



ARRL 10 GHz Contest 2011 Results

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Microwavers get their annual dose of RF on two weekends

The ARRL 10 GHz and Up contest, held Aug 20-21 and Sept 17-18, 2011, again yielded fun and adventure for those who participated. Microwave activity is different from VHF or HF in a number of ways. First, CQ-ing on microwave bands is rare. The tight antenna patterns make finding someone via a CQ unlikely (rainscatter excepted). Second, the low number of operators active on the microwave bands make every contact an accomplishment. Fortunately, clubs and groups across the country are promoting microwave activity and welcoming new interested operators—often with spare equipment available for loan.



Mark, K1MAP operated from the east overlook just below the summit on Mt Greylock FN32mp with Tommy, W1AUV. (Photo by W1AUV)

Rainscatter—DX propagation aided by falling water droplets—really adds to the fun! The rain aloft in thunderheads gives a common surface from which well-separated stations can bounce signals. Rain helped and hurt during both weekends of the 10 GHz and Up contest. It aided contacts when the rain was between two stations. The rain squelched operations when it opened up on operators operating from portable locations.



W7XU gives roving a try. Here, as the rain begins in southern Minnesota, he works a group of operators on the Buck Hill ski-hill just south of the Twin Cities. (Photo by WØZQ)

2011 Contest Highlights

Groups across North America got on the air again in the ways they know to have fun. For instance in California, that means groups on mountaintops and rovers moving in the flat valleys. In Minnesota, it means a rover group in either southwestern Minnesota or northern Iowa working a fixed group on a hilltop near the Twin Cities. In Michigan, operators convened on the shores of Lake Erie for the August weekend and northern Lake Michigan for the September weekend. Lake Erie got activity from VE3's on the north and W8's, W3's, and W2's on the south. In New England, many of the key mountaintops were activated by stations that know the drill.



Check out Jim, KØMHC's tripod setup that includes laptop and SDR. His neat integration takes 10 GHz portable activity to the next level—involving SDR in his operation. (Photo by KØMHC)

During the August weekend, Lloyd, NE8I and Neil, W9NU operated from several locations on the lower peninsula of northern Michigan. They worked a fair amount of rain scatter. It facilitated regional contacts with stations they knew about. It also led to a nice 450km DX shot to Mike, WA3TTS located on the south shore of Lake Erie. After the weekend was over, they received an SWL report from the Cincinnati area (EM79). Had they heard the reply, it would have been a 575km shot.

Microwavers often trek to scenic, elevated locations. While there, they get to enjoy beauty for hours on end. But they also are chatted-up by non-hams visiting the same spot for the scenery. Microwavers have to explain what they are doing with these goofy looking dishes.



This year, artist Laurel Prafke from Ludington, MI spent a good part of the day at the same scenic shore location being used by Lloyd, NE8I and James, W8ISS for microwave operations. Just as Lloyd and James were about to move on after several hours, the artist came up

to them and presented them with the artistic painting shown at left that includes them and their equipment in the scene.

Mel, WA6JBD made his long 840km QSO with Chip, N6CA. Mel was on Mt Potosi near Las Vegas. Chip was at the base of Mt Shasta in far northern California. To complete their contact they used airplane scatter requiring coordination through a wide-area repeater system. Each runs 4-foot or larger dishes and 10 watts or more power. They used a technique of transmitting a continuous carrier until an aircraft caused a path to form. When the receiving station heard the carrier, they directed information to be sent until the path fell apart. The transmissions were short, lasting seconds but much longer than meteor pings. The contact took over an hour to complete and there was no other enhancement at all. Mel and Chip are commended for perseverance and skill.



"Camp" on top of Mt Potosi, Nevada. Las Vegas is behind the dishes. On the left is Robin, WA6CDR's 6-foot dish where he runs 10 watts. On the right is Mel, WA6JBD's 4-foot dish which he illuminates with 30 watts. (Photo by WA6CDR)

This year, Steve, KB8VAO operated from New York, Pennsylvania, and Ohio over the two weekends. He reports daunting challenges on the first weekend such as a broken dish. In September, while operating near Altoona, PA (FN00), he made a nice 580km hook-up with W1GHZ in FN41ee.

New England was dampened by rain and fog during the August weekend. Paul, W1GHZ discusses this and includes pictures in his December QST "Microwavelengths" column. The rain enhanced some contacts while adding to the challenge.

In Minnesota this year, activity was down slightly. The personnel generally rotated over the two sessions as to who would be in the rover group and who would be on Buck Hill in a fixed manner. The rover group went to southwestern MN for the August weekend and northern Iowa for the September weekend. The plan was to push distances further than in past years—weather and

conditions did not cooperate. August had good weather and average conditions that just wouldn't support "going long". September had very poor conditions with rain dampening the efforts of the rover group. The approaching weather front made contacts very difficult even over paths that are normally easy (150km).

Tony, KC6QHP tried to focus on 24, 47, and 79 GHz this year and not emphasize 10 GHz. He worked hard before the event to get two new setups working on 79 GHz. He supplied one of the rigs to a local San Diego area ham but something was not working properly in one of the rigs. In order to achieve success on 79 GHz this year, Tony had to change his Sunday plans and travel northward to Long Beach to meet up with Doug, K6JEY. There, on a 2km path, he was able to work K6JEY and Helen, KI6LQV on 79 GHz. He was glad to see that signals were strong with plenty of margin. He's already looking forward to longer distance attempts in the coming year.



Doug, K6JEY on Signal Hill in Long Beach, CA. Here he is coordinating a 2km 79 GHz contact with Tony, KC6QHP. (Photo by KC6QHP)

John, W3HMS and Joe, WA3PTV spent time operating from FN00wc, northwest of Chambersburg, PA. In general, they felt conditions were average or slightly

below average. Even coordinating on 2m liaison was difficult at times but their highlights included working W3SZ at 172km on 24 GHz with humidity over 70%. Also providing thrills were long 640km contacts on 10 GHz, with AF1T and K2TXB.



Joseph, WA3PTV's neat 10 GHz station (Photo by W3HMS)



Joseph, WA3PTV operating at FN00wc northwest of Chambersburg, PA (Photo by W3HMS)

10 GHz Only Category

In the 10 GHz Only category, Gary, WBØLJC led all 87 operators in this class with a score of 74,981. Gary traveled on all days of the contest and operated from 41 different locations. In second and third place are Jon, WØZQ and Donn, WA2VOI. Both roved on the August weekend and remained at one location on the September weekend. Californian operators KK6MK, AF6NA, and WA6JBD took fourth, seventh, and eighth places while Minnesotan's NØUK, KØHAC, and NØKP were fifth, sixth, and tenth.



A westward sunset view from Mt Potosi, Nevada. The horizon is 150 miles away. Forward scatter over the distant ridges allows reliable contacts with the central San Joaquin valley and northward. Over 350 miles with no help from rain scatter. (Photo by WA6CDR)

The highest number of unique calls worked in the 10 GHz Only category goes to Brian, AF6NA with 60. Close behind were Chris, N9RIN and Ben, KDØEJT with 50. California operators are doing a good job of getting participants on-the-air and having fun during this event. Longest DX in the 10 GHz Only category goes to Mel, WA6JBD with an 840km QSO.

10 GHz and Up Category

Entries in the “And Up” category fell slightly to 29 this year. Repeating this year at the top of this category is Lars, AA6IW with 64,896 points. Second and third were Pat, N6RMJ with 51,230 and Brian, W6BY with 50,303. Those scores were generated by working the most unique call signs; Lars with 75, Brian with 69, and Pat with 66. Californian’s N6TEB and W6QIW were at

fourth and fifth with New England operators N1JEZ, KA1OJ, W1GHZ, and W1FKF filling out spots sixth through tenth.



Jeff, KN6VR awaits the next QSOs on top of Mt Frazier. (Photo by KC6QHP)

Of all the logs submitted in this category, all included contacts on 10 GHz and 24 GHz. Five operators submitted contacts on the 47 GHz band. Two operators reported contacts on the 78 GHz band. Notable 10 GHz DX distances in this category were

652km by Ronald, K6GZA and 639km by John, W3HMS. Lars, AA6IW and Brian, W6BY each worked 343km on 24 GHz—impressive! Equally impressive was Gary, AD6FP working 257km on 47 GHz. 78 GHz contacts were 2km or less and enjoyed by Doug, K6JEY and Helen, KI6LQV.



Tony, KC6QHP by his well-organized multi-band setup. His dishes cover 10, 24, 48, and 79 GHz. In this photo, he's at Signal Hill in Long Beach, CA. (Photo by KC6QHP)

Analysis & Scores

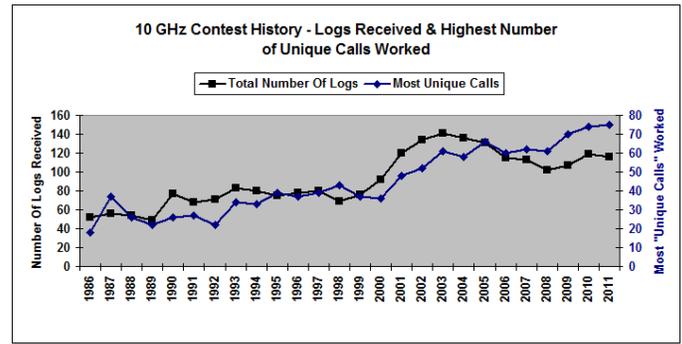
Top 10 Scores			
10 GHz Only	Score	10 GHz and Up	Score
WBØLJC	74981	AA6IW	64896
WØZQ	49094	N6RMJ	51230
WA2VOI	46885	W6BY	50303
KK6MK	43483	K6GZA	47552
NØUK	42653	N6TEB	38985
KØHAC	40958	W6QIW	33858
AF6NA	40674	N1JEZ	26339
WA6JBD	39829	KA1OJ	23484
NØKP	38114	W1GHZ	22075
W7XU	37450	W1FKF	21849

Top 10 QSOs Completed			
10 GHz Only	QSOs	10GHz and Up	QSOs
WBØLJC	360	N6RMJ	278
WØZQ	236	AA6IW	274
WA2VOI	220	W6BY	267
NØUK	198	K6GZA	200
KØHAC	192	N6TEB	180
NØKP	187	W6QIW	161
KK6MK	177	KA1OJ	125
KCØP	176	N1JEZ	104
W7XU	169	W1GHZ	93
N9RIN	169	W1FKF	92

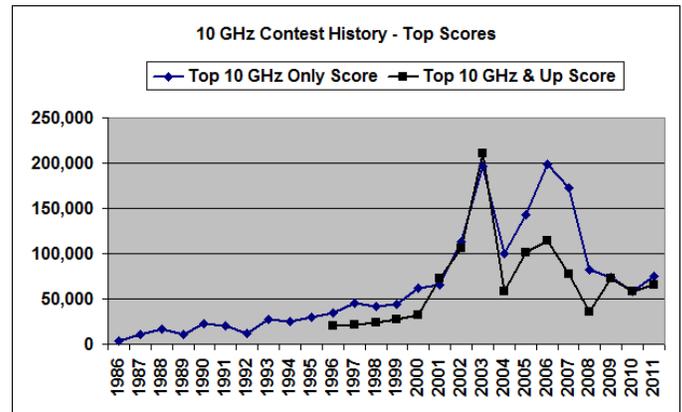
Participation by Call Area			
Call Area	Call Entries	Area	Entries
6	29	5	5
0	23	2	3
1	17	3	3
8	12	9	3
VE	12	7	1
4	8	DX	0

For those of you who like to analyze participation and distances over time, it is interesting to look for causes such as weather or organizational efforts by clubs. These charts were initiated by WØZQ and I thank him for them.

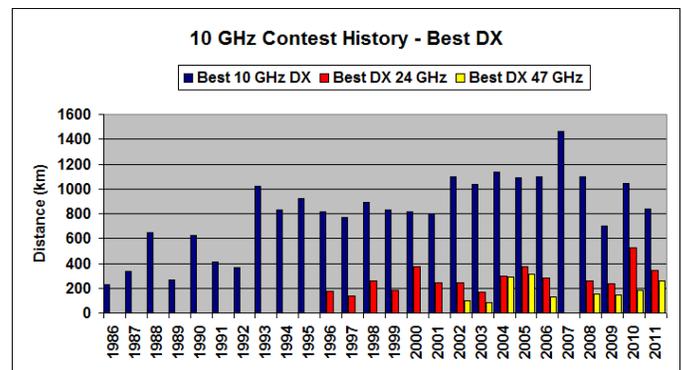
Participation remained steady and healthy again this year. You can see a level trend of logs submitted for the past four years. This year the slight upward trend of unique call signs continues with a new record of 75.



Top scores continue to hop around. Propagation and activity levels affect this so readily. Although I don't show a graph for it, the number of total QSOs worked in all logs submitted continues a downward trend with only 8375 this year. The past three years were above 9000.



Lastly, although 10 GHz and 24 GHz DX distances were slightly down this year, 47 GHz distance showed a nice increase in 2011.



Looking Ahead

For 2012, make a point to get on the air for this event. Put it on your calendar for August 18-19 and September 15-16, 2012. Plan a new adventure different from past years. Also, include new operators in your plans to expand the fun! Initial plans are forming for an expedition by many to the shores of Lake Superior on the August weekend. Operators from 8, 9, and 0-land as well as VE3 and VE4 will be involved. What will you plan in your part of the country?