

K7LED Relay



Volume 51, Issue 3

Mike & Key Amateur Radio Club – Seattle

March 2023

Swap Meet 2023

Wow! I hope you were able to attend the premier Ham event in Washington State yesterday. Better yet, I hope you were able to be one of those folks who made it a premier event. It looks like we, just about, broke the bonds of COVID. I say, just about, because there were a few folks (vendors and volunteers) that had to cancel out due to that dreaded scourge; but not many.

It is hard for ANY organization to come back from what has occurred the past several years. Not just the financial considerations, which are considerable. It is the **continuity** of the event that has really taken the hit. By continuity, I mean that we have lost experience, enthusiasm, and, in some cases, desire to do this anymore.

In the realm of experience, we have had important team members either become Silent Keys or other-wise unable to participate as they, or their family members, deal with life changing events or illness.

Enthusiasm is important. As time goes on, either without the Swap Meet or with disappointing ones, the enthusiasm tend to wane over time. 2020 was terrible with the world, as we knew it, shutting down. We could not hold an event in 2021 and 2022 was beset by the confusion caused by the COVID pandemic endgame.

Who could be enthusiastic about those events? Without the cup of enthusiasm being refilled periodically by a fun experience, why would you have any desire to participate? Not as a worker, a vendor, or a ticket buyer. Hopefully, I think we saw a reversal this year.

First, I saw a lot of new faces in the worker teams. They got to experience the excitement of an event that was well attended and demanding. That fills up some of our leaking knowledge base and instills a desire to do it again.

Continued of Page 2

Celebrating March Members

By Scott Gilyeat, KC7SAG, Treasurer

As of March 2023, these folks have been Mike & Key members for the number of years stated. Congratulations to all of you, and thank you for your participation and service. Happy Anniversary this month! Each of you makes us who we are.

Years

32	Dan Humphrey	N7QHC
30	Robert Crooker	KB7PEC
29	Kathy Martin	KB7QMO
25	Jack McCall	W7TMW
23	Dorothy Lowell	KB7WSO
13	Brett Traicoff	
9	Kirk Butler	K6GNW

9	Eric Skone	K7ELK
8	Whit Worcester	KG7LNZ
7	Keith Johnson	KG7CNU
6	William Allison	K17BZ
6	Bruce Gary	K7BGG
5	Doug Reynolds	K7FDR
4	Manfred Bester	AG7NR
2	Tim Barry	KJ7TJE
2	Holly Eggleston	W6HCE
2	Christian Helfrich	K7XTN
2	April Mardock	K17QFV
2	Erik McClenney	K3ER
2	William Ridge	KJ7QBY
1	Mark Lacas	K7MLX
1	David Schmenger	KK7CSD

Life Member, having been with the club 25+ years

For example, out in registration, my team of experienced folks was pretty much down to a couple folks left over from 2019. Unless you have done the work before, you have no idea of the number of details in the job. More education? Mea Culpa. Still there are a lot of details that just cannot be imparted easily – you must live through it and be able to ask questions real time. I am sure the same occurs in other worker teams.

I am proud of how my team did this year. They learned a lot and many also said they want to do it again. I am hopeful my registration team slots will fill more quickly when we start 2024 planning.

After my excessive harping and browbeating on all of you for so many months, I want to thank everyone who did step up to volunteer and contribute this year. I was truly scared until 8AM Friday when I saw the big team show up for setup. After that, it was all just was fun.



There will not be a lot of detail about the Swap Meet in this *Relay*. It only happened yesterday and the *Relay* needs to get out.

Attend the meeting this coming Saturday. I expect there will be lots of pre-meeting conversation and comments, about the Swap Meet. It is likely this will be the last monthly Club meeting at the Salvation Army HQ. The Board has been working hard on a new location and you can expect details in the April *Relay*.

Fran Underwood N7FWZ – Silent Key
By Dave Smith KB7PSN

On March 8, 2023, the Club was notified that Frances Underwood, N7FWZ, passed away in her sleep in Colorado Springs, CO. She was one of the iconic treasures that had supported the Puget Sound ham radio community for many years.



***Fran Underwood
N7FWZ (SK)***

As I recall one of her stories, she grew up being called Frances. It was her husband, Gene Underwood, W7AKA, who started calling her Fran. She tended to prefer this name.

My experience with the Underwoods goes way back to the early 1990's. I worked with Gene back on one of the 777 Flight Test programs over near Boeing Field. He was somewhat gruff, but tended to get the tasks done.

After I became a ham radio guy, I searched for a way to help where needed. I stumbled upon the Seattle Seafair Torchlight Parade held during the end of July each year. There was a Parade organizational meeting at the Underwood house in Newcastle. The rest was history – the Underwoods made us feel at home while presenting what happens to make a successful Parade.

During the Parade, both Gene and Fran shared net control operations during the Parade from their nice big RV. They had great chemistry together as the Parade went through Downtown Seattle. I was hooked. For multiple years, I work many intersections along Fourth Avenue between the Seattle Center and the Kingdome. They would also provide similar net op support for both the RAMROD and the Seattle Marathon. After Gene passed away in 2011, Fran still managed to muster up the support until more recent years.

On occasion, she would show up to Club meetings, still with a smile and a willingness to help. Then, a couple of years ago, she moved down to Colorado to be closer to her family. For those who knew her, we will miss her cheerful disposition! RIP Fran Underwood, N7FWZ

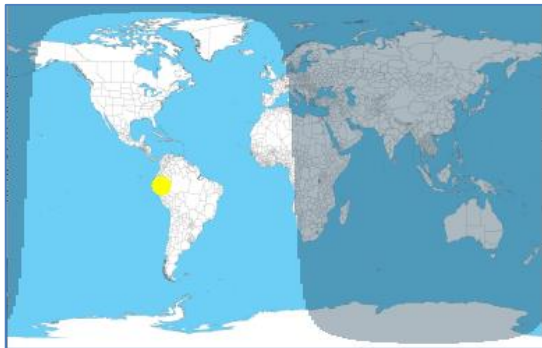
Yes, it is a Grey Area

By David Okrent W7DAO

Over the last month or so I have heard a recurring question on TechNet (Wednesdays at 7:30PM on the 2m repeater) about Grey Line Propagation; therefore, I thought a short article might be worthwhile.

A little review. During the day the ionosphere has four layers: D, E, F1, and F2; where frequencies generally below 10 MHz are significantly attenuated or absorbed. The D-layer absorbs much or all the skywave energy on 160m, 80m, and 40m during the day. But at night DX opens as the D-layer disappears. At night with the absence, or very low levels of UV and X-ray energy the D-layer cannot stay ionized and it disappears – the molecules return to a neutral state. Also, because the night side energy levels have fallen the F-layers consolidate into one.

This change is not an on/off switch but a gradual change starting at dusk for the sunset side of the earth. While conversely the D-layer begins to gradually form on the sunrise side. Lastly, the changes in the ionosphere during dusk/dawn are not uniform from north to south and vary with the seasons. This transition zone is wider at the poles and narrower at the equator. *The transition zone is called the Grey Line*, also known as the terminator.

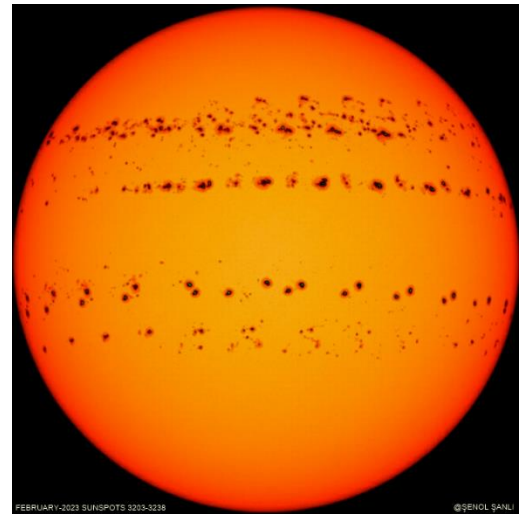


How does the Grey Line help when you want to DX to Japan on 40m? During the day 40m is generally not a DX band as a lot of the radiated energy is absorbed by the D-layer. If you transmit during twilight while the D-layer is thin and getting thinner there are less losses and a higher chance your 40m signal will survive to be reflected off an E- or F-layer. The receiving station in Japan can hear your station because the local D-layer is weak as it is just starting to build up. This means not all your transmission will be absorbed as it reflects off the F and heads to Japan via the thin D-layer. This is Grey Line propagation.

How long does it last? It depends on the band and the current solar weather. This effect is gradual, but the optimal window lasts only about 10-30 minutes depending on the band. During twilight to sunset 160m through 20m

can give you access to SE Asia. BTW, what we are talking about is changes to the LUF-lowest usable frequency.

What about frequencies above 10MHz? There are also changes in the maximum usable frequency (MUF) during the day/night transition. The MUF drops during the night and rises during the day with the changes in the F-layer. Here is a grey line map that updates every five minutes: <https://dx.gsl.net/propagation/greyline.html>.



**A month of Sunspots
February 2023
(28 overlaid photos)
Credit: Senol Sanli, Bursa, Turkey**

Upcoming Election of Officers and Trustees

By Manfred AG7NR

We will hold our annual election of Officers and Trustees at the March 18 General Meeting. So far, we have one candidate for each position, except for Secretary. If you have any suggestions to name additional candidates (including yourself) then please do so either publicly during the General Meeting, or privately via email to the Board.

The election will be held sequentially for each position. We will need to complete the election for each position prior to moving to the next. To be eligible, candidates must be present, either in person or remotely via Zoom.

To conduct Club business, it is essential to have a functioning Board. Many thanks to those who already stepped up and accepted a nomination!

Mike & Key ARC - Officer and Trustee Elections 2023		
Position	Candidate 1	Candidate 2
President	Carl Reynolds, N7CJR	
Vice President	Paul Petach, KI6QXV	
Secretary		
Treasurer	Scott Gilyeat, KC7SAG *	
Activities Manager	David Okrent, W7DAO	
Radio Officer	Hal Goodell, N7NW **	
Trustee #1	Jeff Hite, N7FCC	
Trustee #2	Steven Cook, KD7IQL	
Trustee #3	Robert Grinnell, KD7WNV	
Trustee #4	Manfred Bester, AG7NR ***	
Trustee #5	Alex Malesis, W7AEM	

* The Candidate was vetted by the Executive Board on March 1, 2022.
 ** The Radio Officer is not elected, but rather appointed by the Board without term limits.
 *** Trustees #2 and #4 are elected in even years (except when a Trustee resigns earlier).

It happened at the Swap Meet

I thought this was great email comment I received from a first time Team member (who I will not embarrass by identifying). -ed

I did make it and had a great time volunteering; it was a very different experience from just attending the event. I am planning to do it again next year. All the other volunteers were very helpful guiding me through the process. It was all straight forward; I just did not know what to expect since it was my first time but everything worked out great. Next year I will sign up earlier.

What's a Pin Lock?? And What on Earth Does It Have to Do with Ham Radio?!

By Tim K7ANE

To answer the second question -- more than you would think. And, I'll answer it further with another question.

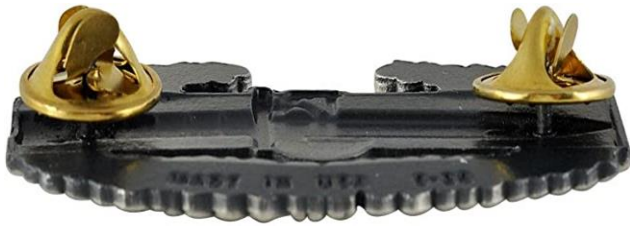
How many of you have pins on your vests or baseball caps, memorializing your participation in various ham radio groups or events: ARRL and club memberships, VE or Instructor service, Field Days, POTA/IOTA contests, SeaPac and other ham fests? Ever lost one when it fell off, unnoticed until later?



At the February general meeting, I was chatting with Dick, W7INK. My callsign ball cap, adorned with several such pins, was lying on the table between us. He had an ARRL Life Member pin attached to his M&K name badge.

I asked him if the pin had ever lost its clutch back and fallen off. This led to a brief discussion of the pin locks that I had on the backs of the pins on my ball cap. He expressed interest, and wondered where he might get pin locks. It occurred to me that others might also be interested in these tiny but helpful devices.

So, to the first question: Pin locks are tiny metal sleeves that replace the clutch backs that typically come on the back of such event pins, to hold them to the clothing or other items on which you wish to wear them. The lock sleeves have a tiny hex bolt that is tightened down on the pin shaft, keeping the pin from slipping off accidentally.



Typical Clutch Lock



Pin with pin lock



Pin locks

I first saw such pin locks at a Harley Davidson motorcycle dealer, where bikers bought them to secure similar pins to the thick material of their leather jackets. A little research found the locks on Amazon (and other on-line sites), and they were about half the price. They come in packages of a dozen to a hundred pin locks, ranging in price from about \$7 to \$15. Each package also comes with a small hex wrench to use tightening down the sleeves. Tired of losing your club and event pins? Try pin locks.

It happened at the Swap Meet

I was managing vehicles coming in for load out. One gentleman was rather distracted and I had a hard time getting his attention to move up. Finally, he moved up and was rather excited. ***I just worked Argentina!*** I said, 10 meters? ***Yes!*** I just smiled remembering my own days of a new one (never mind mobile with a small whip antenna). Don't forget to have fun.



NVIS Primer

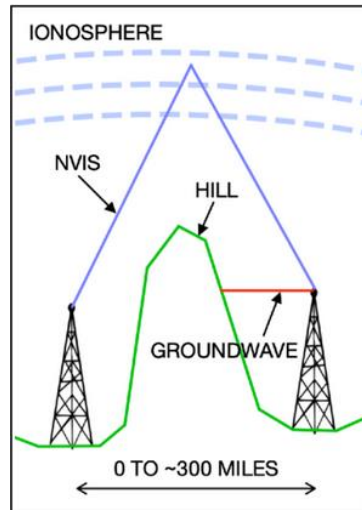
Submitted by Ross VanDeen W7ROV

NVIS Net Times and Frequencies:

For 80M NVIS net; 3.84MHz Primary, Alt 3.86MHz

For 40M NVIS net; 7.23MHz Prim, Alt 7.25MHz.

Tuesday NVIS Net, 0300 UTC (7:00 PM): Come one, Come All.
 Sunday at 1000 (10:00AM) on 7.2MHz LSB beginning in the Spring.



The ionosphere's bending effect is sufficient, even at steep "near vertical" angles of incidence, to bend back to earth the lower HF frequencies, particularly;

- 40-meter band (7 MHz),
- 60-meter band (5.3 MHz),
- And 80-meter band (3.5 MHz) signals.

These bands are most suitable for the NVIS technique, even during daylight hours when more distant skip propagation on these bands is ineffective due to D-layer absorption.

The D-layer of the ionosphere normally absorbs skip signals below the 30-meter band during daylight hours; so long-distance skip is not effective on the low bands during the day. These bands open for long distance skip at night when the D-layer dissipates and the F-layer refracts these frequencies. However, since NVIS signals travel through the D-layer at very steep angles, the transit distance through the D-layer is minimized, as compared to the long skip signals traveling low to the horizon. As a result, D-layer absorption of NVIS signals is minimized, and NVIS is usually a viable technique throughout the daylight hours, with performance variations for ionospheric conditions.

To direct the greatest portion of the transmitted signal vertically, the antenna must be positioned relatively low to the ground. The interaction of directly radiated signals with ground reflections results in more signal strength radiated in the vertical direction when the horizontal antenna is much less than $\frac{1}{2}$ wavelength above the ground.

Height above ground is usually less than $\frac{1}{4}$ wavelength for the NVIS technique, and much lower heights are preferred by many operators due to reported performance improvement. A height of $\frac{1}{8}$ to $\frac{1}{10}$ wavelength is often used for effective NVIS. On the 40-meter band a dipole elevated just 4-meters (13 feet) above ground can provide very effective NVIS propagation in a radius of several hundred miles.

A good reference for what the specific conditions will be prior to making an NVIS contact is the Idaho Amateur Radio Emergency Service site (https://www.idahoares.info/current_propagation.php):

Idaho Amateur Radio Emergency Service

HAWAII FEB 15, 2023 10:32 ST (-10) | ALASKA FEB 15, 2023 11:32 ST (-9) | PACIFIC FEB 15, 2023 12:32 ST (-8) | MOUNTAIN FEB 15, 2023 13:32 ST (-7) | CENTRAL FEB 15, 2023 14:32 ST (-6) | EASTERN FEB 15, 2023 15:32 ST (-5) | PUERTO RICO FEB 15, 2023 16:32 ST (-4) | UTC FEB 15, 2023 20:32Z | GUAM FEB 16, 2023 06:32 ST (+10)

Idaho ARES | Activities | Training | Resources | Members

DATE TIME GROUP: 152032Z FEB 2023

NOTE: This web page references images that are rendered on external web sites, and simply collects those images onto a single page for the convenience of the radio operator. Missing images can result from the external site being down, moved to another domain, or can be due to a change in how the external site presents the images. In the later cases, this page must be updated to generate the proper off-site references.

Solar-Terrestrial Data - <http://www.infobh.com>

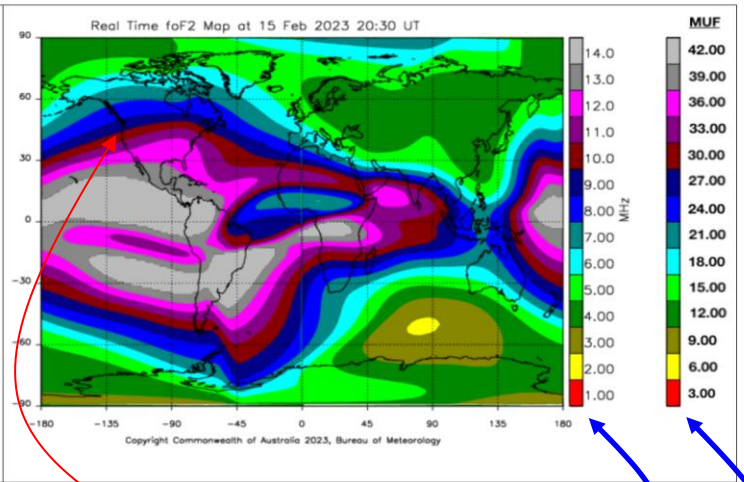
15 Feb 2023 2021 GNT

SFI 180	SN 140
A 8	K 4 / PIntry
X-Ray C2.2	
304R 159.4 @ SEM	
Ptn Flx 696	
Elc Flx 2970	
Aurora 6/n=1.99	
Aur Lat 60.7°	
Bz -7.5 Sw 334.6	

VHF Conditions		HF Conditions	
Item	Status	Band	Day Night
Aurora	MID LMT AUR	80m-40m	Poor Fair
6m EsEU	Band Closed	30m-20m	Poor Fair
4m EsEU	Band Closed	17m-15m	Fair Fair
2m EsEU	Band Closed	12m-10m	Fair Poor
2m EsNA	Band Closed	Geomag Field	ACTIVE
EME Deg	Fair	Sig Noise Lvl	S3-S4
MUF		MUF US Boulder	37.45
MS		Solar Flare Prb	56%

SOLAR WEATHER A & K INDICES		SOLAR FLUX INDEX	
A	K	70	POOR
0	0	80	GOOD
1	1	90	VERY GOOD
2	2	100+	BEST
3	3		
4	4		
5	5		
6	6		
7	7		
8	8		
9	9		

X-RAY (SUN IT)		PROTON FLUX	
X20	HF BLACKOUT	IN	POLAR REGION HF BLACKOUT
X10	1-2 HR HF BLACKOUT	100K	1-2 HR SUNLET HF BLACKOUT
X1	1 HR HF BLACKOUT	10K	POLAR REGION HF DEGRADED
M5	LIMITED HF BLACKOUT	1K	POLAR SMALL HF EFFECTS
M1	OCCASIONAL CONTACT LOSS	100	POLAR MINOR HF EFFECTS
C1	LOW HF ABSORPTION	10	POLAR VERY MINOR HF EFFECTS
A1-B9	MINOR/NO HF IMPACT	1	NO IMPACTS ON HF



foF2 (Critical Freq)
MUF

As you can see from the map, at this time, the Critical Freq for the PNW is about 9.0MHz (the dark blue band). This is ionosonde data for the world. For good NVIS operations, the foF2, or Critical Frequency, needs to be above the frequency you plan on using. If this is not the case the radio waves may not be reflected down to the ground but will pass directly through the F-Layer.

Note the MUF column to the right of the foF2 column, this shows that the MUF is ~3:1 to the foF2 frequency. Also note the Solar-Terrestrial Data to the left. This is a great website to explore.

With this data you can better predict what performance you can expect for NVIS or DX. I have found during my NVIS nets on Tuesday evenings, when the foF2 frequency drops from 4 MHz (forest green) into 3 MHz (brown) on 80M NVIS performance drops significantly.

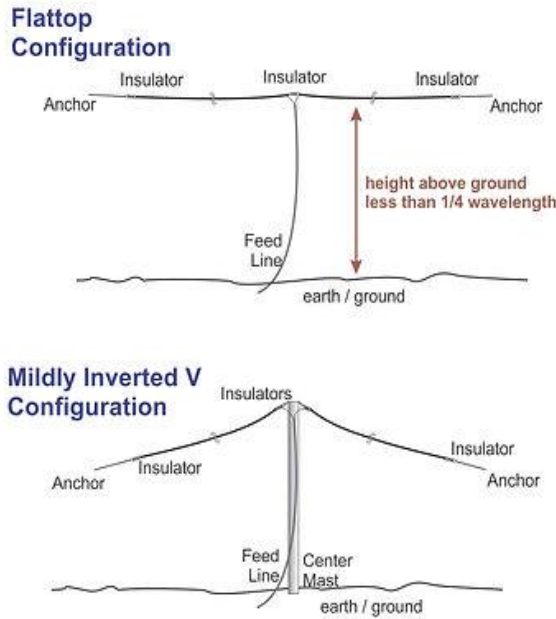
Last night, Feb 14, 2023, the Critical Frequency at 0300 UTC or 7:00 PM PST was at about 6 MHz. On 3.84MHz, from Enumclaw my QTH, I made contact with NW7GO; Everett Wa (129 Mi), KS7SXR; Roy Wa (27 Mi), AD7LJ University Place (23 Mi); WA, and KJ7RDY; Richland Wa (147 Mi); *These distances were determined using Google Earth, 3D Path.* Using 7.24MHz we were all able to contact each other too. So, good performance even though the ionosonde band was at 6MHz, 40 M worked just as well as 80 M.

The Richland contact was very interesting since Mt Rainier is in the direct path from my QTH to Richland.

- Antenna configuration

Perhaps the most critical factor, and certainly the most controversial among ham discussions, is the antenna configuration for NVIS that produces the best vertically directed signals. Let's consider the basics first, and then address some details that are not universally agreed upon.

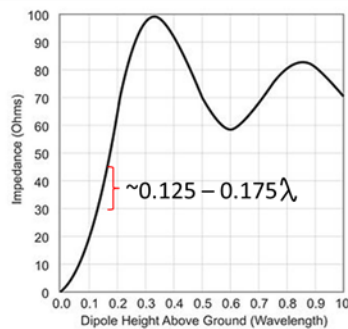
A horizontally polarized antenna provides the best NVIS propagation. A wire half-wave dipole trimmed for the frequency of use is very effective and also the most common type of antenna used for NVIS: Horizontal full-wave loop antennas are also very effective. In the half-wave dipole case, a flattop configuration or mildly down-sloped inverted V configuration works well. But, regardless of the specific type of horizontally polarized antenna used, the key factor in configuration is the antenna's height above ground.



Half-wave dipole antennas are great for NVIS, positioned a fraction of a wavelength above the ground.

NVIS works best with your antenna horizontally polarized. Pat Lambert WØIPL has conducted extensive objective data collection in Colorado and reports an experience of better coverage with a height of only 1/20 wavelength above ground. He notes that noise is significantly reduced as the antenna is lowered below 1/8 wavelength (5 meters, ~16.5ft, for the 40M band), and that communications with close stations (up to 300 miles away) was greatly enhanced with such low antenna height, particularly using the 80-meter band.

Other Factors: Beyond the antenna height, power, and frequency, other factors will impact performance. The height above ground effects the dipole feed point impedance. As the dipole is lowered below 1/4 wavelength the feed point impedance will be significantly reduced in value, and SWR may rise. For best performance, trim the dipole antenna while at the height at which you intend to use it. The diagram below is for a 40M Dipole.



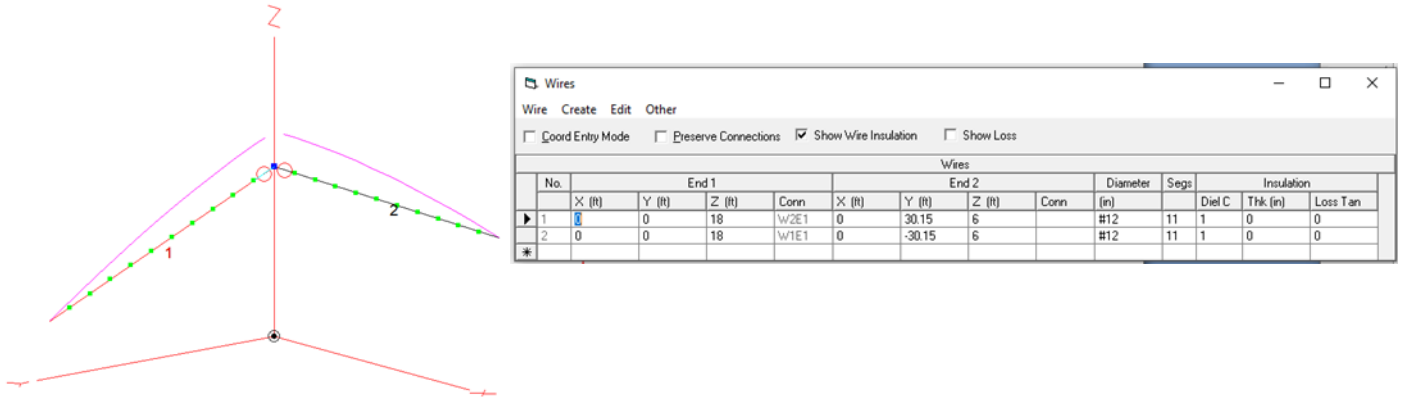
Antenna Height at wavelength

Approximate impedance of dipole antenna for height above ground in units of wavelength.

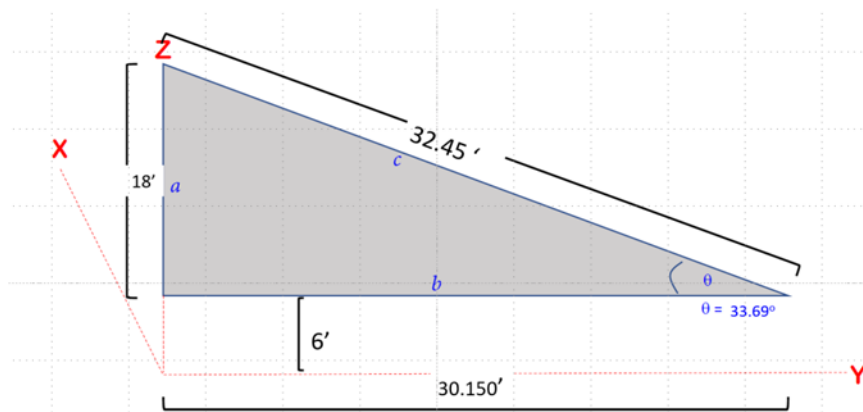
	λ											
Band, M	0.125	0.13	0.135	0.14	0.145	0.15	0.155	0.16	0.165	0.17	0.175	
40	16.4	17.1	17.7	18.4	19.0	19.7	20.3	21.0	21.7	22.3	23.0	Ft.
60	24.6	25.6	26.6	27.6	28.5	29.5	30.5	31.5	32.5	33.5	34.4	Ft.
80	32.8	34.1	35.4	36.7	38.1	39.4	40.7	42.0	43.3	44.6	45.9	Ft.

For a 40-meter NVIS Portable Dipole Concept click on the Ham Radio School reference link above.

So, for my 40M NVIS antenna design here is the simulation data I got from using the EZNec Pro2 v.7.0, which proves to work well. Below is the Antenna view using #12 AWG insulated speaker wire.



The wires, #1 and #2 run along the Y-Axis. It is in an “Inverted Z” configuration with the peak at about 18 ft, as shown in the above Wires Table; about 0.135 to 0.140 wavelength (WL) (see Antenna Height at wavelength table above). The ends of each leg (1/4 WL) are at a height of 6 ft as shown in the above Wires Table. It is important to note that the Wire lengths shown in the Wires table above represent the “Y” distance and not the true length of the wire.



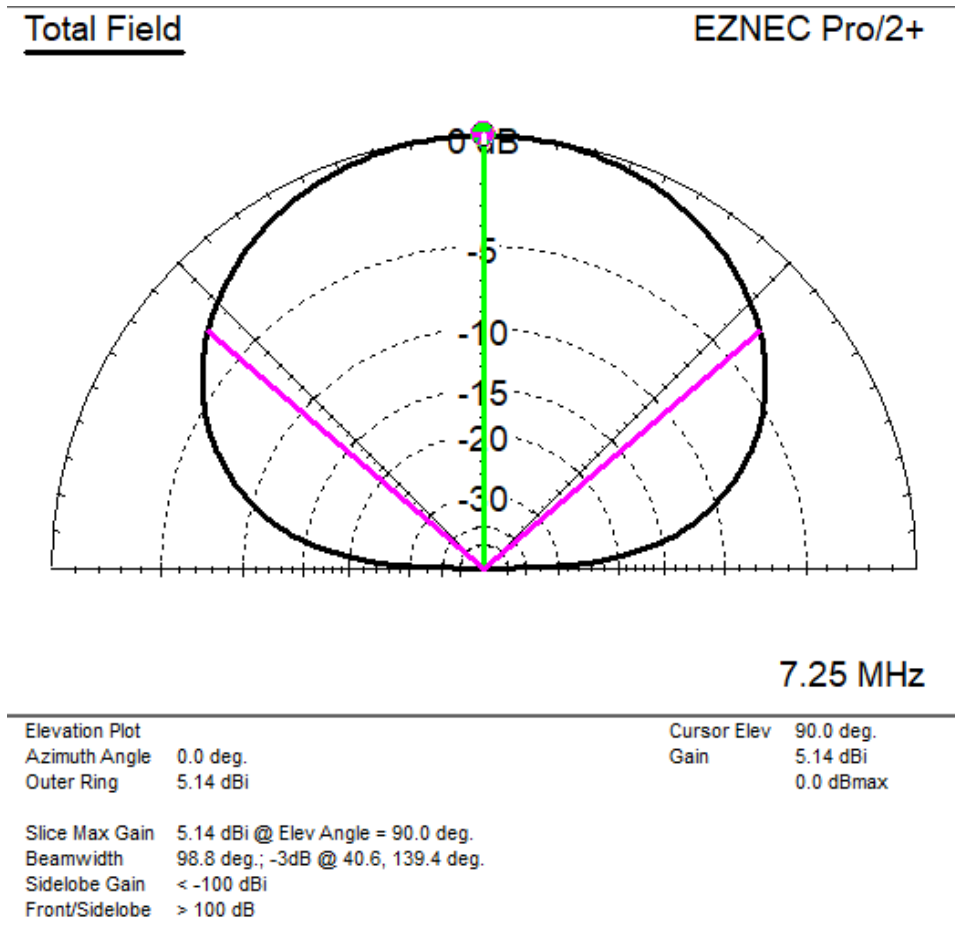
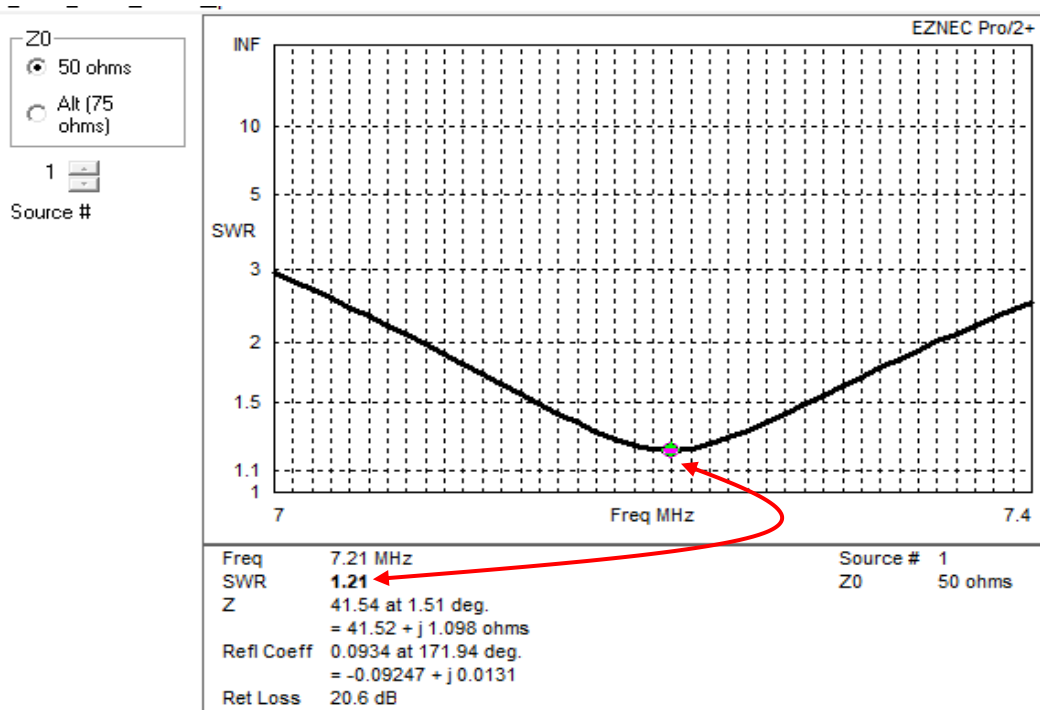
$$C = a / \sin \theta$$

Simple Solution! Of Course, the actual wire length is the Hypotenuse of the Right triangle. So, both the Antenna View and Wire View are correct. The Y coordinate is just the distance and does not include the angle θ .

To calculate the true length of the wire

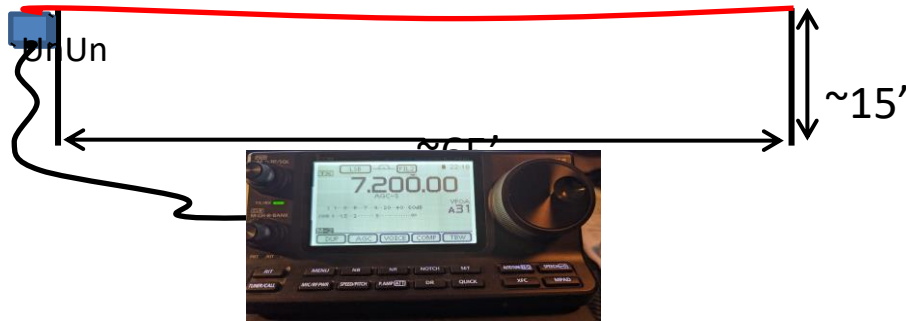
These are approximate and do not reflect entirely actual set up such as the ground conductance etc, but will get you in to the ball park.

The diagram below shows the SWR we can expect and the Far Field Plot.



So for a 40M NVIS I would suggest a frequency between 7.15MHz and 7.30MHz.

There you go. I hope that this was a good primer on the how to set up an antenna for a 40M NVIS Net, it should get everyone in the ball park. I am sure that many of you also have an End Fed Half Wave antenna too. This will work very well on 40M flat at a height of 15 ft. An 80M NVIS antenna can be set up in a similar manner; the only difference is that the dimensions are longer.



**Mike & Key ARC – Board Meeting via Zoom
March 7, 2023, 18:45 Pacific**

Participants:

- Phil Pia, K7PIA (President)
- Steven Cook, KD7IQL (Vice President)
- Carl Reynolds, N7CJR (Secretary)
- Scott Gilyeat, KC7SAG (Treasurer)
- David Okrent, W7DAO (Activities Manager - not present)
- Hal Goodell, N7NW (Radio Officer)
- Robert Abbott, KF7RWA (Trustee #1)
- Jason Nierenberg, KJ7GLB (Trustee #2)
- Jeff Kenner, W7GPG (Trustee #3)
- Manfred Bester, AG7NR (Trustee #4 - Board Chair)
- Jay Jones, AE1J (Trustee #5)
- Mike Dinkelman, N7WA (Relay Editor)
- David Smith, KB7PSN (Webmaster)
- Michael Hansen, KG7MX (Volunteer Counsel)
- Jim Kiniry, KE7JIM
- Michelle Cross, WB7AYU
- Paul Osborne, KK7EJW

Agenda:

Call to Order (19:15 Pacific)

Establishment of quorum (Carl, N7CJR): Have quorum
Approval of previous Board meeting minutes: Voted Yes 100%

Reports

Chairman of the Board (Manfred, AG7NR): Nothing to report

President (Phil, K7PIA): Nothing to report

Vice President (Steve, KD7IQL): Presented 5 new membership applications, all were recommended to proceed to the vote of the Membership

Secretary (Carl, Secretary): Nothing to report

Treasurer (Scott, KC7SAG): Club currently has 301 active members; Report on accounting status; Books are in order

Activities Manager (David, W7DAO - not present): No report

Radio Officer (Hal, N7NW): Report on repeater status; Some older equipment will be sold at the Swap Meet Country Store; Bob, WA7HTJ, and Craig, WA7HTN, went to Tiger Mountain to address a power supply problem; Will need to look at the overall power distribution and make the site more reliable; Guy cables need to be replaced; Will be making a presentation at an upcoming General Meeting; Michael, KG7MX, asked if we received a Bill of Sale for the equipment transferred from PSRRG to Mike & Key ARC; Hal stated that none was received yet, but he will follow up with Bob, WA7HTJ

Standing Committees

Technical & Special Interest (Jason, KJ7GLB): Had great Committee meeting last month; Netops are running well

Public Service (Jeff, W7GPG): Robert, KD7WNV, is working on the Special Events & Information Guide, should be ready for the Swap Meet; Various events are coming up and will be supported

Education & Training (Robert, KF7RWA): Daniel, KL7WM, held a class in Auburn

Membership (Manfred, AG7NR): Updating the membership application form has been an ongoing project (asking for stronger commitments to support the Club); No meeting was held this month

Facilities & Publicity (Jay, AE1J): See discussion on meeting facilities below

Repeater (Hal, N7NW): Committee will start regular meetings in the April time frame to map out a path forward with documenting and upgrading current systems

Publications & IT Support

Relay Editor (Mike, N7WA): Deadline for Relay submissions is March 12

Web Master (Dave, KB7PSN): Amazon Smile has ended, took widget off the web site; Made small web site updates

March 2023

Essential Committees

Audits: N/A

Awards (Scott, KC7SAG): Plaques for 50+ years of membership were ordered, will be presented at the Annual Picnic

Finance: N/A

Strategic Planning (Manfred, AG7NR): No meeting this month

Event Committees

Swap Meet (Hal, N7NW, Mike, N7WA): Delivered ~144 pallets to the Fairgrounds; Will start Thursday morning 9:00 AM with the floor layout; Some tables on 2nd floor are left to be sold

Field Day: No report

Picnic: No report

Old Business

Discussed the Salvation Army proposal and rental agreement: new rental fees would be \$300/month; Kent Commons Community Center will be difficult to book; Kent Senior Activity Center is a better option, costs \$40/hour and would be needed for 5 hours, would need to use theater seating, room is smaller than at the Salvation Army, but has large parking lot.

Community Center at the River Mobile Estates in Auburn is available free of charge, much larger than other facilities, but with limited parking; Need to keep searching for a new home for the Club and look at what \$300/month would do to our budget;

Kent and Auburn are a bit far south; Need to make plans for March 18 General Meeting in the short term; Try to stay one more month at the Salvation Army (donation checks for 2022-Q4 and 2023-Q1 were cashed already); Motion to stay at Salvation Army for the March 18 General Meeting and to hold the April 15 General Meeting at the River Community Center in Auburn; Voted: 100% Yes; Manfred, AG7NR, will ask Capt. Parks at the Salvation Army if we can use their facility one more time and make arrangements with John, KE7OXR, at the River Community Center for April 15

A/V setup and operations support for upcoming General Meetings; Paul, KK7EJW, stepped up, but needs help to run the A/V setup; Need more Club members to help; Robert, KJ7JXM, may be willing to help; May need to get a dedicated laptop instead of Jason's for the future to run the A/V component of the

General Meetings

Nomination of candidates for the upcoming election of Officers (5) and Trustees (4); Secretary is a mandatory position; Need 3 trustees (Robert, Jeff, Manfred) to conduct the election; Can recruit interim vote counters if not enough Trustees are present; Manfred will be on travel to DL (March 13-April 27) and will participate in General and Board Meetings via Zoom
Roy Fisher, KJ7OKL, estate donations; Manfred to ask Jeff, N7FCC, about the status of donated items

New Business

None discussed

Good of the Order

None discussed

K7LED Relay

Action Items

None

Next Meeting

April 4, 2023, 18:45 Pacific (Outgoing and incoming Board; remotely via Zoom)

Adjourn

Motion by Carl, Steve; Adjourned at 21:40 Pacific

Sea-Pac 2023

SeaPac will return to Seaside, Oregon the weekend of June 2-4. On-line registration is open.

Lots of Commercial Exhibits, Giant Flea Market (well, not as big as hours), Workshops, Seminars, Banquet, Prizes, VE Testing, DX & YL Luncheon and lots more.

<https://seapac.org/>

It happened at the Swap Meet

Customer comment

You folks have this load-out LOCKED IN!

Second Floor Pallet Crew at 4:30PM

The second floor is CLEAR!

Contact Us:

Email: info@mikeandkey.org

Message Bd/Reflector: <https://groups.io/g/mkarc>

Website: www.mikeandkey.org

Officer contacts info:

<http://www.mikeandkey.org/officers.php>

Postal Address:

P.O. Box 4234

Renton, WA 98057-4234



Facilities Committee

Our mission statement is to "Ensure that the Club has access to the proper facilities necessary to conduct Club business and activities. We also manage the Club's relationship with facility owners/managers on behalf of the Club."

As part of this effort, we also try to identify changing needs of the club and recommend changes when appropriate.

There are no regularly scheduled monthly meetings at this time. When appropriate, meetings will be held over Zoom on an as-needed basis.

Eager to get involved?

We are looking forward to returning in-person meetings, Club Events, and social activities once COVID-19 restrictions have been lifted. We are seeking volunteers who would be willing to help.

If you have any questions about your membership or would like to get involved, then please feel free to drop us a line at: facilities@mikeandkey.org

Membership Committee

Our mission statement is to "serve Club members and foster friendships and camaraderie in our amateur radio community."

As part of this effort, we also try to identify needs of members and recommend services to meet those needs.

Part of our activities is centered around planning and organizing our major social events:

- Membership Appreciation Banquet (in April)
- Holiday Lunch (in December)

Another part of our activities is focused on managing the membership life cycle:

- Providing membership services for our Club
- Keeping the membership informed
- Honoring members on their membership anniversaries
- Recruiting new members
- Renewing membership

We meet once per month, currently via Zoom, on the first Thursday at 5:30 pm Pacific.

Public Service Committee

The mission of the Mike and Key ARC Public Service Committee is to advance the knowledge and proficiency of our members in supporting public events with amateur radio communications, and to encourage members, as well as hams throughout the community, to participate in such support.

Each year the Club publishes a free booklet, "Amateur Radio Special Events & Information Guide for Puget Sound and Surrounding Area," which is prepared by the Public Service Committee. This guide contains a variety of information for area hams.

Our members support the community at various events throughout the year. Most are single-day walks, runs, bike rides or parades within the urban/suburban areas of the region, but some extend to multiple days and/or take place in surrounding forest areas. Participation in the Public Service Committee is a great place to learn more about these events and how to best participate in supporting them.

Just a few pictures from the 2023 Swap Meet

There will be an archive created shortly that we can all submit pictures too.
In the meantime. Some samples.

Remember you can always Zoom the Relay in your PDF reader.

