

SAN BERNARDINO MICROWAVE SOCIETY, Incorporated

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

# October 2015 Newsletter on the Activities of the San Bernardino Microwave Society Walter Clark, Editor

## **October 1st Tech Talk**

If time permits there will be a short technical presentation. On this *Microwave Mystery Gizmo* of the Month . . .



## But..

Microwave Update (MUD) 2015 San Diego is just a few days away and final preparations need to be discussed.

The upcoming SBMS meeting on Thursday October 1st will be dedicated to this task and MUD team leaders will be bringing progress reports and action items.



We are asking as many of our Southern California members as possible to attend and plan to take just one action item home to complete.

Some of us may have time for more, but thanks goes out to all who have devoted time and resources to making the conference a

Come and join SBMS at the Meeting on Thursday October 1<sup>st</sup> If you can't make it: watch online through Gary Heston's mobile video facility W6KVC by way of the internet out of England: <u>http://www.batc.tv/ch\_live.php?ch=2&id=139</u>

## **Activities at the September SBMS Meeting**

(that would be of interest to the general ham radio community)

### **Business Meeting**

Presiding: Treasurer Dick Bremer WB6DNX (President Chris Schoaff N9RIN and Vice President Brian Thorson AF6NA were out this evening.)

(17 in attendance... 18 last month)

### **Guests or Members Not Seen In a Long Time**

#### Don Hill - KE6BXT who usually joins us via ATV.

Don is a real asset to SBMS and everyone was very glad to see him in the flesh this meeting.

## **Old Business**

- Pat Coker N6RMJ reported on his research into webcams to facilitate presentations at SBMS meetings. The inexpensive (\$39-\$100) webcams all require a laptop or computer to interface to the projector. Question: should we buy a laptop (\$150-\$200) to go with the webcam and make it into a complete setup? Standalone "presenter cameras" are in the \$1000 range. Dick Bremer WB6DNX wondered if such a setup would also be useful at MUD. Gary Heston W6KVC said he would bring another camera for the existing ATV setup and we could use that. Pat moved that we table the discussion until after Microwave Update (i.e., to the November meeting).
- MUD Business
  - Microwave Update 2015 (MUD) chair Pat Coker N6RMJ announced that the guaranteed room rate for the room block would end 9/14/15. Reservations for the banquet had the same deadline. There are some browsers that don't seem to work with the online registration form so we do not think we have all of the banquet meal selection information that we should. Jim Blum KK6MXP has been tracking this and sending e-mails to people without complete registrations but these are not all being answered.
  - Pat would work to arrange with SBMS Lab Manager Dave Glawson WA6CGR for a prize stuffing party to be held at the lab soon.
  - Contents of the registration packet were discussed. Dave Laag W6DL offered a 60th anniversary graphic for the package.
  - Provision of computers, projector, microphones, and other equipment for the presentations was discussed. We have a projector but a backup projector is needed. We are providing all of our own audio/visual setup in order to avoid paying a third party contractor to the hotel for the service.

- Staffing plan for the registration table was discussed. Courtney Duncan N5BF would contact Phyllis Kolbly to follow up about her availability.
- Mel reported on the test setup. The network analyzer he was planning to bring had developed an issue. Chris Shoaff N9RIN offered (via chat room) to check on a test set. Pat would check with Brian Thorson AF6NA about the availability of the FieldFox that was used at the SBMS Tuneup Party in July.
- Pat would check next day about the fee for changing the locks at the hotel meeting rooms, a security issue.
- Pat moved that we spend up to a maximum of \$500 on a Hospitality Suite that SBMS will host Thursday evening. The motion passed.
- The outside swap meet will be held in the parking lot concurrent with the antenna range Sunday morning. These are open to anyone (not just MUD registrants). Rein Smit W6SZ and Mel Swanberg WA6JBD suggested that information about this needed to be on the MUD website.
- Dick Bremer WB6DNX asked about the surplus store. Pat said there would not be one. He would get the Vendor Room at the hotel open early.
- Ed Munn W6OYJ was preparing for the antenna range by collecting antennas for the various bands. Pat said that rooms 1843 and 1643 would be available for one end of the antenna test path.
- After the October SBMS meeting, MUD is one week away.

• Ham Swap Meet News

Dick Bremer WB6DNX commented that there had been a fire alarm event at the last Chino Hills Swapmeet which might lead to its being cancelled in the future. (N9RIN confirmed likely cancellation of the swapmeet from the chatroom). Anyone having plans regarding this event on the third Saturday of the month should check on this first. Rein Smit W6SZ said that the swapmeet had benefited the high school band with approval from the school district for the last five years, so it is likely that this is a mistake that will be corrected.

## **New Business**

• none

### **ATV and Internet Check-ins**

• Don Hill KE6BXT monitored the chatroom throughout the meeting and reported fluctuation between 13 and 15 attending, five reporting call signs: N9RIN, N8KH, KE6BXT, K4QFN, and one other.

Courtney Duncan (N5BF), Recording Secretary

## What Our Members Are Working On

#### Dave Laag W6DL: Marino Valley

Made some low level contacts in the contest.

#### Pat Coker N6RMJ: Lake Los Angeles

Reported 109 contest QSOs, many of them long haul to Robin WA6CDR in Nevada. Moved around a lot. Hopes to work everybody again this month.

#### Jim Blum KK6MXP: Ontario

Occupied Strawberry Peak for day one of the contest and Cajon summit. Needs a bigger dish. Second day of the weekend went to Chino Hills and Laguna Beach with Brian AF6NA. Tweaked up the rig, which is working well.

#### **Don Hill KE6BXT**

At the meeting, Don did a 2.4 GHz demonstration with Laguna Woods Amateur Radio Club of software on an AREDN node. (See the article on the next page.)

#### Jeff Harris NZ6Y (Sylmar)

Still in the planning stages working on and reading about 10 GHz radios.

#### Rein Smit W6SZ: Alta Loma

#### Mel Swanberg WA6JBD (Upland)

Was at Potosi for the contest making about 75 QSOs. Best DX was 766 km under horrible conditions. Doesn't yet have a plan for the September weekend.

#### Courtney Duncan N5BF: La Canada

Made nearly 80 QSOs with over 30 unique callsigns in the August contest weekend. Has written a paper about his Excel logging program for the MUD Proceedings. The paper and example Excel spreadsheet has also been posted to the SBMS website.

#### Walter Clark: Fullerton

This month had been active moving all electronics stuff from the garage into a bedroom of the house. Walter shared a trick for keeping things neat. He puts power strips on the **back** of the tables, (pulls the table away from the wall) and mounts a shelf under the power strips so that the cables drop into the shelf. (He awaits a Nobel Prize for this invention.)

**San Diego Microwave Group Ed Munn W6OYJ: Reporting** Reported good activity from San Diego but it was hot and shade was needed. Went to Mount Miguel about 25 miles southeast of downtown San Diego and Mount Otay, a little closer and much higher. There were two stations there the entire weekend. Dan K6NKC and Mohammad KK6GZJ worked Arizona. Ed had gone to Soldad on Sunday but discovered a huge 70th anniversary VJ day celebration which left no spot to work from. Also tried Double Peak Park in the area west of Escondido but it was so hot that he didn't bother to set up.

## Video Over 5 GHz Ham Band Mesh Network

Don Hill KE6BXT gave a brief demonstration of video over 5 GHz, part of the AREDN Mesh network that had been the subject of the June 2015 Tech Talk (given by Andre Hansen K6AH, Joe Ayers AE6XE, and Frank Columbus WA2KWR). He showed video from his laptop coming in via a Mesh node he had sitting outside. He was also able to show a list of nodes operating and reported on the frequency and geographic coverage of the network, about 100 mile reach from Cousins Peak into Ventura. The network developers work with local EMS organizations.

Don did a 2.4 GHz demonstration with Laguna Woods Amateur Radio Club of software on an AREDN node. (Laguna Woods is a retirement community that is very ham friendly. It's in the hills of southern Orange County.) These nodes use omni and directional antenna. He brought up a page that displayed page pings for every site every second and shows lines of asterisks for signal level. This display gives hints when looking for network problems. Showing 5.8 GHz at this meeting tonight plus 2.4 GHz earlier in the day counts as two microwave bands.

Gary Heston's Video System was of great value to the SBMS members at the meeting in putting Don's small screen up on the large screen in front of the room.

Don brought 5 GHz array antennas and amplifiers and so on. During the break and after the meeting members got a more thorough briefing outside. We learned that most of the infrastructure is being funded by individuals and installed at their houses and other radio sites. Applications supported include video phones, IP servers, blog servers, web servers, and cameras.

## Upcoming Events (Identified by Marty Woll N6VI)

- October 10: Pacific Northwest VHF Conference in Issaquah, WA
- October 15<sup>th</sup>-18<sup>th</sup>: Microwave Update 2015 at the Crown Plaza Hotel in San Diego
- October 19: Logs for 10 GHz & Up Contest due by 5:00 PM PDT
- Oct 31 Nov1: ARRL 50-1296 MHz EME Contest first weekend
- Nov 28 29: ARRL 50-1296 MHz EME Contest second weekend



http://hamradio.com/sbms/mud2015/mud\_index.html

Anyone, (not just SBMS members) ... if you know of any future 1 GHz and above amateur radio event, please send date and description to the editor: walterclark@roadrunner.com

## Last Month's Tech Talk:

Pat shared with us three of his closely-held secrets to scoring high in a microwave contest, and hosted an interactive exchange of contest planning ideas. He will also demo an easy and reliable way to complete CW contacts on 10 GHz for those of us who are "Morse Code challenged."



### Gary Heston's ATV Mobile Studio W6KVC

Not only can you watch our meetings live (well delayed by 240 milliseconds) You can chat with other viewers about what you are watching (or anything else.) Enter the chat room by clicking on the white space on the right of the website described below.

### This is how you watch SBMS meetings from home: http://www.batc.tv/ch\_live.php?ch=2&id=139

Better yet memorize the following Keywords: BATC TV and then use Google.

The TV part is easy to remember. Think of the BATC as batch without the h. It's a British website (that's the B) Once you are there, and logged in, on the right choose

"Repeaters" and then on the left, you have to pick a stream. The stream to choose is: **W6ATN.** 

Memorize W6ATN as ATN in California.

W6ATN is the club call sign for six ATV repeaters that are a part of the Amateur Television Network in Southern California. (ATN-CA)

Gary Heston's mobile studio beams its signal to the ATN repeater on Santiago Peak which is provided by: Roland Hoffman, KC6JPG



## Microwave Mystery Gizmo of the Month (Subject of the October Tech Talk; see above)



If you can identify this (BEFORE THE MEETING), or would like to discuss this after the meeting, use the SBMS Reflector by sending an e-mail letter to the following address:

SBMS@lists.altadena.net

If you don't have an account sign up at this website: <a href="mailto:sbms@ham-radio.com">sbms@ham-radio.com</a>

## **Needs, Wants and For Sale** (Updated 17 July)

- For Sale from Bill Burns: Bill will only rarely comes to the meetings, so if you want any of this, please contact him by phone or email. phone: 760-375-8566 email: bburns@mediacombb.net His address is: 247 Rebel Road Ridgecrest CA 93555
  - TVRO dishes 10 ft, 6 ft, and 5 ft free
  - 6 ft and 4 ft 19 inch racks free
  - Leader LBO514A 15 MHz Dual trace oscilloscope \$75
  - HP 5381A 80 MHz counter \$10
  - o 8 watt 5 GHz TWT's with power supplies \$50 each
  - copper wire enamel coated #14 many feet coils \$10 each (coils are like a foot in diameter and maybe a dozen turns or so...30 or 40 ft long wire)
- For Sale from Doug Millar (drzarkof56@yahoo.com):
  - a Rohde and Schwarz 309 10-18GHz Signal Generator in perfect shape. It is digitally synthesized and has a pull out instruction card. It has internal modulation and will also sweep. Will accept \$900.



I also have an HP432

power meter, cable and head (478) in working order for \$100

# **Member Ads**

## **Sixty North Electronics**

Kits Made by member KL7UW

Let Ed Cole assemble your Down East Microwave kit. For kits in stock, he can deliver an assembled unit to your custom design preferences within 30-days of a paid order. His prices are the same as you pay DEMI for an assembled transverter, but much quicker delivery time. And comes with 90-day written warrantee on labor (guaranteed to work)!

Shipping for a transverter is typically that of medium-size flat-rate Priority Mail anywhere in the USA.

For examples of his work click on... <u>http://www.kl7uw.com/kits.htm</u> Contact him at <u>kl7uw@acsalaska.net</u>

## 

Introducing the **OpenSynth** line of frequency synthesizer kits. Available in standard frequencies of 2556, 2952, 2160, 1152, 3312, 3006 MHz, also available from 400 MHz to 3500 MHz.

- ▲ Low phase noise, Buffered output
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- Open Source code and design, made to be modified
- ▲ 2" x 1.5", 12V @ 140 mA typical

Available at <a href="http://reactancelabs.com">http://reactancelabs.com</a>



If you are a member you can have a picture ad here yourself. For the time being this service is free. eMail editor at: WalterClark@roadrunner.com

## **About SBMS**

The San Bernardino Microwave Society is a technical amateur radio club affiliated with the ARRL having a membership of over 90 amateurs. The focus of the club is microwave activities in the Southern California. *Our sister club is San Diego Microwave Group (SDMG). At least one meeting a year are joint meetings.* SBMS dues are \$15 per year, which includes a badge and that's about it. The dues are more in the way of a donation to pay for outreach things such as video portals, a bank account, and rent for the building. When to pay is not a matter of remembering. The Corresponding Secretary will contact you by email and will then hound you like your own personal PBS telethon. Dues can be handed to the treasurer at the meeting, or mailed to the address of the treasurer listed in the banner below.

Meetings are first Thursday of the month, 7:00 PM at the American Legion Hall, Corona. For carpooling from North Orange County call Walter Clark @ 714 882-9647

#### The Reflector (SBMS Group Email)

The most active method of information exchange is our group email called the SBMS Reflector. You don't need to be an SBMS member to participate. To subscribe fill out the form at the website: <u>http://lists.altadena.net/mailman/listinfo/sbms</u> (If you are getting email on the SBMS Reflector now, and you want to write your own message, pull up a recently received message, click on "Reply to List." Don't forget to change the subject line and delete all previous text as appropriate.)

#### The SBMS Website and Newsletter

The SBMS Reflector is ephemeral. There's no record kept. The Newsletter has a slightly longer life. It is sent to members and past issues are recorded in the website. It's URL is: <u>http://www.ham-radio.com/sbms/</u> You don't have to memorize that or write it down, just enter SBMS into any internet search engine.

Newsletter: Walter Clark: walterClark@roadrunner.com

Website: Rein Smit: rein0zn@ix.netcom.com

The newsletter is created about the middle of the month and broadcast as a link inside an eMail letter to the members. This is mailed to you on the weekend prior to each meeting. SBMS Newsletter and website material can be copied as long as SBMS is identified as source.

### **Official Address**

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## **Contact San Bernardino Microwave Society (SBMS)**

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