Tri-Lakes Monument Radio Association

Just having fun messing around with radio!

WØTLM Radio Association

Newsletter

October 2025

In this issue:

A Word About the Newsletter

The Newsletter welcomes submissions of articles or other items of interest to WØTLM members. Contributions may be articles, commentary, photographs, notification of events, fun things, reports of interesting radio activities, and more!

It's YOUR newsletter. Let's hear from YOU!

Email Editor

From the Prez
Bob WØHTH

Winding Down 2025

Hello Everyone,

Closing out the month of September, we had a great turnout for the club Picnic/Chili Cook Off Style Potluck. As per our standard, we had some delicious chili and, of course, potluck sides. I want to especially thank the folks who brought chili. Dan, NØOLD's Texas Chili, Pierre WØPJG's Vegetarian, Bill NØWRS's famous Billy's Chili, Barbara KØBE's Secret Headquarters Chili, and my wife's Chicken Chili Verde. We certainly had quite a variety and plenty to go around. But none of this would have been possible without those ever popular Honda Generators. It sure seems that those EU 2000i generators are popular with us hams, as we had four of the same aforementioned generators. Who would have thought? Chili accompanied by numerous side dishes certainly tempted every palate. My heartfelt appreciation goes out to all who supported the exceptional cuisine for this event.

Naturally, we had to play with some radios. Special thanks to Tim, WØOOD and Tricia KØTRD for organizing the Fox Hunt at Fox Run. Club members and guests sure seemed to have fun wandering through the trees of the park, over hill and dale searching for the fox transmitters, despite some curious looks from other people visiting the park. Steve, WGØAT spent time with folks exploring how we could utilize Echolink on an HT. The portable stations that were set up attracted members to explore hunting POTA, DX, Logging Programs, and even some FT8. Speaking of FT8, the longest distance contact logged was New Caledonia way out there in the South Pacific. Needless to say our activities certainly got some folks excited about Ham Radio.

Continued...

Hot Announcements

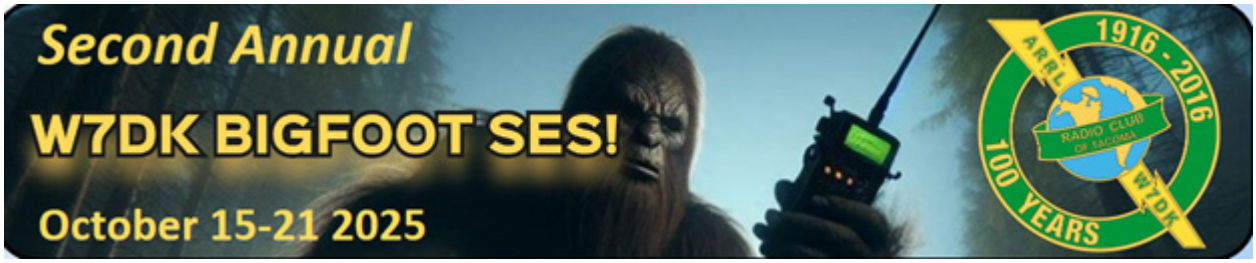
- ***WØTLM Extra License Class:*** Kickoff session Sat, 4 October, 1:00-3:30 pm. Woodmoor Community Center Barn, Monument, CO. Class runs through exam session on November 15. Registration open now. On-demand online course content with WØTLM Elmer support. **It is not too late to sign up and get your Extra license upgrade!**

- ***October Meeting:*** Mon, 20 October, 7:00 pm, Monument Chamber of Commerce Meeting Room. Connect Time begins 6:00 pm for informal discussions among members and newbies. Presentation Topic: Ham Radio Logging Programs

- ***WØTLM Office Elections:*** November 17th is our annual meeting date during which we will hold elections for officers. Please consider attending. Members in good standing according to the club's Bylaws and Constitution will be eligible to vote. Zoom attendees who are members in good standing will be able to vote provided they can hear the business being conducted and those attending in person can hear the person attending virtually. **Anyone interested in running for an officer position should contact Barbara Evans KØBE to receive information specific to that position and the requirements for holding a club officer position.**

From the Prez, continued

October is here, and with it comes cooler weather (maybe even our first snow), golden aspen, and some fun opportunities on the air. While most people look forward to Halloween, I can't wait for every October 20. That is *National Sasquatch Awareness Day.* Please don't laugh, because I am a believer in all thing's cryptid. From Nessie to Bigfoot. With National Sasquatch Awareness Day comes one of my favorite Special Event Stations sponsored by the Radio Club of Tacoma, the W7DK Bigfoot Special Event!



The unique legend of the Northwest is a Ham Radio Operator and will be on the air. Listen for stations calling W7B, W7I, W7G, W7F, W7O, and W7T. The BIGFOOT certificate is available to anyone who contacts at least one BIGFOOT special event station. This year they are also going to have a bonus station W7S, to honor the Skunk Ape. The real challenge is contacting all and receiving the coveted BIG STOMP. I got mine last year and look forward to this year's encounter! They will be operating on all modes, so test your skills and chase BIGFOOT.

As the year winds down, so does my time as your club president. I will not be running for re-election. Let me say that it has truly been an honor to serve alongside such a dedicated and enthusiastic group of amateur radio operators. Together, we've advanced our skills, supported our community, and enjoyed the camaraderie that makes this hobby so rewarding.

With that said let's look ahead to our **annual club elections that will be held on November 17.** This is your chance to shape the future of our organization by choosing the officers who will guide us into the coming year. Anyone interested in running for an officer position should contact our Secretary/Treasurer, Barbara Evans K0BE, to receive information specific to any position of interest to you and the requirements for holding a club officer position.

Please plan to attend this important meeting, participate, and consider how you might contribute, whether through leadership, volunteering, or simply showing up and being part of our shared activities. Members in good standing according to the club's Bylaws and Constitution will be eligible to vote. Zoom attendees who are members in good standing will be able to vote provided they can hear the business being conducted and those attending in person can hear the person attending virtually.

73
-- Bob WØHTH, President

Got feedback or suggestions for our WØTLM leadership?

Drop a note on our officers with your comments or recommendations for WØTLM.

It's YOUR club. Let's hear from YOU!

Email Leadership

Tech-Knowledgy
Stu WØSTU

NVIS Operations

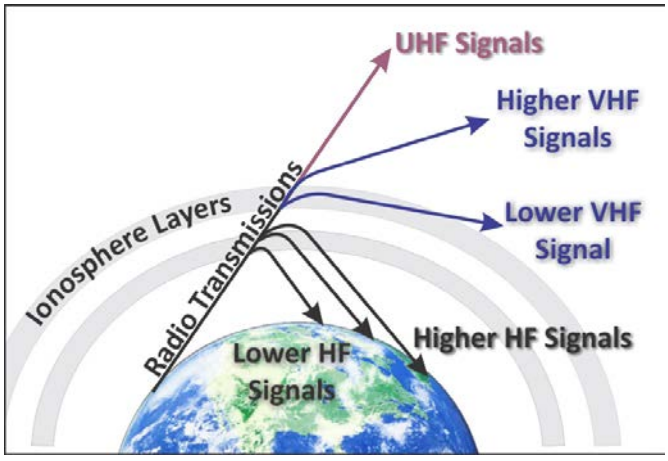
(This article first published at Ham Radio School)

Near Vertical Incidence Skywave (NVIS) is an ionospheric skip operating technique that directs the strongest signals from a station vertically, or upward, rather than toward the horizon. Signals propagating nearly vertically approach the ionosphere with steep incidence angles and may be bent back to earth with similarly small angles. The operational result is skip communications effective within a radius of a few hundred miles. The NVIS technique can help to bridge the communications gap between the local range of VHF/UHF repeater or simplex communications and the longer distance skip propagation of low-to-the-horizon HF signals.

The NVIS technique relies upon a combination of station factors, most importantly the frequency used, the power of transmissions, and the antenna configuration. Let's consider each of these three factors in the context of the NVIS technique.

Frequency: The refractive effects of the ionosphere vary with frequency. The bending effect on signals is reduced as frequency increases. This is why the 2-meter band (144 – 148 MHz) and higher frequencies are almost never received via skip propagation. The HF bands of 10-meters (28 MHz) to 30-meters (10 MHz) are often effectively refracted back to earth's surface when directed toward the horizon where incidence angles into the ionosphere are closer to the horizontal, and this propagation geometry provides long skip distances with single skips up to 2500 miles. However, the ionosphere usually does not have sufficient bending strength to return these upper HF band frequencies to earth with the steep take-off angles necessary for the NVIS technique.

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 the 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.



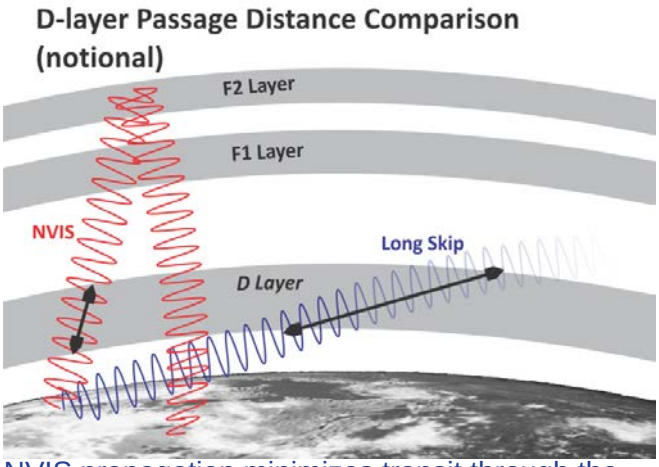
The bending effect of the ionosphere is greater for lower frequencies.

Transmitting Power: Transmitting power with the NVIS technique does not need to be great. Very effective NVIS communication can be completed

Continued...

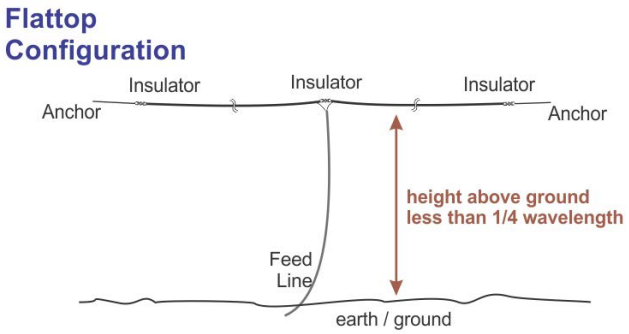
with the typical 100 watts of many HF transceivers "running barefoot." In good ionospheric conditions much lower power may be quite sufficient for effective QSOs. When atmospheric conditions are less favorable, increasing transmitting power with the use of an RF power amplifier can help to keep NVIS communications reliable. It is common for amplifiers to be employed by NVIS operators in the high daylight part of the day when the D-layer absorption attenuates signals more severely.

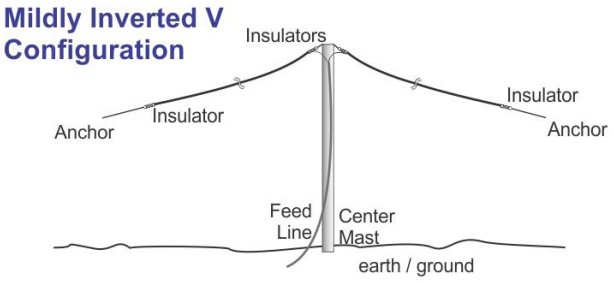
The D-layer of the ionosphere normally absorbs skip signals below the 30-meter band during daylight hours, so long distance skip is not effective on the low bands during the day. These bands open for long distance skip at night when the D-layer dissipates and the F-layer refracts these frequencies. However, since NVIS signals travel through the D-layer at very steep angles, the transit distance through the 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.



NVIS propagation minimizes transit through the D-layer with steep angles.

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 we will address some details that are not universally agreed upon.





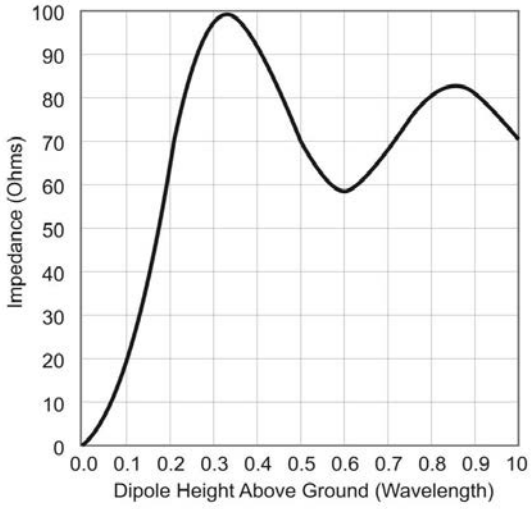
Half-wave dipole antennas are great for NVIS, positioned a fraction of a wavelength above the ground.

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. End-fed half-wave wires are also very effective. Horizontal full-wave loop antennas can also be used. 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.

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 ½ wavelength above the ground. Height above ground is usually less than ¼ wavelength

Continued...

for the NVIS technique, and much lower heights are preferred by many operators due to reported performance improvement. A height of 1/8 to 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.



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

The precise height above ground for the very best NVIS performance is not a well-agreed value. Antenna models reported by Jack Swinden W5JCK (and based on work of L.B. Cebik W4RLN) seem to point to best performance on 40-meters at 0.175 wavelength (7 meters, ~21.7 feet) above ground, and on 80-meters a height of 0.165 wavelength (13 meters, ~41 feet). 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, 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 ¼ 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 local ground conductivity will impact performance, with the poor conductivity of rocky or sandy and dry soil reducing antenna gain. With a more conductive ground, such as richly conductive and moist soil, antenna gain will improve. This brings up another less-than-solidly-agreed factor, the use of a parallel ground wire under the horizontal dipole element. You may think of this arrangement as a vertically pointed, two-element Yagi directional, with the ground wire providing an enhanced “reflector” element.

A parasitic wire reflector is usually implemented 5% longer than the driven element, or 5% longer than the half-wave dipole, and positioned below the driven element. The distance below the driven element is usually recommended as 0.15 wavelength, although other values are also advocated. Various sources recommend the ground wire be elevated above the surface of the earth 0.01 to 0.06 wavelength (1.24 to 7 feet for 40-meters) for best effectiveness and least impact on the antenna’s SWR bandwidth. Implementing the wire reflector narrows the SWR bandwidth somewhat, and Jack W5JCK indicates a substantial narrowing of 25% to 50% with the reflector wire on or near the earth. Further, his data claim a transmit gain with such reflectors of only 0.2 dB to 0.7 dB in the best cases, putting into question the value of the ground reflector wire. On the other hand, Pat WØILP reports up to 6 dB improvement of the transmitted signal with some experimental ground wire configurations he has tried.

Continued...

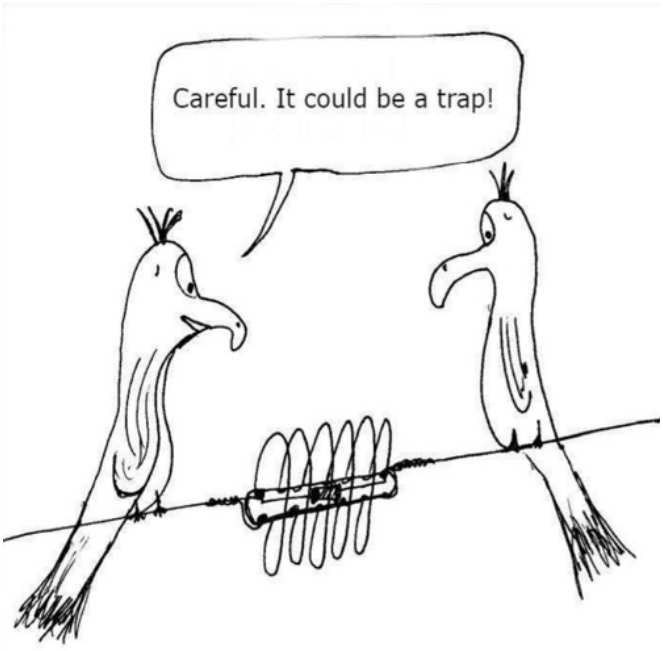
NVIS Operations, continued

The upshot of these conflicting data and reports is that the arena of NVIS antenna configuration is ripe for experimentation! It is most likely that the variation among models, reports and claims is a result of uncontrolled factors that impact NVIS antenna performance. Soil conductivity, height above ground, reflector element implementation and configuration, other RF-coupling conductors in the vicinity, varying atmospheric conditions, transmitter power levels, transceiver and feed line quality, precision of signal strength measurements, and perhaps many other things can impact the measured performance of the NVIS antenna. So, perhaps the best policy is to familiarize yourself with some of the theory of these factors and then try a few things to see what seems to work best for your specific situation.

The Bottom Line on NVIS Antennas: If you are not aiming for the very optimal NVIS station by manipulating the somewhat controversial factors above, a horizontal wire positioned a fraction of a wavelength above the ground will likely provide you quite acceptable short radius communications via NVIS propagation paths. I often erect a 40-meter wire dipole in a gentle inverted V or flattop configuration at 1/10 wavelength (13 feet) above ground, with no reflector ground wire and above my absolutely terrible Colorado rocky, dry soil. With a 100-watt signal I frequently make clear contacts of 25 to 500 miles.

NVIS is one of my favorite operating techniques. I really enjoy connecting with hams in my local region, and NVIS is terrific for emergency communications across the local area outside of repeater range, or in the case of repeater failure. Throw up your own low altitude wire dipole and give NVIS a shot!

73
-- Stu WØSTU



Event Calendar
Oct 2025 - March 2026

WØTLM Upcoming Events

October 2025

• Oct 4	Extra License Class Start	Oct 4 kickoff - Nov 15 exam; Earn Extra!
• Oct 20	Monthly Meeting	Tri-Lakes Chamber of Commerce Building

November 2025

• Nov 15	WØTLM VE Session	Monument Library (Registration required)
• Nov 17	Monthly Meeting	Tri-Lakes Chamber of Commerce Building
• Nov 17	Annual Officer Election	Tri-Lakes Chamber of Commerce Building

December 2025

- No monthly meeting or other club events in December.

January 2026

• Jan 19	Monthly Meeting	Tri-Lakes Chamber of Commerce Building
• Jan 24-25	Winter Field Day	TBD club plans

February 2026

• Feb 16	Monthly Meeting	Tri-Lakes Chamber of Commerce Building

March 2026

• Mar 16	Monthly Meeting	Tri-Lakes Chamber of Commerce Building

Are you ready to upgrade to Amateur Extra license? Or, just want to understand more?
WØTLM has got you covered with our upcoming Extra License Class!
October 4 - November 15, 2025
Get more information and register here.

Got an Event for the Newsletter?

If you have a recommendation for an event to include in our newsletter, let us know. We'll add it to next months listing.

It's YOUR newsletter. Let's hear from YOU!

Email Editor

Photo of the Month

Picnic & Chili Cookoff

Got an interesting photo for the Newsletter?

If you have a fun, historical, or just interesting image to include in our newsletter, let us know. Technology, people, situations, gear, just about anything.

It's YOUR newsletter. Let's hear from YOU!

Email Editor

WØTLM Newsletter

Guest Article
Emil AEØZC

Cheyenne Mountain POTA - My First Activation!

If you are interested in Parks On The Air (POTA), the first thing to do is visit the website POTA.app and register your call sign as a Hunter.

On August 8, 2025, I drove my Tesla down to nearby Cheyenne Mountain State Park (POTA Park #US-1214) and set up my mobile multi-band HF antenna on a tripod right behind my car's open hatch back. Within a few minutes, I was sending out CQ POTA messages on WSJT-X FT8. I was very happy on my first-ever POTA activation, to see how fast other hams quickly responded to my CQs, and I was immediately dealing with my first remote pile-up!

Over the next 30 minutes, I managed to work my way out of the pile-up by connecting my laptop to my phone's WiFi hot-spot so that GridTracker2 could automatically identify the responding hams on QRZ.com. Until that was happening, I felt like a one-armed wallpaper hanger, slowly looking up call signs in my phone's QRZ app, and manually logging contacts into the WSJT-X software after each QSO contact.

I worked 3 bands (6-, 17-, and 20-meter bands), and overall I collected 36 QSOs. After uploading my log to POTA.app the next morning, I was gratified to see all of them converted to confirmed QSLs. I'm pretty sure that if I had arrived at the park earlier and worked longer than 2 hours I would have made dozens of more contacts that day.

Equipment used:

- Yaesu FT-710 (6-160m HF radio)
- LDG AT-100ProII autotuner
- Chameleon CHA Hybrid Mini antenna base
- Chameleon 17 foot vertical telescoping antenna, mounted on a beefy "outdoor speaker" tripod

My POTA station in front of Cheyenne Mountain with my Chameleon telescoping antenna.

Continued...

Cheyenne Mountain POTA - My First Activation! - continued

- 25 feet of RG8 coax cable
- REDODO LiFePO4 100 AH battery (stowed out of way, under the hatchback's floor board in the Tesla)
- Anderson Powerpoles connected the battery, radio and tuner through a small Powerpole junction box

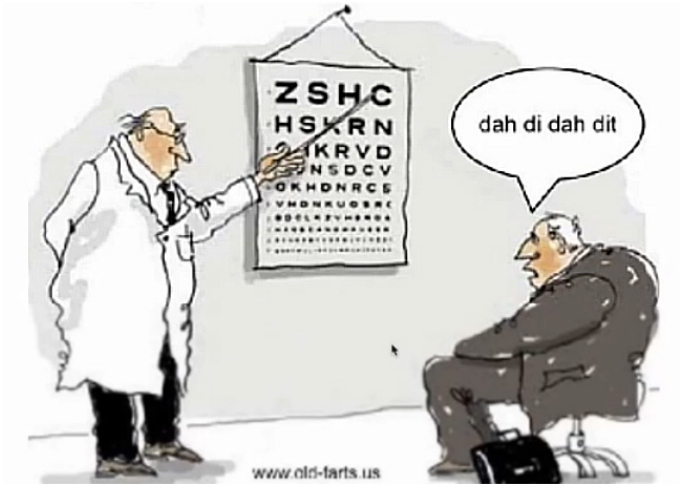
Lessons learned on my first activation. Next time, I resolve to:

- arrive earlier and make a longer day of it!
- start to setup my activation on POTA before arriving to the park
- immediately turn on my phone's hot-spot, so automatic call sign identification and logging can take place
- position my vehicle so that my hatchback covers me better (and if I arrive earlier, I might find a park bench under a provided cover!)
- consider attaching my antenna to my car/truck with a strong 3-puck magnet, so that I could work indoors where the sun's glare wouldn't reflect on my PC screen

Remember, the first step that I recommend for getting started in POTA is to visit the station spotting app website at pota.app! Check it out, and happy POTA-ing!

The Chameleon Hybrid Mini antenna base provides broadband tuning capabilites for multiple band operations. It is convenient to be able to work more than one band during a POTA activation, especially if you plan a longer activation.

73
-- Emil AEØZC



Want to write a piece for the Newsletter?

Share your knowledge or your story with your clubmates!
Write a guest article for the Newsletter.

It's YOUR newsletter. Let's hear from YOU!

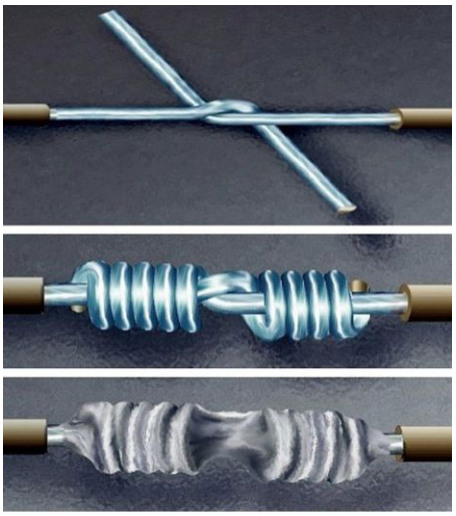
Email Editor

Member Comments

The WØTLM Net: Great value, and fun!

KDØYBJ

I have an icom IC-718 HF radio with a bit of an antenna problem. I installed a G5RV multi-band 102 foot dipole several years ago in a “more-or-less” inverted “V” between two approximately 40 ft ponderosa pine trees about 12 feet above ground level with the center pole 10 feet above my 2-story home. I’ve never done much with HF so when a strong storm broke a large branch that came crashing down and cut one leg of the dipole in two it wasn’t an immediate worry. The antenna sat this way for quite a while until on one of our recent Monday evening nets I posed the question of whether or not anyone knew of a way to make a repair without me having to get a bigger ladder and even if a repair was possible. I am very sad that I did not catch the call sign that answered my query but the advice came in the way of using a Western Union Splice (AKA a Lineman’s Splice as I found out). I have since researched this method (google Western Union Splice) that seems pretty straight forward and do-able and hope to perform this surgery prior to winter’s onset. **So, if you haven’t joined in on the Monday evening W0TLM net you could be missing out on some very valuable insight... and some just plain fun conversations.**



Lineman’s splice

1. The conductors shall be pre-tinned.
2. There shall be at least 3 turns around each conductor and the wraps shall be tight with no gaps between adjacent turns.
3. The wraps shall not overlap and the ends of the wrap shall be trimmed flush prior to soldering to prevent protruding ends.
4. Conductors shall not overlap the insulation of the other wire.

-- Scott KDØYBJ

Got a comment for the Newsletter?

Share your thoughts with your clubmates about anything club, radio, or technology related! Drop your comments on the Newsletter.

It’s YOUR newsletter. Let’s hear from YOU!

Just for Fun

Spot the Differences!

Can you find 10 differences between these two images?
Some are very subtle! Zoom in to look close. **See solution here.**

Admin & Info
WØTLM Officers & Appointees, Etc.

President: Bob Fenkel WØHTH bobthebearguy@gmail.com
Vice President: Loren Andersen KEØHZ landerso2000@gmail.com
Secretary/Treasurer: Barb Evans KØBE k0be.bje@gmail.com

Leadership Committee:

- Bob Fenkel WØHTH bobthebearguy@gmail.com
- Loren Anderson KEØHZ landerso2000@gmail.com
- Barb Evans KØBE k0be.bje@gmail.com
- Larry Kral NØAMP lokral@att.net
- Hans Post-Uiterweer WØPU w0tlm@hansmail.org
- Stu Turner WØSTU stu.turner@comcast.net
- Stephen Moraco KZØQ stephen@moraco.us
- Tricia Olson tricia4wd@gmail.com

Education Program Cmte: Larry NØAMP & Hans WØPU
License Class Directors: Stu Turner WØSTU & Bob Witte KØNR
Newsletter Editor: Melissa KFØPLU - We need someone! Get info.
Community Events Director: Tricia Olson KØTRD

Repeaters:

WØTLM-R
447.725 MHz
-5.0 MHz offset
100.0 Hz CTCSS

NØXLF-R
147.075 MHz
+0.6 MHz offset
131.8 Hz CTCSS

Colorado Connection KBØVJJ
145.130 MHz
-0.6 MHz offset
88.5 CTCSS

Take Your License Exam!

Next WØTLM Volunteer Examiner Sessions:

November 15, 2025 10:30 am
Monument Library Meeting Room

All license level exams offered, Technician, General, & Extra.
Pre-registration is required.

Register for a WØTLM Session

PPRAA VE Session Listing, Colorado Springs (every 2nd Saturday of month).

Net Control Officers:

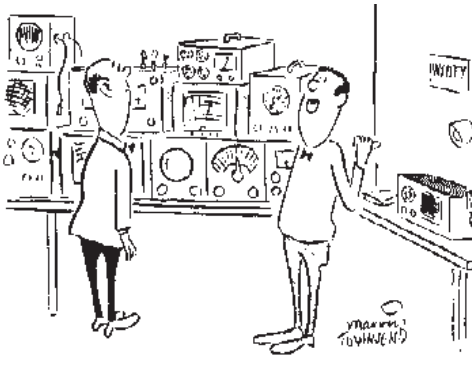
Oct 1: Dan NØOLD
Oct 13: Lisa KB8JLI
Oct 27: Need NCO

Volunteer today to be the NCO for an upcoming net! It's easy!

Sign Me Up for NCO! ***Read the Easy NCO Script***

King Sooper Fundraising!
Earn easy $$$ for WØTLM!

Connect your King Soopers card to the Community Rewards Program and select our club as the nonprofit organization. The club will receive quarterly payments based on purchases. It costs you nothing and is a wonderful benefit for the club. Log into your account (tied to your King Soopers Card) or create an account if needed. Select *Community Rewards Program*, Type in *Tri-Lakes Monument Radio Association* (or use our account number, KM150). Press "Enroll" and you will receive a confirmation. It is that easy! Please sign up today to benefit WØTLM!



"My transceiver is over here. That's just my testing equipment."

Tri-Lakes Monument Radio Association, WØTLM

Admin & Info
Local Education Events & Resources

Digital Library of Amateur Radio & Communications (DLARC)

For anyone who is not familiar with DLARC... you really should check it out: Free Texts : Free Download, Borrow and Streaming : Internet Archive

DLARC is a library of materials and collections related to amateur radio and early communications. It is funded by a grant from Amateur Radio Digital Communications, a private foundation, to create a digital library that documents, preserves, and provides open access to the history of the amateur radio community.

This free resource combines archived digitized print materials, born-digital content, websites, oral histories, personal collections, and other related records and publications. The goals of DLARC are both to document the history of amateur radio and to provide freely available educational resources for researchers, students, and the general public. -- 73 Bill WT0DX

WØTLM Radio Gear Loans

Portable Station: Icom IC-7300 HF+6m and Kenwood TM-V71A VHF/UHF transceiver. Both mounted in Gator case. Coax, vertical antenna available for 10 - 80 meter bands. Optional large telescoping mast. Email WØSTU for queries.

Other small items and tools available. Contact Chip KØCHP for queries.

WØTLM Presentations

*Our WØTLM website features a tremendous array of **presentations on numerous subjects. If you find one** that you need more info on just contact the Elmering crew:* w0tlm-elmer@w0tlm.org

There are no stupid questions!

The WØTLM Elmer Team has the answers. Our volunteer Elmers will help you with anything ham radio related. If you have more than a question or two and would like to be paired with a friendly Elmer, please let us know and we'll connect you. Email us: w0tlm-elmer@w0tlm.org

Solar Activity

Solar Flare Alerts: Sign up for Space Weather Alerts and get instant text notifications when solar flares are underway. There are numerous sites and ways to check and see where and what the chances are of that great contact. One to check is W5MMW solar site. Check it out. Also these sites provides solar data: NØNBH SpaceWeather.com

RM HAM University

Check out the offerings and sign up here.

October 2025 and beyond: Programs TBD.

Visit the RM Ham U website for past presentations. They have an abundance of information shared amongst the ham community!

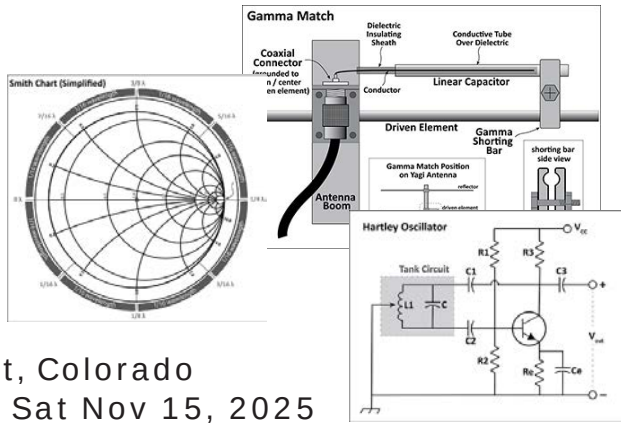
Upcoming Events & Hamfests

10/05/2025 BARCFest Boulder County Fairgrounds, Longmont, CO.

10/23-26/2025 ARRL Rocky Mountain Division Convention. HamCon Colorado 2025. Grand Junction, CO.
See the event flyer on the next page and sign up today!

Admin & Info
Local Education Events & Resources

Ham Radio Extra License Class



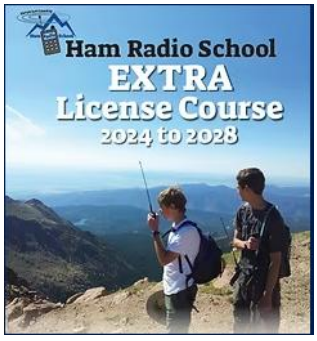
Monument, Colorado
Sat Oct 4 through Sat Nov 15, 2025

- A ~30-hour, paced course of study preparing you to pass the Extra exam.
- Online lessons on demand, with personal Elmer support from WØTLM.
- Video lessons, ebook, depth media, quizzes & practice exams, all provided.
- In-person initial session (Oct 4) & license exam session (Nov 15)
- Weekly live class reviews via remote meeting (Zoom).

The Extra License is the top amateur license, providing full access to the FCC Amateur Radio Service band allocations.

- Upgrade from General to Extra Class radio privileges
- Pass your FCC Extra Class amateur license exam
- Expand your HF ops on 15-, 20-, 40-, & 80-meter bands
- Gain a deeper understanding of radio electronics and theory
- Take the next step with antennas, amplifiers, digital modes

Registration fee: $65 (Proceeds help support WØTLM Radio Association)
Students will receive a subscription to the online course: ***Ham Radio School Extra License Course***



A current FCC General License is required for registration.
Register: https://w0tlm.com/radio-classes/extra-registration

Questions, email: bob@k0nr.com

W0TLM
Tri-Lakes Monument Radio Association

Sponsored by the Tri-Lakes Monument Radio Association
w0tlm.com

Admin & Info
Local Education Events & Resources

Whether you're a seasoned ham operator, a curious newcomer, or a tech enthusiast, this is the event you won't want to miss.

Date: October 23-26, 2025
Location: Hilton DoubleTree - Grand Junction
Learn More: https://www.hamconcolorado.com

Why Attend?

- **Inspiring Keynotes** – Hear from industry leaders and innovators in amateur radio.
- **Hands-On Workshops** – Learn new skills, build kits, and get on the air with expert guidance.
- **Exhibits and Vendors** – Explore the latest equipment, gadgets, and technologies from top brands.
- **Networking Opportunities** – Connect with fellow radio enthusiasts and clubs.
- **Special Events** – Participate in contests, prize drawings, and more!
- **DX University** – Learn some of the biggest "trade secrets" from the best DXers in the business.

Who Should Attend?

- Amateur radio operators (all levels)
- Emergency communication teams
- Electronics and tech hobbyists
- Families and anyone curious about amateur radio

Mark Your Calendar and Register Today! Early Registration is only $25!
Visit www.hamconcolorado.com for event updates, registration details, and hotel accommodations.
Don't miss out—HamCon Colorado 2025 is your gateway to the world of amateur radio!
Follow us on Facebook for the latest news and announcements.

Classified Ads

Member Gear for Sale & Announcements

For Sale:

Cushcraft R9 Nine-Band Vertical Antenna

- Tilt base
- 12 VDC winch (for tilt base)
- 9 bands: 80, 40, 30, 20, 17, 15, 12, 10, and 6-meter bands
- 31.5 ft height

Contact Dennis KB0YLK
denniswatson1@gmail.com

FOR SALE:

Kenwood TH-D74 with fast-charge base. Orange protective case, Nifty manual and two batteries.

Asking $400.00

Contact Rex WDØAJG

Continued...

Got an advertisement for the Newsletter?

Provide one or more photos of the item (.jpg or .png preferred).
Provide a complete description of the item.
Include a characterization of the condition of the item.
Include an asking price, indicate whether negotiable.
Ads expire monthly and will not be repeated without a resubmission.

It's YOUR newsletter. Let's hear from YOU!

Send Your Ad

Classified Ads

Member Gear for Sale & Announcements

FOR SALE:

LDG AT600 Proll Tuner
with ICOM cable, in original box
https://www.ldgelectronics.com/at-600-proii
$300.00
Contact Rex WDØAJG wd0ajg@gmail.com

APC 500 UPS
New battery installed last year (2024)
$25.00
Contact Rex WDØAJG wd0ajg@gmail.com