Tri-Lakes Monument Radio Association

Just having fun messing around with radio!

WØTLM Radio Association

# Newsletter

November 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

## Club President Transition

November. As the autumn leaves begin to settle, so does my chapter as your club president. This is the time of year that we begin to enter the winter season; and as I go into my personal winter season by celebrating my terquasquicentennial anniversary, for those who are not history majors, that's my 75th birthday. The time has come for a little reflection. It has been an incredible privilege to serve alongside such a devoted and enthusiastic group of amateur radio enthusiasts. Together, we've grown in skill, supported one another, and fostered a welcoming culture that has made each on-the-air moment and especially every gathering ever so rewarding.

I must thank my Leadership Team for their support over the year. There are not enough words to express my appreciation to each and every one of them. Don't worry, I will keep this brief, so in as few words as possible my thanks to:

- **Loren, KE0HZ** as VP and strong technical abilities that always supplied the answer a History major could never find.
- **Barbarba, K0BE** the Secretary/Treasurer Supreme, who was always on top club information finances and of course Dropbox.
- **Jim, NC0JW** the Elmer of all Elmer's who has forgotten more about Amateur Radio than I will ever know.
- **Tricia, K0TRD** who laid the strong foundation for the club that allowed me to just plod along.
- **Stephen, KZ0Q** whose Technical Expertise and patience of Job brought this Techno-peasant into the 21st Century.
- **Stu, W0STU,** a true academic whose ability to simplify the complex contributed significantly to my Amateur Radio journey. But most of all his willingness to contribute time and effort to the club.
- **Hans, W0PU,** his sense of humor and his creative ideas for programs, which keeps this club going, will never be appreciated enough.

Continued...


## *Hot Announcements*

- ***November Meeting:*** Mon, 17 November, 7:00 pm, Monument Chamber of Commerce Meeting Room. Connect Time begins 6:00 pm for informal discussions among members and newbies.
  **Presentation Topic: Annual Officer Election & Program Planning**

- ***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

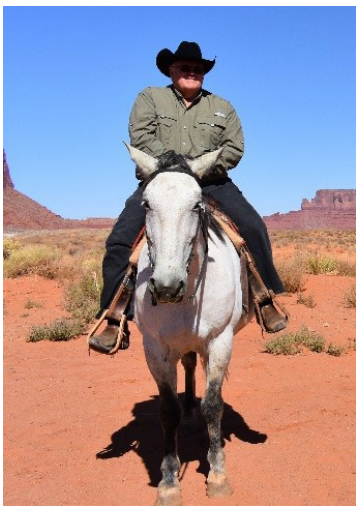
- **Larry, N0AMP,** the ever-present calming voice that will settle any storm, coupled with his vision for the success of the club kept us all on an even keel and looking to a bright future.
- **Melissa, KF0PLU**, for her enduring efforts of editing my monthly President's Article for the newsletter and for her personal Herculean efforts at publishing the newsletter, well, along with Stu as her side-kick.

I will never forget the rest of the club membership. Whether folks have been members for years or the newest members, you have all made an impact on my life. I hope these friendships will last for years to come. Then you as members, just consider that sometime you may need a launcher to get an antenna in a tree. You need that challenge and encouragement to move on to the next license level. Maybe someone urges you to make that first POTA or SOTA activation or DX contact. How about someone to help you conquer your fear of CW or FT8. No matter what you can imagine in the wonderful world of Amateur Radio, you can easily find that someone in this club to assist and encourage you along the way. I have certainly found several of "that someone" for me.

Allow me to make one final challenge to the entire membership of the club. I would like to use a sports metaphor. Consider this in your relationship with the club. You can sit in the stands and watch as all the activity goes on in front of you down on the field. You can sit on the bench waiting to get in the game and play. Or you can be on the field of play and make things happen. I challenge you to get on the field and contribute your talents to the club. One of my favorite quotes in life is from sportswriter Grantland Rice.

"For when the *One Great Scorer* comes to write against your name,
He marks, not whether you won or lost, but how you played the Game."

So, get out there and participate in your club, go ahead and PLAY, have fun on the radio. The greatest risk you will ever face is not taking that risk. Mistakes are simply signs of a good honest effort. Step up to that plate and take a swing.



I just want to thank each of you for your support, friendship, and the trust that you have shown me in this role as club President. Though my term ends, my commitment to the club continues. I know our club will continue to grow and thrive. I look forward to staying active with you on the air and at future events.

Well, it is time for me to ride off into the sunset.
Happy Trails!

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

WØTLM Newsletter

# Tech-Knowledgy
## Loren KEØHZ

## Combating Poor Conditions

Noise! Can I still operate in spite of it?

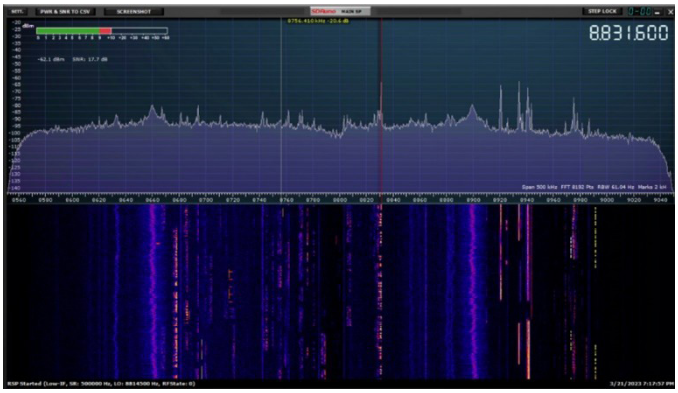



Figure 1: A high noise level across the band may mask all but the strongest signals that peak above the noise floor.

Have you ever had this thought? The bands are so noisy, I can't have a decent QSO in these conditions! The lower frequency HF bands have been challenging because of thunderstorms. Perhaps solar activity driving high Kp indexes has contributed? Could it be the neighbor's new solar panels or LED lights? Is it a problem with my receiver? What's a Ham to do?

Let's get a few basics out of the way. Noise is defined as unwanted signals or random electrical energy that interferes with the reception of desired radio signals. It is commonly expressed in *watts* and shows up on your receiver's S-meter. The noise floor is that unwanted signal level when tuned to a spot in the band where there is no desired signal. If you've listened or operated in the HF bands, I'm sure you've noticed that the level of noise varies, often quite significantly for some of the reason listed above.

You can reduce the noise level in the receiver by simply turning the RF gain down. Sadly, though, the signal you wish to hear goes down as well. Adjusting the RF gain like that does not improve the signal-to-noise ratio (SNR or S/N). SSB requires the highest SNR for intelligibility. CW can be used with a much lower SNR. Digital modes, such as FT8 are usable in what appears to be an almost impossible SNR environment. We'll explore how that can happen.

Noise detected in your receiver is the result of three primary factors – thermal noise, atmospheric noise, and man-made noise. Thermal noise, present in all electronic devices, originates from the thermal agitation of electrons in a conductor. It is a function of the temperature and the resistance of the conductor within the components of the receiver.

Thermal Noise Power = Boltzmann's constant x Temperature (Kelvin) x Bandwidth (Hz)

$P_N = kTB$  (Boltzmann's constant = $1.38 \times 10^{-23}$ Joules/K)

We'll use a temperature of 209 K (about 17 C, the standard reference temperature for noise measurements) and R = 50 Ω. Without going into all the math, this translates to a power level in the HF bands that equates to approximately S-0 for CW or S-1 for SSB on your S-meter. Note that the noise is independent of frequency but varies by the bandwidth of the different operating modes.

Continued...

# **Combating Poor Conditions,** continued

| Band | Freq | Mode | Bandwidth | Vn,rms | Vn,rms (dBV) | Noise Power (W) | Noise Power (dBm) | Eq. S-units |
|---|---|---|---|---|---|---|---|---|
| HF | 14 MHz | CW | 500 Hz | 20.0 nV | −154 dBV | $2.0\times10^{-18}$ | −147 dBm | S-0.3 |
| HF | 14 MHz | SSB | 2500 Hz | 44.7 nV | −147 dBV | $1.0\times10^{-17}$ | −140 dBm | S-1.2 |
| HF | 14 MHz | AM | 6 KHz | 64.7 nV | −143.4 dBV | $2.4\times10^{-17}$ | −136.2 dBm | S-2.2 |
| VHF | 145 MHz | CW | 500 Hz | 20.0 nV | −154 dBV | $2.0\times10^{-18}$ | −147 dBm | S-0.3 |
| VHF | 145 MHz | SSB | 2500 Hz | 44.7 nV | −147 dBV | $1.0\times10^{-17}$ | −140 dBm | S-1.2 |
| VHF | 145 MHz | AM | 6 kHz | 67.4 nV | −143.4 dBV | $2.4\times10^{-17}$ | −112.2 dBm | S-2.2 |
| VHF | 145 MHz | FM | 16 kHz | 109.5 nV | −139.2 dBV | $6.0\times10^{-18}$ | −136.2 dBm | S-6.8 |
| UHF | 450 MHz | CW | 500 Hz | 20.0 nV | −154 dBV | $2.0\times10^{-18}$ | −147 dBm | S-0.3 |
| UHF | 450 MHz | SSB | 2500 Hz | 44.7 nV | −147 dBV | $1.0\times10^{-17}$ | −140 dBm | S-1.2 |
| UHF | 450 MHz | AM | 6 KHz | 67.4 nV | −143.4 dBV | $2.4\times10^{-17}$ | −136.2 dBm | S-2.2 |
| UHF | 450 MHz | FM | 15 kHz | 109.5 nV | −139.2 dBV | $6.0\times10^{-17}$ | −112.2 dBm | S-6.8 |

For sake of comparison, the published sensitivity of the receiver in the Icom IC-7300 operating SSB (2400 Hz BW) in the HF bands is 0.12 µV for a 10 dB S/N (signal-to-noise) ratio. In the chart above, the thermal noise is approximately 44 nV or 0.044 µV. This voltage ratio calculates to be ~9 dB. I think we can conclude that Icom's sensitivity number roughly accounts for the thermal noise in the receiver.

At HF the thermal noise impact is quite minimal. The same can't be said for a wideband FM signal in the VHF and UHF bands where the impact increases by several S-units.

The primary noise sources affecting HF are atmospheric and man-made noise. The dominant source of atmospheric noise is lightning. ChatGPT informed me that globally, there are approximately 50 to 100 lightning flashes per second. These discharges emit impulse noise across a wide frequency range including the HF spectrum. This noise is extremely variable depending on proximity of the storms, however, distant storm's RF energy can travel thousands of miles subject to the same propagation factors that amateur operators deal with. Bands 20 meters and above are less affected than lower frequency bands.

Figure 2: Lightning is a broadband, high noise generator!

Man-made noise is the blight of many a Ham shack. The good news is that at least you have a chance of alleviating the source of that noise. Tracking down man-made radio frequency interference (RFI) is a subject unto itself, and we won't address that here. Man-made sources of noise are power lines, electronics, LED lighting, and appliances (primarily motors). Broadband RF energy comes from electrical arcing and fast rise-time switching. All of those wall-warts you have plugged in around the house are spewing RF energy from their switching regulators even if your

Continued...

# **Combating Poor Conditions,** continued

device isn't connected to it. And there's a good chance you are impacted by your neighbors' LED lights, solar panels, old plasma TVs and switching regulators if the homes are in close proximity.

So, what's a Ham to do? Aside from attacking the man-made noise, look at the chart above. Noise is RF energy spread widely across the radio spectrum. The amount of that energy that is received by the radio is directly affected by the bandwidth of the receiver for the particular mode of operation. Reducing the IF bandwidth may decrease the fidelity of the SSB signal but it's possible that a slight reduction in noise will help you "pull that signal out of the noise".

You may think that turning on the front-end amplifier of your receiver may help but that is unlikely. Not only are you increasing the level of the desired signal, you are also boosting the noise level so there is no improvement of SNR.

If the noise is impacting the automatic gain control (AGC), attenuating the signal in the front-end may make it easier to copy the desired signal. Try switching between a fast and slow AGC if your receiver has that option to see if that makes any difference.

Modern receivers also have noise blanking (NB) capabilities. They tend to be most effective on man-made sources that have a defined pulse shape and are repetitive.

For an intelligible contact on SSB a positive S/N ratio is required. Consulting ChatGPT once again, at a 3 dB S/N words will be missed. A 10 dB S/N ratio is considered good intelligibility. For CW a 0 dB S/N ratio is copyable. So how is it possible that FT8, with a receiver bandwidth setting of ~2500 Hz, that a signal with a -24 dB S/N ratio can be decoded? This seems counterintuitive.


Figure 3: The noise blanker (NB) control is usually found on the front panel or menu.

The difference is that FT8 is not reliant on the operator's ears and the audio processing that takes place between those ears. The receiver's audio is diverted into a digital signal processing (DSP) circuit. The DSP narrows the bandwidth of the audio tones within the signal by approximately 50 times to ~50 Hz. Looking at the FT8 waterfall image of Figure 4, the DSP is analyzing each signal individually. The noise power remaining in this slice of the audio band is reduced to the point where the information in the FT8 signal can be decoded. There is an

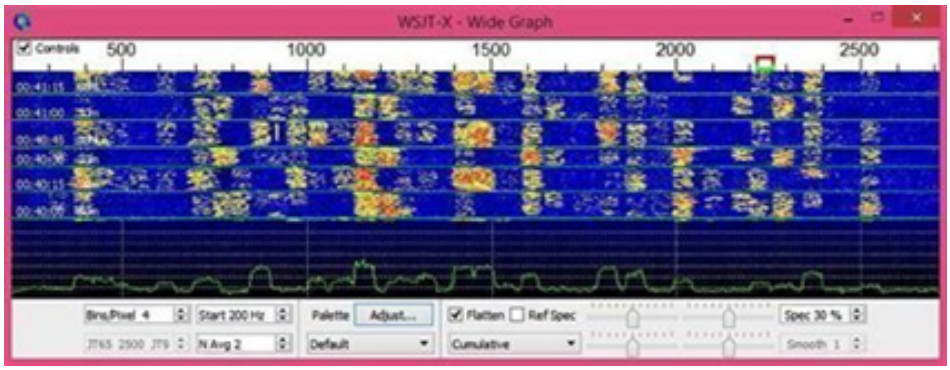



Figure 4: An FT8 display - Many narrowband signals within a 2500 Hz audio band.

Continued...

## **Combating Poor Conditions,** continued

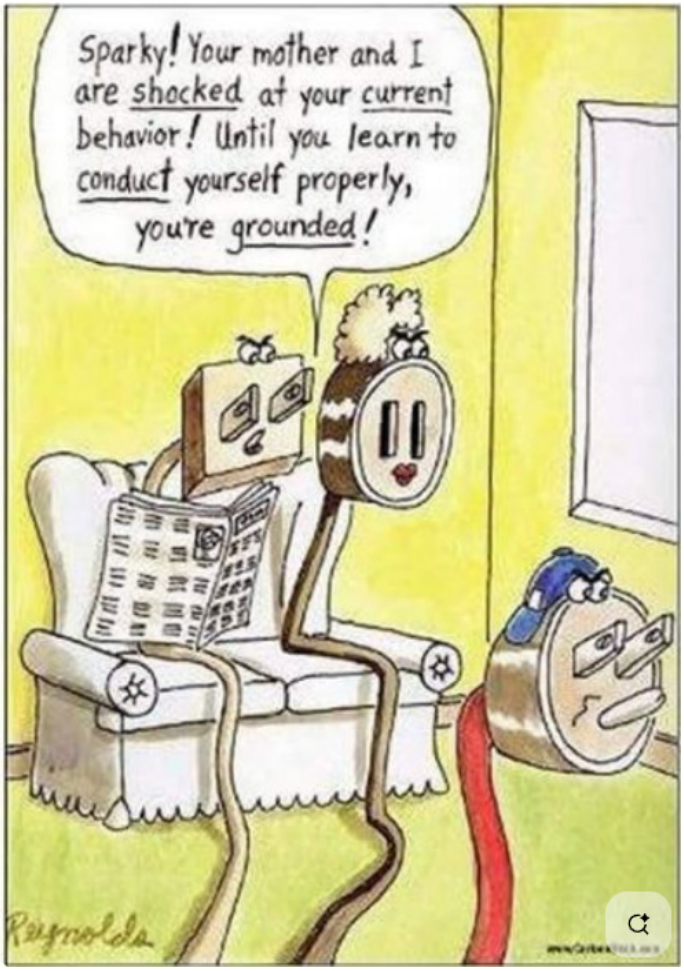
additional benefit of error correction for the signal so if that signal is momentarily lost in the noise it can be recovered. There's always the opportunity to resend that message.

At VHF frequencies and above, we saw that the thermal noise internal to the receiver can have a more significant impact. A low-noise amplifier (LNA) placed close to the antenna raises the SNR before the normal attenuation in the transmission line resulting in a SNR improvement through the entire receiver chain.

Hopefully, I've illustrated some opportunities to alleviate the frustration of poor band conditions.

Happy Hamming, 73

-- Loren KEØHZ

# Event Calendar
## Nov 2025 - April 2026


## WØTLM Upcoming Events

**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.
- No monthly newsletter issued (quarterly issues to begin in2026).

**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 Buiding |

**April 2026**

| | | |
|---|---|---|
| • Apr 20 | Monthly Meeting | Tri-Lakes Chamber of Commerce Building |

## 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
## WØTLM Donation


On Friday, Sept. 26th, Jim NCØJW, Barbara KØBE, and Tricia KØTRD visited the Pueblo Weisbrod Aircraft Museum. During our visit, we noticed they had an amateur radio station set up under the club call WØWAM. The radio being used was a Yaesu FT-101E. We asked one of the docents how often they are on the air, and we were told 'not much', since they were having trouble getting the FT-101E functional.

At the W0TLM leadership meeting the following Monday, we brought up the idea of donating a recently received Kenwood TS-870S to the museum, as this radio would be a significant improvement over the FT-101E. The TS-870S was donated to WØTLM in a set of older equipment by George N4IOM who was moving out of the Colorado area and seeking to donate his remaining gear rather than move it. Leadership unanimously approved the re-donation of the transceiver to the museum. The radio was then delivered to the museum on Friday, October 10th. Subsequently, we learned that George was a pilot and an aviation enthusiast, making the relayed donation a perfect fit for his desires.

If you're in the area, make sure to swing by the museum to marvel at some incredible historical aircraft and also the Southern Colorado Space Museum. Who knows, you might just catch WØWAM on the air!

## 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.

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Email Editor

# Member Comments

## Thank you Bob WØHTH, from the Leadership Team!

**KEØHZ**

Bob, WØHTH, may not be president next year or in the future, but his legacy will certainly last for some time as the current leadership team well knows. Bob worked tirelessly this year documenting and detailing the roles and responsibilities of the club positions, building a detailed task calendar, and expanding the leadership team. The value may not be apparent to the general membership, but it will greatly assist future leadership by transferring knowledge and simplifying the tasks ultimately making the club stronger. We owe him many thanks.

-- Loren KEØHZ
Vice President

**KØBE**

During his time as president, Bob drew from his previous experience to formalize and expand the club's job descriptions into a detailed succession plan. He also expanded the leadership calendar to include the many functions and duties that need to happen to keep the club running smoothly. These documents help current and future leadership understand the various roles and duties in detail and are used as an aid to make sure everything gets done when it needs to get done. Thank you Bob!

-- Barb KØBE
Secretary/Treasurer

**KFØPLU**

I really enjoyed working with Bob on the newsletter! He is always open to new ideas, is concise and responsive in communicating, and exudes an infectious and seemingly boundless optimism. Thanks, Bob!

-- Melissa KFØPLU
Newsletter Editor

Continued...

## 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!

# Member Comments

## Thank you Bob WØHTH, from the Leadership Team!

**WØPU**

Bob is a great people person. I have much to thank him for in radio and event advice. His leadership is a real benefit for the Club. He has put it on solid footing for years to come. Thank you, Bob.

-- Hans WØPU
Education Program

**WØSTU**

Thanks, Bob, for steering WØTLM on a clear and true path in 2025. Our administrative processes and records have benefitted tremendously from your vision and direction. Your president's words in the newsletter each month were also valuable and appreciated, always encouraging our membership to get out and exercise their skills and licenses. We are unquestionably a better public service organization, thanks to your leadership. Well done, sir!

-- Stu WØSTU
License Class Director

**NØAMP**

I echo Barb KØBE's comment above, and Bob has kept things fun, even with applying light pressure to get backups for all positions. His 'history major' ham morsels have been not only entertaining but very informative - hopefully these continue. Thanks Bob.

-- Larry NØAMP
Education Program

*If your actions inspire others to dream more, learn more, do more and become more, you are a leader.*
*-- John Quincy Adams*

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# Guest Article
## Stu WØSTU

## HamCon Colorado, Grand Junction

HamCon Colorado 2025 in Grand Junction was a blast! We had a small contingent of WØTLM members attending. Each day of the conference offered interesting activities, speakers, and opportunities to make new ham radio connections.

Friday provided informative presentations on Digital Mobile Radio (DMR), from technical “under the hood” presentations to operational practices. A special feature on *“Women in Amateur Radio - Connect, Learn, Inspire”* was also featured, as well as a microwave network realtime demonstration by the Rocky Mountain Ham organization. Bob KØNR presented on mountaintop VHF operating, and the Deep Space Exploration Society discussed EME, STEM, and space science topics. And there were many other interesting forums throughout the day.

On Saturday, program presentations included topics of SOTA, circuit board design with KiCAD, and climbing towers safety gear. POTA activation was a popular topic among the attendees and in presentation Saturday, from planning activations to lessons learned. Other speakers presented on NVIS operations, portable ops gear, DX techniques, uses of the Nano VNA device, using 3D printing in amateur radio, and much, much more. See the link at the end of this article for posted presentations.

Saturday was capped off with the evening banquet featuring the wisdom and wit of former FCC Special Counsel for the Spectrum Enforcement Division, Mr. Riley Hollingsworth. Riley’s talk was humorous and interesting, recapping some of his former enforcement activities and commenting on current amateur band enforcement issues.


Riley Hollingsworth K4ZDH entertained and informed the conference attendees as the featured speaker for the Saturday evening dinner banquet.

Sunday morning featured the final conference wrap-up session, including some extremely nice prizes at the prize drawing. The Grand Prize was a Yaesu FT-710 HF transceiver, valued at over $1200, along with a $275 headset. The Early Bird Prize was an ICOM ID-5100 dual-band mobile transceiver, valued at $575. Numerous additional prizes for the drawings were contributed by vendors.

Througout the weekend, attendees had the opportunity to operate the W1AW/Ø radio station of the ARRL. Attendees also participated in a foxhunt, visited vendor displays, attended group breakfasts and luncheons, and more.

Continued...

# HamCon Colorado, Grand Junction - continued

Overall HamCon 2025 was an excellent conference, and the Rocky Mounain Division of ARRL should be commended for a job well done! John Maxwell WØVG and his team of volunteers really came through. Next year's HamCon will be held in Casper, Wyoming, with a TBD specific date. Check it out! I think you'll enjoy the cameraderie and the learning.

73,
-- Stu WØSTU

**Link to all HamCon 2025 Presentations**


Attendees wait for their chance to operate W1AW/Ø.

ARRL Colorado Section Manager Amanda Alden K1DDN introduces her dog, *Radio,* to the HamSCI representatives.

The vendor room.

The breakfasts and luncheons, with guest speakers, were very popular.

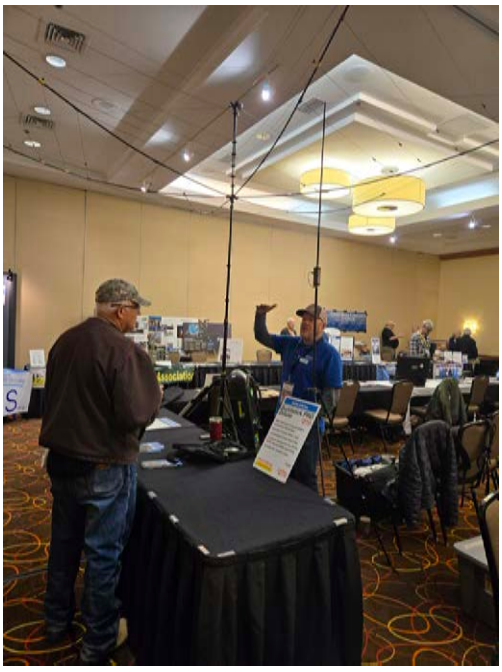
Continued...

# HamCon Colorado, Grand Junction - continued

Elijah KAØELI, Joyce KØJJW, Bob KØNR, and Elijah's father Chris were WØTLM representatives attending HamCon.


Several Colorado clubs were represented with information tables at the conference.

The high-altitude balloon launch with APRS tracker.



Chris W6HFP of BuddiPole describes the portable hexbeam for 20- to 6-meters.

## Want to write a piece for the Newsletter?

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

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Email Editor

WØTLM Newsletter

# Just for Fun

## Ham Cryptogram II!

**What is a Cryptogram?**

A cryptogram is a simple substitution cipher. In a substitution cipher, each of the letters in the original message is systematically replaced by another letter. So for example, all of the A's in the original message might be replaced by M's in the encrypted message. Anywhere there is an M in the encrypted message, you would replace it with an A to return to the original message.

**How to Solve Cryptograms**

Here are a few tips that should help you get started:

Pencil in a possibility. Fill in all examples of that letter in the puzzle, then see if you have created a dead end and need to go back. For example, say you have decided that the letter S is an I, but then you discover that one of the encrypted words reads XSS. You know that there is no word in the English language that ends with two I's, so you need to find a different substitute for the S.

Consider letter frequency. Typically, the most common letters used in English are: E, T, A, O, I, and N. These will be the letters you are most likely to find in most cryptograms.

Solve any single letter words first. In English the only single letter words are A and I.

Look for common, small words next. The most commonly used words in the English language in order of frequency are: the, of, and, to, in, a, is, that, be, it, by, are, for, was, as, he, with, on, his, at, which, but, from, has, this, will, one, have, not, were, or, all, their, an, I, there, been, many, more, so, when, had, may. Apostrophes may help here!

Two optional hints are provided as links below... IF you need them!

**Here is Our Ham Cryptogram:**

Ox'p MG ov wms qmz'x kogb rlc dlqom. Ox'p gozq mv l pcldx ebmekb rmaaw lzwtlw.

See Hint #1

See Hint #2

**View the solution here. Don't peek!**

# 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:

**Nov 3:** Need NCO
**Nov 10:** Need NCO
**Nov 24:** 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!

# 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.

November 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

***Nov 8, 2025: 285 TechConnect TechFest***
***Lakewood, CO https://www.arrl.org/hamfests/285-techconnect-techfest***

***Feb 15, 2026: Rocky Mountain Ham Swapfest 2026***
***Adams County Fairgrounds, Brighton, CO***
***https://www.rmham.org/the-swapfest***

# 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

## Newsletter Notice:

- **This issue of our newsletter is the last for 2025. No December issue is forthcoming.**
- **Following a recent leadership committee decision, the newsletter will be issued quarterly in 2026, with the first issue expected to be released in late January 2026.**
- **An early Happy Holiday Season and Happy New Year to you and yours from the newsletter staff!**

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