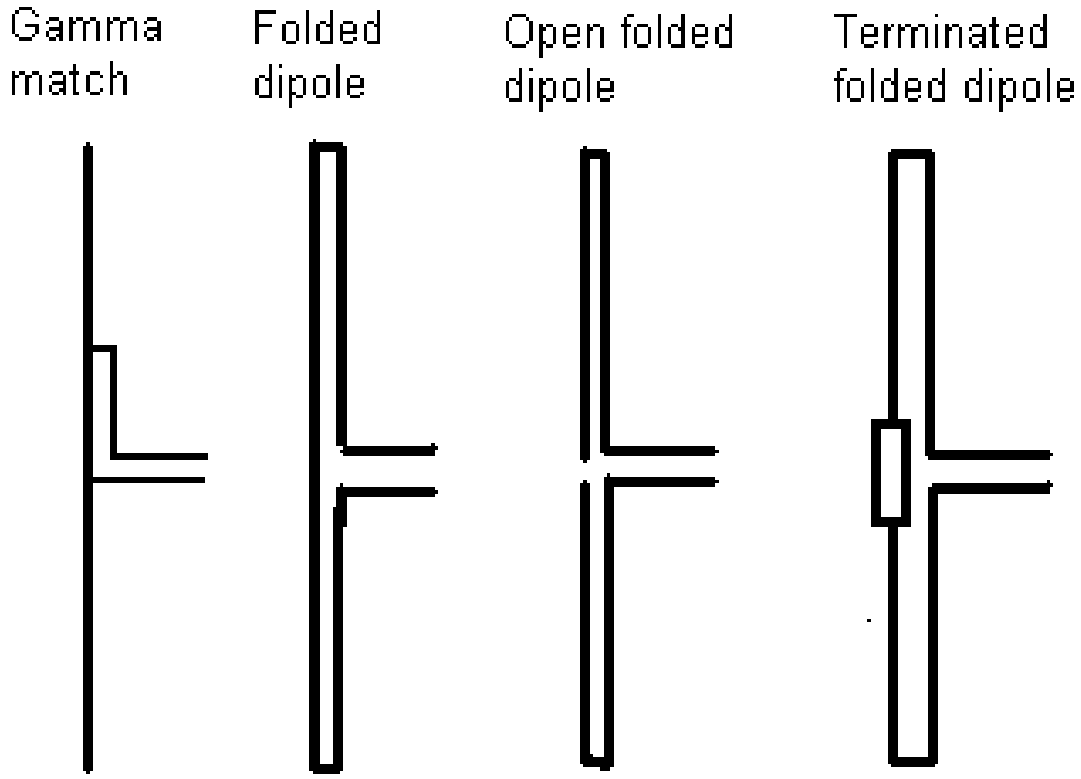

Fig. 3

An open folded dipole is shown second from the right. If we place a load (resistor) in the gap we have a terminated folded dipole as shown on the far right of Fig. 3.

The terminated folded dipole has been shown to provide some signal gain, wide frequency coverage, and exceptionally low noise characteristics. Some have called it a "squashed rhombic" antenna because of the terminating resistor. The value of the terminating resistor is critical. Its value depends on the feed point impedance, and is normally above it. If 300-ohm feed line is used or if we use a 4:1 balun and 75-ohm coax, then a terminating resistor of 390 ohms is recommended. This resistor must not be a wirewound type since its inductance would affect performance. As a receive antenna you can use a ½ to 1 watt carbon resistor. If you plan on transmitting on this antenna you need a higher wattage resistor depending on the power you will be using. The terminating resistor needs to be encased in a PVC cylinder and weatherproofed. The PVC can be used to connect the wires of the antenna so there is no strain on the terminating resistor.

This antenna has been discussed in the May 1984 issue of 73 Magazine and in the June 1949 issue of QST.