

October 2011



**Peter Reinzuch VE7REZ**

## President's Message

It's good to be back in the Desert after my annual trip North. Fall was in the air so it was time to come home here. My article this month is all over the map Hi Hi!....

Plans are in full swing for Palm Springs Hamfest 2012 with flyers being distributed at Dayton, our Southwest Convention and this weekend at Pacificon up the Coast. Gordon West WB6NOA will be promoting our event there as will Bill Prats K6ACJ. Plans are being made for our antenna / picnic (deep fried turkey)/

camping RATS in the Desert Event. It will be held on BLM land West of Salton City about an hours drive from Palm Springs. Mark the November 26<sup>th</sup> weekend on your calendar and stay tuned for more details at the next meeting.

Elections are being held at the November meeting and if you haven't been involved in running a Club before, maybe it's time to step forward and volunteer to run for one of our Executive positions. Tom Avarett AE6WL is acting as Elections Coordinator. Send in your nominations or volunteer yourself to [ae6wl@yahoo.com](mailto:ae6wl@yahoo.com).

If you haven't checked in to our Monday Net recently...we miss you! Starts at 6:30 with Amateur Radio Newslines and followed by the Net at 7PM on the Club repeater 146.940 - PL107.2

I think ARES will be doing a Digital Net again soon so if you want to learn how to use PSK-125 check into the voice Net for details. They use FLDigi software.

On October 20<sup>th</sup> is the annual SHAKEOUT Earthquake Drill. ARES will be conducting a Drill on our Repeater; everyone is welcome to check in at the 10:30 AM radio drill. It is a good time to see how your signal is getting out.

We are always looking for extra articles for the newsletter so think about a story you could contribute sometime.

Club dues are coming up soon and this time consider paying your dues online using this link on our Website: <http://desertrats.am/membership.html>

I received the following and thought some of you might be interested in making an Amazon River...rare location contact:

*Hi Peter,*

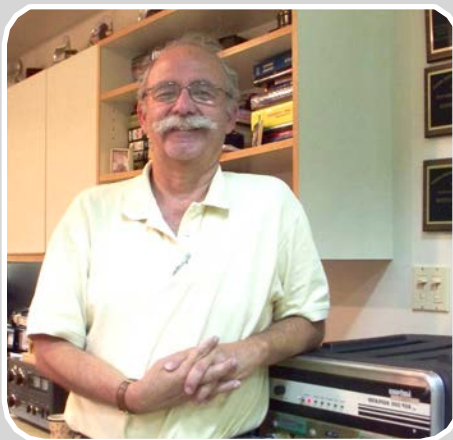
*My Friend Sidney K6DMT will be operating from the region of the Amazon in Peru from now until Oct 21. His actual location is best known by Bonnie KQ6XA although they have never met, approx 300 miles north east of Lima Peru. Sidney's Icom IC-7000 solar powered station is*

*on the edge of a river away from the tree line putting his antennas and solar panels into the clear. Antennas include a long wire and Buddipoles for 40 through 10 meters. His information follows:*

*Station OAI/K6DMT grid FI21ro Peru 5WPM CW & SSB. A semi automatic CW beacon might precede his SSB operation.*

*2300z at 28.540 Mhz- Primary  
2330z at 24.987 - Backup #1  
0000z at 21.447 - Backup #2  
0030z at 18.165 - Backup #3  
0100z at 14.344 - Backup #4  
0130z at 7.250 - Backup #5  
0300z he will be on 7,14 or 18 mhz per band conditions.*

73 Bill K6ACJ



**Glenn Morrison, WB6RLC**

### **Vice President's Message**

Being away from home for the first time at age 19 can be a little tough. For some it was going to college. For many others it was a stint in the military. After a few weeks of some crazed lunatic in a Smokey The Bear hat screaming at you, you might get a chance to make a call home on Sunday and hear moms voice. At some

remote duty station this was a little more difficult. On board a ship at sea or "out in the bush", it was impossible. My brother joined the Navy in 1967, about 2 years before I went into the Marine Corps. I don't remember what the occasion was, but my brother called home from Japan, collect. It seems cost over \$1 a minute. Nowadays we'd scream bloody murder at that rate. I was still in collage and working. I was making about \$1.50 an hour. My brother just sucked up a days wages on ONE phone call!

Otherwise what guys could do to call home from a ship at sea or a large secure base was to use MARS. (Military Auxiliary Radio System). You'd go to the radio shack and he would set up a schedule with a Ham at the other end and with your parents. They'd use what is called a phone patch to tie the radio into the phone lines. You could talk into the mic and mom would hear you at the other end, on the house land line. When you were finished, you'd say "over" and everybody would flip a switch and then mom could talk. Repeat as needed. Throw in propagation, and it could be a bit of a crap shoot, but it worked.

Well that was the decades before cell phones, satellites, the internet and email. What has MARS been up to lately? There is a good letter to the editor in this months QST. The hamspeak definition of MARS is "Organizations providing non-operational communications support, such as health and welfare traffic to each of the US

military services" In part it talks about the modern support of contingency communications not only to the military but civil agencies as well. Did you know that the Pentagon has a MARS station? MARS ties into DoD, FEMA and Homeland security.

Stop by the October meeting of the Desert RATS and meet Corky WE6COP, Tom W6WC and Larry K6SCH. All are members of Navy-Marine Corps MARS. You may have heard them check into the ARES net on 40 Meters or talked to them at our last Hamfest.

73 • Glenn WB6RL



**Susie Boskovich KD6TVO**

### **Tidbits**

Our fall activities are underway. We have the Ham Classes starting on October 24. We have 15 students with 5 more pending. Should be a great class. Again, if you know of anyone interested, please have them contact us. We still have room and time to register, but it is running short.

Keep in mind that elections are coming at the November 15 meeting. If you would like to run

or like to nominate someone please contact Tom Averette, AE6WL, at ae6wl@aol.com. It takes everyone's participation to keep the club going. So we hope people will step up to the plate.

Thank you all who have volunteered to bring goodies for the club meetings. I will try to remind you each month. It is really appreciated.

No one has given me any special news to report but please let me know for next month if there is anything to report.

See everyone at the meeting on October 18, 2011. Glenn, WB6RLC, has scheduled a good topic.



**Michael Brennan KA6PGN**

### How Short Can You Make a HF Antenna ?

The SGC Smartuner (antenna coupler) will provide maximum transfer of radio energy from any HF transmitter to any end-fed HF antenna within the frequency and power limits of its specifications.

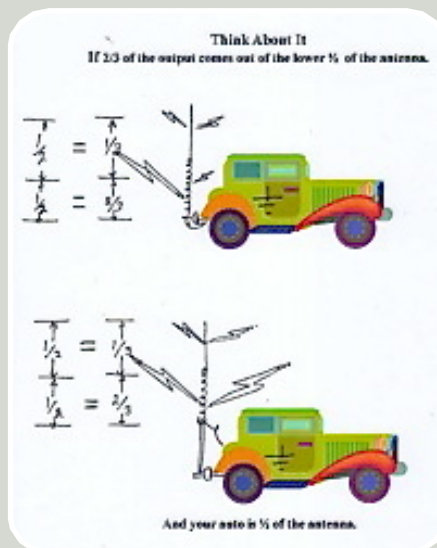
### Specifications

1. Antenna length is 8 to 80 feet, frequency is 3.3 to 30 Mhz
2. Antenna length is 25 to 80 feet, frequency is 1.6 to 30 Mhz

With this information I took one Army camo net pole about 4 foot (Plastic fiber glass ?) and put a copper band on each end. Then I got 20 feet of 1/4 copper tube (ice maker water line) and wound it around the pole. Then solder each band to the end of the tubing. I put them all together and added 4 counterpoise wires. With the first test I got Lake of the Ozark MI. on 80 meters. Next test will be out in the open. I have too many wires and antennas at my home for a good test.

Link to:  
Smartuner Comparison Chart

**<http://www.sgcworld.com/productInfoPage.html>**





## PORTABLE HF & VHF OPERATION FROM MADRID SPAIN

Many of us enjoy mixing our travels with ham radio whenever possible, there is a high level of satisfaction to be gained while assembling a minimum station and completing QSOs from challenging locations such as a city park, hotel lawn or high atop a building. During my recent trips to Madrid Spain operating from the patio of a top floor condominium was ideal given the high location with north and west facing patios. It also helps having an abundance of large shrubs & trees on the patios to support a full size antenna.

This article will describe some of the planning and operating of a successful HF QRP station with some information about 2 meter repeaters in and around Madrid Spain. Some of this information applies to portable stations anywhere.

### Planning the Trip

Most countries have their version of the ARRL, in Spain it is the URE and their web site contains all the details for HF, VHF, UHF and APRS operation. Of course the web site is in Spanish but isn't that the adventure you are looking for?

To get started, explore the organizations web sight to gather information for your operation. Make 2 copies of your FCC license and the FCC CEPT agreement for Europe. Copy advertisements of your gear from the ham radio catalogs for each radio, HT and QRP rig to prove to the border patrol that your

ham radio is legitimate. One set of copies go into your back pack, the other into your suitcase. Remove batteries from the radio and put them into a protective container, be safe, no one wants a fire. I copy the important internet web links and user manuals onto a thumb drive or into a online mail box to access when needed. Spain has excellent 3G/4G voice and data coverage, signals rarely fail.

In the past there was a ham radio store in Madrid but on the last trip I didn't find anything except for general electronic supplies. There is a large RC model shop down town where large batteries and chargers can be purchased and of course unlimited scooter and car shops where larger batteries can be purchased. Prices are in Euros.

I carry each radio in my back pack along with my camera, cell phone and GPS. During the Xray process, do NOT offer info unless asked. Otherwise the baggage passes through and all is fine. If the inspectors have a question, they will ask otherwise don't say anything that will cause delays. My first time through I just described my radio as a transistor portable to listen to the news then the inspector reached into my bag and apologized as he removed my big bottle of water. So it goes ....

### Items to Pack

Try to be resourceful to reduce weight so look for common items to support your operations without filling your pack with a lot of heavy items. For example, use the hotel note pad and ink pen, buy shoe laces, plastic clothes line pins and batteries from the local grocery store. The shoe laces or clothes line pins help support the antenna. Large ZIP Lock plastic bags are extremely handy to keep your gear organized during travel.

It is important to completely check out your gear before the trip at home where you have tools and meters. Once I check out my station configuration of transmitter + receiver + auto tuner and or power amplifier on the bench then I'll shot a photo of it for future reference during the trip.

My carry on bag is a standard high school back pack to hold all things near and dear to me rather

than put the items into the checked luggage. Put all station accessories into the checked luggage, items such as batteries (in protected containers), wires and cords. Don't create an XRay image that looks like a time bomb.



Here is an outline of a minimal station using a 3 band CW rig.

- Elecraft KX-1 with Internal Automatic Antenna Tuner
- Palm Key Paddles
- 10 cell AA holder for external power plus battery cable to the KX-1
- Small Ear Budd head phones. Sony is Recommended.
- Your Choice of wire antennas, I like dipoles
- 4 Plastic Clothes pins
- A separate feed line is not used
- Lengths of bamboo for antenna supports and plastic cable clamps with adhesive backing to support antenna wire to the side of walls.

## Antennas

Everyone has their favorite antenna but it's not practical to pack an array of rotating antennas. There will be compromises for light weight travel. At the current time most of the activity is on 40, 30 and 20 meters where an untuned antenna of lengths of 21, 28 or 31 feet per leg work very well. I prefer a dipole configuration and pull the inside ends right to the alligator clip/BNC connector on the Elecraft connector thus eliminating the extra weight of coax or additional balanced line. The inside ends of the dipole are separated with 4 pieces 1-1/2 long dowel spacers to help keep the wire organized and to help secure

this end of the antenna to something heavy on the operating table. Last time I used a 2 liter bottle of Sprite and scotch tape to secure the feed line against strong winds.



Tune-up with the Elecraft is easy, just hit the tune buttons and that's it, the KX-1 will display power output and SWR with is always in the range of 1.2:1.

## Frequencies

The recommended world wide QRP frequencies are 7030, 10117, and 14060 but I found 7055 and 14055 very active on the weekends. The best time for operation from Madrid is around 0600 to 1000 utc in the morning and in the evening around 1800 to midnight or past. The activity is greater on weekends.

## Operating

For Madrid, I sign EA4/K6ACJ but afterward I signed K6ACJ/EA4 because some stations were confused by the call. Either way, you'll make contacts but in the end I would sign EA4/K6ACJ to be correct.

Most of the stations respond in English and others only transmitted RST, QTH and Name then sign off. Other stations will chat a bit and are curious about your call letters and home QTH. CW skills seem very good and the CW speed is from 13 to 20 WPM.

## VHF UHF & APRS

Refer to the URE information page for repeater frequencies, PL, and location. Some repeaters require

the 1750Hz start tone and others use the familiar PL tone. Operating frequency seems to be 12.5kHz so be aware of this if you cannot tune for example 145.357.5 . Check //aprs.fi and set the map to display Madrid for even more information. I didn't hear very much on 2 meters but in the past contacts were made on simplex frequencies.



## Summary

Running 3 watts to a full size dipole strung through bushes and trees doesn't sound like much but I've made dozens of contacts into England, Holland, Italy and Germany in a few spare hours of operating. Operating like this is very satisfying and overall is a pretty good adventure.

## Links

FCC Amateur Operation in CEPT Countries  
<http://www.fcc.gov/cgb/consumerfacts/da991098.html>

Union of Radio Aficianados Espanolas Home Page  
<http://www.ure.ex>

Basic Information for Visitor Hams (Spain)  
<http://www.ure.es/general-info/417-licensing-and-basic-info-for-visitor-hams-.html>

Page Leading to District Maps and Band Plans  
<http://www.ure.es/informacion-general.html>

Repeaters:  
<http://www.ure.es/informacion-general/14-estaciones-automaticas-desatendidas.html>

Grid Square Conversion:  
<http://www.amsat.org/cgi-bin/gridconv>

**Bill Prats K6ACJ, ARRL ACC Orange Section,  
Desert RATS, SOARA, HF Pack, HBRACES, ARC**

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**Monday Evening Net  
Newslne** • 6:30 pm  
**Regular** • 7:00 pm  
146.940 PL 107.2

**ARES Digital** • 7:30 pm  
144.435 Simple



## Home-Made Rockets

On September 30, 2011 at 11:08am Derek Deville launched his 14-foot, GPS-equipped home-made rocket Qu8k from the Black Rock Desert in Nevada to an altitude of 121,000' in 92 seconds. This small documentary on the flight is probably one of the most brilliant Amateur Rocket videos out there right now." The launch was an attempt to claim the Carmack Prize.

### Links

<http://ddeville.com/derek/Qu8k.html>

<http://www.ddeville.com/rockets.htm>

<http://www.ddeville.com/fireworks.htm>



## CALENDAR

### October 6, 8, & 15, 2011

Basic CERT Course Palm Springs Fire Department First night 6:00 PM to 10:00 PM Two Saturdays, 8:00 AM to 5:00 PM Contact Janet Vines-Mott at [janet.vines-mott@palmspringsca.gov](mailto:janet.vines-mott@palmspringsca.gov) For further information

### October 18, 2011

Desert RATS meeting 7:00 PM Palm Springs City Yard Conference Room Corky, from MARS

### October 24 - November 28, 2011

Technician Class Licensing Monday's for 6 weeks, 7:00-9:00 PM Palm Springs City Yard Conference Room

### November 15, 2011

Desert RATS meeting, 7:00 PM Palm Springs City Yard Conference Room Elections

### November 25, 26, & 27, 2011

(Thanksgiving Weekend) Camping at the Salton Sea With picnic on Saturday Details will be announced

### December 3, 2011

Testing for all Classifications for Licensing Palm Springs City Yard Conference Room 9:00 AM

### December 2011

No meeting due to the holidays.

# The Desert Radio Amateur Transmitting Society

invite you to attend the 3rd annual \* \* \* Palm Springs HAMFEST!

**Special event station on 14.251 and 7.251 from 0300z to 1200z**

**Saturday, January 28  
9:30 A.M. to 4:30 P.M.**

Talk-in frequency:  
146.940- PL 107.2  
WD6RAT Desert RATpeater  
Daily Nets Thursday thru Sat.  
8 A.M. - Noon - 6 P.M.

**ONLY \$2**

Bring your ham gear to sell, no fee charged for selling if you bring own table and chairs. Or bring it to the club table ( small commission to the club) ...we'll handle the sale.

Email us for more info:  
Peter Reinzuch VE7REZ~President of 'the Desert RATS' Club  
[ve7rez@desertrats.am](mailto:ve7rez@desertrats.am)

Riverside County ARES  
[riversidecountyares@gmail.com](mailto:riversidecountyares@gmail.com)

~Check ze Tweets @hamradio @RivCoARES

Check the website for directions and vendor updates!

<http://www.desertrats.am>

An official  Sanctioned Event

## HAMFEST!



**Jan 28, 2012 follow the rat @desertratsam**

**FOOD! FUN! PRIZES!**

Raffle tickets only \$1

**Ham Radio talks by  
Clint Bradford and Gordon West**

**Old Military Radio collection on display by  
Michael Brennan KA6PGN**

Event Coordinators Gary Boskovich KD6QLT and Susie Boskovich KD6QVO 760-328-9662 [sboskovich@dc.rr.com](mailto:sboskovich@dc.rr.com)

RSVP: RV Dry Camping reservations for vendors: [sboskovich@dc.rr.com](mailto:sboskovich@dc.rr.com) Vendor Set-up time 7:00-9:00 AM

Hotels Nearby check early to get reservations!

### Vendors

YAESU DX Store Ham Radio Outlet  
Buds Engraving Alpine Antennas  
Byonics ARRL W5YI RF Stuff  
EDS Emergency Pack Impulse Electronics  
Rouend Computing with ABR Coax

