MTARA NEWS

The President's Message

Hello, MTARA members ~~

Spring is here, following a long and challenging winter. Let's all take a collective deep breath and pull out the sunscreen.

MTARA participated in this year's second annual Association of Mountain Volunteer Organizations recruiting fair on April 22. Thank you to Chet (AE6CO), Chrystal (KK6API), and Vic (KK6WKI) for manning the MTARA booth and spreading the word about what MTARA does. One visitor to our table was very interested to learn that MTARA has the equipment and trained operators to assist in communications for a major community event that he is in charge of. We'll see what comes of that!

An important project currently underway is a review and possible revision of MTARA's constitution and bylaws, which were enacted several years ago and do not address current prevalent means of communication and conducting business. A draft of the proposed changes will be presented to the membership for your input/suggestions and approval of the final draft. Board members Nancy (K6CUB), Tracy (WM6T), and yours truly (KJ6GFS) comprise the constitution/bylaws revision committee.

The Bouvet Island DXpedition had a successful though very trying voyage to one of the most remote islands on the planet. On their 101-foot ketch the Marama, they arrived at Bouvet Island in late January, were able to land, unload their radio equipment, and make thousands of DX contacts under very extreme weather conditions. If you Google **3y0j** (that 0 is a zero) you can click on numerous sites that have video, audio, and written reports from the crew of this incredible adventure. Congratulations to that intrepid team!

Our next meeting will be on Tuesday, May 30, at 7 p.m. at the Lake Arrowhead Community Presbyterian Church. Hope to see you there!

Seven Three, Everyone ~~ Lorna

Officers

- **President:**
Lorna Polley, KJ6GFS
- **Vice-President:**
Chet Olson, AE6CO
- **Treasurer:**
Nancy Karlson, K6CUB
- **Secretary/Newsletter**
Debbie Johnson, WB6LVC
- **Ed/Membership:**
Tracy Lenocker, WM6T
- **Past Presidents:**
John Snedden, KT7P
Vic Marquez, KK6WKI

The Rim of the World ARES group is an ARRL affiliated organization and part of the Mountain Top Amateur Radio Association
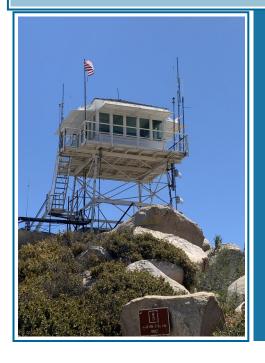
Monthly Club Meetings

Club meetings are held on the first Tuesday of each month. The meeting begins at 7:00 p.m. and lasts until approximately 9:00 p.m.

Our meetings are open to everyone; so bring a friend, and keep the hobby growing. There is always a presentation that will pique your interest and add to your knowledge.

All upcoming meetings, beginning with July 5, 2022, will be held at the Lake Arrowhead Community Presbyterian Church, 351 South State Highway 173, Lake Arrowhead, CA 92352

Membership

Membership in MTARA is open to any individual interested in learning more about Amateur Radio. An FCC issued license is not required, but is encouraged. Membership is on an annual basis, running for the calendar year. There are no prorated membership fees. Club fees are $20.00 for a single membership and $30.00 for a family membership. The necessary forms can be found on the club's home page @ MTARA.club. Current members only need to send in their dues to MTARA, PO Box 2441, Lake Arrowhead, Ca. New members will need to download and send in their forms and payment to the same address.

TREASURER'S REPORT

Our beginning May Balance was:

$16,733

Income:

$260

Expenses:

$0

73, Nancy K6CUB

Local Weekly Nets

	Repeater	Time	Activity	Purpose
Monday	MTARA—2	7:00 p.m.	Weekly Check-In	MTARA News
Monday	144.330 MHz	8:00 p.m.	"Gordo Net"	Simplex Readiness
Tuesday	MTARA—5	7:00 p.m.	"Debbie Net"	Educational Topics
Wednes-day	HF	7:30 p.m. First Wednesday	7.223 MHz	Band(s) Status
Friday	MTARA—5	5:00 p.m.	YL Happy Hour	It's Friday
Daily	CBARC	7:00 a.m.	Tech. Net	Elmer Sessions

Upcoming Calendar 0f Events

- Year-Long Activity "Volunteers On The Air" VOTA vota.arrl.org
- May 19—21 Dayton Hamvention Xenia, Ohio
- May 27—28 CQ World-Wide WPX CW Contest
- June 3—4 ARRL International Digital Contest
- June 10—12 ARRL June VHF Contest
- June 17 Kids Day
- June 14—25 ARRL Field Day

Baker to Vegas...Almost by WB6LVC

Back in March, Gary packed up the Jeep in preparation to take part in the Baker to Vegas race along with members of our B2V (K6BTV) team. The Jeep was loaded to the roof with all of the needed supplies to set up our Stage and be able to communicate with other locations throughout the race.

We took off on Thursday, March 30th, and drove to Henderson, NV. On the way, Gary started to cough a bit. That night, he was not doing well with more symptoms developing. So, on Friday, I bought some Covid Rapid tests to see what was going on. He tested positive…and so did I!! After letting our group know what was taking place, we left our hotel and headed home with all the supplies that were never unpacked.

But that's not the end of the story. Oh, no. Our team still had work to do. Our Team Lead, Marta Carrigan/KG4MUA and her husband, John/KD6JSK, started to re-organize and reassign jobs to the other members. (A note here: 3 of our original members also called in sick, leaving the rest of the team to consist of three brand new volunteers! They had never worked with us before, nor had they participated in any stage of the race.) We were set to handle Stage 19, which was in a strip mall close to town and near the end of the race. If they had been up in the mountains, the new plan would not have worked. But as they had little blocking their transmissions and antennas, they were successful. The "One Mile Out" group used HTs, and/or mobile radios in their cars, and/or cell phones. The "Base" group used basically the same equipment. By early the next morning, the shift was over. What a great accomplishment, something to be so proud of!!

We had really been looking forward to working together this year as last year, due to the lack of volunteers, our team had been split up to cover not only Stage 19, but also Stage 18. That meant that our team at EACH location consisted of only 4-5 people for the entire shift. No sleeping or taking breaks with that number of volunteers. Since we only had one site to cover this year, we thought it would be "a piece of cake." But it ended up worse as we lost not just 2 volunteers, but 5 and all the equipment Gary and I were supplying.

We all know the saying "When all else fails, there is always Ham Radio." But the operators truly make the difference. And I want to take this opportunity to publicly thank Marta and John for all that they did to make this an extremely successful event. Kudos to everyone on the team including the new volunteers; Yujiro (Yuji) Otsuki/ K7STI, Michael Yurco/KN6LDC and Michael's daughter, Megum Yurco/KK7BUE. Now, onto 2024. Third time has to be the charm.

PONDER THE POOL   by AA6GJ

Ponder the Pool is a way for us as Amateur Radio Enthusiasts to dive into selected questions more deeply from each of the current FCC pool of questions used to create the randomly generated Examinations for the Technician, General, and Amateur Extra License. Ponder the Pool is helpful to individuals who are studying for an exam or simply to review concepts that we have already learned.

Because, as we know, if we don't use it, we lose it.

This time we will ponder three questions. One of them is from the Technician Class License Pool and two of them are from the NEW General Class License Pool because they are closely related. (The NEW General Class License Exams will begin July 1, 2023.)

They are:
T8D12 – Which of the following best describes an amateur radio mesh network?
G2E11 – What is the primary purpose of an Amateur Radio Emergency Data Network (AREDN) mesh network?
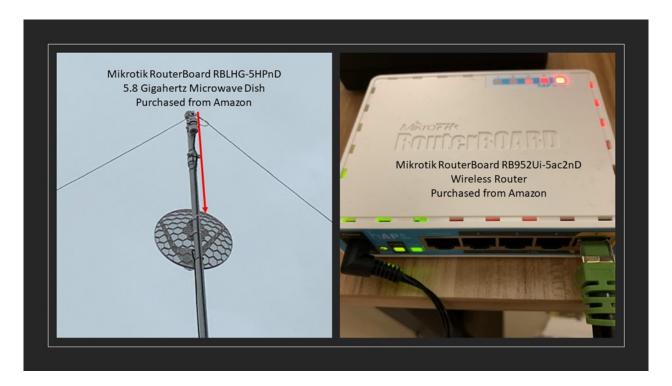*G8C09 – Which is true of mesh network microwave nodes?*

*An Amateur Radio Emergency Data Network (AREDN™) is a **high-speed data network built with Amateur Radio Operators and Emergency Communications Infrastructure in mind.**

AREDN™ is self-configuring and self-healing. Where possible, AREDN™ will establish connections with as many other AREDN™ compatible devices (nodes) as possible and form a redundant mesh-like network.

AREDN™ nodes **automatically finds the "most reliable" nodes (greatest chance of success on packet delivery)** to attempt delivery of the packets sent across the network. One need not know the exact path to get to the destination, only to know what the destination is.

AREDN™ uses **commercial off-the-shelf (COTS) hardware** originally intended to be used for unlicensed WIFI and re-purposes it to fit the needs of Amateur Radio Operators. By using such common gear, we can benefit from affordable pricing and the easy availability of reliable communications gear.

Mikrotik RouterBoard RBLHG-5HPnD
5.8 Gigahertz Microwave Dish
Purchased from Amazon

Mikrotik RouterBoard RB952Ui-5ac2nD
Wireless Router
Purchased from Amazon

By itself AREDN™ is only a networking technology - it provides the basis to move traffic around. It can be thought of like a radio or a repeater, where the infrastructure is an AREDN™ node and the content that flows across it is one that the local users decide.

Networks built on top of AREDN™ are IP based, very similar to but not dependent upon, the Internet and operating under the rules for Amateur Radio operators. Well-used publicly documented protocols (IPv4) are utilized to provide the greatest flexibility to local implementers of these high-speed networks.

Examples of what has been and can be deployed across these networks are:

- Computer Aided Dispatch (Responder management)
- Incident response and mapping solutions
- Static and video imagery of evolving situations.
- Real-time communications and systems
- Winlink message networks
- Asset management and monitoring (Repeater control, solar power management, etc)

With the flexibility this solution provides, you can now deploy infrastructure to serve the local community by providing the ability to send the data that modern operators need.
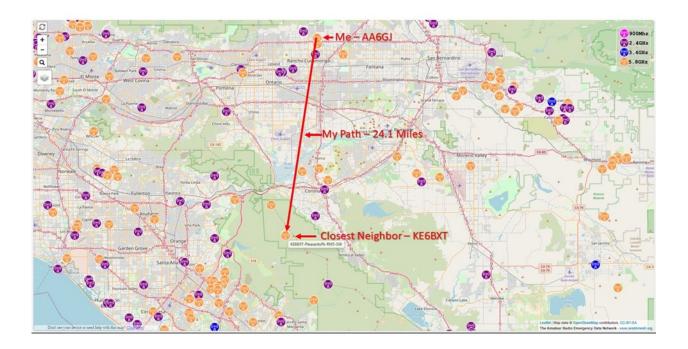
*Lara, C. M. (2015, March 16). *What is an AREDN network?* What is an AREDN Network? | Amateur Radio Emergency Data Network. https://www.arednmesh.org/content/what-aredn-network

The following images are screenshots of my AREDN Node.

The map below shows the direction and distance from my Node to my closest
neighbor, KE6BXT.

That is why the official answer to these questions are:

*T8D12 – An amateur-radio based data network using commercial Wi-Fi equipment
with modified firmware*
*G2E11 – To provide high-speed data services during an emergency or community
event*
*G8C09 – If one node fails, a packet may still reach its target station via an alternate
node.*

That's *Ponder the Pool* for another month. I hope it was helpful.
Stay tuned, next month we will come up with another question to ponder. 73 – Gary
If you have any questions or comments, drop me an email at AA6GJ@arrl.net

Amateur Radio Exams Now Online or In-Person!
No Paper! All Electronic! Very Cool!
with K6DDZ & AA6GJ

Now that MTARA is back in-person for meetings, amateur radio testing will be offered before each meeting. Testing will cover all three elements (Technician, General and Amateur Extra). Remote (online) testing is also available by appointment.

For MTARA in-person or remote testing, please go to **K6DDZ.com - Amateur Radio Testing Made Simple.**

ONLY ONE CLICK to:
Order Gordon West's study materials
HamStudy.org Practice Tests (all levels)
Schedule a Test (in-person or remote)
Get Your FCC Registration Number (FRN)
Pay for Your Test
...and even click to Gary's (AA6GJ) video training for more in-depth knowledge

Let's keep it simple! Any questions, email Dede Hermon at DedeK6DDZ@gmail.com

And if you are DTH (Down the Hill)

You can test all classes of license with the

That's my team AA6GJ and the Group

If you are interested drop me an email at AA6GJ@arrl.net to set a time, either online or in-person or to just get information. We can help you with your FRN, too.
73,
Gary
https://GaryRJohnson.org

MTARA Shirts, Jackets, and More