ARRL 10 GHz and Up Contest 2021 Results

By Rus Healy, K2UA (k2ua@arrl.net)

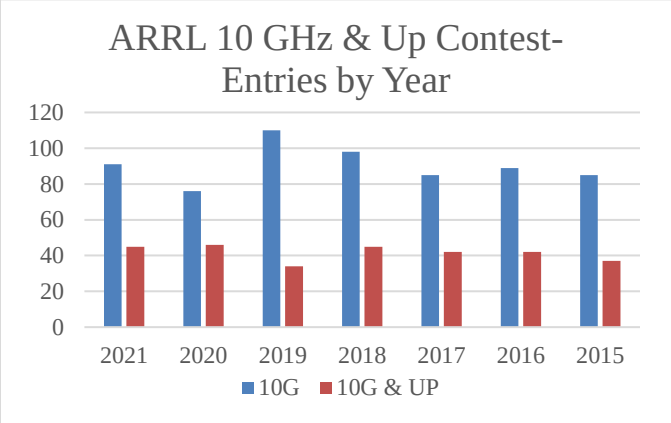
Now that was more like it!

2021 wasn't a "normal year"; I don't think many of us expected that it would be. But compared to the 2020 contest, which featured rain in the west, a huge coastal storm in the east, and cold, dry conditions in the Northeast the second weekend that sucked the life out of 10 GHz, 2021 was a banner year!

What made 2021 better? Well, in spite of Hurricane Henri, which chased Dave, K1RZ, from his island operation as he reports in his sidebar, the weather was much more typical for the time of year–resulting in a return to normal tropo conditions for most of the contest. In the Northeast, we also experienced a truly excellent wide-ranging tropo opening on 10 and 24 GHz as the sun set on Sunday evening of the September weekend.

The Logs

On top of better conditions, participation was up modestly (12%) in 2021. ARRL HQ received 91 logs for the 10 GHz category (up 15 from 2020), 45 logs for the 10 GHz and Up category (down one from 2020), and one checklog. This total represents the third-most logs ever for the contest and the second most for 10 GHz and Up.



It's great to see the contest coming back from the "COVID sag." Several logs resulting in the nice bump from 2020 totals included net-new stations to the band, thanks in part to mentoring contributions by established operators. A number of other highlights came out as well, as reported below.

Distances and Activity

The return to typical weather patterns permitted the better 10 GHz distances to be achieved this time around. Big West Coast distances dominated the top-ten box, with WA6CDR and K6MG enjoying a 746-km QSO to top the box. Back East, AF1T and VE3KH completed an impressive 710-km QSO. It took 629 km to make the top-ten distances on 10 GHz, and the box was occupied by stations from both coasts, Eastern Canada, and Texas.

The average distance of contacts to make the top-ten distance box was 675 km in 2021. By comparison, in 2020 it was 670 km–but it also took 669 km to make the box. We can't conclude much from all that, but the fact that contacts over 700 km long took place on both coasts and long contacts occurred in every region indicates that the 10 GHz band was feeling like its old, welcoming self.

The range of distances in this year's top ten on 24 GHz was 174 to 238 km, with an average of 198 km. Like 10 GHz, East, West, and Central regions are represented in the top ten. A solid tropo opening in the Eastern Great Lakes region on Sunday evening in the September weekend allowed for solid 238-km contacts between VE3SMA at the west end, and K2DH and K2UA at the east end. This path bested the pack for 2021 DX on 24 GHz. VE3SMA was running just 250 mW into a 1-foot dish.

Interestingly, this distance wouldn't have made the top-ten DX box on 24 GHz in 2020. Part of the difference is attributable to the astoundingly bad 24 GHz propagation across the Great Lakes this year in the August weekend–a usually reliable source of some long contacts. Even massive 10 GHz signals didn't indicate success, as they usually do–not a peep would be heard along the usually reliable east-west Lake Erie paths. And as reported last year, in the 2020 contest, 24 GHz and up benefited from the dry, cold conditions in the East that made many contacts possible without enhancement due to the low atmospheric water vapor attenuation.

Table 1 compares top distances for this year's contest with the 2020 results. The numbers allow us to draw some conclusions about conditions.

Band	2021 Average from Top Ten	2020 Average from Top Ten
10 GHz	675 km	670 km
24 GHz	198 km	252 km
47 GHz	113 km	111 km
76 GHz	61 km	50 km

Table 1 – Top Distance Averages from Top Ten Distances by Band

Mike, N2MG, completes his first-ever 24 GHz QSO while operating from Hogback Mountain in FN32ou. Mike worked Tom, WA1MBA, on Mount Wachusett in FN42bl, over an 86-km path. Mike added 24 GHz capability to his 10 GHz setup just a couple of weeks earlier. [Photo by the author]

On 47 GHz, our only exclusive Amateur Radio allocation among the microwave bands, distance results were also tight. A set of six stations topped 120 km, with a top DX of 126 km once again this year shared by N1JEZ, WA1MBA, KA1OJ, and W1EX. At the other end of the box, the Canadian trio of VE2UG, VA3TO, and VA3ELE shared the 98-km best DX. The average distance of the QSOs making the top ten this year was up slightly from last year, to 113 km.

At 76 GHz, N1JEZ and WA1MBA completed over a 126-km path, a huge increase over last year's 93-km best distance on the band. Mike, N1JEZ, reports that helping WA1MBA complete 76 GHz VUCC #3 was the highlight of the contest for him. Also on 76 GHz, W1EX and KA1OJ shared an impressive 85-km best distance. Four stations in the Lake Erie area also completed contacts to make the box. The average distance of the top distances on this band was 61 km, up 11 km from the 2020 average. Equipment for this band remains rare and expensive compared to the bands on both sides of it, so fewer stations are active there. Hopefully this will be the next area of focus for those developing projects that others can duplicate.

Once again this year, the highest band with activity reported in the contest was 122 GHz. As I speculated last year, distances grew in 2021 compared to 2020. WB8TGY, W8MMM, and WA8VPD completed 11-km contacts, and four more stations logged 4-km contacts. Quite a number of other contacts took place on the band, but the box doesn't show contacts that are 1 km or less. Quite a number of longer contacts have been made on 122 GHz outside contests–who will be the first to top 20 km in the contest? Much more is possible!

Top Ten Analysis

The top ten features many of the same stations we've come to expect to post high scores. QSO totals and scores were also through the roof compared to 2020! For the first time, multiple stations topped 50k in the 10 GHz and Up category from the Northeast. This is a signal of activity more than any other factor–lots of new stations are getting on the bands, and a rising tide raises all boats!

Average scores across both top ten boxes were up significantly. In 2021, repeat winner WBØLJC's score was up 11k from his 2020 score. By contrast, the 10 GHz and Up top score is down slightly (by 3k) from last year's top score, but three stations in the Northeast scored more than 50k for the first time.

Logs Received by Call Area	
Call Area	Logs Received
Call Area 0	13
Call Area 1	22
Call Area 2	15
Call Area 3	6
Call Area 4	7
Call Area 5	8
Call Area 6	19
Call Area 7	9
Call Area 8	13
Call Area 9	16
Call Area 15 (Canada)	9

10 GHz	Score	QSOs	10 GHz and Up	Score	QSOs
WBØLJC	56,268	247	VA3ELE	50,889	239
WA6CDR	46,987	120	K2DH	50,299	221
VE3KH	40,253	162	K2UA	50,092	223
KB8U	38,310	156	VA3TO	46,908	230
AF1T	38,214	118	K9PW	41,295	241
W1MKY	36,485	113	K6ML	40,368	162
N6RMJ	33,121	118	N9JIM	36,118	133
WØZQ	31,840	145	W6QIW	33,566	128
KA9VVQ	31,199	151	K1RZ	31,818	88
W9FZ	31,199	151	VE2UG	31,504	167

Table 2 – Top Ten by Category

Table 3 brings out a strong trend in earning big scores. Of those in the 10 GHz box, AF1T and W1MKY operate together, as do KA9VVQ and W9FZ. Both are husband-wife teams, two of just a few married couples I know of in this contest. That's pretty cool in and of itself. That said, in the 10 GHz and Up category, perennial high-scoring Canadian entrants VE2UG, VA3TO, and VA3ELE traveled and operated together. K2DH and K2UA did as well, for the fifth year in a row.

10 GHz	Best DX	Unique Calls	10 GHz and Up	Best DX	Unique Calls
WBØLJC	430	22	VA3ELE	626	39
WA6CDR	746	37	K2DH	573	61
VE3KH	710	47	K2UA	573	61
KB8U	484	31	VA3TO	626	38
AF1T	710	49	K9PW	491	42
W1MKY	640	48	K6ML	528	24
N6RMJ	537	33	N9JIM	528	25
WØZQ	395	20	W6QIW	616	37
KA9VVQ	516	22	K1RZ	517	46
W9FZ	516	22	VE2UG	525	34

Table 3 – Top Ten Scores By Distance and Calls Worked

One of the advantages of this style of operating is that it attracts more stations to work the group. Two or more people can work on site selection, driving, QSO coordination, setup, making sure nobody steps off a dock into a lake at night, and so forth. For other stations, it is easy to prioritize two or more stations operating together at one site when setting schedules. Completing QSOs with a small group is also more likely than it is with one station–typically it's faster to find signals, point antennas, and get on-frequency that way. This doesn't mean it's the only way to go, but the top scores show the advantages of this approach.

One operator deserves a callout in the 10 GHz category. Kevin, VE3KH, raised his score significantly this year, notching a third-place slot from his home station on Lake Ontario. He also logged the third-most call signs in that category, which is tough to do from any home station. Strong work, Kevin!

In the 10 GHz and Up category, K1RZ also deserves a special mention. Though his QSO count was lower than the other stations in the top ten, recall from his sidebar that he missed a day of operation due to unexpected travel to escape Hurricane Henri (see his sidebar for the dramatic story behind that). He still managed to work 46 call signs, finish in the top ten, and notch an average a very impressive 351 km per QSO!

In terms of unique calls worked, 2021 showed another sign of returning to more normal conditions–more stations were on the air to work. Congrats once again to Dave, K2DH, on top calls-worked spot in 2021 in the 10 GHz and Up category. This was the third year in a row that Dave has topped that list and set a new mark for calls worked. Rus, K2UA, matched Dave this time in calls worked. Both operators made significant upgrades to a 76-cm dish with a dual-band W1GHZ feed for 10 and 24 GHz. The extra gain really helps on 24 GHz!

Mark, WB8TGY, traveled to New England for the August weekend for a family wedding. Not to be left out, he took his compact 10 GHz setup, fully self-contained, and made a few QSOs along the way in FN01. He also had 24 and 47 GHz along and made some QSOs on each band. Mark experienced his first brush with a hurricane this weekend also, as Hurricane Henri brushed the Northeast. [Mark Korroch, WB8TGY, photo]

Regional Highlights

In 2021, as is often the case, the largest number of stations submitting logs came from New England. The W1 call area tied 2020 for the most logs submitted at 22. California followed close behind with 19, down two from last year. The W9 and W2 regions followed with 16 and 15 logs, respectively. W0 and W8 each produced 13 logs.

Every call area produced at least six logs, double last year's minimum, and the average was up one to 12 logs per region.

Regionally, the West is strongly represented in both top ten boxes with entries from WA6CDR and N6RMJ in the 10 GHz category and K6ML, N9JIM, and W6QIW in the 10 GHz and Up category. With five of the top 20 scores, California and Arizona stations once again show their strength in this competition.

West Coast Region

(Pacific, Northwestern and Southwestern Divisions; Alberta, British Columbia and NT Sections)

10 GHz		10 GHz & Up	
WA6CDR	46,987	K6ML	40,368
N6RMJ	33,121	N9JIM	36,118
KN6OUL	29,219	W6QIW	33,566
N5BF	21,963	K6MG	20,184
W6DL	19,399	WA6QDP	19,931

In the Midwest, Gary, WBØLJC, repeated his 2020 win this year with a 11k increase in score and the top QSO number of the contest at 246. Those contacts came from 21 different operators. Next in line, Jon, WØZQ, put in a respectable 31k finish on 10 GHz (and a Golden Log), followed by NØKP with 23k. On 10 GHz and Up, Brad, WQ5S, led the region with a 15k score. See his comments in the mentoring sidebar.

Midwest Region

(Dakota, Midwest, Rocky Mountain and West Gulf Divisions; Manitoba and Saskatchewan Sections)

10 GHz		10 GHz & Up	
WBØLJC	56,268	WQ5S	15,848
WØZQ	31,840	W5LUA	8,676
NØKP	23,739	AA5C	7,460
WØGHZ	11,621	AF4JF	1,921
KCØP	9,739	WAØCNS	1,232

In the Central region, six Canadian stations appear in the ten positions across the two categories, led by home station op Kevin, VE3KH, in the 10 GHz category, and Peter, VA3ELE, in the 10 GHz and Up category. Strong work, northern friends! Additional strong scores in the region came from Russ, KB8U, and husband-wife team KA9VVQ and W9FZ in the 10 GHz and Up category, and from all five operators who appear in the 10 GHz and Up category, led by Peter, VA3ELE, and Hugh, VA3TO.

Central Region

(Central and Great Lakes Divisions; Ontario East, Ontario North, Ontario South, and Greater Toronto Area Sections)

10 GHz		10 GHz & Up	
VE3KH	40,253	VA3ELE	50,889
KB8U	38,310	VA3TO	46,908
KA9VVQ	31,199	K9PW	41,295
W9FZ	31,199	VE2UG	31,504
VE3EG	21,935	VE3SMA	31,106

Fred, N1DPM, and John, K1OR, operated from a park in FN32 in Sunderland, MA. [Fred Stefanik, N1DPM, photo]

The Northeast region 10 GHz winner was Dale, AF1T, with 38k, who was followed closely by his wife and operating partner Mickie, W1MKY. In the 10 GHz and Up category, K2DH and K2UA topped the list, followed by Andy, KØSM; Paul, W1GHZ; and Wayne, N2WK; who all topped 25k. Andy and Wayne operated all or mostly from their home stations.

Northeast Region

(New England, Hudson and Atlantic Divisions; Maritime and Quebec Sections)

10 GHz		10 GHz & Up	
AF1T	38,214	K2DH	50,299
W1MKY	36,485	K2UA	50,092
W2RMA	26,420	KØSM	27,434
K3WHC	20,744	W1GHZ	27,367
KA2LIM	17,452	N2WK	25,933

Pat, W5VY, participated in the second weekend as a 10 GHz rover as part of the North Texas Microwave Society group. He visited six sites in Arkansas, Oklahoma, and Texas. Had lots of fun working NTMS fixed stations and Brad, WQ5S, another NTMS Rover. He hopes to add 24 GHz in 2022. [Pat Patterson, W5VY, photo]

The Southeast Region showed lighter participation, topped by a close race between Pat, W5VY, and John, N9ZL.

Southeast Region			
(Delta, Roanoke and Southeastern Divisions)			
	10 GHz	10 GHz & Up	
W5VY	5,678	----	----
N9ZL	5,165	----	----
W3IP	1,672	----	----
K4QF	677	----	----
KI5CKM	572	----	----

Log Checking Revisited – A Wake-up Call

As mentioned in last year's results, log checking for this contest was fully implemented for the 2021 contest. We're now on par with the log checking process for all other ARRL contests. You can access log-checking reports (LCRs) by visiting contests.arrl.org/logcheckreports.php. You'll be asked to enter your callsign, and a list of available LCRs will be presented. Select the event of the LCR you wish to receive, and it will be sent to the email address supplied when the entry was submitted. I suggest requesting yours–unless you had a Golden Log, it will be enlightening!

Some operators will notice significant reductions in their scores from what they claimed. These reductions can result from not-in-log QSOs (NILs). This usually happens when the other station doesn't log a QSO with you. Call sign copying errors and incorrectly logged grids round out the typical error list. None of us is making so many contacts in this contest that we can't take the time to pay close attention to calls and grids we are logging. There's not much we can do to make sure the other station logs the QSO, but we can be sure that they give our calls correctly over the air.

There is a lot of room for improvement in logging accuracy in this contest. Take note of these stats to get an idea of where we stand now. Hopefully we can collectively look back at this next year and see a significant improvement.

This year, 47 entrants (34%) had a 0.0% error rate and therefore no score reduction. Congratulations to this group, listed below, on your Golden Logs!

Score Reductions Due to Logging Errors	
Score Reduction	**Number of Logs and Percentage of Total**
10-33.9%	21 (15%)
5-10%	20 (14%)
3-5%	14 (10%)
0.2-3%	35 (25%)
0% (Golden Log)	47 (34%)

It's worth noting that you don't have to have a huge score reduction in your own log to have a significant impact on other entrants' logs. One operator, for example, caused

exchange logging errors for 28 QSOs by sending something different over the air to those stations than what he submitted to HQ in his log. Another operator caused 12 exchange logging errors, and a total of 13 operators caused five or more such errors each.

Please take the time to make sure that your sent exchange information matches what you're logging.

Six different operators caused four NILs each for other operators by not including these QSOs in the logs they submitted to HQ. (I experienced this issue with the same operator for the second year in a row.) Another operator caused eight busted call signs.

It's worth restating that *nearly all logging errors in this contest are avoidable.* Take the time to log QSOs carefully and, if you're logging on paper, cross-check what you entered into your computer from your paper log!

Golden Logs (*asterisks indicate top-ten entrants*): WØZQ*, W2RMA, VE3FN, K9JK, AG6KG, KØAWU, N6VI, W5VY, AA5AM, N9ZL, W8RU, NU2F, AD7OI, N2ZN, KI7GVT, K1ZZ, KA1ZD, N6LL, WA5TKU, KC2HIZ, W3HMS, N9LB, K3WGR, AA1I, W7GLF, N8IUP, N1SAI, KI5CKM, VE7FYC, AG4V, KN4WNC, KO4GQT, KB8JNE, KD7UO, VE7JH, NJ7A, KB7IOG, KC8VGG, W6QIW*, AA9IL, WQ5S, K9TMS, W5LUA, W9SZ, K6JEY, KI6LQV, W8MMM

A Stormy Story and Goodbye to an Old Friend
By Dave Petke, K1RZ

For Round 1 (the August weekend), Tropical Storm Henri twisted up my week on Block Island with Dale, AF1T; Mickie, W1MKY; and Steve, K3WHC. We all had a great time until Friday afternoon when it became very clear that then-Hurricane Henri would cross the island on Sunday. Steve and I took the point that it would be the prudent thing to be off the island and out of New England before Henri made landfall.

After standing by for the ferry boat Friday afternoon, I made it out on the first ferry on Saturday morning arriving on the mainland about 0915. Driving across my boyhood home state of CT seemed endless as I was still in Connecticut until after 1530. The I-95 southbound lanes were clogged with many other vacationers coming off the Cape and other parts of Southern New England. And the northbound lanes were filled with convoys of electric utility trucks and tree trimmers flocking to the region of Henri.

It was just after 2100 local time when I got home in Maryland and got on the air to work AF1T, W1MKY, and K3TUF. Dale and Mickie were coming through with very good rain scatter signals, as expected. These two Block Island contacts were my best DX for the contest at 518 km.

Sunday started with a QSO with Ray, N3RG, as has become our usual early morning contact in every 10 GHz contest and in the Sprints. The rest of the day was characterized by more rain scatter contacts, which is the only upside to the entrance of Henri. It was good to see so many portables in my region too with W2RMA, WA3PTV, N9ZL along with locals W3EKT and K3EJJ. Then came the RS contacts with KA2LIM, W2FU, N2WK, and VE3KH. And the distant portable contacts with K2DH, K2UA, and K9PW. Then Mark, WB8TGY, checked in from FN01TA, now on his way back to Michigan after attending the family wedding in CT – and bringing 10, 24 and 47 GHz – on the wedding trip. We worked easily on 10 GHz RS with Mark using his new barefoot transverter and a small antenna at 215 km. Ended the first round with 20 QSOs and 17 unique calls.

Yes–we love the RS propagation mode, but yes–it always means someone is getting rained on. My thanks to Andy KØSM as author of the rainscatter.com software tool–everybody who has 10 GHz should register on that site so we all can reach out to you during the year when the site shows rain cells that provide a solution for the rest of us to work you! And thanks to Andy for your QSO from FN12EV.

On the September weekend, I got to work my longtime 10 GHz cohort, mentor, and friend in Maryland - Ed Bruns, W3EKT, for what was to be our last contact, as Ed has now become a Silent Key. Ed would also work me on our ten bands in 4 minutes for a 10-band sweep in the VHF contests. Best DX, Ed.

And to everyone who participated, my thanks for getting on and making the ARRL 10 GHz and Up my most favorite operating activity of every year.—73, Dave

Tropo Magic
By Andy Flowers, KØSM

This contest didn't disappoint. Rus, K2UA, lent me a second station this year, so I got to play with 24 GHz for the first time ever. I operated from home most of the time, with a short excursion up the road to the neighboring sub grid to work east on Saturday afternoon the second weekend.
(Continued next page)

For the purposes of the contest, this is "one location," so I couldn't work anyone a second time unless they moved. Fortunately, there was a lot of that--thanks rovers!

A little rain scatter both weekends resulted in the longest QSOs: W1GHZ (531 km), KB8U (492), and W8RU (485). Two of these were found by tuning around and tail-ending. In a world of panadapters, CQing can make sense on this band, especially when there is rain around. I'm definitely getting a panadapter for next year.

The biggest highlight for me was one of the "shorter" QSOs I made from the driveway and netted grid #25 on 10 GHz. I have trees and a hill to my east so that direction is pretty hopeless unless I point almost up. In fact, I had yet to work a grid to the east of FN1x in longitude from here.

Somehow I let K2UA talk me into a QSO attempt when he was 150 km to my east in FN23 Sunday night. The radiation inversion was in and he and K2DH were able to find me by pointing toward Toronto--to my northwest and their WNW! The 3 GHz weather radar was blooming with ground clutter and AP at the time. I worked NU2F (W2FU at home) a few minutes later using the same parlor trick with him aiming over Lake Ontario. I guess it's kind of like what guys in the mountains do to work around obstructions, except here the land is flat and the RF bends into the ground for us.

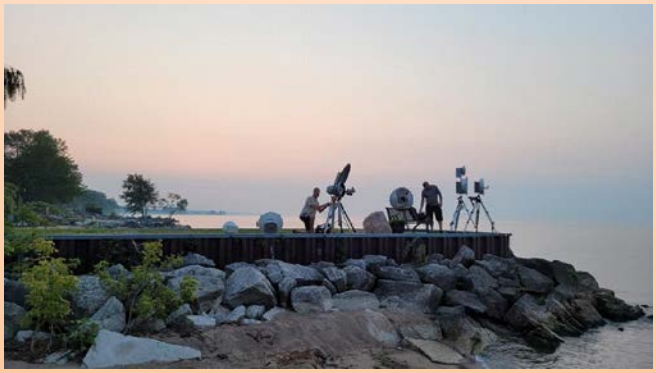
Lots of new calls in the log too--some on 10G for the first time! Now that I have another place to set up nearby I will make more efforts to work east.--73, Andy

Canadian Rovers Make the Most of their Travels

By Hugh Duff, VA3TO

The view to the southwest from FN13ju, looking across a placid Lake Ontario toward Rochester and Buffalo, NY. L-R VA3TO, VA3ELE. [René Barbeau, VE2UG photo]

I had a great time roving with Peter, VA3ELE, and with René, VE2UG. René drove 850 km (9.5 hours) to join us at the west end of Lake Erie on Friday of the August weekend. We worked our way east from there. For the September weekend, Peter and I drove out to the west end of Montreal on Friday night and were joined by René on Saturday morning, where we started our day in grid FN25wf. We worked our way west through various sites along the St. Lawrence River and continued along Lake Ontario.



VA3TO and VE2UG set up their gear during a breathtaking sunrise at their first stop of the August weekend. This site is on Lake Erie in EN82OA. [Peter Prabucki, VA3ELE, photo]

Man, was it hot and humid in Southern Ontario this summer! Especially the August weekend of the contest. Temperatures were in the 90s with a "feels like" reading over 100°F. My 60-year-old body took a few days to recover after a weekend of hard roving under those conditions. Lugging the gear in scorching sun and heat, humidity, rain, wind, and bugs, and through fields of thistle, was brutal. Despite the physical challenges I still had a great time. We made some very interesting contacts with blocked paths to which in the past I would have said, "There's no bloody way." Our successes gave credence to the adage, "Don't discount anything on 10 GHz, just try it!"

We did fairly well on 10 GHz, but the high humidity put the kibosh on 24 and 47 GHz for the most part on both weekends, limiting us to moderately short QSOs, although 24 GHz started showing signs of life near the end of the contest on Sunday night in September. Aside from a chance QSO with W8BYA in EN70jt off a pop-up cell near Detroit at the end of the night on Sunday of the August weekend, we had no great rain scatter opportunities. There were no remarkable contacts on the higher bands, and no broken DX records either. However, working a lot of medium-haul contacts repeatedly seemed to pay off for us!

QSOs are definitely possible without line of sight. This site, in FN03bi, has a fantastic view to the southeast over Lake Ontario, but is blocked to the west by the Niagara Escarpment. They managed to work K8ZR at 180 km to the west in EN91ov by elevating their dishes and knife-edging off the trees at the peak. VA3TO says, "We almost didn't bother trying but gave it a try anyway and glad we did!" L-R: René, VE2UG, and Peter, VA3ELE. [Hugh Duff, VA3TO, photo]

This was by far my best finish for this contest, surpassing my previous best score by over 10,000 points. I've never been a big contester, but I always look forward to the summer microwave contest, and roving gives us the opportunity to visit some beautiful sites along the St. Lawrence River and lower Great Lakes, which never gets old. – 73, Hugh

Mentoring Success Stories

In this year's contest, a number of stations were new to the contest or to some of the higher bands. Some who come to mind for me are Chris, K2CS; Ron, WB2WGH; Mike, VA3MW; and Ken, N2ZN, (all are net new to 10 GHz). Mike, N2MG; and Andy, KØSM, were both new to 24 GHz for this year's contest. All received mentoring in some form from local and regional friends. The Amateur Radio Microwave Community on Facebook and other groups have also provided helpful resources to a number of new people. Here are a few mentoring stories–thanks to those who responded to my request for them!

The 2021 June VHF contest season was my first with a 10 GHz setup, and with only just two weekends of activity so far, I am hooked! I am not a very active VHF+ operator (most of my activity is on HF), but the experiences and challenge of 10 GHz operation are very unique, yet are in line with serious DXing and contesting, which are activities I have enjoyed for over 25 years.

I'd like to thank Rus, K2UA; Dave, K2DH; and Jeff, W2FU, for their encouragement and operating tips, in addition to lending me some parts to get my station completely on the air. Right now, it consists of the DEMI transverter (3 W), along

with the Directive Systems dish and feed, driven by an ICOM IC-7000; this will be replaced shortly by an ICOM IC-9700 as the IF rig.

With a brief test run in the June VHF contest, I was ready for August. That weekend, I joined W2FU and WA2TMC in operating from several sites in Western New York, first in FN02xu and then in FN12gv. I also managed to make a number of contacts from my home in FN13bd in between trips.

It was a thrill to work into the western end of FN03 from the FN12 site, which was my best DX that weekend. It was also very exciting to hear rain scatter for the first time, listening to K2UA working stations while we were both pointed west, into a storm cell over the Great Lakes.
Even with just one weekend of activity in the 2021 10 GHz and Up Contest, I had a great time. I will definitely be adding this one to the permanent contest calendar from now on! — Ken Boasi, N2ZN

Ken, N2ZN, after completing his first-ever 10 GHz contact with Hugh, VA3TO, over a 200 km path. Ken had just finished building his 10 GHz station and went on to make 32 QSOs in the 2021 contest. [photo by the author]

I want to recognize Al Ward, W5LUA, for his help to get me on the air on 10 and 24 GHz. I am an instrument and electrical technician by trade but lack the knowledge and test equipment to get these bands on the air. Al helped me get my 10 GHz rover setup on the air in 2015 and has helped me tweak improvements over the past few years to include the addition of a 24 GHz transverter for the 2021 contest.

There is not nearly as much activity here in northeast Texas. I am one of the two or three rovers who get on for the contest. With Al's help, my scores for the 10 GHz and Up Contest have improved each year. My Score of 15,848 this year was an all-time best for me! *(Brad also had a Golden Log–Ed.)*

Al also has helped lots of other stations get on the Microwave bands and is continually working to raise the activity levels within the NTX and STX areas. He also continues to lead the North Texas Microwave Society to further increase activity levels on the 902 and up bands.

We only had 24 GHz for the second weekend and just managed 10 QSOs, with a best DX of 52 miles. Since then, a better LNA has been added and we are planning to work on better position optimization of the W1GHZ dual-band feed. — Brad, WQ5S

Brad, WQ5S, set up his gear just west of Albany, Texas in EM02HQ. Al, W5LUA, is Brad's microwave mentor.
[Brad Fuller, WQ5S, photo]

I was mentored by Bob, WA8VPD, in 2020. He helped me take my hobbled setup and really make it a great performer. Prior to his help I had not been able to make any contacts on 10 GHz over the previous couple years. I didn't know what I didn't know, as they say. <smile>

I wanted to pass that kindness along, so I loaned Bill, KC8VGG, my second portable station on the Saturday of the second weekend in 2021.That was his first time on the microwave bands. The second station had some problems once we got it into the field (so-called Trash Mountain in EN82), but we managed to make one QSO over a couple of kilometers. On Sunday we tried again over a longer path using a water storage tower as a passive reflector but were unable to complete. We had fun trying though! — Ron, W8RU

I helped Chris, K2CS, get on the air for the second weekend of the contest. I built up and then loaned him a "backup" 10 GHz transverter as well as my spare ICOM IC-202 transceiver that he used as his IF radio, along with the 24-inch dish I gave him. He was quite successful with it and for a newcomer to 10 GHz had a great score! The contest bug really bit him, and as you know, he has now built up his own rig and has since put it on the air from W2CCC up north in the January contest. I fully expect him to be a regular player in the 10 GHz+ contest and I expect he'll be adding bands as time goes on. Chris shared, "Getting on 10 GHz is easily the most fun I've had in ham radio in the past 15 years!" — Dave, K2DH

I would like to recognize the mentoring of Ben Lowe, K4QF. He came out to a POTA activation last year and demonstrated his rig to me, which convinced me to get involved. We discussed it over several months while I funded a DEMI transverter. And he held a meetup for 10 GHz folks on the top of a nearby 7-story parking garage after the first day of the Huntsville Hamfest. Most of the times I have operated were on an activity day he organized.

Gedas Vysniauskas, W8BYA, is a big proponent of Digital Aircraft Scatter (Q65A-15), mutually groping our way through the use of AirScout software and making a couple of attempts with me this winter. We are separated by enough real estate that it would be quite lucky to finish a Q, ceiling level aircraft needed, and this end is unfortunately rather hilly, but I expect we will continue to try occasionally as I look for a better spot.

I would also like to recognize Herbert Ullmann, AF4JF, for organizing a grid expedition in Missouri and including the folk in Huntsville AL (including myself) in his planning and notifications. Also, we have shared many exchanges of information relating to the use of Pluto and Plus SDRs for use as transceivers and IF radios. — Bob, KV4PC

Our entire operation for the first weekend of the contest was a spontaneous mentoring event. Steve, AG4V, from Memphis, emailed and said he was coming to the Huntsville Hamfest, which always coincides with the first weekend of the 10 GHz contest. Steve said he'd bring his 10 GHz rig along if I could set up to work him on Saturday after the hamfest. Rus, K5RUS, emailed saying he was coming to the hamfest with his son and wanted to meet for dinner afterwards (we have one of the best German restaurants here that Rus likes), so I emailed Rus and told him to bring his 10 GHz rig along. I also notified Jay, KB4GRD; and Tom, W4RXR; who also have 10 GHz rigs, that Steve was going to set up on a ridge south of town. The rest of us went to a parking deck a few blocks from the hamfest to work Steve.

The word spread, so we had three operational stations on the parking deck, another station with receive only, and about six onlookers. By the second weekend of the contest, the receive-only station, Bob, KV4PC, had received his rig, and another one of the onlookers had a transverter on order. One of the ladies in the Huntsville Ham club got so excited about the event, she later gave a description of the operation to the ham club.

Most of these folks had no idea the kind of distances that can be worked on the microwave bands, but this impromptu operation generated a lot of interest–much more than I've seen in the 12 or 13 years I've been on. (It took me 12 years to get my VUCC on the band.) — Ben, K4QF

KB4GRD, W4RXR, and KV4PC set up along a parking area during the September weekend. [Ben Lowe, K4QF, photo]

Mike, VA3MW, with his newly built 10 GHz setup. [Mike Walker, VA3MW, photo]

The Rochester VHF Group (RVHFG) is all about mentoring! As an experienced HF'er and new to VHF, UHF, and microwave (sans repeaters) I find the group an invaluable resource for all things VHF and above. From equipment (new and used) recommendations, tune up sessions in preparation for contests, contest coordination, queries via the email reflector, equipment repair and meeting presentations someone in the group always offers to assist. One notable assist was provided by Dave, K2DH; Bill, K2TER; and Rus, K2UA; with a new yet problematic 10 GHz transverter. With help from the group on constructing my first microwave setup, I had a resounding success with my first 10 GHz QSOs from Oswego, NY, to Toronto, Canada. I was elated with S9 signal reports on SSB. All subsequent attempts at 10 GHz were failures including one ARRL VHF contest and several group coordinated sessions. Several attempts to fault isolate in the field pointed to a partially "deaf" transverter.

On one Saturday in December, Dave, Bill, and Rus spent the better part of a morning at Bill's house assisting in fault isolation through interchanging of components and comparing results (their combined stock of transverters, IF rigs, LNAs, cables were amazing) and finally bench testing the transverter with a noise figure meter. All concluded the issue was with the transverter being partially deaf. Based on the brain trust's recommendation, the unit was sent back to the manufacturer where a failed component was identified, replaced, and the transverter tuned up. The unit now has 40 dB more gain than it had before, and I anxiously await warmer weather so I can rack up some additional 10 GHz QSOs! — Ron Panetta, WB2WGH

The hams pictured below are my grandsons, 11-year-old Ian, KO4GQT; (left) and his 12-year-old brother Logan, KN4WNC (right). They each operated a separate 10 GHz station from Sugarloaf Mountain (EL98DP) in Central Florida during the first weekend, and each had three QSO's that included KØVXM (EL98PJ) and K4RSV/R (EL98JK and EL98HK). I have been mentoring Logan and Ian for the last six years. Logan has an Extra class license and Ian a General. I was introduced to the world of microwaves by my mentors Joe, KI4NPV; George, K4RSV; Chuck, KØVXM; and Steve, N2CEI; all of whom are members of the Florida Weak Signal Society (FLWSS). — Don Jones, WA7ZZI

Brothers Ian, KO4GQT; and Logan, KN4WNC; operated with their grandfather, Don, WA7ZZI, from EL98DP and made QSOs with their mentors using these two hot-looking 10 GHz setups. Welcome to 10 GHz, boys! [Don Jones, WA7ZZI, photo]

2021 ARRL 10 GHz and Up Contest- Call Area Leaders

Call Area 0

10 GHz Only		10 GHz and Up	
WBØLJC	56,268	AF4JF	1,921
WØZQ	31,840	WAØCNS	1,232
NØKP	23,739		
WØGHZ	11,621		
KCØP	9,739		

Call Area 1

10 GHz Only		10 GHz and Up	
AF1T	38,214	W1GHZ	27,367
W1MKY	36,485	N1JEZ	16,771
W1AIM	13,280	K1OR	11,159
KA1NKD	12,744	WA1MBA	9,293
W1FKF	12,000	KA1OJ	8,960

Call Area 2

10 GHz Only		10 GHz and Up	
KA2LIM	17,452	K2DH	50,299
N3RG	9,645	K2UA	50,092
K2CS	7,746	K0SM	27,434
N2JMH	4,664	N2WK	25,933
NU2F	4,568	N2MG	22,344

Call Area 3

10 GHz Only		10 GHz and Up	
W2RMA	26,420	K1RZ	31,818
K3WHC	20,744		
WA3PTV	6,550		
W3HMS	1,927		
K3WGR	1,356		

Call Area 4

10 GHz Only	
N9ZL	5,165
W3IP	1,672
K4QF	677
AG4V	500
KN4WNC	397
KO4GQT	397

Call Area 5

10 GHz Only		10 GHz and Up	
W5VY	5,678	WQ5S	15,848
AA5AM	5,500	W5LUA	8,676
WA5TKU	2,323	AA5C	7,460
W5AFY	1,844		
KI5CKM	572		

Call Area 6

10 GHz Only		10 GHz and Up	
KN6OUL	29,219	K6ML	40,368
N5BF	21,963	N9JIM	36,118
W6DL	19,399	W6QIW	33,566
K1CT	10,514	K6MG	20,184
AG6KG	7,422	WA6QDP	19,931

Call Area 7

10 GHz Only	
WA6CDR	46,987
N6RMJ	33,121
AD7OI	3,961
KI7GVT	3,467
W7GLF	952

Call Area 8

10 GHz Only		10 GHz and Up	
KB8U	38,310	K8ZR	28,167
W8RU	5,152	K2YAZ	16,679
N8IUP	892	KB8VAO	14,092
KB8JNE	256	WA8VPD	11,246
KC8VGG	101	WB8TGY	7,820

Call Area 9

10 GHz Only		10 GHz and Up	
KA9VVQ	31,199	K9PW	41,295
W9FZ	31,199	AA9IL	16,182
WA9TT	20,785	K9TMS	14,189
WA2VOI	15,583	W9XA	9,862
KØKFC	14,886	W9SZ	8,139

Area 15 (Canada)			
10 GHz Only		10 GHz and Up	
VE3KH	40,253	VA3ELE	50,889
VE3EG	21,935	VA3TO	46,908
VE3FN	11,681	VE2UG	31,504
VE7FYC	549	VE3SMA	31,106
VE7JH	160		