



# MTARA NEWS



| OCTOBER 2021 | [Mountain Top Amateur Radio Association](http://www.mtara.org) |

**President: Vic Marquez, KK6WKI**

**Secretary: Dave Esquer, K6WDE**

**Ed/Membership: Tracy Lenocker, WM6T**

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

**Vice President: Gary Johnson, AA6GJ**

**Treasurer: Patty Szychowski, KK6LWH**

**Past President: John Snedden, KT7P**

## President Vic's Message

**G**reetings from your President, Vic, KK6WKI.

Well if you think you missed out on all the Special Event fun this year, like the Tour de Big Bear, the Kodak-100, Route 66 and the Gran Fondo, no worries because you can still operate in this year's National Fire Prevention Week Special Event, which starts Sunday, October 3rd, and runs thru Saturday, October 9th.

In 1871, on October 8th, it is said that Mrs. O'Leary's cow kicked over a lantern and started a fire that burned for 27 hours and resulted in the loss of over 300 lives and destroyed 17,000 buildings and left 100,000 people homeless. The great Chicago fire was one notable event that helped the campaign for fire safety and the reason that this week is National Fire Prevention week.

Practicing good fire prevention measures is important no matter where you are but with so much of our community covered in woodlands, it is especially important to understand and follow outdoor fire safety guidelines. I'm sure I don't need to explain the

importance of this, especially those of us who live in the mountain communities.

This year's Fire Prevention Week Special Event theme is, "Learn the Sounds of Fire Safety".

There are 12 special event stations, N0F thru N9F plus 2 wildcard stations: KF2IRE and VE3FIRE.

Last year N6F's QSO count was 2,174, the highest count out of the 12 stations, the year before that, our count was 1,479, the second highest.

There are a couple of ways you can participate and either way you choose you don't need to be a Firefighter.

One way to participate, you can chase any of the N\*F stations or KF2IRE and VE3FIRE stations (wildcards).

A certificate of achievement is offered to those who work any ten of the twelve special event stations.

All of the N\*F stations, KF2IRE and VE3FIRE count toward your certificate!

The other way to participate, is you can call CQ for station N6F. We try to call CQ in the General license portion of the band, unless there are no clear frequencies. N6F imparts no operating privileges you must operate within your license privileges.

You simply call "CQ, November Six Foxtrot, Fire Prevention Week Special Event Station" and log call time, date, Frequency, mode, RST, sent and received.

Name and state are optional, but log them if you can get them. It really depends on how busy you are.

A computer log is appreciated but a paper log is acceptable. If you have time, you give a fire safety tip from a list of fire safety tips that are mostly related to the Sounds of Fire Safety i.e. hear a beep, get on your feet. A loudly beeping alarm means smoke or carbon monoxide is present. Get outside and stay outside.

Hopefully, we will get several MTARA members to participate this year.

Please contact Tracy or myself if you are interested in calling for N6F.

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**We hope to SEE you on October 5, for our monthly club meeting at the Masonic Lodge in Twin Peaks.**

All for now. Stay radio-active and as always, ***if you see something, say something!***

73, Vic

## *Route 66 Wrap Up - K6WDE*

With support of MTARA members, the Citrus Belt Amateur Radio Club Route 66 Special Event is in the record books. Totals for all stations across the U.S. are still being tallied and will be available shortly, but it looks like the **event cleared at least 45,000 contacts in TOTAL**. We'll have more data in next month's newsletter.



MTARA members participated in the event by either working from their home locations as W6C and/or working from the W6C/portable site on Route 66 at the Wigwam Motel in Rialto on Monday and Thursday, September 13 and 16th. All 3 modes (SSB, CW and FT8) were in



operation during the week-long event. The Wigwam had 2 simultaneous SSB stations on the air both days, each for 4 hours and the 2 stations were operated

entirely on solar and battery power. About 130 QSOs were made over the 2 days at the Wigwam Motel.

Members operating W6C from home (or a friend's station) were Vic (KK6WKI), Greg (AJ6FN), Gary (AA6GJ), Debbie (WB6LVC), Ed (KK6UWI), Tracy (WM6T), Jo (N6NTJ), Maria (K6RMA), Sandy (W6SJE) and Dave (K6WDE). Those who operated from the portable Wigwam were Gail (KM6GBN), Lorna (KJ6GFS), Vic, Dave, Jo (and Matt), Gary, Debbie, Sandy and Dave. Jim and Rhonda (KM6YCA and KM6YBZ) stopped by to see the portable operation in ... operation!

Stay tuned for next year!

## *Monthly Club Meetings*

Our monthly meetings are on the first Tuesday of each month. **October 5 is the next meeting, remember we are now at the Masonic Lodge in Twin Peaks.** The address is 26012 Highway 189, Twin Peaks, CA. 92391 adjacent to the Sheriff's Station. The meetings begin at 7:00 p.m. and last until about 9:00 p.m. Our meetings are open to everyone, licensed amateur radio operators or just interested parties. Our purpose is to provide educational opportunities, mentoring, radio communication training and radio communications for community events.

See you soon!

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## Treasurer's Report - KK6LWH

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Our opening August balance was \$8,293.73 with \$229.00 in deposits and no expenses for the month. The total funds on deposit in our account is now \$8,522.73 as of September 7.

73, Patty

## Online Zoom tech meetings winding down ...

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Our Zoom meetings are on THURSDAYS at 2:00 p.m. Check out the MTARA Website home page for a listing of what each of the presentations will be about. If you need help setting up Zoom on your laptop or smart phone please contact Tracy, WM6T, who will help you get set up and running.

Now that we are having club meetings again and that a number of people are no longer staying home due to COVID we will be ending these Thursday afternoon sessions. The plan at this time is to try and carry forward until the end of the year. However we will be having some Saturday training classes and field operation trainings which will definitely be in lieu of a Thursday Zoom session.

There are holidays, conflicts and other events coming up so on the following dates **we will not be having a Thursday Zoom Session:**

**October 14, November 11,  
November 25, December 23 and  
December 30.**

## Gran Fondo 2021 - WB6LVC

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On the weekend of September 25th., the Gran Fondo bike race was held in Big Bear. We had a large number of MTARA members take part in "manning" the various locations on the race route. Their locations were near the Aid Stations or as a Mobile contact. Gary (AA6GJ) and I (WB6LVC) were at Converse Flats. Our location was at the bottom of a very steep grade. The riders came bolting down and then had to make a very sharp left turn. Quite a few had to put out their feet to navigate and make the



racers started their descent is called "Heaven." So, take a guess (wink, wink) at what our location is affectionately called? That's right. H-E-double hockey sticks. You got it.

The event went very smoothly at our location. No serious injuries. Lots of conversation with the people at our spot or those passing through. It was beautiful day; we couldn't have asked for a nicer one. I have included a few photos from our set-up. That's it from "Hell." Looking forward to next year's race.



turn without taking a tumble. By the way, the area above us where the

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## Easy Antenna Switch - AJ6FN

Last month I described the construction of an antenna patch panel. I was browsing articles from older QST magazines and ran across a simple way to make an antenna switch using a 3-way electrical wall type light switch available from any home improvement store. A single switch can be used to switch one transceiver to two antennas while an arrangement of three switches can be combined to switch one transceiver to four antennas.

For those unfamiliar with 3-way light switches, these are single-pole, double-throw switches which make one connection when the switch is in the up position and a different connection when the switch is in the down position. These switches are often used at opposite ends of halls and stairways. In contrast, the more common on-off light switch is a single-pole, single-throw switch which either makes or breaks the connection to the light or outlet. Please be sure to use a switch marked, "3-way" for this project.

This project can probably be built for less than the cost of a good commercial antenna switch and can easily add that "home-brew" flavor to your shack. The antenna switch can even be built into a metal duplex electrical box with a metal cover, as shown in the article, so that no drilling is necessary to mount the switch. Furthermore, the author used the knock-outs in the sides of the box to mount the SO-239 connectors so that only the small mounting holes for each connector need to be drilled. The complete article can be found in the **August 1986 QST p 25-27** available [online here](#).

Some benefits of using a 3-way electrical switch in this way include:

- ▶ ARRL tests found no arcing at 1000W even at high SWR
- ▶ Switch does not affect SWR
- ▶ Low capacitance between contacts

- ▶ Large contacts can handle appreciable power
- ▶ Large contact spacing gives good isolation

I will leave it up to interested readers to check out the QST article for more details. I just happened to run across this article and since it related closely to last month's article, I thought I'd point people to this resource. Even though the article appeared in QST in 1986, not much has changed in the way of antenna switching so this article is just as relevant today as it was then.

Good luck and good building,

Greg ~ AJ6FN

## Local Weekly Nets

	Repeater	Time	Activity	Purpose
<b>Monday</b>	MTARA-2	7:00 p.m.	Weekly Check-in	MTARA news
<b>Monday</b>	144.330 Mhz	8:00 p.m.	'Gordo' net	Simplex readiness
<b>Tuesday</b>	MTARA-5	7:00 p.m.	Weekly Check-in	Tech discussions
<b>Wednesday</b>	HF	7:30 p.m. first monthly Wednesday	7.223 Mhz	Band(s) status
<b>Friday</b>	MTARA-5	5:00 p.m.	XYL Happy Hour!	It's Friday!
<b>Daily</b>	<a href="#">CBARC</a>	7:00 a.m.	Technet	Elmer sessions

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## Membership Info

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**M**embership in the Mountain Top Amateur Radio Association© is open to any person interested in learning more about Amateur Radio.

Members do not have to be a licensed Amateur Radio Operator to be a member but licensure is recommended. Members must be active in club activities which includes trainings, events, club meetings and Field Day. Membership is on an annual basis and is from January 1 to December 31 of each year. There are no prorated memberships. The annual membership is \$20 for a single member or \$30 for an entire family.

Current members do not need to fill out the renewal application form for 2021. You can just mail your check to MTARA, PO Box 2441, Lake Arrowhead, CA 92352-2441. We already know who you are. Those who joined in November or December of this year are already paid for 2021. The membership form can be downloaded by [clicking here](#).

## The NEW YL Corner! - WB6LVC

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**A** few weeks back, on the Tuesday night 220 net, I shared some information on authors who were either Ham operators or used the hobby of Amateur Radio in their books. One such individual who was both was Amelia Lobsenz. Ms. Lobsenz was an experienced ham. She was licensed back in 1941. After a brief time in publishing, she ran her own public relations firm. Her first book was *Kay Everett Calls CQ*. It is about a young college girl who takes a summer road trip from North Carolina out to the West. Travelling with her are three friends. They stay in a travel trailer which is also where Kay's Ham Radio set up is. The author based some of the characters on her actual friends, including another Ham, Theresa Korn, K7JGU. Part of the plot has a character, Terry, who is a YL and a pilot, taking two of the girls flying over Idaho. In that portion of the story, Ms. Lobsenz incorporates aeronautical mobile operations when the characters end up directing smokejumpers into a wildfire. As the

young ladies continue their travels across the country, they visit many historical sites such as Yellowstone National Park, the Grand Tetons, Crater of the Moon National Park, and the Great Salt Lake in Utah. (The locations were based on places that the author had visited when she took a similar trip out West back in the 40s.) Ham Radio plays a critical role in several of these places. The author also has the main character explore various aspects of the hobby and even go to a Hamfest!

Ms. Lobsenz also authored an additional book, *Kay Everett Works DX*, with the main character again being Kay Everett (who was named after the author's daughter). This time Kay is involved with trapping a group of international spies who intend to use atomic bombs in their fight against another group. That's where the DX in the title comes in. Kay uses her Ham radio skills to thwart their plot. Both books are aimed at young girls to show them the fun and excitement of "playing radio," as we now say. The books also include Ham Radio terms, slang, and operating notes in the appendix. I could find no other titles written by this author. She became a very famous and well recognized woman in her field. Lobsenz ran her firm until 1992 when she passed away at the age of seventy from cancer.

Until next time, 33 YLs!

- Debbie

## [PACIFICON 2021](#)

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**S**an Ramon Marriott, San Ramon, CA.  
Friday through Sunday October 15-17, 2021. **It is the ARRL Pacific Division Ham Radio Convention!**

A full slate of outstanding Forum presentations about a wide range of amateur radio topics including Gordon West demos, a large Vendor Expo filled with exciting products and exhibits, an outdoor Swap Meet, youth activities, electronics kit building and soldering instruction and much more! Hope to see you there!

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## *Upcoming Calendar of Events*

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Activities that MTARA will be participating in or supporting during the upcoming months:

- ▶ October 2-3, [California QSO Party](#)
- ▶ October 5 at 7:00 p.m - MTARA monthly meeting
- ▶ October 9-10, [Nevada](#), [Arizona](#), [Pennsylvania](#), [South Dakota](#) QSO Parties
- ▶ October 15-17 [Pacificon](#), ARRL Pacific Division Ham Radio Convention, San Ramon, CA.
- ▶ October 16-17, [Illinois](#), [New York](#) QSO Parties
- ▶ October 30-31, [CQ World Wide DX Contest](#), [SSB](#)
- ▶ December 4 - Blue Jay Christmas Parade communications support
- ▶ TBD - "I am Lost" Field Training
- ▶ TBD - Digital Modes Workshop

## *Upcoming VHF/UHF and HF Ham Radio contests or special events*

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A few fun events that club members can participate in and/or sharpen their communication skills with!

- ▶ [Slow Speed Con\(Test\)](#) for CW operators, **EVERY SUNDAY** (5:00 - 6:00 p.m., PDT ) and **EVERY FRIDAY** (1:00 - 2:00 p.m., PDT), a great learning tool for us new operators!
- ▶ [Weekly Phone Fray](#) by NW2K. A great way to get your feet wet for 30 minutes. It is weekly on Tuesday nights from 6:30 p.m. to 7:00 p.m. PST on SSB. The rapid-fire exchange is OP name and location ('Dave CA', e.g.). Folks start on 15 meters and then migrate to 20, 40, 80 and even 160 meters, its fun to watch the bands change as seasonal propagation does!
- ▶ Ongoing, updated [Contest Calendar](#) sponsored by WA7BNM, there is something for everyone, check it out!

## *MTARA shirts and jackets*

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We have our optional MTARA logo shirts and jackets available so that you too can look smart and cool! If interested, please contact Mary at Classic Images in Crestline. Her telephone number is 909-338-2281 from Tuesday through Friday at 23723 Rocky Dell Drive, Crestline, CA 92325.

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Welcome to “Ponder the Pool” by AA6GJ

**P**onder the Pool is my column for the MTARA Newsletter. Every month I pick a point to ponder (a question) from one of the three FCC question pools and try to explain it more and review the concepts because,

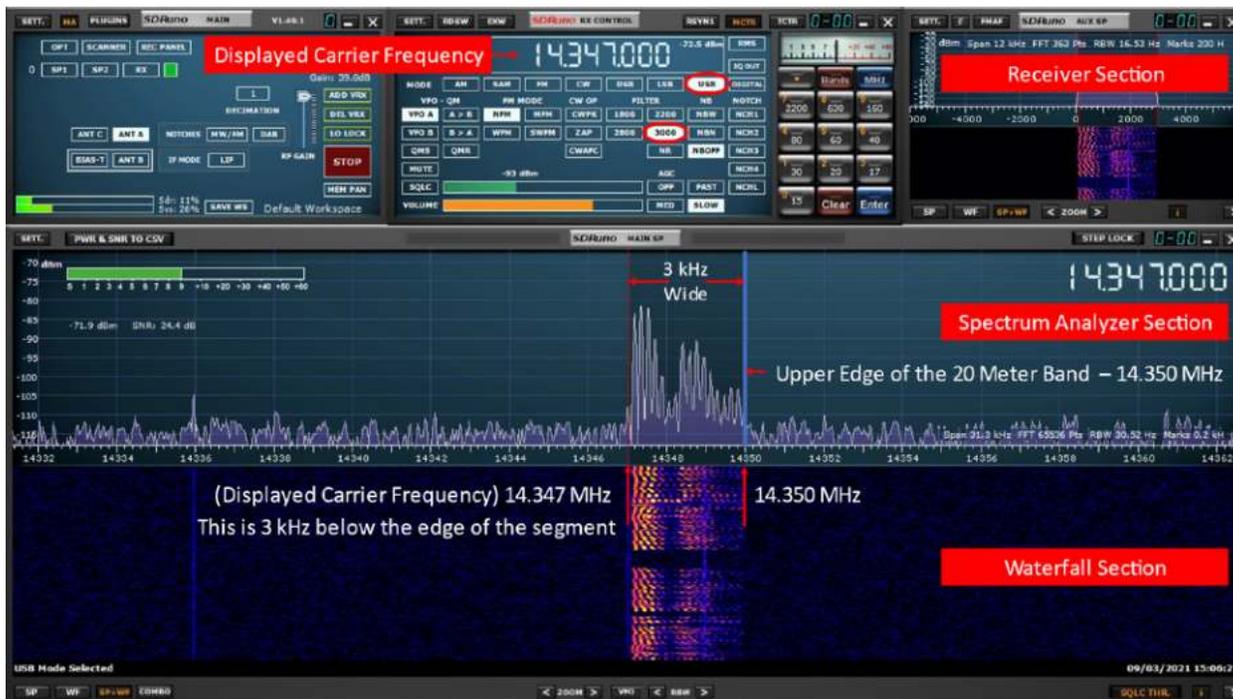
**“If you don’t use it, you lose it!”**

This time, we will ponder two related questions from the General Class pool: Questions No. G4D08 and G4D10 (Pg. 49 in Gordo’s General Book)

**G4D09 – What frequency range is occupied by a 3 kHz USB signal when the displayed carrier frequency is set to 14.347 MHz?**

**G4D11 – How close to the upper edge of the phone segment should your displayed carrier frequency be when using 3 kHz wide USB?**

We will refer to the photo below to help us answer these two questions:



This question is also talking about “bandwidth” just like last month’s question, except this time we are in the 20-meter band. Remember there is a limited amount of bandwidth on all our amateur bands.

The photo above is also similar to last month’s with one marked difference. On 20-meters, our mode of operation for phone is upper sideband USB.

Let’s start to take apart question G4D09. The question wants to know “what the range of frequencies” is. By FCC Rules, our Single Sideband transmission can only extend from 300 to 3 kHz (3000 Hz.) which is basically common voice

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frequencies. Remember that Amplitude Modulation utilizes both Upper and Lower sidebands along with a carrier frequency; AM takes up more bandwidth. We add both 3 kHz sidebands together and we come up with 6 kHz. That's pretty wide for one conversation. It was for this reason (and others that I won't go into here) that Single Sideband communication was invented and developed.

At the top of the photo, you will see a red box that reads "Displayed Carrier Frequency". This is the frequency that we dial our transceiver to, and the frequency that we will transmit and receive on. It says, "Displayed CARRIER frequency" because if we were going to transmit AM, this is where the carrier would be, but since this is single sideband, the carrier frequency and one of the sidebands (this time the lower sideband LSB) has been "suppressed", so we just have to pretend that the carrier is there. So, what happens to the carrier? It is magically reinserted in the receiver. Isn't that genius? Again, we won't go into all of that now. We're just going to answer these questions.

Next, we will look at the two lower sections of the photo. Right below the Receiver Section is the Spectrum Analyzer Section. Below that you will see the Waterfall Section. In the spectrum analyzer section, we see at left, an S Meter reading about S9. On the right is the carrier frequency where we are "parked". The middle section is where we will focus. Also, before we go on, look at the line graph just above the two red arrows. You will see that this is a portion of the 20-meter phone band extending from 14.347 MHz (14347 kHz) to 14.350 MHz (14350 kHz). Again, look at the center portion of the Spectrum Analyzer section. You will see that we are parked at 14.347 MHz (14347 kHz). If this were an AM emission, we would see our carrier frequency here along with our lower sideband. Now, this is the magic. Both the carrier and the lower sideband are gone, so instead of having a 6 kHz wide bandwidth, we only have a 3 kHz width. See the jagged lines in the middle? That's me talking. That's my modulation. Also notice that it is the UPPER sideband. My audio voice frequencies are extending 14.347 MHz up to 14.350 MHz. Check out between the arrows above and you'll see that.

$14.347 \text{ MHz} + 3 \text{ kHz} = 14.350 \text{ MHz}$ , plus because it is the upper sideband. By convention, upper sideband is utilized on 20-meters. So, in this case, "a 3 kHz USB (Upper Sideband) signal occupies 14.347 MHz to 14.350 MHz." That takes care of the first question.

Now that we know how wide our signal is, it will be easy to know how to stay inside the 20-meter phone band. Let's refer to our photo again. Notice the thick blue vertical line. That is the top edge of the 20-meter phone band. We now know from the previous question, that our signal should not be more than 3 kHz wide. So, parking on 14.347 MHz and allowing my modulation to extend to 14.350 MHz is pretty risky. Luckily, or not, I have a pristine signal. There are no "spurs", and I am not "overmodulating", both of which would cause my signal to extend beyond the limit of the band. So, by parking on 14.347 MHz, I am indeed 3 kHz below the edge of the band, which does answer the question. But, in general practice, I would suggest that you never get that close to the edge of the band or segment. Always stay at least 5 or 6 kHz away from band edges or segment edges. And always stay at least 3 kHz away from fellow hams on the band. That was a Technician Class question. I know I'm preaching to the choir, but all of these rules are to remind us to keep using good amateur practices and to be courteous to each other, so we can all enjoy this wonderful hobby of Ham Radio.

The official answer to these questions is:

**G4D09 – 14.347 to 14.350 MHz**

**G4D11 – At least 3 kHz below the edge of the band.**

There you have it, Ponder the Pool for another month. I hope it was helpful. Stay tuned, and we'll do another one next month. 73 – Gary

If you have any questions or comments, drop me an email at AA6GJ@arrl.net