



HYPERLINKS

Desert RATS Website

DRATS Calendar

Riverside ARES

Riverside RACES

ARRL Website

ARRL Newsletter

DX Zone

Ham Radio Links

Submit Articles to Newsletter

CALENDAR

January 18th 2011

Desert RATS Meeting 7pm
Palm Springs City Yard Conference Room

January 29th 2011

ARRL Sanctioned Desert RATS and Palm Springs DX Club Hamfest

February 15th 2011

Desert RATS Meeting 7pm
Palm Springs City Yard Conference Room

March 15th 2011

Desert RATS Meeting 7pm
Palm Springs City Yard Conference Room

Special Edition: ARRL Sanctioned Palm Springs Hamfest 2011 • RATS Nest Newsletter • January 2011



Peter Reinzuch VE7REZ

President's Message

December's Club activities are behind us however I'll just recap a few thoughts about our great 'RATS in the Desert' adventure the second weekend in December. An adventuresome group of Desert RATS members packed up their RV's and trailer then headed out to the Desert about an hours drive from mid Valley to just west of Salton City then headed west into the desert just along Hwy 22 (about 3 miles.) Ending at an easily accessed off road camping area we found some covered picnic tables. Bill Prats and I decided this was the spot so we started the circle and hung up the Clubs Banner. Not long after Evan KI6WNF appears then Steve KI6WNW and others arrive. While some went off roading like in Joshes dune buggy, others had their own off road toys or tried out our GIANT Antenna. Still others opted instead and one of the highlights for me.... was a side trip seeing Laura and Michael Brennan's working

Military collection of radios, equipment and antenna farm. You'll see Michaels collection at Palm Springs Hamfest ...look for the army tent! You'll see Bill's comments about our 'Great Antenna Project' in this edition of the newsletter. So successful in fact that we have been asked to do a presentation at Quartzfest to demo it. We had a great time in the Desert and will certainly do it again. Next time come on out and join us for the picnic part of the weekend, a half day outing with something for everyone... deep fried Turkey will be on the menu again.

Quartzfest is only days away and myself others will be headed out to Quartzite Thursday after Tuesday nights meeting. We'll be out there promoting Palm Springs Hamfest which in case you've been to some remote part of the world, with no Ham News, is on the 29th of January. We anticipate hundreds of Hams from around the States and some beyond to attend. See the other notes in the Newsletter about some of the details. Hundreds of e-mails have gone out and almost as many flyers have been sent to all Electronics and Ham equipment stores ...to hams in the South Western states ...to promote our event. It promises to be quite the show. If you are not already helping out then for sure you will not want to miss attending it for the bargains will be great and fun is guaranteed. The food alone is worth the trip. Where else can you go to a shopping mall 's worth of vendors all selling Ham Equipment. If you want to sell at our Swap Meet there is still a room to set up shop

in our acres of space venue. From a convoy worth of RV's that are coming, to the many just driving here for the day this will be the biggest Ham Event ever in our part of So-Cal and the 3rd largest ARRL sanctioned event in the California. Next years plans are already taking shape because of the large demand for commercial vendor space indoors we are seriously talking about renting a Circus Tent to accommodate everyone. So as Ed Sullivan used to say, "welcome to our really big shoow", and I'll say hope to see you there too as you never know you might be going home with some really nice raffle prizes! I hope to be calling out **your** winning number!

Last I'd like to thank the other special contributors to this inaugural "Special Edition of our Hamfest Newsletter." And John McKee, our Editor, for putting up with my short deadlines. We have more vendors than space allows but have a look at the logos of some of our Vendors and supporters. See you at Palm Springs Hamfest January 29 mark it on your Calendar and bring a friend! Talk In 146.520 – PL107.2 Daily Nets.... 8AM, Noon and 6PM. Please make our out of town visitors welcome on air and help them out when you can! •

Volunteers

A special thank you to all the volunteers that help with the club activities. You get so much more out of a club when you volunteer and participate in the activities. A club is all about team work and there is no "I" in the word team. So unfortunately no one gets the glory



Susie Boskovich KD6TVO

by volunteering. Everyone pulling together makes the activities a success. The volunteers and participants during Field Day helped make that activity a success. Even attending meetings and making our guest speakers feel welcome are very important.

The Ham Fest is coming up very soon and we have many who have volunteered to help with this great endeavor. There are already twice as many this year as last year. At least another 10 could be used easily. More are needed to help with preparing and servicing of food, in registration, parking, and especially in security. If you have not already volunteered and been assigned a spot, please contact me at 760-328-9662 or by e-mail at sboskovich@dc.rr.com. There is plenty to do. The more there are the less time each needs to be working.

So to get all you can from being a club member, participation is the goal. From mentoring other hams, visiting with fellow hams, new and old, and volunteering during

club activities help make stronger and better hams out of all of us. •



Satellite Shorts

Remember SuitSat in 2006? SuitSat was a payload that was installed in a discarded Russian Orlan EVA suit that was pushed out of the International Space Station, carrying a two meter amateur radio beacon.

WILDLY wonderful press coverage across the planet. Well, AMSAT's doing it again with their ARISSat-1/RadioSkaf V project!

This project will have simultaneous 2M FM, CW, BPSK, and transponder transmissions. The satellite's software-defined transponder will cycle the FM transmissions between a voice ID, select telemetry values, 24 international greeting messages (in 15 languages!) and live SSTV images. The CW transmissions will be callsign ID, select telemetry, and callsigns of ARISS members.

The BPSK transmissions will feature a new 1kPSK protocol developed by Phil Karn, KA9Q, to be readable in low signal conditions. The BPSK data will alternate between telemetry and Kursk experiment data. FREE ground station demodulator and display software will be available before launch.

Satellite Shorts... Con't next page

Satellite Shorts... Con't

SO ... Stay tuned for this project - and more from AMSAT in 2011.

Come visit the AMSAT table at the ham fest - and see the schedule for working the satellites. And when you see a hamfest worker, stop and take a moment to THANK them for this event. It takes a LOT of preparation to pull this off - and we want to see you again in 2012! •

Clint Bradford, K6LCS
AMSAT Area Coordinator
<http://www.work-sat.com>
909-241-7666



SBMS Microwave

THE SAN BERNARDINO MICROWAVE SOCIETY is devoted to the use of microwave frequencies, modes of operation and equipment. It was founded in the early 1950's and has supplied a steady stream of new microwave inventions and microwave contest awards. The Society has three primary goals: Activity, building and sharing. It is a ham club that is exciting to be in and full of activity. If you have always wanted to become active on the microwave bands this is the group you should be in. As a beginner, you can start to build equipment and get help and access to laboratory level test

equipment, as an intermediate you can get help with projects and have other like minded hams to work with. If you are already active on microwaves you can join others. We have members active on all the major bands up through 80ghz, using EME and terrestrial paths; digital and analogue modes, and commercial and home made gear. Members come from all over Southern California to meet on the first Thursday of the month in Corona at 7pm at the Legion Hall on Main St.

Website <http://www.ham-radio.com/sbms/>.



For more information, contacts are:
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john.d.oppen@boeing.com
Vice President : Doug Millar K6JEY
doughelen@moonlink.net •



Bill Prats K6ACJ

Building a 40 Meter Square Loop Antenna

Building this antenna at a desert camp out and picnic was a Desert RATS Club project organized by myself, Steve KI6WNW and Peter VE7REZ/W6 club president and erected by five club members somewhere south west of the Salton Sea in BLM Land. There are many reasons for an antenna of this size, our objective was to create a club project by building a high performance antenna for the weekend. What better way to measure success than to operate 2 watts CW and SSB on 40, 20 and 17 meters, I am still smiling.

Due to the detail and available space, I'll jump directly into describing the construction of this large loop antenna which also provides building techniques for other construction. Preparation and team work is important because you will want to use the antenna while time allows. The bases for the antenna are the popular green metal and fiberglass military tent poles. Each of us purchased 1 complete military pole package containing 12 poles each with various accessories to support camouflage tents over military installations. Some of the odd plastic accessories were machined into guy rings and lanyard supports. At home and in advance, prepare making the masts, collecting rope for the guys and lanyards, mill the guy rings, and purchase the pulleys and stakes. In addition assemble a collection of tools (some are listed below) to complete the field installation. Obtain a balanced line tuner and make sure necessary internal or external jumpers are installed for the antenna balun. Also check the tuner shaft set screws and make all repairs in advance. The old balanced line tuners might have more wear and tear than expected. Our loop was erected on Bureau of Land Management land south west of the Salton Sea where motorcycles race in the hills so mark the antenna perimeter with cones and 'caution' tape so a stray biker doesn't get tangled in the guys ropes. Expect to have a visit from a BL M officer or the local Marshall and be ready to demonstrate that you understand safety issues. The antenna location should be far off to the unused side of the off road area so there is little exposure to others in the area.

Safety First, Plan ahead. This is a large antenna that must stand up against the desert wind.
• Mast sections are 48" long and 1-3/4" OD. There are two versions of the popular Military Fiberglass Masts, the fiberglass sections of the old version are noticeably heavier and have a large reinforcing ring at the large end of the section while the newer version sections are a little lighter and do not have the large reinforcing ring at the large end. For this reason, ADD one or two 2" radiator clamps at the large end of each mast for added support.

Parts List:

- Radiator Loop: #12 or #14 stranded copper wire cut to 9005/f length (7,100 kHz)
- Balanced feed line. We had 300 ohm line.
- Balanced Line Tuner or Unbalanced Tuner plus 1:1 balun 2KW rated. This

Loop Radiator: 9005/f length (7,100 kHz). 1/4 of the length per each of 4 sides.

The masts are located 10-12 inches out from the loop antenna corners.

The feed line attachment point is at a corner. Additional details for the loop diagram and guy ring dimensions are located at <http://www.biztek.com/k6acj/rats40meterloop>



Locate a large open space. This happens to be on the edge of the BL M land near the Salton Sea. Stay clear of all Off Road Vehicle traffic. Use Orange Safety cones and Yellow Caution Tape to mark off the area.

is an important component, don't skip here.

- Feed Line/Radiator Termination board
- 6 Military mast sections for each of 4 masts. Overall mast height is 22.5 feet.
- 4 Guy Rings with extensions to support the pulley & lanyards to raise the antenna wire. Diagram follows
- Black Dacron / Nylon rope 3/16 or 1/4 inch diameter for guys and lanyards
- 4 x 1 inch quality pulleys
- 12 long heavy duty ground stacks
- 24 clamps for the guy lines at the top and bottom. If you know knots then the number of clamps can be reduced.

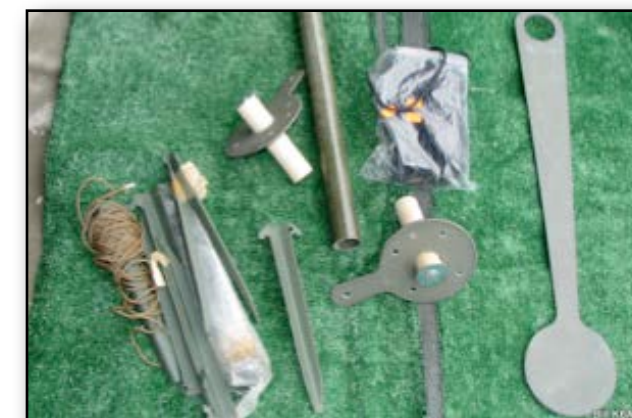
HINT: There are large voltages or current nodes at the feed point, Crimp then solder using a propane torch. A good job here is essential for mechanical strength and electrical conduction.

Tool List:

- Large hammer or a small axe to drive the stakes into the ground
 - Large shovel and a block of wood to act as a lever for removing the ground stake
 - Propane soldering torch with solder and solder flux
 - Measuring Tape, as long as possible.
 - Soldering Tools and extra hardware
 - Table, chairs, hats and lots of beer
- Calculating Guy Rope Length and angles: <http://www.csgnetwork.com/righttricalc.html>



Guy Ring and Lanyard Support Ring Detail are located on my web site. Notice the hole pattern is for either 3 guy ropes or 4 guy ropes. Chamfer the holes to prevent chafing the support ropes.



The guy rings were cut from the mast paddles on the right. The 6" x 1-1/2" wood dowel retains the ring when the ring is placed at the top of the mast.



The feed point support is made from the remainder of the Army Green plastic mast paddles. The support provides some strain relieve to both the radiator and the feed line. Termination is soldered into stout ring connectors on 8x32 SS hardware.

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<http://desertrats.am>

Repeater:

146.940 PL 107.2
Monday Evening Net
Newline • 6:30 pm
Regular • 7:00 pm
ARES Digital • 7:30 pm



40 Meter Square Loop Antenna... Con't



Peter VE7REZ/W6 is shown measuring the position of each of four masts for the square loop and measuring the final cut on the support guys from the top of each mast. Each mast is supported at the bottom by a hole in the ground roughly 10 inches deep then with one person on each of the 3 guy lines the mast is pulled up into position and staked down. Expect the desert floor to be rock hard but the advantage is that it firmly holds the mast and ground stakes.



The first two masts are up, two more to go. The small end of each mast sits in a 10 inch hole. Guy ropes are secured with very large tent stakes pounded into the hard earth



Attached at a corner mast, the feed line details show the lanyard pulley attached to the feed line / loop support point



Guy Ring and lanyard detail



5 hours in the field and the 40 meter square loop is complete. Orange cones around the perimeter and long streamers on the guys help mark the antenna location. Yellow 'Caution Tape' is recommended. After sunset flashing lights were added to the masts to make the antenna perimeter visible.



Peak the tuner on the band of choice and begin operation. Performance was excellent as measured by the number and quality of 2 watt QRP contacts. Here we are using a Kenwood TS-2000 at 100 watts into a vintage balanced line tuner. The 40 meter loop easily tuned across 40 meters, 20 meters and 17 meters. We were having so much fun that we did not try other bands.



Lots of fun for everyone and the deep fried turkey and tamales served Saturday and Sunday made this Radio Picnic a Winner.

**Bill Prats K6ACJ, ARRL ACC Orange Section,
Desert RATS, SOARA, HFPAck, HBRACES, ARC •**





Code Red Amateur Radio Emergency Services Activated

Tuesday Dec. 21 was a gloomy wet day in the east valley, I received a call from AEC Peter VE7REZ. Peter had been on the California ARES net that morning on 7.250 and had heard reports of major flooding

Evan De Rouen KI6WNF all over Cali. He requested that I activate ARES as this weather was developing into a serious flash flood situation. I agreed we needed to activate and monitor the air until the hazards subsided.

We activated on our 146.940 repeater and began having informational nets every odd hour. We would also announce the nets on the other emergency frequencies here in the valley as well as check in on the 7.250 net every even hour. With help from 5 local ARES members we had reported the road closures and areas to avoid. Dan W6EMF gave weather reports from his NWS station. For 68 hours we had someone monitoring and providing vital information on this event. With 3.61 inches of rain this storm brought more water to the Coachella valley then we have seen since 1945. If this doesn't prove to you that climate change is real then I don't know.

Luckily we had no incident with human life in danger or property damage other than the roads that needed ARES support. This event was good practice and really shows the great team we have assembled. Thank you to all. The 68 hour activation shows our readiness and dedication to our community and public safety. We were hoping that RACES would be activated also to help with the effort but the county mustn't have seen the need. Here is an excerpt from the KMIR news feed about the state declared disaster.

"The county declared a local emergency Tuesday as rainfall wreaked havoc, damaging public and private property. Office of Emergency Services Director Peter Lent said there were two storm-related deaths -- a 65-year-old pilot whose plane went down in the Lake Perris State Recreation Area Monday, and a 39-year-old woman

whose vehicle was swallowed by flood waters in Canyon Lake Wednesday. According to Lent, fire crews responded to about 1,000 incidents, including 50 water rescues, 300-plus traffic collisions, more than 125 flooding calls and 13 calls regarding downed power lines."



Photo by Regina Reinzuch

[KMIR's Storm Video](#)

ELECRAFT
Hands-On Ham Radio™

<http://www.elecraft.com>

RF Stuff <http://www.rfstuff.com/>



<http://www.edisastersystems.com/>



<http://www.hamcity.com/>



<http://www.w5yi.org/>



<http://www.newsline.org/>

[Link to Palm Springs Life Hamfest Article](#)

The Desert Rats and the Palm Springs DX Club invite you to attend the 2nd annual * * * \$1 admission with raffle ticket. HAMFEST - RAFFLE - WINTER FIELD DAY

Bring your ham gear to sell, no fee charged for selling if you bring own table and chairs. Maybe you only have one or 2 items for sale put it on our single items table with a sign and tell us your reserve price... (for a small commission to the club) ...we'll handle the sale.

Saturday,
January 29
9:30 A.M. to
4:30 P.M.

CHECK OUT OUR WEBSITE!

<http://www.desertrats.am>



Winter Field Day 2011 Special Event Station

Email us for more info:
Peter Reinzuch VE7REZ-President of 'the Desert RATS' Club
ve7rez@desertrats.am
Evan DeRouen KI6WNF - EC Riverside County ARES
riversidecountyares@gmail.com
-Check ze Tweets @hamradio @RivCoARES

Admission only \$1 includes 1 free raffle ticket!

Event Coordinators Gary Boskovich KD6QLT and Susie Boskovich KD6QVO 760-328-9662 sboskovich@dc.rr.com

Nearby Hotel: Holiday Inn, corner of Sunrise & E. Palm Canyon, Palm Springs 760-323-1711 call for best room rate.

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

Talk-in frequency:
146.940- PL 107.2

WD6RAT Desert RATpeater
Daily Nets Thursday thru Sat.
8 A.M. - Noon - 6 P.M.

Directions:
Take I-10 to Palm Drive Exit.
Turn onto Gene Autry Trail
(becomes Matthew Dr. as it
crosses Hwy. 111)
Follow the RAT...
4193 Matthew Dr. is on left

Lots of vendors and exhibits! Check website for the most up to date list.
ICOM

Buds Engraving
Old Military Radios
EDS Emergency Pack
Ham Radio Outlet
Impulse Electronics

ARRL
DX
Store
W5YI
RF Stuff



Clint Bradford and Gordon West



<http://www.n6bt.com/>



<http://www.m2inc.com/>



<http://www.byonics.com/>



<http://www.yaesu.com/>



<http://alpineantenna.com/>



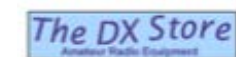
<http://impulse-electronics.com/>



Nifty! Ham Radio Guides
<http://www.niftyaccessories.com/>



<http://www.hamradio.com/>



The DX Store
Amateur Radio Equipment
<http://www.dxstore.com/>



Your complete battery supplier
<http://www.nicd ladyonline.com/>

Final Reminder - Mark It on Your Calendar - ARRL Sanctioned Palm Springs Hamfest January 29, 2011

The air waves are A-BUZZ with talk of ARRL's Sanctioned Desert RATS first event of the year! Our little ARRL Sanctioned Hamfest has in it's second year become the third largest ARRL Sanctioned Event in California, rivalling any Hamfest across the Western States! We anticipate an attendance of around 800! It's unique low cost 'one day' format has turned on it's ear the way Hamfests in California will be heading 'back to the future' are some predictions made. Well, the future is here in Palm Springs on January 29th. To quote attending AMSAT Representative Clint Bradford at the end of last years event: *"Your Hamfest is causing many to think about the future of the 2- and 3-day conventions in our region. I mean, you had most of what hams want at such a gathering - and I didn't have to pay a parking fee, didn't have to pay admission, was charged only five bucks for a lunch and only a buck for coffee ... Compare that to, say, PACIFICON coming up in October. It will cost \$500 for me to drive up there and stay in their hotel for two days. Did you see what SANDARC is charging for their events? \$23 for a breakfast \$26 for lunch \$43 bucks for dinner. \$15-20 to merely walk in the door. Rooms are \$135+ a night ..."* (Clint will be doing satellite contact DEMOS throughout the Day) Plus the vendors have to pay about \$500 to start! At Palm Springs it's free! Our gift to the Ham Community! So if you are within 4 hour driving range of Palm Springs for the price of gas + a \$10 dollar bill you can pay your entry fee, get a raffle ticket, and a meal. Where else could you go for a full day of fun these days with only a single \$10 bill? (Also see Forum site below for Hotel accommodations if you want to make a holiday out of it in warm Palm Springs!) Sure we want you to buy more raffle tickets, so maybe bring an extra \$20 bill. Yes, we will have raffle draws hourly, maybe half hourly, as donations keep rolling in.

By the way, we don't charge vendors to attend including Swap Meet sellers. Pass the word around, the more that attend the merrier. It will be a veritable Shopping Mall for Hams as every major product line of radios will be there for sale at vendors such as HRO which deal in all the major Ham radios available plus other related Ham gear. HamCity (a Costco style Ham store with too many products to mention), DX Store where you can buy Icom and Heil products plus more. (warranted Icom products that were manufactured can be bought at a fraction of the cost of new boxed ICOM radios), RF Stuff has any type of coax connector you could dream of plus coax, antennas ...again more stuff than I have room to mention. Numerous antenna companies. I could go on but the article would be so long your mailbox would not accept the file size. Here instead is a partial list of vendors and some activities: If you play an instrument or sing or have a small band come on down and join in the JAMFEST or play solo at our lounge style out door venue call Peter 760-318-0186 to book your time or just show up

AMSAT - Clint Bradford - DEMO - ARES - ARRL- Meet all the Guys from our Division! - Elecraft -user group -sponsored by the factory to attend - Yaesu - ICOM a guest speaker will be there to speak about & answer questions about ICOM's radios throughout the Day - Alpine Antenna Co - Buds engraving - Byonics - DX Store - EDS Emergency Packs - Ham Radio Outlet - Impulse Electronics - Ni Cad Lady Company - Nifty Accessories - R F Stuff - Old Military collectables featuring Radios from all of the major wars DEMO W5Yi Gordon West - San Bernardino Microwave Society DEMO - M2 Antennas Hamcon 2011 - Desert RATS Club - Earth Moon Earth signal bouncing EME DEMO - Hamcity - Next Generation Antennas

Swap MEET - Tail Gaters - Special Events Station WD6RAT - Raffles - Food - FUN - Fraternalism - Winter Field Day sponsored by SPAR (Society for preservation of Amateur Radio) WD6RAT

RATPEATER 146.940 -PL107.2 TALKIN and information NET at 8AM , NOON, 6PM Thursday, Friday and Saturday. - CONVOY from Quartzfest ARIZONA will be on 146.520 then switch to the RATPEATER frequency.

Club SALES Table to sell your items on consignment for you for 10% commission to the RATS bring your equipment from 8:30AM onward - Last year this was one of the most popular swap meet tables there and we almost sold out of everything that was there, so bring in your old Ham gear to sell and walk away with a jingle in your pocket and a hand full of cash (so to speak) - We accept credit card payments. (All sales will be paid to you by a cheque within 4 days) - TEST the radios you want to buy at the Swap Meet before you buy at our free test Bench.

Hamfest Special Event Station WD6RAT - 6:30AM till 4:30PM Pacific Standard time on 14.251 MHZ - 7.240 - 3672 find us live at [SEND SPOT internet Beacon](#) (click) final reminder mark it on your Calendar

ON U-STREAM LIVE video and audio web Cam [Desert RATS TV](#) and CHAT

Here is a link to our website : <http://desertrats.am> and here is separate link to our Forum that has all the Hamfest information you might want to know! <http://desertrats.x.am>

PLEASE PASS THIS Notice ON TO YOUR FELLOW CLUB MEMBERS AND BUDDIES on AIR, MENTION IT AS A REMINDER ON YOUR NET IN THE NEXT 3 WEEKS .
be proactive and help promote our event that we put on as our gift to the Ham Community!

THANKS " The Desert RATS" 2010 Hamfest Committee - Palm Springs Hamfest January 29, 2011

DIRECTIONS TO PALM SPRINGS HAMFEST *(freq.146.520 for Quartzfest Convoy group January 28) - TALKIN 146.940 - PL 107.2 on Desert RATS Ratpeater

from Freeway In Palm Springs / driving from Hwy I-10 go to / Palm Drive exit (south) / follow right onto N. GENE AUTRY TRAIL
(you should be going south on N GENE AUTRY TRAIL(6.5 miles 11 minutes to Site) / becomes Mathew Drive after crossing Hwy 111
then Follow Desert RAT Signs to: / 4193 Matthew Drive (on left)

Click on [LINK](#) to view map marker for the HAMFEST PARKING AREA

