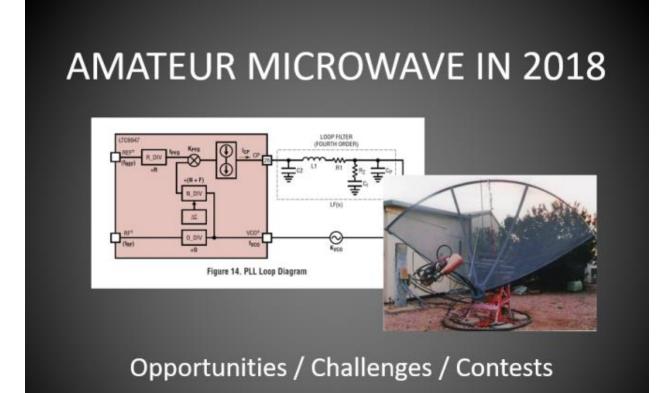


SAN BERNARDINO MICROWAVE SOCIETY, Incorporated

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

San Bernardino Microwave Society Newsletter

before the Meeting Sizzler's (again... sheesh) Tech Talk for the January 4th Meeting ...



Brian Thorson – AF6NA

I will briefly review some of the major SBMS events of 2017 and challenge our attendees to go higher and farther in the coming year.



I will mention FT-8 as an emerging digital mode and...

Rein, W6SZ will review his recent FT-8 Mode contact on 10 GHz with Chip Angle - N6CA.

Activities of the Christmas SBMS Meeting

(... which would be of interest to the General Ham Radio Community)

Pizza Party No one Presiding

Old Business

• none

New Business

• none

What Our Members Are Working On (Remember you can watch these reports live on http://atn-tv.org/live)

No Show and Tell

Events of Interest to the Microwave Ham Community

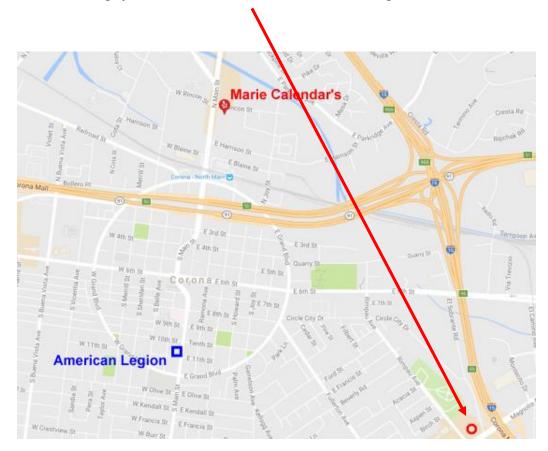
| February 1 | SBMS Meeting |
|---------------------|---|
| March 1 | SBMS Meeting |
| April 5 | SBMS Meeting |
| May 3 | SBMS Meeting |
| May 5 – 6 | SBMS 2 GHz & Up Contest |
| May 5 $(8am - 2pm)$ | CSVHF Spring Microwave Sprint (902 MHz & up) |
| June 7 | SBMS Meeting |
| June 9 – 10 | ARRL VHF (& Up) Contest – get on the microwave bands |
| June 23 – 24 | ARRL Field Day – do microwave demo for your local club |
| July 5 | SBMS Meeting |
| August 2 | SBMS Meeting |
| August 4 – 5 | ARRL 222 MHz & Up Contest – Theme is: distance |
| August 18 – 19 | ARRL 10 GHz & Up Contest – 1 st weekend |
| September 6 | SBMS Meeting |
| September 8 | ARRL VHF (& Up) Contest – get on the microwave bands! |
| September 15 | ARRL 10 GHz & Up Contest – 2 nd weekend |
| September | ARRL EME Contest – 2 GHz & Up |
| October 4 | SBMS Meeting |
| October 12 – 13 | Microwave Update 2018 – Fairborn, OH Holiday Inn |
| October ? - ? | ARRL EME Contest – 1.3 GHz & Down – 1 st weekend |
| November 1 | SBMS Meeting |
| November ? - ? | ARRL EME Contest – 1.3 GHz & Down – 2nd weekend |
| December 6 | SBMS Meeting |

If you have other events or more information on the ones listed; information that would help people decide whether to go or not, please send it to the editor at the email address below.

Dinner before the upcoming meeting Sizzler:

"Dinner-Before" is like a people capacitor in that it is a gathering place for those who are trying to beat the traffic and have a variety of distances to come from. Some arrive as early as 4:00. Magnolia exit then two right turns. (Gawd I'm tired of that place. ed)

For some reason, guys don't like waitresses and fine dining. Marie Calendar's is out.



Microwave Beacons for Southern California

Los Angeles

San Antonio Heights 2304.320 MHz W6IFE/B 27dBm Transmitting grid for Johnstone PK DM14ed -117 39 06.0 34 09 14.0 6436'

| Frazier Mtn. | 10368.310MHz | N6CA/B | 1.3W |
|--------------|--------------|--------|-------|
| DM04ms | -118.96948 3 | 4.7751 | 8027' |

| Santiago Peak | 10368.330MHz | AF6HP | 2W |
|---------------|--------------|----------|-------|
| DM13fr | -117.53401 | 33.71098 | 5681' |

| Palos Verdes | 10368.300MHz | N6CA/B | 1.6W Out of Service |
|--------------|--------------|----------|---------------------|
| DM03ts | -118.37642 | 33.76761 | 1200' |

Phoenix

| White Tanks | 1036 | 68.375MHz | W7ATN/B | 2W |
|-------------|------|-----------|----------|-------|
| 1296.270 | MHz | W7ATN/B | 10W | |
| DM33rn | - 1 | 112.56000 | 33.56861 | 3992' |

San Diego

Mt. San Miguel 10368.360MHz K6QPV/B 1W 5760.300MHz K6QPV/B 2W 3456.300MHz K6QPV/B 10W 1296.300MHz K6QPV/B 12W DM12mq -116.93516 32.69793 2500'

All beacons are horizontally polarized.

To update this list:

- contact Mel Swanberg or if you don't have his email,
- use the Reflector. Mel or the Newsletter Editor will see it there.

Home to Home This Wednesday Evening; (don't forget)

Rein Smit, W6SZ (Alta Loma), Past President SBMS

is encouraging all Southern California microwave hams to try contacting each other from their QTH the night before the SBMS meeting.

The intent is to learn home to home capabilities and to discover tricks to use them.

The Wednesday before the meeting: 10,368.100 MHz, CW or SSB. WA6JDB, N6RMJ and W6SZ will be looking/listening for your signals.



We'll be listening on 10368.100 starting at 21:00 PDT. We have been using the LARA Santiago repeater for liaison. Since that doesn't cover the high desert, we will use the LARA/Cactus repeater located on Heaps Peak, so the desert dwellers can check in,

The frequency is 448.86- PL 100.0 It will be configured in a stand alone mode so it doesn't bother anyone.

Mel - WA6JB

Pat Coker's Prodelin on his tower. 9 watts at 75'

"Provided a time sufficiently before or after the QSO party's time, W6SZ can position his radio before his home and can then utilize Keller Pk as a bouncing point for working points to the north."

Rein W6SZ

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).

This is how to watch SBMS meetings from home:

http://atn-tv.org/live

What you will see is this \rightarrow

It's a British website (that's the B in batc.tv) You do not need to log in to be able to watch the video and participate in the chat. You will be automatically put into the right video channel. It is W6ATN. The "W6" for California of course and the ATN is for Amateur Television Network. W6ATN is the club call sign for eight ATV repeaters that are a part of the Amateur Television Network in Southern California. (ATN-CA)

Gary Heston's mobile studio beams a 2.4415 GHz FM video (analog) signal to the ATN repeater on Santiago Peak maintained by Mike



Collis WA6SVT. (Gary monitors the signal from the repeater on 5 GHz.) From Santiago Peak on 5 GHz Roland Hoffman KC6JPG puts it on the internet by way of the website BATC.TV described above.

The ATN network linking is all done using FM microwave links on 2.4 GHz and 5 GHz bands. All ATN repeaters in Arizona, California and Nevada now have DVB-T (Digital Video Broadcast-Terrestrial) on 434 MHz input. Analog on 434 still works as well as the FM standard on 2,441.5 MHz. The DVB-T is the European standard for over the air TV. The T part, "terrestrial" is a format that is better with multipath. The only difference (which the US based) ATN has done to that standard is use 2 MHz B/W to fit within the 433-435 space between the weak signal and satellite sub bands.

- Gary transmits analog first.
- Snow Peak is the first digital station.
- There is a 2-3 second delay to digital users.
- There are also nodes on Mt. Potosi and Mt. Lemmon.
- Note: some meetings are recorded for archive.

When Roland Hoffman is substituting for Gary Heston, he streams to the internet directly by way of a mobile hotspot to a cell phone tower, thereby eliminating two lower bandwidth RF paths (SBMS to Santiago and Santiago to Roland's QTH).

The December Meeting Tech Talk:

Peet Zaw

Needs, Wants and For Sale (updated 1 June 2017)

Come on guys. If Bill lowers his price any lower he has to be paying you to take it away.

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: <u>bburns at-symbol mediacombb.net</u> His address is: 247 Rebel Road Ridgecrest CA 93555

For Free/ Sale

- Henry Electronics 2meter RF amplifier 1-4w input 30w output 12v free
- Roof mount antenna mount tripod free
- Aluminum chassis big and small free
- Large insulators with wood screw attached free
- Large turn-buckles for guy wires free
- Steel TV push-up masts free
- Power pole 14.5 ft tall by 1 ft diameter free
- Many feet Romex #14, #12 copper wire free
- Heat sinks, many sizes free
- Linksys broadband firewall 4 port router model befsx41 free
- Alinco DJ-280t 220 MHz handheld 4w with manual free (replacement batteries available)
- 4 ft Aluminum dish \$30

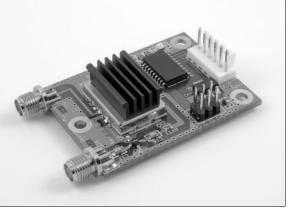


Introducing the **OpenSynth** line of frequency synthesizer kits. Available in standard frequencies of 2556, 2952, 2160, 1152, 3312, 3006 MHz, also

available from 400 MHz to 3500 MHz.

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

Available at http://reactancelabs.com



If you are a member you can have a picture ad here yourself. For the time being this service is free.

eMail the editor at: WalterClark at 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).*

Official Address San Bernardino Microwave Society 417 South Associated Road #146 Brea, CA 92821

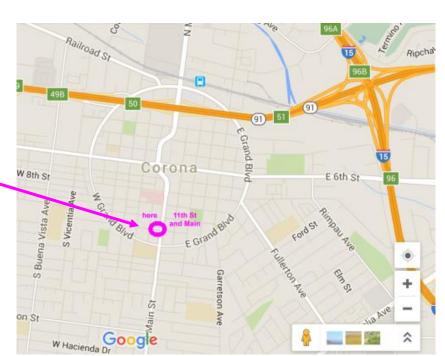
SBMS dues are \$15 per year, which includes a badge and that's about it. The dues are more in the way of a donation to pay for outreach things such as video portals, a bank account, and rent for the building. When to pay is not a matter of remembering. The Corresponding Secretary will contact you by 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

Google Map: Keywords: American Legion Hall, Corona

For carpooling from North Orange County call Dick Bremer at: 714-529-2800

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://atn-tv.org/live</u>

Services Sponsored by SBMS

The Reflector (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> After that, Send your email message to: sbms at-symbol ham-radio.com. (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.)

Responsible person for this: Dave Glawson WA6CGR wa6cgr at-symbol ham-radio.com

Website: Rein Smit W6SZ: rein0zn at-symbol ix.netcom.com

The URL is: <u>http://www.ham-radio.com/sbms/</u> But you don't have to memorize that or write it down, just enter SBMS into any internet search engine.

Newsletter: Walter Clark: walterClark at-symbol roadrunner.com

The newsletter is distributed by way of the SBMS Website: <u>www.ham-radio.com/sbms</u>. The purpose of the SBMS Newsletter is to keep hams everywhere in the world informed on current activities of the "active" members of the San Bernardino Microwave Society. Active Members include those who:

- o come to the meetings and share their progress
- o use ATV to report in and describe their projects
- send by email words and pictures of progress to the above

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- Time sensitive questions, reports or just plain bragging is for the SBMS Reflector. Send your email message to: sbms at-symbol ham-radio.com. To sign up go to: <u>http://lists.altadena.net/mailman/listinfo/sbms</u>

Contact San Bernardino Microwave Society (SBMS)

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