



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

July 2010 Edition

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At the **July 1, 2010** SBMS meeting the "Tech Talk" will be **Wayne N6NB** talking about contesting techniques. 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. The 2010 newly elected SBMS officers are noted in the above banner. Check out the SBMS web site at <http://www.ham-radio.com/sbms/>.

REMINDER- NO PARKING IN THE CHURCH LOT

Last meeting-Walter presented a great demonstration on Interference/ Heterodyne/ Homodyne/ Diffraction using 10 GHz Gunnplexer source and two waveguide detectors. He demonstrated how a simple sheet of plastic can be a beam splitter at 10 GHz. Different path lengths can produce what we know as multi-path or interference nulls and peaks. Different antenna aperture widths also create interference patterns. Monochromatic sources used in the demonstration produced a set of results where as a non-coherent source (Walt's spark gap [Testila coil type] octave bandwidth [5-10 GHz] round waveguide source) produced different results. Corner reflector type antennas and 3 corner reflectors were demonstrated. Using an IF signal source and Spectran software Walt demonstrated heterodyne, superheterodyne and homodyne type receivers. Super show Walt!!! Alan, KF6PGT of Diamond Springs; Gordon, WA6ZKY of Placerville; and Tisza KI6DBR of Claremont were our visitors (members). July 31 will end the MUD2010 pre-registration. There is to be a separate prize for those pre-registering. Mel, WA6JBD is setting up the surplus tours. So far C&H, Apex, Alltronics are on the list for the tour. Contact Mel at WA6JBD@verizon.net if you have other places to tour. Banquet planning has "radio white elephants"/raffle prizes for center pieces on the tables. Tisza also plans to have some "radio" cakes for center pieces like her BC-348 cake at the SBMS Christmas dinner. She is looking for suggestions for cakes. The JPL Lab tour registrations need to be also MUD registered to get on the list. There was a quick auction with parts from Wayne, N6NB. Mike, KI6OQT won the HP 415 meter and Bill, WA6QYR won the two Adler 3CX100A5 amplifiers. The results of the SBMS 2 GHz and UP contest will be reported next month when all the reports are received.

Activity reported at the June SBMS meeting: John, KJ6HZ attended the International Microwave Symposium with rigs from 500 KHz to 78 GHz; Dennis, W6DQ has a 1296 MHz EME rig working and has 50 to 2304 MHz rigs on his tower; Pat has his 1296 MHz rig working on a 30 ft tower; Larry, K6HLH has modified his GS-35 tube to a water cooler with the help of Dick, K6HIJ and had 2 10 GHz contacts (N6NB, WA6EXV); Dick, K6HIJ finished his 10 GHz rig and is now

working on the antenna; Dan, W6DFW has a new batch of 10 GHz slot antennas; Gordy, WA6ZKY has his 10 and 24 GHz rigs running and did some ATV work; Alan, KF6PGT has a working 1296 MHz rig; Chris, N9RIN has some new 3 and 5 GHz board; Steve, K6LPP went to the International Microwave Symposia; Ed, WX6DX went to the International Microwave Symposia with weather satellite demo; Mel, WA6JBD did some filter tune up; John, WA6JBC did some computer work; Wayne, N6NB has a 10 GHz rig on tower at 70 ft and one at his cabin in the San Gabriel mountains; Rein, W6SZ went to the International Microwave Seminar; Ed, W6OYJ went on a trip to Arizona and reported San Diego Beacons on 5760.700 2w 10,368.360 at +42 dBm and 24.196.050 with horn pointed 311 degrees, San Diego repeater on 449.680 91.5pl and the San Diego group will be doing the MUD2010 antenna measurements; Mike, KI6OQT is working on a 2.4 GHz magnetron source; Tom, WB6UZZ went to the International Microwave Symposia and has a lock board working on 10 GHz; Bill, WA6QYR is building a DSP-10 rig; Chuck, WA6EXV has the 10 GHz beacon done and will be taking it to San Diego for measurements; Dick, WB6DNX went to the International Microwave Symposia and took many pictures; ATV check-ins were AC6RB, KD6ILO, W6MNF, KA6DPS, KE6BXT, K6JEY; KB8VAO, KE6QHD, W6QIW, KB6ZJZ. 25 people at the meeting.

2010 SBMS 2.3 GHz and Up Contest Results

<u>Club</u>	<u>bands worked</u>	<u>Calls</u>	<u>DX</u>	<u>points</u>
Northern Lights Radio Society	2.3 3.4 5.7 10	31,700	56,358	102,051
SBMS	2.3 3.4 5.7 10	2200	2496	4696
San Diego Microwave Group	10	1400	1963	3363
Arizona MUG	10	600	708	1308

<u>Club</u>	<u>Operator Logs</u>
NLRS	16
SBMS	1
SDMG	3
AMUG	3

Scheduling.

July 31 Tune up party. The San Diego Microwave Group will be leading the testing of 10 and 24 GHz rigs at Fairview Park in Brea around 10 am.

August 5 Tech Talk- Planning for the 10 GHz and Up contest.

August 7-8 UHF Contest

August 21-22 ARRL 10 GHz and UP contest 1st weekend

September 2 Tech Talk Doug, K6JEY on "Using TV/Cable level meters for Antenna Measurements".

September 11-13 September VHF QSO Party

September 18-19 ARRL 10 GHz and UP second half

SBMS sponsored MUD 2010 October 21 to 24 Cerritos Sheraton Hotel. Website is microwaveupdate.org. Preregistration on line \$35. Hotel info on the web site. Thursday Tours. Friday talks and swap meet. Saturday talks, noise figure measurements, banquet and speaker. Sunday antenna measurements. Papers due 1 September for proceedings.

Wants and Gots for sale.

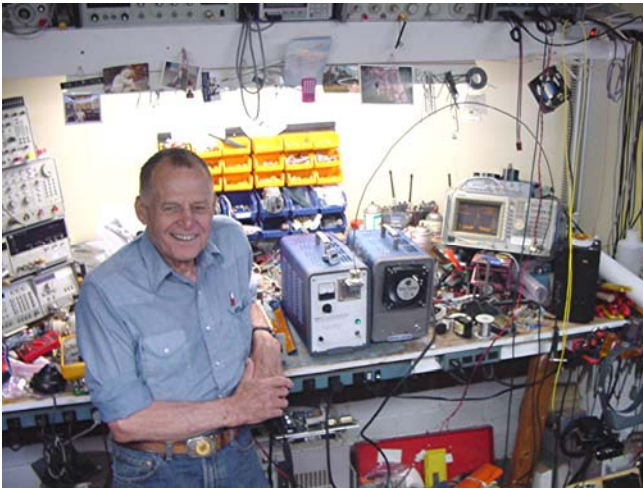
For Sale 30w 1296 MHz kit \$50 + \$5 for shipping Chris Shoaff cshoff@yahoo.com

For Sale- microwave oven leak detectors 0-5-10mv/cm2 Mike KI6OQT@yahoo.com

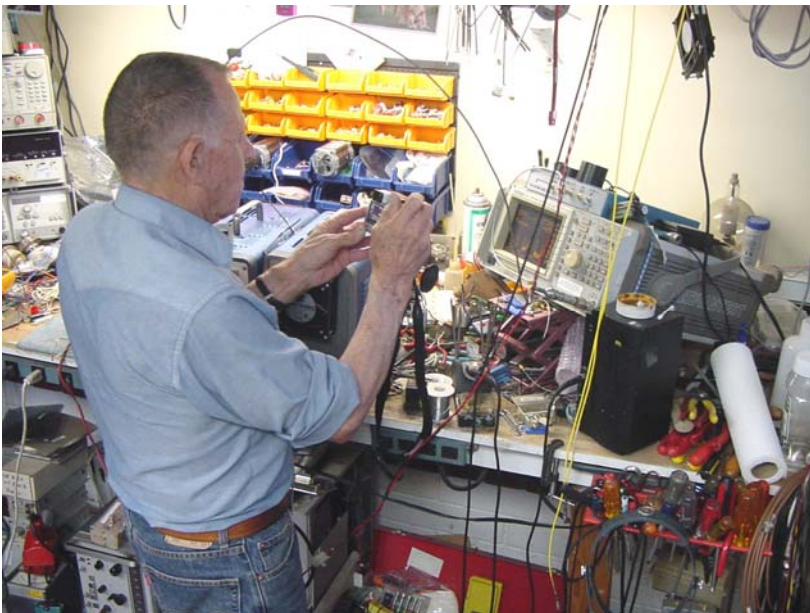
For Sale TS-403 2-4 GHz signal generator \$10 Bill bburns@ridgenet.net

For Sale 10 GHz slotted waveguide antennas \$60 kit \$85 assembled plus shipping Dan W6DFW W6DFW@apex-scientific.com

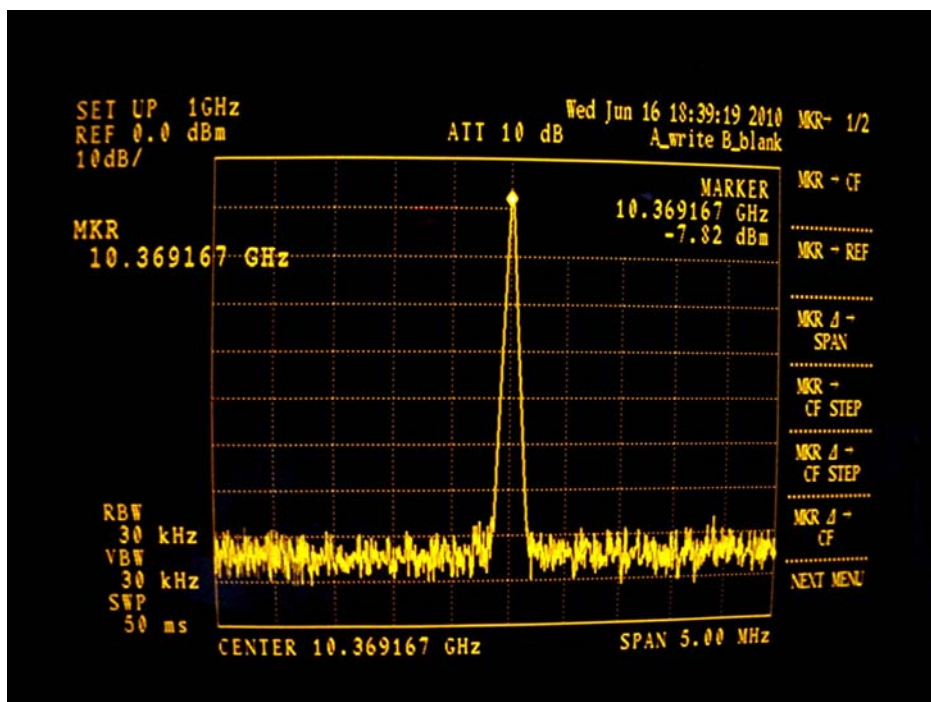
Ed Cole KL7UW has the Alaska VHF Up Group on his web site at www.kl7uw.com, Radio Astronomy- SETI and many more interesting things.



The following Pictures were taken when Chuck, WA6EXV visited Greg, K6QPV's QTH in San Diego and demonstrated the new 10G beacon. Kerry, N6IZW and Greg, K6QPV of the San Diego Microwave Group checked its operation and frequency tolerance to be $10.368370 \pm 1\text{Hz}$. Photographs and equipment provided by QPV.



Chuck connecting the beacon to the spectrum analyzer.



The Spectrum analyzer screen shot showing the frequency and the skirts of the signal. Nice and clean.



Doug, K6JEY at the IEEE International Microwave Symposia. Pictures by Dick, WB6DNX.



John, KJ6HZ; Doug, K6JEY

showing off Doug's 76 GHz rig.

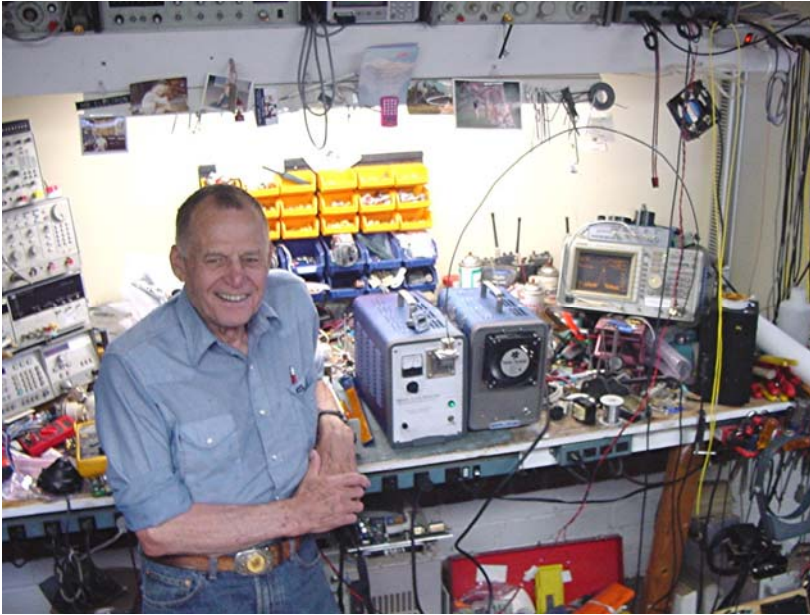


Another

demonstration at the IEEE International Microwave Symposium.



Walt discussing his demonstration of optics through the use of microwave devices.



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

Chuck, WA6EXV at Greg, work bench in San Diego where the 10 GHz beacon was measured. . 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@ridgenet.net, 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

San Bernardino Microwave Society newsletter
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