President's Message

Palm Springs Hamfest was a big hit; we all know that now. The many hundreds that attended and those that were impressed enough to write and thank us for putting on this Event, the Desert RATS Club gift to the Ham Community ...The Volunteers...Demo people, ARRL, ARES, AMSAT, CQ Magazine, RACES, MARS and other organizations ... free space to Vendors and Swap Meet sellers... courtesy of Gary and Susie Boskovich... made it all happen. Many vendors have already signed on for next year and some that were sorry they did not come this year will be here at the next Event, like Hamcity, maybe ICOM and a few others including quite a few Swap Meet vendors that have just recently heard the Buzz about how great of an Event we all put on. I spoke to over 30 Swap Meat sellers and Commercial vendors when I went to Yuma Hamfest as an Ambassador for our Event and most said they will be here next year. I saw a few of our members there including Michael and Laura, Evan and Christi and a double prize winner at the Banquet John Polak. Anyway mark January 28th on your calendar and plan on volunteering for a part of the day so others can do the same and also be able to have fun; maybe find some bargains... eat some good food and socialize with the rest of the Club and other Hams from afar. If you didn't attend last months Desert RATS meeting you get a second chance to take home some of the giveaways left for you by some of the vendors at Hamfest. Come and pick up some nifty items. Hope to see you at the March 15 meeting.

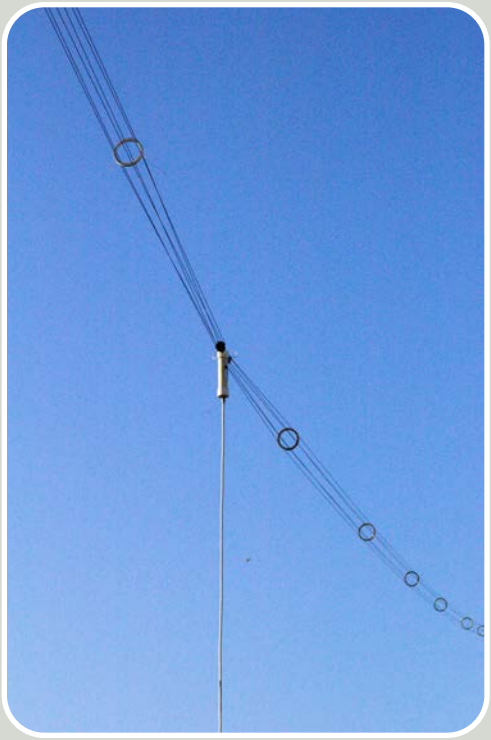
Peter Reinzuch VE7REZ

Antenna Tech Talk to be presented by Michael Brennan KA6PGN

Michael KA6PGN will be our Guest Speaker at our March 15th meeting. Michael and XYL Laura are the Hams who had that fabulous Army Communications Display at Palm Springs Hamfest. At our December "RATS in the Desert " Event some of us got to see their museum quality collection at his residence north of Salton City. Not just a display, it was the active demonstration of the collection that impressed me. New members of the Desert RATS in the last year, Michael designed Antenna set ups for Field Day at his former Club in Northern California; they came in 6th the year he organized their antenna set up. He's sent along a few photos and diagrams of some of his creations featured in this month's RATS NEST Newsletter. Michael is a very knowledgeable Techie person and antenna designer/ builder. I am in awe of his workshop and Antenna Farm on their acreage. At Tuesday's meeting, he will give an introductory talk on Antenna basic ending with some very technical information about Antenna Design and use. So there will be something for the New Ham as well as for some of our seasoned builders who still are not quite

Michael Brennan KA6PGN

sure why some of these unusual designs work and how well they work. He'll use this presentation as a foundation for a new regular Club activity: an ongoing Antenna Clinic where we will build various antennas, hoist them up on his multiple towers and actively test them; in this way he will show us how to do it. As a bonus, some of the attendees will be able to take home what is built at that week's Antenna Clinic project. We will build a few at a time so most likely, if you attend, you will get a chance to keep some of the antennas built. By the end of the year all who attend will end up with one or more of the creations. A great reason to attend the full series of Antenna Clinics. Baluns, ladder line,Top Hats and coax mysteries, which are still confusing to me, will be part of the lecture and hands-on lab building series. It is less than one hour drive from Palm Springs to get to Michael's Ham Shack and Machine Shop and well worth ending up with your own series of antennas built under Michael's supervision . His collection of tools, laths, metal working machines and testing equipment rivals his military radio collection. You could potentially end up with hundreds of dollars worth of antennas by attending this Series of Clinics. One can never have too many antennas! This upcoming meeting we will be registering participants. If for some reason you can't make it on your own...sign into our Web site where Evan has put up a registration area for our Clinics asking for a ride and we'll try and pair you up in a carpool We want to make sure you get to attend if you want to participate. Be sure to enter what types of antennas you wish you could have so we can help you build it. Need a hand putting it up at your house?...mention that too and maybe you'll get help putting it up. Just like the good old days of Hams having antenna raising gatherings. Here's a link to our signup area http://desertrats.am/labrats.php Dates will be determined at the next meeting so plan on attending… Hope to see you there!



HYPERLINKS

Desert RATS Website

DRATS Calendar

Riverside ARES

Riverside RACES

ARRL Website

ARRL Newsletter

DX Zone

Ham Radio Links

Orange County Radio Club

Submit Articles to Newsletter

CALENDAR

March 15th 2011
Desert RATS Meeting 7pm
Palm Springs City Yard
Conference Room - Guest Speaker: Michael Brennan, KA6PGN will give a demonstration on Antenna Design

April 19th 2011
Desert RATS Meeting 7pm
Palm Springs City Yard
Conference Room

May 17th 2011
Desert RATS Meeting 7pm
Palm Springs City Yard
Conference Room - Guest speaker: Dennis Kidder, W6DQ from the Microwave Society

June 21st 2011 - Tentative
Desert RATS Meeting 7pm
Palm Springs City Yard
Conference Room - Final Meeting before Field Day

Glenn Morrison WB6RLC

Oscilloscopes

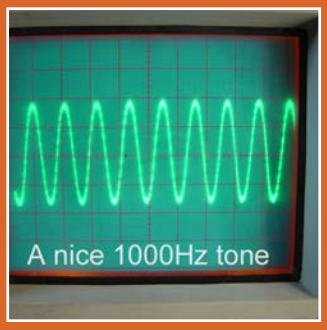
One basic tool that should be towards the top of tool list that a Ham should have in his shack is an oscilloscope (O-scope or just plain "scope"). Along with a good handheld DMM (digital Multi-meter) it is a basic trouble shooting tool that can help you ferret out some basic problems you may be having in your shack. A decent used scope can be found used at yard sales, ham fests or on line and sometimes very reasonable prices. I found my Tektronix 465B at a yard sale for $65. Some good scopes sold at our Hamfest for the $100-200 range.

A scope is a very versatile tool and can do things that a DMM can not, like measure voltages into the RF range up to 100 MHz or more. It will display graphically/visually audio distortion and measure DC voltages. In fact DC to 100+MHZ. You can also measure time and frequency with one.

I've had a problem not getting out. No audio drive. I put the mic onto the scope and spoke into the mic. Yep, the mic is working. I can see my voice. I have also wrapped a few turns of wire around my coax and attached it to the scope. Bingo...a station monitor. I can see if my signal is distorting and if I am over driving the audio. You can trouble shoot most any receiver or transmitter by following the signal down the path using the schematic. Maybe save yourself a bunch of money in repair costs. Is there hum on your DC supply? You can see it if there is. Digital signals too.

A scope has 2 basic functions. They measure time and voltage (amplitude). There is one control that adjusts the sweep rate (how fast the trace moves across the screen). The horizontal control (time base) adjusts the rate from about 1 sec/cm to as high as 10 nanosec/cm. (Oh, by the way,. the screen of a scope has a grid pattern measuring 10 by 10 centimeters in 1 centimeter squares). The vertical input is adjusted from 10 millivolts/cm to maybe 50V/cm. Kind of like a volume control. A signal is brought into the scope either directly or via a scope probe. The vertical and horizontal controls are adjusted for amplitude and time to give you the picture you want. You may need to sync the signal and the scope using the trigger control to stabilize it. Now you just count the squares, vertically and multiply times the vert. amplitude setting (3 squares high x 2 v/cm = 6 volts). Now measure the time between any two adjacent peaks on the signal and multiply it times to time base (4 squares between peaks x 10 microsec/cm = 40 microseconds [0.000040 sec]. That is the time duration of the signal. It takes it 0.000040 of a second to complete one cycle. Divide that into 1 and you get frequency. 1 / 0.000040 = 25,000Hz or 25KHz.

So this is an important test tool to have around the shack. Next time you get a chance to pick one up somewhere, do so. Play with it a bit and find all of the things it can do for you. See ya on the bands.



DESERT RATS BOARD OF DIRECTORS

President:
Peter Reinzuch, VE7REZ
pete.r@mac.com 760-318-0186

Vice Pres:
Glenn Morrison, WB6RLC
Ticntoc@speakeasy.net 760-770-6434

Treasurer:
Pat Case, KG6NXC
rider140@juno.com 760-329-3022

Secretary:
Lisa Kordich, KJ6DZU
kordich@earthlink.net 760-567-8728

Directors:
Gary Boskovich, KD6QLT
sboskovich@dc.rr.com 760-328-9662
Tom McLean, KI6WNF
Kj6wnf@earthlink.net 760-393-1799
Evan De Rouen, KI6WNF
evan@rouend.com 760-578-8101

Trustee of Call:
Henry Richter, W6VZA
henryrichter@earthlink.net 760-325-8196

Webmaster:
Evan De Rouen, KI6WNF
evan@rouend.com 760-578-8101

Newsletter Editor:
John McKee, WB6VKS
johnwb6vks@dc.rr.com 760-567-1492

Website:
http://desertrats.am

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

ARES Digital • 7:30 pm
144.435 Simple

Tidbits

We are starting a new column about Tidbits in the club. If anyone has anything to add, please forward to me by the first of the month at sboskovich@dc.rr.com and we will try to spread the news around.

Clare Gilbertson, N6ODO, underwent knee surgery around the first part of February. She is healing nicely but still having physical therapy. Orin, WW6O did a great job of taking care of her, but looks like she is back to cooking again. We wish you well.

Julie, KJ6FFY and Earl, KJ6DQR Haltman, have been helping Chris Vance, K6YNW, with the net occasionally on Monday nights. Chris has been doing a great job for quite a while and probably pleased to have someone help out when he is unable. They are doing great, also, and we welcome them as net controllers.

We would like to welcome 7 new members since last month. They are: Robert Fox, AG6BL; Dick Hummai, N6XNN; Jim Leighty, W6UJX; Larry, KJ6LWM and Susie Miller; Paul Richeson; and Ron Rusk, KA6QGR. We not only invite you to the club meetings at 7:00 PM on the 3rd Tuesday of each month, but also to the Monday night net. 6:30 PM Newsline, 7:00 PM Net on 146.940 and PL of 107.2 and 7:30 PM ARES Digital Net on 144.435. Be sure to visit the web site at desertrats.am regularly as there are always new thing to see. If we missed anyone please let me know. Would also like to welcome David Axness, WA6WHA, who has recently rejoined the club and was a charter member when the club was first formed in 1961. We are glad to have you back.

Congratulations to Glenda Stults, KJ6MNW, for receiving her Technician Class license on February 4. Glenda has already become a big asset to the club.

On Air Communications Test

Hello everyone, last month La Quinta RACES co-sponsored an on air communications test with ARES. We held the test on 145.550 simplex, many members participated in this event. Thank you to all who helped out and gave reports. I was positioned in the south at 60th and Monroe, I was using my Yaesu VX7 HT (5w) and a Porta-Fox log periodic antenna up on a pole at 16 feet. Reports were good to the cove, Bryan Elsner KJ6JRA was up there with his HT and a mag mount. Good to know that just 5w can make it around those hills! That's not the only good thing, I was even getting reports from as far as DHS and our Miracle Hill EOC! The reports from the north were varied from 5-5 to

Evan De Rouen KI6WNF
Web Master - RivCoARES

5-2, Peter VE7REZ and I could hear each other full 5x5. I had my go-kit with me, and in it was my small brick amp. with 30w and a AGM 7.5ah battery. I hooked this up and my reports to the north got even better. To my surprise I was hearing Gary KD6QLT at his QTH in Palm Springs, and he could hear me! A little bit of power goes a long way. Greg Butler KJ6JWA was roving to different spots within La Quinta and I was able to communicate with him at all points within the city. I packed my HT and antenna back into the go-kit and jumped into the pickem up truck. While running mobile with 50w and a mag mount, I headed further south and east. Comms were good on simplex all the way out to Valerie Jean (66th and 86) where KD6QLT, KJ6JWA and I all had clear contact with each other. Id say not too bad for us "amateurs" and overall it was a successful test of our capabilities.

Now a word from our SEC Bob Turner W6RHK…

"We have completed our first Riverside County ARES net Thursday Feb. 24th. Thanks to all who participated. This net was not just to test your equipment, but also the ARES database. With a few minor exceptions, everything seems to be in good working order. If it has been awhile since you have updated your information, you may want to sign-in and take a look. The database is the backbone of the Orange Section organization so the information needs to be kept current (www.orange-arrl.org). If you know someone that should be receiving these emails, but is not due to old information in the database, please let them know about the net, and that they should update their information. I know that many of you cannot make contact with the Hemet repeater from your location and it was short notice about the net; however, we will still be using this repeater in the future for local ARES check-ins on a weekly basis. So for those of you who can check-in, please do, weekly on Thursday's, at 1900 hours. Plans are moving forward to create a simplex network throughout the region in order for everyone to have an opportunity to check-in, practice serving as net control, and practice handling traffic and passing messages from one end of the county to the other and back again. This is ARES' greatest strength, the ability to communicate nationally, regionally, and locally, down to the "Last Mile". If you would like to serve as net control for one of the Thursday nets, please let me know so that I can get you the roster and script well beforehand. Thanks, and 73, Bob Turner, W6RHK *Orange Section Emergency Coordinator*

Orin Gilbertson, WW6O

Ham Radio Computer Logging Programs

Several folks have asked for some of the information from the presentation I presented at the last DRATS meeting on computer logging programs. This article will briefly summarize some of the information presented.

There are at least four good reasons for keeping a log (or record) of your contacts. First, the log provides information about the contact and the person you conversed with (name, location, work, hobbies, etc.) Second, your contact is recorded for submission for an award (only if you get a QSL card or electronic QSL via Logbook of the World (LoTW)). Third, most computerized logging programs provide an output file in ADIF format (logname.adi) for submission to LoTW or for transfer to another logging program. Fourth, a good log provides a record of your time on the air in case of an enforcement action by the FCC, a notice of infraction by an ARRL Official Observer or suspected RFI emissions.

Computer logging programs can be general or contest oriented. Both types provide for logging the contact call, date, time and exchange. The general program also allows for keeping notes about the contact, details about their QTH and has the ability to sort the log to track your status and progress toward various awards. The contest logging programs keep the logged information to minimum but do include automated features for contest scoring, on-the-fly duplicate contact information, statistics on contact rate, multipliers worked, etc. Both the general and contest logging programs have the ability to interface with your radio and rotor controller. The contest programs generally have the ability to automate the contact with stored memories capable of calling CQ Contest, QRZ this is mycall, contest exchange, etc. These capabilities are available for both cw and voice contests.

A few of the general logging programs I have looked include ProLog 2K, Logic8, AALog, DX4Win, LogWindow, ACLog by N3FJP and LogPlus!. LogPlus! was a DOS program that I really liked but support has been discontinued. I recently have switched from LogWindow to ProLog2K and am having good results. All these programs have the same basic capabilities, each having slightly different formats and bells and whistles. Prices range from about $19 for the N3FJP ACLog program to $129 for Logic8.

Some of the more frequently used contest logging programs include CT (no longer supported by the developer), N1MM Logger, WriteLog, TRLog, and contest specific programs by N3FJP. Again all these programs have the same basic capabilities, each having slightly different formats and bells and whistles. Prices range from free (N1MM Logger) to $75 for TRLog. I have used CT for over 30 years and am sad to see it going. I have used both N1MM Logger and several of the contest specific programs by N3FJP. The N1MM Logger will take some playing with to get comfortable with even the basic capabilities. The N3FJP programs are relatively simple and use is straight forward. Use of any of these contest programs requires frequent update of the files that contain current/recognized countries and prefixes.

Even though you have a computerized logging program, you must go the next step to qualify for any of the various awards available. You must get a QSL card or submit you electronic log to LoTW and get an electronic QSO match. Only when you get the QSL card or the LoTW electronic match can you get the award. Electronic QSLs are also available at www. eQSL.cc but are not yet recognized for major awards such as DXCC, WAS, WAS, etc.

All QSL cards must contain the contact call, date, time, band and mode and your call and location from which the QSO was made. Other information may be provided such as awards, previous calls, etc.

QSL cards can be cheap, hand written cards or expensive cards with high quality photographs of you and your shack, some beautiful scenery or anything else that meets your fancy. Cards may be sent direct to the contact, via the ARRL Outgoing QSL Bureau (for ARRL members only) or via a QSL Manager. Incoming QSL cards can be received through the ARRL Incoming DX Bureau for your call district. ARRL members must provide address labels and postage. The cheapest way is to electronically QSL. QSL'ing direct is the most expensive and has good return rates. QSL'ing via a QSL Manager has excellent return rates and is moderate in price. QSL'ing via the Outgoing QSL Bureau is the cheapest but has lower return rates and a very slow turnaround time.

Contest operation on the 10 meter band is available for all major contests such as the ARRL DX Contest, the CQ WPX Contest, the IARU RadioSport Contest, the CQ World Wide DX Contest and the ARRL 10 Meter Contest. Any of these contests provides a Technician Class licensee a good chance to practice and hone their HF operating skills. Don't be intimidated by the Big Guns. They were once entry level operators also. See you on the bands!!!!

Contest schedules for major contests can be found at www.ARRL.org under On-the_Air and at www.cq-amateur-radio.com under CQ Contests. Other web sites are available with information on many other contests. Information on Logbook of the World (LoTW) can be found at www.ARRL.org. ARRL has the ARRL Contest Update online for ARRL members. Establish your account and sign up under your profile for this publication to be sent to you 26 times a year.