

As I write this note, I am mindful that when you read it you will have celebrated the arrival of a new year. So please accept my heartfelt wishes that 2015 will find you and yours in good health, and enjoying happiness.

I congratulate PARC's past president, Dennis (KD6TUJ) for superb execution of his Presidential responsibilities. Dennis brought enthusiasm to all his actions, and helped put PARC on the map of local amateur radio activities.

It is my hope that I will be skilled enough to continue that path. First, I thank many of you for your strong support through a hotly contested election for the PARC Presidential seat! I hope not to disappoint you.

I must comment on some things I believe are worthy objectives for the continued success that PARC is having in the ham radio hobby, or as some would say, art. If you have other things you believe we should be doing, please let me know. You can always reach me at NN3V@arrl.net.

We must encourage greater participation of our members in the activities planned by the club. From Field Day, through operating days, to the club picnic and activities that support teaching others about technology and our hobby, none of those efforts are successful without participation of more members. It is nice to have a volunteer lead an activity, but the activity has little value if others do not participate. Ask yourself when the last time was when you "Elmered" a new ham? Most club activities gear themselves to Elmering opportunities if we go the extra mile to attract new hams.

Club members also must be aware that the ham radio technology world is moving ahead, and some of our infrastructure is getting a bit "long in the tooth". The PARC Board is moving forward with plans to upgrade our repeaters to the new world of digital technology. Do you know what that means and how you will use it? I have an objective of making ham radio's digital world something you appreciate and look forward to using. The technology update will go a long way in refreshing the Club's repeater site, and that is needed if we are to continue enjoying the services of the infrastructure that you pay for.

And along the lines of infrastructure care and maintenance, those things cost money. I will devote attention to looking at ways to cut the costs of running the Club. The things we do cost money. So judicious management of those funds is important. I hope you find that the measures we undertake give you greater understanding of the expenses, and an opportunity to contribute where you can.

73 de NN3V
Charlie

Save the Date

Club Meeting
7 January 2015

John Sonneberg will present on the crossover of commercial and amateur radio.

Board Meeting
14 January 2015

Palomar Amateur Radio Club board meeting at 7:00pm at W6GNI QTH.

Club Events
April, May 2015

Operating Day in April, and possible public demonstration at Carlsbad Faire in May

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The Ham Radio Lunch Bunch meets Fridays for lunch and socializing at any one of a number of restaurants on a rotating schedule.

The Lunch Bunch signup is

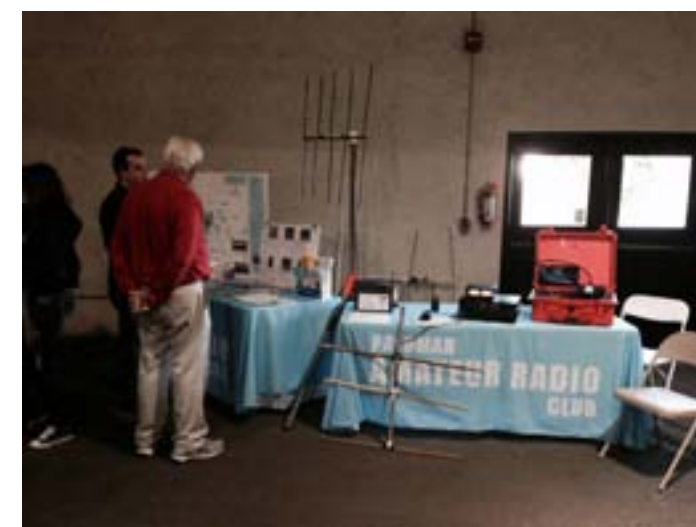
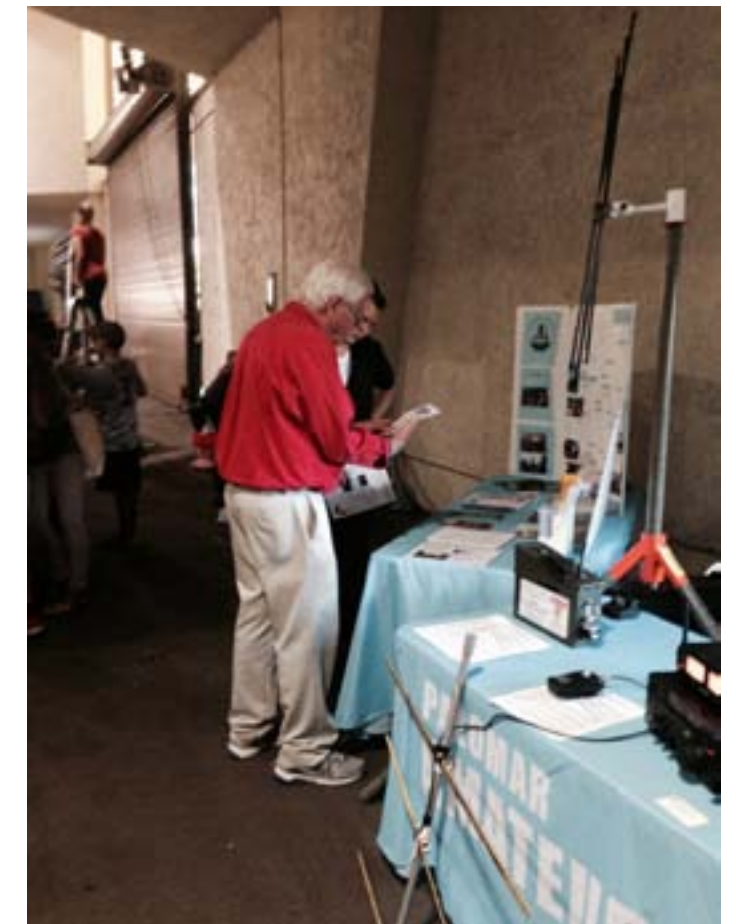
<http://w0ni.com>

Reminders are sent out on Wednesdays.

All are welcome for food and fun!

Some of the restaurants on the schedule are Fuddruckers, UTC Food Court, Spices Thai, Savory Buffet, Denny's, Callahan's Pub and Grill, and Phil's BBQ.

STEAM Maker Fest - PARC Booth



STEAM Maker Faire 2014 - video from the floor



The Great Shoot-Out of 2014

Part 2

Dennis N6KI
Howard was told repeatedly that the receiver comparisons would be done by “ear” only.

The receiver test was never intended to be “scientific” and when the FLEX radio couldn’t hear signals any better than the Elecraft K3, ICOM 7800 or Elecraft KX3, Howard had to fill the air with smoke and hyperbole to hide his embarrassment of failure.

The non-scientific audio recordings of the four receivers, presented here in the digital issue of the Scope, show that the signals received by the FLEX had no brilliance and were slightly muffled compared to the other radios mentioned above.

Howard had every opportunity to tweak and peak the FLEX radio to produce recordable CLEAR audio that would show that the FLEX could hear weak SSB signals better than the three other contender receivers mentioned above by the four other hams who attended the test session.

The only thing Howard won was the “Generation of HOT AIR”, Contest!

Therefore, this is my official response:
<https://www.youtube.com/watch?v=67qScvVrEP8>

Howard arrived late as usual and with the help of Dick K6KAL and John W6JBR, spent just over an hour reassembling Howard’s FLEX station. So when Howard was happy with setup and was out of my way, I then came in and got the K3, KX3 and ICOM IC-7800 set up. Did I have some technical difficulty for a few moments? Well, yes, some of my contest club Ops had mucked up some of the dozens of configuration menus of my K3 and IC-7800, unlike Howard’s ready to go FLEX, which he alone diddles at home with for hours on end trying to make the vapor-ware driven radio work like some of our top notch rigs, BUT, ACCORDING TO Dr. White, “we have only OBSOLETE LEGACY RADIOS”

Howard or I then tuned in the weakest SSB station we could find on whatever frequency band was most active at the moment, insuring the maximum amount of QRM from adjacent stations.

I told Howard to tune that station in and tune any interference out with all the resources

available to him with his FLEX 6700. After Howard was satisfied that he had done everything in his FLEX’s system to make that weak station understandable by anyone who was on site and desired to listen in, (we had four sets of headsets available, 3 Heils and whatever brand Howard brought for his challenged hearing condition) I then tuned in the same station on a K3, KX3 and an ICOM IC-7800 and quickly determined that the K3 consistently won out over the KX3 and IC-7800 in its ability to hear a weak station with QRM and QRN.

Receive audio to all the radios under test was controlled with the use of a Berringer audio control panel/mixer and a Berringer 1 to 4 output variable amplitude headset splitter to account for impedance difference in any of the headsets and a very well isolated antenna splitter so the Flex and K3 always received simultaneously with the same antenna.

Well, the FLEX, at best, could equal the K3’s signal strength and but the signal clarity or brilliance just wasn’t to be attained by the FLEX, meaning that the FLEX had a slightly hollow muffled sounding audio, most likely due to “over-processing” when Howard would make adjustments to the FLEX.

It turned out the K3 had the best clarity 90 percent of the time for test stations signals that Howard had “tuned” in. So, feeling sorry knowing that Howard was not really someone one could call a “proficient” radio operator, I and sometimes John W6JBR (EX WA2OOB who is a retired Hollywood Movie industry Audio Engineer with 75 IMDB credits and 30+ years as an excellent amateur operator) one of my best contest SSB trainees and Dave N6EEG, one of best SSB contest Ops with over 5 years SSB contest operating experience at the Nashville test site, either directed Howard to make adjustments to the signal on the FLEX which could not be clearly tuned in and understood by the above mentioned experienced Ops. At times we actually put our hands on a external optional knob so we could adjust the FLEX so it at least, audio-wise, have some brilliance or clarity for the audio heard in our head sets.

Shoot Out Audio - Decide for Yourself



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JF2QNM CQ 59 25 1.MP3



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Lunch Bunch - Food and Fellowship



Lunch bunch photos from August and December. Top, the group convenes at Fuddruckers. Middle left, KK6OOZ tries out the customized drink dispenser. Middle right, the bunch that braved a downpour to eat at a Chinese buffet! Bottom left, the bunch organizer, W0NI, imparts some wisdom. Bottom right, W0NI invites all Scope readers to attend!



PHOTOS BY MICHELLE W5NYV



PARC - A Year in Review

Palomar Amateur Radio Club in Action

by kk6frk@arrrl.net

The Summer and Fall of 2014 has been a busy time for members of the **Palomar Amateur Radio Club (PARC)** in engaging our surrounding communities, especially youth. Our key activities have focused on Cub Scouts and Boy Scouts through events ranging from:

- ARRL Kids Day on June 21st in Poway
- **Radio Merit Badge** at the PARC Field Day on June 28th
- **Radio Merit Badge** the ARRL Southwest Convention on September 13
- Boy Scout Black Mountain District Emergency Preparedness Event on September 27, and
- 57th **Annual Boy Scout Jamboree** over the Air on October 18th at Camp Balboa, featuring the **Radio Merit Badge** and an Introduction to Radio



Photos - Brian Tagg - AG6CF at ARRL Kids Day – A 3 year old takes over Brian's rig and Cub Scout from Pack 342 gets on the air for the first time. Notice that Brian is sporting his cool PARC badge and showing off is go box to visitors in Old Poway Park.

The **PARC** Field Day was awesome. Field Day is one of the best venues to introduce the public, especially Scout age youth to the wonders of radio. **PARC** hosted a **Radio Merit Badge** for over 20 Boy Scouts, and many parents stayed the whole day to learn about radio science and it's role in science, technology, engineering, and math education.



Photo – Boy Scouts at PARC Field Day 2014 Mike Binder - NA6MB explains how the sun charges the atmosphere and how it influences radio communication, and John Rotondi – WA2OOB answers questions from Scouts about antennas

PARC and the Boy Scouts were out in full force for the **ARRL Southwest Convention**. Over 20 Scouts earned their **Radio Merit Badge** thanks to Conrad Lara – KG6JIE, Bob Shoemaker – KG6EJW, Kevin Walsh – KK6FRK, Dennis Baca – KD6TUG, Mike Binder – NA6MB, Thurston Watson – KK6NPD, Roger Hort – KK6CTI, and Charlie Restorcelli – NN3V. A big thanks to Mike Maston – N6OPH and SANDARC for arranging the room used for the Merit Badge class, and all the vendors who were very patient and accommodating of the Scouts.



Photos - Scouts Invade at ARRL Southwest Convention 2014



Photos – Scouts at the HRO Candy Store picking out an HT and putting their name on the waiting list for a Flex SDR



Photos - Scouts take over the Radio Room at ARRL Southwest Convention

PARC also supported the **Black Mountain District Emergency Preparedness Day** on September 27th. Over 70 Scouts and their parents attended the event. The Scouts carried out a messenger service drill using radio communications between the Latter Day Saints Stake on Bernardo Heights Road, Saint Michael’s Catholic Church on Pomerado Road, and Lucido Park in Rancho Bernardo. The Scouts were divided into messenger groups and jogged to operating stations to relay messages about the availability of water, baby formula, diapers and beds at designated emergency preparedness shelters. Third party traffic was handled by Mike Binder – NA6MB, Charlie Restorcelli – NN3V, and Brian Tagg – AG6CF. Erik Johnson – KK6IJN taught a course on personal and family emergency preparedness, and Terri Sorensen – KK6LBD was standing tall to share info on the Poway Neighborhood Emergency Corp (PNEC).



Photo - Scouts from Black Mountain District Emergency Preparedness Day

Jamboree over the Air 2014

PARC supported the 57th annual **Jamboree over the Air (JOTA)** on October 17th and 18th for the San Diego Imperial District at the Boy Scout Headquarters - Camp Balboa. Conrad Lara – KG6JIE --- *Mr. Lara to Boy Scouts* – carried the load to deploy four antennas to support rigs on 10, 15, 20 and 40 meters. Mr. Lara directed the supporting cast of Bob Shoemaker – KG6EJW, Kevin Walsh – KK6FRK, Mike Binder – NA6MB, Thurston Watson – KK6NPD, Brian Tagg – AG6CF, Roger Hort – KK6CTI, and Erik Johnson – KK6IJN. Special thanks goes to Craig Davis – KM6AW, the trustee of the Boy Scout Radio Room at Camp Balboa.

In addition teaching the Radio Merit Badge for Boy Scouts and providing an Introduction to Radio for Cub Scouts, **PARC** volunteers handled several waves of Scouts from troops and packs to get them on the air with other Scouting units all over the United States and other radio amateurs around the world. Radio contacts were made in California, Oregon, Washington, Wisconsin, Pennsylvania, New York, Arkansas, Oklahoma, Tennessee, Mississippi, Texas, and good DX contacts in Brazil, Slovakia, and New Zealand.



Photos - Conrad Lara – KG6JIE and Craig Davis - KM6AW work with Scouts on 20 and 40 meters at JOTA 2014



Photos –Brian Tagg – AG6CF and Erik Johnson – KK6IJN work 2 and 20 meters with Cub Scouts at JOTA 2014

2015 Board of Directors



Photo by Conrad KG6JEI
Left to right: Charlie NN3V, President, Gary W6GDK, Secretary, Richard KJ6WUY, Treasurer, Greg KI6RXX, Director 1, Jim NE6O, Director 2

(not pictured) Joe K6JPE, Vice-President

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Obtaining Reciprocal Licensing in French Polynesia

By Ellen Utschig N6UWW
In early September, Wild Bill, WB6BFG, and I took a freighter cruise (www.aranui.com) around the Marquesas & Tuamotus. I researched how to get reciprocal licenses so that we were legally able to operate from the various islands we'd visit (Fakarava, Nuku Hiva, Ua Poa, Hiva Oa, Fatu Hiva, Tahuata, Ua Huka, Rangiroa) and, with the freighter line's approval, on board the ship.

A quick search at the ARRL's website showed that French Polynesia, under French rules, falls under the CEPT agreement. FO is the prefix and French Polynesia, being a territory of France, has a reciprocal operating agreement with the United States. Information on the ARRL site indicated that there would be no fee for the reciprocal license and it'd be good for three months.

The contact information was easily found on the ARRL's website so I shot off an e-mail in November 2013 to Mr. Jean Chartier at the National Frequency Agency in Tahiti inquiring what would be required to obtain reciprocal licenses. That very day I received a response saying: "We can authorize you to operate your amateur radio in French Polynesia. For that, could you please fill, sign and send back to us (by post, fax or e-mail) the attached form accompanied with a copy of your amateur radio certificate or licence and of your identity card or passport." Unbelievably, once I finally got around to returning the required documents, with less than a week before we were to embark (nothing like waiting till the last second, right?!), the turn-around time was less than 24 hours.

We cruised with five of our friends, three of whom are hams (Al - WA6EFT, Tommie – KA6OAM & Ronnie – XE2/N7KVJ). Al, WA6EFT, brought along his Kenwood TS-480SAT and Wild Bill brought our power supply, coax and a Super Antenna MP-1. We were so busy having more than our share of fun both on and off the ship that we only managed to set it up twice (maybe three times) in the two weeks aboard the Aranui3. With the easy set-up for the antenna, we were on the air soon thereafter with very little effort. The antenna mounted to the starboard railing and radials woven through the safety netting. Coax & ship's power were connected, hit the power button and (presto) in no time we talked (via a phone patch while in international waters) to WB's daughter who was camping on the Oregon coast and a lot of other friends with whom we have daily schedules.

When we stopped on the island of Nuku Hiva, Wild Bill & I were able to do a little bit of reconnaissance for the TX7G DXpedition (http://tx7g.com/media/TX7G-Story.pdf) taking pictures of the site and accommodations & coincidentally making contact with the owner of the rental car business on the island.

At left, reciprocal operating document in French.

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Dossier suivi par Madame ARITAI Léonne
Ref. : N°015/2014

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Référence	TS 4805AT	Référence	
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Emplacement		Emplacement	
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INDICATIF ATTRIBUE : FO/ N6UWW

Date de validité : 29 août 2014

Date d'expiration : 13 septembre 2014

A Papeete, le 26 août 2014
Signature de l'intéressé :

Pour le Haut commissaire
et par délégation
le chef de l'Antenne de la
Polynésie française

Dominique DIOT

Club HF Remote Station? Let’s Install One!

There are at least three reasons for the club to get involved in the HF remote movement. The first one is technical. The challenge of making a quality remote installation is fun and rewarding. The project involves backhaul establishment, HF equipment selection, remote access protocol development, command channel identification and establishment, testing and tuning, documentation, and training, among other things.

Secondly, autopatch and casual repeater usage has declined due to the increase of cellular coverage. Exploring new services that can be offered from club equipment on the Palomar Mountain property is an important responsibility. A new broadband repeater has been installed, and fresh hardware for the voice repeaters is under active investigation. Adding an HF remote station would expand the services provided by the club. This is an exciting time to get involved with renovating equipment on the site.

Third, many members are negatively affected by CC&Rs and other limitations on putting up HF antennas on their San Diego properties. We live in an urbanized area where antennas may or may not be allowed. Plenty of us live in valleys or in places that are not good for radio. Having a remote station that members can reserve and use would go a long way towards making the hobby possible for people that live in places where radio is limited.

If you would be interested in helping explore a club remote HF station on Palomar Mountain, then please join up by writing me at scope@palomararc.org.

This special interest group for HF remote will write a proposal for the Palomar Amateur Radio Club board of directors to vote on. If the vote is successful, then fundraising will begin immediately.

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HF Remote on Palomar Update

by Michelle W5NYYV

We continue our investigation into a remote HF station for Palomar Amateur Radio Club use with comments from those that have responded to the call for membership in the special interest group (HF-SIG). A big thank you and welcome to Howard KY6LA, Rob WA3IHV, Mace KG6VMF, Roger AD5T, and Ken Easton!

There is strong consensus that for successful fundraising the club needs to be a 501(c)(3) organization. I'll be passing this sentiment to the incoming board. I know that several members of the incoming board are interested in seeing PARC become 501(c)(3).

Here's a summary of technical discussions so far. Dipoles are recommended for 80 and 40, a shunt feed tower for 160, and a Force 12 for 20, 15, and 10. Dennis N6KI recently put one up at his contest station in Fallbrook ("Nash'ville").

Although a Flex Radio is state of the art, and was immediately recommended by Roger AD5T, Rob WA3IHV advised that there may be too many variables with the Flex that can foul things up from a remote site. This would necessitate reboots, etc.

Rob suggested a simple, straightforward radio such as a TS 590. No linear amp but offer SSB, CW, JT65, +/- RTTY and PSK.

On the software remote control side, there are a wide variety of choices. Here's a list of just some of the remote control software that is being investigated and reviewed by active members of the HPSDR (high performance software defined radio) email list. Forum members are very interested in remote operation and it is a frequent topic of discussion.

Additional resources shared from HPSDR discussion list
<http://www.dxzone.com/catalog/Contesting/Stations/> (50 entries)
http://www.dxzone.com/catalog/Manufacturers/Remote_Control/ (5)
http://www.dxzone.com/catalog/Operating_Modes/Remote_Operations/ (9)
<http://www.dxzone.com/dx6349/internet-remote-base-society.html>
<http://www.dxzone.com/dx13063/remote-controlled-hf-operations.html>
<http://www.dxzone.com/dx24426/remoterig.html>

- <http://www.remotehams.com/>
Any Desk
SplashTOP
Screen Hero
Google Remote
Teamviewer
Mikogo
Parallels Access
UltraVNC
TightVNC
TinyVNC
Skype (for audio)
ipSound (discontinued in 2006, but still popular)

- HPSDR (Android application for Internet Remote for OpenHPSDR written by G0ORX/N6LYT)
QtRadio (Win/Lin/MAC remote application for OpenHPSDR written by G0ORX/N6LYT)

glSDR - Android QtRadio client with full control written by volunteers for OpenHPSDR

According to a report from HPSDR member Ken N9VV,

"Flex Radio Systems is going to put Remote Operation on the top of their Developers list this year. They took a show of hands at their Dayton-2014 Banquet and *Remote Operation* was at the top of the list of desired features that their 6000 owners desired."

These are early technical discussions. We invite debate and additional discussions about the project. We anticipate having short meetings immediately before the general membership meeting to gather input, make decisions, and write a proposal. More soon! -73s

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You can join or renew your membership, find a repeater listing, find contact information for the board all on the club's web site <http://www.palomararc.org>

Editor: Michelle Thompson W5NYV

Submissions: scope@palomararc.org

Questions? Ideas? Comments? W6NWG@amsat.org

Featured Program:

At 7:30pm on 7 January 2015, Palomar Amateur Radio Club will have a program. John Sonneberg will present on the crossover of commercial and amateur radio. He has a commercial radio business. We look forward to seeing you at the Carlsbad Safety Center, 2560 Orion Way, Carlsbad, CA. Arrive at 7:00 for socializing!

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<http://www.palomararc.org/mailman/listinfo>