

NARS NEWS

April 2021

Northwest Amateur Radio Society

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Lunch Break - North

Apr 21 Gianna's
Apr 28 Spring Creek BBQ on 2920
May 05 Mi Rancho
May 12 Panera Bread
May 19 Jason's Deli at Champions
May 26 Adriatic Grill
Jun 02 BJ's at Willowbrook

Saturday Breakfast:

Saturdays at 7 am
Broken Yolk Café, 16803 Stuebner
Airline Road, Spring, TX 77379

Lunch Break - Medical Center

Oct 14 Pappas Barbecue
Oct 21 Antonio's Mexican Grill
Oct 28 Jason's Deli
Nov 04 Buffalo Grille
Nov 11 Vieng Thai Restaurant
Nov 18 Southwell's Hamburger Grill
Nov 25 Niko Niko's (BW-8 & I-10 West)

Monday Lunch (was Taildraggers

Lunch):
Mondays at 11 am; Goodson's in
Tomball

The latest information on in-person meetings.

- 1. The April meeting will be a combination of ZOOM and in-person.**
- 2. There will be an in-person VE session at the Klein Fire Department Admin Building on April 17th, 2021.**
- 3. Lunch Break Medical Center has been suspended until further notice.**
- 4. Lunch Break North resumed October 7th. Check the reflector for the latest status.**

Next Gathering: Friday, April 16th

Some important board personnel changes will be discussed. There will also be discussions concerning NARS repeater activity and plans and Texas QSO Party and the awards.

- April 16th, 2021 at 7:30PM
- ZOOM and in-person at the Klein Fire Department Admin Building .
- ZOOM login: 2815436502 PC: 123456

NARS News is published monthly by the Northwest Amateur Radio Society (NARS). Northwest Amateur Radio Society is a Special Services Club affiliated with the American Radio Relay League, ARRL Club No. 2120. Please send all submissions to the news-letter editor before the end of the month prior to publication.

Meeting Location—When social gatherings are allowed.

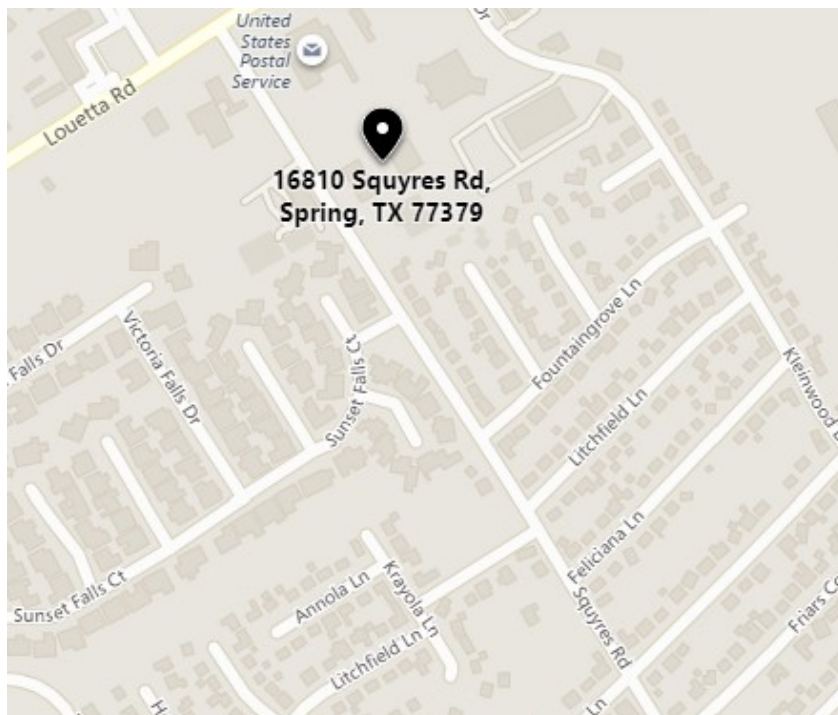
We will meet at Klein Fire Department Administration, 16810 Squyres Rd., Klein, TX 77379. It is located behind Klein Fire Station 4.



Picture from <http://kleinfiredept.com/services/stations/headquarters>

The Board wishes to thank the Klein Fire Department for the generous offer allowing NARS use of their facility.

LOCATION MAP — 16810 Squyres Rd.



Opportunities to Serve

APRIL GATHERING

Our April gathering will be held on ZOOM and in-person at the Klein Fire Department Admin Building Friday April 16th at 7:30 PM.

ZOOM

login: 2815436502

PC: 123456

Some important board personnel changes will be discussed. There will also be discussions concerning NARS repeater activity and plans and Texas QSO Party and the awards.

MARCH MEETING RECAP

DMR Training

If you are interested in obtaining a copy of the Video of each Session please bring a USB stick (estimate 3GB per session) and we can make a copy available to you to download on your USB stick with a NARS donation of \$6.00 per session. You can sign up at the meeting. Many have requested this as a helpful tool to refer back to when programming radio's and other general information related to DMR. This video is NOT planned for wide public publication so take advantage of this opportunity.

John Portune, W6NBC, presented on a "Compact 40 M Vertical".

VE Session Congratulations

Congratulations to:

Jimmy R. Sanders - New Technician
Edward M. Baachman - New Technician
Stephen P Allison – New General
Trevor J. Lewis - New Extra

Rosendo A. Jimenez – KF50SW – Upgrade to General
Bjorn A. Held – KI5LWT – Upgrade to General
Samuel L. Barnes – KI5HKP – Upgrade to Extra

Saturday, March 27th (Klein Fire Department)

Special points of interest:

- The date for the next VE is set for Saturday, April 17th at the Klein Fire Department Admin Building.
- Gates will open at 8:30 A.M.
- Testing will be from 9:00 A.M. until 12:00 P.M.
- The gates will be closed and locked at 12:30 P.M.

We had 7 candidates taking 11 tests.
Element 2 tests given: 4; passed 4; Failed 0
Element 3 tests given: 5; passed 4; Failed 1
Element 4 tests given: 3; passed 2; Failed 1

Thanks to the Exam VE's in attendance: Robert Ewers K9HOU; Sheree Horton KF5LMJ; Keith Dutson NM5G; Dan Carroll KD5DAN; Marvin J. Wilken KT4W; Sam Labarbera N6HB; Martin Rogoff N5GPS.

And to Ron Matusek WA6TQH, NARS ARRL VE Liaison.

VE session guidelines

- If you have a temperature or feel ill, please do not ask to be tested.
- Tables and chairs have been arranged to meet social distancing requirements. Do not move them.
- Please bring a mask and plan on wearing it while in the building.
- If you know you will be attending, please send an email to rom1@att.net or vec@w5nc.net to be placed on the list for testing.
- We are allowed a maximum of 28 people in the building at one time. This number includes all applicants plus the VEs.
- Walk-ins will be allowed for this session.
- Please park in the designated spaces and wait for instructions.



*Houston Transtar Building
Conference Center West Entrance
6922 Katy Road
Houston, TX 77024*

*V.E. Exams every 4th Saturday of the month at 9:30 a.m.
Contact: Mark Landress, WBSANN@arrl.net for further info.*

Welcome, Congratulations, and Condolences

It is with much sadness that I report the passing of Edward M. Reynolds, (Eddy), K5WQG. He passed away, April 9, 2021 at Tomball Regional Hospital after a massive heart attack earlier in the week.

More information to follow when arrangements are made.

Bob Walworth, N5ET

Sad news indeed. I worked him almost every week on the CWops CWT sessions, although I did not hear him this past Wednesday. Also, he did not attend the North Lunch Break this week held at Adriatic Café Italian Grill. Now I know why.

I first met Eddy during a VE session. Eddy gave the code test, back before the code was eliminated. Soon Eddy became VE session manager after Norm Covey retired that position. Subsequently Eddy passed the job to me, which I held for 9 years before passing to Ron WA6TQH.

Another memory was a trip to Nicaragua with Eddy and Bob N5ET to participate in a contest from the shack of Octavio Miranda near Granada.

Finally, Eddy was a great musician, and performed as keyboardist with the NARS Pickers. That went on for many years until the passing of band leader "Captain" Jim Kirk KJ5X.

Boy Eddy, you have left a huge void in my life. Rest in peace, my friend.

Respectfully, Keith NM5G

Welcome new members

January, 2021, new members(s):

Bert Estes — AI5BW (was KI5MSR)

Tom Bazan — KA6SFR

Tony Hui — KI5NEL

February, 2021, new member(s):

James Lovett — KI5NVD

March, 2021, new member(s)

Rafael Alvarez — N4SPD

NARS Info

NARS now has a new address!

Please update your address list!

Northwest Amateur Radio Society
P.O. Box 11483 Spring, TX 77391

NARS WEBSITE: W5NC.NET

E-Mail Reflector: mailman.qth.net.

Board Meetings

The board meetings will be at 6:00 on the same date and at the same location as the general membership meeting, except for January due to the NARS award banquet.

General Membership Meetings

3rd. Friday each month at 7:30 pm. — EXCEPT January Banquet
Located at Klein Fire Station Administration, 16810 Squyres Rd., Klein, TX 77379. Located behind Klein Fire Station 4.

NARS name tag

Any member can request a badge and should contact Sheree Horton, WM5N (was KF5LMJ).

Weekly 2m Net

Wednesdays at 8 pm.
Monitor Reflector for Current Repeater.
Coordinator: Neal Naumann N5EN.

Weekly DMR Net

Tuesdays at 7 pm.
Monitor Reflector for Current Repeater.
Coordinator: Sam Labarbera, N6HB
slabarb@outlook.com

NARS Resource List

Digital Modes (Including DMR)

Walter Holmes – K5WH
 Marty Fitzgerald – W5MF
 Ron Matusek – WA6TQH

NARS Officers & Other Contacts

President & Board Chairman Ron Matusek, WA6TQH 713-825-9606 officers@w5nc.net	Directors (term expires 12/31/2021) Sheree Horton, WM5N (was KF5LMJ) 713-299-6994 officers@w5nc.net	Administrative & General Info. Marty Fitzgerald ,W5MF 281-251-4301 officers@w5nc.net
Vice President Marty Fitzgerald, W5MF 281-251-4301 officers@w5nc.net	Sam Labarbera, N6HB 832-781-3145 officers@w5nc.net	Web site URL: http://www.w5nc.net Web Master: Bill Buoy ,N5BIA 281-370-3510 webmaster@w5nc.net
Treasurer Tom Hoherd ,KK5YU 281-370-2941 treasurer@w5nc.net	Directors (term expires 12/31/2022) Kirc Breden, N5XJB officers@w5nc.net	NARS E-Mail Reflector NARS@mailman.qth.net Coordinator: Keith Dutson, NM5G keith1@dutson.net
Secretary Martin Rogoff, N5GPS 832-603-0036 officers@w5nc.net	Rob Nixon, KD5BXZ officers@w5nc.net	VE Session (ARRL) Manager Ronald Matusek – WA6TQH vec@w5nc.net
Newsletter Editor Martin Rogoff, N5GPS 832-603-0036 officers@w5nc.net	Buffalo Bayou Regatta Lee Glassman, WA5LEE 570-840-2633 wa5lee@wa5lee.com	

NARS has a social media presence

NARS has a social media presence! Thanks to Sam Labarbera, N6HB, we have a Facebook page for those who would like to follow us there. Visit the [W5NC Facebook](#) page and join! It is open to ham radio operators, so there is a short quiz to qualify new members.

We also have a Twitter feed. Follow us on https://twitter.com/nars_w5nc.

Locations for NARS Lunch Break - North and Medical Center

Lunch Break North locations

Gianna's Italian
28301 State Highway 249
Suite 100
Tomball, TX 77375

Mia Rancho
6096 FM 2920 Rd
Spring TX 77379

Panera Bread
1448 Louetta Road
Spring, TX 77388

Jason's Deli at Champions
5403 Farm to Market 1960 W
Houston, Texas 77069

Adriatic Cafe - Tomball
19004 Windsor Pointe Dr.
Tomball, TX 77375

BJ's at Willowbrook
7637 FM 1960 West
Houston, TX 77070

Spring Creek BBQ on 2920 in Klein
6068 Farm to Market 2920
Spring, TX 77379

Medical Center area Wednesday lunch

Vieng Thai Restaurant
6929 Long Point Dr.
Houston, TX 77055

Southwell's Hamburger Grill
2252 W Holcombe Blvd
Houston, TX 77030

Niko Niko's Greek & American Café (BW-8 & I-10 West)
1040 W Sam Houston Parkway North
Houston, TX 77043

Silver Palace Chinese Buffet
4005-H Bellaire Blvd. @ Stella Link
Houston, TX 77025

Pappas Barbecue

Antonio's Mexican Grille
3147 W Holcombe Blvd
Houston, TX 77025

Jason's Deli

Buffalo Grille
4080 Bissonnet St
Houston, TX 77005

Hamfest Calendar

Ham Fest -- The Eastside Amateur Radio Society (EARS, Website: <http://earstx.org>) is holding a swap meet on April 24th. 6AM until 2 PM.

St. Marks Church

3811 North Main

Baytown, TX

Contact: Wes, W5WES, at w5wes@arrl.net or 832-205-5483

Check <http://www.arrl.org/hamfests-and-conventions-calendar>

Contest Tips, Tricks & Techniques

Antenna Angles, Part 1

What do you do when the band is open in two or more directions? Are signals coming in at angles that match a null on your antenna? What can you do about it? In this installment, we'll look at antennas in all three dimensions.

A band can open to multiple directions. For DX contests from North America, frequent openings to the Caribbean and Africa occur at the same time the band is open to Europe. Typically you will want to concentrate on the population centers to maximize your rate, but you want to grab mults in other directions quickly. In a similar vein, you can work stations in multiple directions in domestic contests, especially if you don't live near the coasts.

Rather than move the beam, switching to a fixed antenna beaming the secondary direction is frequently suggested. W9RE has fixed antennas toward the southeast on all bands 80 – 10 meters to cover the Caribbean. The 20 – 10-meter antennas are all 4-element monobanders, with a Moxon on 40. Mike used to have an 80-meter 4-square that was usually left switched southeast, but he now uses a high dipole. Mike does a lot of switching and says he wore out relays rated for 2 million operations over the years.

The W9RE station was started in 1975 and currently has 21 Yagis. Mike notes that if he were to start over, he would probably have more fixed antennas and fewer rotators. He would have stacks fixed on Europe, single beams pointed southeast, and a rotatable antenna to cover other directions. Mike noted higher activity out of Japan in the past, and some stations had fixed stacks in that direction.

K9CT says that having antennas pointed in multiple directions is especially important in domestic contests. From his Illinois location, the population areas are to the northeast, southeast, and west. On 40 meters, he can cover these directions and can select antennas in any combination.

Craig also has an antenna for 40 that can be raised from 25 to 90 feet to match the contest, DX, or domestic. Craig can feed two of his 40-meter stacked antennas out of phase for high arrival angles. "It really makes a difference," he says.

The K9CT station has two antennas each for 20, 15, and 10. Craig notes that these bands often mirror each other in the open directions, but E openings can happen on 10 and 15 that do not affect 20. Craig has a 4-square on 80 meters. The 160-meter antenna is a vertical with four passive elements. The passive elements can be switched to be reflectors, directors, or left floating. He can set them for one of four directions or for omnidirectional.

W2GD has a "golden rule" for antennas. Always have more than one antenna per band to cover different propagation con-

ditions, and as a backup in case one fails. AA4NU also has a goal for at least two antennas per band. Some of his past and present antennas include a tribander at 80 feet and a 20 – 15 – 10 meter quad at 40 feet. On 40 meters, it is a Yagi at 70 feet, and a dipole at 35 feet. Billy has also used verticals and low dipoles for 80 and 40.

WØLSD lives in Colorado. Most of the ham population centers are east and west of him. Ken uses a 3-element SteppIR aimed east or west in the bi-directional mode to beam in both directions. Ken says he never turns the beam in many 10 – 12-hour domestic contests because the beamwidth is broad enough to cover most of the US. N8YXR also mentioned using his SteppIR in the bi-directional mode to avoid missing anyone.

Take-Off Angles

Antenna gain is often overrated, in my opinion. Vertical take-off angles are at least as important but often ignored. It does not matter how much gain your peak lobe has if signals arrive at angles matching a deep null in the pattern. Part of the problem is that it is challenging to control take-off angles. Height above ground is

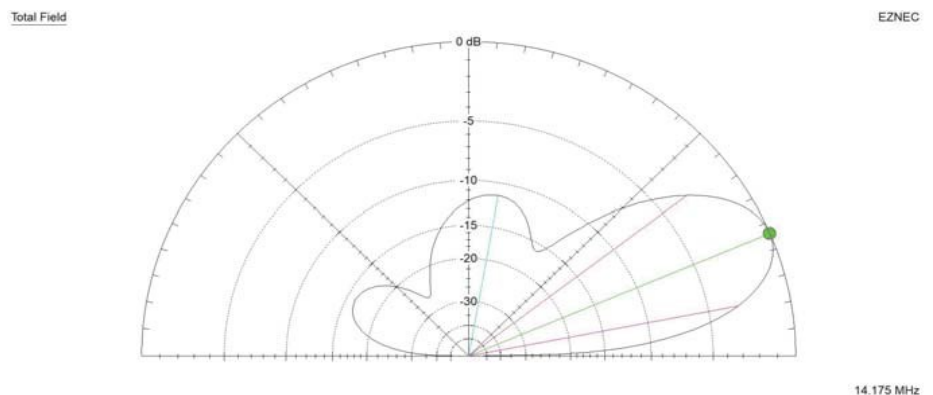


Figure 1 — An EZNEC vertical plot of a 3-element Yagi at 40 feet over flat terrain and average ground.

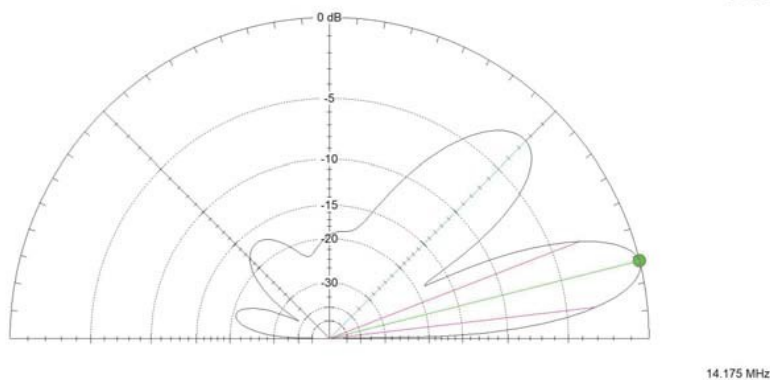


Figure 2 — An EZNEC vertical plot of a three element Yagi at 70 feet over flat terrain and average ground.

the biggest factor in take-off angle. Typically, you put up a tower as high as you can and stick a tribander on top. Your dipole hangs from the highest tree branch in the yard. You get the angles you get.

Incoming signals arrive at many angles. It depends on the band and distance. In general, more distant signals come in at lower angles. The state of the ionosphere is critical too. Signals are refracted back to the ground at more acute angles when the ionization is high, and the incoming signal will arrive from a higher angle.

Signals from a specific area will come in at different angles over time. They often come in at low angles when a band opens. The ionization along the path may increase later in the day. The length of the hops decreases, but the number of hops on a particular path increases. Sometimes signals from a given station will arrive at two or more angles from a station with different numbers of hops to make the trip.

Figures 1 and 2 show the patterns for a 3-element 20-meter Yagi at 40 and 70 feet.

The main lobe will be around 20-30° at 40 feet. At 70 feet, you have the highest gain at approximately 15° and 45°. The 15° lobe will often be the best angle for working DX. But there is a null at 25° – 30°. That may be the sweet spot for working domestic stations. The Yagi at 40 feet might be more than 15 dB better for those stations. By feeding the two in-phase, you essentially overlay the two plots and cover the low angles and mid angles without the deep nulls.

With the sunspots starting to rise in Cycle 25, W2GD mentions the increased likelihood of higher angle propagation on 10, 15, and 20 meters. John writes, “10-meter beams up over 100 feet have had their way in recent years, but the horror of being put at the mercy of tribanders at just 35 to 40 feet is about to return.” That’s good news for those with modest stations.

John goes on to say that those having multiple stacked Yagis are well suited for the coming years since they can select the antenna combinations to match the different arrival angles.

Besides height, take-off angles will depend on the local terrain. K5ZD recommends the *HFTA* software by N6BV. *HFTA* is included on the supplemental CD that comes with *The ARRL Antenna Book*. Not only can you analyze antenna performance for your antenna and local terrain, you can also plot antenna patterns against the statistical probabilities of incoming signals from other locations of the world.

We will continue this topic in our next installment.

Next Time

Antenna Angles, – Part 2. Do you feed multiple antennas at one time? What antennas and how? How can smaller stations improve their antenna azimuth and elevation performance without stacked beams? How do you avoid missing stations while using high gain, narrow bandwidth beams at VHF and up?

Send your ideas on these subjects by November 11, or suggestions for future topics via email to w9xt@unifiedmicro.com or USPS to 3310 Bonnie Ln, Slinger, WI 53086. Include “NCJ” in the email subject line.

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Texas QSO Party

Mobile operation, with goal of working as many stations as you can!

Keith, NM5G and I, Mark, K5GQ teamed up to work the Texas QSO party using the Texas DX society Club call, K5DX.

One of the reasons to be a mobile station is to have a high number of stations wanting to work you every time you change county or band. Being mobile during TQP can be compared to being a DX station and everyone wants to work you. To have an almost endless number of stations trying to work me was on my bucket list – Believed it would never happen! It did in 2021!

Electronic improvements have added to the thrill and complexity of this event. ARPS displaying which county you are in. (For those trying to find mobile stations in different counties.) Spotting software, allowing other to tell everyone where you are. Computer interface to radio, allows one to record time, frequency, county and other stations call. For morse code, CW the radio technology is every changing but one still need to filter and decode a station calling out of noise and other stations. Some radios will match the pitch of the calling station. When multiple stations use this feature, one hears multiple stations calling with the same pitch; unable to decode anything! One tries to decode the last single letter or letters heard. When the mobile station pauses what he may hear sounds like RAIN on a tin roof, that STOPS for seconds waiting to hear who is being called and when to start sending again. The radio sounds were played through the car stereo system, Keith, NM5G, mentioned the pile-up were close to what he heard when he was on a DX expedition. WOW!!



In years past operating the TQP, Texas QSO party one plans a route that one plans to be in a county for 10-15minutes. Not always possible to get from one county to another in 10-15 minutes try to prevent no one is calling back. Yes one could change bands but that wastes time.

NOISE – There are places where the power line noise makes it impossible to hear stations calling. (I'm just glad I do not live close to one of these places.) Hopefully, it does not last long and experience very few places with this high level of noise!

Friends & multiple contacts. It is a WOW FEELING when stations you recognize work you. Some stations follow mobile operator and try to work you every county change. I send email thanking each for the contact.

Mark K5GQ