

AUGUST 2009

**LARGEST
ISSUE EVER**

SCOPE

A newsletter by and for the Palomar Amateur Radio Club
of San Diego, California.

See SCOPE in **color** on our website at www.palomararc.org.

August Highlights

Annual Picnic



**15 August 2009 at San Dieguito
Park. Food, Foxhunting, and
Club Station.**

**Bring Food according to
Starting Letter of Last Name:
A-K: salad, vegetables or fruit
L-R: side dish or casserole
S-Z: dessert**



Read all about the Cub Scout amateur radio demonstrations starting on page 3 at the "Cubs in Space" day camp at the Antique Gas and Steam Engine Museum. Thank you Paul, Jim, Loren, Dennis, and Wild Bill for making it such a great experience for the boys!

Read a first-person account by Rich KI6RRQ of amateur radio assisting in a hiker rescue in the San Gabriel Mountains over the CARA Repeater.

Catch up with what happened at our last membership meeting on page 8.

Read an article by Loren AD6ZJ about lessons learned at this year's PARC Field Day effort starting on page 9.

Ron K2RP tells us about the Johnson Viking transmitter beginning on page 13. Yes, 13! This is our largest issue ever.

Check out the back page for details about our next meeting.

The 5 August 2009 meeting will feature Wild Bill describing his

Save the Date!

Club Meeting

5 August 2009

Wild Bill tells us all about his adventures in Honduras.

Board Meeting

12 August 2009

At W6GNI QTH.
Meeting starts at 7:00pm.

Annual Picnic

15 August 2009

San Dieguito Park
Area 4. Food,
Foxhunting and
Club Station!

Annual Club Picnic

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Calling All Adventure Seeking Amateurs

The countdown has started to the Longest Off Road Race in the United States - the Vegas to Reno off road race. If you're an Amateur who likes the excitement of the outdoors and off road racing Best in the Desert would like you to join the hundreds of volunteers, racers, and spectators in the beautiful Nevada desert for "Vegas to Reno the Long Way"!!! The cars, trucks, motorcycles, quads, and UTVs will be racing for 3 days (August 20, 21, 22 2009). Many of you have joined us in the past to make this and other races across Nevada the safest, best organized events for everyone, and here is your chance to join the excitement. The Amateur volunteers will join with other volunteers on the race course at gas stops, check points, and road crossings to make the almost 1000 miles of off road race course the safest and most memorable 3 days of racing Nevada has to offer for racers, support teams, volunteers, and all involved. For a field day like adventure and the speed and excitement of off road racing with teams from all over the world contact us for more information or to join the team please contact:

Keith Purmal KC7HT
kc7htkeith@hotmail.com

Best in the Desert
3475C Boulder Hwy.
Las Vegas, NV 89121
www.bitd.com
702-457-5775

Thanks and 73,
Keith

Club Reports

Got news? Send reports about your activities and things that you think other club members need to know to scope@palomararc.org.

Membership

New Members Joining PARC: KI6THI, KI6RXX, and KI6ZLG.

And 5 members reinstated their membership, thank you!

Here is the list of members receiving the SCOPE on the web that "expired" in the last month or so. Please check this list, and get your renewal checks in the mail!

Pretty PLEASE!!! N6WXD, K7MOA, K7WCC, KI6QDB, W6CDU, K6BZZ, KI6SAT.

As a reminder, in accordance with the by-laws, the year for participation points is August 1 through July 31. So, the points for attending the August 5th, 2009 club meeting will be starting points for year 2010. The fold and staple crew will get their points added in 2009, since this newsletter was prepared and mailed July 29th.

A1
W6GNI

July Goodie Givers

Thank you very much to those who brought goodies to the July meeting. Please consider bringing a snack to share at the August meeting! Suggested Theme: Apples 🍏

Fold and Staple for July

KB6NMK Jo
W6GNI A1 & Kathy
WA5ACE Sonny

“Scouts in Space” Cub Scout Day Camp Report

Get Outside, Have Some Fun and Intrigue a Cub

By Paul WN6K

At last month's meeting of PARC, we had an announcement and request from Ron Anderson for the club's help with a Vista Day Camp for some young Cub Scouts. They were going to have a day camp experience at the Antique Gas and Steam Engine Museum during the weekdays of July 21-23. Some PARC members were needed to set up a station so that the 'cubbies' could get a little taste of what our service and hobby was about.



When asked by Dennis, KD6TUJ, my early answer was that on Tuesday the 21st, I was going to be tied up with some water district business. Not wanting to leave Dennis in a total lurch, I suggested that perhaps if he called Wild Bill, WB6BFG, he might be able to lend a hand in my place. Dennis and WB made contact and the process was started. Prior to the start day KD6TUJ, Dennis & AD6ZJ, Loren got together a 'spare' antenna and others moved the new PARC tower trailer and one of the PARC radio trailers over to the site. When preliminary testing the antenna, the early crew discovered that the

antenna was not tuning as expected and once again called to see if WB could 'take a quick look' at the antenna. Monday afternoon I met up with WB and we got together some of the necessities to diagnose and possibly fix the ailing antenna. After an afternoon of hot sun, sanding, tuning and prepping the seasoned 3-element tribander (Hy-Gain TH-3) was ready to go.



The next morning I was off to my meetings and Wild Bill headed out to the Day Camp and made the final preparations in time for the first group to arrive. Armed with grid maps of the US, a couple of radios, a logbook and bottles of water, "Frankie" (WB's K9DOG), the master of getting things done with whatever and whenever was set to go on time. I was 'between meetings' when I heard Bill talking with his newfound young friends and someone on the 73 machine. I had just discovered that my second meeting of the day was to take place the following day, so I texted WB's cell (did not want to interrupt his 'flow') that I was on my way to his location to assist.

I arrived in time just as the second of seven groups (about one group every 50 minutes) of

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Club Classified Advertisements

Personal equipment ads are free to members and will run for at least one month. Send your ad to scope@palomararc.org

Commercial ads are \$2 per column inch per month. We will adjust your ad copy to conform to the number of inches bought.

Antenna Available

Butternut HF9V, vertical 9-band antenna in good condition, with manual, assembly and tuning instructions. Antenna is already taken down and ready to pick up.

FREE

Contact Bernie-N6FN ph 760-746-7411 or email n6fn@niftyaccessories.com

Items For Sale

Astron power supplies: 13.6V - 2ea. RS-35A @\$50 each
1ea. RS-20A @\$35 ;
2 ea. LS-25A (28 V) @\$35 ea.

Solid state linear amplifier, METRON, model MA1000B , 13.6 V DC in . 70watts PEP drive for 1Kw out. Size is 10" x 17" x4" tall. The top is a one piece heat sink (fins about 1" tall) \$75

2 each "all mode" 2 M radios. 1 Yaesu FT221R and 1 Kenwood TS700A. Even unreasonable offers will be considered

Gary Bollschweiler - WB6GSN
WB6GSN @ gmail.com
858-748-6076

Free Oscilloscopes

Two Tektronix 2246A, 100 MHz, 4 channel oscilloscopes. 1990 vintage, all solid state with CRT displays. Immediate needs = major switch mode power supply surgery plus unknown more repairs. Requires more time, trouble and \$\$\$ than I am willing to invest in them. Complete repair manual available. Disassembled right now. WB6IQS@att.net, Vista 760-727-3876.



Drake Receiver For Sale

Drake R7 Receiver for sale. Excellent condition. Asking \$800 If interested please Email me, slevy1@san.rr.com or call during day or early evening at 858-755-0571.

Stephen L. Levy, KG6VSF

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about 20-25 cub scouts per group arrived at the mobile shack. We held a brief 'tag team' intro at the 7-10 year old level of what Ham Radio was and what it could be and entertained questions from the kids, moms and other leaders of their activities for the day.



Soon we got down to the 'fun stuff'. I got on 20m (the only real band that was open this day) and called CQ, advertising that I was looking for anyone who had a little bit of time and would be willing to give me a chance to have the kids say hello. WB made me a quick card so that the kids could go through a little script we devised so that they could tell the op on the other end their name, age and what city they lived in.



This script worked very well as they were too busy reading the script and they never really knew they were supposed to have 'mic fright'. Those that were even more adept were even able to enhance their conversations telling tales of other activities in which they partook during the day ranging from Archery to Obstacle Course. WB pulled a fast one on me toward the end of one of groups. He had talked one of the den leader moms into talking on the radio. She read through the cue card just like the kids had been doing, but they got me with the closing. She signed with her callsign! N7ITM - sure threw me for a loop and they (we) had a good laugh...



A special thanks to those helpful hams from Calgary to W1AW to San Diego who opened up a bit of their day to say hi and gently prod the shyness while encouraging that this might be something fun to do. So when called upon to perhaps try your hand at assisting in a similar club project, do try to mark out a little time – you will be tired for certain but go home rewarded many times over. And oh it doesn't hurt to have a Wild Bill at your side.

WN6K, Paul

Hiker Rescue from Mt. Baldy Enabled by Amateur Radio

By Rich KI6RRQ

Around 3:00 pm on Saturday, July 11, 2009, I was monitoring the CARA (Catalina Amateur Radio Association) repeater on my base station, when I heard a call. "Is there anybody listening?" I responded, "probably about 300 people." The caller said he was on his HT, hiking around the Mt. Baldy area. He said he was about 2.5 miles off the road, resting at the wilderness San Antonio Ski Hut, and that a few hikers had arrived from farther in the backcountry. One of their group had broken an ankle and was a mile or more up the trail. They needed help. Mt. Baldy is the highest peak in the San Gabriel Mountains and the highest point in the Los Angeles area. Mount San Antonio is at 9,900 feet above sea level.

I had my computer on, so I asked the caller for his call sign and name. He responded, "KE6MTF, Kirk." They matched. I asked if he had a cellular phone, and he told me there was no cell service on anybody's phone. I told him I would coordinate emergency services over my landline and asked for his exact location. Kirk, KE6MTF, did an excellent job. He had a good idea of where he was, including GPS coordinates, but was not sure which county he was in. I called 911 and was transferred three times until I was put through to San Bernardino County Sheriff's dispatch, Chelsea, who coordinated the rescue with San Bernardino Fire. They sent a foot patrol and the Sheriff dispatched a helicopter to meet someone at the Ski Hut to take them to where the hiker was down. It took a little less than an hour for emergency services to get above the location in a helicopter. They were not able to land the helicopter because of the rocky terrain at the ski lift. Meanwhile the group of hikers had gotten the injured lady down the trail to the Ski Hut and had her leg stabilized. They had determined

it was probably not broken, but they still felt they could not carry her out, since the trail down from the wilderness Ski Hut was so steep.

The dispatcher said they would perform a skid rescue, where they drop and suspend a collector of some sort from the helicopter. The victim is secured to the equipment and pulled up and out. The dispatchers also asked if there were any other needs, such as food, water, etc. There were none. About 15 minutes after arriving on site they were working to effect the rescue. The victim was airlifted out, successfully, without further complications.



Since the incident, Kirk informed me that the injured lady was around 40 years old and that there were up to 15 hikers hanging around the Ski Hut, some of whom were search and rescue volunteers on vacation. They had some kind of radios with them, but their batteries were spent. Kirk said when he got out of his car to start the hike, he grabbed his ham radio and GPS and his friends said, "that's just extra weight, you won't be needing that!" He replied, "First, I go nowhere without my radio. Second, if I need to call for help, the only way I would be able to let them know where I am is with GPS. I'm bringing them." I don't think they will say that next time! One of them decided they need to look into getting a ticket and radio. The search and rescue folks said they were going to look into getting ham radio licenses.

Ham radio saved the day. A hand held radio,
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hitting a local wide area repeater, was exactly what was needed when cell and landline phones were not available. Many thanks to the CARA club for their awesome reach in southern California on 2 meters (147.090 MHz, + offset, no PL) and to those on the air who were very gracious to respect the traffic and keep communications open during the rescue.

This is such an excellent example of the benefits of ham radio! If the party had had to hike out of the wilderness, get to their cars, and find a cell signal, they might have run out of daylight. Rescue would have been significantly more difficult and might have included more people than just the initial injured hiker. As it was, a couple of ham radio operators made all the difference. Emergency services accepted the ham radio call without hesitation. They used me, a

ham radio operator, to relay questions back and forth with Kirk in the wilderness, so as to gain all the information they needed to commit assets to the emergency. It was as if I were calling about something in my own back yard, in Vista, California, even though the problem was several counties (and several hundred miles) away in the mountains, and involved people I didn't personally know. I am proud to have had the opportunity to use my license in service of an emergency situation. As a CERT member, this was the very reason I got my ham radio license in the first place!

Here is a link to video taken by Kirk KE6MTF.

http://marlene.zimage.com/ke6mtf/hike/rescue/iPhone/IMG_0408.MOV

Rich KI6RRQ



PARC July Meeting “Quiz Night” Report from Talented Event Emcee Steve Venner W6TAN

Hi Michelle,

I had a really great time at the last PARC meeting! I've finally gotten around to 'officially' marking the papers, so you can publish the results if you wish.

There was some very dubious marking that took place on the night – as well as the tallying of the scores. It's amazing that the winners actually won!

Anyway, the good news is that they did... and they did it out-right. There was really no need for the tie-break question(s) - if the markers had added up the scores correctly!



Q15 regarding the power level limits for doing an RF environmental evaluation on 30m (425 Watts).

That is the correct answer according to the ARRL & the FCC!, however Paul (WN6K) & a few others quite correctly pointed out that you can't (legally) run more than 200 Watts PEP, hence they answered (a) (30 Watts). Basically what this means

is that US hams don't need to do an RF evaluation on 30m (and I think you actually suggested that). For those that gave answer (a) to Q15, I've given them the benefit of doubt, and awarded them a point.

Please let me know if you have any questions or comments. I will try to make it to the next PARC meeting, just in case, and I'll bring the marked-up papers with me too!

Enjoy,
Steve
(W6TAN).



I've attached the final score sheet, which gives a breakdown of the scores for each team: What they were given on the night, what they should have been given on the night, and what they really scored.

There was only one contentious question



Team	Scores		
	Original	Should have been	Correct
Old Farts	29	29	28
Trouble in River City	29	25	24
Random Noise	26	26	26
Final Century Club	26	25	25
My Mind Has Gone Blank	25	21	21
The Usual Suspects	23	25	25
Super Meg's (Hertz)	21	21	21
Ratchedy Spark Slingers	21	21	21
OSIMA	17	17	18
Old Codger	12	12	14

Clockwise from top, quiz winner Jim W6SST, Steve Venner W6TAN receives certificate of appreciation from Dennis Baca KD6TUJ, and quiz winner David KC6YSO.

Field Day Report from Loren AD6ZJ

This was my first year as a band captain so I had no idea what to expect. I should have at least expected the unexpected. What follows is a summary of what went right and what went wrong.

Friday afternoon we put the towers up at the field day site. Aside from initially setting a tower trailer too close to a tree, things went relatively smoothly. Our club president Dennis, KD6TUI had been working on a new tower trailer and it saw its first action this FD. The other towers had the usual issues you get when you take a tower off a trailer but nothing major. By 4:00pm we were waiting for the fire truck to fill up the ballast barrels. This year's site offered shade and a cool breeze so things were looking good.

Saturday morning things started to go sideways a bit. I had to deal with some family issues so it took a little longer to make it to the site than planned. As the band captain for the 40m/15m station, I was assigned the PARC trailer as operation central. Just before 9:00am we unlocked the trailer that hadn't been used since last years FD...or so we thought. Field mice had taken up residence and the trailer had an aroma that no one needs to smell just after breakfast. To make matters worse there were things being "stored" in the trailer that gave the "field day



mice" extra bedding materials. I made a quick run home and picked up cleaning supplies to spruce up the place. After about an hour the trailer was sufficiently tidy to set up the station. During the

cleanup I spotted a lone 12V battery dead as a doornail equipped with clip leads for easy connection. I thought how useful it would be if it were charged.

The station setup started out ok mainly because I



used the same setup (with different antennas) just two weeks before for the VHF contest as a dry run. One thing lacking from the dry run was a headset and foot switch adapter cable for the Yaesu 857D. I trip to HRO a week before FD came up empty as they had just sold the last one and had more on order. I never made it back to HRO after they received more cables. So here it was, Saturday morning, when I remembered I needed to make a trip to the candy store. Conrad KG6JEI (FD chairman) volunteered to go to HRO to pick up the needed cable until Bill N6HBO reminded me that Ham4Less was just around the corner and might have what we need. It was a noble attempt to save a trip to San Diego but in the end no suitable cable was found locally.



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During all this time FD had started so Paul KB5MU started operating with the hand mic along with the voice keyer. 15m wasn't all that open at 11:00am and so the rates were very slow. Making things worse I discovered the Yaesu 857D is totally inappropriate for a multi station setup. Every time someone would TX on the 20m, 10m or the 6m station the RX on the 857D would get overloaded and go silent. This made things challenging for Paul who was only able to snag the occasional call. Another annoyance of the 857D is that it has no monitor output so you can't hear what you're transmitting. I needed to make a change and couldn't delay.

After another trip home and back I was installing my Yaesu FT1000MP. Installation should have been quick as I use a common interface in the Microham Universal Interface II. Of course Windows saw this second interface as a new device and wanted to install a new set of drivers. Once that was done it still didn't work until Conrad looked up the baud rate for the FT1000MP on the Internet. About the same time Dennis found the box of band pass filters and we installed one each on the 15m and 40m lines. So, a few hours into the FD exercise we finally had a station that was suitable for the task at hand. A few hours into the FD exercise, and after the end of Paul's shift, we finally had a station that was suitable for the task at hand. Paul had to put up with station issues that were not an issue the remainder of the day.

The second shift was run by Dick, K6KAL assisted by his wife Rusty, KI6SMT. 15m was

picking up and so was the energy level. The pair concentrated on SSB and they were having a good time of it. Near the end of their shift a guest in the trailer started asking about PSK and we decided to demonstrate. I had software on the computer to handle it and the hardware interface was already connected so we decided to try. For some reason I couldn't get the PTT control to work even though it was working at home just the night before so we switched to VOX and gave it a try. The PSK portion of 15m was quiet (no signals on the display) so I sent out "CQ FD DE W6NWG" but the VOX delay was set for fast CW QSK and needed to be adjusted so it wouldn't cut out at every space in the text string. While I was remembering where the VOX delay adjustment was I didn't notice that a station came back to my original CQ. Dick pointed this out and we proceeded to make our first PSK QSO with the VOX kicking out multiple times during the exchange. While making the adjustment Dick noticed another station coming back to us. Now we were having some fun. With VOX set correctly I left Dick and Rusty for a while and let them rack up more on PSK. It was interesting that although 15m was poor at the start of FD, now, at 7:00pm,

15m was still going so they continued on past their shift end to grab a few more on the band.

At the start of my shift I decided to give 40m PSK a try since I had a 40m SSB operator lined up for

the 11:00pm - 7:00am shift and a CW operator lined up from 7:00am till the end of FD. As I was getting dialed in I switched to the 40m

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inverted V antenna, went down to 7.070 and the band was packed with PSK activity. I honed in on a signal, made the contact but noticed my power output was only about 5 watts. I had forgotten to hit the tune button on the FT1000MP. Pressing tune should have been simple enough but the antenna was cut for the high end of the band and the FT1000MP would not tune it. I kept trying things such as starting higher in the band and tuning and slowly sneak in on the lower part. The best I could do was about 2.5:1 and then I remembered the FT1000MP internal tuner will only tune out about a 3:1 mismatch. The next step was to search the trailer for some extra wire to lengthen the antenna a bit. In no time at all I spotted that dead 12V battery with the clip leads. In less than 2 minutes the clip leads were extending the inverted V and Voila!



The rig could tune the lower 40m band. I continued to make contacts on 40m until my shift was drawing to an end. My graveyard shift (who was tentative) didn't show but I was tired and needed to get home to deal with some family stuff. I was getting ready to shut things down when Phil KA9Q who was working with Art KC6UQH at the satellite station volunteered to work some CW on 40m. We switched the rig to CW but the keyer wouldn't put the rig into TX. The PTT problem on PSK came to my mind. They both worked at home but now they didn't. I remembered that the Microham interface uses a DB15 shell to make the ground connection for both CW and PTT and that I had

removed the cover a few weeks earlier to make a repair. The shell was not making contact. I put a little side load on the wires that allowed the shell to contact the ground post on the interface box and in a short time we were on 40m CW. Shortly after I headed for home for some much needed rest.

Sunday morning came along soon enough. I went back to the site to fill the generator and get things set for the morning shift. During the evening after Phil turned in we had another operator named Bob take over and work SSB for a few more hours. I got everything set for the morning shift but that shift was tentative also. I needed to get going to church so I left the station in the hands of Conrad. Shortly after I left Ron K2RP showed up with a friend and they both worked CW till the end at 11:00am.

Now that I have been a band captain I know a little more of what to expect and what I can expect to go wrong. All experience is good experience if it can be used to improve things in the future or to help others. If you have never been a band captain or operated a FD station I highly recommend it. It is fun, you will build relationships and you will learn things both technical and personal.



At the end of FD I volunteered to take the trailer home for a little while to make some much needed repairs and cleanup. There will be more on the trailer in the future.

Loren Hunt AD6ZJ



During Field Day, PARC member children played at Guajome Park playground and toured the stations. Near one of the generators, a sign reading “sensitive wildlife habitat do not enter” could be seen. Water barrels hold down the towers.

Many new hams were able to participate in Field Day, which was a primary goal for this year's event. Gaining experience on the air in a variety of ways enhances enjoyment of the hobby and contributes to being more prepared to contribute in a communications emergency. Field Day is a significant opportunity for the club to demonstrate, teach, experiment, and socialize.

If you would like to volunteer for 2010 Field Day, please contact the board of the Palomar Amateur Radio Club.

Johnson Viking Transmitters and Accessories of the 1950s

By Ron K2RP

The 1950s, in my opinion, was the “Golden Age” of US-based amateur radio manufacturing. Companies such as Hallicrafters, Hammarlund, Johnson, National, WRL, Drake, Collins, Heathkit, and many others offered dozens of models of receivers, transmitters, and accessories. Improved models were introduced almost annually in some cases.

The E.F. Johnson Company, of Waseca, MN had long been a manufacturer of components, notably variable capacitors, coils, and electronic hardware. In 1950, they entered the amateur market with the “Viking I,” a medium power AM and CW transmitter in kit form. It was an immediate success. An accessory VFO soon followed, along with numerous accessories such as electronic TR switches and the famous “Matchbox” antenna tuner.

By the mid 50s, Johnson offered a full line of transmitters, amplifiers, and accessories ranging from the “Adventurer,” a 50W novice unit, to the “Desk Kilowatt” amplifier. Most were offered both in kit and factory wired versions. One measure of the effectiveness and popularity of particular models in this time frame is their use by “top gun” stations of the era.

Fortunately, during this time, QST published a list of the transmitters and receivers used by section winners of the popular Sweepstakes Contest, which then, as now, attracted many serious operators.

An analysis of the reports in the May and June 1959 issues of QST, where the 1958 CW and phone Sweepstakes results were reported, shows that out of approximately 150 winners, a remarkable 33% were using Johnson equipment. By comparison, the next most popular, Heathkit, was the transmitter choice of 23% of winners, followed by Home Brew, 22%; Collins, 7%; Hallicrafters, 6%; and others, 9%. Note that this was all before the popularity of SSB, so the phone winners were using AM.

While the Johnson equipment did not carry the price tags of similar power Collins gear, it was more expensive than some of the lower priced lines with similar specifications. For example,

the “Adventurer” novice 50W unit cost \$55. Knight Kit, from Allied radio, offered a 50W novice kit with the same tube lineup (a 6AG and an 807) for \$39. The Adventurer was more popular, despite its 50% higher price, because of Johnson’s reputation for quality components and engineering. The Viking I and Viking II competed with the less expensive Heath DX100, and were very successful as well, for the same reasons.

In 1954, the Viking Ranger was introduced, both in kit and wired versions. The power input was only 75W on CW, and 65W on plate modulated phone, and cost \$230 in kit version or \$330 wired and tested. It included a built in VFO and covered the 160 through 10m ham bands, and used a single 6146 tube in the final. About the same time, a Heathkit DX35 and accessory VFO could be had for less than \$80 with about the same power available. But, the Ranger had plate modulation for AM compared to the screen modulator in the Heathkit, and the Ranger was a much more sophisticated and substantial unit. Novices were limited to 75W, crystal controlled, and the Ranger had the ability to use crystals. When the Novice upgraded, the Ranger made a fine exciter for a higher power amplifier, which Johnson offered as well.

But, many hams wanted higher power without the expense and complication of a separate amplifier, so in 1956, the Viking Valiant was introduced. This transmitter was a Ranger on steroids! Instead of the single 6146, this transmitter had 5! Three were used in the final, and two in the modulator. Everything in this rig was heavy duty, and it weighed 85 lbs. Power input, as it was measured at that time, was a respectable 275W on CW, and 200W on AM. Mine puts a solid 200W output on CW, and 150W on AM. Cost was \$350 in kit form, or \$439 wired. SSB was still in infancy, but the future was becoming clear, and the Valiant had provision for an external SSB adapter. Several manufacturers offered such adapters, which put out about 10W or so of SSB on the proper frequencies. The Valiant, as did other transmitters of the era, had provision to use the

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amplifier stages and power supplies to enable SSB operation. Johnson produced an SSB generator in the early 60s to match the Valiant II, a cosmetically redesigned model.

The Ranger and Valiant were two of the most popular transmitters of the 50s. They're still in high demand today, with a perfectly restored Valiant commanding in the \$1000 range.

I was fortunate to have a Ranger in the early 70s, which I used mostly for CW and RTTY, and wish that I had kept it. It was a reliable transmitter despite heavy usage.

A couple of years ago I was able to obtain a Valiant in poor condition, and it languished in my garage. I was inspired to tackle this project recently, when a friend developed the ability to silkscreen panels. My panel was in terrible shape, so I had it redone. It came out so well that I was decided to get it on the air. The result is shown in the photo. Also shown is a Johnson

Matchbox antenna tuner, which was also very popular. These were made in two sizes: The 275W version is shown below, and there is also a 1 KW version. Both are in demand and are commonly used today, with both vintage and modern rigs. I have owned this one for at least 40 years!

If you want to hear the sound of AM, tune into 3870 most evenings, but particularly Monday and Wednesday evenings. The AMI (Amplitude Modulation International) nets meet on those days, 7:30 PM local on Mondays, 8:00 PM on Wednesdays. Check ins vary between 15 and 60 stations, all using AM, mostly with vintage gear ranging from simple screen modulated transmitters to converted broadcast transmitters. Each station describes the equipment used.

If you keep track, you'll notice that on a typical evening, nearly half of the stations are using Johnson transmitters! You'll probably hear me check in with my Valiant or Viking I!





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Featured Program

The program for the general meeting at 7:30pm on 5 August 2009 at the Carlsbad Safety Center, 2560 Orion Way, Carlsbad will be Wild Bill WB6BFG talking about his adventures in Honduras.