

# Nacogdoches Amateur Radio Club

## 2021 CLUB OFFICERS

Pres: Bill Rascher - KT5TE

Vice Pres: Steve Bartlett-WB5IDY

Sec/Treas: Army Curtis - AE5P

Visit our web site at

<https://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 and having fun.



## JUNE MINUTES

The June meeting of the Nacogdoches Amateur Radio Club (NARC) was held as scheduled on June 2nd. **President Bill KT5TE** opened the meeting at 7:00 p.m. in the Nacogdoches City/County Emergency Operations Center off FM 3314. Self-introductions were made by members and guests present. Minutes of the previous meeting were approved as published. The Treasurer's report was not available.

After some discussion, it was decided that no rovers will go out for the June

VHF contest. Instead, members will be operating from home.

The July CQ VHF contest will be discussed at the July club meeting.

Field Day:

Antennas: Bill KT5TE. The club has a 3 element tri-band yagi, a Butternut 80/40M vertical and a G5RV. These and possibly others are planned to be used.

Radios/Computers: Aaron KI5FIQ. Aaron is planning one radio/computer for FT8, and two radios/computers for SSB/CW. We will also have an Orange Box setup with VHF/UHF and a computer for Winlink.

Food and Drink: Dale K5BDD is planning BBQ for

dinner Saturday evening and well stocked ice chests with soda and water. Mike W5NXX has volunteered to cook breakfast Sunday morning.

Meeting closed at 7:49.

Book raffle: ARRL's Hints and Kinks for Amateur Operators was won by Mike W5NXX.

Show and Tell: Bill KT5TE showed off his Elecraft KX2 transceiver.

Program: Army AE5P presented a program on 2 meter antennas. A simple homemade ground plane made with #12 house wire soldered to a SO239 receptacle was shown, along with simple J-poles made with 300 ohm twin lead. A GP-3 dual band vertical that had been damaged in transit was raffled off and won by Darrell KI5PYQ who did a great job of repairing it.

## FROM THE PRESIDENT

With all the wonderful help 2021 Field Day was a success. It was a really enjoyable and well spent time seeing and learning new things. It is always nice to put a face to a call sign and just talk about radios and antennas. Yeah, we covered many other topics too. There is still a lot I need to work on in the way of antennas and getting stuff back to their right owner. Things like coax, tripods and masts.

As of this moment I'm writing this article in a travel trailer in Mt. Hope, Ohio. My wife and I are at Horse Progress Day (<https://horseprogressdays.com/2021-hpd/>) and have walked our legs just about off after 14 hours of demonstrations and seminars. Phew...

The fun doesn't end because we have a VHF contest to plan at this

month's meeting. In theory I should be back the day before our July 7<sup>th</sup> meeting. Hope to see you there,

73, Bill KT5TE

[bill@watershipfarm.com](mailto:bill@watershipfarm.com)

## FROM THE VP CHAIR

### Tech Tips

#### NETS - How To

Nets are a great way to test your equipment, learn additional radio skills, and meet new folks. Many of the local clubs in East Texas have weekly nets to test repeaters and operator radios for emergency management events like Skywarn and ARES/RACES.

Check a club's web page for the frequency, offset, and PL tone. This information tells your radio the transmit and receive frequencies, and the special tone that opens the repeater. I even check

into nets as a visitor when I travel.

If you want to check in to a net, identify your call sign and location with the Net Control Operator (NCO) when asked. Each net may have slightly different rules to check in, just listen to the instructions from the NCO. Generally, your call sign, location by city or grid square, and your name are given. For example, "this is W5ABC, Steve, in Loco Valley". Most hams use phonetics for their call sign when checking in, especially if you are not a regular. The NCO will acknowledge your call sign if he/she copied your attempt to check in. If they do not verify your call sign, then you can try again when asked. It is very common for two or more stations to try to check in at the same time and the NCO cannot hear all of them at once. Don't worry at all if you "double" with another station. Just try again.

Most weekly nets are equipment tests but the

traffic is usually social and informal. Weather reports, community news, or how the tomatoes in the garden are doing, are all fair conversation. Limit your comments to one or two minutes maximum.

You can usually make additional comments if the NCO asks for "additional check-ins" toward the end of net. Simply respond with your call sign again and say "re-check". When called, you can add comments you omitted earlier.

If you are in a hurry or do not feel like chatting, you can still check in by telling the NCO something like "in and out tonight Bob" after your initial check in. The NCO will recognize your request and not call on you for traffic or discussion.

Lastly, always end your conversation with your call sign, each time you speak. While the traffic on these nets can be casual, the procedures are not. Most nets are directed and the NCO calls the shots.

If you are a bit nervous, just listen for a week or two. It is not hard and most all hams understand if you don't exactly land on the runway the first time! Nets are an important part of our emergency management practice. Give it a try.

73

Steve, WB5IDY

[bartlett.steve58@gmail.com](mailto:bartlett.steve58@gmail.com)

## NOTES FROM OUR EC

Let's see, Field Day, Rain and Hurricane Season 2021. That should make a dent in the July EC column. Field Day 2021 is now in the books, well at least in a carbon and silicon form. It was great to gather as a club and participate. We were a 2F (EOC) which we have run for at least 3 of the last 4 years (let's NOT talk about 2020).

We took over the Nacogdoches EOC and set up 3 HF antennas. We

managed to install the Yagi without the green monster. Adapt and overcome and it seemed to work well enough.

We had 20 or so guests and participants come visit and one of them was a young fellow working on earning his ticket. Judge Sowell, Mayor Mize and wife, City Manager Canizares and Ms Triana the Nac County EMC stopped by. The Daily Sentinel was there and the article should be in the Wednesday 30 Jun edition.

Thanks to Dale for supper and Mark for the great breakfast. Mark beat the tacos from San Antonio. Too bad we can't count points for that.

Army probably has the final tally somewhere in this edition of your newsletter.

Rain and more rain. I thought we had gotten out of the rainy season and only had to worry about tropical storms, but I guess that is not the case. It also seems the weather

has done a flip flop. The Pacific Northwest is getting a taste of our Texas and southwest US temperatures. You know we have 5 seasons hot, hotter, hotter, hottest and OMYGOODNESS. My daughter in law lives close to Seattle and she's not happy with it.

We are now 1 month into Hurricane season, we've had one preseason game and 3 in the regular season. Claudette threatened and took a swing to the east and went through Louisiana. Ya'll please keep our friends in LA in your thoughts they have been hammered the last few seasons and it's hard to rebuild when the next storm comes through.

Quick netiquette for our newer hams and net ops, don't forget when you are completely done with your comms and pass it back to net control to give your call sign. Remember it's sign every 10 minutes (if you are particularly long winded) or at the end of our comms whichever comes first.

Roger KOYY put out a list of VHF nets that you may be able to participate. Give them a try those that have DMR (digital mobile radio) let us know how those nets are and how they work out for you. And don't forget the Monday and Thursday nets we meet at 8 pm. That's it for now see you on the air

See everyone on the nets

73 de John Chapman  
KC5MIB  
[kc5mib@arrl.net](mailto:kc5mib@arrl.net)

## VE TESTING

The June VE session saw two applicants who drove down from Tyler.

Congratulations to **Stephen Hughes KI5QIH** and **Nathan Mimms KI5QII**, for passing their Technician exams.

Many thanks also to VE's **Ralph N6RH**, **Mike AA5HH**, **Mike W5NXX**, **Robert KD5FEE** and **Army AE5P**.

Of note, the pertinent data from this exam was transmitted electronically to ARRL-VEC in Newington, CT. The licenses were issued the Thursday after the exam. What used to require one week now takes one day!

Remember that we give VE tests the third Wednesday of EVERY month. For the latest information always check the club website at:

<https://w5nac.com/ve-testing/>

73 de AE5P.

email: [ae5p@arrl.net](mailto:ae5p@arrl.net)

## TWO METER CLUB NETS

Please join us each week for the two 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.

## NEXT MEETING

Our next meeting will be Wednesday July 7th at the City/County Emergency Operations Center off FM3314. Meeting starts at 7:00; doors open at 6:30. Come early for a little socializing before the meeting.

We will have our monthly book raffle, with everyone present receiving a raffle ticket without charge. One ticket will be drawn and the winner will be given a book on a ham radio subject.

We will be discussing Field Day. What did you learn? What can we do to make it better next year?

A program is planned where members can ask any question they might have concerning Amateur Radio. I'm betting (hoping) we'll have folks there with answers for you. Be thinking about what questions you want to ask and perhaps write them down so they don't get forgotten.

Hope to see you there.

## UPCOMING EVENTS OF NOTE

Mark your calendars for the following events coming up in the next few months. Full information on these events and much more can be found at <http://www.hornucopia.com/contestcal/contestcal.html>

Note that all dates shown here are local, CST dates while all contest logging uses UTC dates and times.

### **CQ VHF CONTEST**

July 17-18, 2021

<http://www.cqww-vhf.com/>

### **NAQP RTTY**

July 17-18, 2021

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

### **NAQP CW**

Aug 7-8, 2021

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

### **NAQP SSB**

Aug 21-22, 2021

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

Check out the many contests listed on the Contest Calendar link shown here. There are many State QSO parties and Parks On The Air events that may be just right for you. Check 'em out.

## Two Element Delta Loop for Two Meters

by

Thomas Atchison W5TV

We have been discussing Delta Loop antennas. Suppose we consider beginning with a delta loop antenna for two meters that is horizontal polarized. This would be an antenna that might be used on the lower end of the two meter band. To improve the gain and introduce directivity we might add a delta loop director so we would create a parasitic antenna. Such an antenna might look like the diagram in Fig. 1.

EZNEC

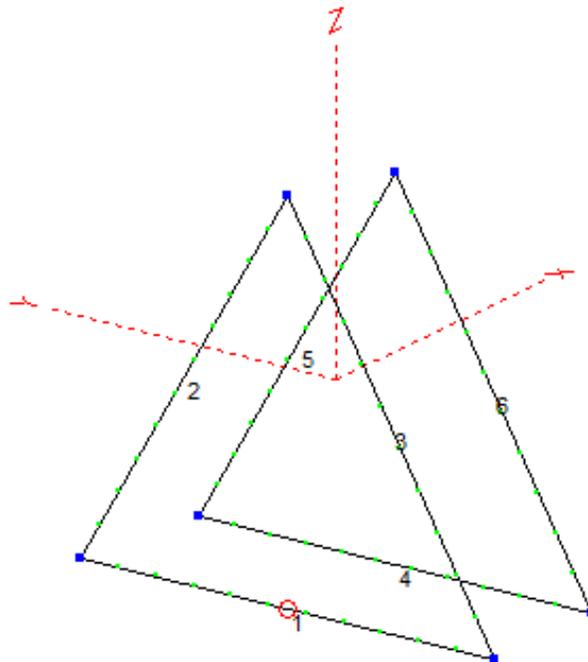


Fig. 1

Here the driven element is formed by the wires labelled 1, 2, and 3 with the feed point being centered on wire 1. This will provide horizontal polarization for the antenna. The parasitic element consists of wires 4, 5, and 6. The separation of the loops is 0.8 foot or about 9.6 inches.

We will use EZNEC to simulate this antenna using # 12 wire over real ground. The bottom wires will be 10 feet off the ground. The resulting SWR for this antenna is shown in Fig. 2 assuming the feed line is 52 ohm coax.

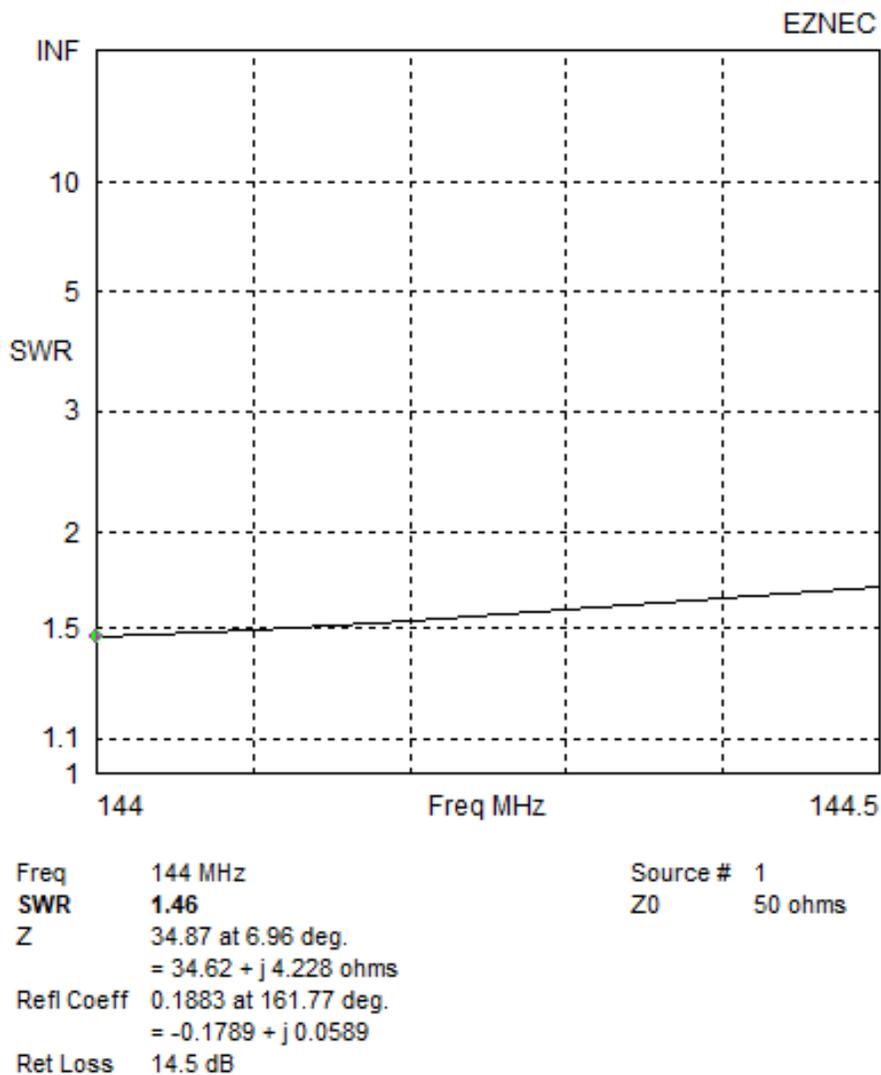


Fig. 2

Note that the SWR is less than 2:1 from 144 to 144.5 MHz. This is the range that a station would use for SSB and CW. The calling frequency for SSB is 144.200.

If we look at the far field plot of this antenna we get the graph shown in Fig. 3.

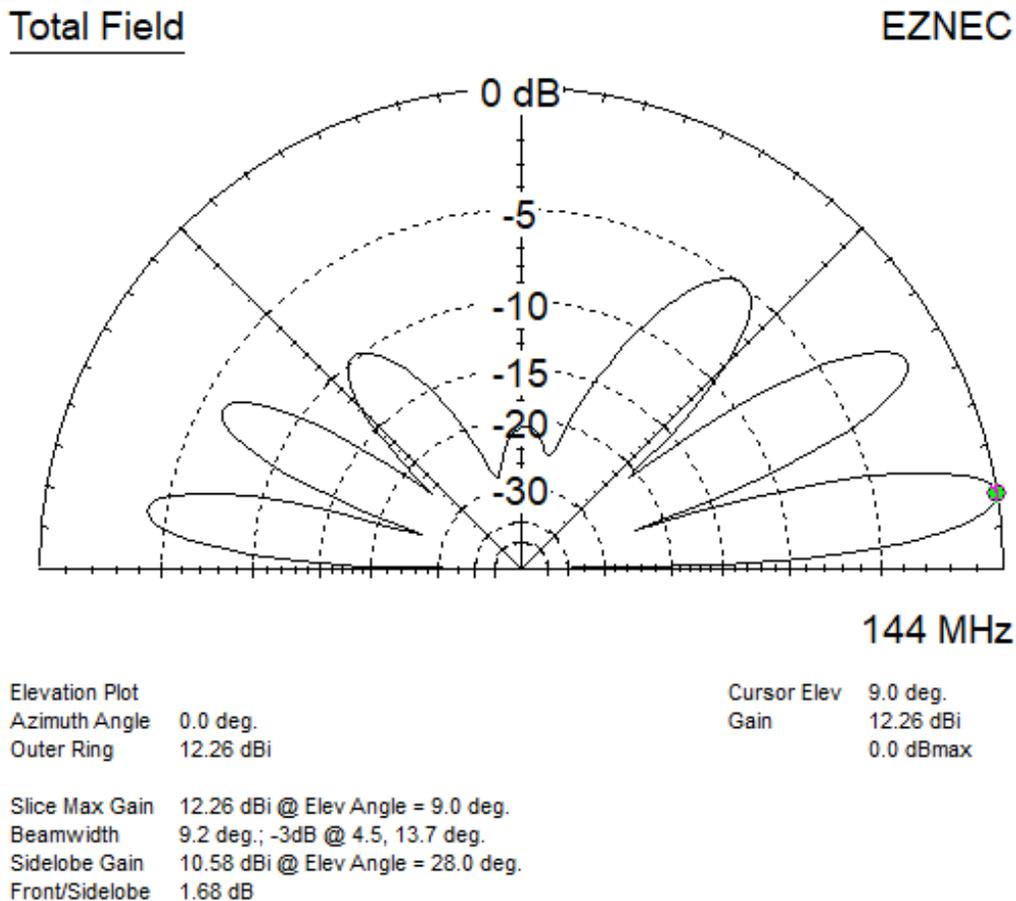


Fig. 3

Maximum radiation is indicated by the green dot. It is perpendicular to the driven element in the direction of the director at an elevation angle of 9 degrees. The gain of this antenna is 12.26 dBi.

A three dimensional plot of the far field is shown in Fig. 4. The plot in red is the two dimensional elevation plot shown in Fig. 3.

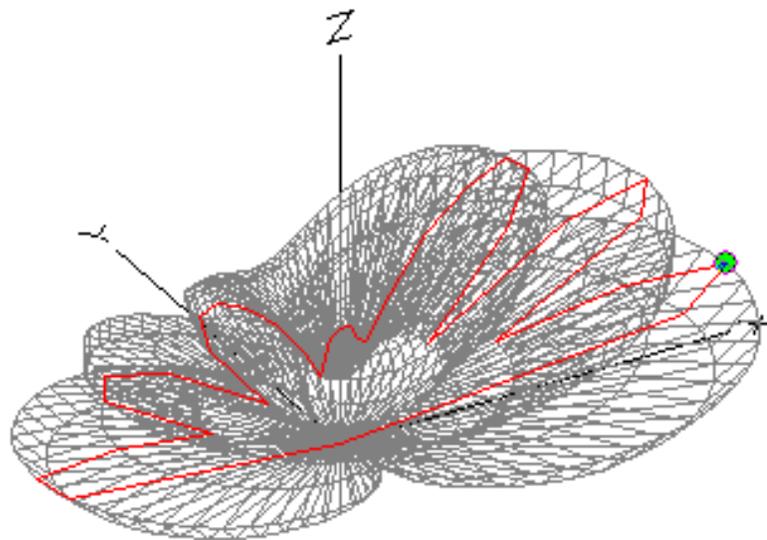


Fig. 4

You could use a single support for this antenna by tilting the plane of each delta loop so the top apex of each can be hoisted by a single rope. Since the distance from the base of the driven loop to the apex is longer than the distance from the base of the parasitic element to its apex the two loops should not touch. The resulting array will have a slightly higher SWR ( $\sim 2:1$ ) and a gain of about 10 dBi. A diagram of this antenna is shown in Fig. 5.

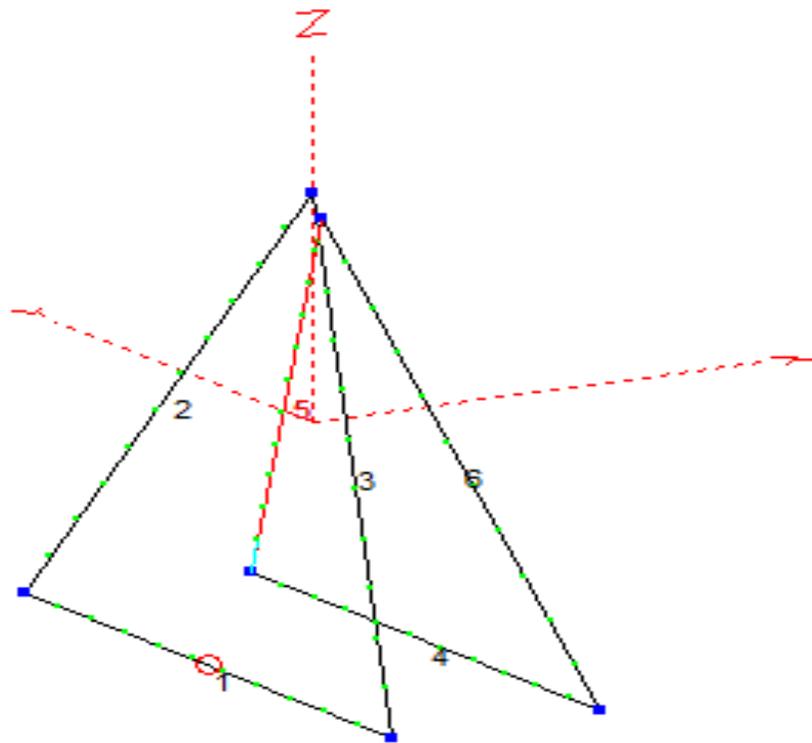


Fig. 5

## FIELD DAY RESULTS

### Summary:

Entry received at: 2021-06-30 19:56:23

Call Used: **W5NAC**    GOTA Station Call: (NONE)    ARRL/RAC Section:  
**NTX**    Class: **2F**

Participants: **27**    Club/Group Name: **Nacogdoches Amateur Radio Club**

Power Source(s): **Commercial, Battery, Solar**

Power Multiplier: **2X**

Preliminary Total Score: **1,068**

### Bonus Points:

Media Publicity	100 - Documented by Daily
<b>Sentinel 6-29-2021.pdf</b>	
Public location	100
Formal message to ARRL SM/SEC	100 - Documented by SM Msg.txt
Site visit by invited elected official	100
Site visit by invited served agency	100
Educational activity	100
Youth participation (1 x 20, max of 100)	20
Entry submitted via web	50
Total bonus points	670

Score Summary: (Cabrillo log/dupe sheet file: W5NAC.dup)

	CW	Digital	Phone	Total	
Total QSOs	37	17	91		
Total Points	74	34	91	199	Claimed Score = (QSO points x power mult) = 398

Submitted by: Army Curtis, AE5P [ae5p@arrl.net](mailto:ae5p@arrl.net)

Band/Mode QSO Breakdown:

	CW		Digital		Phone	
	<u>QSOs</u>	<u>Pwr(W)</u>	<u>QSOs</u>	<u>Pwr(W)</u>	<u>QSOs</u>	<u>Pwr(W)</u>
160m						
80m						
40m			17	100	41	100
20m	29	100			50	100
15m	8	100				
10m						
6m						
2m						
222						
432						
Other						
Satellite						
GOTA						
TOTAL	37		17		91	
<b>GRAND TOTAL:</b>	<b>145 QSOs</b>					