



SAN BERNARDINO MICROWAVE SOCIETY, Incorporated

FOUNDED IN 1955

A NON-PROFIT AMATEUR TECHNICAL ORGANIZATION DEDICATED
TO THE ADVANCEMENT OF COMMUNICATIONS ABOVE 1000 MC.

W6IFE Newsletter November 2008 Edition

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At the **6 November 2008 SBMS** meeting the "Tech Talk" will be about the great HF Dxpedition that Robin, WA6CDR went on. The SBMS meets at the American Legion Hall 1024 Main Street (south of the 91 freeway) in Corona, CA at 1900 hours local time on the first Thursday of each month. Check out the SBMS web site at <http://www.ham-radio.com/sbms/>.

REMINDER- NO PARKING IN THE CHURCH LOT

Last meeting- Doug, K6JEY talked about the Rubidium 10 MHz standards that were being ordered by Doug and Robin, WA6CDR and the power supply module to run them. The manual is on the SBMS website. Welcome to new members Brian Kidwell, W6BLK. Five members of the San Diego Microwave group managed 515 Km contacts with stations in Arizona during the contest. Bernardo, XE2HWB operated his station from Mexico and managed multiple contacts to US rovers. Pat, N6RMJ needs to find another person to do the log collection and reporting of the 2 GHz and Up contest in 2009. Jerry N7EME has a 24v multi-distribution amp for the 10 MHz standard signals. 26 people present.

If you would like to move from USPS mailing of the newsletter to an email version, please let Bill WA6QYR know at bburns@ridgenet.net.

Scheduling.

15-16 November ARRL International EME Competition

4 December SBMS meeting Frank, WB6CWN IF Radios

8 January 2009 Meeting TBD

NOTE the January 2009 meeting will be on the second Thursday 8 January.



The JWM 10 MHz distribution amplifier RDA-6 available from Jerry N7EME on his JWM Engineering web site.

Activity reported at the October SBMS meeting: John, KJ6HZ had some 53 calls during the contest roving with Wayne KH6WZ; Doug, K6JEY and Helen KI6-- wee out for the contest and attended the EME conference in Italy; Robin, WA6CDR roved to Arizona and Barstow during the contest; Larry, K6HLH operated from home with some 98 QSO's using his Flex radio 5000 IF; Pat, N6RMJ had some 130 QSO's while roving the Central Valley; Mel, WA6JBD did lots of driving to Arizona only to have the rig break; Dick, K6HIJ converted on of the Pyrojoe 2400 MHz several hundred watt amplifiers and did some cavity design work; Jerry, N7EME is building a 10 GHz rig; Dan W6DFW was out on 10 GHz; Rein W6SZ was home monitoring all the 10 GHz activity; Chris, N9RIN brought out a friend during the contest; Wayne, KH6WZ contested and posted some soapbox items; Ed, KE6FJU has a weather satellite dish up; Dave, W6DL was out for the contest and is updating his rig; Wayne N6NB was out for the contest and managed several contacts with Bernardo, XE2HWB in Mexico; Ray, WA6OWM is coming back to being active; Gordy, WA6ZKY made a trip to Alaska, was on during the contest and is building a 24 GHz rig; Bill WA6QYR was out for the contest and is working on a PDA for doing BD program; Bill, N6MN was out to Catalina Island for the contest and hopes to get his station stabilized on frequency with the Rubidium; several stations checked in via ATV-KC6UQH, K6BNN, N6EQ, WA6DPS, KE6BXT.

Wants and Gots for sale.

My 'Wants' is for lightweight prime focus reflector(s?) of 2 1/2' to 3 ' in diameter with a F/D of about 0.375. I have 'Gots' of multiple, offset fed dishes ranging in size from 18" to 6 feet for trade, or reasonable priced sale or whatever. Transportation of either to/from the Arizona area will have to be arranged or negotiated.
Chuck Smallhouse <w7cs@theriver.com>

I have an old HP430C with HP477B Thermistor mount. It appears that the readings are down by a factor of 10. Does anybody have any idea what the cause for this could be? The meter will balance etc. I like to get some capability to measure microwave power. Rein W6SZ rein0zn at @ix.netcom.com

For Sale 4 17 element Square 900 MHz antennas Pat N6RMJ 661-755-1773 or N6RMJ@ sbcglobal.net.

Threads

A preview of my latest Microwave Update paper, Waveguide Filters You Can Build - and Tune is available at: http://www.w1ghz.org/filter/Waveguide_Filters_You_Can_build.pdf 73 Paul Wade

The manual for the recently purchased Rubidium Oscillator Standard is at the SBMS website under Technical Information/ Papers and Software. Dave - WA6CGR

In case you haven't found a copy, Bob WA6VHS has one on his website.

It is a pdf file. Here's the link:

<http://www.ham-radio.com/wa6vhs/Test%20equipment/FREQUENCY%20STANDARDS/man-1pro.pdf> Doug "Dr. Rubidium"

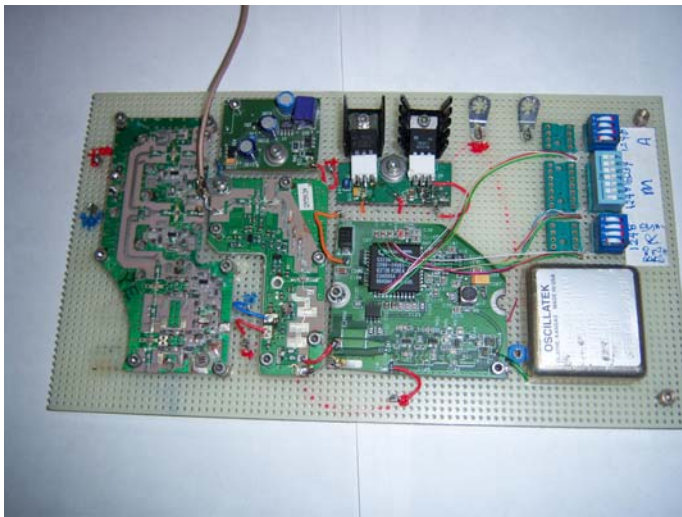


Robin and Doug sorting out the Rubidium units for the guys who had ordered some.

I think the ATV guys have a net on Tuesday nights. I'll try to look at this when I get a chance and see how well it works. Here are the instructions from the ATV newsletter. It looks like you can at least see the test pattern any time. To best log on to his BATC.TV Stream go to www.batc.tv <http://www.batc.tv/>, when the home page opens look for a button on the left column titled Members Streams and click on it. Then look for a drop down tab with the title Trevor's Stream and click on the drop down tab. Then find KE6BXT's call and click on it and then click on watch. You will be watching the ATN-CA Repeaters, 24/7. John KH6HZ

EME- K6JEY

I thought you might like to see the station with Rein W6SZ and John KJ6HZ hard at work. We had a great time and the rig worked very well. Murphy hit us hard in the high power amplifier, but a spare was available. Here a picture: http://www.nitehawk.com/rasmit/k6je_setup.jpg we also heard-PI9CAM, OH2DG WW2R and perhaps a couple others. Doug K6JEY



Joonho's, KG6MQS 10GHz rig with dip switch tuneable synthesizer.



Gordy, WA6ZKY early member



Dave, W6DL former K6OW and K6OWD



Gary, W6KVC our ATV network operator at the SBMS meetings.

MUD08 Report

The Northern Lights Radio Society did an outstanding job in putting together MUD2008. Of interest was their "surplus" tour, which hit a number of stores around Minneapolis on Thursday. Although they didn't have the "old style" surplus, they had a number of interesting electronics stores where a number of us purchased some goodies. With the coming of ebay, a number of "walk in" stores have turned to shop by Internet on ebay. Northern Lights Radio Society, Chippewa Valley Contesters and Badger VHF Contesters have a number of Internet reflectors to help with finding those stations at home or rovers that might have good propagation. N0UK 10G Contesting reflector and N0UK 10 G rain scatter reflectors help with the rover packs out ready to work anyone. They call the home stations "fixed" stations and the rovers "Packs". National Weather Service Internet sites help them predict the occurrences of patterns useful for ham operations. They do a lot of "super cell" scatter communications. They have a "beaconing mode" which is the electronic keyer in either the dit or da mode just transmitting to get signals out where others can check if signals are making it cross county. Most of the rain or snow scatter takes an elevated dish pointing. Since most locations have tall trees in the path, extra elevation is needed most of the time. Their trees even allow "knife edging type work. Most of the stations are working with "tens of watts" power levels. The rovers use horns in the cases of cross the pond Lake Superior operations since it is hard to determine where the signals are coming from lots of the time. The ducting or tropo gets spread around the lake and even has bounces off the opposite shore. The merits of cornfields vs. soybean farming were discussed since corn is often too high for rovers to see over. But the farming road system being laid out in squares helps for that grid locating. They like having the SBMS 2GHz and Up contest to have reason to be out with the other bands.

Paul Wade, W1GHZ introduced his Multiband Microwave Transverters boards for 903, 1296, 2304, 3456, - plus a new 1296 MHz transverter with low side LO injection, so it comes out right side up. He has one LO to run the several bands. Also an 1152 MHz LO board, or you could use it with a synthesizer like the apollo. Details at www.w1ghz.org/MBT/multiband.htm.

Stephen Hicks N5AC introduced his USB Programmable High Stability LO in both the kit apollo-1 700-1700 MHz range and the DEMI manufactured jumper programmable fixed frequencies apollo-32 version.

Down East Microwave has a 10 MHz distribution amplifier available to route that standard signal around the shack.



Dick, K6HIJ presented the SBMS 3.4 GHz project to MUD.



MUD08

The Noise Figure Measuring Event during the



The Rohde and Schwarz folks measured filters during the MUD08. Here Paul Wade W1GHZ is getting his waveguide filter measured.



Banquet prizes were many at the MUD08. Here is one of the tables with antennas and goodies available for the winning tickets.

SBMS members present were Larry K6HLH and Linda; Bill, WA6QYR and Judy KC6UTF; Dick, K6HIJ, Gordy WA6ZKY and Scott, N0EDV.



during the Banquet Drawings.

There were a number of semiconductor items to choose from



pick from. The prices were good too.

The Flea market on Friday evening had lots of hardware to

Various talks indicated that one could use WR10/WR12/WR15 on 78 GHz with out problems. WR62 and WR28 worked fine on 24 GHz.

There were lots of presentations on the software defined radio systems available. EME'rs are using it on the 24/47/and 78 GHz bands. Rocky 3.6 software and the various Softrock and Flex radio systems were discussed. The long integration and waterfall displays help the very low signal level communications in EME. 24 GHz EME is now on 24.048.1 GHz.

The MUD 2009 is to be Oct 24-25 in Dallas.

The Southeastern SVHF Conference 24-25 April 2009 is to be in Charlotte NC. They have a design contest where the first prize is on the order of \$2500. This is something that you would need to check their web site or with Steve at Down East Microwave.

Thanks for the hospitality Northern Lights Radio Society!!! Bill WA6QYR



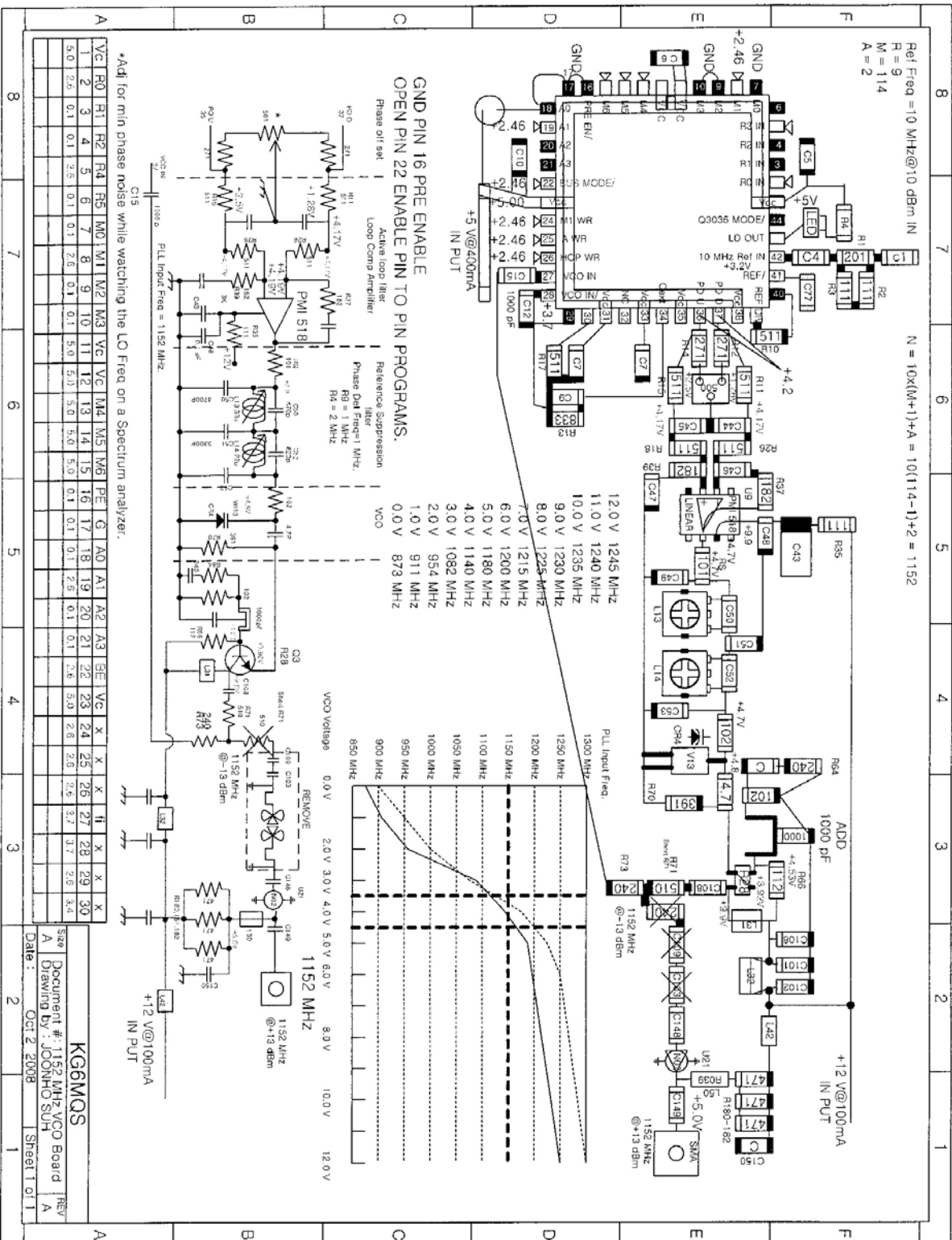
The banquet dinner had good food and lots of attendees. Again there was lots of discussion about what it is like at your QTH and what you have for a rig.



The Host room had lots of folks dropping by to sample the drinks and provided a place to exchange ideas on how to do it and what it was like at home with the rigs.



The technical Talks had many topics to listen to and pick ideas from. Software defined Radios, 78 GHz amplifier development, Roving, 24/47/78 GHz EME, SBMS 3.4 GHz project, 241 GHz DX work, and USB Programmable High Stability LO for transverters were among the topics presented. It was interesting to learn that the Midwest rovers have problems with the high corn and root for soy plants.





Bill, WA6QYR and Judy KC6UTF in visiting the MUD08 drove from Chicago to Minneapolis. They got to see lots of the county sites including this silo with a big pumpkin atop it. The trees in all their fall colors were wonderful to see. The San Bernardino Microwave Society is a technical amateur radio club affiliated with the ARRL having a membership of over 90 amateurs from Hawaii and Alaska to the east coast and beyond. Dues are \$15 per year, which includes a badge and monthly newsletter. Your mail label indicates your call followed by when your dues are due. Dues can be sent to the treasurer as listed under the banner on the front page. If you have material you would like in the newsletter please send it to Bill WA6QYR at 247 Rebel Road Ridgecrest, CA 93555, bburns@ridgecrest.ca.us, or phone 760-375-8566. The newsletter is generated about the 15th of the month and put into the mail at least the week prior to the meeting. This is your newsletter. SBMS

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