



# SCOPE

Palomar Amateur Radio Club

May 2018

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## Memorial Day



All Have Some...  
Some Have All

## It Appears By Spears



Greetings!

In this issue we have an interesting article by Bernie Lafreniere, N6FN on how to use our 6 meter repeater. The repeater has been crosslinked to 147.130. Please see the article on page 10.

some interesting comments and pictures starting on page 15.

Don't forget Field Day is coming up on June 23rd and 24th. Dennis, KD6JTU has some information and requested items on page 12.

program and learn how) on Fiesta Island and of course the Hamvention in Dayton, Ohio.

Keep those articles coming, it's the only thing that keeps me from filling it up with bad jokes:)

Dennis, KD6TUI visited ARRL's Percy Maxim Station W1AW. He has

Other activities this month include a T-Hunt (Come to our May

73 de KM6CXW  
Keith Spears  
Editor

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## President's Report

Greetings Fellow HAMs!



As we gear up for summer, keep in mind a few important activities that are fast approaching.. Dayton Hamvention is May 18-20, it's not too late to make plans to go! Ask around and see if any other club members can help with last minute planning. Be

sure to check out the combined booth that will feature ORI, GNU Radio, Space Communications podcast, PARC, and other open source efforts! Field Day is June 23-24 2018, more information from our Field Day chair on page 12, we're still looking for operators and shelter/generator loans. Lastly, Operating

Day at Fry's on Saturday May 19th starting at 09:00 (setup at 07:00) and concluding in the early to mid afternoon, whenever it settles down. That's all for now, hope to see you on Wednesday evening for a T-Hunt presentation!

73 de K6JPE



## Board Members and Committee Chairs

### Board of Directors

President	Joe Peterson, K6JPE	(619) 630-8283
Vice President	Charlie Riistorcelli, NN3V	619-368-7617
Treasurer	Tom Ellett, W0NI	(858) 546-1148
Secretary		
Director 1	John Kuivinen, WB6IQS	(760) 727-3876
Director 2	Greg Gibbs, K16RXX	760-583-9668
Membership Chair	Glen Christensen, A16RR	(858) 735-1144
Repeater Technical Chair	Mark Raptis, KF6WTN	
Scope Editor	Keith Spears, KM6CXW	(858) 472-8442 Text Welcome

### Non Voting Members

Repeater Site Chair	Mark Raptis, KF6WTN	(Acting)
Webmaster	Guido Sansonia, NO6I	(760)-224-6824
Trustee	Michelle Thompson, W5NYV	mountain.michelle@gmail.com

### Committee Chairs

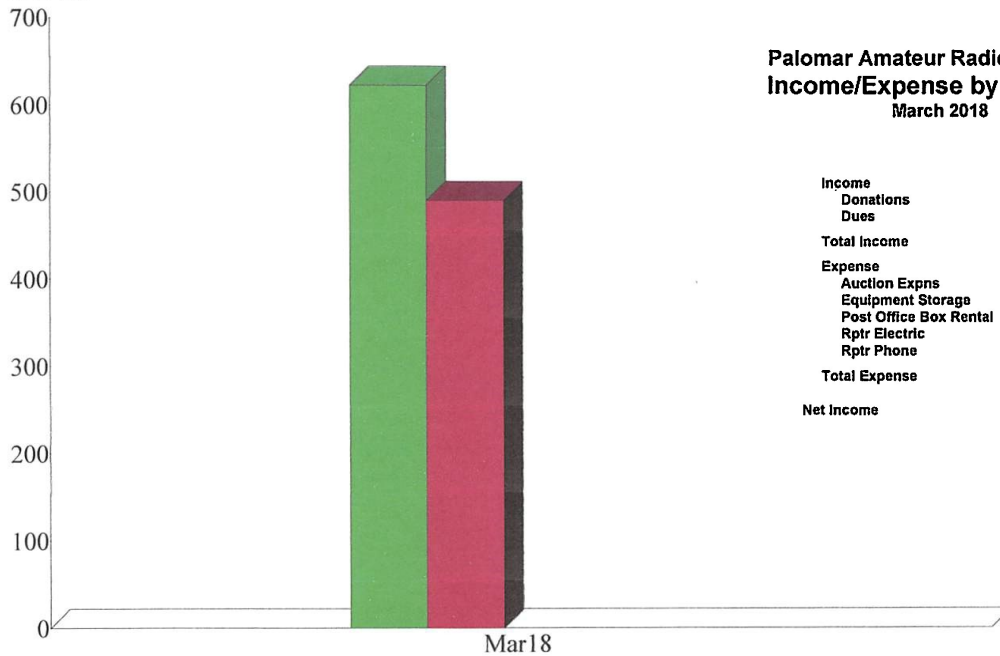
Boy Scouts	Michael Palugod	mpalugod@yahoo.com
Digital ATV	Michelle Thompson, W5NYV	mountain.michelle@gmail.com
Echo Link	Bernie Lafreniere N6FN	N6FN@niftyaccessories.com
HF Remote	HF Remote SIG	hfremote@palomararc.org
Mesh Networking	Michelle Thompson, W5NYV	mountain.michelle@gmail.com
Operating Day	Tom Martin K6RCW	k6rcw@amsat.org
SANDARC Representative	John Walker AC7GK	ac7gkjohn@gmail.com
SANDARC Representative	Paul Williamson KB5MU	kb5mu@amsat.org
SD Microwave Group Liaison	Kerry Banke N6IZW	kbanke@sbcglobal.net

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Palomar Amateur Radio Club, Inc.  
Income and Expense  
March 2018

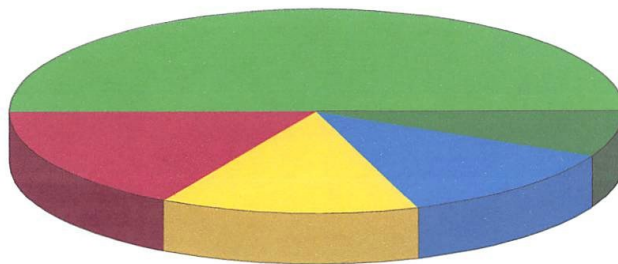


\$ in 1's



Expense Summary  
March 2018

Equipment Storage	\$245.00
Post Office Box Rental	82.00
Auction Expns	67.50
Rptr Electric	61.22
Rptr Phone	34.28
Total	\$490.00



By Account



## May Program

This month we will turn our attention to Transmitter Hunting (T-Hunt).

This is a well-established science and a great adventure. It allows hams to combine their knowledge of radio propagation and technology with an opportunity of being “RF sleuths”.

N6SZO (Joe Coronas) and KE6BHB (Joe Loughlin) will expound on the science of transmitter localization through RF detection, and its use in ham radio and public service. There are a few types of this localization that are called “transmitter hunting” (T-Hunting). They will describe how this activity has evolved into an important ham service and enjoyable pastime for both licensed and un-licensed enthusiasts.

Commercial as well as homebrew T-Hunt equipment will be reviewed, highlighting their strengths and limitation. They will also describe T-Hunt activities ongoing as well as planned for the San Diego County area and give detailed information about a well-organized and popular T-Hunt adventure to take place in San Diego later this month.

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## June Program

In June we will change our traditional Club meeting format. Instead of the traditional program presentation, we will “mix it up”.

The Field Day coordinator (KD6TUJ, Dennis) and his FD team will expound on the preparations for our FD adventure, describing the excellent activities to enjoy at the PARC FD site on 23-24 June. The biggest, most important thing you can do to support the PARC FD is **“show up at the PARC FD site”**. Many PARC members are already operating during the FD effort. The nice way to support PARC by all is to just **come out and enjoy!** We will have traditional food enjoyment, and great opportunities to socialize with hams, and talk about ham radio.

After Dennis’ presentation, we are going to have a “show and tell” session. This will be a chance to spend an evening chatting and getting to know our fellow club members. **Please share your treasures with us!** We will have an area set aside for equipment brought by you to show and tell us about.

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## Upcoming Events

Wednesday, May 2nd	7:30	PARC Meeting	Carlsbad Safety Center
Wednesday, May 9th	7:00	PARC Board Meeting	Poway Fire Station #3
Wednesday, June 6th	7:30	PARC Meeting	Carlsbad Safety Center
Wednesday, June 13th	7:00	PARC Board Meeting	Poway Fire Station #3
Sat. & Sun. June 23rd & 24th	All Day	Field Day	Valley Center

## Repeater Status

This list includes W6NWG repeaters operated by PARC and other repeaters open to use by PARC members. All W6NWG repeaters are located on Palomar Mountain and are open to all amateurs.

Frequency	TX	Tone	Call sign	Remarks
52.680	-	107.2	W6NWG	Back on the air
146.730	-	107.2	W6NWG	System Fusion enabled. See Note 1
147.075	+	107.2	W6NWG	System Fusion enabled. See Note 1
147.130	+	107.2	W6NWG	System Fusion enabled. See Note 1
447.000	-	107.2	W6NWG	FM only for EchoLink Call Sign W6NWG
224.900	-	107.2	WD6HFR	Convair/220 ARC
224.380	-	107.2	KK6KD	HARS Hispanic Amateur Radio Society Open
224.940	-	107.2	KK6KD	HARS: Sharp Chula Vista Hospital, Open
145.260	-	107.2	KK6KD	HARS: San Diego Open
147.945	-	107.2	KK6KD	HARS: System Fusion Mt. Miguel Open
448.460	-	151.4	KK6KD	HARS: Mt. Miguel, San Diego Open
145.460	-	110.9	XE2DXA	HARS: Tijuana, Mexico Open
146.970	-	107.2	KA3AJM	Vista-Sponsored by MetroNET
146.175	+	107.2	N6FQ	Fallbrook ARC; linked to 445.600
445.600	-	107.2	N6FQ	Fallbrook ARC; linked to 146.175
145.050	s	N/A	W6NWG-1	Packet node; linked to metro 9600 net 1
146.700	-	N/A	W6NWG-3	Packet duplex repeater; Duplex 3

PARC operates an armature fast-scan television repeater. It's currently off the air. Currently there are not links to other ATV sites.

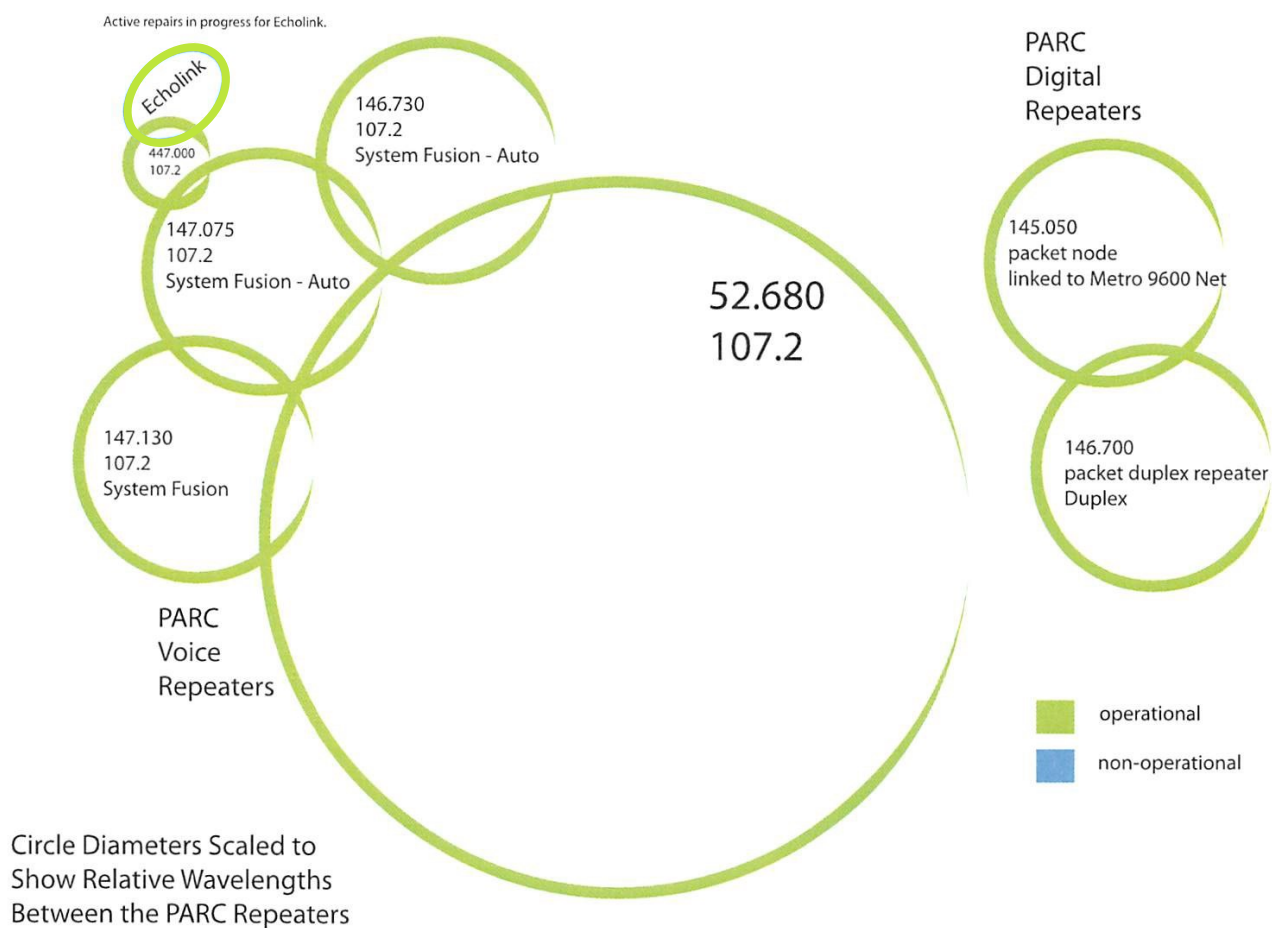
- ATV in: 915 MHz WBFM audio subcarrier 5.8 MHz
- ATV in 2441.5 MHz WBFM, audio subcarrier 6.0 MHz
- Intercom: 146.415 MHz NBFM simplex (tone 79.7). Currently not working.
- ATV out: 1241.25 MHz VSB, NTSC Standard

The PARC repeater site on Palomar Mountain is located at 5560 feet above mean sea level and 2132 above mean terrain. It covers most of San Diego County and beyond into Mexico and out to sea, and is shielded from the North.

**Note 1:** All Fusion enabled repeaters require a CTCSS tone of 107.2 Hz to access the repeater and also transmit a 107.2 Hz tone. Since the repeater output has a 107.2 tone you can enable CTCSS receive tone squelch on your transceiver which will eliminate interference from spurious noise and other repeaters. Control operators have the capability of setting the Fusion Repeaters to FM only operation. Consequently if you can't bring up the repeater in C4FM digital mode, try using normal FM mode. When in FM mode all Fusion repeaters have a 3 minute maximum transmit time, after which the repeater will cut off transmission until after the received signal drops. To prevent timing out the repeater after someone finishes talking, wait until you hear the courtesy beep which indicates that the 3 minute time has been reset. If a transmit timeout happens the repeater will provide a voice message indicating that the maximum transmit time has been exceeded.

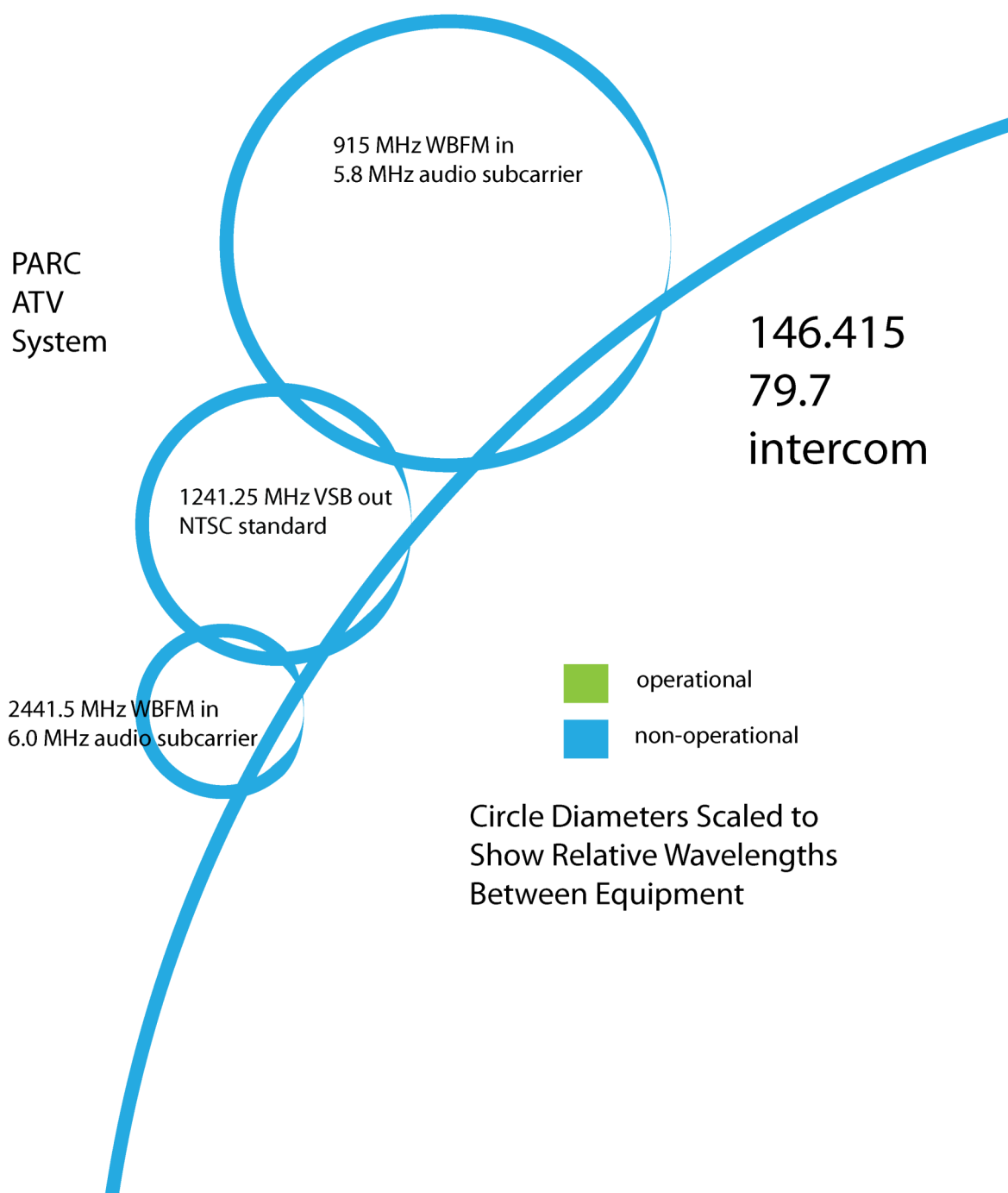
**Note 2:** PARC no longer operates an autopatch or packet BBS

# Reported Repeater Status



Thanks to Michelle Thompson, W5NYV for the repeater status graphics.

# Reported ATV Status



## Membership Report

You can check the status of your membership 24/7 at Member List or go to the club's website and navigate to Join and click on "here" at the top of the page. Enter your call sign into the box and click the "Look up my membership status

now" button. To renew your membership or extend your membership, fill in the form on the Join page. Make sure you select the correct value from each of the drop-down menus (Type of Membership, How many years, I'm an ARRL Member,

Newsletter option and License Class). If you want to receive an email when your membership is coming due for renewal, please make sure that I have a valid email address for you. To do that, please send an email to [Membership@palomararc.org](mailto:Membership@palomararc.org).



Check the status of your membership 24/7 at [Member List](#). If you don't find your name and callsign on that page, then your dues have lapsed. If you have questions, send email to [Membership@palomararc.org](mailto:Membership@palomararc.org).

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## Donate to PARC by Shopping at Amazon

As publicized earlier this year, PARC is now a not-for-profit charity, and funds donated to PARC are deductible for income tax purpose if you itemize. PARC also announced

that in cooperation with Amazon, it is now possible to shop on Amazon at NO cost increase, and have Amazon distribute a percentage donation to PARC.

This is done by shopping on [www.smile.Amazon.com](http://www.smile.Amazon.com). If you choose to avail yourself of this opportunity, when shopping on [www.smile.amazon.com](http://www.smile.amazon.com),




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## Polo Shirts

We're ordering Polo shirts! Some of you already have orders in with me from the last meeting, please be ready to pre-pay for them so we can get the order placed ASAP! We need

20 shirts to get the price I've been quoted. If we end up with 30+ then the price goes down and I'll have a little change for those who have pre-paid once your shirts come in! Base price: \$21.00 includes printing on the front, PARC logo on one

side and your name/callsign over the pocket. Add \$2.00 for 2XL, \$3.50 for 3XL, or \$5.00 for 4XL. Add \$5.00 if you also want the logo printed large on the back.

73 de K6JPE



## **New 6-Meter Repeater Operation**

**April 20, 2018**

**By Bernie Lafreniere, N6FN**

As was announced in last month's SCOPE and at the April meeting, the new 6-meter repeater setup is now operational, including new features that should be of interest to those of you with FM mode capable 6-meter HF stations or HT's. Most recent vintage HF transceiver's have this capability.

In summary, the new 6-meter repeater system was put together by, John, WB6IQS using two Midland commercial 50 MHz mobile radios, one acting as the receiver the other as the transmitter. John installed the Midland transceivers into a 19-inch rack enclosure and inter-wired them to be compatible for use with the 7330 controllers we have been using on our other FM repeaters.

In mid-February, John brought his creation to me so that I could make use of one of the spare repeater ports on one of our 7330 Controllers to make a functional repeater out of the two Midland transceivers. This was accomplished by modifying the 7330 controller's programming I had previously written for our Yaesu DR-1X repeaters, adding some new features in the process.

After several weeks of bench-testing and a couple of hardware mods to the repeater system and 7330 code refinements, on Saturday March 31<sup>st</sup>, John and I installed the new repeater on the mountain. Since I needed to update the software on the controller which was to run the 6-meter repeater, I took the time to update both on-site controllers to the latest SCOM operating system, and also with my latest version of code enhancements for the existing 146.730, 447.00, 147.130 and 147.075 repeaters. The SCOM 7330 controllers are capable of controlling up to 3-repeaters each. The 6-meter repeater was added as a third-port to the controller that had already been operating the 147.130 and 147.075 repeaters.

### **New 6-Meter Repeater Capabilities**

The new 6-meter now sounds and behaves essentially the same as the other four voice repeaters running on the 7330 controllers. In general, the new 6-meter repeater has most of the same functionality that exists on the DR-1X repeaters: voice ID, meeting announcements, time-out warnings etc. In addition, however, we now have a major new capability: the ability for control operators to remotely link either the 147.130 or 147.075 repeaters to the 6-meter repeater.

### **Repeater Crosslink Capability**

To potentially improve usage of the 52.680 repeater, the 7330 controller has been configured to allow control operators to link the 52.680 to either of the 147.130 or 147.075 repeaters.

When linked, all FM mode voice traffic on the 52.680 repeater and the repeater it is linked to will be heard on both repeater's simultaneously. The only difference is that instead of hearing a normal courtesy beep, transmissions originating from a linked repeater use the CW code for the letter "L" as the courtesy beep, while still using the normal beep on the originating repeater. That way, listeners who hear the distinctive

Continued on Next Page



CW code “●-●●” will know the audio originated on a different repeater than the one they are listening to.

The rationale for providing linking capability is that the 50MHz band has different propagation characteristics than the 2-meter repeaters on the same controller and may provide a way for users unable to reach our repeaters on 2-m or 70-cm to access our repeaters using their HF mobile and base stations.

Users with high power (100 watt or more) transceivers and large antennas (as opposed to normal VHF/UHF mobile rig installations or HT's) may be able to make use of this capability to check into nets or make contacts that they could not otherwise make. If propagation conditions allow, perhaps users can check-in from areas far removed from our normal coverage area.

When linked, *C4FM digital audio* traffic on the 147.130 and 147.075 repeaters will not be heard on the 52.680 repeater, not even the squeal that FM mode receivers would normally produce when receiving digital signals. The 7330 controller is configured to not pass digital audio.

Initially, the 52.680 and 147.075 have been linked as part of an ongoing evaluation of how well this capability works. Hopefully some of you will give it a try.

#### **Setting up to use the 6-Meter Repeater**

As standard for 6-meter FM repeaters, the offset is -500kHz from the frequency you hear the repeater on. To use the 6-meter repeater, set your radio for FM mode operation, a receive frequency of 52.680 and a transmit offset of -500 kHz. On many HF rigs, instead of specifying an offset in a menu setting, the radio is set to operate split, with a transmit frequency of 52.180. In addition, to access the repeater you need to set the radio to transmit a 107.2 CTCSS tone, the same as for the club's other repeaters.

If like me you don't have a base station antenna cut for 6-meters, you can use an antenna tuner to load whatever HF antenna you might have. In my case I have a 4-band vertical designed for 40, 20, 15 and 10-meter operation, by using my antenna tuner I'm easily able to reach the repeater. Even with transceiver output power settings as low as 1-watt.

If you have an old VHF/UHF antenna laying around, you can scavenge some of the longer elements to make a very effective 6-meter dipole antenna. (Yeah, I know the polarization will be off unless you mount the dipole vertically, but it may work either way.) Here is a link to a YouTube video explaining how to make one. <https://www.youtube.com/watch?v=FBGSvI5Cgn8>

A Google search for “6-meter antenna plans” will bring up lots of links, including some J-poles. Give one of them a try. It might be a lot of fun. If you don't want to build one, an inexpensive 6-meter hamstick should also work when mounted to some kind of groundplane / counterpoise. When not using hamsticks mobile, I've had good luck using chain link fences as counterpoises to operate from fixed locations.

#### **6-Meter Repeater Beacon Capability**

An hourly identification beacon has been added to help people discover our 6-meter repeater. This may allow people to take advantage of “band openings” enabling communication over distances far greater than are generally achievable using either the 2-meter or 70-cm bands. The beacon broadcasts 24-hours a day at the “top-of-the-hour”, verbally transmitting: “Welcome to W6NWG, PL 107.2.” This message is inhibited if the repeater is already in use at the time the message would normally be transmitted.

Continued on Next page

Those of you without 6-meter transmit capability can check if you can "hear" the repeater by tuning any 6-meter, FM capable receiver to 52.680. If within range you will be able to hear the "Welcome to W6NWX, PL 107.2" message broadcast at the "top-of-the-hour" i.e. on the hour: 1:00, 2:00, 10:00, etc.

#### **6-Meter Repeater Radios**

If your existing radios don't already have 6-meter FM capability, there are a variety of older radios that can be found on the [www.eham.com](http://www.eham.com) classified pages. Lots of base stations have 6-meter capability. In the handheld arena, I have an older Yaesu VX-5R that I use, the more recent but also discontinued VX-8R also is capable of 6-meter operation.

Transverters to use with an existing HF or 2-meter radio might be another option. For the relatively low cost of \$37, you can purchase a 28MHz to 50MHz transverter to use with your HF station. Additional information is available at: <http://transverters-store.com/50mhz.htm>

#### **Repeater Usage and Reception Reports**

Please email me with comments you may have on how the linked repeater system is working. I would especially like to receive signal reports from around the county and beyond. If I receive enough signal reports to talk about, a future SCOPE article will summarize the results and include a map showing where people have been able to access the repeater from. It ought to be interesting. Send your comments to [n6n@niftyaccessories.com](mailto:n6n@niftyaccessories.com). Thanks.

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## **Field Day– Dennis KD6TUJ**

Start planning now to participate in Field Day. June 23 and 24, 1100 to 1100 local.

Did you know that Palomar Amateur Radio Club's Field Day effort will collect 800 points before we even start? During the event PARC will add another 800 + points. After, there will be another 100 points. This is 1700 points with a possible 200 more, before adding in QSOs and multipliers. BUT THIS IS NOT A CONTEST. THIS IS A SKILLS PRACTICE AND DEMONSTRATION.

Field Day will be held in Valley Center on the grounds of Valley Center Municipal Water Department. Setting up on Friday June 22, 2018 and operating June 23 11:00 am TO June 24 11:00 AM. After breakdown and transport back to the appropriate places where the items came from.

Field Day preparations are well under way to provide a great time for members and guests. We should all thank WD6FWE, AK6R, N6XT, NE6O + KF6C, and KI6RXX for being station Captains. Also thanks to Richard KJ6WUY for offering to be Safety Officer. We anticipate some elected officials and members of served agencies along with the general public. If lucky (slow news day) we may be guested by the media. Plans also include a T-Hunt for scouts and other who want to search.

For those who may be staying at the field day site Friday evening after set up, there will be a movie projected for viewing complete with cartoons. Scheduled is FREQUENCY. Surround sound could be done by placing speakers all around the audience, but expect mono.

Currently looking for:

- shelters

- generators

SAFETY OFFICER is now filled by KJ6WUY

If there are other ideas or suggestions, send the forth.

Dennis, KD6TUJ  
Field Day Chair 2018  
[parcfieldday2018@hotmail.com](mailto:parcfieldday2018@hotmail.com)

## INTERNATIONAL STYLE ON-FOOT T-HUNT

Saturday May 12<sup>th</sup>, 2018

Mission Bay Park, Vacation Isle, San Diego, CA.

Sponsored by the San Diego T-Hunt Group & CQ Magazine World Wide Fox Hunting Weekend

Starting times will be 10:00 AM to 2:00 PM at 5 minute intervals. If you start at 2:00 you will have until 3:30 to complete the course. **NO REGISTRATION FEES!** There will be 5 hidden T's using the MOE-MOI-MOS-MOH-MO5 format. You will be issued a "Punch card" and there will be orange & white flagging tape at each punch located close to the T's which will be concealed. Antennas will all be vertically polarized with approximately the same radiated power from each "T". This is a "flat & easy" course! There will be experienced Hams present to demonstrate techniques for those that want to learn about "On-Foot" Amateur Radio Direction Finding (ADRF) and "Practice T's" to experiment with before you start the course. You do not need a Ham Radio License to participate! Limited ADRF equipment will be available for loan. You will be issued a map of the area with major features delineated. A compass, clipboard and pencil may be handy to plot bearings. Dress appropriately and plan on taking water with you while hunting. There are several restrooms in the Park.

A BBQ is planned for about 3:00 PM for those interested. We will have burgers & hot dogs, buns, condiments, potato salad, drinks, chips & salsa. BBQ donations can be made on site. For information contact :

Joe Corones, N6SZO H-858.484.3582, C-858.603.5545, [jcorones@gmail.com](mailto:jcorones@gmail.com)

Joe Loughlin, KE6PHB H-619.461.7845, C-619.403.3149, [ke6phb@cox.net](mailto:ke6phb@cox.net)

Directions: From Interstate 5 take I-8 west to the W. Mission Bay Drive exit and turn right. Stay on the main street and in about 3/4 miles it changes names to Ingraham St. Stay on Ingraham St. for about another 3/4 miles, after crossing the bridge, turn left on Vacation Rd. Make a quick left and follow road to South to Gazebo. Watch for T-Hunt/Fox Hunt signs. Coordinates are as follows: 32° 46' 18.72" N, 117° 14' 07.53" W.

**COME OUT AND EXPERIENCE A DIFFERENT ASPECT OF HAM RADIO**



## Proposed Bylaws Amendment 2018-A

**Purpose:**

To bring the bylaws into alignment with current practice, and clarify what is required.

**Discussion:**

Back in 2001, the board decided that the expense of maintaining a “retail” insurance policy on the club-owned equipment was not financially responsible, due to multiple reasons; Most of the equipment was donated, cobbled together from pieces and parts, upgraded, repaired, modified, etc. so replacement cost justification to insurance companies might be problematic at best. The largest danger we have on the mountain is fire, and many insurance policies allow the underwriter to claim fire as an “Act of God” and deny coverage. The decision was made to start a self-insurance fund, a CD that gains interest over the years and we continue to fund that with the money that we would have spent on a retail policy. In 2013, the same discussion came up again, and again it was determined that self-insurance was sufficient for our needs. The current board agrees that self-insurance is still the best course of action for our insurance needs, but will continue to re-evaluate the situation in future years – so the option to have either a retail policy OR self-insurance gives future boards the ability to make that determination as it sees fit. An informational point, we have had only one equipment loss due to theft, which happened in the mid-1980s, and that loss was not claimed to insurance, but was replaced by the membership. For further information, please see page 4 of the June 2013 SCOPE.

**Text of Amendment:**

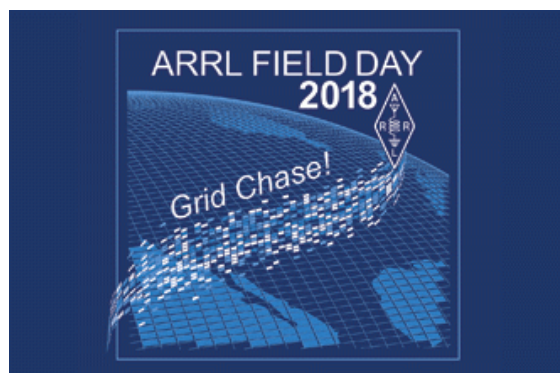
In Section 10(e), add the words “or self-insurance fund” as highlighted below :

(e) The corporation shall obtain and maintain a general liability insurance policy from a national coverage insurance company to cover liability of the corporation and its officers, directors, employees, and agents in the amount of at least \$1000.00, or such greater amount as the board may determine. The corporation shall also obtain and maintain a policy or self-insurance fund to cover Theft or Fire loss of corporation property in such amount as the board shall determine.

**Authored by:**

Joseph Peterson K6JPE

President, Palomar Amateur Radio Club





## Visit to W1AW by Dennis KD6TUJ

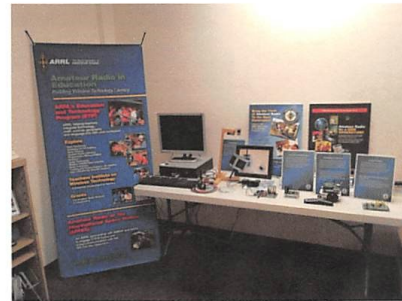


On this day, field support packages were being put together to support Puerto Rico after the hurricane.

### W1AW

W1AW can be an interesting place to visit. If you have an opportunity, you should take it.

When you first come to the site you notice an antenna for each band. Depending on the time of year you may see a pumpkin grown by a member.



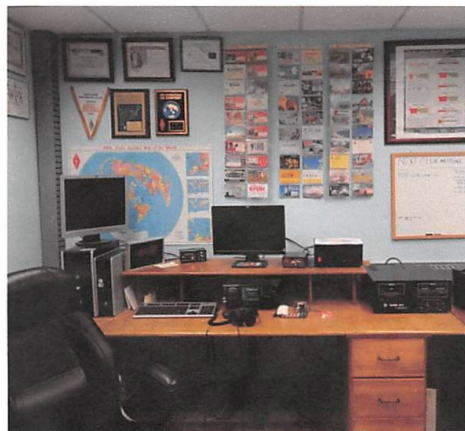
The next display Was about amateur radio in education



Every month a story board is started over. Once the article is proofed and approved it can become part.

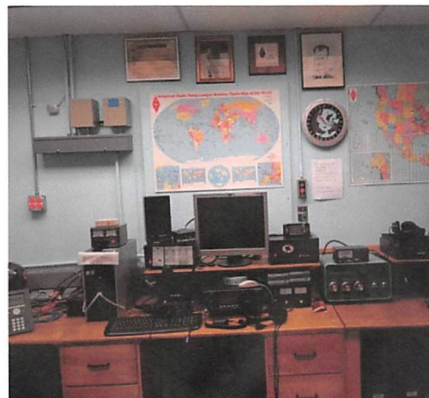
There is a faraday cage with great late model test equipment to prove the results you see about new equipment. Photos were not allowed in this area.

Did you know that every build project is built by the lab team to verify the project before publishing?

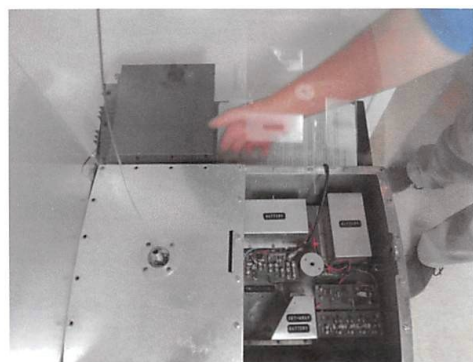


**W1HQ**  
is the United States  
"Country Station". Every  
Country supporting  
Amateur Radio has a  
Country Station.

Left station



Right station



One of the trial  
samples of the  
first satellite  
radio.

Top view of  
Percy's first  
radio transmitter



The W!AW radio sets  
used for code and bulletin  
transmission



Your local host for the operating center.

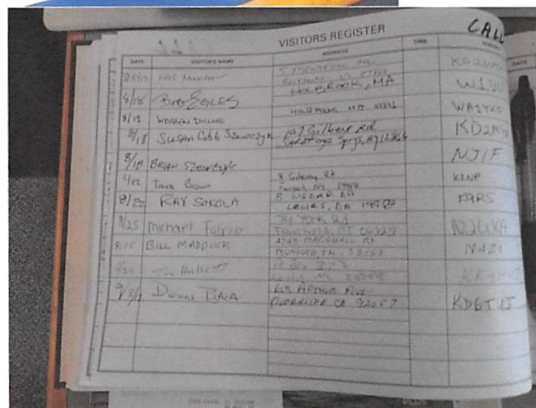




One of four operating positions. Each position can change to any antenna using top of the line equipment.

Yes I have proof I was there.

KD6TUJ Dennis >>>



What a surprise to see your call and name on the welcome board.

Back view



View to left from street



right antenna view



Front view from street





SCOPE  
PUBLISHED BY THE  
PALOMAR AMATEUR RADIO  
CLUB

EDITOR  
KEITH SPEARS  
KM6CXW

## Editorial Policy

The Scope welcomes and encourages members to submit articles, photos, stories, equipment reviews and any other items of interest to ham radio.

The Palomar Amateur Radio Club reserves the right to edit all submissions for content and length.

Please submit documents in MS Word format and photos as JPEG or GIF. Flyers may be submitted in PDF.

**All submissions need to be received by the 20th of the month.**

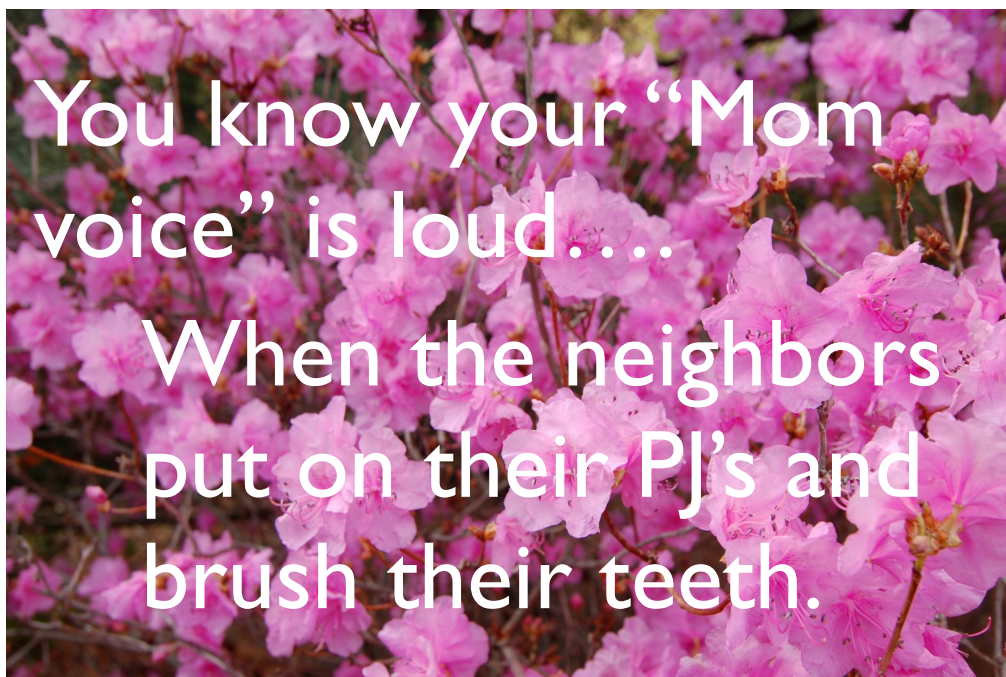
Send submissions to:

[scope@palomararc.org](mailto:scope@palomararc.org)



## Palomar Amateur Radio Club

**The Back page is a place for humor. If you have a joke, cartoon or just a fun story about ham radio, please share it with me. Please remember**



## Mothers Day Humor

My mother had a great deal of trouble with me, but I think she enjoyed it- Mark Twain.

A good mother lets you lick the beaters. A great mother turns them off first!

Treat mom to a bottle of wine this mothers day. Remember you're the reason she drinks!

Behind every mother is a basket of dirty laundry:)

I love cleaning up messes I didn't make... So I became a mom

Mom's note to her son; " I am leaving for the weekend and left you \$100 for food in your room. Clean your room and you will find it"

When a mom says "WHAT"? It's not because she didn't here you; She's giving you a chance to change what you said!