



MTARA NEWS



The President's Message

Hello, MTARA members ~~

It's time to get ready for the holiday season, but first, many MTARA members will be busy on Dec. 2, providing radio communications for the festive Blue Jay Parade. This is an annual event that MTARA has participated in for several years. Some hams will be assigned to specific locations, dealing with road closures, CHP activities, and the lining up of parade floats and marchers. Other hams will act as shadows for parade officials and for the DJs/Mistress of Ceremonies. And, of course, there's the all-important Command Post.

It's also time to get ready for the coming El Nino winter, though NOAA and other weather professionals can't tell us for sure what to expect in the way of precipitation (rain/snow and how much?). The County has indicated that they've learned a lot from last winter's experience, and have taken serious steps to improve the planning, communications and, perhaps most important, the acquisition and strategic placement of appropriate snow-removal equipment, to better safeguard the residents, businesses, and infrastructure of the mountain communities.

Our next meeting is Tuesday, Dec. 5, 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:**
Chrystal Stenberg, KK6API
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.

Meetings are 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 November Balance was:

\$11,956.68

Income:

\$135.00

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
Wednesday	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 Of Events

- November 25—26 EME Contest 50 to 1296 MHz
- November 25—26 CQWW DX CW Contest
- December 2—Blue Jay Christmas Parade
- December 1—3 ARRL 160 Meter Contest
- December 9—10 ARRL 10 Meter Contest
- December 17 Rookie Roundup CW
- January 21—27, 2024 Quartzfest 2024

Pacificon 2023 by WB6LVC

Pacificon 2023 was held on October 20-22 in San Ramon, Ca. It was, as always, a terrific event, attended by over 1100 hams including our own MTARA members Tracy/WM6T, Jodi/WA6JL, Gary/AA6GJ, Debbie/WB6LVC, Dave/W6DVE, Tina/W6TNA and Gary/W6KVC. Of course, Gordon West (also a club member) was there to start off the festivities on Saturday morning with his “Breakfast with Gordo” gathering which we attended along with tons of other hams. After a fun time of reminiscence with friends we hadn’t seen since last year, Gordon held his Instructor Academy, assisted by Gary/AA6GJ. Yes, Gordon, along with an audience volunteer, set afire the pickles-hey, it wouldn’t be a Gordo activity without them, while Gary shared and demonstrated the use of videos and “Hands On” items for teaching licensing classes. Showing how to teach on Zoom and in person with the use of visuals to “frontload” concepts was a big hit. After the close of the session, many attendees came up to chat with Gordon and Gary about more of the items that had been shared and how to access Gary’s videos for their classes. Gordon, the generous person he is, really stressed the use of introducing concepts, as Gary does, before reviewing the test questions, and how to contact Gary if they wanted more information about his classes.

There were so many great seminars, it was difficult to choose where to go next. Some of the topics covered were: Introduction to DSP, Advanced Winlink, Receiving SST from the ISS and Dealing with Intentional Interference, plus kit building and JOTA. But let’s not forget the vendors. Wow! They filled the hallways and conference rooms from one end of the convention center to the other. And to make sure people who were not able to be there in person, Gary/W6KVC and the ATN (Amateur Television Network) were on site, covering seminars, meetings of the organizations that were present and the banquet.

Later that Saturday afternoon, I was privileged to speak at the YLRL Forum. My topic was “Nets, Nets and More Nets.” I shared about the types of nets, Formal and Informal, which are available for all to take part in, and discussed the training and techniques to run a net. Following my talk, we had an open session about nets the other YL’s had taken part in. Carol/KP4MD also invited up three YLs that had been helping her on a project with the Citrus Heights Senior Girl Scouts who are going to be a part of the ARISS project in April of the coming year. The ladies were very enthusiastic about their project, to be sure. We wish them much success!

I could go on and share so much more about what took place, but I will let the pictures speak for me. And the best news of all...there WILL be a Pacificon 2024!! Hope to see you there.



[Gordo Burning Pickles \(vimeo.com\)](https://vimeo.com/GordoBurningPickles) Click here to see the video.



Boulder Amateur Television Club TV Repeater's REPEATER

November, 2023
2ed edition, issue #146

BATVC web site: www.kh6htv.com

ATN web site: www.atn-tv.com



This is an excerpt from the TV Repeater's REPEATER Newsletter. Thank You, Jim KH6HTV



Jim Andrews, KH6HTV, editor - kh6htv@arrl.net www.kh6htv.com


ATN - DATV Success Story

Aloha, Jim, and All --- As you can see, I am OTA on DAT through the ATN's Santiago Peak Repeater!!! THANK YOU so MUCH for your expertise on this project. Your equipment is working PERFECTLY! Beyond my wildest dreams!

I am receiving the repeater with the 1.2 GHz downconverter analog. I'm not sure if we are set up for digital transmit yet, but when we are, I'm ready with my new HV-120-1.2 GHz.



AA6GJ's new DVB-T station and his signal after going through the Santiago Peak, ATN TV repeater, 30 miles away.

West End Amateur Radio Group 



440-6SS Yagi



Santiago Peak as seen from AA6GJ's QTH

Attached are three photos. My ham shack Digital ATV setup. My M-Squared 440-6SS, 70cm, Yagi antenna up about 11 feet on a tripod. The Coax is LMR 600. Still looking for the best place to hang it on the house. It works pretty well there. Also a photo of a shot of Santiago Peak about 30 miles south of me.

I will definitely recommend you to anyone who would want a turn-key Digital Amateur TV station. Thank you once again for all your hard work! 73 de Gary, AA6GJ, Rancho Cucamonga, California

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 this question from the NEW General Class License Pool:

G8B05 – Which intermodulation products are closest to the original signal frequencies?

Pretty confusing, huh? Let's go through this slowly and we'll see if we can sort this out. First, what is *intermodulation*?

Intermodulation means the creation of signals at new frequencies because of two or more signals modulating each other. Intermodulation products have frequencies that are linear combinations of the original input signal frequencies.

The equation is $n \times (f_1) + \text{and} - m \times (f_2)$.

Let's say we are operating in the 20-meter band, and we have 2 frequencies present. (f_1) is **14.150** MHz and (f_2) is **14.175** MHz mixing and modulating each other in the "front-end" of our receiver. If all the higher-order terms in the original equation are considered, n and m can take on any integer value. 1, 3, 5, 7, ... odd or 2, 4, 6, 8, ... even. If the sum of n and m is odd, the result is products that have frequencies near our desired signal. Those are called odd-order products.

For example:

If $n = 1$ and $m = 1$ **1+1=2 Even-Order**

$f = 1 \times 14.150 + 1 \times 14.175 = 28.325$ MHz (This product is out of the 20-meter band and not a problem for us.)

$f = 1 \times 14.150 - 1 \times 14.175 = -0.025$ (This is a negative number, and we can ignore it.)

$f = 1 \times 14.175 - 1 \times 14.150 = 0.025$ MHz (This product is also not in the 20-meter band, so no problem there.)

Now, if $n = 2$ and $m = 1$ **1+2=3 Odd-Order**

$f = 2 \times 14.150 + 1 \times 14.175 = 42.475$ MHz (This product is out-of-band, no problem here.)

$f = 2 \times 14.150 - 1 \times 14.175 = 14.125$ MHz (This product *IS* in the 20-meter, and it is close to the original frequencies above. This product could cause intermodulation distortion in the receiver.)

$f = 1 \times 14.175 - 2 \times 14.150 = -14.200$ MHz (And, again, this is a negative number, and can be ignored.)

Let's try another odd-order:

If $n = 5$ and $m = 4$ **5+4=9 Odd-Order**

$$f = 5 \times 14.150 + 4 \times 14.175 = 127.45 \text{ MHz (No problem here, not in-band.)}$$

$$f = 5 \times 14.150 - 4 \times 14.175 = 14.050 \text{ MHz (This frequency is in-band, and again close to the original two frequencies. This could cause intermodulation distortion.)}$$

$$f = 4 \times 14.175 - 5 \times 14.150 = -14.050 \text{ MHz (Negative number, again, ignore)}$$

Here is a chart that shows all of the Odd-Order products:

n	m	Intermod. Products
5	4	14.05
4	3	14.075
3	2	14.1
2	1	14.125
Original Frequencies		14.150 (f1)
Original Frequencies		14.175 (f2)
1	2	14.2
2	3	14.225
3	4	14.25
4	5	14.275

As you can see from the above chart if we add $n + m$ each one of the **sums** is an **odd number**. This is another way to determine odd-order products.

That is why the official answer to these questions are:

G8B05 – Odd-order

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@arri.net



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

with K6DDZ & AA6GJ

Now that MTARA is back to in-person 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

West End Amateur Radio
Group



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>

Mountain Top Amateur Radio Association

The Amateur's Code by Paul M. Segal, W9EEA (1928)

The Radio Amateur is:

CONSIDERATE never knowingly operating in such a way as to lessen the pleasure of others.

LOYAL offering loyalty, encouragement and support to other amateurs, local clubs and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.

PROGRESSIVE with knowledge abreast of science, a well built and efficient station, and operation beyond reproach.

FRIENDLY with slow and patient operation when requested, friendly advice and counsel to the beginner, kindly assistance, co-operation and consideration for the interests of others. These are the hallmarks of the amateur spirit.

BALANCED Radio is an avocation, never interfering with duties owed to family, job, school or commu-

MTARA Shirts, Jackets, and More

We have many items available with our club logo.

The information for ordering is as follows:

- Name Tags—Harlan Technologies, Name Tags by Gene (715) 340-1299, www.hampubs.com
- Mouse Pads—Check with Jodi, WA6JL
- Polo Shirts—Port Authority 510L Dark Green, 510K Dark Green, Long Sleeve Dark Green.-Check with Brandy
- Jackets—Forest Green or Black J317. Sizes Small to 6X
- Brandy will also embroider hats. You must supply the hat.
- Contact:

Hurt Ink

2651 Coleen Lane

San Bernardino, CA 92407

(909) 815-6852

hurtink815@gmail.com

www.hurtink.com

