2013 ARRL 10 GHz and **Up Contest Results**

Another year, another adventure on the microwaves.

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Microwave operators took to the air on August 17 – 18 and September 21 - 22, 2013 to see what they could accomplish on frequencies of 10 GHz and up. Beforehand, it's fun to plan where to go and who to attempt to contact. Then, when those weekends arrive, it's time to put the plan into action — first by loading the car. Some operators went to mountaintops or seashores to find an unobstructed horizon; some went to the flat farm fields of the plains.

Wherever the operators are, they marvel when signals are surprisingly loud, usually in the early morning and late evening. When conditions get tough or distances quite long, they utilize all their skills to eke out a contact from the noise. It all starts with a clear horizon; close-in foliage or terrain will either block or severely attenuate microwave signals. However, if

one can get even one mile away from obstructions, transmitted signals will energize the dust particles and water molecules above the close-in obstruction and will then scatter in all directions. Fortunately, some of the signal

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Figure 1 — Kevin, AD7OI, spent the August weekend on Cunningham Mountain DM23tn near Blythe, Arizona. Arizona operators made several contacts over challenging paths to multiple locations in California. [Kevin Jacobson, AD7OI, photo]

Top 10 Scores						
10 GHz Only	Score	10GHz and Up	Score			
WBØLJC W6YLZ KØCQ KCØP N6RMJ WØJT NØKP WØZQ NØUK KØHAC	84,754 59,288 58,119 45,817 44,945 44,924 44,884 44,884 42,989 42,881	AA6IW K9PW K6GZA AF1T W1MKY W6QIW N9RIN N1JEZ W1GHZ KA1OJ	60,200 54,746 45,651 36,319 34,535 33,015 28,335 27,128 25,838 25,169			

Top 10 QSOs Completed						
10 GHz Only	QSOs	10 GHz and Up	QSOs			
WBØLJC	372	K9PW	298			
KØCQ	248	AA6IW	232			
W6YLZ	231	K6GZA	178			
N6RMJ	207	AF1T	148			
KCØP	200	N9RIN	144			
NØKP	195	W1MKY	144			
WØZQ	195	W6QIW	139			
WØJT	191	KA1OJ	131			
KE6HPZ	184	W1JHR	101			
W9FZ	183	W1GHZ	97			

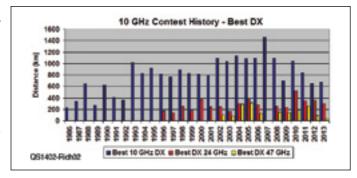


Figure 2 — The Best DX graph shows the effect of an unusual propagation event or the variability of activity levels on the 10, 24, and 47 GHz bands. In previous years, good tropo or rainscatter opportunities led to the two longer 10 GHz DX distances. While 676 km is a real accomplishment this year, conditions didn't provide spectacular enhancement.

scatters in the direction of the station one is trying to work.

Single sideband (SSB) is preferred for the ease and speed of making a contact. As signals get weak near the noise level, repeats and well articulated phonetics help to get the message through and complete the contact. When signals get weaker still, switching to CW gives margin above the noise to still get a signal and message through. When CW is so weak as to tell a signal is there, but not make out what is being said, some switch to digital modes like JT65 and JT4 and crawl into the noise to find the signal. Not many microwave operators are using digital modes when portable, but the number is growing every year.

Both East and West coast operators made multiple 600+ km contacts, despite neither coast having particularly good conditions. In September, Colorado operators were off the air completely due to the terrible flooding that happened earlier in the month. The northeast was impacted by rain during part of the September weekend.

Looking Ahead

Those who microwave contest know it is fun — primarily because it provides a challenge. I challenge all microwave operators to get on the air for the 2014 event and, more importantly, share the fun by bringing along a new operator. I also encourage you to try new things or new locations. Start making plans to be on-the-air August 16 - 17, 2014 and September 20 – 21, 2014. Be sure to check out an expanded web-only report at www. arrl.org/contests — look for the 2013 10 GHz and Up listing.

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