

A P R I L 2 0 0 9

SCOPE

A newsletter by and for the Palomar Amateur Radio Club of San Diego, California.
See SCOPE in color on our website at www.palomararc.org.



Above, contesters successfully work at W6HCD with K6QK Harv's trailer. See more photos on page 3 and 4.

146.730 Repeater Update

Evaluation by Art KC6UQH showed a crack in the ceramic substrate of the PA module. Soldering the broken trace brought it back to life. Art installed a new PA module and checked the mounting surface. According to Mike K6MRP, the repeater was back on the air 23 March 2009.

Save the Date!

Club Meeting
1 April 2009

Board Meeting
8 April 2009
7:00pm at W6GNI
QTH.

EARS Auction
9 April 2009
7:30 p.m. at
The Escondido
Salvation Army,
1301 Las Villas Way,
Escondido

Electronic Delivery

You can choose! If you still want to get this newsletter the old-fashioned way, printed on paper and delivered to your mailbox, you can. But if you don't need the paper copy, you can save the club some money by getting your Scope online. As a bonus, the online version is in color!

You can always find the Scope on the web site. To help you remember to check the web site, you can sign up for the Scope-notice mailing list and get an email reminder each time a new Scope is posted. You can also choose to have the Scope emailed directly to you by subscribing to the Scope-PDF mailing list.

Go to www.palomararc.org and click on Newsletter.

To stop the paper delivery, notify Membership Chairman Al, W6GNI, at membership@palomararc.org, and include your call sign, name, and address just to be sure.

Club Reports

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

March General Meeting

Terry Runyon K3PXX did the talk for the March meeting. Meeting photos at left and below by Paul KB5MU. Terry covered the role of different groups of Hams in emergencies. R.A.C.E.S., A.R.E.S., C.E.R.T. Salvation Army, and the Palomar Amateur Radio Club.

February Fold and Staple

WA5ACE Sonny KB6NMK Jo
W6GNI Al & Kathy
KB6YHZ Art

Membership Report

New Members Joining PARC WB6PIE, KI6SHB, N1ROE, WB6JHQ, KI6SBW, WA6RDB, and K6BKI. In addition, THREE past members reinstated their membership. Of course we welcome all members, new and "old", even "new" old timers.

We are always seeking helpers to encourage membership in the club, and to help retain the members we have when renewal time comes about.

Please check your SCOPE label for your renewal date. If you are receiving the SCOPE by Web, please remember your renewal date, or drop by the membership table at the meetings to find out your renewal time. If you have changed e-mail address, please let me know so we can send an e-mail reminder when your club renewal is due. In the near future, we will publish the last two letters of the calls of the Web SCOPE folks for reminders to renew (for those that we do not have current e-mail addresses).





S E S A M E Q M G S S T A R W O R T P
 E D U T K X V U N C H A P L E T G E O
 P E I C H R I S T M A S F L O W E R P
 A U O R M O O K Z N U P H A R E Y A P
 L T H U I V L P I W I I C Q V S L M Y
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 M I M O S A I H E N N A U E D Z P G L
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April Showers

Find the words listed below

Agave, aloe, annual, arum, aspic, aster, avens, balm, bellis, briar, broom, Canterbury bell, chaplet, Christmas flower, clover, coleus, cosmos, datura, deutzia, Erica, flag, flora, geum, gorse, henna, iberis, iris, ixia, lilac, lily, linum, lupin, marsh marigold, may, Michaelmas daisy, mimosa, musk, nuphar, orchid, orchis, orris, oxlip, pansy, peony, petal, pink, poppy, rambler, rose, salvia, sepal, sesame, starwort, stock, thistle, thrift, tiger flower, tulip, viola, weed, weld, whin, wisteria, wold, xanthium, yucca, yulan

Special Challenge: Find the hidden bonus word revealed in the unused letters.



An avid group of PARC contesters have found the ideal site to light up the airwaves. N6KI/Dennis, NN6X/Paul, N6EEG/Dave, KY6LA/Howard and W0NI/Tom raised a 40m beam on K6QK/Harvey's (SK) trailer mounted tower at the QTH of W6HCD/Nash in Bonsall. What a fantastic site! We are going to have a bodacious signal on 40 meters said N6KI/Dennis. The long time QTH of W6HCD/Nash appears to be on top of the world with an unobstructed 360-degree view, no power lines and just an occasional bird to float overhead.

The trailer/tower has allowed the contesters to travel to several remote sites and quickly set up the 40m beam. Designed and built by Harvey Hiller the trailer was used at several PARC field day events and now owned by the contest team. No doubt some top scores will be logged from the site in the days to come.



Photos by W0NI

More on CW Skimmer

SDR Concepts In Action

By Paul KB5MU

Last month I wrote about CW Skimmer, a program from VE3NEA that lets your computer copy every Morse code signal on a band. I predicted that contest rules would be changed to cover programs like CW Skimmer. After a little more research, it turns out that my prediction has already come true.

As you might guess, the ARRL has a Contest Advisory Committee to study issues like this one. There's a representative from each division plus a few liaison people from ARRL headquarters. They made the following recommendations:

1. *Multi-channel decoders should be allowed in ARRL contests.*
2. *Multi-channel decoders should not be allowed in the Single Operator category.*
3. *Use of information gathered by multi-channel decoders during off times should not be permitted.*
4. *The Single Operator Assisted category in ARRL contests should be renamed Single Operator Unlimited.*
5. *Rules for remote receivers apply to remote multi-channel decoders, including the exception for spotting nets.*
6. *Multi-channel decoder spots should not be banned from spotting networks.*
7. *Robot QSOs (contacts made by automated means independently of a human operator) should not be permitted.*

You can read the entire report from the ARRL Contest Advisory Committee at <http://www.arrl.org/announce/reports-2009/january>

The organizers of the CQ World Wide DX Contest reached a similar conclusion. The rules for the 2008 contest included this provision:

"QSO alerting assistance of any kind (this includes, but is not limited to, packet, local or remote Skimmer and/or Skimmer-like technology, Internet) places the entrant in the Single Operator Assisted category."

The CQ committee apparently wasn't worried about using the word "assist" to describe what CW Skimmer does for the human operator, or about trying to define exactly what it means to be "Skimmer-like".

If you want to read nearly endless discussion about the consequences of allowing CW Skimmer to be used in contests, and about everything else related to contesting, the CQ-Contest mailing list at www.contesting.com is a great resource. You'll find quotes like these:

"CW Skimmer is a major slide down the slippery slope to automatic station contesting." — Steve K9ZW

"For many, especially those who feel that "packet ruined contesting" or that "packet ruined DXing," this may turn out to be the "packet ruined contesting" of the 21st century." — Doug KR2Q

"Whether you are for this type of software or against it, one thing is for certain....The face of contesting and dx'ing is about to be changed. Whether it is for good or bad remains to be seen." — Jack K4SAC

"I think this sort of stuff is great for the hobby — it shows that we continue to embrace technology for communicating through radio waves. It will be interesting to see where this program takes the hobby." — Scot, K9JY

"As the [ARRL DX] contest went on (during the EU opening when there was stuff to work), I had to wonder why I was even bothering to tune on the S&P radio. If someone was calling CQ and we needed them, the skimmer almost always found it before I did. Sometimes the skimmer would go down, or the band would change in a way that the skimmer didn't have propagation anymore...especially during Asian openings. And the skimmer busted things. But it was extremely effective most of the time." — Pat N9RV

continued on page 8

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Minutes of the Palomar Amateur Radio Club Board of Directors Meeting held on February 11th 2009

---Treasurer's Report

Georgia KI6LAV distributed the treasurer's report for December. Total Assets were \$11,096.14. The prepaid dues were \$6321.00. Elimination of unused phone lines was discussed. A stop order will be placed on the unused lines. The safety deposit box in Escondido was opened and inventoried. All items (club papers) were scanned and stored by Georgia KI6LAV. The Post office accounts and amounts were reviewed and discussed. Loren AD6ZJ made a motion to approve the treasurer's report and was seconded by Mike K6MRP. The motion carried.

Discussion Items

1. K6DEX variance – Bob, K6DEX needed to go to the city of Oceanside council to get his antenna approved. The city was requiring a NEC plotting report. This report was available through the ARRL. The ruling was in favor of Bob but he still needs to get a soil test conducted.
2. PARC special calls. W6P, W6A, W6R and W6C will be on the air during the month of February
3. ARRL ARES board election

is coming up March 14th at Scripps Memorial Hospital
4. San Diego DX club has put together a legal response to the city of San Diego's new ordinances on antenna towers. Does PARC need to do anything in this regard? Not yet asked.

5. Scope articles needed. Cutoff date is the 18th.

Future Topics:

-April – Lin Robertson KJ6EF – Vintage broadcast radios

Membership Report: Presented by Al W6GNI
Current club membership is 351.

Repeater Site/Technical Report: Presented by Mike K6MRP

- The repeater site is cold with lots of ice. This time of year the power outages can be for several hours. The site had a 9 hour outage this week. The "P" was reset earlier in the day but we were still on battery power. Discussion – should we rest the "P" if power is still out? At the last club meeting there was a discussion about changing the deviation. While we discussed the issue, no change was made. A CO2 fire extinguisher is needed at the site. Mike K6MRP made a motion to purchase a CO2 fire extinguisher for the shed for \$142.00. Seconded by Paul KB5MU. The motion passed.

Old Business:

-Field day – Mark Baldwin will check on the baseball fields and Bradley Park as a possible field day site. Actively looking for a good site.

New Business:

- Repeater usage by David Hieser. Sunday February 22nd for coordinating CERT operations during the bicycle race. PARC board agreed to let the operation use the 147.130 repeater (PL107.2) for Saturday the 21st and Sunday the 22nd as needed. Loren AD6ZJ will inform them on the authorization to use the repeater.

continued from page 5

Contesters will also be interested in the potential for CW Skimmer to be used by contest organizers to help with enforcing the rules. CW Skimmer can record everything on an entire ham band for the full duration of the contest. It wouldn't be too hard to place a few CW Skimmer stations at strategic locations around the country or around the world, and record virtually everything that happens in the contest. This information could be analyzed extensively after the contest, and some kinds of cheating would be easy to detect.

For the rest of us who don't organize contests, check out skimmer.dxwatch.com. It's a database on the web that is fed by many stations around the world, each running CW Skimmer to survey the bands and feed information about what stations are heard to the central server. Where a PacketCluster only reports on stations deemed to be of special interest by other DXers, this "reverse beacon" arrangement reports on every station heard calling CQ. Or misheard. As I write, the web page shows both W8AC and W8ACM on the exact same frequency at the exact same time. One of these is probably a mistake CW Skimmer made in copying the callsign.

The widely-respected Pakistani programmer Achmed, AP1RL recently released the next big innovation in amateur radio automation: SSB Skimmer. This program does for voice communications what CW Skimmer does for Morse code. Using the latest in voice-recognition technology from software giant IBM, it is able to recognize CQ calls and a wide spectrum of special contesting procedures and shortcuts. You can configure it to watch for keywords of special interest to you, so you need never again miss an exciting discussion about the San Diego Chargers or the AIG bail-out.

Download it now from www.palomararc.org/tech/ssb-skimmer.html – it's free!

Special Event Report

During the month of February PARC celebrated its 73rd anniversary. As part of the celebration several members were issued special 1x1 call signs. Each of 4 1x1 calls was used in the four consecutive weeks during the month. By working all four stations you were able to spell PARC with the suffixes. These stations were active on the repeaters as well as HF and VHF simplex but each call was only on for one week. There will be a special QSL card for stations that worked all four and spelled PARC. 73 Loren AD6ZJ.

PARC Anniversary Call for Volunteers

The Palomar Amateur Radio Club began in February 13, 1936 as North San Diego Radio Club. The name changed to Palomar Radio Club prior to the June 1936 publishing of QST. Association with ARRL began on May 8, 1937. February 2009 marks our 73rd anniversary. Two more years will be our 75th and we would like to do something very special.

First, we would like a volunteer to lead the 75th anniversary organizational effort. We would like to see events throughout the year take advantage of our anniversary theme.

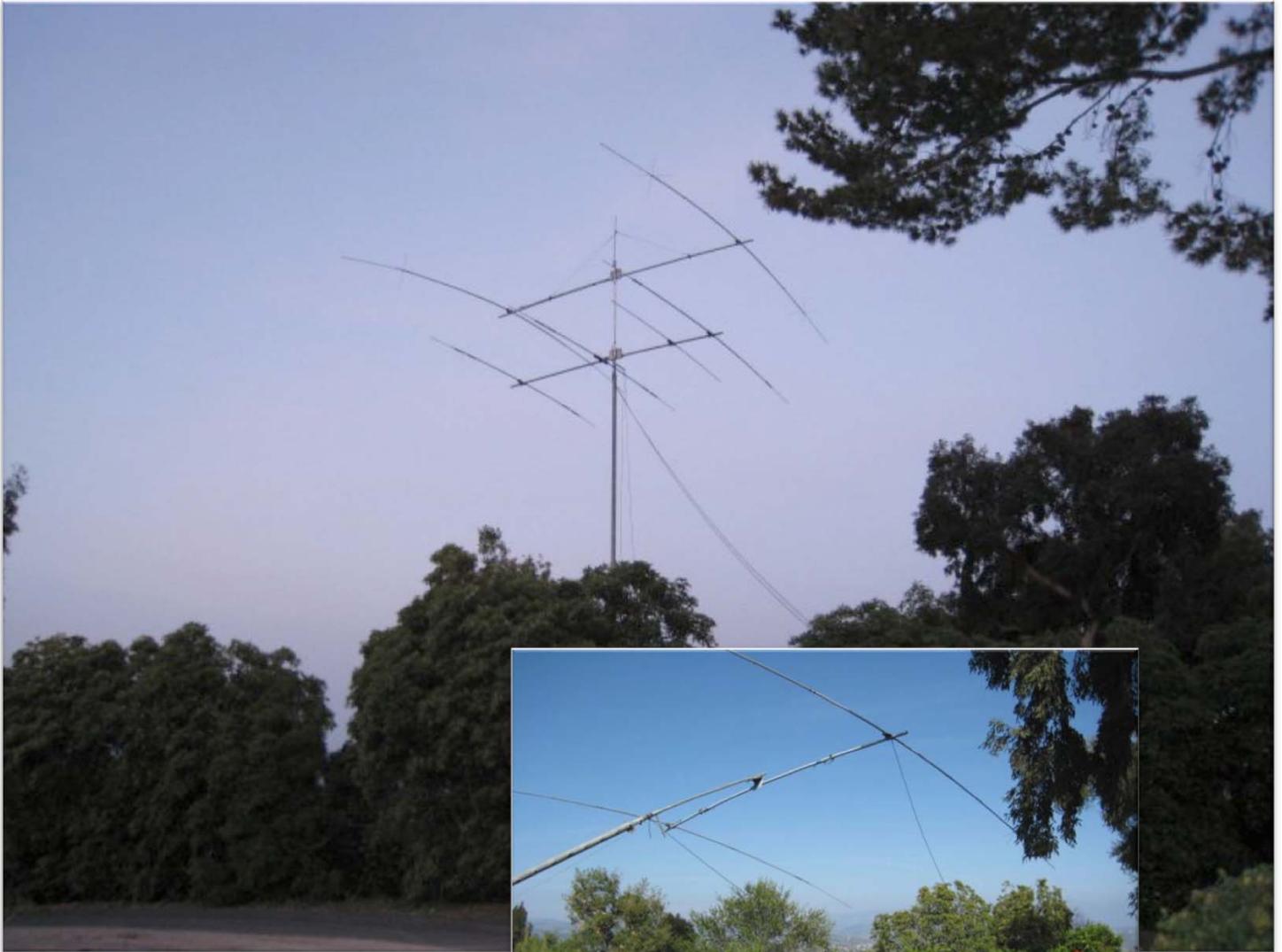
Second, we would like to hear from all of you that may have any stories, memorabilia, documents, photographs, and other items that could be presented and shared at our 75th anniversary events.

Please contact board@palomararc.org or any officer at a meeting to help with making our 75th anniversary year special.

Thank you for your participation and support.

Dennis KD6TUJ and Michelle W5NYV

Antennas at 46ft and on the ground at W6HCD. Photos from Howard KY6LA.



SD100 Course Data Communications Viability Testing - March 20-21, 2009 Results

By Andre Hansen K6AH, Dean Jacobson W6DBJ, and Paul Schmidt K6PKS

Checkpoint	Monument Pk KA6DAC-1 145.050"	Stephenson Pk VHF Digipeater	Direct
Camp Cuyamaca	X(h) na	Camp Cuyamaca	X(h) na
Paso Pecacho	X	X	X(s)
Big Bend	X(h)	X	X(s)
Milk Ranch	nt	nt	nt
Pedro Fages	-	-	X(sy)
Sunrise Trailhead	X	X	X(sl)
Sweetwater Bridge	nt	nt	X(lc)

Notes:

X = Data connection confirmed viable
 - = Data connection not viable
 s = Locate antenna at multipath maximum
 h = Results realized at 35-50 watts
 l = Results realized at 1-5 watts
 c = Antenna location somewhat critical
 y = High-gain (i.e.. Yagi) antenna required
 na = No applicable
 nt = Not tested

Comments:

-Direct connections are between Camp Cuyamaca (Start/Finish) and other checkpoints
 -Direct results surprising, but consistent with Radio Mobile predictions.
 -North Pk (directly North of Lake Cuyamaca) should be validated as a suitable digipeater site

-"Direct connections are highly dependant on finding multipath maximums. This is done by having Camp Cuyamaca give a long count while moving the antenna 5 to 20 feet. Stop at the highest S-meter reading. The difference between minimum and maximum can be greater than 20db"

-"Stephenson Peak was not scientifically selected and thought to be more advantageous for PCT50."

-Unless otherwise noted, all tests were run at 10-15 watts

-Access restrictions prevented test at Milk Ranch, but data connection presumed to be incrementally better than results at Big Bend.

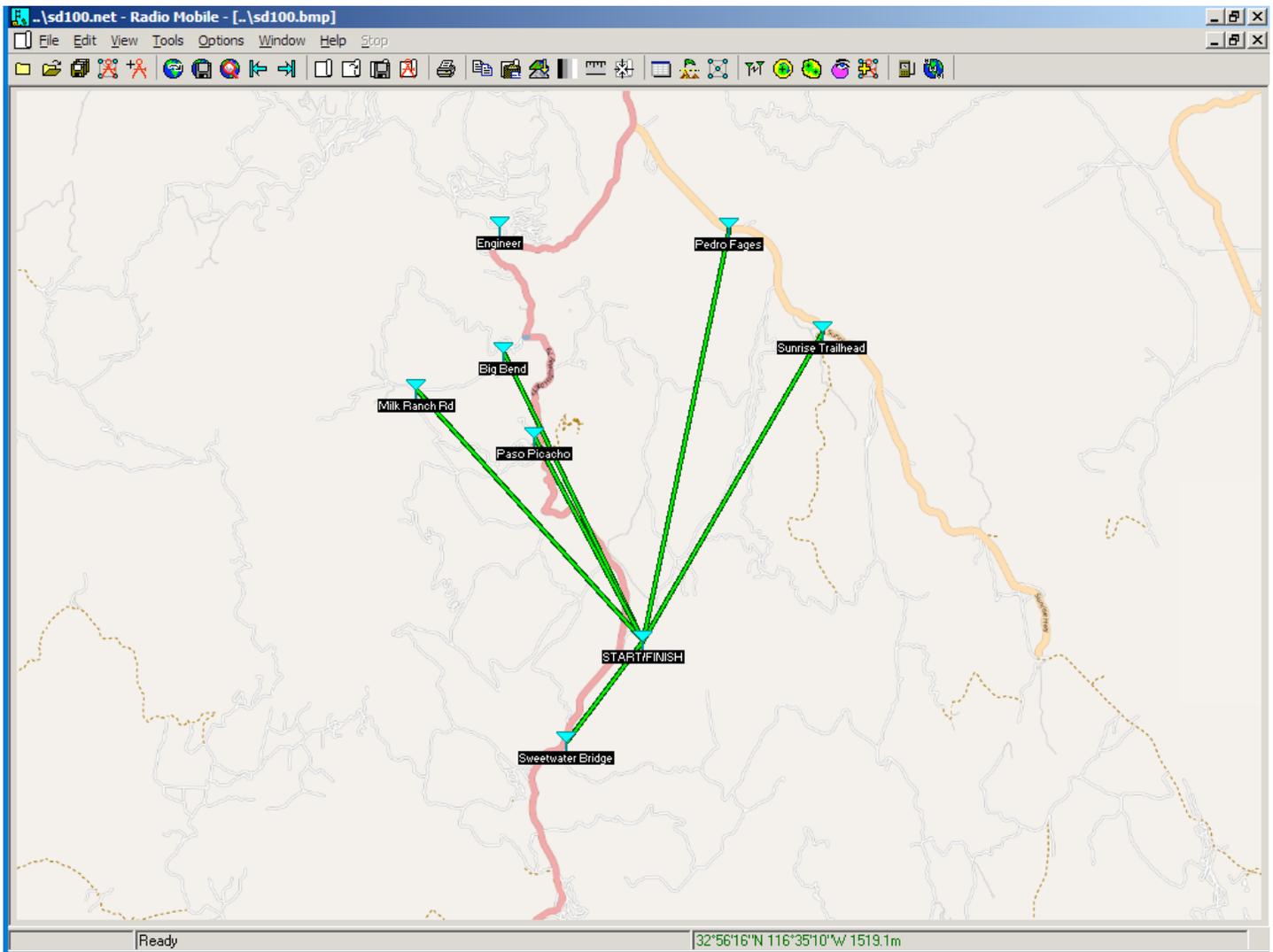
-Original Big Bend Lat/Lon found to be in error. Was 32'58'30" W 116'36'12" N, corrected to 32'58'57" W 116'34'96" N

Conclusions:

-VHF direct connections to the database should be used as a primary data path

-A digipeater overseeing the course could establish a second data path. Note that this does not need to be strategically placed... since all checkpoints can already communicate directly with Camp Cuyamaca, a digipeater placed above the camp should also be reachable by all checkpoints.

SD100 Course Data Communications Viability Testing - Map



Below, Harv K6QK (SK) is operating one of the trailers at PARC Field Day.



Northern Cal DX Convention

The theme for the 60th Annual International DX Convention, our Diamond Jubilee year, is 60 years of DX history and Looking Forward to the next 60 years of DXing. This year the Northern California DX Club has gone all out to bring you an outstanding program, terrific \$35,000 raffle, great speakers, good food, a wonderful YL tour and short waits to sign up for banquet seating.

<http://dxconvention.org/>

Loren AD6ZJ

SCOPE

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Submissions: scope@palomararc.org
Questions? Ideas? Comments? W6NWG@amsat.org

Featured Program

There will be a
program at the general
meeting at 7:30pm on
1 April 2009 at the
Carlsbad Safety
Center, 2560 Orion
Way,
Carlsbad.

Julian Starfest Needs Volunteers

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