THE SAN BERNARDINO MICROWAVE SOCIETY (SBMS)

"Communicating at 1 GHz and Above - Since 1955"

July 2019 Updates, Activity and News







CONTENTS

"Don't Ask" about the Santiago Peak 10368.330 Beacon
June 2019 Technical Presentation
Promoting Amateur 10 GHz on Field Day
The 2019 SBMS Microwave Tune-Up
June Microwave Activity Reports
Microwave Mystery Device
Upcoming July Meeting Technical Presentation
SBMS Monthly Meetings
So. Cal. Microwave Beacons

An Important Message to SBMS Members – "Don't Ask"

An important message was delivered to SBMS members in attendance at the June 7th meeting after the video feed was turned off. This is important to those of us who use the X-band beacons for radio development, troubleshooting, and in the contests. The message came through an intermediary from the owner of the Santiago Peak 10 GHz beacon equipment:

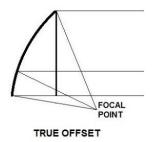
"Stop sending emails via the SBMS reflector asking about status of the Santiago 10368.330 MHz beacon. Remember, SBMS is getting a free ride on this."

The message was presented to the club after the meeting was adjourned. Regardless of how membership may feel about this, the reality is that the beacon may permanently go silent if we do not honor this request. The situation is further complicated by the fact that available space for beacon equipment on Santiago Peak is almost non-existent.

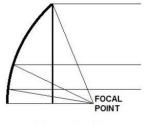
Please take this to heart and obey the request. We do not want to lose this important Amateur Microwave resource.

June 2019 Technical Presentation

"Seeing the Light and Finding Your Focus"







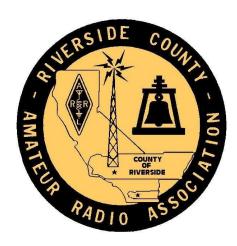
"RCA" OFFSET

At the June 6th SBMS meeting, Brian, AF6NA presented an optical method for finding the focal point of parabolic reflectors using sunlight. The difference between an "RCA" offset versus a "true" offset reflector was also covered.

Promoting Amateur 10 GHz on Field Day

SBMS Vice President Robert Carter, KM6RXN, was out promoting Amateur Microwave on the annual "Field Day" event held on Saturday June 22nd and Sunday June 23rd. The Riverside County ARA was glad to welcome Robert to their Field Day event held at the Martha McLean Anza Narrows Park.







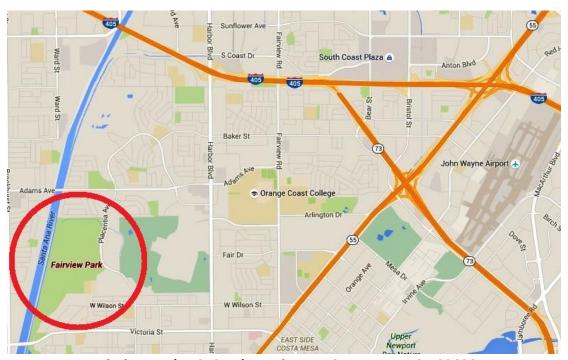
Robert demonstrated 10 GHz contacts to the licensed Hams in attendance. Rein, W6SZ and Brian, AF6NA provided contacts on 10368.100 MHz. Robert reports that there was a small crowd looking on as he spoke on USB voice with W6SZ and AF6NA. Some of the Riverside County ARA members said they would like to get on the X-Band.

The 2019 SBMS Microwave Tune-Up

Just 5 weeks, now, until the SBMS annual Microwave Tune Up where SBMS members and friends bring their 10 and 24 GHz radios for EIRP and MDS testing. This year, we are set to meet on July 27th, the last Saturday of the month at Fairview Park in Costa Mesa.



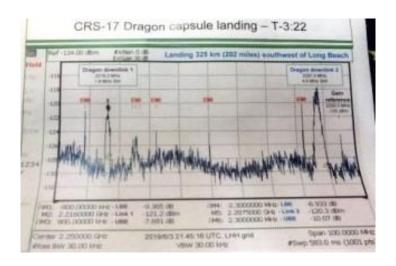
This is a great way to get started in Amateur Microwave or to connect with and learn from experienced microwave radio operators. We will be equipped to test 10.368 GHz and 24.192 GHz radios this year. Fairview Park is a no-barbecue park, but sandwiches and snacks are fine as long as we manage the trash responsibly. Get your systems out and ready for the last Saturday in July. Testing commences at 9:00 AM. A Freeway map and Fairview Park location is shown below.



Fairview Park - 2525 Placentia Ave, Costa Mesa, CA 92628

June 2019 Attendee Microwave Activity Reports

<u>Dan-AG6HF</u> - Was able to follow the Space X returning shroud and booster from his house in La Habra Heights.



<u>Mel-WA6JBD</u> - Was able to see Brian AF6NA, Rein W6SZ, Dave W6DL, and Frank WB6CWN in the home to home event last night. Was also able to improve performance on a filter he is working with.

<u>Larry-K6HLH</u> - In the home to home event last night almost worked Pat N6RMJ in Arizona. Both sides heard callsigns but did not complete exchanges before the channel closed.

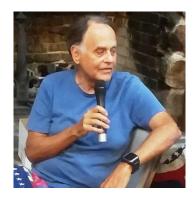
<u>Rein-W6SZ</u> - Reported a very successful home to home activity with contacts and chit chat going on until 2245 local time last evening.

<u>Gary-W6KVC</u> – Has returned from the Dayton Hamvention which was held again this year at the new fairgrounds venue where the weather was nice. He mentioned that the Hara Arena, former home of Hamvention until 2017 had been torn down by a tornado.

<u>Dick-WB6DNX</u> – Detailed the Treasurer's Report as above.

<u>Courtney-N5BF</u> – Participated in the Spring 2019 ARI (Associazione Radioamatori Italiani) EME weekend last month with 17 JT65C and 4 CW QSOs. Bought an Analog Devices Adalm-Pluto "SDR Active Learning Module", a software designed transceiver covering 200 MHz to 6 GHz, with the intent of trying to put it on 2304 and 3456 MHz experimentally.

<u>Robert-KM6RXN</u> - Did make a few 10 GHz contacts with the new radio last night in the home to home event, fighting QSB. Gordon West brought him a QSL card at the TRW Swapmeet.





Microwave Mystery Device

Bringing back a popular SBMS newsletter item, we have a mystery afoot that has something to do with microwaves. That is your only clue. If you brought this to the SBMS meeting, hold your peace until our members have had a chance to correctly identify the device in the photo below. Those who know what this is can post their (final) answer on the SBMS email reflector.



Can You Identify This Microwave Mystery Device?

Upcoming July 11th 2019 SBMS Meeting Technical Presentation

Please note that the next SBMS meeting will <u>NOT</u> be on the 4th of July, even though that is the first Thursday. It <u>has been moved to July 11th</u> so members can enjoy Independence Day with their families and friends.

Robert Carter, KM6RXN will present to SBMS ...

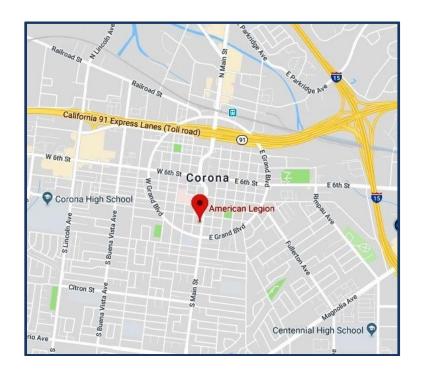
Promoting Amateur Microwave – An Activity for All Members

Last weekend, Robert, KM6RXN joined the Riverside County Amateur Radio Association (RCARA) for Field Day. He noticed that the only microwave activity used by the club was a 2.4 and 5.8 GHz mesh network that linked each operator to the Club logging system. But they were very interested in the 10 GHz system used for contacts by Robert. There are several outreach methods that will be discussed. Come with your ideas and lessons learned to share in this interactive meeting.

SBMS Monthly Meetings:

First Thursday of the month – 7:00 PM

American Legion Hall 1024 South Main St. Corona, CA 92882



Contact SBMS:

Feel free to get in touch with SBMS with questions about Amateur microwave systems, operation, design, club activities or meetings.

San Bernardino Microwave Society 417 South Associated Road Brea, CA 92821

Jason Sogolow	W6IEE	w6iee73-at-gmail.com	
Robert Carter	KM6RXN	laserdog3 -at- juno.com	951-289-5694
Dick Bremer	WB6DNX	rabremer-at-sbcglobal.net	
Brian Thorson	AF6NA	brianaf6na-at-gmail.com	951-768-0960
Dave Laag	W6DL	dlaag-at-clubnet.net	
Dave Glawson	WA6CGR	wa6cgr-at-ham-radio.com	
Rein Smit:	W6SZ	rein0zn-at-ix.netcom.com	

The SBMS E-Mail Reflector

For hardware requests, technical help, microwave theory questions, reach all SBMS members on the email reflector list at the following address:

sbms -at- ham-radio.com

Amateur Microwave Beacons in Southern California:

Radio Beacons are dependable signals always on the air that builders and makers can tune in to and receive. They give the users an indication that their receiver is working, whether it is on frequency, and a rough idea of receiver sensitivity. The following beacons may be useful in microwave system development and testing.

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<u>Name</u>	Freq. MHz	Call	Altitude	Output	Grid Square	W Long.	N Lat.
Heaps Peak	2304.325	W6IFE/B	6435 ft.	27 dBm (0.5W)	DM14kf	- 117.797	34.152
Santiago Peak	10368.330	AF6HP	5681 ft.	33 dBm (2W)	DM13fr	- 117.534	33.711
San Diego:							
Name	Freq. MHz	Call	Altitude	Output	Grid Square	W Long.	N Lat.
San Miguel	1296.300	K6QPV/B	2500 ft.	40.8 dBm	DM12mq	- 116.935	32.569
San Miguel	3456.300	K6QPV/B	u	40 dBm			
San Miguel	5760.300	K6QPV/B	u	33 dBm			
San Miguel	10368.360	K6QPV/B	u	27 dBm			
Phoenix:							
Name	Freq. MHz	Call	Altitude	Output	Grid Square	W Long.	N Lat.
White Tanks	1296.270	W7ATN/B	3992 ft.	40 dBm (10W)	DM33rn	-112.560	33.560
White Tanks	10368.375	W7ATN/B	u	33 dBm			

Events of Interest to the Amateur Microwave Community in 2019:

July 4	Celebrate USA Independence Day
July 11	SBMS Meeting
July 27	SBMS Microwave Tune-up
August 1	SBMS Meeting
August 3 – 4	ARRL 222 MHz & Up Distance Contest
August 17 – 18	10 GHz & Up Contest – Part 1
September 5	SBMS Meeting
September 14 – 16	ARRL September VHF Contest
September 21 – 22	ARRL 10 GHz & Up Contest – Part 2
September 29 – 30	ARRL EME Contest, 2.3 GHz & Up
October 3	SBMS Meeting
October 3 – 5	Microwave Update, Dallas, TX
October 5 – 6	Maker Faire, San Diego, CA
October 27 – 28	ARRL EME Contest, 50 to 1296 MHz. Part 1
November 7	SBMS Meeting
November 24 – 25	ARRL EME Contest, 50 to 1296 MHz. Part 2
December 5	SBMS Meeting

(Thanks to Marty Woll, N6VI for content) If you have other events or more information on the ones listed, please email it to brianaf6na-at-gmail.com or text it to 951-768-0960.