

Club Station
W6LFJ

Short Skip

newsletter of the

Sonoma County Radio Amateurs, Inc.

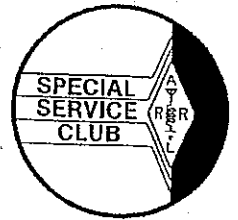
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Repeaters

146.73- • 224.48- • 441.375+



Repeater Station
W6SON

Volume 27 Number 3

March 2002

QTC

by

Bill Hillendahl KH6GJV
SCRA President



I just knew when I started listing those who provide ongoing service to the SCRA membership that I'd forget someone.

One of those people is **Brian Rayl N7MOE**. Brian makes sure that we have *Amateur Radio Newline* audio cued up for our weekly net. Thanks, Brian! If I forgot anyone else, my apologies. Let me know.

Some of you have already heard me talk about a trip I took this time last year with my nephew who was moving to Seattle. Figuring to fill some of the boredom traveling up I-5, I took along my HT with a mag-mount hoping to make some contacts on repeaters and simplex on the way. I had my trusty ARRL repeater directory with me to plug in the local repeaters en route. As has been told by others with the same experience in a number of articles and letters in Ham publications recently, I had very few contacts on the trip, either on repeaters or on 146.52, the national calling frequency. It didn't used to be this way not that many years ago. I remember making a trip up to Trinity County a few years ago and had great simplex contacts most of the trip. We even made skeds for the return trip.

We have the same problem here locally. I periodically hear a new Ham or a visitor to our area calling on a repeater only to get silence in return. I have heard that very few people monitor .52 locally. A lot of Hams don't know our local repeater frequencies, much less the PL access as PL is not as widely used elsewhere in less populated parts of the country. They call out on .52. Let's remember that part of the fun of the hobby is to meet new people from far away. How about we all make an effort to monitor our local repeaters and 146.52, and, if a "foreign" station shows up, or even just a "local," pick up the mike for a short QSO. That's how I made great friends with G6DUI and his XYL from the United Kingdom. See you on the air!

A Mini Primer on SWR Measurements

By John Breckenridge WB6FRZ

Part 1

Acknowledgments

I wish to recognize the thoughtful review of this article by Al Bloom, N1AL, truly one of Sonoma County Radio Amateurs guiding lights. I also credit M. Walter Maxwell, W2DU, the author of "Reflections, Transmission Lines and Antennas," the book that inspired this article. Some sayings from Kurt N. Sterba were also used.

Introduction

I have long noticed that many new-time and old-time amateur radio operators alike hold the idea of low SWR (standing wave ratio) for antenna systems very near and dear to their hearts. High SWR has been blamed as being the cause of TVI, poor transmitted signals, burned finals and antenna system problems. Low SWR has been the most sought-after and trusted measurement among hams for antenna system adjustment and monitoring. So let's consider what SWR measurements are, why we make them in the first place, and how we can best interpret the readings we measure.

What Is the Definition of SWR?

SWR stands for standing wave ratio. SWR is computed from the ratio between an RF signal going in the forward direction (toward antenna) and the RF signal going in the reverse, or reflected direction (toward transmitter) on a transmission line.

(continued on page 8)

DUES ARE DUE!

Yes, it's that time of year again. The SCRA dues for the 2002-2003 fiscal year are due. The dues are **\$20 per year for individual members** and **\$30 per year for a Family membership**. If you are a current SCRA member, a renewal envelope was included in the February issue of *Shortskip* to make it easy to send in your dues. Please take a couple of minutes and complete the membership information on the envelope flap so that we can update the roster. If the envelope is missing, please use the membership application on the inner last page. *Thanks!*

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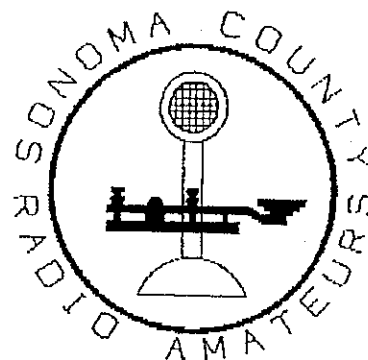
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Tuesday Night Net

Check in to the SCRA net each **Tuesday** evening on the **146.73-(PL 88.5)** repeater at **7:00 PM**. Announcements are made of upcoming SCRA and other amateur radio activities in the area and what is listed in Hank's Swap Shop. You will also hear the weekly *Amateur Radio Newslines* broadcast.

Short Skip Advertising Rates

Business Cards	\$ 12
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**CLUB MEETINGS**

The club normally meets the first Wednesday of each month at:

Agilent Technologies
1400 Fountaingrove Parkway
Santa Rosa, CA

The meeting starts at 7:30 PM

ALL ARE WELCOME!

Please join us at our next meeting. Membership in SCRA is open to anyone interested in Amateur Radio. A membership application is included in this newsletter.

Interested? For more information, contact any SCRA officer, director or member.

NEXT MEETING

March 6th
7:30 PM

Program:
Slow Scan TV
 by Gregory Gordon AC6VJ
 (See article)

HUNGRY BEFORE THE MEETING?

JOIN US FOR DINNER! We meet at Marie Callenders restaurant, 2460 Mendocino Avenue (corner of Mendocino & Chanate), Santa Rosa. People start showing up at 5:30 PM. No RSVP is required! See you there!

March Program

Slow Scan TV by Gregory AC6VJ

Join us on **Wednesday, March 6th**, where our own **Past President Gregory Gordon AC6VJ** will bring us up to date on Slow Scan TV from the HF bands. The newer software available does not require a fancy multi-mode TNC. You can use your computer and it's sound card for your connection to the world of video and other digital modes.

If you missed the February meeting, you missed a lot of fun, and, some learning to boot! **John Breckenridge WB6FRZ** and **Brian Torr N6IHY** put together a new game show called Ham Radio Jeopardy. The members were divided into two groups who competed for points by providing the "questions" to the Jeopardy answers. It was surprising to see how much was remembered and forgotten by the groups. The competition was fierce, but everyone came out a winner. Look for future episodes of Ham Radio Jeopardy in your Shortskip entertainment guide.

ULS at SCRA Meetings

John Mullan KD2L will have a computer at the meeting for members to register with the FCC's Universal Licensing System. Most Hams have not registered which is required to make any changes or upgrades to your license, even an address change. John will be available to help you through the process. The FCC computers run on east coast time, so you have to use the ULS before the meeting or at the break.

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Alcatraz

Keep **May 18th and 19th** in your calendar as members of the Empire Amateur Radio Society and SCRA are going to spend the night on Alcatraz. The details of the trip, including the cost, are being put together. Reservations with prepayment will be taken once the final plans have been set. Information will be available at the meetings, in *Shortskip*, EARS' *Propagator* and on the nets. It will be great. Stay tuned!

SCRA's Mobile Communications Unit

The "Toaster"

If you have not had a chance to come by and help, make it a point to do so. The project is fun and you get to be on the ground floor of designing and building the club's mobile communications center. The "Toaster" will be able to be used at public service events, Field Day, ARES events, and, of course, true emergencies should the need arise. The vehicle will also be a good public relations device to keep Amateur Radio in the mind of the general public. **Work parties are held each Saturday from 10 AM until about Noon at Lee Dibble's home, 1290 Parsons Drive, Santa Rosa.** Come and join the fun!

Fresh-Tasting "Toaster" Fundraiser

By John Breckenridge, WB6FRZ

The club needs your help in a tasty fund-raiser for the "Toaster!" As many of you know, the club has taken on the project of restoring a motor home (the "Toaster") and transforming it into an effective portable communications center. To raise funds for this task, we are asking YOU to help sell coupon books for tasty deals at Fresh Choice restaurants. The price is \$5 per book and contains \$85 worth of coupon savings at any Fresh Choice restaurant. Buy several to sell or as gifts, or get one for yourself and family. Either way you win, and the community is served by making it easier for your club to complete work on this worthy project. For details, contact John Breckenridge, WB6FRZ at (707)838-6398 or come to the next club meeting.

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ARES Comm Log

by Rich Freitas KF6SZA
Greater Santa Rosa
Emergency Coordinator

Training

Small and large-scale disasters have plagued this country (and will continue to do so) as they do in every corner of the globe. It doesn't even matter if the event is natural or manmade the results are the same. People are displaced from their homes, injuries must be handled as expeditiously as possible, and relatives need to know the condition and whereabouts of their loved ones. There's been a lot of press over the past few years expounding the theory that Amateur Radio as pertains to emergency communications is a dying function. Certainly the public agencies have touted the benefits of trunking radio systems, cellular telephones, the Internet, and the Iridium satellite system as the "new wave" of communications for disaster services. Many times this idea is based on the argument that these complex commercial and military systems are capable of much greater bandwidth and faster data rates than traditional Amateur Radio networks. Many of the "experts" who like to compare CW circuits with the digital communications systems being deployed by the U.S. Military have commented that 'Ham Radio is doomed to obsolescence because it can't match the data rates achieved in commercial and military systems.' To these prophets of doom I would like to address the main reason I believe Amateur Radio will continue to be of value in the future.

Have you ever thought about why you never see a multitude of every-day citizens report to disaster headquarters offering to provide emergency communications services with their cellular telephones and PCs? The reason is, (forgetting about the fact that the infrastructure upon which these devices rely often fails during emergencies) they simply don't know how. Citizens armed with personal wireless devices are not recruited by Emergency Management Agencies for emergency communications because they're not trained! They don't understand how the agency works, how to interface with public safety or relief personnel, how to process and deliver message traffic, nor how to improvise when their beloved wireless device fails (i.e. the batteries die or the circuit fails).

While it is necessary for Amateur Radio to integrate newer technologies into its public service activities in order to remain viable, the most valuable asset we have remains that of the trained operator.

This means:

- Understanding the concepts of message prioritization, how to use standard prowords and prosigns, net discipline, and proper message transmission techniques to ensure accuracy.
- The ability to conduct effective disaster communications planning and emergency communications resource allocation.
- Having access to redundant communications networks and emergency power supply capabilities.

- Knowing how to improvise in an emergency (i.e. how to construct an emergency antenna, how to rig two lantern batteries for a temporary power source, or how to debug unfamiliar software).
- Being aware of changes in wave propagation and having the ability to change bands as necessary to maintain contact.

Amateur Radio continues to offer public and private relief agencies access to a wide range of communications technologies and skilled personnel in a highly cost-effective manner (yes, 'free' is about as cost-effective as it gets). The fact that Amateur Radio operators are organized through such programs as ARES insures that our disaster communications resources are allocated in a much more efficient manner than normally occurs through the random application of public communications facilities.

Participation in the ARES organization is valuable for the knowledge of emergency planning and deployment it imparts. Traffic nets, on the other hand, offer a different type of training geared to the art of 'communicating.' The traffic handler needs to understand how public safety and relief agencies operate and how to prepare for an emergency and many ARES groups seem to be in need of the basic skills taken for granted by the experienced traffic handler. To address this situation it is recommended that ARES members become involved in the NTS and more traffic handlers should join their local ARES program.

Think about it: the mere possession of two-way radio capability is no longer enough to make Amateur Radio unique nor a valuable national resource. We must be trained and prepared. We cannot obtain this training by sitting at home and rag-chewing or participation in DX contests (both of which are perfectly fun and honorable activities). If you wish to make an investment in the future of Amateur Radio, join your local ARES program, check-in to a net and originate some meaningful traffic, and be prepared to help in time of emergency.

Our weekly ARES net is at 7:30 PM on Mondays on the SCRA 146.73 repeater. Please join us.

** Source material courtesy of Jim Wades, WB8SIW, and Worldradio magazine*

Are you a budding author? Write an article for *Short Skip* on a Ham radio-related subject, technical or non-technical. E-mail the article to kh6gjuv@arrl.net. We'd love to see YOU in print!

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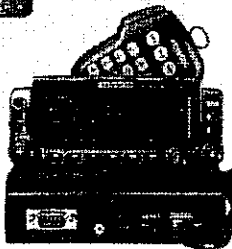
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- 100W HF/6M • Newly designed 32 bit DSP
- 5 inch TFT color LCD • Digital IF filter with 41 passband widths
- 121 microphone equalized audio settings
- Multiple DSP controlled AGC loops
- Advanced CW functions
- Real time spectrum scope

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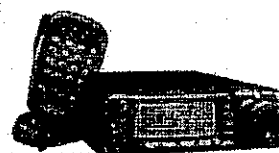
YAESU

VX-5R

50/2M/440HT

- Wideband RX, 6M-2M-440TX
- 5W output
- 220 memos, opt. barometer unit
- Alpha Numeric Display
- CTCSS/DCS built-in
- Li-Ion Battery

Call For Low Price!



FT-100D HF/6M/2M/70CM Trans.

- Compact Transceiver w/detachable front panel
- Rx 100kHz to 970mHz (cell blocked)
- Tx 100W 160-6M, 50W 2M, 20W 70CM
- Built-in DSP, Vox, CW keyer
- 300 Memories

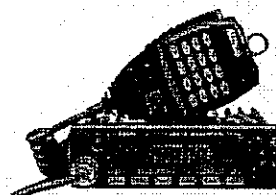
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DJ-196T 2M HT

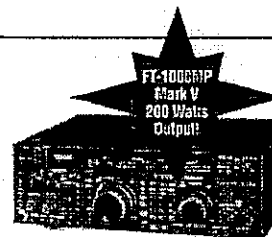
- 5 Watt out
- 40 memories
- Alphanumeric Display
- CTCSS • DCS Built-in
- "S" Meter
- Auto Dialer

**CALL NOW
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DR-135TP 2M Mobile

- 50 Watt out • Alpha Numeric Display
- 100 mems • Built-in TNC 1200 & 9600 Baud
- Front Panel GPS in • Rear DB-9 Port
- CTCSS/DCS Encode/Decode built in



FT-1000MP HF Transceiver

- Enhanced Digital Signal Processing
- Dual RX
- Collins SSB filter built-in
- 100W, Power supply built-in

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Sonoma County Radio Amateurs, Inc.

Membership Meeting 2-6-2002

MINUTES

1. Call to Order, Verification of Quorum - The meeting was called to order by President Bill Hillendahl, KH6GJV at 7:32 PM at the Santa Rosa Agilent Technologies facility.
 - a. Introductions
 - i. Officers & Directors - The club officers and directors introduced themselves.
 - ii. Guest Speaker - The Program for the evening "Ham Radio Jeopardy" was described.
 - iii. Visitors - KF6SBQ, Peter KG6JSI, Brian KG6JSM, Terry KG6JSK, Pat KG6JSL, Terrence KG6JSJ, John KG6IAF, John KE6RMC (Welcome back John!)
 - iv. New Calls & Upgrades - None
2. Approval of Minutes - Jim KE6VGV moved that the minutes of the 11-7-2001 membership meeting be approved as printed. The motion passed.
3. Officer & Director Reports
 - a. Vice President - Brian N6IY - Brian had nothing to report.
 - b. Secretary - Jeff Basham W2JAB
 - a. Mail and Communications - Jeff distributed the mail to the appropriate officers.
 - c. Treasurer - Vicki Cero KF6ZCT updated the membership on the financial position of the club.
 - d. Directors -
 - Jim Lee KE6VGV - Jim made a call for donations, due to the tight nature of this year's budget.
 - John Breckenridge WB6FRZ - John welcomed the 5 new hams to the club who earned their licenses at the last VE session.
 - a. Past President - Greg Gordon AC6VJ - Greg had nothing to report.
4. Committee Reports
 - a. ARES - Rich Freitas KF6SZA - Rich announced that there is an ARES Leadership net, which they practice traffic handling for part of the net. The net is held at 7:30pm on 3987 LSB. Rich also mentioned that CDF has a lot of training activities coming up, and has once again invited ARES members to participate. There will be an Emergency Communications Conference on April 22, 23, 2002. Rich also invited everyone to check into the ARES net on 146.730 at 7:30pm on Monday evenings.
 - i. "Rolling Toaster" - A donation can was passed in order to raise funds for the rolling toaster. Thank you to all who donated. Donations of Cash, 2m/440 Antennas and 2m/440 radios will be welcomed at any time.
 - b. Activities Committee - Mark Lockwood KK7CU - Alcatraz Trip - The date of May 18-19, 2002 was announced. No reservations are being taken at this point.
 - c. Newsletter Editor - Bill Hillendahl KH6GJV - Bill has nothing to report.
 - d. Public Service - John Mullan KD2L - Our first event will be April 7, 2002 - The MS Walkathon. Low key event. Contact John if interested.
 - e. Repeater Committee - Greg AC6VJ reported that 440 and 220 are currently being worked on, and the programming updated. There was no update on the status of the 146.730 issues. A discussion regarding keeping the autopatch available was held. The membership decided that they do want to keep it available.
5. Unfinished Business - None
6. New Business - Mike AD6YB indicated that the Red Cross needs a tower.
7. Member Bio - Bill KH6GJV told about his early days of Amateur Radio, and how he got involved. A random member each month will be called on for a short bio. Brian N6IY was selected for next month's bio.
8. Show & Tell - None
9. Recess - There was a break.
10. Program - John Breckenridge WB6FRZ and Brian Torr N6IY presented Ham Radio Jeopardy. A great time was had by all participants.
11. Raffles -
 - a. Regular - There was no regular raffle.
 - b. Lottery - Dave Santori KF6CLG was selected for the membership lottery. Dave was present and donated his \$13.15 winnings to the Rolling Toaster fund.
12. Announcements
 - a. Next Program - AC6VJ on SSTV
 - b. Board Meeting Next Wednesday - Furniture Traditions 6:30PM
13. Adjournment - The meeting was adjourned at 9:30 PM

Sonoma County Radio Amateurs, Inc.

Board of Directors Meeting 2-13-02

MINUTES

- Board Members Present: Bill Hillendahl KH6GJV, Brian Torr N6IY, Jeff Basham W2JAB, Vicki Cero KF6ZCT, Jim Lee KE6VGV, John Breckenridge WB6FRZ and Greg Gordon AC6VJ
- Committee Chairmen Present: Mark Lockwood KK7CU, John Mullan KD2L, Rich Freitas KF6SZA
- Guests Present: Lee Dibble KE6EAQ, Sue Mullan K8SUE
1. Call to Order, Verification of Quorum, Introductions - The meeting was called to order by President Bill Hillendahl KH6GJV at 6:34 PM. The meeting was held at Furniture Traditions, 3450 Airway Drive. A quorum was present in that all seven voting board members were present.
 2. Approval of Minutes - December 12, 2001 - This item was deferred. Approval of Minutes - 1-16-02 - John KB6FRZ moved that the minutes of the 1-16-02 meeting be approved as published in ShortSkip. The motion carried.
 3. Officer & Director Reports
 1. Treasurer
 1. Current Financial - Vicki Cero KF6ZCT gave the current financial report.
 2. Audit Report - This item was deferred.
 2. Officers
 - i. Vice President - Brian Torr N6IY - Brian had nothing to report.
 - ii. Secretary - Mail & Communications - Jeff W2JAB handed out the mail to the appropriate officers. Crown Awards - Bill at Crown Awards contacted the club regarding an outstanding invoice. A check was mailed to him on December 8th, 2001, the club issued a stop payment on that check, and mailed a replacement check on Feb 9, 2002.
 3. Directors
 - i. Jim Lee KE6VGV - Jim had nothing to report.
 - ii. John Breckenridge WB6FRZ - John had nothing to report.
 - iii. Greg Gordon AC6VJ - The 2001 Inventory is complete. It is not yet printed.
 4. Committee Reports
 - a. ARES - Rich Freitas KF6SZA - Rich has nothing to report about ARES. He updated the club on the Rolling Toaster. Discussion was held regarding the coordination of work on the toaster, and Bill KH6GJV appointed Lee KE6EAQ chairman of the Comm Van Committee.
 - b. Activities Committee - Mark Lockwood KK7CU
 - i. Trip to Alcatraz - May 18-19, 2002 - Mark contacted the IRLP regarding the event. Bill KH6GJV is going to contact Rick Renier regarding getting the event into all the magazines. John FRZ is going to investigate getting shirts made.
 - c. Newsletter - Bill KH6GJV - Bill reminded everyone that the deadline is Saturday the 16th.
 - d. Public Service Committee - John KD2L reported that the first event is on the books. April 7, 2002 is the MS Walkathon.
 - a. Repeater Committee - Greg Gordon AC6VJ
 - i. Status of Repeaters - Greg advised that everything seemed to be working normally. He reported that he sold the Uniden repeater on Ebay for \$250.00, and the Repco is currently on Ebay for ~\$105.00
 - ii. Status of FCC Complaint - Under review by FCC.
 - iii. Net Control Operators - 3/5 - VJ, 3/12 - IY, 3/19 - L or SUE, 3/26 - GJV
 5. Unfinished Business
 - a. Meeting Programs - Mar - Greg on SSTV, Apr - Homebrew and ?? Future program ideas - NWS Skywarn, Marconi Sites, CDF, N1AL on RFI
 - b. Club Calendar - Not Yet issued. Jeff W2JAB will give this out next month.
 6. New Business
 - a. Appointments by BoD
 - License Trustees (W6LFLJ) - Al Bloom has not yet been contacted. Item Deferred.
 - b. Presidential Appointments
 - Field Day Chair - Mark KK7CU, Swap Meet Chair - Deferred, Education Chair - Deferred.
 - c. Fresh Choice Fund-raiser - John WB6FRZ described the Fresh Choice Fund-raiser to the board. After discussion, Jim KE6VGV moved that \$100 be spent to purchase 100 fund-raising books, with the first \$100 profit given back to the club as reimbursement, and

the rest going to the toaster. The motion carried.

7. Announcements - There were no announcements

8. Adjournment - The meeting was adjourned at 8:27 PM.

SWR (from page 1)

Any discontinuity or impedance mismatch along the line or at the ends of the line will cause a portion (at least) of the RF signal to reverse direction. The SWR meter detects the magnitude of that reflected signal in relation to the magnitude of the forward signal. From that information, certain conclusions are then drawn about the quality of the antenna or antenna system. These conclusions rest solely with YOU, the operator.

You will also hear the term VSWR, which stands for voltage standing wave ratio. SWR and VSWR are the same thing.

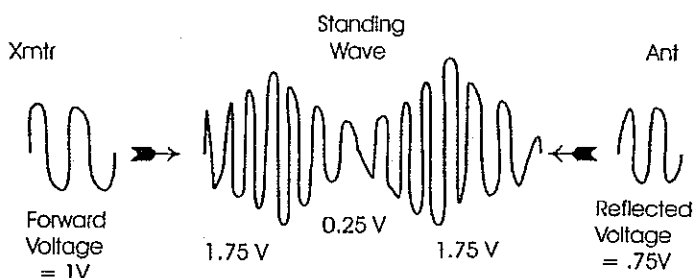
Let's do a little math, very little math, to clarify this ratio. We know that

$$\text{VSWR} = \frac{\text{Forward Voltage} + \text{Reflected Voltage}}{\text{Forward Voltage} - \text{Reflected Voltage}}$$

If Forward Voltage is 20 volts and Reflected Voltage is 0 volts, then we get:

$$\text{VSWR} = \frac{20 + 0}{20 - 0} = \frac{20}{20} = 1$$

That 1 is the FIRST number in the ratio. The SECOND number, after the colon (:), is ALWAYS 1. So, our answer is a VSWR (or SWR) of 1:1, pronounced "one to one." The following art is a visual representation of voltage standing waves having a ratio of 7 to 1.



An example of high SWR. Here the forward voltage is 1V and the reflected voltage is .75V for an SWR of 7:1
 $(1 + .75) / (1 - .75) = 1.75 / 0.25 = 7:1$

How is SWR Measured?

Whatever we use to measure SWR, somehow we need to measure the "forward" signal and the "reflected" signals and mathematically manipulate the values. The result may be

shown directly in SWR on a meter, or as a swept value of return loss or SWR on a network analyzer (the latter usually being a VERY expensive piece of test equipment).

The most common and cheapest way to measure SWR is with an SWR bridge (SWR meter). Inside there are diodes and other circuitry that allow a meter needle to move. As you might imagine, these meters do not necessarily give the most accurate readings. However, for all but the purist, these simple and relatively cheap meters do a reasonable job for amateur radio work, although uncertainties are magnified at VHF and above.

What Does a Low or High SWR Mean?

As you read the explanations given here, try not to make any judgments or jump to conclusions about the meanings.

A low SWR refers to a large forward RF signal and a small reflected signal. Since the reflected voltage can never be less than zero, the very lowest value possible is 1, or 1:1.

A high SWR refers to a large reflected signal. For example, a meter reading of 9.5 indicates an SWR of 9.5 to 1.

Incidentally, you may note that there are not many numbers on the meter after about 3 or 5. That's because SWR values get very large very quickly. It is difficult to tell the difference between an SWR of 9.5 and 35, for example.

Low SWR is Good and High SWR is Bad, Right?

Wrong, wrong, wrong. That's like saying cold water is good and warm water is bad. To a penguin, this is probably true. But to a person who fell through a hole in an ice-covered pond, it is probably false.

Like water temperature preference, the interpretation of good, bad, or indifferent SWR depends upon the situation! Sorry, folks; there just aren't any quick and simple answers here. Ask a few hams and I think you will hear statements like: "A good SWR reading means my antenna is working properly," or "A bad SWR reading means there's a problem with my coax or antenna." It's a shame that these simplistic, well-intentioned, widely accepted viewpoints are passed on from one ham radio generation to the next.

Next Month: Part 2 - Good High SWR and Bad Low SWR

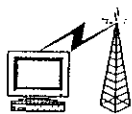
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North Bay DXCluster Group

Change of the guard for DXANP

By Steve Carniglia KV6A



On February 3rd, 2002, the DX Cluster that was supported by Len Gerald (K6ANP) was moved from his Penngrove residence to my residence in Santa Rosa. As of Sunday, February 10th the Sonoma Node is back up and running. Nothing changed except the location. The site ID and login is still DXANP.

For a while, you will notice that the Node still shows K6ANP as the sysop. I will be eventually changing that part but it takes quite a bit of work and coordination to make that change and Len has offered to leave his call on the Node as long as necessary however, the Node ID will always remain DXANP.

As of this writing, the 2-meter Diamond antenna is about 10 feet off of the ground. Within the next couple of weeks, I will be raising it to the top of my tower, which will bring it to about 55 feet off of the ground. That will put it about 350 feet MSL.

For those of you that are not aware, this system uses a 220 link to St. Helena for it's access to the backbone. It then repeats out to all of us on 2 meters (145.67 mhz).

Len has noticed that for many years, people will listen but not connect to the Node. The Node needs your help. I guess I am as guilty as anybody. My Ham computer is always on and when I work HF, I always watch the Node for DX spots but I rarely connect to the Node. This is known as a "Spot Sucker".

I am encouraging everyone to take advantage of the Node and connect more frequently or better yet, just leave the your TNC connected. It doesn't hurt anything and you will find yourself sending out lots of spots because it is so convenient. Hey just like a DSL circuit only a bit slower ... (ha)

So, if you just like to browse the HF bands, send out some spots when you hear them. You don't have to work the station to send out the

spot. They don't have to be true DX either. Many of us feel that states like Rhode Island could be considered rare DX... (ha). I know that when I was working on "WAS" (Worked All States), the last state that I needed to work was Nevada, so don't be afraid to send out any spot that you think might be of interest to someone.

I want to thank Len for providing and maintaining the Node for the last 7 or 8 years. It is a bit of a thankless job and there is some out of pocket expense that goes with it. In addition, I can only imagine the hundreds of hours he spent on the Node to make it work as nice as it does. "Thanks Len".

I also want to thank the following people that contributed to the purchase and support of the Node from Len:

W6OSP-Bruce	AC6ET-Ross	KE6UAR-Jim
N7MOE-Brian	AG7D-Ed	W2JAB-Jeff
KQ6OB-Fred	K6UM-Steve	W8NF-Dave
K6RBF-Bruce	AC6VJ-Greg	KD2L-John
KF6ZCT-Vicki	KA5S-Cortland	KH6GJV-Bill
KE6VGV-Jim		

If I forgot someone who did contribute to the cause, please let me know right away. You can reach me at my office at 707-573-3500 or you can email me at kv6a@cdis1.net. There were a couple of people that asked me to remind them about this because they wanted to send a check to me rather than using "cash in the ol pocket". This is your reminder. I will put any additional contributions to good use towards the DXcluster. My address is: Steve Carniglia KV6A, 2774 Canterbury Drive, Santa Rosa, CA 95405

As for now, (including folks that I forgot) this will be the member list that makes up NBDXG. As part of the group, I invite you to come by and see it operating and also please give me all the feedback you can to improve it. Please login and use it. It is real "Ham Radio Stuff" with a little computer mixed in.

Thanks to all of you. 73!

Sonoma County Radio Amateurs, Inc.

Membership Application

New ☐ Renewal ☐

Please Print Clearly

Name _____ Call Sign _____ License Class _____ Date _____

Address _____ Hm Phone _____ Wk Phone _____

City/State _____ Zip _____ E-Mail _____

ARRL Member? ☐ Yes ☐ No

Dues & Fees: (SCRA dues year is from 3/1 to 2/28)

Individual/Associate Member	\$ 20 (\$5.00/qtr)
Family Membership	\$ 30 (\$7.50/qtr)
Under 18 Membership	\$ 10 (\$2.50/qtr)
Badge	\$ 7

Badge Information

Call Sign _____
First Name _____
City _____

Payment Calculations:

Make checks payable to SCRA

Dues - Full Year (3/1 to 2/28)	\$ _____
Dues -	
Prorated _____ Qtrs. X \$ _____ /qtr	\$ _____
Badge	\$ _____
Other - _____	\$ _____
Donation	\$ _____
Total	\$ _____

Mail to: SCRA, P. O. Box 116, Santa Rosa, CA 95402

Calendar of Events

Mar 1	Fri	7:30 PM	Marin ARC Meeting, Alto Clubhouse, 27 Shell Road, Mill Valley
Mar 2	Sat	10:00 AM	Red Oak Victory ARC Meeting, Point Richmond
Mar 6	Wed	5:30 PM 7:30 PM	Dinner at Marie Callenders, 2460 Mendocino Ave, Santa Rosa SCRA Meeting, Agilent Technologies, 1400 Fountain Grove Prkwy, Santa Rosa
Mar 13	Wed	6:30 PM	SCRA Board of Directors Meeting, 3450 Airway Dr., Santa Rosa
Mar 15	Fri	8:00 PM	San Francisco ARC; VA Medical Center, 42 nd Ave & Clement, San Francisco
Mar 16	Sat	5:00 PM	VE Test Session - SMRS, Kennelworth Youth Center, Petaluma Contact: Dale (707) 762-9414
Mar 20	Wed	7:00 PM	REDXA Meeting, Carrow's, Petaluma
	Wed	7:30 PM	Valley of the Moon ARC Meeting, McDougall Hall, Sonoma Developmental Center, Glen Ellen.
Mar 25	Mon	7:00 PM	Willits ARS Meeting, Brooktrails Firehouse, Willits

Sonoma County Radio Amateurs, Inc.

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