

SCCARA-GRAM



Santa Clara County Amateur Radio Association

Volume 24, Number 12

December 2008



December meeting

Our annual Christmas meeting will be a luncheon on Saturday December 20 at 12:00 noon. This year our luncheon will be at the Creekside Inn 544 W. Alma Ave. San Jose (one block west of Hwy 87).

This year we will be having a gift exchange. The way it works is that everyone brings a wrapped gift suitable for a man or woman costing about \$10.00. This type of gift exchange is always a lot of fun to participate in.

Reservations need to be in by Friday Dec 5, (see sign-up sheet). Talk-in will be on our repeater, W6UU, 146.985-(simplex if you can't hit the repeater). Why not renew your membership at the same time?

I'm looking forward to seeing all of you there!

73, Don K6PBQ

ARRL News

From *The ARRL Letter*, November 14, 2008

IBM TEAMS UP WITH BPL PROVIDER TO OFFER SERVICE IN SEVEN STATES

On November 12, IBM announced that it has signed a \$9.6 million deal with International Broadband Electric Communications (IBEC) to install equipment and provide BPL service to almost 350,000 homes in Alabama, Indiana, Maryland, Pennsylvania, Texas, Virginia, and Wisconsin. According to the Associated Press, IBEC Chief Executive Scott Lee said the network, which will be funded by \$70 million in low-interest federal loans from the Department of Agriculture, should be in place in about two years. IBEC currently provides broadband to only about 1400 customers, most of them beginning to receive service in the past 18 months.

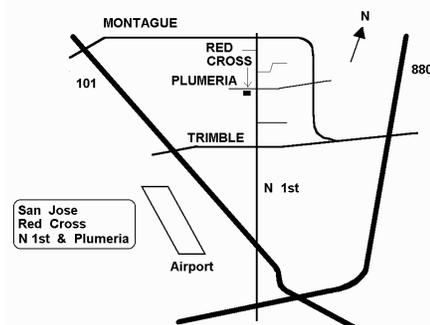
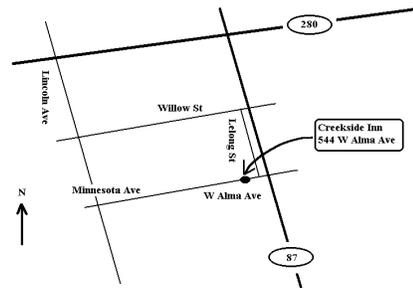
"IBEC's equipment doesn't use the ham bands," said ARRL Laboratory Manager Ed Hare, W1RFI, "making it less likely that they will have any interference complaints from amateurs. Their equipment, however, does interfere with shortwave broadcast and other spectrum, but in the US, not many users have complained. IBM has been in the BPL business for a few years now, so this venture is nothing new for them." IBEC staff member Brent Zitting, KB4SL, serves as a member of ARRL's EMC Committee.

Calendar

- 12/20 SCCARA General Meeting—Luncheon
- 12/15 SCCARA Board Meeting--(San Jose Red Cross, 7:30p, all are welcome)
- 1/12 SCCARA General Meeting

General Meeting

- Day: Saturday, Dec. 20, 2008
- Time: 12 noon
- Place: Creekside Inn, San Jose, 544 W Alma
- Featuring: Annual holiday meeting (reservations)



The **SCCARA-GRAM** is published monthly by the **SANTA CLARA COUNTY AMATEUR RADIO ASSOCIATION**, PO Box 6, San Jose CA 95103-0006. Permission to reprint articles is hereby granted, provided the source is properly credited.

The deadline for articles is the last Monday of the month.

SCCARA was formed in 1921 and became a non-profit corporation in 1947. SCCARA is an affiliate of the American Radio Relay League (ARRL). The club station is W6UW.

Web page: <http://www.qsl.net/sccara>.

OFFICERS & DIRECTORS
(all officers are also directors)

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	e-mail: fred@dctolight.net	
Past President	---	
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	e-mail: dippon@atstar.com	
Treasurer	Don Steinbach, AE6PM	867-3912
	e-mail: ae6pm@arrl.net	
Station Trustee	Don Village, K6PBQ	263-2789
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	e-mail: ka6ymd@arrl.net	
Director	John Parks, W6JPP	309-8709
	e-mail: w6jpp@arrl.net	
Director	Gary Mitchell, WB6YRU	269-2924
	e-mail: wb6yru@ix.netcom.com	

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	e-mail: ka6ymd@arrl.net	
N0ARY BBS	Gary Mitchell, WB6YRU	269-2924
	e-mail: wb6yru@ix.netcom.com	

SCCARA REPEATERS

SCCARA owns and operates two repeaters under the call W6UU:

2 meter: 146.985 - PL 114.8
70 cm: 442.425 + PL 107.2

Phone auto-dial and auto-patch is available. The two meter repeater is located at Eagle Rock near Alum Rock Park in the foothills of east San Jose. The 70 cm repeater is located at the Regional Medical Center (formerly Alexian), east of downtown San Jose, north of 280 and 101.

SCCARA NETS

On our two meter repeater: Mondays at 7:30 PM, (not the second Monday--our meeting night). Coordinator: Don Village, K6PBQ. On ten meters, 28.385 MHz USB, Thursdays at 8:00 PM. Net control: Wally Britten, KA6YMD. Visitors welcome.

N0ARY PACKET BBS

SCCARA hosts the packet BBS N0ARY (Mt Umunhum). User ports: 144.93 (1200 baud), 433.37 (9600 baud), telnet sun.n0ary.org (login "bbs"). Sysop: Gary Mitchell, WB6YRU (packet info: www.n0ary.org/ncpa)

TELEPHONE NUMBERS

SCCARA contact Clark KE6KXO:	408 262-9334
ARRL/VEC Silicon Valley VE group, Morris Jones, AD6ZH:	408 507-4698

IBM is the first major systems integrator to enter the market. According to an IBEC press release announcing the joint venture, IBM will provide overall project management, oversight and training of the line crews who will be installing the BPL equipment. IBEC will provide the BPL technology and equipment and serve as the Internet Service Provider (ISP) to these rural residents.

A 2006 FCC study reported that fewer than 5000 homes receive their Internet connections via power lines. IBM and IBEC's joint plan, Lee said, will serve residents, of whom about 86 percent have no cable or DSL access, in the seven states.

According to reports, IBEC's strategy is to sign up electric cooperatives that provide power to sparsely populated areas across the eastern United States. Rather than compete toe-to-toe with large, entrenched cable or DSL providers, IBEC is looking for customers that have been largely left out of the move to high-speed Internet.

"Although the BPL industry is making progress on the EMC issues," Hare explained, "this process will not be complete until it supports regulations and industry standards that reflect its successful models. At recent meetings of the IEEE P1775 BPL EMC standards committee -- although utility and radiocommunications stakeholders wanted to include an informative annex on the ways to address BPL interference, as well as a procedure to address complaints -- some in the BPL industry, including the representative from IBEC, blocked moving the EMC standard to IEEE ballot with the annex included."

SPECTRUM DEFENSE: THE ARRL'S PRIMARY MISSION

Defending and enhancing access to the Amateur Radio spectrum is the primary mission of the ARRL. According to ARRL Chief Executive Officer David Sumner, K1ZZ, the League has not only protected the bands, but has also added several new ones, despite exponential growth in the variety and number of radio frequency devices in the hands of consumers and businesses. "Even our most disappointing defeat -- the loss of the bottom 40 percent of the 220 MHz band some two decades ago -- gave us upgraded status, from shared to exclusive, in the remaining 60 percent of the band," he said.

Sumner said that amateurs will soon have cause to celebrate: March 29, 2009 marks the date that high-powered international broadcasting stations will be removed from the heart of the 40 meter band. "We are working with the broadcasters to make sure the change takes place as agreed at the 2003 World Radiocommunication Conference (WRC)," Sumner said. "While it's probably too much to expect 100 percent instant compliance, we know that the responsible broadcasters are preparing to move out of the 7100-7200 kHz segment -- doubling the size of the worldwide 40 meter band and making this popular band more useful than it's been in 70 years."

At the WRC in 2007, the Amateur Radio Service earned its first low-frequency (LF) allocation, 135.7-137.8 kHz; however, here in the United States, amateurs will not gain access to this new band automatically when the Final Acts of the conference take effect on January 1, 2009. "We must petition the FCC to implement the allocation, and we know the petition will not be granted without an argument -- because we've been down this road before," Sumner explained. "Twice in the past, the ARRL has sought an LF allocation. Both times our request was opposed by the Utilities Telecom Council (UTC) -- the same organization that has opposed our efforts to protect radio services from Broadband over Power Lines (BPL) <<http://www.arrl.org/tis/info/HTML/plc/>>

interference."

Sumner recounted that the ARRL's fight against BPL interference has been going on for six years. "Last year, in the wake of Federal Communications Commission decisions that did not adequately protect licensed radiocommunication services from interference from BPL systems, the ARRL even went to court to challenge the FCC and won!" he said <<http://pacer.cadc.uscourts.gov/common/opinions/200804/06-1343-1112979.pdf>>. "On April 25, the United States Court of Appeals for the District of Columbia Circuit confirmed what the ARRL has been saying for years about how the FCC was handling the BPL interference issue: FCC prejudice tainted the rulemaking process."

On July 9, the Court went one step further, ordering the FCC to pay the ARRL more than \$6000 toward the League's costs in pursuing the appeal. "While this is a tiny fraction of our total investment," Sumner said, "the award affirmed that -- contrary to the 'spin' the FCC had been trying to give to the Court's decision -- the ARRL substantially prevailed in its appeal."

Calling the Court's decision "a tremendous victory for radio amateurs and other licensed users of the radio spectrum -- indeed, for anyone who cares about the federal administrative process," Sumner said that the remand does not guarantee that the FCC will correct its errors. "We face another round of technical arguments," he said. "No doubt the FCC's technical staff, many of whom want to do the right thing, will remain under heavy pressure to ignore the laws of physics and give preference to wishful thinking once again. When the FCC reopens the BPL proceeding as the Court has ordered, we must leave no room for these technical issues to be settled on anything other than technical grounds. There's more work to do. It is only through the support of thousands of ARRL members and friends that we have managed to come this far. But it took great effort, including our frontal assault on the flawed FCC proceedings, to get their attention. Together we can celebrate all that we have accomplished on the BPL front over the past six years!"

BPL is not the only challenge facing the League, Sumner said, pointing out that preparations for the upcoming WRC in 2011 are already underway.

The key WRC-11 issues for Amateur Radio are: * A possible allocation near 500 kHz. This would provide amateurs' first access to the lower part of the medium frequency (MF) band. Sumner said a "600 meter" band offers exciting possibilities for reliable groundwave communication through the application of digital signal processing techniques to a portion of the spectrum that is as old as radio itself. * Defense against a push to allocate spectrum between 3 and 50 MHz for oceanographic radar applications. * Support of an initiative to provide better protection for radio services against interference from short-range radio devices. * Consideration of regulatory measures for software-defined radio and cognitive radio systems, which offer both opportunities and threats to existing radio services. * Selection of agenda items for the WRC to follow (tentatively planned for 2015).

"ARRL staff and volunteers are hard at work on your behalf, teaming up with International Amateur Radio Union (IARU) volunteers from around the globe to build the strongest possible case for Amateur Radio at WRC-11," he said, calling on all amateurs to help protect Amateur Radio's precious spectrum. "Once again, your financial commitment to spectrum defense is vital to our ability to protect your access to radio spectrum. Your contribution to the 2009 Spectrum Defense Fund will provide the financial resources required for us to represent you at WRC-11, and to respond when the FCC reacts to the BPL remand decision.

Contributions to the 2009 Spectrum Defense Fund are coming in, but the goal of raising \$300,000 to support ARRL's representation of members by November 30 is an uphill climb. We cannot reach our goal without contributions from ARRL members."

To help in the ARRL's ongoing mission to protect our valuable spectrum, please visit the Spectrum Defense area on the ARRL Web site <<https://www.arrl.org/forms/fdefense/>>. You can also reach ARRL Chief Development Officer Mary Hobart, K1MMH, at 860-594-0397 or via e-mail <k1mmh@arrl.org>. New special gifts are being offered for contributions, including a new 2009 mug and pin. More details on thank you gifts can be found on the donation form for the Spectrum Defense Fund.

SATELLITE SERVING AS VOICE REPEATER EXPECTED TO GO QRT BY END OF YEAR

Launched in January 1990, AMSAT-OSCAR 16 (AO-16) -- a digital satellite -- has been operating as a voice repeater since January 2008, using FM voice on the uplink and transmitting DSB voice on the downlink (best received on SSB) <<http://www.arrl.org/news/stories/2008/01/23/100/>>. But according to the satellite's command team, the satellite's orbit might force this to end sometime before the end of the year.

According to Mark Hammond, N8MH, a member of the AO-16 command team, AO-16 has a hardware/watchdog timer that resets the satellite and shuts the transmitter down. This timer in AO-16 will fire -- and cannot be reset -- when the satellite's temperature is 15 degrees Celsius or cooler. When the timer "fires," it shuts down the transmitter. "When the bird's temperature is more than 15 degrees Celsius," Hammond said, "the hardware timer behaves and continuous operations are sustained."

The satellite's temperature depends upon solar illumination. Hammond said that the "magic number" is around 85 percent of the orbit in sunlight: If the orbit provides AO-16 with less than 85 percent illumination, the spacecraft's temperature falls below 15 degrees and the hardware timer fires. "Illumination projections, as well as subsequent temperature predictions, suggest that we might be able to sustain operations until sometime in the window of November 22 until December 4, 2008," Hammond predicted. "So if you want to make some AO-16 contacts, you had better get them as soon as possible!"

Hammond said that long term-orbital projections suggest that if the satellite hardware remains fundamentally unchanged -- such as no deterioration of on-board components -- "it will be nearly 10 years before AO-16 receives sufficient illumination to warm up the spacecraft enough to again support sustained operations."

It is possible that the transmitter on AO-16 will turn off sometime in the next few days or weeks, Hammond said. "This requires some commanding to get it running again, meaning a pass over the eastern coast of the United States is required for a change in operational status. We expect that as the spacecraft cools down, transmitter shutdowns will become more frequent. You can be sure that we'll continue to probe the craft with commands, in hopes that we something will change in a good way that will allow us to use the bird for operations of some sort."

AMSAT Vice President of Operations Drew Glasbrenner, KO4MA, said the satellite hears very well; the reduced bandwidth by using either USB or LSB on the ground station receiver "allows for a very robust downlink. Tuning the downlink is just like on a linear transponder, meaning it is tight and with fast Doppler. Uplink tuning is not required, just as with the FM mode V/U satellites. My personal observations include being able to access and hear the satellite within one degree of the horizon, much lower

than any other current bird for my location [in Florida]. This should be an easy satellite with omni antennas and a 70 cm preamp."

AO-16's uplink is 145.9200 MHz FM; the downlink is 437.0260 MHz SSB. Users are asked to restrict their uplink power to a reasonable power level, and not to transmit without being able to hear the downlink; all general single-channel guidelines apply. "Enjoy this grand old bird while you can!" said Hammond.

WORLD RADIO TO CEASE PRINT PUBLICATION

In a joint statement, WorldRadio Publisher Armond Noble, N6WR, and CQ Publisher Dick Ross, K2MGA, announced that WorldRadio magazine will no longer be published as a print magazine. According to the announcement, CQ Communications Inc has acquired WorldRadio and plans to continue it as an online publication on CQ's Web site. WorldRadio subscribers will have their subscriptions transferred to CQ magazine. Readers will be notified of details as plans are finalized.

Sun's cycle 24 starts

Dick Kors KM6EP brings us this:

From NASA Science News

Starting on October 31, 2008, five sunspots appeared in quick succession, and progressed across the Sun's surface over the next four days. One of five belonged to Solar Cycle 23. The other four, however, showed characteristics of the emerging Solar Cycle 24. Sunspot forecasters can distinguish old and new cycles by looking at two features of sunspots. The first feature is latitude. The first sunspots of a new cycle initially appear at high latitudes. As the cycle progresses, they begin appearing progressively closer to the solar equator.

The second feature is polarity. Like the Earth, the Sun has a magnetic field, but the Sun's field flips [much more frequently than the Earth's](http://science.nasa.gov/headlines/y2001/ast15feb_1.htm)--usually at the peak of each sunspot cycle. The rapid flipping of the Sun's magnetic pole affects the polarity of sunspots, helping scientists distinguish between sunspots belonging to different solar cycles.



Treasurer's Treatise

Our financial status as of November 11 is: checking account \$2,861.58, savings account \$6,843.18 and cash on hand \$250.46 for a total of \$9,955.22. \$325 of that is reserved for the Holiday Luncheon. Planned lump-sum future expenditure estimates include Mt. Madonna field day reservation (\$438), liability insurance (\$320), ASVARO flea market fee (\$1,550), PO box rent (\$54), and BBS electricity (\$69). On-going cost for the SCCARA-GRAM will probably be around \$1000 for the next year. These are my best estimates based on past actual expenses.

Don Steinbach - AE6PM Treasurer

Meeting Minutes

General Meeting, Nov. 10, 2008



{no minutes were received by the deadline. -Ed}

Board Meeting, Nov. 17, 2008



{no minutes were received by the deadline. -Ed}

tower collapse

Fred Townsend, AE6QL, would like us to see this:

Broken Rock Mountain Tower Collapse

During the October 27th SARA Monday Night 2-meter net, N5XFW - JM announced the collapse of the Alltel tower in Montgomery County Arkansas. This tower also held the primary NOAA transmitter for the area, JM advises everyone to re-tune or reprogram their NOAA weather radios to appropriate frequencies for receiving NOAA broadcasts from Little Rock or Gurdon Arkansas.

WA5LUY - Wayne Mahnker contributed the following pictures of the fallen tower.





EchoLink: KK6MX

W6ACW, Ed Hajny, (408) 739-6105

WB6EMR, James D. Armstrong, Jr.,
evening & msg: (408) 945-1202

KD6FJI, Lloyd DeVaughns,
(408) 225-6769 e-mail: kd6fji@arrl.net

KK6MX, Don Apte, (408) 629-0725
e-mail: kk6mx@aol.com

KB6NP, Jon Dutra, day & msg (408) 428-2058
evening (408) 867-8654
packet: home BBS NOARY
e-mail: jad@aol.com

K6PBQ, Don Village, (408) 263-2789
e-mail: donvillage7@yahoo.com
WA6QYS, Lou Steirer, (408) 241-7999
packet: home BBS NOARY

WB6YRU, Gary Mitchell, msg (408) 265-2336
also (408) 269-2924
packet: home BBS NOARY
e-mail: wb6yru@ix.netcom.com

Packet Pieces

Downloaded from the BBS packet network:

=====
Date: 30 Aug 2004 04:33
From: GI4RSI@GB7FCR
To: QUIZ@WW
Subject: Einstein's puzzle.....

Need Help?

Amateurs have a long history of helping each other. An experienced amateur who helps another is traditionally called an "Elmer." If you have a question or problem, you are encouraged to ask one of SCCARA's Elmers. Below is a list of topics including who to contact for each.

If you consider yourself to be reasonably competent in at least one area of amateur radio and would be willing help others, please fill out an Elmer form from the club secretary.

Antennas, feed-lines, tuners: WB6EMR, W6JPP, K6PBQ, WB6YRU

Lightning protection, grounding: WB6YRU

Station set-up, equipment: K6PBQ

TVI/RFI: WB6YRU

Homebrew projects, construction: KD6FJI, WB6YRU

Computers: KB6NP; IBM PC: WB6YRU

Packet Network (BBS, forwarding): WB6YRU

Code operating and installations: WB6EMR, K6PBQ

DX (long distance/propagation): WB6EMR

Emergency operating/preparedness: WA6QYS

FM (VHF/UHF, repeaters):

HF operating techniques (SSB, CW): WB6EMR, K6PBQ

Classes/license upgrading: W6ACW

Legal/FCC rules: WB6YRU

SCCARA (club inner workings): K6PBQ, WB6YRU, WA6QYS

Took me 15 minutes to do:

BTW: NO CHEATING

ALBERT EINSTEIN'S RIDDLE

ARE YOU IN THE TOP 2% OF INTELLIGENT PEOPLE IN THE WORLD?

SOLVE THE RIDDLE AND FIND OUT.

There are no tricks, just pure logic, so good luck and don't give up.

1. In a street there are five houses, painted five different colours.
2. In each house lives a person of different nationality
3. These five homeowners each drink a different kind of beverage, smoke different brand of cigar and keep a different pet.

THE QUESTION: WHO OWNS THE FISH?

HINTS

1. The Brit lives in a red house.
2. The Swede keeps dogs as pets.
3. The Dane drinks tea.

4. The Green house is on the left of the White house.
5. The owner of the Green house drinks coffee.
6. The person who smokes Pall Mall rears birds.
7. The owner of the Yellow house smokes Dunhill.
8. The man living in the centre house drinks milk.
9. The Norwegian lives in the first house.
10. The man who smokes Blends lives next to the one who keeps cats.
11. The man who keeps horses lives next to the man who smokes Dunhill.
12. The man who smokes Blue Master drinks beer.
13. The German smokes Prince.
14. The Norwegian lives next to the blue house.
15. The man who smokes Blends has a neighbour who drinks water.

ALBERT EINSTEIN WROTE THIS RIDDLE EARLY DURING THE 19th CENTURY. HE SAID THAT 98% OF THE WORLD POPULATION WOULD NOT BE ABLE TO SOLVE IT.

73 - Kenny, GI4RSI @ GI4RSI

=====
 Date: 16 Nov 2008 20:35
 From: NOKFQ@NOKFQ
 To: TODAY@WW
 Subject: Today in History - Nov 17

November 17, 1970
 First wheeled-vehicle on the moon

An unmanned Soviet lunar probe, Luna 17, soft-landed in the Sea of Rains on the surface of the moon on this day. Hours later, Lunokhod 1, a self-propelled vehicle controlled by Soviet mission control on earth, rolled out of the Luna landing probe, and became the first wheeled vehicle to travel on the surface of the moon. Lunokhod, which explored the Mare Imbrium region of the Sea of Rains, sent back television images and took soil samples. Despite this notable space first, the Soviet space program was trailing considerably behind the U.S. program which, in 1969, had succeeded in putting an American on the moon with the Apollo 11 lunar mission. In August of 1971, during the fourth manned lunar landing, the United States achieved another first: astronauts David R. Scott and James B. Irwin drove the Lunar Rover--the first manned lunar automobile--on the surface of the moon.

=====
 Date: 15 Nov 2008 01:35
 From: W1GMF@W1GMF
 To: HUMOR@USA
 Subject: SERIOUS HEARING

An elderly man had serious hearing problems for many years. He went to the doctor and the doctor was able to have him fitted for a set of hearing aids that allowed him to hear 100%.

The elderly man went back in a month to the doctor and the doctor diagnosed, Your hearing is perfect! Your family must be very pleased.

To which the elderly man said, Oh, I haven't told them yet. I just sit and listen to their conversations. I've already

changed my will three times!

=====
 Date: 16 Nov 2008 14:16
 From: G8MNY@GB7CIP
 To: TECH@WW
 Subject: dBW & dB Levels made easy.

By G8MNY

Deci Bells (1/10 Bell) which are on a logarithmic scale are used when large ranges are used or many gain/loss terms have to be considered. As these are logs the dB can just be added rather than using gain factors or loss fractions that have to be multiplied together.

dBW
 The Formulae for POWER is

$$10 \log P_{\text{Out}}/1\text{WATT}$$

which gives this easy to remember 1dB step table based only on +/- 3, 6 & 10 dB. Where the log is base 10, not E or Natural Logs.

Note, dBW has "0" referenced to 1 Watt. And dBm has "0" referenced to 1 mW, so 30dBm = 0dBW. So 1uW = -30dBm or -60dBW

+3dB is doubling the power, -3dB is only a half.
 +6dB is Quadrupling power, -6dB is only a quarter.
 +10dB is 10 times the power, -10dB is only a tenth.

Watts	dBW	Watts	dBW
0.010	-20	3.125	5
0.012.5	-19	4	6
0.015.65	-18	5	7
0.020	-17	6.25	8
0.025	-16	8	9
0.031.25	-15	10	10
0.040	-14	12.5	11
0.050	-13	15.65	12
0.062.5	-12	20	13
0.080	-11	25	14
0.1	-10	31.25	15
0.125	-9	40	16
0.1565	-8	50	17
0.2	-7	62.5	18
0.25	-6	80	19
0.3125	-5	100	20
0.4	-4	125	21
0.5	-3	156.5	22
0.625	-2	200	23
0.8	-1	250	24
1	0	312.5	25
1.25	1	400	26
1.565	2	500	27
2	3	625	28
2.5	4	800	29

dB
 For Voltage & Currents the formulae is

$$20 \log \text{out/in}$$

which gives this easy to remember 2dB step table based only on +/- 6, 12 & 20dB, where log is base 10 not E or Natural Logs.

+6dB is doubling the level, -6dB is only a half.
 +12dB is Quadrupling level, -12dB is only a quarter.
 +20dB is 10 times the level, -20dB is only a tenth.

Note +1dB is about +11% (111%), & -1dB is about -9% (91%) of the level.

Ratio	dB	Ratio	dB
0.01	-40	4	+12
0.0125	-38	5	+14
0.01565	-36	6.25	+16
0.02	-34	8	+18
0.025	-32	10	+20
0.03125	-30	12.5	+22
0.04	-28	15.65	+24
0.05	-26	20	+26
0.0625	-24	25	+28
0.08	-22	31.25	+30
0.1	-20	40	+32
0.125	-18	50	+34
0.1565	-16	62.5	+36
0.2	-14	80	+38
0.25	-12	100	+40
0.3125	-10	125	+42
0.4	-8	156.5	+44
0.5	-6	200	+46
0.625	-4	250	+48
0.8	-2	312.5	+50
1	+0	400	+52
1.25	+2	500	+54
1.565	+4	625	+56
2	+6	800	+58
2.5	+8	1000	+60
3.125	+10	1250	+62

There are other dB standards in use not always measuring the same item!

e.g.
 dB SINAD is a ratio of signal in noise & distortion.
 dBm used much for 600 Ω AF where
 $1mW = 0.774V$ RMS which w 2V peak to peak.
 dBV where the "0" = 1V RMS about 2.5dB bigger than dBm in 600 Ω
 dBuV where the "0" = 1uV of signal.
 e.g. 12dB sinad @ -6dBuV in 75 or 50 Ω!
 dBvu as displayed on a Voltage Unit meter. 0dBvu=100% level etc.
 dBc where the "0" = full carrier power. e.g. spurious = -60dBc. Not to be confused with the sound dB "C" weighting standard.

73 De John, G8MNY @ GB7CIP

Newsletter Notes

The Packet Pieces column serves three functions: 1) filler, 2) adds a little humor to the newsletter, and 3) shows a little something of what can be found on the BBS network.

Evidently there are some in the club who don't have a sense of humor and consider that second function to be a waste of space.

So, I'm going to try something slightly different. There will still be some humor, but I'm going to mix in a selection of the other bulletins available on the BBS. If anyone has anything specific they'd like to see, let me know.

73, Gary WB6YRU, Editor

Annual December Meeting

Our annual December meeting will be a luncheon on Saturday December 20, at the Creekside Inn 544 W. Alma Ave. San Jose. We will have a choice of three entrees, \$25.00 each. Reservations need to be in by Friday, December 5. Talk in on our W6UU, 146.985-repeater (simplex if can't hit the repeater). I'm looking forward to seeing all of you there. Why not renew your membership (back cover) at the same time? See December Meeting article for information on the gift exchange.

Don K6PBQ

For the annual meeting in December, Sign me up for the following lunch(es):

_____ Coulette Steak _____ Chicken Marsala _____ Salmon

Name: _____ Call: _____



Give this form (or copy) with payment to the Treasurer or Mail to:
 SCCARA PO Box6 San Jose, Ca 95103-0006



SCCARA

Santa Clara County Amateur Radio Association
PO Box 6
SAN JOSE CA 95103-0006

Affiliate of the ARRL,
American Radio Relay League



FIRST CLASS

ADDRESS SERVICE REQUESTED

SCCARA Membership Form for 2009

Fill in name and call only if renewing and no info has changed

Name: _____ Call: _____ Class: E A G T+ T N

Address: _____ Licensed since (yr): _____

City: _____ State: _____ Zip: _____ - _____ Licence Expiration
Date (mo/yr): _____

Telephone: () _____ New Member Renewal
 I'm also a member of the ARRL

E-mail: _____

Memberships begin January 1 and expire December 31.

If renewing: annual membership dues (base rate) are: \$20 Individual, \$25 Family, \$10 Student (under 18)

For new members:

If joining in January: base rate

If joining in February through October: base rate x (11 - month) x 10% (e.g. for June, that would be: base rate x 50%)

If joining in November or December: free for November and December if paying the base rate for the following year

\$ _____ **Dues payment for:** individual family student

For family memberships (at the same address), please include a separate form for each family member.

I want the newsletter by: U.S. Mail internet (make sure your e-mail address is legible and correct)

Give this completed form (or copy) with payment to the Secretary or Treasurer at any meeting or mail to the club address.