

ARRL RTTY Roundup 2021 Full Results

By Jeff Stai, WK6I (wk6i.jeff@gmail.com)

... A Pandemic of Diddles...

In 2021 at least the elements more or less behaved for most of us, except maybe some of you in the middle. Instead it took a pandemic to keep many physically away from their operating locations. Fortunately the technology for running a contest remotely - whether single-ops on two radios, or many ops coordinated in a multi - has matured just in time so that the impact on participation was far less than it might have even 5 years ago. More on this further down in the article.

New Folks

I hope I am not in the minority but it does seem like in every RTTY contest I operate in I get at least one call from someone who is making their very first RTTY contact - W7RN R R NAME DAVE THIS IS MY FIRST RTTY CONTACT HW CPY? - right in the middle of all this contest chaos. I think when this happens it's important that we slow down and do two things: make sure we get the exchange - QSL THX DAVE WHAT IS YOUR STATE? - and then most importantly welcome them to the mode - THX DAVE FOR NY UR 599 599 IN NEVADA 73 WELCOME TO RTTY. It just takes an extra moment - especially if you practice your keyboard to keyboard! - and I promise it will not keep you from a winning score!

W9KKN concurs "I was also happy to get an email from someone telling me that this was his first ever RTTY contact -- that's awesome, and it's good to have people venturing over from FT-x into RTTY. This is a fun mode that, if you set it up right, and compete to the fullest extent can be every bit as enjoyable as any other contest mode." More first-timers:

K3DNE: "First ever (after 50 years of being licensed) RTTY contest, first RTTY contact was in practice session on Friday! It's fun!"

K4DR: "After being licensed since 1970, I thought it was time to enter my first RTTY Roundup. I now wish that I had taken the plunge much sooner. This

is now one of my favorite contests. I'll be back for the next one."

K6EI: "Who says you can't teach an old dog new tricks? I've been a ham for four decades, but RU/2021 was my first time operating RTTY -- lots of fun!"

N6YEU: "First ever RTTY contest for me! Operating portable away from home with IC-7300 and very low dipole I was amazed how well things went. Good fun!"

VA4HZ(VE4HAZ): "First time in the RTTY RU. Lots to learn but I had fun. I'll be back!" [And thanks for putting MB on the air! - WK6I]

K8YE: "I enjoyed my first RTTY Roundup. There was certainly a lot of RTTY activity on the bands! Thanks for hosting the 2021 RTTY Roundup!"

KC2IEB: "IC-7300, AH4, Long wire My first contest - really, really had fun!"

We even finally got "TV Bob" N6TV to play for the first time: "First ARRL RTTY RoundUp. Just time to test the [Elecraft] K4D in AFSK mode. Works fine!"

And last but not least, Kyle W2SOX: "I am a young ham who just started exploring new modes, RTTY was one I instantly fell in love with. I have only been operating RTTY for over a month, I struggled to get started simply because I had no clue what I was doing! While I do enjoy the new digital modes I consider myself an extravert so I really do enjoy chatting rather than just given signal reports. It was amazing to see how RTTY has stood the test of time that I feel won't be the case with these other new modes. The history of the mode is fascinating as well, I enjoyed talking to the operators who were running vintage equipment such as the machines that were once on Navy Ships. I hope more young hams like myself get into RTTY, I see there is a comeback with CW and I hope people also make the shift back to RTTY as well."



Kyle Morse, W2SOX, just started exploring operating digital modes. He stated he has only been operating RTTY for a month, and instantly fell in love with it. [Kyle Morse, W2SOX, photo]

RTTY Resources

Judging from the traffic I see in various forums around the web, interest in RTTY is rising rapidly. This seems to be fueled by FT operators wanting to know more about other digital (and more conversational?) modes, and by the desire to discover new ways to enjoy amateur radio since they have to stay home anyway.

I'm going to guess that I have a bunch of new and digi-curious readers who might not be inclined to read all the way to the end of the article, so for you I'm putting this right up front.

Leading off is the mother lode of all RTTY-related websites, **rttycontesting.com**. Here you will find articles about getting started in RTTY, setting up your contest logger (for N1MM+ and Writelog), a RTTY contest calendar, software downloads, and a host of other useful bits and pieces. Highly highly recommended.

For more direct interaction with other RTTY ops, for help setting up your particular situation, or just to swap stories, there are these internet forums:

The original RTTY email reflector: **groups.io/g/RTTY**

This reflector features both RTTY and other digi modes: groups.io/g/rttydigital

Interested in vintage RTTY iron? Here are your people:

mailman.qth.net/mailman/listinfo/greenkeys

On Facebook? Here's a very active group: facebook.com/groups/rttyops/

A good contest logger can make or break any contest effort, serious or casual. According to my scan of the logs, the most popular loggers are:

N1MM+ Logger - get it here: n1mmwp.hamdocs.com/

Online discussion: groups.io/g/N1MMLoggerPlus

Writelog - get it here: writelog.com/

Online discussion:

lists.contesting.com/mailman/listinfo/writelog

That Darn Two-Break Rule

Most contests take the easy way and just specify that any breaks must be (say) longer than 30 minutes, if they specify anything at all. But the RTTY Roundup introduced a wrinkle which makes it more than just any old RTTY DX contest - the Two-Break Rule for single ops. To best understand the rule, it will help to clear your mind of anything you may have read anywhere else, including even the ARRL website. Instead, here's how the log checking really works - straight from the log checking people themselves (thanks WA1Z).

In a nutshell, the log checking software scans your log to find all of the gaps between logged QSOs that are 30 minutes or longer. Note that this scan does not consider as a "gap" neither the time between 1800 UTC and your first logged QSO, nor the time between your last logged QSO and 2359 UTC on Sunday.

The software finds the two longest gaps and scores those as "off-time" - your two official breaks. It then scans your log again starting with your first logged QSO, skipping the off-time and adding up on-time until on-time adds up to 24 hours. Any logged contacts after 24 hours of on-time are simply not counted.

(This is where my friend Ed WØYK hops in and says "But you can keep operating!" It's true, you can keep operating after your 24 hours - if you're having fun, why not keep having fun? - and you can do so without penalty. In fact many top contesters will log contacts after their time limit has been reached "just in case". But if you do, log all those contacts and include them in your Cabrillo log. Don't worry, log checking will sort it out!)

Online Scoreboard

I'm probably late to this party but I couldn't help but notice the elevated level of chatter regarding something I had no clue about, called the "Contest Online Scoreboard." Seems like quite a few stations are feeding their current score to this server to watch their own horse races in more-or-less real time - maybe their overall position, or position within a group of friends or in a region or club.

Most seem to use it for motivation, like chasing the rabbit. KØTI noted that "watching K9WX's score on the scoreboard kept me going on this one. The ND2T team of four operated fully remotely from K6MTU: "Because of the complex band and antenna switching, we didn't go off chasing multipliers on other bands, which led to a last minute push for Multipliers on Sunday. On the Contest Online Scoreboard, we could see KT7E fall away, and WV4P took the lead until Sunday when we recovered all the gap and we moved ahead." And WV4P in reply "Thanks to the ND2T Team for letting us keep your seat warm for a few hours. We were under no illusion that we could hold it once the propagation shifted. Some great battles on the Online Scoreboard"

Bill W9KKN operating at NW6P "For most of the weekend, though, I was punching above my weight and topping the online scoreboard -- and that felt really good." Randy K5ZD says he "Loves contestonlinescore.com for these part time efforts. Always someone to chase. The horse race between AA3B and ACØC was unrelenting. I could never keep up with these guys." (Yeah, a top ten part time effort! More on that later. - WK6I)

For others it's just part of the enjoyment. Bill KO7SS: "Watching the scoreboard was great fun, I always keep it open in a browser window on the desktop..." And Bud VA7ST "Gotta love

contestonlinescore.com for adding to the fun factor. Great stuff!"

The mutli-op team at N6RO competed separately this time as single-op efforts and Chris N6WM "knew it was gonna be a throw down... there was some friendly competitive banter, and stress was a little high." However, Chris found himself "a bit frustrated by folks trying different strategies on Online scoreboard, so for a period of time I QRTed off it because it was distracting. best not to obsess with it or have people obsess with what you're doing."

What do I think? I think I don't need the distraction and I'm not sure that it is to my advantage to give my competition a rabbit to chase. What do you think?

Wait, How About Some Results?

Nah, we're going to check some stats first! There is some good news there - overall participation is back up compared to last year, and QSO totals may be at record levels. Check out the tables below!

Total Logs Submitted, by Year			
Year	Total Logs		
2015	1,780		
2016	1,757		
2017	1,733		
2018	1,620		
2019	2,642		
2020	2,087		
2021	2,353		

It's interesting to see the progression since 2019 when FT modes were first included in the RTTY Roundup as an approved mode. 2019 saw logs shoot up to 2,642, but then in 2020 we shrunk back to 2,087, and then in 2021 - possibly fueled by folks stuck at home anyway - log rebounded to 2,353.

But take a look at these QSO totals; even with fewer logs than 2019 the total QSO count shot way up to 662,385 - an almost 24% increase in QSOs for a 12.7% increase in logs, and that's without a sizable contribution from 10 or 15 meters. The average log went from 221 QSOs in 2019 to 281 QSOs in 2021. I'm feeling pretty good about where this contest is headed! But the ratio of RTTY QSOs to FT QSOs remained steady at 19% - meaning the bulk of the QSO increase came from more RTTY QSOs.

Yearly QSO Totals, by Band						
Band	2016	2017	2018	2019	2020	2021
80 M	65,133	83,832	91,966	91,935	95,592	112,048
40 M	146,679	132,277	150,648	201,136	188,940	224,277
20 M	191,328	204,593	210,821	250,967	231,761	277,248
15 M	153,983	62,229	36,233	38,554	16,178	48,667
10 M	31,850	5,364	50	253	60	145
Total	588,973	488,295	489,718	582,845	534,551	662,385

Then there's category choices. With the expansion of Single-Operator categories it was decided (correctly) that all of the previous SO categories would be retired and record keeping would start anew in 2021. The short answer to why this was done is that the definitions of the new SO categories are different from the old, and to a great degree the new ones are subsets of the old ones split apart. But anyway, if you owned a record in 2020 - woo hoo! - you own that forever!

Category Choice			
Single Op, RTTY-Only			
High Power	SO-RTTY-HP	286	
Low Power	SO-RTTY-LP	722	
QRP	SO-RTTY-QRP	47	
Total		1,055	
Single Op Unlimited, RTTY-Only			
High Power	SOU-RTTY-HP	305	
Low Power	SOU-RTTY-LP	244	
QRP	SOU-RTTY-QRP	8	
Total		557	
Single Op Unlimited, Digi-Only			
High Power	SOU-DIG-HP	71	
Low Power	SOU-DIG-LP	344	
QRP	SOU-DIG-QRP	25	
Total		440	

Single Op Unlimited, Mixed Mode		
High Power	SOU-MIX-HP	63
Low Power	SOU-MIX-LP	142
QRP	SOU-MIX-QRP	7
Total		212
Multi Op		
Single Transmitter, High Power	MSHP	29
Single Transmitter, Low Power	MSLP	22
Two Transmitter	M2	9
Multi Transmitter	MM	3
Total		63

With the category changes we can now clearly see the distribution of RTTY-only operation versus FT operation. Turns out Single-Op category entries that included FT modes (652 total) were less than half of entries for RTTY-only (1612). Total Multi-op entries remained virtually flat at 63 (62 in 2020).

The Winners

Top Ten- United States and Canada

Single Operator, RTTY Only, High Power (SO-RTTY-HP)

AA3B	271,370
ACØC	251,538
W7RN (WK6I, op)	232,848
AI9T	179,087
K6MR	172,480
N1IXF	156,456
K5ZD	135,753
WB4YDL	127,008
N5HC	126,582
WØYK	119,616

Single Operator, RTTY Only, Low Power (SO-RTTY-LP)

W4AAA (KK9A, op)	207,900
кøті	117,990
K9WX	112,792
K3AJ	106,428
NØAT	104,013
AA2MF	102,178
W1QK	95,060
K3RWN	87,032
KØAD	86,504
WA1FCN	85,446

Single Operator, RTTY Only, QRP (SO-RTTY-QRP)		Single Operator Unlimited, Digital Only, High Power	
VE3KI	35,700	(SOU-DIG-HP)	
NØNI	32,163	W1UE	141,504
K2YG	24,882	AG2J	55,752
W4DWS	17,152	N4BP	55,404
N7RCS	15,455	N1EK	47,476
K6EI	11,542	KQ4AV	46,065
WE6EZ	5,676	NT6X	40,940
NE3R	5,074	VE6WQ	35,446
KH6KG/W5	4,998	K1BZ	29,082
козт	4,312	N7PHY	27,880
		NE9U	27,145
Single Operator Unlimited, Mixed	d Mode, High Power	Circle Occurred Hulbridge Dist	al Oule Law Barrer
(SOU-MIX-HP)		Single Operator Unlimited, Digit (SOU-DIG-LP)	al Only, Low Power
N800	255,996	WA2BOT	66,833
VE5MX	163,449	KE8M	
KK6P	155,136		49,217
N7NM	103,872	KB1IKC	44,880
NA3M	103,230	KM4RL	42,658
AG4W	99,400	WBØTEV	38,090
KA6BIM	98,475	W3PAX	36,018
NF3R	89,424	N3AAA	34,632
WQ5L	82,709	NR3M	34,279
K6OK	77,714	N7ZZ	33,152
Single Operator Unlimited, Mixed	l Mode Low Power	кøвак	31,122
(SOU-MIX-LP)	i wiode, Low i owei	Single Operator Unlimited, Digit	ol Only, OPD (SOLI
W9SN	158,662	DIG-QRP)	al Olly, QRP (300-
К9ОМ	143,910	WM5L	10,945
AK6A	, 78,958	KK4BZ	10,476
AA4DD	77,353	N8ME	7,992
WA3AAN	60,630	VA1MM	4,712
W3KB	59,813	K4PQC	3,640
KT4Q	57,362	WØKI (KJ4ZMQ, op)	3,640
KK8MM	53,680	WY7BG	3,115
VE2NMB	49,734	WD9EKA	3,024
K6GHA	47,212	KEØJMK	2,013
		WA9QXY	836
Single Operator Unlimited, Mixed MIX-QRP)	d Mode, QRP (SOU-	WAJQAT	830
NØUR	50,760	Single Operator Unlimited, RTT\	Only, High Power
W7YAQ	31,084	(SOU-RTTY-HP)	
AA5KD	9,000	KI1G	316,416
AASKU	3,000	К9СТ	222,902
		N6WM	201,214
		W6YX (N7MH, op)	200,016
		K6LL	199,808
		W9KKN	194,021

KO7SS	189,175	W4DAN		15,246
WØLSD	185,934	WSØZ		14,094
N3QE	175,044	NJ1F		8,533
N4ZZ	173,340	143.11		0,555
N4ZZ	173,340	Multioperator, Two Transmitte	or (M2)	
Single Operator Unlimited, RTTY Only, I	Low Power	ND2T	:1, (1412)	272,976
(SOU-RTTY-LP)		WV4P		254,640
AA5AU	209,645	NW8S		227,808
AD4EB	165,025	KT7E		162,162
WW3S	139,040	NA5NN		149,657
NA4DA	99,746	K3CCR		118,932
KA2K	95,824	KB3VQC		73,950
W3RGA	91,278	W5NN		31,734
WW5M	83,072	W9CF		36
KØCN	76,194			30
N7US	71,200	Multioperator, Multitransmitte	er (MM)	
KB3AAY	65,600	W3GH		240,218
		WW4LL		174,615
Single Operator Unlimited, RTTY Only, (QRP (SOU-	K5LRW		10,506
RTTY-QRP)	44.640			
K7XC	14,640			
VE6EX	6,400	Affiliated Club Compe	etition	
W4ER	5,280			
K6MI	2,144	Club	Score	Entries
K8ZT	840	Unlimited	Score	Entries
K8ZT	840	Unlimited Northern California Contest		
	840	Unlimited Northern California Contest Club	3,286,060	75
K8ZT Multioperator, Single Transmitter, High	840	Unlimited Northern California Contest Club Potomac Valley Radio Club		
K8ZT Multioperator, Single Transmitter, High (MSHP)	840 Power	Unlimited Northern California Contest Club	3,286,060 2,146,246	75 66
Multioperator, Single Transmitter, High (MSHP) K5RZA	840 Power 225,459	Unlimited Northern California Contest Club Potomac Valley Radio Club Society of Midwest Contesters	3,286,060	75
Multioperator, Single Transmitter, High (MSHP) K5RZA N7AT	840 Power 225,459 212,628	Unlimited Northern California Contest Club Potomac Valley Radio Club Society of Midwest	3,286,060 2,146,246 1,931,858	75 66 51
Multioperator, Single Transmitter, High (MSHP) K5RZA N7AT N7TY	840 Power 225,459 212,628 178,825	Unlimited Northern California Contest Club Potomac Valley Radio Club Society of Midwest Contesters	3,286,060 2,146,246 1,931,858	75 66 51
Multioperator, Single Transmitter, High (MSHP) K5RZA N7AT N7TY AB5EB	840 Power 225,459 212,628 178,825 139,849	Unlimited Northern California Contest Club Potomac Valley Radio Club Society of Midwest Contesters Minnesota Wireless Assn	3,286,060 2,146,246 1,931,858	75 66 51
Multioperator, Single Transmitter, High (MSHP) K5RZA N7AT N7TY AB5EB N6EE	840 Power 225,459 212,628 178,825 139,849 105,525	Unlimited Northern California Contest Club Potomac Valley Radio Club Society of Midwest Contesters Minnesota Wireless Assn Medium	3,286,060 2,146,246 1,931,858 1,748,109	75 66 51 55
Multioperator, Single Transmitter, High (MSHP) K5RZA N7AT N7TY AB5EB N6EE VE3NZ	840 Power 225,459 212,628 178,825 139,849 105,525 105,152	Unlimited Northern California Contest Club Potomac Valley Radio Club Society of Midwest Contesters Minnesota Wireless Assn Medium Frankford Radio Club Contest Club Ontario Yankee Clipper Contest Club	3,286,060 2,146,246 1,931,858 1,748,109 2,550,431	75 66 51 55
Multioperator, Single Transmitter, High (MSHP) K5RZA N7AT N7TY AB5EB N6EE VE3NZ KM4OQO	840 Power 225,459 212,628 178,825 139,849 105,525 105,152 102,500	Unlimited Northern California Contest Club Potomac Valley Radio Club Society of Midwest Contesters Minnesota Wireless Assn Medium Frankford Radio Club Contest Club Ontario Yankee Clipper Contest Club Arizona Outlaws Contest	3,286,060 2,146,246 1,931,858 1,748,109 2,550,431 1,048,630 1,027,140	75 66 51 55 48 25 25
Multioperator, Single Transmitter, High (MSHP) K5RZA N7AT N7TY AB5EB N6EE VE3NZ KM4OQO W4MLB	840 Power 225,459 212,628 178,825 139,849 105,525 105,152 102,500 100,260	Unlimited Northern California Contest Club Potomac Valley Radio Club Society of Midwest Contesters Minnesota Wireless Assn Medium Frankford Radio Club Contest Club Ontario Yankee Clipper Contest Club Arizona Outlaws Contest Club	3,286,060 2,146,246 1,931,858 1,748,109 2,550,431 1,048,630 1,027,140 983,519	75 66 51 55 48 25 25
Multioperator, Single Transmitter, High (MSHP) K5RZA N7AT N7TY AB5EB N6EE VE3NZ KM4OQO W4MLB	840 Power 225,459 212,628 178,825 139,849 105,525 105,152 102,500 100,260 91,600	Unlimited Northern California Contest Club Potomac Valley Radio Club Society of Midwest Contesters Minnesota Wireless Assn Medium Frankford Radio Club Contest Club Ontario Yankee Clipper Contest Club Arizona Outlaws Contest Club Tennessee Contest Group	3,286,060 2,146,246 1,931,858 1,748,109 2,550,431 1,048,630 1,027,140 983,519 954,828	75 66 51 55 48 25 25 20 20
Multioperator, Single Transmitter, High (MSHP) K5RZA N7AT N7TY AB5EB N6EE VE3NZ KM40Q0 W4MLB KT1I W6DR Multioperator, Single Transmitter, Low	840 Power 225,459 212,628 178,825 139,849 105,525 105,152 102,500 100,260 91,600 81,035 Power (MSLP)	Unlimited Northern California Contest Club Potomac Valley Radio Club Society of Midwest Contesters Minnesota Wireless Assn Medium Frankford Radio Club Contest Club Ontario Yankee Clipper Contest Club Arizona Outlaws Contest Club Tennessee Contest Group Florida Contest Group	3,286,060 2,146,246 1,931,858 1,748,109 2,550,431 1,048,630 1,027,140 983,519	75 66 51 55 48 25 25
Multioperator, Single Transmitter, High (MSHP) K5RZA N7AT N7TY AB5EB N6EE VE3NZ KM40Q0 W4MLB KT1I W6DR Multioperator, Single Transmitter, Low K9NR	840 Power 225,459 212,628 178,825 139,849 105,525 105,152 102,500 100,260 91,600 81,035 Power (MSLP) 125,248	Unlimited Northern California Contest Club Potomac Valley Radio Club Society of Midwest Contesters Minnesota Wireless Assn Medium Frankford Radio Club Contest Club Ontario Yankee Clipper Contest Club Arizona Outlaws Contest Club Tennessee Contest Group	3,286,060 2,146,246 1,931,858 1,748,109 2,550,431 1,048,630 1,027,140 983,519 954,828	75 66 51 55 48 25 25 20 20
Multioperator, Single Transmitter, High (MSHP) K5RZA N7AT N7TY AB5EB N6EE VE3NZ KM40Q0 W4MLB KT1I W6DR Multioperator, Single Transmitter, Low K9NR NTØK	840 Power 225,459 212,628 178,825 139,849 105,525 105,152 102,500 100,260 91,600 81,035 Power (MSLP) 125,248 114,688	Unlimited Northern California Contest Club Potomac Valley Radio Club Society of Midwest Contesters Minnesota Wireless Assn Medium Frankford Radio Club Contest Club Ontario Yankee Clipper Contest Club Arizona Outlaws Contest Club Tennessee Contest Group Florida Contest Group Grand Mesa Contesters of Colorado Central Texas DX and	3,286,060 2,146,246 1,931,858 1,748,109 2,550,431 1,048,630 1,027,140 983,519 954,828 656,230 538,662	75 66 51 55 48 25 25 20 20 22
Multioperator, Single Transmitter, High (MSHP) K5RZA N7AT N7TY AB5EB N6EE VE3NZ KM40Q0 W4MLB KT1I W6DR Multioperator, Single Transmitter, Low K9NR NTØK N8LRG	840 Power 225,459 212,628 178,825 139,849 105,525 105,152 102,500 100,260 91,600 81,035 Power (MSLP) 125,248 114,688 111,644	Unlimited Northern California Contest Club Potomac Valley Radio Club Society of Midwest Contesters Minnesota Wireless Assn Medium Frankford Radio Club Contest Club Ontario Yankee Clipper Contest Club Arizona Outlaws Contest Club Tennessee Contest Group Florida Contest Group Grand Mesa Contesters of Colorado Central Texas DX and Contest Club	3,286,060 2,146,246 1,931,858 1,748,109 2,550,431 1,048,630 1,027,140 983,519 954,828 656,230 538,662 470,502	75 66 51 55 48 25 25 20 20 22 14
Multioperator, Single Transmitter, High (MSHP) K5RZA N7AT N7TY AB5EB N6EE VE3NZ KM40Q0 W4MLB KT1I W6DR Multioperator, Single Transmitter, Low K9NR NTØK N8LRG WTØDX	840 Power 225,459 212,628 178,825 139,849 105,525 105,152 102,500 100,260 91,600 81,035 Power (MSLP) 125,248 114,688 111,644 87,032	Unlimited Northern California Contest Club Potomac Valley Radio Club Society of Midwest Contesters Minnesota Wireless Assn Medium Frankford Radio Club Contest Club Ontario Yankee Clipper Contest Club Arizona Outlaws Contest Club Tennessee Contest Group Florida Contest Group Grand Mesa Contesters of Colorado Central Texas DX and Contest Club Willamette Valley DX Club	3,286,060 2,146,246 1,931,858 1,748,109 2,550,431 1,048,630 1,027,140 983,519 954,828 656,230 538,662 470,502 435,876	75 66 51 55 48 25 25 20 20 22 14 8 14
Multioperator, Single Transmitter, High (MSHP) K5RZA N7AT N7TY AB5EB N6EE VE3NZ KM4OQO W4MLB KT1I W6DR Multioperator, Single Transmitter, Low K9NR NTØK N8LRG WTØDX WD4LBR	840 Power 225,459 212,628 178,825 139,849 105,525 105,152 102,500 100,260 91,600 81,035 Power (MSLP) 125,248 114,688 111,644 87,032 73,055	Unlimited Northern California Contest Club Potomac Valley Radio Club Society of Midwest Contesters Minnesota Wireless Assn Medium Frankford Radio Club Contest Club Ontario Yankee Clipper Contest Club Arizona Outlaws Contest Club Tennessee Contest Group Florida Contest Group Grand Mesa Contesters of Colorado Central Texas DX and Contest Club Willamette Valley DX Club Niagara Frontier Radiosport	3,286,060 2,146,246 1,931,858 1,748,109 2,550,431 1,048,630 1,027,140 983,519 954,828 656,230 538,662 470,502	75 66 51 55 48 25 25 20 20 22 14
Multioperator, Single Transmitter, High (MSHP) K5RZA N7AT N7TY AB5EB N6EE VE3NZ KM40Q0 W4MLB KT1I W6DR Multioperator, Single Transmitter, Low K9NR NTØK N8LRG WTØDX	840 Power 225,459 212,628 178,825 139,849 105,525 105,152 102,500 100,260 91,600 81,035 Power (MSLP) 125,248 114,688 111,644 87,032	Unlimited Northern California Contest Club Potomac Valley Radio Club Society of Midwest Contesters Minnesota Wireless Assn Medium Frankford Radio Club Contest Club Ontario Yankee Clipper Contest Club Arizona Outlaws Contest Club Tennessee Contest Group Florida Contest Group Grand Mesa Contesters of Colorado Central Texas DX and Contest Club Willamette Valley DX Club	3,286,060 2,146,246 1,931,858 1,748,109 2,550,431 1,048,630 1,027,140 983,519 954,828 656,230 538,662 470,502 435,876	75 66 51 55 48 25 25 20 20 22 14 8 14

Alabama Contest Group	339,719	8		C juggernaut continued its d		
Kentucky Contest Group	338,155	13	to dominate the Local club category. (CTRI with only 5			
North Coast Contesters	301,280	6	logs in a respectable second place - will they challenge			
Carolina DX Association	298,432	10	the top dog in 2022?)			
Southern California Contest			Affi	liated Club Gavel Winners	s, 2004 to	present
Club	282,033	17	Unlimited			•
Northeast Maryland			Year	Club	Logs	Score
Amateur Radio Contest	200 720	4.4	2021	NCCC	75	3,286,060
Society	280,730	14	2021	NCCC	51	2,250,767
Spokane DX Association	268,714	9			63	
Swamp Fox Contest Group	267,266	6	2019	NCCC		2,233,702
Louisiana Contest Club	238,365	3	2018	NCCC	74	3,486,901
DFW Contest Group	225,044	7	2017	PVRC	62	1,929,695
South East Contest Club	202,588	4	2016	NCCC	67	3,809,079
Saskatchewan Contest Club	195,438	4	2015	Minnesota Wireless Assn	56	1,891,478
Order of Boiled Owls of New York	176 046	6	2014	NCCC	65	3,202,878
Orca DX and Contest Club	176,846	6	2013	NCCC*	71	4,044,558
New Providence ARC	158,327 119,404	5 6	2012	NCCC	73	3,715,609
Rochester (NY) DX Assn	-		2011	Minnesota Wireless Assn	64	2,183,630
North Carolina DX and	111,589	4	2010	NCCC	60	2,502,251
Contest Club	97,743	3	2009	NCCC	86	3,307,797
Valley Amateur Radio Assn	93,837	3	2008	no winner		
Mad River Radio Club	93,177	7	2007	no winner		
Portage County Amateur			2006	no winner		
Radio Service	72,164	5	2005	no winner		
Hudson Valley Contesters			2004	no winner		
and DXers	38,909	5		Medium		
Skyview Radio Society	14,312	3	Year	Club	Logs	Score
Silver Comet Amateur Radio			2021	Frankford RC*	48	
Society	8,673	3				2,550,431
			2020	Frankford RC	39	1,592,104
Local			2019	SMC	49	1,788,349
Orleans County Amateur Radio Club	609,977	10	2018	SMC	47	1,811,579
CTRI Contest Group	447,480	5	2017	NCCC	43	1,879,145
New Mexico Big River	447,460	J	2016	Frankford RC	19	1,178,489
Contesters	224,908	6	2015	PVRC	47	2,406,478
Central Virginia Contest Club	188,536	5	2014	SMC	28	1,524,519
Midland ARC	106,305	3	2013	Minnesota Wireless Assn	43	1,607,832
Metro DX Club	91,522	3	2012	PVRC	49	2,500,870
	,		2011	PVRC	37	1,833,820
Once again, we find the Northe	ern California	Contest	2010	PVRC	40	1,813,567
Club on top of the Unlimited Clu	•		2009	PVRC	37	1,778,086
year's squeaker they were tak	•		2008	PVRC	35	1,440,226
rounded up 75 logs in 2021, wh			2007	PVRC	37	1,966,378
second highest club log total in even better in Medium clubs the	•	•	2006	PVRC	28	1,355,040
even better, in Medium clubs the Frankford Radio Club			2000	· viic	20	1,333,040

2005

2004 NCCC

NCCC

scored an impressive 2,550,431 to take the all-time

record score away from the PVRC - and this during the

interminable solar low of Cycle 25 - well done! And the

31

35

1,231,336

1,439,443

	Local		
Year	Club	Logs	Score
2021	Orleans County ARC	10	609,977
2020	Orleans County ARC	10	583,258
2019	Orleans County ARC	8	492,003
2018	Orleans County ARC	10	455,258
2017	Orleans County ARC	6	475,347
2016	Orleans County ARC	7	748,161
2015	Orleans County ARC	6	533,555
2014	Orleans County ARC	10	655,255
2013	Orleans County ARC*	10	1,065,283
2012	Orleans County ARC	10	936,547
2011	Dominion DX Group	10	639,851
2010	Orleans County ARC	6	449,103
2009	Orleans County ARC	4	294,392
2008	Maritime Contest Club	4	297,018
2007	Alabama Contest Group	7	453,854
2006	Maritime Contest Club	5	262,279
2005	Spokane DX Assn	3	131,022
2004	Dauberville DX Assn	3	125,534

Regional Highlights

* Record score

W/VE Logs Received by Region						
Region	2018	2019	2020	2021		
Central	171	268	226	260		
Midwest	197	284	230	247		
Northeast	213	326	260	332		
Southeast	201	342	246	333		
West Coast	228	364	242	297		
Total	1010	1584	1204	1469		

Nice to see a big jump in logs received across all regions, with the Northeast and Southeast in a virtual tie for most logs. I found it interesting to see that with the proliferation of categories this year, that each of the five regions had at least two first-place top ten finishers. That's pretty impressive!

In Section participation, we continue to have IL, VA, and MN slugging it out at the top, with EPA and NC ramping up to higher places compared to last year. Alas no logs received from NT or VI, here's hoping for 2022!

Domestic Participation, Logs Received by Section

	Logs		
Section ID	Received	2020 Rank	2020 logs
IL	62	2nd	52
VA	60	1st	55
MN	59	3rd	51
EPA	56	5th	45
NC	52	7th	35
ОН	52	4th	49
MDC	46	10th	29
WWA	40	6th	37
WNY	39	12th	29
TN	35	14th	25
SCV	34		
NFL	33		
CO	32		
MI	31		
STX	29	8th	31
OR	26		
AZ	25		
WI	25		
WPA	25		
AL	24		
IN	23		
SC	23		
SV	23		
GA	22		
NNJ	22		
MO	21		
SFL	20		
KY	18		
NTX	18	9th	30
SNJ	18		
ONS	17		
SJV	17		
WCF	17		
EB	16		
ENY	16		
GTA	16		
QC	16		
ОК	15		
NLI	14		
EWA	13		

ID

13

LAX	13
NM	13
EMA	12
ONE	12
WMA	12
WV	12
IA	11
KS	11
LA	11
NV	11
SDG	11
CT	10
MS	10
ORG	10
AR	9
ВС	9
NH	9
AB	8
DE	8
ME	8
NE	8
SB	8
SF	7
UT	7
AK*	6
RI	6
VT	6
MAR	5
PR*	5
SK	5
WY	5
MT	4
ONN	4
WTX	4
MB	3
ND	3
NNY	3
SD	3
PAC*	2
NL	1
NT	1
PE	0
VI*	0

^{*} DX Section

West Coast Region

West Coast Region		
(Pacific, Northwestern and Southwestern Divisions;		
Alberta, British Columbia and NT Sections)		
W7RN (WK6I, op)	232,848	SO-RTTY-HP
K6MR	172,480	SO-RTTY-HP
WØYK	119,616	SO-RTTY-HP
AJ6V	77,082	SO-RTTY-HP
N6ZFO	75,472	SO-RTTY-HP
N7UVH	57,768	SO-RTTY-LP
WN6K	38,613	SO-RTTY-LP
VE6BBP	33,741	SO-RTTY-LP
WS7V	32,697	SO-RTTY-LP
AE7AP	31,240	SO-RTTY-LP
K6EI	11,542	SO-RTTY-QRP
N6HI	900	SO-RTTY-QRP
KK6P	155,136	SOU-MIX-HP
N7NM	103,872	SOU-MIX-HP
KA6BIM	98,475	SOU-MIX-HP
K6OK	77,714	SOU-MIX-HP
W1RH	69,423	SOU-MIX-HP
AK6A	78,958	SOU-MIX-LP
K6GHA	47,212	SOU-MIX-LP
K7VAP	46,250	SOU-MIX-LP
W7BOB	38,896	SOU-MIX-LP
N7ESU	33,542	SOU-MIX-LP
	/ -	
W7YAQ	31,084	SOU-MIX-QRP
	0 = / 0 0 1	
NT6X	40,940	SOU-DIG-HP
VE6WQ	35,446	SOU-DIG-HP
N7PHY	27,880	SOU-DIG-HP
KG7CW	26,520	SOU-DIG-HP
N7EZQ	24,895	SOU-DIG-HP
147 LZQ	2 4 ,033	200 DIO-III
KC7CS	27,540	SOU-DIG-LP
K6RO	12,844	SOU-DIG-LP
N7PMS	11,532	SOU-DIG-LP
N9BD	11,088	SOU-DIG-LP
N3FAA	9,800	SOU-DIG-LP
INJI AA	3,000	JOO DIU-LI

W6JLV	80	SOU-DIG-QRP
N6WM	201,214	SOU-RTTY-HP
W6YX (N7MH, op)	200,016	SOU-RTTY-HP
K6LL	199,808	SOU-RTTY-HP
W9KKN	194,021	SOU-RTTY-HP
KO7SS	189,175	SOU-RTTY-HP
VA7KO	58,080	SOU-RTTY-LP
K7GS	39,130	SOU-RTTY-LP
N7QT	25,986	SOU-RTTY-LP
WAØWWW	17,110	SOU-RTTY-LP
W7DN	11,600	SOU-RTTY-LP
K7XC	14,640	SOU-RTTY-QRP
VE6EX	6,400	SOU-RTTY-QRP
K6MI	2,144	SOU-RTTY-QRP
N7AT	212,628	MSHP
N7TY	178,825	MSHP
N6EE	105,525	MSHP
W6DR	81,035	MSHP
N6KIM	48,330	MSHP
W7ZF	897	MSLP
ND2T	272,976	M2
KT7E	162,162	M2
W9CF	36	M2

With the plethora of categories I am abandoning my usual simple walk down the tables. Instead I'll bounce around a little to highlight the best accomplishments and wryest comments.

Your humble scribe managed to drive over the mountains and through the woods and up the snow choked driveway at the W7RN Comstock Memorial Station to safely operate to a first place SO-RTTY-HP and third overall. Second place and fifth overall was an impressive score by Ken K6MR aka the keeper of the NCCC Thursday Night RTTY Sprints. Third place (and tenth overall by a real squeaker, more on that later) was a rare appearance of Ed WØYK in the domestic standings, as opposed to his usual stints from P4.

Fifth place SO-RTTY-HP Bill N6ZFO logged a claimed score 76,807 and "upon noting the score ending in 807, decided it was a good time to quit." It's not clear whether any beer was consumed after that, but we hope so. In SOLP fourth place WS7V noted that conditions

were such that he made "contact with two(2), that's 2, European stations." Go sunspots! And K6EI - first in SO-RTTY-QRP and sixth overall disclosed "Who says you can't teach an old dog new tricks? I've been a ham for four decades, but this was my first time operating RTTY. Running this contest ORP was a hoot!"

In the mixed mode categories, there was also plenty of Western action. First place SOU-MIX-HP Paul KK6P didn't have much to say about also placing third overall. But second place Paul N7NM (fourth overall) exclaimed "Most activity I've seen outside of WW's! Made for tough times looking for spots to run. Countries tough from WA but surprised with a few EU on Sunday at Noon local on 40M!! Crazy prop. Gave FT a shot but really would rather see this as a pure RTTY contest." But further south Dave KA6BIM differed "Seemed like poor conditions on low bands." K6OK managed to subdue the software demons that plagued his FT Roundup effort to place tenth overall. And Bob W1RH asserted "FT4, SO2R with [Writelog and] Digirite, is really the only reason I played in the digital side of this contest. With SO2R, I could do FT4 rates of about 70-140. The big rates were SO2R RTTY."

First place AK6A was third SOU-MIX-LP overall. Tenth overall K6GHA noted the "first full effort of the year, and first RTTY and Dig experience switching between RTTY and FT4 with N1MM +. Wouldn't have had nearly the fun without some great coaching from the NCCC. (Join your local contest club! - WK6I) A late start, and better timing on sleep period, and taking advantage of the rule for spotting assistance would have improved my score and effort. However, this multimode effort was my best score in the past 3 years."

One might have thought the mixed mode QRP would have been popular, but such was not the case. Still this category pulled in a couple pretty impressive scores. Second place overall SOU-MIX-QRP Bob W7YAQ "spent about 60% of my 19.5 hours on RTTY and 40% on FT4 and FT8. I may have mismanaged the times off. I took a two-hour dinner break and had resumed operating for less than an hour when I got a FaceTime call from one of my sons. It was his birthday and my 2year old grand-daughter had also celebrated hers the week before. Well by the time we finished sharing postholiday, socially distanced, New Year's cheer I got back to the radio 35 minutes after the previous QSO. I guess I don't understand the logic of the special time-off rules for this contest. There's even a possibility running ORP that a half-hour can pass between QSOs, although fortunately that wasn't the case here." (Based on his low score reduction his breaks were good! - WK6I)

In SOU-RTTY-HP (that's "Single Op, Unlimited, RTTY-only, High Power" for those of you keeping

score, and you are, aren't you?) Western stations managed a perfect 3-4-5-6-7-8 sweep (including "not-appearing-in-this-table" KO7SS). This was one of the more competitive parts of the scoreboard with a spread of just 12,039 points between third and eighth!

These ops are also talkative, posting nice write-ups on 3830scores.com. Chris N6WM operating at the N6RO superstation noted this "was a serious sporting event" where he got caught up in mult chasing early on and not keeping his rate up. Chris wrote:

"In the mid and second sessions, I had to put my thinking cap on and realize that it's not just chasing the mults, but how you do it, in the second day, I thought through beam placement, etc. to position myself for success, knowing I was at one of the most capable stations, and if I could be loud in the right place at the right time, goodness will come in. (Rather than abandoning productive rate and chasing mults for mults sake.) I made a deliberate shift to this strategy with nothing to lose... and indeed, it paid off... I spent the majority of the remaining time running or working other stations. I did my beam placement to bring in mults at the right time. and as sure as sure can be, they came... some right in the nick of time." (N6WM writes some of the most thoughtful post-contest writeups on 3830, you should check them out. - WK6I)

Mike, N7MH, operating W6YX at Stanford University: "I spent the first 3 hours in 2BSIQ mode (That's '2 Band Synchronized Interleaved QSOs' AKA 'alternating CQs' - WK6I) on 15 and 20. Post-contest I tried to classify time intervals in the log and determined that in total I only used 2BSIQ for 5 hours and 20 minutes. Most of my time was spent doing traditional SO2R, running on one radio and click/pounce on the other. Two and a half hours were spent with both radios on the same band, mostly when 20 or 40 was open to Europe and I was trying to collect new mults while also running on what was the highest rate band." Zowie! But that's interesting because I find myself running two bands more than that, and spinning the subreceiver dial to catch mults, but maybe that's a difference from running Unlimited.

Dave K6LL in Arizona: "The Sunday morning opening to Europe had a bunch of loud stations, but the geographic footprint was pretty small out west here. There were a few JA's, but probably not worth getting up at 4 a.m. to work them on 40. Conditions were pretty good, but 40 got watery pretty early. Signals looked like ghosts on the Panadapter. 80 was quite good, even with my high noise level. It was all fun."

Bill W9KKN operating at NW6P in Silicon Valley had a lot to say as well, but this: "I always have a great time in this contest; it sets the tone for all of the contests that

will follow in the year -- and boy was I ready for 2020 to be over with. I could have done this from ZF1A remotely (and there's a reasonable chance I could have won the entire thing that way) but because there's no way for DXexpedition efforts to count for club points and because we decided that this was one of our focus contests in the NCCC, I made sure that I made my showing in circle. It would be awesome to see that change some day because it would encourage more DX to get on the air for such a fun contest." I'm with you Bill, that would be a great change!

And finally, Bill KO7SS on Mt. Lemmon in Arizona: "24 hours of amazing activity! Not much EU or JA, a few more sunspots would have helped:) Just a few hours of 15/20 SO2R, the 40/80 OCF dipole overheats with high power SO2R RTTY:)" Yike!

With the profusion of categories some of them saw a lot less attention than others, creating opportunities to hit the big time even from a modest station. This effect gave Nevadan Tim K7XC the opening to score a W/VE first place overall in SOU-RTTY-QRP. In his post-contest comments, he enthused "WOW, that was Great Fun! It still amazes me how well QRP power levels can support worldwide communications from the West Coast of NA. With only 5 Watts I managed to work 252 QSOs in 48 states/provinces & 17 countries on all continents using a 43 ft tall 3 element tribander and a dual band fan inverted vee at 38ft. Many thanks to those who worked to pull my signal from the noise."



Bruce Thompson, N7TY, along with Michael Mitchell, W6RW, operated from Bruce's station in the Multioperator, Single Transmitter, High Power category. They logged 1,581 contacts and 115 Mults for a final score of 178,825. [Bruce Thompson, N7TY, photo]

Sliding into the multi-op categories, N7AT was second in MSHP, while third overall N7TY expressed what many have observed: "We need an expedition to ND next year, 49 states in 4 hrs. and waited the rest of the

contest for ND to show up; it never did. As usual had a great time in this contest. The station continues to outperform the owner. I really enjoy doing multi-ops with my contest buddy, W6RW! Go Arizona Outlaws!" Fifth overall N6EE achieved "Socially distanced M/S. N6EE was at home in Turlock. N6DE was at home in San Jose." And at K6ZH, proof that couples can indeed contest together: "I got my wife Joan N6KIM interested in doing this as a Multi-Single contest. She did the FT8 Qs, and I did the RTTY Qs. Nice balance, and quite a few mults - including all states!" Even ND!

ND2T operating also fully remotely set a very high bar for the inaugural Multi-Two category, taking the W/VE first place overall. In fact, this "was the first Multi-2 operation from the K6MTU station on Mt. Umunhum near Los Gatos, California." They found it "surprising that a West Coast station can win this contest over the East Coast's access to European multipliers - so we will brag about it all year while we can!" I bet! K7TE at K7ZS averred that "we consider this an RTTY contest, so only used that mode for all contacts." And that "Software Murphy really reared his head this weekend... BUT, at least the hardware performed flawlessly. Thanks to the ARRL for changing the rules to allow M/2, and letting us work the entire contest. Our QSO's and score are up 75% over last year ... we had a nice time ... WX in Oregon on Saturday was AWFUL, so a great way to spend an ugly day outside."

Midwest Region

Midwest Region		
(Dakota, Midwest, Rocky Mountain and West Gulf Divisions; Manitoba and Saskatchewan Sections)		
ACØC	251,538	SO-RTTY-HP
N5HC	126,582	SO-RTTY-HP
N7WY	97,782	SO-RTTY-HP
KIØF	97,666	SO-RTTY-HP
AD5XD	96,369	SO-RTTY-HP
кøті	117,990	SO-RTTY-LP
NØAT	104,013	SO-RTTY-LP
KØAD	86,504	SO-RTTY-LP
ACØW	65,160	SO-RTTY-LP
WØPI	59,511	SO-RTTY-LP
NØNI	32,163	SO-RTTY-QRP
WE6EZ	5,676	SO-RTTY-QRP
NØSTP	1,200	SO-RTTY-QRP
VE5MX	163,449	SOU-MIX-HP

W7II	66,483	SOU-MIX-HP
NØKQ	41,976	SOU-MIX-HP
AA5H	14,884	SOU-MIX-HP
NØAJN	10,224	SOU-MIX-HP
WØGJT	17,871	SOU-MIX-LP
KB5PGY	16,320	SOU-MIX-LP
AI5R	6,032	SOU-MIX-LP
AEØTB	5,967	SOU-MIX-LP
KDØIOE	3,780	SOU-MIX-LP
NØUR	50,760	SOU-MIX-QRP
AA5KD	9,000	SOU-MIX-QRP
	·	
W5IP	23,958	SOU-DIG-HP
WØZA	22,411	SOU-DIG-HP
KJØI	10,348	SOU-DIG-HP
NFØN	9,405	SOU-DIG-HP
K5PI	2,160	SOU-DIG-HP
NOT 1	2,100	300 310 111
KB1IKC	44,880	SOU-DIG-LP
WBØTEV	38,090	SOU-DIG-LP
K5WO	20,900	SOU-DIG-LP
K4IU	20,608	SOU-DIG-LP
KAØKVW	17,898	SOU-DIG-LP
KADIK VV	17,030	300 DIG LI
WM5L	10,945	SOU-DIG-QRP
WØKI (KJ4ZMQ, op)	3,640	SOU-DIG-QRP
WY7BG	3,115	SOU-DIG-QRP
KIØG	532	SOU-DIG-QRP
KIØG	332	300-DIG-QIVI
WØLSD	185,934	SOU-RTTY-HP
W7RY	169,510	SOU-RTTY-HP
W5AP	148,575	SOU-RTTY-HP
WØGJ	113,019	SOU-RTTY-HP
NØXR	105,600	SOU-RTTY-HP
ΝΦΑΝ	103,000	300-1(111-111
KØCN	76,194	SOU-RTTY-LP
AAØAW	48,640	SOU-RTTY-LP
AD1C	47,150	SOU-RTTY-LP
KØMPH	42,920	SOU-RTTY-LP
КФКХ	30,544	SOU-RTTY-LP
KED7A	225 452	MCUD
K5RZA	225,459	MSHP
AB5EB	139,849	MSHP
KDØEZS	22,528	MSHP

NØKE	14,950	MSHP
WTØDX	87,032	MSLP
NØHJZ	55,130	MSLP
WSØZ	14,094	MSLP
кøин	5,280	MSLP
W5NN	31,734	M2
K5LRW	10,506	MM

Jeff ACØC did have a bit of good old wintry weather, wreaking havoc on antenna SWR: "A nice ice storm rolled in as we celebrated our quiet New Year's eve, spreading the joy of about ¼ inch of ice on everything at ground level, apparently more the higher up in altitude it got. Not enough to cause worry that any of the otherwise well-built JK beams would fall from the sky, but certainly enough to detune things. I was not worried - at the time - because the forecast was for mid 30's (F temps) on Saturday and the hope was the ice would be gone by contest kick off. Ha ha. That was just not meant to be unfortunately... Temps on the first contest day stayed under 30F, so the ice was with me the entire time." Jeff was somehow able to find enough tunable radiators to finish second overall in SO-RTTY-HP.

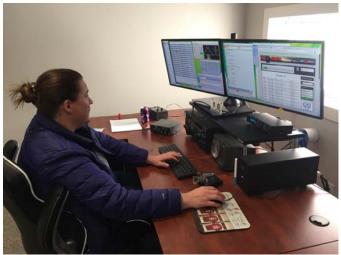
Despite "about 200 Qs less than last year" KØTI tracked Tim K9WX on the online scoreboard to keep him going and achieved second overall in SO-RTTY-LP. And continuing the trend, VE5MX had "one of those weekends where if it could go wrong it did, mostly self-inflicted" but managed second overall in SO-MIX-HP. He noted "All the digi Qs were made with FT4. Who has time for a 15 sec period in a contest, am I right?" Right behind in second-place Midwest is Bill W7II who felt he got "Pretty good results for a vertical antenna." Indeed!

WØZA enjoyed his "First time out operating a digital contest. It's different from other contests. I was using only FT8. What I was surprised at was a number of stations duping me. I assume they are not using a contesting logging program along with the FT8 program? ...you really can't make mistakes coping callsigns, it's there or not. CW or SSB contests, you're entering in callsigns by hand. This is different, and I was assuming I would be dupe free." It's an interesting conundrum indeed. WY7BG also gave digi contesting a first try: "I am not an experienced contester, but since FT8 was allowed and I have recently set up for it, I decided to attempt to participate. The event was enjoyable and addictive, and I was surprised by how many stations I was able to work at only 5 watts with a tiny Xiegu transceiver and a wire antenna."

WØLSD was recovering from major surgery and was hoping by the contest to be back to 100%. "Didn't quite happen that way but had a great contest with no big failures. BIC is more strenuous than I thought HI." - and good enough for eighth overall in SOU-RTTY-HP. But he went on to echo a common refrain "Do we need to mount a DXPedition to ND? Were there any ND stations on?" According to available data, there were 3 for a total of just 244 QSOs in submitted logs. The more you know.

At first place overall in MSHP K5RZA, operators Deborah and Gator "Made a few FT4 QSO's in the wee hours when things got slow, but generally the rate was better on RTTY so stuck with it the rest of the time... When running on 20M Sunday afternoon, VK7BO called in on LP for a new mult. Deborah mentioned 'I wish a North Dakota would call in' (our last state needed). Four QSO's later, KDØWUQ calls in from ND!" [So, for N7TY and WØLSD, maybe when you wish upon a mult, you might be surprised at the result... - WK6I]

Rich NØHJZ "invited local kids to join me to show them one side of Amateur Radio. I had three kids (ages 8-14) help me operate and I had my girlfriend help. I wasn't smart enough and only got a picture of my girlfriend operating.... [Don't beat yourself up, it's a nice picture! - WK6I] This was great exposure for the kids to experience radio without having to 'talk' to people. I'm going to get them back for Field Day." You coached well Rich, getting a sixth place overall in MSLP!



Rich Westerberg, NØHJZ, had some assistance from several "non-ham" operators, including his girlfriend (pictured) and several youth operators ranging in age from 8-14. {Rich Westerberg, NØHJZ, photo]

Central Region

Central Region			
(Central and G		sions; Ontario East,	
=		, and Greater Toronto	
Area Sections)		,, a.i.a. 5. 5. 5. 5. 5. 5. 5. 5. 5.	
AI9T	179,087	SO-RTTY-HP	
KT9L	119,600	SO-RTTY-HP	
W5MX	114,654	SO-RTTY-HP	
VE3JI	74,994	SO-RTTY-HP	
N8BJQ	64,158	SO-RTTY-HP	
K9WX	112,792	SO-RTTY-LP	
VE3PJ	61,424	SO-RTTY-LP	
VA3SB	60,984	SO-RTTY-LP	
AD8FD	51,030	SO-RTTY-LP	
WB8BZK	48,138	SO-RTTY-LP	
VE3KI	35,700	SO-RTTY-QRP	
K9AWM	3,034	SO-RTTY-QRP	
W8JWN	36,223	SOU-MIX-HP	
WT2P	24,072	SOU-MIX-HP	
W9JA	16,430	SOU-MIX-HP	
кк8ММ	53,680	SOU-MIX-LP	
WB8JUI	47,040	SOU-MIX-LP	
VE3BR	45,360	SOU-MIX-LP	
KM8V	20,910	SOU-MIX-LP	
KB9ITE	20,474	SOU-MIX-LP	
NE9U	27,145	SOU-DIG-HP	
KC8GAE	19,890	SOU-DIG-HP	
W8MRL	18,282	SOU-DIG-HP	
NS9I	16,988	SOU-DIG-HP	
KB8ZR	3,298	SOU-DIG-HP	
KE8M	49,217	SOU-DIG-LP	
N7ZZ	33,152	SOU-DIG-LP	
W4UWC	28,098	SOU-DIG-LP	
WB8SIG	23,184	SOU-DIG-LP	
WV4O	19,596	SOU-DIG-LP	
N8ME	7,992	SOU-DIG-QRP	
WD9EKA	3,024	SOU-DIG-QRP	
WØLM	180	SOU-DIG-QRP	
WB9AYW	42	SOU-DIG-QRP	

к9СТ	222,902	SOU-RTTY-HP
AC9KW	109,928	SOU-RTTY-HP
VA3DF	103,282	SOU-RTTY-HP
VE3CX	103,122	SOU-RTTY-HP
VA3LR	102,021	SOU-RTTY-HP
N7US	71,200	SOU-RTTY-LP
KI6DY	65,208	SOU-RTTY-LP
W4LC	63,600	SOU-RTTY-LP
VA3MJR	53,768	SOU-RTTY-LP
KE3K	53,440	SOU-RTTY-LP
K8ZT	840	SOU-RTTY-QRP
VE3NZ	105,152	MSHP
VA3LML	35,040	MSHP
WB9TFF	26,979	MSHP
K9NR	125,248	MSLP
N8LRG	111,644	MSLP
NW8S	227,808	M2

AI9T enthused: "That was lots of fun!!! But I am worn out today!!" And worth it for fourth overall in SO-RTTY-HP! Larry KT9L was eleventh overall, just 16 points behind WØYK in tenth, "A personal best for this contest." KØTI's rabbit of choice (see above) Tim K9WX hopped his way to third overall in SO-RTTY-LP.

VE3KI topped the charts overall on SO-RTTY-QRP with just a K3 at 4.9 watts, and a tribander and wires nice work! NE9U "just killing time in the shack......" still scored tenth overall in SOU-DIG-HP. Time well-killed! And KE8M with a whole bunch of antennage earned second overall in SOU-DIG-LP.

Craig K9CT reports that, like ACØC above: "Weather was the big story at my station. All of central Illinois and surrounding areas were treated to freezing rain in the hours preceding the contest. Ice accumulations of half an inch were not unusual. Thank goodness we had no wind like last time, or it would have been very destructive. My 80- and 40-meter main antennas were usable but 20, 15 and 10 were not. I used the 20m with a very high SWR and there was not any reasonable pattern. The 15 and 10 SWR were in excess of 5:1 and a showstopper. The SteppIRs were folded like a dead bird. The rotating towers had iced up and I was very nervous rotating them. I made several inspections while inching the towers. The ice at the bases forced the limit switches to

shut the power off. I had to take a hammer and carefully tap the ice around the base to give it space to move. Overnight, we received additional ice and snow and in the last hour of my 6, I went to each tower and got them ready for the day....in the dark at 5:30am. I knew I needed to get the 20m aimed at EU and the east coast. Thankfully at midday with six hours to go the sun peaked out. Then the ice started falling! It will be many days of that. Just don't stand under them!" Noted!

On his way to second place overall in SOU-RTTY-HP, Craig "...had one major problem during the contest that I don't understand. I would send my exchange and the IL would be sent '8)' I am sure that repeats cost me a few QSOs and hopefully no NILs. I was using the same setup I have used for many contests. 2Tone for TX. Something changed and I don't know what! Any ideas?. Let me know." AE6JV was one confused by this, reporting "Why did K9CT report his QTH as '8)', which is IL in figures shift? I saw at least one station ask for a repeat, not either knowing K9CT is in IL, or not knowing how to manually translate a character printed in the wrong shift. I observed this 'feature' in all 4 of my Qs with K9CT plus a few other ones I decoded while waiting for a run station to recognize me." Any ideas?

N7US also: "Shoveled snow Saturday and slept all Saturday night because I didn't expect to put as much time as I did. SWR was high on all antennas, presumably due to ice, which is why I ran low power." Got you to ninth-place SOU-RTTY-LP overall! And K9NR: "Better than last year in spite of ice damage to 40-meter beam and high SWR due to ice storm." Better indeed - first place overall MSLP!

Black River Radio Ops (NW8S operating KB8O) wanted to set the record in the 8th call area for Multi-2 (M2): "We started off on time with no issues even with some freezing rain and high winds just prior to the contest..." Many shift changes later... "This is the first time we have been able to keep both stations going for the most part full time. Conditions were pretty good from Ohio and it was nice to fill in the gaps with a little FT4. Special thanks to Doug for pulling the night shift, we know it's not easy, and thanks to all in the log." I think they got that record!

Southeast Region

Southeast Region		
(Delta, Roanoke and Southeastern Divisions)		
WB4YDL	127,008	SO-RTTY-HP
K5XH	119,520	SO-RTTY-HP
WA1PMA	103,360	SO-RTTY-HP
N4CW	89,500	SO-RTTY-HP
K4RO	88,392	SO-RTTY-HP

W4AAA (KK9A, op)	207,900	SO-RTTY-LP
AA2MF	102,178	SO-RTTY-LP
WA1FCN	85,446	SO-RTTY-LP
AA4LR	70,210	SO-RTTY-LP
K8ARY	61,088	SO-RTTY-LP
KOANT	01,088	30-KTTT-LF
W4DWS	17,152	SO-RTTY-QRP
N7RCS	15,455	SO-RTTY-QRP
NE3R	5,074	SO-RTTY-QRP
KH6KG/W5	4,998	SO-RTTY-QRP
AD4TT	3,605	SO-RTTY-QRP
N800	255,996	SOU-MIX-HP
AG4W	99,400	SOU-MIX-HP
WQ5L	82,709	SOU-MIX-HP
K4QD	51,552	SOU-MIX-HP
W4CU	45,696	SOU-MIX-HP
	13,030	230 11111
W9SN	158,662	SOU-MIX-LP
K90M	143,910	SOU-MIX-LP
AA4DD	77,353	SOU-MIX-LP
KT4Q	57,362	SOU-MIX-LP
WØPV	43,650	SOU-MIX-LP
W.G. V	13,030	300 1411/4 21
N4BP	55,404	SOU-DIG-HP
KQ4AV	46,065	SOU-DIG-HP
KD4RH	18,544	SOU-DIG-HP
WB3D	16,185	SOU-DIG-HP
WA6POZ	13,724	SOU-DIG-HP
KM4RL	42,658	SOU-DIG-LP
W4BTW	16,640	SOU-DIG-LP
KY4E	16,276	SOU-DIG-LP
AC5O	16,225	SOU-DIG-LP
KO4CTF	15,370	SOU-DIG-LP
KK4BZ	10,476	SOU-DIG-QRP
K4PQC	3,640	SOU-DIG-QRP
KEØJMK	2,013	SOU-DIG-QRP
N4ZZ	173,340	SOU-RTTY-HP
N4IQ	141,435	SOU-RTTY-HP
N2TU	112,052	SOU-RTTY-HP
NS4X	91,434	SOU-RTTY-HP
K4SO	86,254	SOU-RTTY-HP

209,645	SOU-RTTY-LP
165,025	SOU-RTTY-LP
99,746	SOU-RTTY-LP
83,072	SOU-RTTY-LP
39,520	SOU-RTTY-LP
5,280	SOU-RTTY-QRP
102,500	MSHP
100,260	MSHP
114,688	MSLP
73,055	MSLP
49,820	MSLP
15,246	MSLP
2,754	MSLP
254,640	M2
149,657	M2
	165,025 99,746 83,072 39,520 5,280 102,500 100,260 114,688 73,055 49,820 15,246 2,754

John KK9A operating W4AAA took a whole year off from RTTY but his "...station was still set up from the November Sweepstakes contest and the computers and transceivers still remembered the RTTY settings from a year ago so it was easy to get ready for RU. Everything appeared to be working perfectly but for some reason I had a slow first hour which was very concerning. I hung in there and fortunately by the second hour rates quickly escalated and stayed that way during the remainder of the evening. Two radios on two productive bands is what makes RTTY contesting fun! In one 60-minute segment I made 140 contacts running on 40m and 80m. 20m and 40m were my most productive bands and they were also the best for DX. On 20m 28% of my contacts were in Europe and on 40m it was 8%. There is limited DX activity in this event, and it is hard to search for multipliers when running on two radios. I worked every US state, I missed some Canadian provinces and worked 54 countries. The ARRL RTTY Roundup was a fantastic way to spend the first weekend of 2021! I do not use FTx modes, so I was happy that the ARRL added RTTY only categories. I would like to thank everyone for the QSOs." Result - first place overall in SO-RTTY-LP. Maybe I need to take a whole year off RTTY to win the Roundup? Yeah, not gonna happen...!

Eighth overall SO-RTTY-HP WB4YDL "...really enjoyed playing in this contest again - it's been 3 years. I had some great runs and lots of DX. Just wish 10M opened."

Bob WA1FCN also found motivation from the online scoreboard "Sure helps keep you motivated! What a close finish for K9WX, K3AJ, and KØTI. It was fun being ahead of KØTI and K3AJ but it didn't last long." Long enough for tenth-place overall SO-RTTY-LP.

Don AA5AU is always worth a read: "I've operated all 33 RTTY Roundups and it was another great one. Seemed like good participation. Conditions were nice & quiet on Sunday. I changed up my off time this year. I took 5 hours Saturday night and the last hour on Sunday around lunch time during a slow period.... Second year in a row I missed ND. Someone needs to go there next year. Did get NT." Nice catch! Don once again scored first place SOU-RTTY-LP - a LOT of station work is clearly the key to success at AA5AU: "I made 165 more contacts than last year (with the exact same number of multipliers) and it's due to repairs in the station that allowed me to do things like rotate the 2nd Yagi. Did a lot of work this fall. Fixed the rotor and SteppIR on tower #2 and had to re-install all antennas after taking them down for Hurricane Zeta. [vikes - WK6I] I obtained a good used PC and installed Windows 10 Pro on it with an SSD and retired the Windows XP machine on the 2nd radio. I did it mainly so I could operate FT modes in the Roundup but when they changed the rules, I decided to go RTTY-only. After all, it's the "RTTY" Roundup, right?"

After a "dismal" first 3 hours, Jim AD4EB "actually considered pulling the plug. But hung in there, and after midnight everything picked up and had couple 100+hours. EU was out in force, seemed more like a DX contest at times. Worked all states, but missed NB, NF, NT, NU, PE, and YT. RTTY is what got me into ham radio as a youngster 50 years ago, sure is wonderful to see it has remained so popular." His all-time personal best score was good enough for second place SOU-RTTY-LP.

John W4ER's part-time effort using a "K3 @ 5 watts to attic antennas" was still good for a third-place podium finish in SOU-RTTY-QRP. W4MLB pulled together a "small team of just 5 operators" for eighth place MSHP. WV4P "could not get any traction the first 4 hours, fell way behind quickly. Thankfully we had a few runs and were able to make up some ground... The few FT* Q's (No Mults) were showing a freshly minted Tech how it all worked.... I think he's hooked. I still contend the FT modes should not be mixed in." Enough ground made up for second place overall!

Northeast Region

North and Davies		
Northeast Region		
(New England, Hudson and Atlantic Divisions; Maritime and Quebec Sections)		
AA3B	271,370	SO-RTTY-HP
N1IXF	156,456	SO-RTTY-HP
K5ZD	135,753	SO-RTTY-HP
NN2NN	95,570	SO-RTTY-HP
K2NV	90,896	SO-RTTY-HP
	,	
КЗАЈ	106,428	SO-RTTY-LP
W1QK	95,060	SO-RTTY-LP
K3RWN	87,032	SO-RTTY-LP
N2WK	75,264	SO-RTTY-LP
NG1M	55,186	SO-RTTY-LP
K2YG	24,882	SO-RTTY-QRP
KO3T	4,312	SO-RTTY-QRP
N1DID	1,881	SO-RTTY-QRP
KG2U	903	SO-RTTY-QRP
AD3Y	900	SO-RTTY-QRP
NA3M	103,230	SOU-MIX-HP
NF3R	89,424	SOU-MIX-HP
NY3B	70,513	SOU-MIX-HP
K4KGG	65,758	SOU-MIX-HP
WT3K	59,520	SOU-MIX-HP
WA3AAN	60,630	SOU-MIX-LP
W3KB	59,813	SOU-MIX-LP
VE2NMB	49,734	SOU-MIX-LP
VE2HEW	46,784	SOU-MIX-LP
W1HS	41,574	SOU-MIX-LP
W1UE	141,504	SOU-DIG-HP
AG2J	55,752	SOU-DIG-HP
N1EK	47,476	SOU-DIG-HP
K1BZ	29,082	SOU-DIG-HP
W2TT	22,770	SOU-DIG-HP
WA2BOT	66,833	SOU-DIG-LP
W3PAX	36,018	SOU-DIG-LP
N3AAA	34,632	SOU-DIG-LP
NR3M	34,279	SOU-DIG-LP
KØBAK	31,122	SOU-DIG-LP
NOUNK	J1,144	JOU DIG LE

VA1MM	4,712	SOU-DIG-QRP
WA9QXY	836	SOU-DIG-QRP
KI1G	316,416	SOU-RTTY-HP
N3QE	175,044	SOU-RTTY-HP
K6DTT	171,479	SOU-RTTY-HP
W3FIZ	163,328	SOU-RTTY-HP
K1MK (@K1TTT)	149,694	SOU-RTTY-HP
WW3S	139,040	SOU-RTTY-LP
KA2K	95,824	SOU-RTTY-LP
W3RGA	91,278	SOU-RTTY-LP
КВЗААҮ	65,600	SOU-RTTY-LP
K2DFC	56,640	SOU-RTTY-LP
KT1I	91,600	MSHP
KA3D	9,720	MSHP
NJ1F	8,533	MSLP
K3CCR	118,932	M2
KB3VQC	73,950	M2
W3GH	240,218	MM
WW4LL	174,615	MM

Rich, N1IXF, "Had a blast! The format is very US centric with the start on Saturday 1pm (EST local) and as a single op you can only operate 24 of the 30 hours. That meant I could choose to sleep for almost 6 hours... very civilized." However, a caution - he used "the call history file and thought it was wrong more than usual. Hope I was careful on every QSO! Especially with the snowbirds who have apparently already migrated to FL. I also noticed there were lots of callers who weren't in the call history at all, so maybe that holds good things for expanding interest in contesting and for RTTY newcomers." Rich did a good job; his error rate was super low and score reduction an excellent 1.1% - good for sixth overall in SO-RTTY-HP!

Rich also had a funny thing happen in the shack: "At one point Sunday I was looking around while my macro was sending and I noticed the breadboard circuit on my bench was "active" with no power to it. I'm building an ESR meter to test electrolytic caps and the meter in that circuit would slightly deflect every time I transmitted. The 1N34As were rectifying my RF and causing the meter to move. Entertaining crystal radio."

Randy, K5ZD observed it was "hard to justify the slow rates of FT modes when you can work 60-120/hour on RTTY... Love contestonlinescore.com for these part time efforts. Always someone to chase. The horse race between AA3B and AC0C was unrelenting. I could never keep up with these guys." Part time to seventh overall in SO-RTTY-HP!

Eighth-place overall SO-RTTY-LP K3RWN "Had not worked a JA on a Vertical with 100 watts for a long time! Great Fun!" Anthony, VE2HEW "Operated mixed mode this weekend. Had some fun almost working all states, just missed one!" I bet I know which one! Pat, W3RGA, sixth overall in SOU-RTTY-LP, was happy with the new categories "I'm glad I could operate assisted this year and not have to compete with the FT modes."

Dennis, W1UE in SOU-DIG-HP worked "880 FT4, 230 FT8. Only 71 of the FT8 QSOs were on the "normal" FT8 frequencies. Best hour was a 68, worst full hour was a 37. For a period on Sunday, I actually ran out of people to work. It was fun watching TV and operating the contest!" So now TV watching is part of a first-place overall effort! This was KØBAK's "First time putting in a decent effort in this contest, >17 hours. No lulls in contacts while operating. FT4 and FT8 only; low 40m doublet on all 3 bands. First contact with Qatar was a highlight, as was contacts on all my 3 bands with the King of NPOTA, KX9X." Ninth overall!

N3QE "Was originally planning to take all my remaining offtime about 1800Z (my 1PM) when the sun had set on EU, but was DELIGHTED to find excellent and extremely strong SHORT SKIP most of Sunday afternoon to W8/W9/W0 with huge rates and easy copy. Used 20M extremely productively and only taking 0.8 hours offtime on Sunday afternoon. Had some good fun on 40, then my 24 hours optime was up before 2230Z."

Third-place overall WW3S enjoyed "Saturdays nights 162 hr while dual CQing on 80 and 40 was a rush.....and as great as that was, Sunday I hit the wall, never could find a spot to CQ on 20....I'd like to think if it wasn't for my grandsons birthday party late Saturday afternoon and a emergency trip to the drugstore on Sunday morning I'd have finally beat Don, AA5AU, but alas I know it isn't so, buy hey, that's my excuse(s) and I'm sticking to it !!! 73 and thanks all for the qsos...."

For Charlie, KT1I, "This was a first using the remote station for a multi-op contest. All went well both hardware and software. Running Writelog on all stations. Thanks to Gordon, N1MGO for all the work needed to set this up. We came close to 100K points and 1K QSO." Good for ninth overall! KA3D "teamed up

with my wife KA3ZNI for a multi single this year. We had a good time." I would hope so!

W3GH "Had big fun" on the way to first-place overall in the new MM category. Second-place overall WW4LL found that "The use of FT8/4 was better on Sunday than on Saturday. On FT8, it seemed as though the majority were running, but not many in S&P on Saturday. In hindsight, it may have been more productive for us to just run RTTY. The remote operation from ME ran great with the new ICOMs."

Score Reductions and Golden Logs

Unfortunately, the disparity in error rates and score reductions between RTTY logs and FT logs continues. I did a little math... RTTY-only logs across all categories averaged 8.4% score reduction, while FT-only logs averaged 15.4%! And you'll see in the table below there were very few golden logs outside of RTTY-only categories. Clearly the understanding over what constitutes a properly logged FT contest QSO is still an issue. Anyway, a Golden Log is arbitrarily defined as a log with no errors and with at least 100 QSOs, and the top logs have always had around 300-400 OSOs and this year continued that trend. Congratulations to this year's top Golden Log, submitted by LX1NO with 322 QSOs and a respectable 25,116 points in the Single Op RTTY HP category. And we have one repeat appearance in this listing. Last year W4NBS also had a Golden Log with 111 QSOs. Keep up the good work!

Golden Logs			
Call	Category	Score	QSOs
LX1NO	SO-RTTY-HP	25,116	322
AA7V	SO-RTTY-HP	20,370	291
VA3PC	SO-RTTY-LP	14,100	235
AF3I	SO-RTTY-LP	12,483	219
K6BIR	SO-RTTY-LP	12,412	214
K8PO	SOU-RTTY-LP	9,936	207
RWØSR	SOU-DIG-LP	7,480	187
K5TA	SO-RTTY-LP	8,648	184
N3ATE	SO-RTTY-LP	8,320	160
PA4O	SOU-MIX-HP	6,084	156
K2WK	SOU-RTTY-HP	7,650	150
N6VH	SOU-RTTY-LP	6,300	150
K7AZT	SO-RTTY-LP	5,328	144
KE3ZT	SO-RTTY-LP	6,578	143

W9XT	SOU-RTTY-LP	7,906	134
VA1MM	SOU-DIG-QRP	4,712	124
AB3GY	SO-RTTY-LP	4,428	123
W4NBS	SO-RTTY-LP	5,520	120
SP6FXY	SOU-RTTY-LP	5,750	115
AI9K	Checklog	4,104	114
KQ3F	SOU-RTTY-LP	6,893	113
KB9OWD	SO-RTTY-LP	4,746	113
Z36N	SO-RTTY-LP	4,032	112
SM7CIL	SO-RTTY-LP	4,730	110
W2TB	SOU-RTTY-HP	4,284	102
N2RSC	SOU-RTTY-LP	3,876	102
WB3JIS	SO-RTTY-LP	3,060	102
HA3OU	SOU-RTTY-QRP	4,600	100
NØUX	SO-RTTY-LP	4,000	100

KH6ZM	66,600
EA8DO	61,425
PZ5RA	58,656
Single Operator, RTTY Only, Low Power (SO-RT	TTY-LP)
CT7AUP	80,649
UX1VT	56,689
TG9ADQ	41,200
IK2BUF	39,063
KH6CJJ	36,180
MW9W (GWØKRL, op)	32,674
UT5EPP	32,192
PY2NY	30,498
CO2AME	30,388
HA8WY	29,273

72,540

DL3BQA

DX Results

DX Participation, by Continent					
	2017 2018 2019 2020 2021				
Continent	logs	logs	logs	logs	logs
Africa	5	5	8	4	3
Asia	146	117	209	152	150
Europe	474	490	683	620	636
North America					
(non W/VE)	30	22	18	27	17
Oceania	30	33	69	40	47
South America	23	26	71	40	31
Total logs	708	693	1072	883	884

DX participation was utterly flat as compared to last year, with DX in the Americas trending down, but Europe and Oceania trending up. The Roundup is at its heart a DX contest; it sure would be great to get more DX participating!

Top Ten-DX

Single Operator, RTTY Only, High Power (SO-RTTY-
HP)

OK7W	186,340
UW1M	173,884
IK2QPR	141,804
EMØI (UT2IZ, op)	127,317
D4Z (IK2NCJ, op)	89,688
OK2ZA	89,095

Single Operator, RTTY Only, QRP (SO-RTTY-QRP)

F5BEG	37,101
OK6AB	8,820
мфнмо	8,500
ON3CQ	5,311
F4GKY	4,840
CO2GL	4,180
SP4LVK	3,840
JA6WFM	3,030
JH7UJU	2,520
G8VVY	1,960

Single Operator Unlimited, Mixed Mode, High Power (SOU-MIX-HP)

YO9HP	99,327
MM9I (GMØOPS, op)	95,778
LU5VV	72,474
PB7Z	36,195
IK4UOA	33,998
IK4MTK	24,140
IZ2RLO	16,060
YO3GNF	13,988
PA4O	6,084
RU6YJ	4,592

Single Operator Unlimited, Mixed Mode, Low Power (SOU-MIX-LP)

EW7B	50,310
S56A	33,761

M3ECT	29,970	IK4UXA	5,265
OL6D	20,661	YL3FW	4,260
G1P (MØIEP, op)	20,605	TA30WL	931
JH7RTQ	20,448	TA1BM	304
PD1RP	18,970	TA30ER	300
UTSEOX	16,756	JA1KPF	105
JH4UTP	15,552		
UX7QV	15,087	TA3ONK	42
		Single Operator Unlimited, RTTY	Only. High Power
Single Operator Unlimited, Mixed Mode, MIX-QRP)	QRP (SOU-	(SOU-RTTY-HP)	
PC2F	7,956	SN7Q (SP7GIQ, op)	218,375
RV3DBK	2,660	EA4GOY	142,044
7L4IOU	345	TK5MH	115,188
JH3DMQ	72	IV3SKB	112,454
	ur t n	UR7GO	105,163
Single Operator Unlimited, Digital Only, (SOU-DIG-HP)	High Power	P3X (5B4AMM, op)	95,034
ON6NL	42,971	G3ORY	83,538
	•	PY2KNK	79,285
IK2TDM	23,280	LZ8E (LZ2BE, op)	74,195
DG9BEO	20,368	IK3ORD	70,956
XE1FJM	20,100	Challe Construction to the Latter	
UA6CE	14,219	Single Operator Unlimited, RTTY (SOU-RTTY-LP)	Only, Low Power
JO7KMB	13,969	WP3C	106 400
SP7IIT	10,452	DF2SD	106,488
I3FIY	10,207		77,367
IZ2FOS	6,670	EC1A	75,735
DU3TW	6,360	ON5GQ	69,498
		UZ1WW	63,226
Single Operator Unlimited, Digital Only, I	ow Power	UT4LW	56,420
(SOU-DIG-LP)		SP9H	41,280
SV2AEL	30,178	F4EGA	39,840
OQ4U	28,700	SE4E (SM4DQE, op)	38,269
OZ1ADL	22,648	F4DSK	38,010
DG5LP	22,100	Single Operator Unlimited, RTTY	Only ORP (SOLL-
ОНЗМА	21,609	RTTY-QRP)	omy, Qiti (500-
CO7HNS	21,420	HA3OU	4,600
LY2PAD	21,252	YU1LM	4,212
RN3OG	19,929	PE2K	3,597
HI8JSG	19,032	. ==.	3,007
LZ2INP	18,639		
		Multioperator, Single Transmitte (MSHP)	r, High Power
Single Operator Unlimited, Digital Only, (DIG-QRP)	אא (200-	DP7D	183,138
PA3EOU	10,584	OK7O	126,672
EA3FHP	9,593	MW2I	112,140
	·	UZ2I	74,582
IZ3NVR	7,304	<u></u> .	77,302

DJ1XT	52,440
9A1CBM	41,225
F8KCF	34,188
RK3DXW	26,112
VR2CC	18,444
SP9ZHR	7,296

Multioperator, Single Transmitter, Low Power ((MSLP))

• •	•	
LY5W		45,227
4U1A		44,368
S57ZT		15,264
9A7B		14,600
DX3H		5,040
SN65KDU		4,275
BH3DHE		3,584
JK2VOC		1,375

On his way to first-place overall DX SO-RTTY-HP Standa, OK7W found that "Conditions were great on 40m. I enjoyed lots of pileups and SO2R operation. Even quite complicated SO2R setup worked 100% all the time - thanks to OK2ZAW and his QRO.CZ company for providing such a reliable technical solution."

Kent, KH6CJJ observed "Better conditions than last year, but 15 was thin and 10 never showed. The low bands are always bad for me with low power and a low dipole from out in the Pacific. Unfortunately, I lost 3 1/2 prime hours Saturday afternoon due to family obligations. I really didn't hear nor work much DX and did not hear any EU. The closest was D4Z who called me out of the blue while I was running NA. Had fun and look forward to the next one!"

First place SOU-MIX-HP, Alex, YO9HP "struggled with poor propagation towards NA and with lack of interest for FT4 mode. I wonder what is happening with FT4, the mode initially designed for contesting. A question for software designers (what about user friendly contest settings, in order to attract the casual operators) and for contest sponsors (incentives on using FT4, allow FT4 as single mode contest etc). Now strictly speaking about ARRL-RTTY RU, it should be 100% RTTY contest. Fortunately, there is still enough interest in this fine old mode, to cover 24-36 hours contests." For second place MM9I, this was their "first ARRL

RTTY RU. Good conditions on 20m to USA. Pretty busy."

ON6NL found SOU-DIG-HP to be a "Difficult contest in FTx from Europe. Frequency choices very poor for Europeans. Especially FT4 of very little use in Europe." But you still made first place DX! EA3FHP operated in the SOU-DIG-QRP category and observed "Conditions on 40 were incredible. Normally working US West Coast is a challenge but worked one after the other CA!" QRP, nice!

Alfredo, WP3C, on the other hand felt conditions were not so great "Very bad propagation but I had fun." Fun, and first-place DX SOU-RTTY-LP! (Thanks for getting PR on the air!) DP7D also scored a first place, in MSHP DX: "We lost 45 minutes operating time due to a power failure at the TRX, but we had fun. Thanks for all who took part in livescoring - this is always a good motivation." LY5W noted "Great activity, on 40m from 7030 to 7120" on their way to first-place MSLP DX.

Continental Winners

Africa Single Operator, RTTY Only, High Power D4Z (IK2NCJ, op) 89,688 Single Operator, RTTY Only, Low Power EA80M 17,064 Asia Single Operator, RTTY Only, High Power JA7IC 17,424 Single Operator, RTTY Only, Low

Multipporator Cinals			Cinala Onor	atar Unlimited DTTV		
Multioperator, Single Transmitter, Low Power	BH3DHE	3,584	Only, Low P	ator Unlimited, RTTY	YB8RW	2,568
Transmitter, 2011 Fower	51135112	3,301	Multioperat		1201111	2,300
_				, Low Power	DX3H	5,040
Europe						
Single Operator, RTTY Only, High Power	OK7W	186,340	South Ame	rica		
Single Operator, RTTY Only, Low	OK7 VV	100,540		ator, RTTY Only, High		
Power	CT7AUP	80,649	Power	,	PZ5RA	58,656
Single Operator, RTTY Only, QRP	F5BEG	37,101	Single Opera	ator, RTTY Only, Low		
Single Operator Unlimited, Mixed	13520	37,101	Power		PY2NY	30,498
Mode, High Power	YO9HP	99,327	Single Opera	ator, RTTY Only, QRP	PU2RTO	1,161
Single Operator Unlimited, Mixed			Single Opera	ator Unlimited, Mixed		
Mode, Low Power	EW7B	50,310	Mode, High		LU5VV	72,474
Single Operator Unlimited, Mixed	D025	7.056		ator Unlimited, Mixed	\0.(CB\/\)	2.040
Mode, QRP Single Operator Unlimited Digital	PC2F	7,956	Mode, Low		YV6BXN	2,940
Single Operator Unlimited, Digital Only, High Power	ON6NL	42,971	Only, Low P	ator Unlimited, Digital	YV5KAJ	14,904
Single Operator Unlimited, Digital	ONONE	42,371	• • • • • • • • • • • • • • • • • • • •	ator Unlimited, RTTY	145100	14,304
Only, Low Power	SV2AEL	30,178	Only, High F		PY2KNK	79,285
Single Operator Unlimited, Digital			Single Opera	ator Unlimited, RTTY		
Only, QRP	PA3EOU	10,584	Only, Low P		PY4XX	8,085
Single Operator Unlimited, RTTY	SN7Q (SP7GIQ,	242.2==	Multioperat	-		
Only, High Power	op)	218,375	Transmitter	, High Power	CE4WT	1,170
Single Operator Unlimited, RTTY Only, Low Power	DF2SD	77,367	The Re	corde		
Single Operator Unlimited, RTTY	51235	77,507	THE RE	Corus		
Only, QRP	HA3OU	4,600				
Multioperator, Single				previously in the		
Transmitter, High Power	DP7D	183,138	0 ,	definitions for Sing		
Multioperator, Single	13/514/	45.007		s of 2020 have be	,	
Transmitter, Low Power	LY5W	45,227		d MSHP continue		
			•	s for 2021, M2 an	d MM.) For y	our perusal
						11 14 1
North America				e is a huge table r	•	•
Single Operator, RTTY Only, High			posterity b	ooth the retired re	cords and the	e new 2021
Single Operator, RTTY Only, High Power	KL2R (N1TX, op)	8,007	posterity be records for	ooth the retired re or W/VE and DX.	cords and the Thank goodn	e new 2021 ess online
Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low			posterity be records for	ooth the retired re	cords and the Thank goodn	e new 2021 ess online
Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power	TG9ADQ	41,200	posterity be records for bits are free	ooth the retired re or W/VE and DX. ⁻ ee! See you in 20	cords and the Thank goodn	e new 2021 ess online
Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP			posterity be records for bits are free	ooth the retired re or W/VE and DX.	cords and the Thank goodn	e new 2021 ess online
Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP Single Operator Unlimited, Digital	TG9ADQ CO2GL	41,200 4,180	posterity be records for bits are free New Divisi	ooth the retired re or W/VE and DX. on ee! See you in 20 on Records	cords and the Thank goodn 22! - Jeff, Wh	e new 2021 ess online K6I
Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP	TG9ADQ	41,200	posterity be records for bits are free New Divisi	ooth the retired re or W/VE and DX. on ee! See you in 20 on Records	cords and the Thank goodn 22! - Jeff, Wh NA5NN	e new 2021 less online (61 55,272
Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP Single Operator Unlimited, Digital Only, High Power	TG9ADQ CO2GL	41,200 4,180	posterity be records for bits are free New Divisi MSQRP SOQRP	ooth the retired re or W/VE and DX. oe! See you in 20 on Records Delta Canada	cords and the Thank goodn 22! - Jeff, Wh NA5NN VE3KJQ	e new 2021 ess online K6I 55,272 1,710
Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP Single Operator Unlimited, Digital Only, High Power Single Operator Unlimited, Digital Only, Low Power Single Operator Unlimited, RTTY	TG9ADQ CO2GL XE1FJM CO7HNS	41,200 4,180 20,100 21,420	posterity be records for bits are free New Divisi	ooth the retired re or W/VE and DX. on ee! See you in 20 on Records	cords and the Thank goodn 22! - Jeff, Wh NA5NN	e new 2021 less online (61 55,272
Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP Single Operator Unlimited, Digital Only, High Power Single Operator Unlimited, Digital Only, Low Power Single Operator Unlimited, RTTY Only, High Power	TG9ADQ CO2GL XE1FJM	41,200 4,180 20,100	posterity be records for bits are free New Divisi MSQRP SOQRP	ooth the retired re or W/VE and DX. oe! See you in 20 on Records Delta Canada	cords and the Thank goodn 22! - Jeff, Wh NA5NN VE3KJQ	e new 2021 ess online K6I 55,272 1,710
Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP Single Operator Unlimited, Digital Only, High Power Single Operator Unlimited, Digital Only, Low Power Single Operator Unlimited, RTTY Only, High Power Single Operator Unlimited, RTTY	TG9ADQ CO2GL XE1FJM CO7HNS KL7SB	41,200 4,180 20,100 21,420 66,123	posterity by records for bits are free New Division MSQRP SOQRP SOQRP	ooth the retired re or W/VE and DX. on Records Delta Canada Dakota Hudson	cords and the Thank goodn 22! - Jeff, Wh NA5NN VE3KJQ W6GMT K2YG	e new 2021 ess online <6I 55,272 1,710 2,460 39,093
Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP Single Operator Unlimited, Digital Only, High Power Single Operator Unlimited, Digital Only, Low Power Single Operator Unlimited, RTTY Only, High Power	TG9ADQ CO2GL XE1FJM CO7HNS	41,200 4,180 20,100 21,420	posterity by records for bits are free New Divisi MSQRP SOQRP SOQRP SOQRP SOQRP	ooth the retired re or W/VE and DX. on Records Delta Canada Dakota Hudson Pacific	cords and the Thank goodn 22! - Jeff, Wh NA5NN VE3KJQ W6GMT K2YG K6GHA	e new 2021 less online (6) 55,272 1,710 2,460 39,093 100
Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP Single Operator Unlimited, Digital Only, High Power Single Operator Unlimited, Digital Only, Low Power Single Operator Unlimited, RTTY Only, High Power Single Operator Unlimited, RTTY	TG9ADQ CO2GL XE1FJM CO7HNS KL7SB	41,200 4,180 20,100 21,420 66,123	posterity by records for bits are free New Division MSQRP SOQRP SOQRP SOQRP SOQRP SOQRP	ooth the retired re or W/VE and DX. on Records Delta Canada Dakota Hudson Pacific Southeastern	cords and the Thank goodn 22! - Jeff, Wh NA5NN VE3KJQ W6GMT K2YG K6GHA KI4MZC	e new 2021 less online (6) 55,272 1,710 2,460 39,093 100 2,774
Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP Single Operator Unlimited, Digital Only, High Power Single Operator Unlimited, Digital Only, Low Power Single Operator Unlimited, RTTY Only, High Power Single Operator Unlimited, RTTY Only, High Power Single Operator Unlimited, RTTY Only, Low Power	TG9ADQ CO2GL XE1FJM CO7HNS KL7SB	41,200 4,180 20,100 21,420 66,123	posterity by records for bits are free New Division MSQRP SOQRP SOQRP SOQRP SOQRP SOQRP SOQRP SOQRP SOQRP SOQRP	ooth the retired re or W/VE and DX. Tee! See you in 20 on Records Delta Canada Dakota Hudson Pacific Southeastern Southwestern	cords and the Thank goodn 22! - Jeff, Wh NA5NN VE3KJQ W6GMT K2YG K6GHA K14MZC N6HI	e new 2021 less online K6I 55,272 1,710 2,460 39,093 100 2,774 1,541
Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP Single Operator Unlimited, Digital Only, High Power Single Operator Unlimited, Digital Only, Low Power Single Operator Unlimited, RTTY Only, High Power Single Operator Unlimited, RTTY Only, High Power Single Operator Unlimited, RTTY Only, Low Power	TG9ADQ CO2GL XE1FJM CO7HNS KL7SB WP3C	41,200 4,180 20,100 21,420 66,123 106,488	posterity by records for bits are free New Division MSQRP SOQRP	ooth the retired re or W/VE and DX. Tee! See you in 20 on Records Delta Canada Dakota Hudson Pacific Southeastern Southwestern West Gulf	cords and the Thank goodn 22! - Jeff, When the State of t	e new 2021 less online K6I 55,272 1,710 2,460 39,093 100 2,774 1,541 24,220
Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP Single Operator Unlimited, Digital Only, High Power Single Operator Unlimited, Digital Only, Low Power Single Operator Unlimited, RTTY Only, High Power Single Operator Unlimited, RTTY Only, High Power Oceania Single Operator, RTTY Only, High Power	TG9ADQ CO2GL XE1FJM CO7HNS KL7SB	41,200 4,180 20,100 21,420 66,123	posterity by records for bits are free New Division MSQRP SOQRP SOQRP SOQRP SOQRP SOQRP SOQRP SOQRP SOQRP SOQRP	ooth the retired re or W/VE and DX. Tee! See you in 20 on Records Delta Canada Dakota Hudson Pacific Southeastern Southwestern	cords and the Thank goodn 22! - Jeff, Wh NA5NN VE3KJQ W6GMT K2YG K6GHA K14MZC N6HI	e new 2021 less online K6I 55,272 1,710 2,460 39,093 100 2,774 1,541
Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP Single Operator Unlimited, Digital Only, High Power Single Operator Unlimited, Digital Only, Low Power Single Operator Unlimited, RTTY Only, High Power Single Operator Unlimited, RTTY Only, Low Power Oceania Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low	TG9ADQ CO2GL XE1FJM CO7HNS KL7SB WP3C	41,200 4,180 20,100 21,420 66,123 106,488	posterity by records for bits are free New Division MSQRP SOQRP	ooth the retired re or W/VE and DX. Tee! See you in 20 on Records Delta Canada Dakota Hudson Pacific Southeastern Southwestern West Gulf	cords and the Thank goodn 22! - Jeff, When the State of t	e new 2021 less online K6I 55,272 1,710 2,460 39,093 100 2,774 1,541 24,220
Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP Single Operator Unlimited, Digital Only, High Power Single Operator Unlimited, Digital Only, Low Power Single Operator Unlimited, RTTY Only, High Power Single Operator Unlimited, RTTY Only, Low Power Oceania Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power	TG9ADQ CO2GL XE1FJM CO7HNS KL7SB WP3C KH6ZM KH6CJJ	41,200 4,180 20,100 21,420 66,123 106,488 66,600 36,180	posterity by records for bits are free to bits are free to bits are free to be between the bits are free to	ooth the retired re or W/VE and DX. ee! See you in 20 on Records Delta Canada Dakota Hudson Pacific Southeastern Southwestern West Gulf Central	cords and the Thank goodn 22! - Jeff, When 22! - Jeff, When 25 was a second of the Cords of the	55,272 1,710 2,460 39,093 100 2,774 1,541 24,220 234,438
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Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP Single Operator Unlimited, Digital Only, High Power Single Operator Unlimited, Digital Only, Low Power Single Operator Unlimited, RTTY Only, High Power Single Operator Unlimited, RTTY Only, Low Power Oceania Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power	TG9ADQ CO2GL XE1FJM CO7HNS KL7SB WP3C KH6ZM KH6CJJ	41,200 4,180 20,100 21,420 66,123 106,488 66,600 36,180	posterity by records for bits are free to bits are free to bits are free to be	ooth the retired re or W/VE and DX. ee! See you in 20 on Records Delta Canada Dakota Hudson Pacific Southeastern Southwestern West Gulf Central Canada Atlantic Canada	cords and the Thank goodn 22! - Jeff, When 22! - Jeff, When 22! - Jeff, When 22! - Jeff, When 22! - Jeff, Wegman 22! - Jeff, We	e new 2021 less online K6I 55,272 1,710 2,460 39,093 100 2,774 1,541 24,220 234,438 123,785 840 5,170
Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP Single Operator Unlimited, Digital Only, High Power Single Operator Unlimited, Digital Only, Low Power Single Operator Unlimited, RTTY Only, High Power Single Operator Unlimited, RTTY Only, Low Power Oceania Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP Single Operator, RTTY Only, QRP Single Operator Unlimited, Mixed	TG9ADQ CO2GL XE1FJM CO7HNS KL7SB WP3C KH6ZM KH6CJJ YC8FXI VK3YV	41,200 4,180 20,100 21,420 66,123 106,488 66,600 36,180 88 550	posterity by records for bits are from the bits	ooth the retired re or W/VE and DX. ee! See you in 20 on Records Delta Canada Dakota Hudson Pacific Southeastern Southwestern West Gulf Central Canada Atlantic Canada Dakota Dakota	cords and the Thank goodn 22! - Jeff, When 22! - Jeff, When 22! - Jeff, When 22! - Jeff, When 22! - Jeff, Weger 24! - Jeff, Weger 24! - Jeff, Weger 25! - Jeff, Weger 26! - Je	e new 2021 less online K6I 55,272 1,710 2,460 39,093 100 2,774 1,541 24,220 234,438 123,785 840 5,170 60,876
Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP Single Operator Unlimited, Digital Only, High Power Single Operator Unlimited, Digital Only, Low Power Single Operator Unlimited, RTTY Only, High Power Single Operator Unlimited, RTTY Only, Low Power Oceania Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP Single Operator Unlimited, Mixed Mode, Low Power Single Operator Unlimited, Digital Only, High Power	TG9ADQ CO2GL XE1FJM CO7HNS KL7SB WP3C KH6ZM KH6CJJ YC8FXI	41,200 4,180 20,100 21,420 66,123 106,488 66,600 36,180 88	posterity by records for bits are free to bits are free to bits are free to be	ooth the retired re or W/VE and DX. ee! See you in 20 on Records Delta Canada Dakota Hudson Pacific Southeastern Southwestern West Gulf Central Canada Atlantic Canada Dakota Great Lakes	cords and the Thank goodn 22! - Jeff, When 22! - Jeff, Wh	e new 2021 less online K6I 55,272 1,710 2,460 39,093 100 2,774 1,541 24,220 234,438 123,785 840 5,170 60,876 18,904
Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP Single Operator Unlimited, Digital Only, High Power Single Operator Unlimited, Digital Only, Low Power Single Operator Unlimited, RTTY Only, High Power Single Operator Unlimited, RTTY Only, High Power Single Operator Unlimited, RTTY Only, Low Power Oceania Single Operator, RTTY Only, High Power Single Operator, RTTY Only, QRP Single Operator Unlimited, Mixed Mode, Low Power Single Operator Unlimited, Digital Only, High Power Single Operator Unlimited, Digital	TG9ADQ CO2GL XE1FJM CO7HNS KL7SB WP3C KH6ZM KH6CJJ YC8FXI VK3YV DU3TW	41,200 4,180 20,100 21,420 66,123 106,488 66,600 36,180 88 550 6,360	posterity by records for bits are from the bits	ooth the retired re or W/VE and DX. ee! See you in 20 on Records Delta Canada Dakota Hudson Pacific Southeastern Southwestern West Gulf Central Canada Atlantic Canada Dakota Dakota	cords and the Thank goodn 22! - Jeff, When 22! - Jeff, When 22! - Jeff, When 22! - Jeff, When 22! - Jeff, Weger 24! - Jeff, Weger 24! - Jeff, Weger 25! - Jeff, Weger 26! - Je	e new 2021 less online K6I 55,272 1,710 2,460 39,093 100 2,774 1,541 24,220 234,438 123,785 840 5,170 60,876
Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP Single Operator Unlimited, Digital Only, High Power Single Operator Unlimited, Digital Only, Low Power Single Operator Unlimited, RTTY Only, High Power Single Operator Unlimited, RTTY Only, High Power Single Operator Unlimited, RTTY Only, Low Power Oceania Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator Unlimited, Mixed Mode, Low Power Single Operator Unlimited, Digital Only, High Power Single Operator Unlimited, Digital Only, Low Power	TG9ADQ CO2GL XE1FJM CO7HNS KL7SB WP3C KH6ZM KH6CJJ YC8FXI VK3YV	41,200 4,180 20,100 21,420 66,123 106,488 66,600 36,180 88 550	posterity by records for bits are free to bits are free to bits are free to be	ooth the retired re or W/VE and DX. ee! See you in 20 on Records Delta Canada Dakota Hudson Pacific Southeastern Southwestern West Gulf Central Canada Atlantic Canada Dakota Great Lakes	cords and the Thank goodn 22! - Jeff, When 22! - Jeff, Wh	e new 2021 less online K6I 55,272 1,710 2,460 39,093 100 2,774 1,541 24,220 234,438 123,785 840 5,170 60,876 18,904
Single Operator, RTTY Only, High Power Single Operator, RTTY Only, Low Power Single Operator, RTTY Only, QRP Single Operator Unlimited, Digital Only, High Power Single Operator Unlimited, Digital Only, Low Power Single Operator Unlimited, RTTY Only, High Power Single Operator Unlimited, RTTY Only, High Power Single Operator Unlimited, RTTY Only, Low Power Oceania Single Operator, RTTY Only, High Power Single Operator, RTTY Only, QRP Single Operator Unlimited, Mixed Mode, Low Power Single Operator Unlimited, Digital Only, High Power Single Operator Unlimited, Digital	TG9ADQ CO2GL XE1FJM CO7HNS KL7SB WP3C KH6ZM KH6CJJ YC8FXI VK3YV DU3TW	41,200 4,180 20,100 21,420 66,123 106,488 66,600 36,180 88 550 6,360	posterity by records for bits are free to bits are free to bits are free to be between the posterior of the bits are free to	ooth the retired re or W/VE and DX. ee! See you in 20 on Records Delta Canada Dakota Hudson Pacific Southeastern Southwestern West Gulf Central Canada Atlantic Canada Dakota Great Lakes Midwest	cords and the Thank goodn 22! - Jeff, When 22! - Jeff, Wh	e new 2021 less online (6I) 55,272 1,710 2,460 39,093 100 2,774 1,541 24,220 234,438 123,785 840 5,170 60,876 18,904 44,571

SOUQRP	Rocky Mountain	KBØSNI	1,242
SOUQRP	Southeastern	W4ER	5,002
SOUQRP	West Gulf	KIØG	609

New Overall DX QRP Records

SOQRP	Overall	F5BEG	49,036
SOUQRP	Overall	YO9BCM	12,656

New DX Continental Records

SOHP	North America	ZF2WF	246,736
SOQRP	Asia	JH7UJU	240
SOQRP	Europe	F5BEG	49,036
SOQRP	North America	TG9ADQ	18,018
SOUHP	Africa	EA8PT	27,440
SOUQRP	Asia	JG1LFR	3,885
SOUQRP	Europe	YO9BCM	12,656
SOUQRP	North America	CO2VE	7,595
SOUQRP	Oceania	YB2BNN	140
SOUQRP	South America	PY2MQ	42

Overall Records - DX					
	(new red	cords in bold)			
Call	Score	Category		Year	
P49X (WØYK,					
op)	468,720	SOHP	P4	2015	
HI3TEJ	183,885	SOLP	HI	2009	
F5BEG	49,036	SOQRP	F	2020	
P49X (WØYK,					
op)	309,348	SOUHP	P4	2019	
YV1KK	167,388	SOULP	YV	2016	
YO9BCM	12,656	SOUQRP	YO	2020	
OK7W	186,340	SO-RTTY-HP	ОК	2021	
CT7AUP	80,649	SO-RTTY-LP	СТ	2021	
F5BEG	37,101	SO-RTTY-QRP	F	2021	
ҮО9НР	99,327	SOU-MIX-HP	YO	2021	
EW7B	50,310	SOU-MIX-LP	EU	2021	
PC2F	7,956	SOU-MIX-QRP	PA	2021	
ON6NL	42,971	SOU-DIG-HP	ON	2021	
SV2AEL	30,178	SOU-DIG-LP	SV	2021	
PA3EOU	10,584	SOU-DIG-QRP	PA	2021	
SN7Q (SP7GIQ,					
op)	218,375	SOU-RTTY-HP	SP	2021	
WP3C	106,488	SOU-RTTY-LP	KP4	2021	
HA3OU	4,600	SOU-RTTY-QRP	НА	2021	
PJ2N	279,554	MSHP	PJ2	2012	
KP2D	171,454	MSLP	KP2	2007	

Continental Records by Continent							
(new records In bold)							
Call	Score	Category		Year	Continent		
V5/DL9NDS	183,655	SOHP	V5	2014	Africa		
5C5W (CN8KD, op)	146,133	SOLP	CN	2009	Africa		
EA8PT	27,440	SOUHP	EA8	2020	Africa		
EA8OM	50,140	SOULP	EA8	2014	Africa		
D4Z (IK2NCJ, op)	89,688	SO-RTTY-HP	D4	2021	Africa		
EA8OM	17,064	SO-RTTY-LP	EA8	2021	Africa		
СТ9М	206,142	MSHP	СТ3	2008	Africa		
CS9Z	51,775	MSLP	СТЗ	2006	Africa		
DP1POL (DL5XL, op)	19,278	SOHP	CE9	2010	Antarctica		
5B4AIF	117,824	SOHP	5B	2012	Asia		
ZC4LI	73,429	SOLP	ZC4	2012	Asia		
JH7UJU	240	SOQRP	JA	2020	Asia		
P3X (5B4AMM,	139,810	SOUHP	5B	2017	Asia		
op) JP1QDH	30,618	SOULP	JA	2017	Asia		

JG1LFR	3,885	SOUQRP	JA	2020	Asia
JA7IC	17,424	SO-RTTY-HP	JA	2021	Asia
JA6GCE	26,791	SO-RTTY-LP	JA	2021	Asia
JA6WFM	3,030	SO-RTTY- QRP	JA	2021	Asia
JR3RIY	4,181	SOU-MIX- HP	JA	2021	Asia
JH7RTQ	20,448	SOU-MIX-LP	JA	2021	Asia
7L4IOU	345	SOU-MIX- QRP	JA	2021	Asia
ЈО7КМВ	13,969	SOU-DIG-HP	JA	2021	Asia
BG8GAM	12,152	SOU-DIG-LP	BY	2021	Asia
TA3OWL	931	SOU-DIG- QRP	TA	2021	Asia
P3X (5B4AMM,	95,034	SOU-RTTY- HP	5B	2021	Asia
op)	95,034	SOU-RTTY-	36	2021	Asia
JF1RYU	4,107	LP	JA	2021	Asia
RW9C	100,548	MSHP	UA9	2002	Asia
UO6P	26,904	MSLP	UN	2005	Asia
CCD7					
G6PZ (UT5UDX,					
op)	278,528	SOHP	G	2013	Europe
F6IRF	130,806	SOLP	F	2006	Europe
F5BEG	49,036	SOQRP	F	2020	Europe
LZ8E (LZ2BE, op)	255,080	SOUHP	LZ	2014	Europe
IT9BLB	122,428	SOULP	1	2016	Europe
ҮО9ВСМ	12,656	SOUQRP	YO	2020	Europe
OK7W	186,340	SO-RTTY-HP	ок	2021	Europe
CT7AUP	80,649	SO-RTTY-LP	СТ	2021	Europe
F5BEG	37,101	SO-RTTY- QRP	F	2021	Europe
ҮО9НР	99,327	SOU-MIX- HP	YO	2021	Europe
EW7B	50,310	SOU-MIX-LP	EU	2021	Europe
PC2F	7,956	SOU-MIX- QRP	PA	2021	Europe
ON6NL	42,971	SOU-DIG-HP	ON	2021	Europe
SV2AEL	30,178	SOU-DIG-LP	sv	2021	Europe
PA3EOU	10,584	SOU-DIG- QRP	PA	2021	Europe
SN7Q (SP7GIQ, op)	218,375	SOU-RTTY- HP	SP	2021	Europe
DF2SD	77,367	SOU-RTTY- LP	DL	2021	Europe
назои	4,600	SOU-RTTY- QRP	НА	2021	Europe
EI7M	219,604	MSHP	EI	2013	Europe

EA1DR	129,840	MSLP	EA	2012	Europe
ZF2WF	246,736	SOHP	ZF	2020	North America
НІЗТЕЈ	183,885	SOLP	н	2009	North America
TG9ADQ	18,018	SOQRP	TG	2020	North America
XE2K	174,570	SOUHP	XE	2014	North America
XE2K	139,314	SOULP	XE	2016	North America
CO2VE	7,595	SOUQRP	СМ	2020	North America
KL2R (N1TX, op)	8,007	SO-RTTY-HP	KL	2021	North America
TG9ADQ	41,200	SO-RTTY-LP	TG	2021	North America
CO2GL	4,180	SO-RTTY- QRP	СМ	2021	North America
XE1FJM	20,100	SOU-DIG-HP	XE	2021	North America
CO7HNS	21,420	SOU-DIG-LP	СМ	2021	North America
KL7SB	66,123	SOU-RTTY- HP	KL	2021	North America
WP3C	106,488	SOU-RTTY- LP	KP4	2021	North America
WP2NN	269,008	MSHP	KP2	2013	North America
KP2D	171,454	MSLP	KP2	2007	North America
	, -	-			
KH6ZM	163,822	SOHP	кн6	2012	Oceania
KH6ZM	108,388	SOLP	кн6	2013	Oceania
KH6ZM	83,472	SOUHP	кн6	2017	Oceania
KH6ZM	98,212	SOULP	кн6	2016	Oceania
YB2BNN	140	SOUQRP	YB	2020	Oceania
KH6ZM	66,600	SO-RTTY-HP	кн6	2021	Oceania
КН6СЈЈ	36,180	SO-RTTY-LP	кн6	2021	Oceania
YC8FXI	88	SO-RTTY- QRP	YB	2021	Oceania
VK3YV	550	SOU-MIX-LP	VK	2021	Oceania
DU3TW	6,360	SOU-DIG-HP	DU	2021	Oceania
YB2HAF	2,370	SOU-DIG-LP	YB	2021	Oceania
ZL3P	5,074	SOU-RTTY- HP	ZL	2021	Oceania
YB8RW	2,568	SOU-RTTY- LP	ΥВ	2021	Oceania
KH7Q	82,104	MSHP	KH6	2005	Oceania
YB1ALL	34,191	MSLP	YB	2012	Oceania
P49X (WØYK, op)	160 720	COUR	P4	2015	Courth Amorica
P4ØYL	468,720	SOHP	P4	2015	South America
(AI6YL, op) P49X	177,480	SOLP	P4	2012	South America
(WØYK, op)	309,348	SOUHP	P4	2019	South America

YV1KK	167,388	SOULP	YV	2016	South America
PY2MQ	42	SOUQRP	PY	2020	South America
PZ5RA	58,656	SO-RTTY-HP	PZ	2021	South America
PY2NY	30,498	SO-RTTY-LP	PY	2021	South America
PU2RTO	1,161	SO-RTTY- QRP	PY	2021	South America
LU5VV	72,474	SOU-MIX- HP	LU	2021	South America
YV6BXN	2,940	SOU-MIX-LP	ΥV	2021	South America
YV5KAJ	14,904	SOU-DIG-LP	ΥV	2021	South America
PY2KNK	79,285	SOU-RTTY- HP	PY	2021	South America
PY4XX	8,085	SOU-RTTY- LP	PY	2021	South America
PJ2N	279,554	MSHP	PJ2	2012	South America
ZX2B	119,886	MSLP	PY	2010	South America
N4TRA/MM	143	MSLP	ММ	1989	Maritime Mobile

Overall Records - W/VE					
	(nev	v records in bold)			
Call	Score	Category	Section	Year	
AB5K	347,625	SOHP	NTX	2014	
AA5AU	274,944	SOLP	LA	2012	
K2YG	39,093	SOQRP	NNJ	2020	
KI1G	357,576	SOUHP	RI	2015	
AA5AU	280,704	SOULP	LA	2015	
NØUR	60,876	SOUQRP	MN	2020	
ААЗВ	271,370	SO-RTTY-HP	EPA	2021	
W4AAA					
(KK9A, op)	207,900	SO-RTTY-LP	NC	2021	
VE3KI	35,700	SO-RTTY-QRP	ONE	2021	
N800	255,996	SOU-MIX-HP	LA	2021	
W9SN	158,662	SOU-MIX-LP	TN	2021	
NØUR	50,760	SOU-MIX-QRP	MN	2021	
W1UE	141,504	SOU-DIG-HP	EMA	2021	
WA2BOT	66,833	SOU-DIG-LP	NNY	2021	
WM5L	10,945	SOU-DIG-QRP	WTX	2021	
KI1G	316,416	SOU-RTTY-HP	RI	2021	
AA5AU	209,645	SOU-RTTY-LP	LA	2021	
к7ХС	14,640	SOU-RTTY-QRP	NV	2021	
NØNI	298,934	MSHP	IA	2014	
NØNI	210,500	MSLP	IA	2010	
ND2T	272,976	M2	scv	2021	
W3GH	240,218	ММ	WPA	2021	

Division Records					
	(new r	ecords in bold)			
Call	Score	Category	Section	Year	
Atlantic Division					
AA3B	310,863	SOHP	EPA	2012	
WØBR	141,480	SOLP	EPA	2012	
N2WK	241,617	SOUHP	WNY	2016	
WW3S	123,664	SOULP	WPA	2014	
N3HND	840	SOUQRP	DE	2020	
AA3B	271,370	SO-RTTY-HP	EPA	2021	
K3AJ	106,428	SO-RTTY-LP	MDC	2021	
козт	4,312	SO-RTTY-QRP	EPA	2021	
NA3M	103,230	SOU-MIX-HP	MDC	2021	
WA3AAN	60,630	SOU-MIX-LP	EPA	2021	
AG2J	55,752	SOU-DIG-HP	SNJ	2021	
WA2BOT	66,833	SOU-DIG-LP	NNY	2021	
WA9QXY	836	SOU-DIG-QRP	WPA	2021	
N3QE	175,044	SOU-RTTY-HP	MDC	2021	
WW3S	139,040	SOU-RTTY-LP	WPA	2021	
W3PP	171,336	MSHP	DE	2002	
N2WK	162,503	MSLP	WNY	2014	
W2ROO	13,847	MSQRP	WNY	2020	
K3CCR	118,932	M2	MDC	2021	
W3GH	240,218	MM	WPA	2021	

Central Division				
AI9T	218,377	SOHP	IL	2013
N9CK	192,120	SOLP	WI	2015
к9СТ	234,438	SOUHP	IL	2020
WE9V	187,354	SOULP	WI	2014
AI9T	179,087	SO-RTTY-HP	IL	2021
K9WX	112,792	SO-RTTY-LP	IN	2021
K9AWM	3,034	SO-RTTY-QRP	IN	2021
WT2P	24,072	SOU-MIX-HP	IL	2021
кв9іте	20,474	SOU-MIX-LP	IL	2021
NE9U	27,145	SOU-DIG-HP	WI	2021
N7ZZ	33,152	SOU-DIG-LP	WI	2021
WD9EKA	3,024	SOU-DIG-QRP	IL	2021
к9СТ	222,902	SOU-RTTY-HP	IL	2021
N7US	71,200	SOU-RTTY-LP	IL	2021
K9NS	222,176	MSHP	IL	2003
K9NR	128,810	MSLP	IL	2015

Dakota Division				
KØIR	196,000	SOHP	MN	2010
NØAT	199,200	SOLP	MN	2013
W6GMT	2,460	SOQRP	MN	2020

KØCN	91,300	SOUHP	MN	2018
NØHJZ	73,781	SOULP	MN	2015
NØUR	60,876	SOUQRP	MN	2020
KIØF	97,666	SO-RTTY-HP	MN	2021
кøті	117,990	SO-RTTY-LP	MN	2021
NØSTP	1,200	SO-RTTY-QRP	MN	2021
KDØIOE	3,780	SOU-MIX-LP	ND	2021
NØUR	50,760	SOU-MIX-QRP	MN	2021
K4IU	20,608	SOU-DIG-LP	MN	2021
KØMD	104,700	SOU-RTTY-HP	MN	2021
KØCN	76,194	SOU-RTTY-LP	MN	2021
wøsd	252,830	MSHP	SD	2012
NØHJZ	81,144	MSLP	MN	2012

Delta Division				
KI5XP	266,936	SOHP	LA	2009
AA5AU	274,944	SOLP	LA	2012
W9SN	256,053	SOUHP	TN	2016
AA5AU	280,704	SOULP	LA	2015
WB4YDL	127,008	SO-RTTY-HP	TN	2021
WB5BHS	47,936	SO-RTTY-LP	AR	2021
KH6KG/W5	4,998	SO-RTTY-QRP	AR	2021
N800	255,996	SOU-MIX-HP	LA	2021
W9SN	158,662	SOU-MIX-LP	TN	2021
KF8PD	4,032	SOU-DIG-HP	MS	2021
AC5O	16,225	SOU-DIG-LP	LA	2021
N4ZZ	173,340	SOU-RTTY-HP	TN	2021
AA5AU	209,645	SOU-RTTY-LP	LA	2021
KN5O	219,648	MSHP	LA	2014
N5ZM	177,580	MSLP	AR	2012
NA5NN	55,272	MSQRP	MS	2020
WV4P	254,640	M2	TN	2021

Great Lakes Division				
N8BJQ	167,680	SOHP	ОН	2013
К9ТМ	117,705	SOLP	ОН	1999
K4WW	99,960	SOUHP	KY	2017
AA8R	127,897	SOULP	MI	2014
AC8ZU	18,904	SOUQRP	ОН	2020
W5MX	114,654	SO-RTTY-HP	KY	2021
AD8FD	51,030	SO-RTTY-LP	ОН	2021
W8JWN	36,223	SOU-MIX-HP	MI	2021
кк8ММ	53,680	SOU-MIX-LP	MI	2021
KC8GAE	19,890	SOU-DIG-HP	ОН	2021
KE8M	49,217	SOU-DIG-LP	ОН	2021
N8ME	7,992	SOU-DIG-QRP	ОН	2021
K8YE	73,040	SOU-RTTY-HP	МІ	2021

KI6DY	65,208	SOU-RTTY-LP	ОН	2021
		SOU-RTTY-		
K8ZT	840	QRP	ОН	2021
N8NR	146,850	MSHP	ОН	2011
AA8R	123,308	MSLP	MI	2015
NW8S	227,808	M2	ОН	2021

	Hudson Division				
N2KI	166,750	SOHP	ENY	2014	
K2DSL	95,452	SOLP	NNJ	2015	
K2YG	39,093	SOQRP	NNJ	2020	
NY6DX	119,640	SOUHP	NLI	2015	
KU2M	77,066	SOULP	NNJ	2016	
K2TW	83,916	SO-RTTY-HP	NNJ	2021	
AH2O	50,512	SO-RTTY-LP	NLI	2021	
K2YG	24,882	SO-RTTY-QRP	NNJ	2021	
K4KGG	65,758	SOU-MIX-HP	ENY	2021	
K2AL	37,323	SOU-MIX-LP	NNJ	2021	
K2IW	9,882	SOU-DIG-HP	ENY	2021	
K2GLS	13,910	SOU-DIG-LP	NNJ	2021	
W2MKM	110,484	SOU-RTTY-HP	NNJ	2021	
K2DFC	56,640	SOU-RTTY-LP	NNJ	2021	
N2KI	105,678	MSHP	ENY	2011	
K2DS	98,333	MSLP	ENY	1998	

Midwest Division					
ACØC	276,208	SOHP	KS	2018	
N3SL	143,910	SOLP	IA	2003	
W7RY	181,716	SOUHP	МО	2018	
KI6DY	117,600	SOULP	KS	2018	
WØGJ	44,571	SOUQRP	IA	2020	
ACØC	251,538	SO-RTTY-HP	KS	2021	
WDØBGZ	27,156	SO-RTTY-LP	NE	2021	
NØNI	32,163	SO-RTTY-QRP	IA	2021	
W7II	66,483	SOU-MIX-HP	IA	2021	
AEØTB	5,967	SOU-MIX-LP	IA	2021	
NFØN	9,405	SOU-DIG-HP	NE	2021	
KDØOIX	17,248	SOU-DIG-LP	KS	2021	
W7RY	169,510	SOU-RTTY-HP	МО	2021	
AI6O	26,260	SOU-RTTY-LP	МО	2021	
NØNI	298,934	MSHP	IA	2014	
NØNI	210,500	MSLP	IA	2010	
New England Division					
KI1G	317,814	SOHP	RI	2012	
N1RCT	140,220	SOLP	ME	1999	
KI1G	357,576	SOUHP	RI	2015	
K1SD	113,100	SOULP	RI	2014	

N1VVV	1,891	SOUQRP	ME	2020
N1IXF	156,456	SO-RTTY-HP	СТ	2021
W1QK	95,060	SO-RTTY-LP	СТ	2021
N1DID	1,881	SO-RTTY-QRP	СТ	2021
N1RR	22,081	SOU-MIX-HP	EMA	2021
W1HS	41,574	SOU-MIX-LP	NH	2021
W1UE	141,504	SOU-DIG-HP	EMA	2021
AB1J	27,122	SOU-DIG-LP	EMA	2021
KI1G	316,416	SOU-RTTY-HP	RI	2021
KS1J	31,770	SOU-RTTY-LP	RI	2021
K1SFA	224,250	MSHP	WMA	2013
W1SLF	102,144	MSLP	ME	2012
WW4LL	174,615	MM	ME	2021

	Northw	estern Division		
W7RY	210,041	SOHP	WWA	2015
K2PO	194,235	SOLP	OR	2014
W7RY	192,458	SOUHP	WWA	2014
KB7Q				
(@WA7U)	170,362	SOULP	MT	2015
W7CD	4,032	SOUQRP	WWA	2020
W7QDM	58,820	SO-RTTY-HP	ID	2021
N7UVH	57,768	SO-RTTY-LP	ID	2021
N7NM	103,872	SOU-MIX-HP	WWA	2021
AK6A	78,958	SOU-MIX-LP	OR	2021
W7YAQ	31,084	SOU-MIX-QRP	OR	2021
N7PHY	27,880	SOU-DIG-HP	WWA	2021
N7PMS	11,532	SOU-DIG-LP	MT	2021
W6OAT	132,613	SOU-RTTY-HP	WWA	2021
K7GS	39,130	SOU-RTTY-LP	EWA	2021
NK7U	206,700	MSHP	OR	2012
WB7AVD	85,002	MSLP	EWA	1993
КТ7Е	162,162	M2	OR	2021

Pacific Division				
W7RN (WK6I,				
op)	309,248	SOHP	NV	2013
N6OJ	111,588	SOLP	SF	2001
K6GHA	100	SOQRP	SCV	2020
W1SRD	269,568	SOUHP	SV	2015
N6EE	83,062	SOULP	SJV	2014
W7RN				
(WK6I, op)	232,848	SO-RTTY-HP	NV	2021
WB3JFS	27,456	SO-RTTY-LP	NV	2021
K6EI	11,542	SO-RTTY-QRP	SCV	2021
к60к	77,714	SOU-MIX-HP	SV	2021
K6GHA	47,212	SOU-MIX-LP	SCV	2021
AD6E	23,100	SOU-DIG-HP	scv	2021

N9BD	11,088	SOU-DIG-LP	sv	2021
W6JLV	80	SOU-DIG-QRP	SF	2021
N6WM	201,214	SOU-RTTY-HP	EB	2021
W6IFN	4,160	SOU-RTTY-LP	scv	2021
		SOU-RTTY-		
K7XC	14,640	QRP	NV	2021
N6DE	192,416	MSHP	SV	2009
W6YX	114,648	MSLP	SCV	2003
ND2T	272,976	M2	SCV	2021

Roanoke Division				
K4GMH	310,050	SOHP	VA	2013
W4AAA				
(KK9A, op)	215,500	SOLP	NC	2018
K4GMH	284,532	SOUHP	VA	2014
N2QT	206,976	SOULP	VA	2014
N4CW	89,500	SO-RTTY-HP	NC	2021
W4AAA				
(KK9A, op)	207,900	SO-RTTY-LP	NC	2021
NE3R	5,074	SO-RTTY-QRP	wv	2021
W3GQ	34,124	SOU-MIX-HP	NC	2021
KT4Q	57,362	SOU-MIX-LP	NC	2021
KQ4AV	46,065	SOU-DIG-HP	NC	2021
W4BTW	16,640	SOU-DIG-LP	NC	2021
KK4BZ	10,476	SOU-DIG-QRP	VA	2021
N4IQ	141,435	SOU-RTTY-HP	SC	2021
КЗЈТ	39,302	SOU-RTTY-LP	wv	2021
W4RM	199,936	MSHP	VA	2016
NTØK	114,688	MSLP	NC	2021

Rocky Mountain Division				
WØLSD	244,156	SOHP	СО	2012
KTØDX	142,230	SOLP	СО	2014
WØLSD	271,586	SOUHP	СО	2016
AD1C	104,092	SOULP	СО	2014
KBØSNI	1,242	SOUQRP	СО	2020
N5HC	126,582	SO-RTTY-HP	NM	2021
AA5B	40,704	SO-RTTY-LP	NM	2021
NØKQ	41,976	SOU-MIX-HP	СО	2021
WØGJT	17,871	SOU-MIX-LP	со	2021
W5IP	23,958	SOU-DIG-HP	NM	2021
KB1IKC	44,880	SOU-DIG-LP	NM	2021
WØKI				
(KJ4ZMQ, op)	3,640	SOU-DIG-QRP	СО	2021
WØLSD	185,934	SOU-RTTY-HP	со	2021
AD1C	47,150	SOU-RTTY-LP	со	2021
WA5ZUP	208,940	MSHP	NM	2012
KØDU	144,368	MSLP	СО	2012
K5LRW	10,506	MM	NM	2021

Southeastern Division				
W4/LY5W (@N8PR)	177,548	SOHP	SFL	2015
WW4LL	177,749	SOLP	GA	2011
KI4MZC	2,774	SOQRP	GA	2020
W4DXX	229,274	SOUHP	GA	2016
к90М	159,427	SOULP	NFL	2016
W4ER	5,002	SOUQRP	AL	2020
WA1PMA	103,360	SO-RTTY-HP	NFL	2021
AA2MF	102,178	SO-RTTY-LP	WCF	2021
W4DWS	17,152	SO-RTTY-QRP	GA	2021
AG4W	99,400	SOU-MIX-HP	AL	2021
к9ОМ	143,910	SOU-MIX-LP	NFL	2021
N4BP	55,404	SOU-DIG-HP	SFL	2021
KM4RL	42,658	SOU-DIG-LP	NFL	2021
K4PQC	3,640	SOU-DIG-QRP	GA	2021
AA8R	46,658	SOU-RTTY-HP	WCF	2021
NA4DA	99,746	SOU-RTTY-LP	NFL	2021
		SOU-RTTY-		
W4ER	5,280	QRP	AL	2021
W4UH	205,692	MSHP	SFL	2012
к9ОМ	148,302	MSLP	NFL	2012

Southwestern Division				
WK7S (K6LL,				
op)	238,497	SOHP	AZ	2013
KB7Q	142,596	SOLP	AZ	2012
N6HI	1,541	SOQRP	AZ	2020
K6LL	244,000	SOUHP	AZ	2016
W7ZR	82,880	SOULP	AZ	2018
K6HGF	58,030	SO-RTTY-HP	LAX	2021
WN6K	38,613	SO-RTTY-LP	SDG	2021
N6HI	900	SO-RTTY-QRP	AZ	2021
КК6Р	155,136	SOU-MIX-HP	SB	2021
N2JNR	17,458	SOU-MIX-LP	LAX	2021
NT6X	40,940	SOU-DIG-HP	ORG	2021
KC7CS	27,540	SOU-DIG-LP	AZ	2021
K6LL	199,808	SOU-RTTY-HP	AZ	2021
N7WLC	11,070	SOU-RTTY-LP	SB	2021
N7AT	212,628	MSHP	AZ	2021
N6MA	81,654	MSLP	AZ	2012
W9CF	36	M2	AZ	2021

West Gulf Division				
AB5K	347,625	SOHP	NTX	2014
KE5OG	136,141	SOLP	WTX	2013
WE6EZ	24,220	SOQRP	STX	2020
W5AP	196,262	SOUHP	NTX	2014

WB5TUF	174,360	SOULP	STX	2016
KIØG	609	SOUQRP	STX	2020
AD5XD	96,369	SO-RTTY-HP	NTX	2021
AD5LU	40,348	SO-RTTY-LP	NTX	2021
WE6EZ	5,676	SO-RTTY-QRP	STX	2021
AA5H	14,884	SOU-MIX-HP	ОК	2021
KB5PGY	16,320	SOU-MIX-LP	STX	2021
AA5KD	9,000	SOU-MIX-QRP	ОК	2021
К5РІ	2,160	SOU-DIG-HP	STX	2021
WBØTEV	38,090	SOU-DIG-LP	NTX	2021
WM5L	10,945	SOU-DIG-QRP	WTX	2021
N5XJ	54,614	SOU-RTTY-HP	STX	2021
NK5G	21,780	SOU-RTTY-LP	STX	2021
NR5M	272,718	MSHP	STX	2015
KU5B	199,821	MSLP	STX	2014
W5NN	31,734	M2	STX	2021

Canada				
VE7CC	271,816	SOHP	ВС	2013
VA2UP	250,954	SOLP	QC	2014
VE3KJQ	1,710	SOQRP	ONE	2020
VE7CC	284,928	SOUHP	ВС	2014
VE4VT	123,785	SOULP	МВ	2020
VE2NCG	5,170	SOUQRP	QC	2020
VE3JI	74,994	SO-RTTY-HP	GTA	2021
VE3PJ	61,424	SO-RTTY-LP	ONE	2021
VE3KI	35,700	SO-RTTY-QRP	ONE	2021
VE5MX	163,449	SOU-MIX-HP	SK	2021
VE2NMB	49,734	SOU-MIX-LP	QC	2021
VE6WQ	35,446	SOU-DIG-HP	AB	2021
VE1ANU	23,714	SOU-DIG-LP	MAR	2021
VA1MM	4,712	SOU-DIG-QRP	MAR	2021
VA3DF	103,282	SOU-RTTY-HP	ONS	2021
VA7KO	58,080	SOU-RTTY-LP	ВС	2021
		SOU-RTTY-		
VE6EX	6,400	QRP	AB	2021
VA2UP	183,662	MSHP	QC	2012
VE1OP	87,045	MSLP	MAR	2009

Sponsored Plaque Winners

Winner	Plaque Category	Plaque Sponsor
AA3B	W/VE Single Operator High Power	Preston Radio Club, K7RU
KI1G	W/VE Single Operator Unlimited High Power	Steve Dyer, W1SRD and Doris Wong, K0BEE
AA5AU	W/VE Single Operator Unlimited Low Power	Kevin der Kinderen, N4TT
K7XC	W/VE Single Operator Unlimited, RTTY Only, QRP	Jeff Stai, WK6I
K5RZA	W/VE Multioperator High Power	John Lockhart, WODC
K9NR	W/VE Multioperator Low Power	Dan Karg, K0TI
OK7W	DX Single Operator High Power	Yankee Clipper Contest Club
CT7AUP	DX Single Operator Low Power	Rich Cady, N1IXF
WP3C	DX Single Operator Unlimited Low Power	Kevin der Kinderen, N4TT
DP7D	DX Multioperator High Power	Paolo Cortese, I2UIY, Memorial by W0YK
AA3B	Atlantic Division Single Operator High Power	Mike Jacoby, N3MA
K3AJ	Atlantic Division Single Operator Low Power	Mike Jacoby, N3MA
AI9T	Central Division Single Operator High Power	Society of Midwest Contesters
K9WX	Central Division Single Operator Low Power	Society of Midwest Contesters
к9СТ	Central Division Single Operator Unlimited High Power	Society of Midwest Contesters
N7US	Central Division Single Operator Unlimited Low Power	Society of Midwest Contesters
KIOF	Dakota Division Single Operator High Power	Minnesota Wireless Association
кØТI	Dakota Division Single Operator Low Power	Minnesota Wireless Association
кøмD	Dakota Division Single Operator Unlimited High Power	Minnesota Wireless Association
KØCN	Dakota Division Single Operator Unlimited Low Power	Minnesota Wireless Association
W7QDM	Northwestern Division Single Operator High Power	Hank, KR7X
N7UVH	Northwestern Division Single Operator Low Power	Brian Moran, N9ADG
W6OAT	Northwestern Division Single Operator Unlimited High Power	Brian Moran, N9ADG
AK6A	Northwestern Division Single Operator Unlimited Low Power	Brian Moran, N9ADG
WB3JFS	Pacific Division Single Operator Low Power	Dick Wilson, K6LRN & Carolyn Wilson K6TKD
N6WM	Pacific Division Single Operator Unlimited High Power	Northern California Contest Club
W4AAA	Roanoke Division Single Operator Low Power	Kevin der Kinderen, N4TT
NTØK	Roanoke Division Multioperator Low Power	Sheila Blackley, K4WNW
OK7W	Europe Single Operator High Power	Kresimir Kovarik, 9A5K, Memorial by K6MR

Plaque Sponsorship Information

Thanks to the generous support of numerous clubs and individuals, we are pleased to list the winners of the Sponsored RTTY Roundup plaques below. Remember, you too can be a plaque sponsor, and you can sponsor any available outcome - or make up your own for a contest within the contest. For more information on plaque sponsorship or to order a duplicate plaque, contact ARRL Contest Program Manager Paul Bourque, N1SFE at 860-594-0232 or n1sfe@arrl.org. Plaques cost \$80, which includes all shipping charges