



NM5HD

WEEKLY NEWSLETTER
FOR THE
HIGH DESERT AMATEUR RADIO CLUB OF NEW
MEXICO INC.

"Celebrating 20 years of service to the Amateur Radio Community and the General Public
as a non profit 501 (c)(3) charitable organization"

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Introduction from the President

Greetings,

Last Saturday was our October Membership Meeting. The membership has approved funding for new programs and the celebration of 20 years as a club. We kicked off the new test equipment loaner program for members. Approved a charitable donation and match to Hurricane Helene/Milton relief efforts. Appropriated funds to the celebration of 20 years as a club. Approved a new incentive program for net participation and practicum for net control operators. We approved and appropriated funding for the development for space communications training and affiliated radio/equipment loaner program for communicating through orbiting amateur satellites for members. Details are contained within this newsletter. This week NASA and NOAA made statements to the effect that we have reached the SOLAR MAX for Cycle 25. Learn what this means in this newsletter. I wanted to note that a Navajo Code Talker passed away at the age of 107 this past week. Members of this club have a close affiliation with family members of Navajo Code Talkers and have supported their efforts to continue to help ensure the legacy of how the Code Talkers impacted the world is not forgotten. A big 73 to VP Mike C NM5MC for sending this to me. Click on this link for more information

<https://navajotimes.com/reznews/navajo-code-talker-john-kinsel-sr-passes-away-at-107/>

The link for the Wednesday Lunchtime Noon Chat Room

<https://us02web.zoom.us/j/82410741347?pwd=kXb9i18t3bc3MATidQmEsJb31DoVnR.1> Password is 737373

I am continuing to work on our events for next year and will share with you as soon as I complete the plan and have contacted the presenters and leads. In December V.P. Mike C and I will present an operating budget proposal for 2025 to you, the membership for approval. That's all I have for this week. I hope to hear from you on the net this Saturday @ 1000 hours on the Mega Link.

73 Mike KI5NBP

Club Repeaters and Simplex Frequencies

The Club has Two Repeaters, 442.750+ PL 162.2 on Sandia Crest and 145.370 - PL 162.2 in Edgewood. The Club uses two Simplex frequencies, 146.460 and 446.025

Join the FUN, join the Club

Are you aware that the HDARC is one of the most active Amateur Radio Clubs in New Mexico? Well, it is! Read on and find out! Tell a friend! www.nm5hd.org

To become a club member go to www.nm5hd.org and click on the "become a member" tab to join the ever growing group of the coolest Hams in New Mexico, you'll be glad you did!



Welcome to NEW Members

Richard (Ric) Ramirez
Michael C. Olewine

Hurricane Helene/Milton Hurricane Relief Donation



The club membership through unanimous vote by those in attendance at the October Club membership meeting this past Saturday approved a donation of \$300.00 dollars from the club treasury towards Helene/Milton hurricane relief to the Samaritan's Purse International Relief Organization (<https://www.samaritanspurse.org>). Chairman of the Board Ken Ham stated that he would match any donations to Samatitanan's Purse by club members up until this Friday October 25, 2024. If you wish to participate in giving through the club, go to <https://www.nm5hd.org/tax-deductible-donations> to make a donation and indicate in the notes that this is a donation for hurricane relief. You can also go directly to <https://www.samaritanspurse.org/> and give. Please notify me at hdarcpres@gmail.org of the donation with proof of the amount and date for the opportunity for the matching donation which expires on Friday October 25, 2024 at 2359 hours MDT. The donations will go directly to hurricane relief.

HDARC HAM Radio Demonstration for STEM Week at the National Museum of Nuclear Science and History

Yul WA5YUL has assembled a team of HDARC members to put on a HAM Radio Demonstration at the [National Museum of Nuclear Science and History](#) in Albuquerque. The demonstration will take place on October 24, 2024 from 0900 - 1500 hours. This is an annual event for HDARC at the museum. We will share more details as they are provided. If you wish to participate, be at the museum at 0800 hours to enter as a team.

Test Equipment Loaner Program for Members

HDARC Director Harvey Dove KI5YVY is the lead for this program. He presented an outline of the program this past Saturday during the membership meeting. The membership adopted the program with corrections and amendments by unanimous vote. Harvey is making those adjustments this week. Once they are complete you will see the program outline published in this newsletter. We are also making available to members access to online tutorials on how to use the test equipment from the HDARC NM5HD.org website. You can contact Harvey at: doveduo1@gmail.com if you wish to borrow the equipment.

The current inventory of loaner test equipment includes:

- MFJ -263 Dummy Loads
- MFJ - 802B Field Strength Meter
- RigExpert AA-650ZOOM Antenna Analyzer



We **CURRENTLY** have two donated pieces of test equipment; A ZeenKo, NanoVNA-H 4 Handheld Vector Network Analyzer and a Fluke Multimeter. Please consider if you have a piece of gently used and functional test equipment you can donate for this program. The next purchase of test equipment for the program will include RF noise detectors (MFJ 805).

HDARC Space/Satellite Communications Program

The membership has approved the development of a Satellite Communication Program via Amateur Radio Satellites and Equipment loaner program for HDARC members. The membership also voted to appropriate \$400.00 to begin the purchase of equipment for this program. If you are interested in attending a workshop on this topic please send an email to hdarcpres@gmail.org expressing your interest to attend. We are planning to have the workshop at the beginning of 2025. Click on this link access an article from “The Radio Amateur Satellite Corporation (AMSAT)” to learn more about this topic:

https://www.amsat.org/wordpress/wp-content/uploads/2023/06/For_Beginners_Compilation.pdf

HDARC Holiday Dinner and 20 year celebration

We have slated Saturday December 14, 2024 for our annual HDARC Club Holiday Dinner. Save the date. Time and location to be announced soon. We will also commemorate the milestone celebrating 20 years as a club. The membership approved \$500.00 be allotted to purchase items to be raffled off at this dinner to members that attend. Save the date. More information to follow next week.

HDARC East Mountain Group

Saturday October 28, 2024 12:00 PM HDARC Testing Session for Technician's License. Edgewood Community Center , 27 East

Frontage Road Edgewood New Mexico 87015. This is a rare opportunity to sit for the technicians licensure exam in the east mountains. There are a limited number of seats for this exam.

Register Now: <https://www.nm5hd.org/free-testing-registration-form>

Free study material at: <https://www.nm5hd.org/study-material>

From the "Elmer"

Wavelength, frequency, the speed of light, and "Beam me up, Scotty." It isn't very intuitive, especially if you're new to the physics of rf (radio frequency), but it turns out that the higher the frequency (f) of the radio signal, the shorter its wavelength (λ) is. Conversely, the lower the frequency (f), the longer the wavelength (λ) is. This is why the 80 meter ham band can be found at 3.5 MHz (MegaHertz) and the 2 meter band's frequency is at 144 MHz. The really way cool thing, though, is that – (get your calculators out because we're about to do a little bit of arithmetic) – if you multiply the frequency (in Hertz) by the

wavelength (in meters) you'll get the speed of light. So let's take 144 MHz (that would be the same as 140,000,000 Hz) and multiply it by its wavelength (λ) of two meters, and Presto! Change-o! – Your answer is approximately the speed of light! Physicists refer to the speed of light as “c”. It's a constant in our universe, and in a vacuum or a near vacuum, it's clocked at 299,792,458 m/s (meters per second). For us hams, we're OK with rounding so you'll find we use the less accurate but much more user-friendly velocity for the speed of light as 300 million meters per Second. So one of the math formulas we hams use is this: $c = f \lambda$ (The speed of light is equal to the frequency times the wavelength.) Because c is always constant, all we need is either the frequency or the wavelength to figure out the third element of the equation. Want to know the wavelength of 28MHz? You simply divide c by f and the answer will be (approximately) λ . It should look like this: $300,000,000/28,000,000 = 10.7$ (which is pretty close to 10 meters). Now if you're one of the folks who would rather have their fingernails pulled out than have to deal with the math behind the physics of rf, perhaps you're a fan of Star Trek. If so, all you need to do is think in terms of warp speeds. Warp One, you see, is the speed of light. So, Warp one is equal to frequency times wavelength. The math is the same, but the terminology is a bit more friendly. In any event, enjoy your voyage to seek out new modes and new communications as you boldly go places you've never gone before.

73 MaryAnn NS7X

Elmer MaryAnn has prepared several tutoring kits for new hams. These kits will be on display this coming Saturday for review during the meeting. Thank you MaryAnn. If you know of someone wanting to become a ham or if you wish to upgrade, MaryAnn NS7X can be contacted through ns7x@arrl.net

ELMERS are defined as an experienced operator who takes someone under his or her wing, providing personal guidance and answers to the thousands of questions that confront a newbie. In our case it would include those wanting to upgrade.

The New HAM 10 (or so) Minute Tutorial

Cycle 25 - We have reached the SOLAR MAXIMUM!

Let's explore what this means:

<https://youtu.be/kMtk-wYHKek?si=8a4xdw5LOsXkx-f7>

BBC: https://youtu.be/71HWgxfrS5w?si=N90jJMYN_rYepQ8X

SOLAR MAX HAS ARRIVED: It's official. NASA and NOAA announced this week that Solar Maximum has arrived. This kicks off a period of high solar activity which could persist for another 1 to 2 years. Full story @ [Spaceweather.com](https://www.spaceweather.com).

Aurora alerts: Last week, auroras spread around the globe with sightings as far south as Key West and Mexico. Did you miss the show? Next time get a wake up call from [Space Weather Alerts](https://www.spaceweather.com/alerts).

HDARC Member Name Badges/Hats/Shirts



I have been asked by members how to purchase a HDARC Membership Badge. [Click Here](#) to be directed to our vendor's web store.



HDARC Shirts,hats,and other Club gear can be ordered from Rio Rancho T-Shirts, 1207 Golf Course Rd SE Ste F, Rio Rancho, NM 87124. Speak with Wayne or Penny at: (505) 891-1521



Club Calendar - October- December 2024 SAVE THE DATES **UPDATED**

October 2024

Wednesday October 23, 2024 Noon: Club ZOOM Lunchtime Chat Room. Click on the link below to enter the virtual room.
<https://us02web.zoom.us/j/82410741347?pwd=kXb9i18t3bc3MATidQmEsJb31DoVnR.1> PIN 737373

Thursday October 24, 2024 8:00 AM to 3:00 PM: [National Museum of Nuclear Science and History](#) in Albuquerque. HDARC HAM Radio Demonstration

Saturday October 26, 2024 10:00 AM: HDARC NM5HD STATEWIDE CHAT SHACK NET on the MEGA Link NM5ML. KI5NBP Mike is our net controller. [Click Here](#) for more info.

Saturday October 26, 2024 12:00 PM: HDARC East Mountain Group Technicians Exam. Special Session Edgewood Community Center , 27 East Frontage Road Edgewood New Mexico 87015.

November 2024

Saturday November 2, 2024 10:00 AM: HDARC NM5HD STATEWIDE CHAT SHACK NET on the MEGA Link NM5ML. K5JVG John is our net controller. [Click Here](#) for more info.

Wednesday November 6, 2024 Noon: Club ZOOM Lunchtime Chat Room. Click on the link below to enter the virtual room.
<https://us02web.zoom.us/j/82410741347?pwd=kXb9i18t3bc3MATidQmEsJb31DoVnR.1> PIN 737373

Saturday November 9, 2024 10:00 AM: HDARC NM5HD STATEWIDE CHAT SHACK NET on the MEGA Link NM5ML. net controller TBD . [Click Here](#) for more info.

Wednesday November 13, 2024 Noon: Club ZOOM Lunchtime Chat Room. Click on the link below to enter the virtual room.

<https://us02web.zoom.us/j/82410741347?pwd=kXb9i18t3bc3MATidQmEsJb31DoVnR.1> PIN 737373

Saturday November 16, 2024 10:00 AM: In Person Club Meeting and V.E. Testing.

Presentation: Mike Langer K5MGR : How Ham's started the Broadcast Industry:.

HT Radio Giveaway. V.E. Testing begins at Noon. [Click here](#) for more information

**Location: North Domingo Baca Multigenerational Center Room #4
7521 Carmel NE Albuquerque, NM 87113.**

Live Stream Link: TBA at a later date

Wednesday November 20, 2024 Noon: Club ZOOM Lunchtime Chat Room. Click on the link below to enter the virtual room.

<https://us02web.zoom.us/j/82410741347?pwd=kXb9i18t3bc3MATidQmEsJb31DoVnR.1> PIN 737373

Saturday November 23, 2024 10:00 AM: HDARC NM5HD STATEWIDE CHAT SHACK NET on the MEGA Link NM5ML.
Net controller tbd. [Click Here](#) for more info.

Wednesday November 27, 2024 Noon: Club ZOOM Lunchtime Chat Room. Click on the link below to enter the virtual room.

<https://us02web.zoom.us/j/82410741347?pwd=kXb9i18t3bc3MATidQmEsJb31DoVnR.1> PIN 737373

Saturday November 30, 2024 10:00 AM: HDARC NM5HD STATEWIDE CHAT SHACK NET on the MEGA Link NM5ML.
Net controller tbd. [Click Here](#) for more info.

December 2024

Wednesday December 4, 2024 Noon: Club ZOOM Lunchtime Chat Room. Click on the link below to enter the virtual room.

<https://us02web.zoom.us/j/82410741347?pwd=kXb9i18t3bc3MATidQmEsJb31DoVnR.1> PIN 737373

Saturday December 7 , 2024 10:00 AM: HDARC NM5HD STATEWIDE CHAT SHACK NET on the MEGA Link NM5ML.
K5JVG John is our net controller. [Click Here](#) for more info.

Wednesday December 11, 2024 Noon: Club ZOOM Lunchtime Chat Room. Click on the link below to enter the virtual room.

<https://us02web.zoom.us/j/82410741347?pwd=kXb9i18t3bc3MATidQmEsJb31DoVnR.1> PIN 737373

Saturday December 14, 2024 10:00 AM: HDARC NM5HD STATEWIDE CHAT SHACK NET on the MEGA Link NM5ML. net controller TBD . [Click Here](#) for more info.

Wednesday December 18, 2024 Noon: Club ZOOM Lunchtime Chat Room. Click on the link below to enter the virtual room. <https://us02web.zoom.us/j/82410741347?pwd=kXb9i18t3bc3MATidQmEsJb31DoVnR.1> PIN 737373

Saturday December 21, 2024 10:00 AM: In Person Club Meeting and V.E. Testing.
Presentation: John Betz II KI5YIF: Intro to Digital Mobile Radio (DMR)
HT Radio Giveaway. V.E. Testing begins at Noon. [Click here](#) for more information
**Location: North Domingo Baca Multigenerational Center Room #4
7521 Carmel NE Albuquerque, NM 87113.**

Live Stream Link: TBA at a later date

Wednesday December 25, 2024 Noon: Club ZOOM Lunchtime Chat Room. Click on the link below to enter the virtual room. <https://us02web.zoom.us/j/82410741347?pwd=kXb9i18t3bc3MATidQmEsJb31DoVnR.1> PIN 737373

Saturday December 28, 2024 10:00 AM: HDARC NM5HD STATEWIDE CHAT SHACK NET on the MEGA Link NM5ML.
Net controller tbd. [Click Here](#) for more info.

Wednesday December 30, 2024 Noon: Club ZOOM Lunchtime Chat Room. Click on the link below to enter the virtual room.
<https://us02web.zoom.us/j/82410741347?pwd=kXb9i18t3bc3MATidQmEsJb31DoVnR.1> PIN 737373

Saturday CHAT SHACK NET Incentive Program

In an effort to promote members to participate in the Saturday Chat Shack Net and develop net controller skills, the membership approved an incentive program for members who check in and members who volunteer to take on the role of net controller on various Saturdays. The program will begin on the first Saturday of November 2024 and end on the last Saturday of February 2025 at which time a grand prize will be drawn. Any member in good standing who checks into the Saturday Net will receive a ticket with their call sign attached. When you check in starting in November 2024 indicate that you are a member, clearly give you callsign using phonics. The net controller will submit their log sheet to the President who will verify and assign tickets. Those who chose to volunteer to be net controller and complete that assignment for that given Saturday will receive 5 tickets with their call sign attached. A member can be a net controller once per month. Net controllers will be assigned on a first come first serve basis. If you wish to be net control for the Saturday Chat Shack Net between November 2024 and February 2025 send an email to hdarcpres@gmail.com. The grand prize is a \$300.00 gift

certificate to HRO (Ham Radio Outlet). If you volunteer to be a net controller and it is your first time, you will be assigned a club net controller mentor to prepare you for running the net if you request it.

Saturday CHAT SHACK NET/MegaLink

The Saturday 10am CHAT SHACK NET will use the 444.325 + PL 100 and the 145.290 - PL100 on Sandia Crest in order to access the MegaLink system.

NM5HD Net Controllers :

1st Saturday, John Gleeson, K5JVG

2nd Saturday, OPEN . We need volunteers.

3rd Saturday, Club Meeting. No net

4th Saturday, Michael Chirin, NM5MC

5th Saturday, (when needed) Open for a volunteer. Backfilled by Mike Smith, KI5NBP until a volunteer is assigned.

The next controller for this Saturday is Mike KI5NBP filling for Mike C NM5HD. You can reach this Net from any part of NM because of its design. You just need to be on the right frequency, offset, and PL tone for the local repeater closest to your location at the day and time of the net. I use a HT and have checked in from different parts of the state with minimal issues. For current mega link frequency information go to www.nm5ml.com. If you're having issues programming your radio email hdarcpres@gmail.com. You will be directed to someone in the club that can help you.

Please [click here](#) to see the operational status of NM5ML Mega Link Repeaters.

V.E. Testing

The Institute of HAM Radio Sciences conducts free V.E. testing session at NOON on the 3rd Saturday, of every month immediately following the Monthly HDARC In-Person Club Meeting in classroom #4 at the North Domingo Baca Multigenerational Center. Look for the link [FREE TESTING](#) on the club web page. Please, pre register on the club web page for testing www.nm5hd.org. For more information contact Yul Bratcher at his email, yul.bratcher@att.net A big 73 to YUL and the V.E. team for volunteering their time and resources. Without them this could not happen.

Congratulations to the following HAMS who passed their exams this past Saturday. We had 3 new technicians and 2 upgrades to General:



Technician:

Steve Coltran

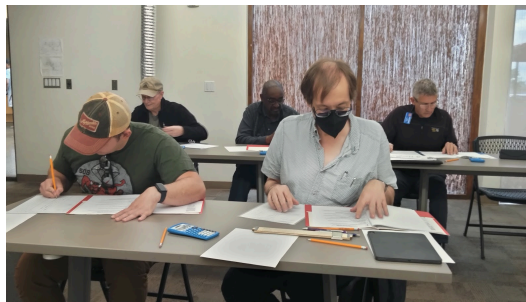
Dwight E. Talley

Richard W. Ramirez

General:

Thomas D. Tarman KC5MRC

Jim Baylor KJ5DMX



Classifieds

Welcome to the classified section. The intent is to give members and other HAMS a place to advertise any HAM related equipment they have for sale. It is also a place for members to list what HAM related equipment they are seeking to buy. There are no new classifieds this week. We will have new items posted next week.

HAM RADIO ETIQUETTE

- adapted from the original Amateur's Code, written by Paul M. Segal, W9EEA, in 1928

The Radio Amateur is:

CONSIDERATE...He/[She] never knowingly operates in such a way as to lessen the pleasure of others.

LOYAL...He/[She] offers loyalty, encouragement and support to other amateurs, local clubs, the IARU Radio Society in his/[her] country, through which Amateur Radio in his/[her] country is represented nationally and internationally.

PROGRESSIVE...He/[She] keeps his/[her] station up to date. It is well-built and efficient. His/[Her] operating practice is above reproach.

FRIENDLY...He/[She] operates slowly and patiently when requested; offers friendly advice and counsel to beginners; kind assistance, cooperation and consideration for the interests of others. These are the marks of the amateur spirit.

BALANCED...Radio is a hobby, never interfering with duties owed to family, job, school or community.

PATRIOTIC...His/[Her] station and skills are always ready for service to country and community.

CONCLUSION

Check the club's website often, there are interesting things being added weekly. www.nm5hd.org

I want to thank the club's COB, Kenneth Ham, AG5UY, for maintaining the website. Thanks Yul, WA5YUL and V.E. team for what they do to provide free testing to the public. Thank you to our Elmer MaryAnn NS7X. Thanks to those of you who provided content for this newsletters.

Feel free to reach out to me anytime at hdarcpres@gmail.com. If you wish to add content to the weekly newsletter the deadline for submission is Monday preceding the Wednesday publication date. *I look forward to hearing you on the net this Saturday.*

73 Mike

**Michael R. Smith, KI5NBP, President HDARC
The High Desert Amateur Radio Club of New Mexico, Inc.**