



The Newsletter of the Mother Lode DX/Contest Club

May 2021

Volume 26 Number 5

From the President – NC6R

MLDXCC -

I want to apologize for the lackluster president's report. As many of you know I came down with COVID the weekend of WPX. Although I am over that (thank God), the fuzzy brain it leaves behind has taken a while to subside.

As the wintertime contest season fades, DX on the HF bands has been on the increase with conditions improving most every day. Several DX entities from Africa have been very active lately. There has also been nice openings from the West Coast into Northern Europe in the evening (their morning) much to their surprise and delight. I've also observed some of you logging several "all time new" DX contacts too....congratulations to you all on your effort!

The yearlong CQ Marathon for 2021 also looks to be going well...how are you doing? Remember that any DX you work, whether in a contest or one-on-one, counts toward the 2021 CQ Marathon even if you've logged them in a prior year. Have you been able to avail yourself to the online meetings? Several of our members have asked when we might be going back to regular meetings. Please stand by as I believe W1RH (MLDXCC VP) may be announcing an-in person meeting with a great speaker coming very soon!

Regarding meetings, going forward I can see MLDXCC doing a modified approach where we try and balance "in person" and "online" meetings. This could allow us to secure an online speaker that we might not have otherwise had the privilege of listening to in person.

Our continued success as a premier club can't be done without you. Would you consider becoming a paid member of MLDXCC? Dues are only \$20 dollars a year. Payment method can be found in the newsletters.

As always, here are websites to view upcoming contest and DX announcements -

Contest calendar dates are listed at https://www.contestcalendar.com/index.html DX operation announcements can be found at https://www.ng3k.com/misc/adxo.html

73 & good DX,

From the V.P. - W1RH

From the VP

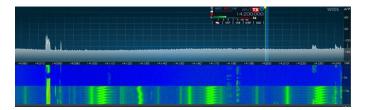
Bob, W1RH

When I first moved to my current QTH, I was absolutely amazed at how little noise I had. That was in about 2007. Living just below the top of a ridge, with a panoramic view to the North, East and South, did expose me to some noise sources 1,000 feet below me, but it still wasn't that bad. Even 160 was quiet, using the transmitting antenna for receiving.

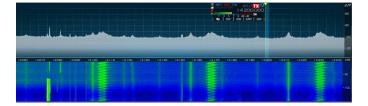
I have two towers. One right next to the house and one about 300 feet down the hill. Both have essentially the same view. When I first installed the tower next to the house, I could point the beam right at the house which also looked at the power lines on the street and the noise level was dead quiet. What noise I had was from the valley, below.

Fast forward to 2021. In the past 15 years or so, I've added five routers, two switches, numerous Amazon Alexa devices, and countless other devices using wall-warts around the house. Little, by little, the noise level kept growing worse on all bands.

This is what my noise level looks like today, on 20 meters, with the beam on the tower next to the house pointed at 70 degrees, which has the house off of the back of the beam. To give you an idea of the level of noise generated inside the house, take a look at the same screen shot below, made at the same time, using my beam on the tower that is 300 feet down the hill. There is still more noise than I'd like, but what a difference! Almost everything in the top screen shot, except for the FT8 segment on the left side of the screen, is local noise.



I'm going to show you one more screen shot. This is with the beam, on the tower next to the house, pointed at the house. In this direction, the noise is beyond unacceptable.



Steve / NC6R

MLDXCC President

The noise from the tower next to the house has made it just about useless at this point and I find myself doing less and less SO2R and mainly using the beam on the lower tower for contesting on 10-20 meters.

I was able to greatly improve the noise situation on 40-160 meters by using a W6LVP receiving loop, as suggested by NC6R. I can't say enough about this antenna. I'm sure there are many other better receiving antennas out there, but this one has made a huge difference for me. Nevertheless, even though the antenna is about 400 feet from the house, I can still see some local noise with it.

I'm close to replacing the Force12 C19XR and KLM rotatable dipole on the tower next to the house with either a JK stack, similar to NC6R's or a SteppIR DB36 but I'm not going to do it until I can clean up the noise problem.

Gary, NA6O, gave a terrific talk on tracking down noise at a NCCC meeting a few years ago. It included directions on building a directionfinding loop for locating noise sources. I began looking around the junk in the shack for the materials to home-brew one and then noticed an article in NCJ, by KOAV, called Tracking RFI with an SDR One Source at a Time.

In the article, Alan describes his experience tracking down interference using a nifty device, built by National RF, called a Vector Gun.



The Vector Gun includes a switchable high-gain amplifier and a switchable attenuator, along with five loops covering 1.8 to 55 MHz. Alan uses this device, paired with either a general coverage portable receiver with a signal strength meter or a SDRPlay, to track down interference.

Sounds good to me, so I bought one and it was just delivered.

Hopefully, my next VP article will give you an idea of just how well this works.

In other news, many have asked when we're going to meet in person again. It looks our June meeting will be the point where we all get to see each other again! More to come on this, but I'm really hoping we can get W1SRD to give us his long-awaited South Orkney DXPedition presentation.

One big benefit of using Zoom for our meetings has been seeing so many of our members who

simply live too far away to make the local meetings. We're going to try to continue using Zoom for our meetings, as long as we can find locations with reasonably good internet connectivity.

Hope to see you all in June.

Bob W1RH

Next Meeting

Date: June – 19th

Time: TBD

Location: TBD

Presentation: TBD

MLDXCC Treasurer - K6SZQ

MLDXCC Treasurer's Report - April 2021

3/31/2021 Opening Balance \$2,568.94 Income \$99.12 2021 Dues - Paypal \$59.12 2022 Dues - Paypal \$40.00 Expenses \$0.00 None \$2,668.06

From the Secretary - KI6YYT

No meeting notes for May. May meeting was cancelled so that members could attend the Visalia International DX Convention.

Emilia Seiferling KI6YYT

<u>CLUB Dues</u>

2020 dues are due!

The Dues period runs from Jan 1 to Dec 31. Dues are \$20.00 individual, \$30.00 family

PayPal – Send to: <u>motherlodeclub@gmail.com</u>. Use the Friends and Family option.

Cash or Check - Given to a club officer at a meeting. Or mail to the Treasurer - Sue Allred K6SZQ, 17610 Red Mule Rd. Fiddletown, CA 95629

Club Log Standings

Overal	
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1	NJ6G	Dennis Moore	170			
2	WU6W	Rick Palio	165			
3	N6JV	Norm Wilson	160			
CW						
1	К6ҮК	John Lee	114			
2	N6JV	Norm Wilson	108			
3	W1SRD	Steve Dyer	89			
Phone						
1	NC6R	Steve Allred	112			
2	КбҮК	John Lee	76			
3	K6TQ	Dave Sanders	72			

Data

1	NJ6G	Dennis Moore	164
2	NK7I	Rick Bates	135
3	WU6W	Rick Palio	131

Club Log Standings are based on worked entities during the calendar year.

Member Reports

ATNO: TZ4AM on 20 meter CW in the log! Steve / NC6R

ATNO: 4S7AB Sri Lanka on 30 Meters Doug WE6Z

I picked up WY and OK on 10M today to complete 5BWAS.

73, Dennis NJ6G

There was a great 6 meter opening on 5/17 at around 4PM local.

I made 51 contacts and confirmed 11 different states. First time using the SteppIR on 6 meters. 73s, Doug WE6Z

Nice 6 meter opening. 5/17 When's the last time you could say you worked 14 *new* states on a band in one session? 73, Dennis NJ6G

Six meters has almost opened into Europe. I have decoded 6 European stations. Better luck into Asia with DU6 and a new one YB1TJ in the log. YB is number 133 on 6 meters. Norm N6JV

Doug's Canteen Radio project

I happened across an article from N6CC titled <u>"Canteen" Shortwave Radio Receiver</u> and thought that would be a really cool project to build. It is based on a radio that was built by a POW in World War II. Looking at the schematic, the circuit seemed pretty simple, and it's basically a one tube regenerative receiver. Thinking about it, I realized I had all of the necessary components in my junk box, and not only that, I had parts that would be period correct.

There just happened to be a military vehicle and swap meet in Plymouth, and I was able to pick up a WW2 canteen at a reasonable price.

I was able to fit all of the necessary components inside the canteen and make the parts layout very similar to the original documented design. It took 24 hours of labor from start to finish. In the end, to test it, I used 4 AA batteries for the filament voltage, and my 60 volt bench supply for the B+.

I was very surprised that it worked right away. I was able to receive WWV and one of the HF bands, either 40 or 80 meters. The headphones had very low volume, but that's to be expected with their age and construction. If I was to use this more often I would probably feed it into some sort of audio amplifier.

Overall, it was a heck of a lot of fun. It was challenging making all of the components fit in the tight space and making due with what you have on hand.

Here's a quick YouTube video showing the build process.

https://www.youtube.com/watch?v=qZu-zkKdwXc





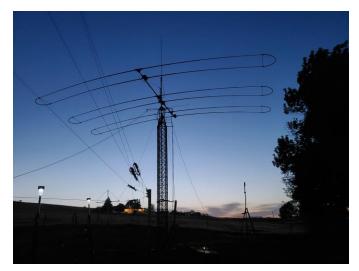


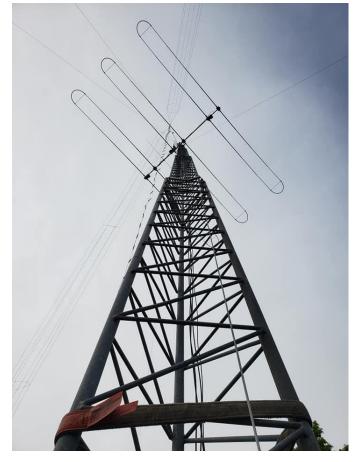
Doug WE6Z

Doug's SteppIR Project

Over the last month I've been able to complete my SteppIR DB18E project. I got the antenna assembled, tested on the ground, and finally raised up to the tower. I rented a 50ft JLG towable boom lift to get the antenna mounted. I had to wait another week for the winds to calm down enough before I felt comfortable raising the tower to full height and guying it.

In the last 10 days I've worked 38 different countries using the SteppIR, most of them on 30 meters.







I still have to finish all of the station integration including hooking up the controller to the radio, automatic band decoder, and amp key disable lines. But in manual mode everything is working excellent! Here is a quick video slideshow of the tower and process.

https://www.youtube.com/watch?v=54z2BFkJNCI

Doug WE6Z

<u> Visalia - 72nd International DX</u> Convention



The 72nd International DX Convention was this past weekend. May 15-16th, 2021. It was hosted by John Miller, K6MM and Rich Seifert, KE1B via a Zoom

webinar. It was a great success. The meeting hosted 1472 attendees and 40 panelists. Twenty one percent of the attendees were non-USA, and fifty nine unique DXCC entities attended. Over \$7,000 of prizes were awarded.

Presentations were made by DX Engineering, Elecraft, Green Heron, Yaesu, Flex, JK Antennas, Expert Linears, and more. Lots of DX and DXpeditions were discussed including a great presentation on the 3YOJ DXpedition by co-leader Paul Ewing, N6PSE. There were no significant glitches and all presentations were on time. A great time was had by all, and we hope to see many of these people next year in person at Visalia.

ARRL Contesting Certificates

If you have participated in ARRL Contests by submitting your log, enter your call sign and see your available certificates. You can view and download them. The certificates show where you placed in the contest.

http://contests.arrl.org/certificates.php

Awards Checkers ARRL

Ken Anderson, K6TA (DXCC, WAS, VUCC, 160M) Rick Samoian, W6SR

<u>Tube of the Month</u>

8891/4CX18000A



The natural evolution of TV transmitters was always in the direction of less complex designs that were more powerful. RCA began production of power tubes at their Lancaster, PA facility starting in 1946. Their early high power TV transmitters featured running several tubes in parallel. In the early 1970s, RCA introduced the <u>8891</u> tetrode. It had a dissipation of 20,000 watts using a maximum of 10,000 VDC at 6 amps. The filament was a mere 9.5 volts at 147 amps and it operated up to 400 MHz. RCA incorporated this tube in some of their TV transmitters they called the F line. The F line consisted of both low and high VHF range transmitters. The high range used the 17 KW TT-17FH or the 25 KW TT-25FH. When used with their "OPTO" combiner, the outputs were added to produce the TT-35FH or the TT-50FH. Either transmitter could be chosen or the two combined as necessary. These became common units and they were operated for many years. The TT-35FH used the 8891 in its final amplifier. Eimac made their version of the 8891 that was designated 8891/4CX18000A. In 1987, with the demise of RCA,

the management at the Lancaster RCA facility bought the plant and it became Brule Industries. Same tubes, different name. In the Sacramento area at KOVR, the 35 KW TT-35FH eventually became the back-up transmitter for whenever the main 50 KW transmitter needed maintenance. This all changed when digital transmission was mandated and all the old equipment became surplus. The article comes from RCA Broadcast News, Dec. 1975 when Sacramento got their F line transmitters.



The 8891 and its driver tube were mounted in a pair of silver plated, tunable cavities. The tube sockets were made with many finger stock contacts that needed to be cleaned or re-plated periodically. The cavities needed to be disassembled to get to the sockets. When the sockets were re-assembled, the alignment tool shown was used to keep the filament and grid rings in perfect symmetry.

Visit the museum at <u>N6JV.com</u> Norm N6JV

Three Sacramento TV Stations Install New RCA Transmitters

All three VHF television stations in Sacramento, Calif., have installed new RCA transmitting systems.

KOVR-TV and KXTV-TV are on-air with RCA TT-35FH 35-kilowatt highband parallel transmitters. KCRA-TV is operating a TT-30FL, a 30-kilowatt lowband parallel transmitter. The three installations include equipment for transmitters remote control and monitoring.

The new transmitters have replaced units which are 15 to 20 years old and provide the operational advantages of newer designs, including capability for remote control or unattended operation.

The new units were installed at the Transtower facility located at Walnut Grove, Calif. Transtower, owned jointly by the three stations, includes a 1500foot tower and antenna array designed and built by RCA. The array was one of the earliest multiple TV antenna sites erected.



MLDXCC Focus Contests

The following lists all contests in which MLDXCC would appreciate your efforts.

ARRL SS CW/PH ARRL DX Phone* ARRL DX CW* ARRL 10M* ARRL 160M* California QSO Party

*Proposed and approved at the November 12, 2016 MLDXCC general meeting.

Northern California Contest Club (NCCC) announced their focus contests at their August 2018 meeting. This list can be found in the Aug 2018 NCCC newsletter.

ARRL RTTY RU CQ WPX RTTY CQ WPX SSB CQ WPX CW

<u>MLDXCC – Outgoing ARRL</u> <u>Bureau</u>

The Mother Lode DX/Contest Club will provide Outgoing QSL Bureau services to current paid club members. The policy is as follows:

The club will cover packaging, shipping, and the \$7.00 ARRL fee. Members will be responsible for the \$1.15 per ounce fee, payable to the club. A scale will be provided at the designated meetings to weigh the cards.

Twice per year, at the March and October meetings, members may bring their outgoing

cards (or have delivered by another club member) to the meeting for collection and collating.

All regulations set forth by the ARRL must be met, including:

Members must be ARRL members to use outgoing bureau.

Must provide proof of membership (QST mailing label, ARRL membership card)

Cards need to be sorted according to ARRL requirements when brought to club.

The after-meeting program at those meetings would be dedicated to weighing, merging the cards, and making sure the paperwork is in order.

For more information regarding the ARRL Outgoing Bureau, please visit

http://www.arrl.org/outgoing-qsl-service

QSL bureau rates have changed.

Outgoing QSL Service

QSL Service Fee Structure (effective May 15, 2019)

ARRL members — including foreign members, QSL Managers, or managers for DXpeditions should enclose payment as follows:

Effective May 15, 2019, the rate structure is: \$2 for 10 or fewer cards in one envelope.

\$3 for 11-20 cards in one envelope, or 75 cents per ounce, for packages with 21 or more cards.

[For example, a package containing 1.5 pounds of cards -- 24 ounces, or about 225 cards -- will cost \$18.] Under the new fee structure, there are no transaction service fees.

You should use an accurate scale to weigh your cards. Most post offices have scales that you may use.

Please pay by check (or money order) and write your call sign on the check. Send cash at your own risk. DO NOT send postage stamps or IRCs. Please make checks payable to: "The ARRL Outgoing QSL Service."

Packages received with insufficient payment will not be processed until the balance is paid in full. The outgoing QSL bureau does not keep money on account.

The NOAA Solar Update

Click the link below to display the latest NOAA solar predictions.

http://www.swpc.noaa.gov/products/weeklyhighlights-and-27-day-forecast

UPCOMING DX and DXpeditions

Click the link below to display upcoming DXpeditions.

http://www.ng3k.com/Misc/adxo.html

MLDXCC Reflector

The MLDXCC reflector is maintained at groups.io. Visit <u>https://groups.io/g/mldxcc</u>

We also maintain a spotting reflector at https://groups.io/g/MLDXCC-Spots

We are also on Facebook! https://www.facebook.com

UPCOMING Events

For the latest contest info, click on the following link: http://www.contestcalendar.com/contestcal.h tml

<u>Classifieds</u>

Members are requested to review their classified ads each month for accuracy and to resubmit their ads or confirm their desire to keep it running in the next issue.

The Northern California Swap

Thursday evenings at 8 PM local on the N6ICW repeater system 147.195 +123 Join Armand WB2ZEI and the group to buy, sell, or trade amateur radio related gear. Check-ins and visitors welcome.

New! "<u>The Serial Box</u>" (SBOX) by N6TV – Combination Serial Port Splitter, ACOM / Elecraft / SPE Amplifier Interface, FSK/CW/PTT keying interface, and Breakout Box

https://www.eham.net/reviews/detail/13971 Serial Box



Serial Box

"<u>The Y-BOX</u>" by N6TV – 4-way Elecraft K3/K3S ACC port splitter, Elecraft Amplifier Interface, and Breakout Box

https://www.eham.net/reviews/detail/13296



Y-Box N6TV

Need QSL cards, business cards, club banners? Contact Vina K6VNA <u>vina@sign-tek.com</u>

For Sale:

National NC-125 receiver. Restored, recapped, retubed, and aligned. \$149.

https://www.youtube.com/watch?v=b627ubsCLEI

National NC-98 receiver. Restored, recapped, retubed, and aligned. \$119.

https://www.youtube.com/watch?v=o32vO2Ijsf 4

Hallicrafters SX-96 with matching R-46B speaker. Restored, recapped, retubed, and aligned. \$299

https://www.youtube.com/watch?v=INAFa0MIj ZI

Collins 75A-3 receiver. Excellent condition. Has a product detector that was installed in the 60s. Restored, recapped, retubed, and aligned. \$449/obo

https://www.youtube.com/playlist?list=PLPuaq7V41 U5sqriDtWxEH | SS-XZyCXq

Collins 30L-1 amplifier. Great condition. All original. Comes with new power supply board with caps (not installed). Asking \$600.

Collins 32S-1 transmitter. Restored, recapped, and retubed. Comes with Turner Single Sideband Mic. Asking \$350.

Collins 516F-2 power supply with case and speaker. Restored, recapped, retubed. Asking \$250.

Contact Doug WE6Z, we6z@hotmail.com

Not giving up...just making space.

1994 ARRL Handbook Hard Bound offer

The MLDXCC Newsletter

1995 ARRL Handbook Soft Bound offer FT-5000 MP \$1800/offer have box, manual Late serial #

FT-890 'AT' w/manual & mobile bracket (AT may or may not work) \$250/offer

FT-1000 MP with filters, accessories & box \$995/offer (ex WZ6Z radio)

80 Meter vertical antennas...67' HD aluminum elements breaks down to 8 31' pieces (3" diameter/1/8" wall), \$100 each or offer 3 available

50' coax with center & end insulators for dipole...new, never outdoors- \$ 60/offer

Satellite & old DirecTV dish...free

1992 International Callbook (remember those?) offer

Old Novice & Tech License Guides, Tune in the World, Operating Manual

IMAC (old-unkown condx) with kb & mouse...???

Kenwood TR-8300 440 mhz FM transceiver with xtals for 446.000, 443.250 & maybe 443.525...offer.

May take labor instead of \$ on some items.

email: k6lrn@arrl.net

Swapmeet

Sacramento Elks Lodge swap meet

May 30, 2021.

5631 Cypress Ave, Carmichael, CA 95608.

Sellers \$10.00 per space. Open around 7:00am

The Carmichael Elks 2021 Annual Ham Swap is scheduled for Sunday, May 30 from 7 am to 1 pm at

the Carmichael Elks Lodge on the corner of Cypress and Hackberry, 5631 Cypress Ave, Carmichael, CA 95608. Parking is free to buyers on the East lot. For Sellers, South lot spaces are \$10 each space. Thank an Elk for this great price! The Elks Lodge will be selling coffee, water, maybe dogs and doughnuts. There will be an electronic salvage trailer available for stuff you want to donate. This is a LEAVE NO TRACE event. We want to leave the Elks facility cleaner than we found it! ***COVID 19 PROTOCOLS*** PLEASE protect the Elks Lodge and yourself. Plan on leaving an empty space next to you, maintain appropriate social distance, and WEAR A MASK. Cheers -- John Dyer

N7RCA's 17th Annual Electronics Swap Meet

June 5, 2021

This is a free event for buyers and sellers. More info n7rca.com

Rain or Shine

Electronics including: Modern gear, Drake, Collins, Johnson, HI-FI and all electronics

What to Bring: Truck loads of gear and tables for the swap.

AGENDA: Swap - Buy - Sell - Trade- Have fun

No fee event free for the hobbyist

Please pass this along to other groups and operators: WE NEED HELP SPREADING THE WORD All are invited to the Northern Nevada Radio Swap Meet on June 5, 2021 7:30 am until 12pm MINDEN NV. (20 miles from S. Lake Tahoe) RV's welcome on the ranch, lots of room. Swap meet is on a 6 acre ranch parking trailers and RV easy access. BRING LOTS OF STUFF BY THE TRUCK LOAD Please respect social distancing guidelines. This will be held rain or shine.

The MLDXCC Newsletter

CAN SET UP THE NIGHT BEFORE WHERE: (N7RCA) RANCH

1780 BOBCAT CT MINDEN (20 miles from s Lake Tahoe) 15 miles south of Carson City NV. June 5, 2021

No food or drinks available at swap meet. BRING YOUR OWN Bring chairs and a tables for swap. EASY UPS SHADE FROM THE SUN Swap - Buy - Sell - Trade. You can drop off large loads the night before COLLECTORS, BROADCASTERS etc. RV's welcome on the ranch, day before and after the swap meet. lots of parking. Map and contact information at www.N7RCA.com Weather Outlook:: Temps in the day time can range from mid-60's to mid-80's Nights in the 60's to low 40's.

Bring a hat and sunscreen, the Elevation is 5000 feet of clear blue open skies.

Notice: this event is a non-commercial event for the hobbyist, the property owner is not a party to any sale or warranty from attendees. Brad Hollander is not responsible for any loss or injury while on property. If you don't agree to these terms please don't attend.

2021 Meeting Dates

January -23^{rd} Zoom Feb - none March -20^{th} Apr -17^{th} May -15^{th} June -19^{th} July -24^{th} August -28^{th} September -18^{th} October -23^{rd} November -13^{th} Dec - none

Dates are arranged to accommodate major contest dates. Meeting dates are subject to change. MLDXCC traditionally holds a mid-year combined meeting with NCCC.

<u>Area Clubs</u>

Northern California Contest Club https://www.nccc.cc

Lodi Amateur Radio Club http://www.lodiarc.org

Stockton Delta Amateur Radio Club http://www.w6sf.org

Pizza Lovers 259 -

https://www.pl259.org

El Dorado Amateur Radio Club http://edcarc.net

Sierra Foothills Amateur Radio Club http://www.w6ek.org

Redwood Empire DX Association http://www.redxa.com

Calaveras Amateur Radio Society http://calaverasars.org/

Please contact the editor to have your club listed here.

ARRL Pacific Division

Pacific Division Director Kristen A. McIntyre K6WX k6wx@arrl.org

Pacific Division Vice Director Vacant

East Bay Section Manager Jim Siemons, W6LK

jim@siemons.com

Nevada Section Manager John Bigley, N7UR <u>n7ur@arrl.org</u>

Pacific Section Manager Joe Speroni, AH0A <u>ah0a@arrl.org</u>

San Francisco Section Manager Bill Hillendahl, KH6GJV <u>kh6gjv@arrl.org</u>

Santa Clara Valley Section Manager James Armstrong <u>nv6w@arrl.org</u>

Sacramento Valley Section Manager Dr. Carol Milazzo, KP4MD kp4md@arrl.org

San Joaquin Valley Section Manager John Litz NZ6Q john@litz.com

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The MLDXCC Newsletter

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