



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

May 2007 Edition

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At the **3 May** SBMS meeting Dick Kolby will be giving a presentation on Micro-controllers for microwave use. 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 UNTIL CLAIRIFICATION IS MADE.

Last meeting- Tech Talk by John, N6AX on 47 GHz was enlightening and the demo contact by John and Ed, W6OYJ was great. Welcome to new member Ernie Vigus, W7ERN of Anaheim. Doug, K6JEY was positioned in to the position of new member committee chairman who will come up with ways to bring in new and younger members to the club and set up a loaner rig group and project. Dick, K6HIJ will be machining 24 GHz waveguide switches and Frank, WB6CWN will be the electronics control project leader. Doug had a demo of his 47 GHz radio using a fin line mixer, DRO, and a DB6NT 10 GHz transverter. Our election had for the first time in many years multiple people for the various positions. The results were President, John Oppen KJ6HZ; Vice President, Dan Welch, W6DFW; Recording Sec, Dick Bremer, WB6DNX; Corresponding Sec, Kurt Geitner, K6RRA; Treasurer, Dick Kolbly, K6HIJ and Editor, Bill Burns, WA6QYR.

Scheduling

May 12 06:00-13 20:00 2GHz and Up contest
June 3 24 GHz VUCC
June 9-11 ARRL VHF QSO

June 23-24 Field Day

Swap meet at the Lab 1300 local Saturdays every other month.

July 28 Picnic/ Tune-up party

August 4-5 ARRL UHF Party

August 18-19 ARRL 10 GHz and Up contest

Sept 8-10 ARRL VHF QSO

Sept 15-16 10 GHz and Up second half

October 18-19-20 **MICROWAVE UPDATE (MUD) 2007** Historic Valley Forge Philadelphia,

“Wants and Gots for sale.

For Sale: 30W 1296 amplifier kit. Cost \$45, plus \$5 if sent by mail to cover cost of shipping and packaging. In So Cal, can arrange for pickup. Email 1296Amp@cox.net for more info. Chris Shoaff n9rin

For Sale- Traco 9-15vDC in and +/- 12v dc and 24 v dc out at over 400 ma \$1 each Dick Bremer
WB6DNX 714-529-2800

For Sale--Excess to my needs is a 2+ watt 24 GHz amplifier from W2PED. It has 56-db gain. I am asking \$325.00 that is what I paid. Contact me off list if you are interested.73's Bob WA6VHS
rhkendall@earthlink.net

For Sale: Wiltron 610D Sweep Generator with heads 6223D 4-12.4 GHz 61084D 1 MHz-1500 MHz
6116D 1.7-4.3 GHz \$200 HP 606A 50 KHz to 65 MHz Sig Gen \$20, Larry K6HLHK6HLH@sbcglobal.net

Activity reported at the April SBMS meeting- Doug, K6JEY has a working 78 GHz rig and a new FT1000 radio; Mel, WA6JBD is building a newer lighter 10 and 24 GHz rig; Frank, WB6CWN is working on 24 GHz and planning the summer trip to Mexico and is building two new 10 GHz radios for Mexico personnel; Dick, WB6DNX has a manual for his spectrum analyzer; Chuck, WA6EXV –Greg and Kerry donated to the OVRO aluminum plate fund and Jeff donated some rack mounting plate, GPS freq std is working along with shop distribution amp, built a 24 GHz feed for Frank and new boards for EME dish controller; Bill, WA6QYR built a 24 GHz rig that still has problems; Ed, W6OYJ reported that WB6BKR is staying in San Diego, has been playing with WSJT65 modes and had his 47 GHz rig to show; Kerry, N6IZW retired, worked 47 miles Mt Miguel to Palomar on laser; Greg, K6QPV worked on 24 GHz beacon; John, N6AX is getting his 10 GHz box on air; Tom, WB6UZZ has freq lock boards; Chris, N9RIN has new 10 GHz rig in work; Dave, N6TEB did some 24 GHz work; Ernie, W7ERN is a new member and looking for gear; Ray, WA6OWM has been busy; Bob, WB6VHS has done some YIG and synthesizer work; Dave, WA6CGR has been doing work with Wayne WH6HZ on a 10 GHz rig for W6JEH; Pat, N6RMJ did some 2304 MHz work; Larry, K6HLH did some work in on a 10 ft dish and has a new amp with a GL7399 tube; Jeff, KN6VR built some 1296 MHz power dividers; Dick, K6HIJ has his shop moved and working; Juno, KG6MQShass a 1w 10 GHz amp; Mike, W6YLZ is working paperwork for the next trip to Mexico; John, KJ6HZ has some new interfaces.

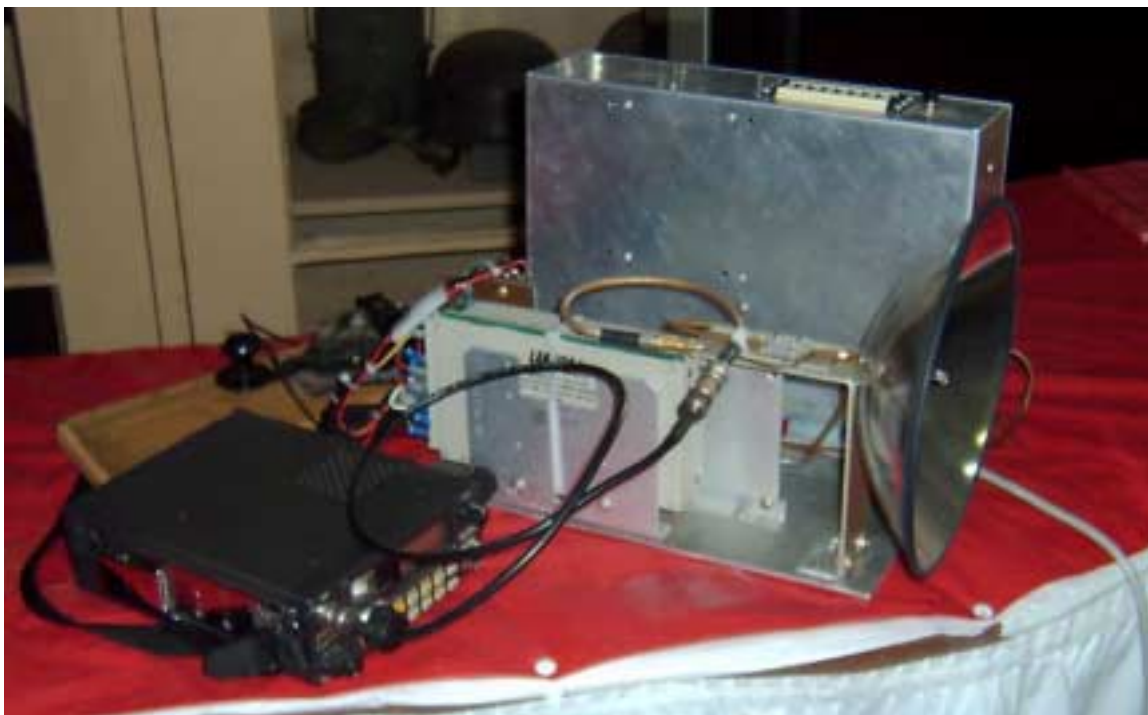
John, N6AX tech talk was about how he had married parts together for the 47 GHz rig. His main parts are a 9.450 GHz oscillator that mixes 438 MHz IF radio to 9.888 GHz. Then an 18.x GHz oscillator doubles through a W0EOM device to 37.2 GHz. Those two signals are then mixed to make the 47.088 GHz signals. Missing is some LNA and power amps at the 47 GHz front end.



John, N6AX following his cross the room contact with Ed, W6OYJ.



John's 47 GHz rig.



Ed, W6OYJ 47 GHz rig.



Doug, K6JEY and his 47 GHz rig in work.

MICROWAVE UPDATE (MUD) 2007 October 18-19-20 Historic Valley Forge Philadelphia,
 Pennsylvania CALLING FOR Papers and Presentations
 MARK YOUR CALENDARS AND REGISTER NOW
 HOTEL ACCEPTING RESERVATIONS
 Full info and registration at www.microwaveupdate.org Abstracts, papers and presentations may be sent to
 W2PED pdrexler@hotmail.com or N2UO lu6dw@yahoo.com

SORRY ABOUT THIS, PLEASE READ NUMBER 5,6,7
I HOPE THIS CLARIFIES EVERYTHING FOR EVERY ONE
N6RMJ / PAT

2GHz and Up World Wide Club Contest

Sponsored by the San Bernardino Microwave Society

1. Object

Worldwide groups of amateurs (Clubs) work as many amateur stations in as many different locations as possible in the world on bands from 2GHz through Light.

2. Date and Contest Period

Second weekend in May. The weekend begins at 6 a.m. local Saturday through 8 p.m. Sunday.

3. Exchange

Six-character Maidenhead Locator; example DM04ww (see April 1994 QST, p. 86 or www.arrl.org/locate/gridinfo.html). Signal report is optional.

4. Miscellaneous

Scheduling contacts is both permissible and encouraged. Stations are encouraged to operate from more than a single location. A station may be worked again on each band for additional credit after a change of location.

For purposes of the contest, a change of location is defined as a move of at least 16 km (10 miles).

A transmitter used to contact one or more stations may not be used subsequently under any other call during the contest period with the exception for multiple licenses in the same family sharing the same equipment (family rule). The intent of this rule is to prohibit "manufactured" contacts.

5. Scoring

Distance points: The distance in km between stations for each successfully completed QSO. One point per kilometer (e.g., 10km is 10 points).

In making the distance calculations, a string (or ruler) and map may be used. However, calculations by computer program are preferred. Several such programs are available, including a BASIC program listing in The ARRL World Grid Locator Atlas. For purposes of making calculations, stations are defined as being located in the center of the 6-character locator sub-square (most computer programs make this assumption).

6. Multipliers

- a. 2GHz to 10GHz times 1
- b. 24GHz = 2 times
- c. 47GHz = 4 times
- d. 76GHz and up = 8 times

7. Bonus points

Count 1000 points bonus for each band you activate and make at least one contact

Count 100 QSO points for each unique call sign worked per band

8. Awards

1st place plaque and all club entries will receive a certificate, suitable for framing.

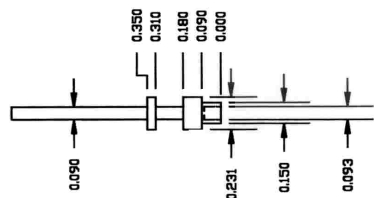
Send entries no later than 60 days after the contest to be considered.

Submit logs via regular mail only.

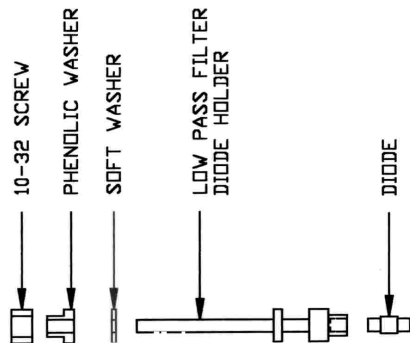
Pat Coker, N6RMJ, 40916 179th Street, Lancaster CA 93535, USA

For more information, rules and past scores see the SBMS web page at <http://www.ham-radio.com/sbms>

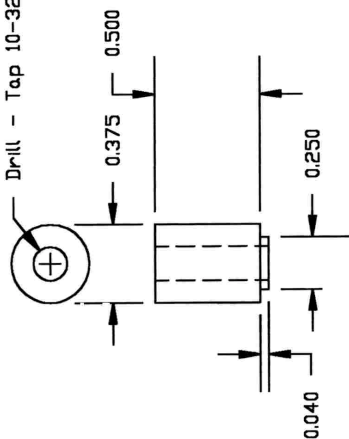
or contact Pat Coker, N6RMJ: n6rmj@sbcglobal.net



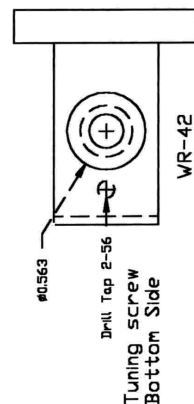
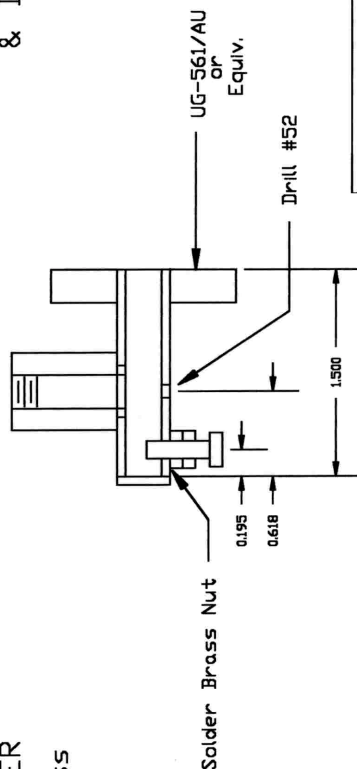
LOW PASS FILTER & DIODE HOLDER Material: Brass



Drill - Tap 10-32 0.200" deep



FILTER HOLDER Material: Brass



WR-42

Chuck Swedblom, WA6EXV
P.O. Box 605
Ridgecrest, CA 93556-0605

24GHZ WAVEGUIDE MIXER

SIZE A REV. 1 DWG NO.

SCALE 1:1.5 DATE 09-19-96 SHEET

DRAWING VR42MIX.DWG



Pat, N6RMJ with his expanded leg spread tripod for making it more stable in windy conditions.

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 Newsletter material can be copied as long as SBMS is identified as source.

San Bernardino Microwave Society newsletter
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USA