

NOVEMBER 2010

THE MONTHLY NEWSLETTER of the SANTA CRUZ COUNTY AMATEUR RADIO CLUB

SHORT SKIP



Calif. QSO Party

– Jumping into the deep end of the pool

By K6GHA

Once a year all ears turn toward California, at least from an amateur radio contest perspective. It is called the California QSO Party or CQP, and was started in 1967 by a pair of students (more history at <http://www.cqp.org/history.htm>). This is a 'domestic' NA contest where California amateur operators hold center stage for 24 hrs while the rest of the world tries to make contacts with the 58 counties of California, and Californians are trying to capture 50 States and 8 Canadian Provinces. This year (2010, October 2nd and 3rd) had a special meaning for me as this was my first ever contest as an amateur operator. I'll share a bit of my perspective of the experience looking over the edge of the cliff at the water below.

I have to say that all my learning about how to operate in a contest, and deciding to participate in this year's CQP mostly happened in the deep end of the pool, without the aid of flotation devices, and with cement shoes!

Without the short time observing my mentor (Bob K6XX) operating a contest in September, I never would have started down this path. His encouragement and prodding got me off the high dive (or off the cliff) and into the pool. *Note: My perceived success or lack thereof is in no part a reflection of his diligent tutoring, confidence in me, and his patience. I wrote this out of a deep sense of respect and appreciation for his efforts. I am just an average student at best.*

Seeing how contesting is done right, with the right tools, proper equipment, and years of practice, gave me new appreciation for the song 'Smooth Operator', and it is invaluable. Effortlessly he conducted QSO's, handled pileups, and operated the equipment, while telling and teaching me of the software, tools, and process. All this was to

help me in not being a LID (a.k.a tin ear, a reference to the use of a tobacco can lid on the sounder to enhance the audio and aid a poor operator in copying Morse.)

For whatever reason, I said to myself, "Hey! I can do this. It is just phone operation." Similar things are said every day by those with no conscious understanding of what they are getting into. Things like "that dog doesn't look like it would bite, let me pet him", "I can make it through that yellow light, 100 feet from the intersection", and my favorite Darwinian decision "well it shouldn't work, if you hit it with a hammer it shouldn't explode, here let me try!"

So, knowing that the contest began Saturday morning (16:00 UTC), I started downloading contesting software at 8:30am (15:30 UTC). *Note to self, NEVER, NEVER, NEVER wait until the last moment to A) download new software, B) read the contest rules, C) miss taking advantage of a Friday night pre-event practice session, and D) inform your family you won't be around for the weekend.* All of the above add to owning the label of LID... or MUD from a family perspective.

Ok... let's advance the timeline 5hrs later into the contest when I finally have loaded the software, briefly reviewed the "how to" video, listened to a few (hundred) QSO's, and have set up my computer with (hopefully) the right contest template to log my contacts. The eventful moment has arrived! I am at the edge of the cliff and ready to jump, but now I have a moment of indecision with yet another choice to make, do I just want to 'hunt and pounce' or actually call CQ for contacts?

Scanning the frequency and listening to all the stations calling CQ, and then managing the pileups from other states causes me to breakout into a cold sweat, my bravado and nerve fail me once again... Um... 'Hunt and Pounce' seems like the right answer because

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Holiday Luncheon (and Raffle)

Time to Make Reservations for the December 11 Holiday Luncheon (and Raffle)!

This year we continue our tradition of a festive holiday luncheon at Marie Callender's in Capitola. And again this year, if you renew your membership when you pay for the holiday luncheon, you'll get an extra five (that's right, five!) raffle tickets in addition to the one raffle ticket included with your \$20 for the luncheon.

For most of you, luncheon plus dues will be \$45 (dues for each additional family member are still \$6), preferably paid ahead of time, either at a Club meeting or by mail (SCCARC, P.O. Box 238, Santa Cruz, CA 95061-0238). Of course, you may also pay at the door, but

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K9YC November Speaker

On November 19 Jim Brown K9YC will give a talk to the Santa Cruz County Amateur Radio Club on the subject of Common Mode Chokes, also called (incorrectly) current baluns.

Jim will cover what they are, what they do, and why we need them. In the process, he will also talk about ferrite chokes in general, how they work, and their fundamental equivalent circuit.

Jim is a distinguished local ham and an active tester. He is the author of section 24.2 of the 2010 edition of the ARRL Handbook for Radio Communications and has contributed to other sections. There will be more material by Jim in the 2011 and later editions.

Other papers by Jim can be found at <http://www.audiosystemsgroup.com/publish.htm>.

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CLUB MEETING FRIDAY NOVEMBER 19, 7:30PM



By Art Lee WF6P

CHATTER

After reading a disturbing article about the complexities and expenses of new car maintenance these days, it is no wonder we shade tree mechanics feel inadequate. The November issue of Popular Mechanics article, "Costly Repair Bills," cites complicated problems with on-board computers and sensors controlling everything from idle speed, rpm, ignition timing and air-fuel ratio. With shop rates at \$100/hr or more, shops have to hire highly skilled technicians able to operate \$7000 scanners to access thousands of manufacturer-specific trouble codes. I guess I can retire my strobe timing light, distributor feeler gages, vacuum gages and other archaic tools of the auto tuner-upper. The article concludes with "Shops used to be able to get all they needed from one fat (and oil and grease stained!) Motor Manual for \$40." My buddy Tim Foy, AA6GP, is the owner of Foy Engineering, near Ventura Harbor. Tim was a resident of Ben Lomond until about 15 years ago. He has been in business for years doing "reverse engineering" for obsolete aircraft parts. Herb Lundin, WA6LOB, of Santa Cruz, does much of the engineering drawings.

In my on-the-air chats with Tim, he tells me of the trials and tribulations of designing and building a prototype hydrogen engine. He may have to hurry as GM and Vauxhall will have one on the market within the next 10-20 years. Called the Hy-Wire "car of the future," it uses a hydrogen tank and fuel cell for developing electricity to drive the wheels and electrical system. Hydrogen is extracted from salt water. After use, the only emission from the exhaust is plain water. One very neat thing about the car is that after removing a few bolts and the disconnect cable, the entire body is lifted free of the chassis exposing all systems and vital components. No batteries required. Looks like a dream car but I would fear that some wag would label it the "Haywire" car if he wasn't happy with it. The cost? I'll have to ask Ron, W6WO, to clarify, as it is listed at 5 million quid.



If you have not attended one of our bi-weekly sessions you may be curious about what goes on.

In short, and in old English, yer pays yer money (free) and makes yer choice (we discuss almost anything technical even barely related to Ham radio). Three topics come up time and time again and here are the kind of questions might you encounter

Antennas, Grounds and Soldering.

I have heard about isotropic radiators, how good are they and where can I buy one?

Grounds, What is and is not a good ground ?

Soldering ,Is it better to apply high heat for a short time or a low heat for a longer time.

Please note that most questions can be answered at levels to satisfy both newcomers and old hands.

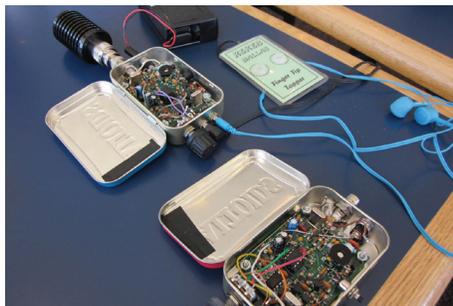
So come with questions and leave with answers (or at least a variety of opinions) plus we love mystery items and exhibits of any kind

We meet at GIGI's bakery at River St and Hwy 1 shopping center at 10:00AM each second and fourth Saturday of each month.

CAKE Crumbs Oct 9th

This was a morning for the flea market in Cupertino and several of our hardy souls set off at 6:00 AM (yours truly not included). The prized items were a mint condition copy of one of Bill Orr's famous books and many copies of GE Ham News from 1949 and onwards. One book that fascinated me was " Below Ten Meters" by James Millen and Robert Kruse; a subject where hams were the pioneers.

Dallas K6KEB showed his K1SWL Micro-mite radios for 40 and 20 meters. The QRP long-wire tuner under construction showed



the really great job on his first toroids. Don K6KHA is having much fun on HF and had just made his first QSO using the SPLIT mode to work some rare EU DX. Don has made good use of HRD to print out attractive maps pin-pointing his DX contacts. The world-wide system of NCDXF HF beacons are very helpful so listen on 14100 cw where you at about 10 minute intervals when you will always hear W6VX at 100,10,1,0.1 Watts Next in sequence comes KH6WO in Hawaii followed by others

Here are some crumbs of conversations. 813s at 25cents each , MOOG Synthesizers, use of 900 MHz for hair removal (no kidding its approved by the FCC). Being only one hair at a time one wag said it gave a whole new meaning to a hair cut. The adaptation of Wi-Fi for military purposes was a topic both Eric K6EP and Tom KW6S had in common. CAKE sessions are a fun place to increase one's vocabulary eg. Spectral Growth= IMD ZigBee=Mesh Networking.

When next looking at the colored bands on resistors you may recall this . Better Be Right Or Your Great Big Adventure Goes Wrong.

We invite inquiring minds so come with questions curious items.

CAKE Crumbs Oct 23

It was opportunistic checking into the resource net for a simulated emergency test today as I drove in and heard quite a few others doing the same, many of whom were on emergency power. Viz-a-viz ECOM, the recent breakthrough of a software modem approaching PACTOR performance was mentioned in the recent QST, so much super software out there these days

Once more Don K6GHA came up with a packet of issues of Tecnews published by the Electric Supply Co of Oakland back in the 50s. I marvel at the topical nature of this well-written material mainly the work of Clayton Bane W6WB. Time honored topics like matching a ground plane vertical, bandpass filters, bending and finishing metal, on and on and on. Don parted with \$1 for all and I think this stuff is priceless and should be preserved. Does anyone have experience with direct scanning to PDF ?

We saw the very first synthesized 2 m handheld radio called the Tempo and a picture of a fine piece of home-brew by Gino Campioni circa 1963

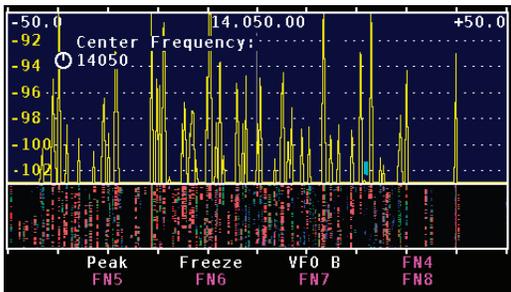
Kerry K6RRY "enlightened" us with his tales of violet lasers and photo-luminescent paint to create a contemplative environment in the form of a simulated Japanese garden with rain drops and Koi ponds. Whatever next Kerry ?

It was good to have our trusty Short Skip Publisher Ron K6EXT join us with his SW40 radio, one of these would be a good step up

for you Dallas. The Yeasu FTDX 9000D looks impressive but may require you to take a new home loan. Tom KW6S raised an interesting question of how good does your radio need to be to make any significant difference and naturally it rather depends on what operating conditions you enter into and your drive to win. As a sanity check look at how its spec compares with the humble FT857D and the testing done by Sherwood Engineering. <http://www.sherweng.com/table.html>

We had an interesting discussion on how a panoramic display can provide competitive edge when using SPLIT mode with either a single or with a second RX.

The idea was floated to arrange a group grope over in the valley where we can take in a variety of useful stores like HSC, Electronic Surplus, Fryes, HRO etc. Anyone have van? Several at the session said they would welcome an Open-Shack event but would have to limit the numbers who would plan to attend so watch out for announcements.



SS Contest I630Z November 11

Notes from Other Clubs

SCCARC (Santa Clara County ARC): The club runs a 10-meter SSB net (28.385 MHz USB) on Thursday at 8:00 p.m. There is a Technician class and exam on Nov 13 at West Valley College. Warren Gilleran, KD6UD, is a SK; his station has been donated to the club and will be auctioned, first to club members and if anything is left then to the public. The major items are a Kenwood TS-180, a Yaesu FT301SD QRP rig in fair condition, and a Yaesu FR101 HF through 6m receiver.

K6LY, the NPS (Naval Postgraduate School) ARC: K6LY members will join NB6GC at their meeting on the USS Hornet Museum Ship in Alameda Saturday, Nov 13, at 1300 hrs.

Loma Prieta ARC: There will be a fox-hunt in November.

—WS2I

Cal QSO

all I have to do is manage ONE call or QSO at a time, not the Tsunami of calls that would come in if I called CQ, right?! I mean, it is one thing to select your target and another to announce to the world the target on your chest! For the next hour I selectively, slowly, deliberately engage in this interesting ritual of searching, getting set, making contact, passing traffic and logging the response.

Palms sweating, heart racing, fingers trembling, listening intently, and spinning the dial, I key the mic and blast through contacts. After an hour I look up. Where did the time go? *Note: Bob completes about 100-120 QSO's, on a bad day, in an hour...* I have completed 12... yes, twelve. I take a break.

Now here is my short list of other considerations (which I didn't fully comprehend or appreciate) that need to be dealt with when considering contesting, as a first time contestant:

Bands are not always open when you are ready to participate. Learn about propagation and where activity might be located.

Know your logging software. Take the time to be familiar with its strengths and weaknesses. Learning in the contest happens, but preparation allows you to maximize your time OTA.

There is a need to have two hands on the keyboard to enter QSO contact information. And translating what you hear to data entry isn't as easy as it seems. Is that Alpha or Oscar?

Headphones and a boom mic improve efficiency; you don't have to hold and key the mic with one hand and try to type with the other hand at the same time.

A foot based transmit switch comes in handy, I liken it to playing a drum set and keeping the base beat.

Having experience working a pileup is a good thing, as is practice calling CQ and working on HF prior to contests. Don't just answer those who are calling, be a caller!

Take advantage of Elmers at field day (or mentors all year long) to learn at the GOTA station or other stations, and as a benefit you have their captive attention. It is better to learn with others than learn by yourself and/or at contest time.

A few questions I am still pondering; Why are there so many loud Texas stations? Why are there so few ham operators in Rhode Island? Why don't I have a voice Monday morning? And, why in my dreams last night I kept hearing myself repeating "CQ CQP California

QSO Party, CQ..." and getting no replies from the static filled ether?!?

In conclusion, I made some great contacts on Sunday the next day, when I did finally get the nerve (and practice) to call CQ. In addition, I was able to work some of you folks who were also participating in the CQP. For me it was quite nice hearing and working some familiar and friendly local voices (N1WC, AE6RF, KE1B, and of course K6XX) who recognized me.

While I didn't achieve the lofty goals I set for my first contest, I did learn a lot about what I need to change at my station, as well as how to improve my performance. Without the help from Bob (K6XX) and all the contesters (and with a little push from the cliff) I never would have known the fun of the freefall (commitment to participate), the reality of the cold water (pulling it together for the first time), and the exultation of breathing again as I surfaced (completing my first contest). Now all I have to do is learn how to swim (and submit my results electronically)! I guess the story continues.

If you haven't jumped in the pool, don't wait. Ask about the process, maybe you will have the fortune to find a mentor as I did willing to place his or her hand in your back, smile knowingly at what you are about to do, and give you a gentle push over the edge. You don't have to be Mark Spitz (7 time Olympic medal winner) out of the gate to participate. Bottom line, the water is fine ... dog paddle!

For more information on the California QSO Party, and free contesting software, go to: <http://www.cqp.org>.

LID definitions courtesy of <http://www.ac6v.com/hamlid.htm>

Luncheon cont. from pg. 1

we need your reservations made by Sunday, December 5--by email to ki6aie@k6bj.org or by phone to (831) 476-6303.

We'll start checking folks in at 12:30 PM, with the meal starting at 1:00; the servers will ask for your choice among turkey, meat loaf, and chicken (also a vegetarian option), along with choice of beverage and pie.

And while you're looking around for items for our November auction, why not gather up some choice pieces for the raffle as well? The Club will provide some nice "store-boughten" prizes, but member-donated items will also be very welcome (and are often among the most entertaining prizes!).

—Kathleen, KI6AIE, SCCARC Treasurer

Sun Spot Projections

We hear many voices keenly looking forward to improved HF propagation as the cycle continues. With improved propagation will come new challenges, As a frame of reference let's look back to 1957.

1957 was an outstanding year for science, it brought the first satellites and an unprecedented rise in sunspot activity. It was described in CQ Magazine that January as "Amateur Radio's Greatest Year". HF was truly magical and this graph surely tells the story.

This was an era when dial tone was often scarce let alone long-distance dialing and cell phones. I can well remember what it felt like to work all over the globe on one band or the other; using AM and CW at any time day or night. It was simply unique and magical.

We are now hovering around where we were in 1955 so for the purpose of thinking ahead just imagine what it might be like IF in 3 years we reached a SSN even close to 170.

Given the great advances and availability in technology, amateur radio would once again provide reliable world-wide communications. So what! Isn't inter-personal communications across the globe the purpose of our hobby? My response is a qualified yes.

Couple this scenario with the probability of a great increase the number of amateurs joining the hobby from other major economies (I don't recall any JA's in 1957). So what! Isn't growth in membership essential? Once more a qualified yes.

Here's what's bothering me. If communications via Ham Radio becomes as predictable as Cell Phones, what we could lose is the magic, the challenge and need for skill. The incentive to become an amateur may become that it is essentially free.

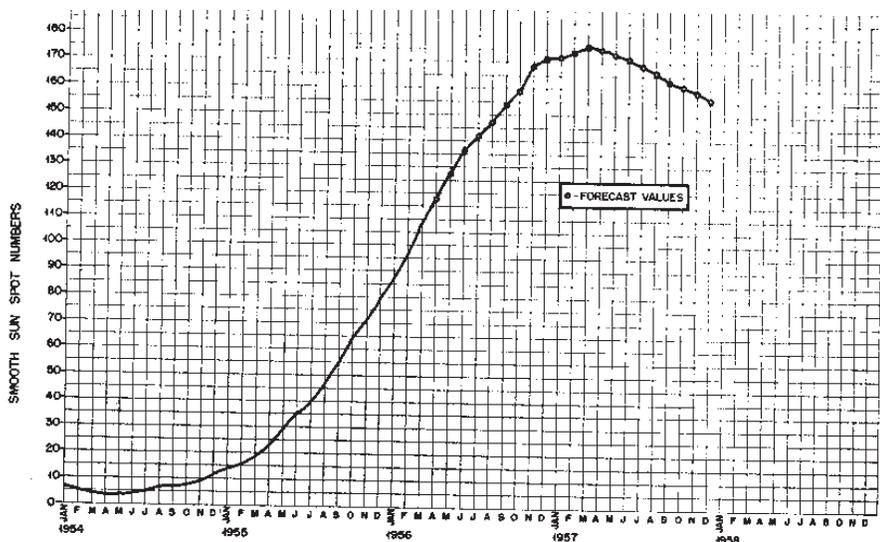
I accept the argument that there is strength in numbers but you already know how congested our bands become during any significant contest. Even with a SSN below 20 a contester can become irritated by a rag chewer and vice versa. Just imagine the congestion if the numbers of users grow by several orders of magnitude.

Having so expressed some anxiety, bear with me because I am confident that our hobby will flourish but only if a) we find ways to communicate that go beyond "shooting fish in a barrel" and b) develop and apply technologies for using spectrum that go beyond filtering and noise limiting.

To the first point, vast sections of our allocated spectrum have so little use that we stand in peril of losing them. Let's be pioneers once again. To the second point let us use modern techniques such as frequency agility and robust coding to increase our ability to share spectrum. We should consider abandoning self-imposed allocations within our bands based on mode as this seems to me to represent a SW broadcasting mind-set.

George Jacobs (W3ASK) concluded his article in CQ with these words. "We may be at the beginning of a new scientific age which presents a stimulating challenge and the future of our hobby may depend upon how well this challenge is met". Great foresight George

—Ron W6W0



Zen and the Art of Radiotelegraphy

By Dan Romanchik, KB6NU

One thing that I find amusing about Morse Code is that the more people claim that it's dead, the more people there are that rise up to defend and promote it. Note that I said "defend and promote it," not actually use it, but that topic is for another column.

Having said that, let me direct you to a new tome on our ancient art, Zen and the Art of Radiotelegraphy by Carlo Consoli, IK0YGJ. This book is available as a free download in the original Italian (http://www.qsl.net/ik0ygg/enu/ZART_ita_v20100826.pdf) and in an English translation (http://www.qsl.net/ik0ygg/enu/ZART_r20101008m.pdf).

What makes this book different from others is that instead of concentrating on the mechanics of learning and using Morse Code, the author spends a good deal of time talking about the psychology of learning this skill. To succeed in learning Morse Code, Consoli advises that we need to change our approach to learning:

"When learning CW, therefore, we must establish a new component in our self-image and, when doing so, we need to be relaxed. Always practice during the same time of day and in a place where you can experience positive feelings of comfort and pleasure. When we make a mistake we are always ready to blame ourselves. This is the way we learnt from our environment during childhood, often accepting any fault as our own error or weakness. This potentially destructive mechanism can be used to build a positive self-image, rather than demolish it. A mistake must be considered a signal, pointing us in the right direction. If you fail, let your mistake pass away, with no blame or irritation. Learn CW in a relaxed mood, enjoy the pleasure of learning something new, repeat your exercises every day and be confident in the self-programming abilities of your self-image. Just a few minutes a day: you can take care of your 'more serious' stuff later on."

Consoli also has some interesting things to say about getting faster. He agrees with me that it's essential to abandon pencil and paper and start copying in one's head. We also agree that at this point, you need to start using a paddle instead of a straight key.

He has analyzed the situation a lot more than I have, though. When hams ask me how I

Continued next page

SCCARC Board - 2010

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	Rich Olsen	W1WUH	464-7474
	Cap Pennell	KE6AFE	429-1290
Board	Jeff Watson	W6NA	
	Allen Fugelseth	WB6RWU	475-8846

MONTEREY BAY REPEATER ACTIVITY

Santa Cruz County	K6BJ 146.790- PL 94.8 Santa Cruz (linked to KI6EH) KI6EH 147.945- PL 94.8 Watsonville (linked to K6BJ) K6BJ 440.925+ PL 123.0 Santa Cruz (not linked) • SCCARC Net Monday 7:30 PM 146.79- /147.945- /147.180+ linked • SCCARC 10 Meter Net Monday 7:00 PM 28.308 MHz USB
ARES Net	SC County Wide ARES Tuesday 7:30 PM on 147.180+ PL 94.8 and 443.600+ PL 110.9 linked
San Lorenzo Valley	WR6AOK 147.120+ PL 94.8 Ben Lomond • SLV Net Thursday 7:30 PM
Loma Prieta	AB6VS 440.550+ / AE6KE 146.835- PL 94.8 (linked for net) • LP ARES / LPARC Net Tuesday 7:15 PM
Monterey	K6LY 146.97- PL 94.8 / 444.700+ PL123 (linked for net) Monterey • Monterey Co. ARES Net Wednesday 7:30 PM K6LY 146.970- (PL 94.8) • NPSARC Net Wednesday at 8 PM on K6LY/R
LPRC	WR6ABD 146.640- PL 162.2 / 442.900+ PL 162.2 (winsystem.org) • LPRC Net Tuesday 8:00 PM 146.640-(PL 162.2) • Amateur Radio Newline broadcast Tuesday

• Santa Clara Valley Section Traffic NET Tuesday 9:00PM 146.640- (PL 162.2)

FOR MORE INFO SEE: <http://www.k6bj.org/freq.html>

SCCARC Calendar of Events

ARES Meeting (prior to club meeting)	Friday	Nov 19
SCCARC Meeting	Friday	Nov 19
Cake Meetings	Sat	Nov 13, 27
Board Meeting	Thursday	Nov 18
Luncheon	Saturday	Dec 11
Short Skip articles due	Mon	Dec 13
SCCARC Meeting	Friday	Jan 21

MONTHLY MEETINGS.

The SCCARC Meets at 7:30 PM, on the **THIRD FRIDAY** of the each month (except December). Meetings are at Dominican Hospital, Education Center, 1555 Soquel Drive, Santa Cruz.

NET CONTROL SCHEDULE

(Subject to Change)

11/15	Tom K6TG
11/22	Chris KG6DOZ
11/29	Byron N6NUL
12/6	Greta KI6NTL
12/13	Phil KE6UWH
12/20	Tom K6TG

Short Skip is published 12 times per year. Free to members.

Santa Cruz County Amateur Radio Club, Inc.

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Columnist: Art Lee, WF6P

Writer: Ron Skelton, W6WO

SCCARC Election

At the November 19 general meeting we will elect officers and directors for 2011. The nominating committee, consisting of David Copp WS2I and Kathleen McQuilling KI6AIE, has identified at least one person who is willing to run for each office, with two exceptions: we need at least one VP candidate and at least one more Director candidate.

We know that there are many members of the club who would do a great job on the Board, and enjoy it. Board membership does not consume a lot of time.

Please send e-mail to Kathleen (ki6aie@hotmail.com) or me (dhcopp@yahoo.com) if you would be willing to serve.

Thanks es 73,

David Copp WS2I

Treasurer's Report

The October 2010 Treasurer's Report presented to the Board of Directors showed that the SCCARC treasury had \$3,286.02 in cash and bank accounts. At that time all financial obligations for which invoices had been received had been met. The full Report, incorporating the current working budget as well as actual and projected income and expenditure figures for the full calendar year, will be available for review at the November 19 Club meeting.

—Kathleen KI6AIE

Speaker cont. from pg. 1

Jim is the Chair of the AES (Audio Engineering Society) Technical Committee on EMC (electromagnetic compatibility), Vice-Chair of the AEC Standards Committee Working Group on EMC, and principal author of all current AES Standards on EMC.

The talk will be on Friday November 19, 2010, at 7:30 p.m. in the Dominican Hospital Education Center. All hams and the general public are invited.

Zen cont. from pg. 4

learned to copy in my head, all I can do is to relate my own experience, which is that one day, I just went cold turkey. I put down the pencil and paper and never copied letter-by-letter ever again.

Unfortunately, that doesn't seem to work for a lot of operators. If that doesn't work for you, Consoli says that what you need to do is to program yourself to copy in your head. You do this, he says, by relaxing and visualizing. Visualize yourself as a high-speed operator, and one day, you will be one.

That seems to have worked for him. He is a member of the Very High Speed Club (VHSC), First Class Operator's Club (FOC), and has been clocked at copying over 70 wpm.

Will it work for you? I'm not sure, but if you haven't been successful with other methods to improve your code speed, then Consoli's methods are certainly worth a try.

When not pondering the psychology of operating CW, Dan actually operates CW. You'll find him almost every day on either 40m, 30m, and as we transition to winter here in North America, 80m. You can e-mail him with comments or questions at cwgeek@kb6nu.com.