

# ARRL RTTY Roundup 2022 Full Results

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#### ... The End of an Era...

Well, it's the end of an era, and the beginning of another. The great experiment of mixing RTTY and FT modes is coming to an end, starting with the brand new ARRL International Digital Contest this June, and in January, 2023, a RTTY Roundup that is true to the name. More on that later. How about some stories?

# Casual (No Jacket Required) and Serious Efforts

A notable absence from the post-contest internet chatter and soapboxes was any commentary at all on the dreaded two-break rule. I saw comments on breaking hardware, breaking software, and Breaking Bad, but nothing on break rules. Yay!

Bob, KE3K, however, probably did need a jacket: "Enjoyed the RU. I didn't work as many stations as last year but overall, I still had a good time. Nothing says passion about contesting more than working outside in 17 F. weather for a few hours prior to the contest in order to get the loop antenna off the ground and back into the trees."

Mark, W6IA/7: "Operated all RTTY out of a rental car while activating 3 different parks along the Oregon coast in the POTA program. Antenna was a linked dipole supported by a fiberglass mast. Max power was 40 watts. While I had no noise at any of my locations it can be difficult breaking the pileups with a low antenna and low power. It was still a great time and thanks for the Qs!"

Bill, KO7SS: "A big welcome snowstorm the week before the contest made travel to the QTH impossible and I had to drive up Saturday AM, 2 hours before the start... I have so much going on, I didn't have time to set up any SO2R capability. I have done it on RTTY with the station I have, but not this year. As things got slow Sunday AM, 1000 Q's and some points for the club seemed like a good time to stop."

Dan, KØWOI, noted it was "Really enjoyed participating this year. First time using FT-8 in any kind of a digital contest. But I gravitated toward RTTY...just something fun about using radio teletype!"

It's always nice to see Phil's, GUØSUP, call in the decode window: "A severe storm here all of Saturday afternoon meant I wasn't able to start until Sunday morning. We had severe gales, and torrential rain, and the high risk of thunderstorms, so everything was switched off. On Sunday morning, I had some duties to complete before starting, but it was great to see so much RTTY activity."

Scott, KB4KBS, "decided to see if I could capture a record for SOU-DIG-LP... Maybe I got the record for the 4th call area? We shall see... [no, sorry, but you did set a GA record!] This was a 98% FT4 effort; only 12 FT8 Qs. Last time there was a lot of stumbling and bumbling. I really tried to get and keep a 40/hr rate but the stations weren't there to support it. I'll be interested to hear what the RTTY folks say about the depth of the field. I surely didn't work all of the DIGI folks, but I worked all I could hear and I didn't see a lot of calls being made to stations not on my waterfall (except a few JAs being called by W6-land)."

Like many of us, K4TLS found it "interesting that so much of the digital action was in the FT4 section of the band. Didn't hear nearly as much FT8 in the proposed frequency bands, likely due to the huge number of RTTY stations on the air (which was nice to hear!) Overall a great contest, but look forward to the sunspot cycle hopefully giving us some fun on 10m next year!"

Similarly, Brian, K4UL, noted that "I had fun doing this contest. It was my first in a long time! I found it difficult to get quality contacts on FT8 since many were not participating in the RU."

Eric, NR4O, in SOU-RTTY-HP "pulled off the 1000th QSO with just 2 minutes left and added a

couple more with the last finishing 10 seconds before the final bell!!! Saturday evening was great especially on 40m. I had nearly half my Q's on that band. I went there early to catch the east coasters before the band got long. It was a good decision. My 15 and 20m wire antennas don't perform well enough so I played to my strengths. My country mults were really low compared to others with similar Q totals, down about 15-20. EU didn't seem very good on Sunday morning/afternoon. I tried to run on 20 and 15 meters with very limited success. On average I was more productive with S&P on those bands. I did go to 10m and worked the few stations I could hear after one of my breaks. Just 4 Q's in about 5 minutes. There was some weak stuff that just wasn't worth the time. Very happy with my best RTTY RU score ever."

Larry, KF6NCX: "This was a lot of fun. I intended to do both FT8 and RTTY, but my FT system was on the blink, so I did RTTY only. Well, I'd been a bit dubious about RTTY, considering it so noisy and so complex, but really spending some time with it showed me it's fun! I was surprised (and pleased) to encounter considerable dx in the contest. Late Sunday afternoon, the Japanese operators showed up right on schedule."

Plans changed for Eric, W3DQ, (SO-RTTY-HP): "What was intended to be a casual test of a new 40m antenna ended up being a 20m single band effort. The 40m antenna worked before last week's snow/ice storm, but failed later in the week. It problem appears to be at the center insulator up in the tree. That left me with the yagi (F12 C3-SS) on the roof. So 20m it was. The radios and indoor gear all worked quite well, while the rotator went bonkers early on -- I ended up going outside to see what direction it was facing all too often. I missed most of the Europeans Sunday morning, but other than that, signals -- especially from the midwest and west coast -- were quite good. I split running and S&P 60/40, which was a good mix."

Bill, VY2LI, (SO-RTTY-LP): "This was probably the first RTTY contest that I actually prepared for since selling our West Prince QTH in 2017. Looked like everything was set...after some struggles, got the Rigblaster Pro to play, my tiny ~30' Rohn TV tower in place a few weeks ago and the Th3 Jr (old) and my 40M Vee mounted. Then Murphy struck! The yagi went offline on Friday, the worst blizzard we have had in 6 years struck leaving little time to

effect repairs. Undaunted, I cobbled a 20-meter wire to hang 7' off my rain trough (sadly, back to 7 feet again) and hoped that the 40 Vee would get me by on 15. It did, in fact, 40 was my bread and butter band, while working decently on 15...20 meters was workable. I can no longer spend long periods in the chair, but found lots of action when I could. I was even able to put together a couple of decent runs on 15 and 40 with 60 watts! Snow clearing duties ate into some of my BIC time. Duty calls!"

Andy, AE6Y, (SO-RTTY-HP) says "I've never been an RTTY operator, and last year I managed just 23 Qs in this contest, just so that NCCC could have enough logs to get more than 50 for the club score. This year with the contest as a focus contest for NCCC, I thought I'd try to make 100 or so contacts just to help out. Well, one thing led to another, and in spite of my very primitive RTTY skills and equipment, I started to enjoy myself and see that I could in fact be productive, so I stuck it out for 11 or so hours. I just kept going, first setting a goal of 400 Qs, then 500, then 700.

"I didn't make any particular effort to find dx, but was keeping track of states. The last one needed was ND, and I heard KØOP on 15 working NW6P as I was tuning around a little before noon on Sunday. I didn't know if this would work on RTTY, but I tried the time-honored CW contest tactic of calling CQ a little above the frequency on the off chance that he was moving up the band, and sure enough he called a minute or two later."

And finally Luca, IZ2JQP, noted, "As always great fun work with my poor fishing rod antenna and 100W... See you next year."

# We're Going to Digi Land!

There was a LOT of chatter in the comments on the subject of mixing RTTY modes and FT modes in a single contest, with most coming down on the side of splitting into separate RTTY and FT contests. They got their wish.

The inaugural ARRL International Digital Contest (IDC) kicks off on June 4th. 2022 - but it's not a clone of the RTTY Roundup, about the only thing inherited from the Roundup is the two-break rule! Here are some highlights:

- ARRL has decided to take a shot at separate Single-op 1 Radio (SO1R) and Single-op 2 Radio (SO2R) categories, and there is no high power only low power (100 W max) and QRP (5 W max). Also they have overlays for "Enclosed Antennas" (all inside a building) and "Limited time" (8 hours max).
- Exchange is 4-character Maidenhead grid square, no signal report and scoring is distance-based with no multipliers.
- There is still the usual Affiliated Club competition, but they've also added 5 member teams sort of like the *NCJ North American QSO Party* but with a max distance limit between team stations.
- You can make contacts on the usual 80-, 40-, 20-, 15-, and 10-meter bands, but the IDC also adds 160 meters and 6 meters to the mix. (It will be interesting to see whether these bands make much of a difference but at least it is an opportunity for more Technician license participation.)

You can check out all of the rules at <a href="https://contests.arrl.org/ContestRules/Digital-Rules.pdf">https://contests.arrl.org/ContestRules/Digital-Rules.pdf</a>



Brian Campbell, VE3MGY, shows off his shack, complete with some of the best mood lighting around. The mood must have been right, has he navigated his station to a first-place finish in the Single Operator Unlimited, RTTY-Only, Low Power category in Canada. [Brian Campbell, VE3MGY, photo]

#### Data, Data, Data

Total Logs Submitted, by Year		
Year	Total Logs	
2016	1,757	
2017	1,733	
2018	1,620	
2019	2,642	
2020	2,087	
2021	2,353	
2022	2,350	

Frequent readers of my RTTY Roundup reports (you know who you both are) will be aware of my propensity to crunch numbers and look for trends. This year... not so trendy.

For example, total logs received in 2022 were 2,350, which is virtually flat compared to last year (2,353). Within that total there was actually a slight increase in digi-only logs and a slight decrease in RTTY-only logs, with no change in the number of mixed logs. Still overall, RTTY-only logs comprised about ½ of the total entries. Amusingly and untrendingly, the number of Unlimited RTTY-only logs was unchanged at 557. Multiops decreased from 63 to 55.

Category Choice				
Single Op, RTTY-Only				
High Power	SO-RTTY-HP	299		
Low Power	SO-RTTY-LP	742		
QRP	SO-RTTY-QRP	51		
Total		1,092		
Single Op Unlimited, RTTY-Only				
High Power	SOU-RTTY-HP	285		
Low Power	SOU-RTTY-LP	263		
QRP	SOU-RTTY-QRP	9		
Total		557		

Single Op Unlimited, Digi-Only				
High Power	SOU-DIG-HP	55		
Low Power	SOU-DIG-LP	337		
QRP	SOU-DIG-QRP	23		
Total		415		
Single Op Unlimited, I	Mixed Mode			
High Power	SOU-MIX-HP	72		
Low Power	SOU-MIX-LP	129		
QRP	SOU-MIX-QRP	9		
Total		210		
Multioperat	tor			
Single Transmitter, High Power	MSHP	23		
Single Transmitter, Low Power	MSLP	16		
Two Transmitter	M2	12		
Multi Transmitter	ММ	4		
Total		55		

Looking at QSO totals we can find something that looks like a trend, the total count is down for 2022 compared to 2021. We can see that 10 and 15 meters saw a very nice uptick, but the lower bands were down a bunch. I don't know about you but I found conditions on 40 and 80 meters to be quite poor and I suspect this is the manifestation of that.

Also kinda trending: the percentage of FT QSOs compared to the total of all QSOs fell from 19.0% to 17.9%. And I wondered if one mode or the other was favored on any bands, but I really didn't find anything. FT modes did a little better as a percentage of all FT QSOs on 40 meters, while RTTY favored 15 meters. Finally, I couldn't help but notice from perusing the comments and soapboxes that the vast majority of contacts were made on FT4 instead of FT8, at least among those reporting. This is curious to me because my efforts in other FT mode contests like the *CQ WW Digi* in August have been more evenly split between the two.

Yearly QSO Totals, By Band						
Band	2017	2018	2019	2020	2021	2022
80 M	83,832	91,966	91,935	95,592	112,048	83,711
40 M	132,277	150,648	201,136	188,940	224,277	182,658
20 M	204,593	210,821	250,967	231,761	277,248	241,905
15 M	62,229	36,233	38,554	16,178	48,667	95,685
10 M	5,364	50	253	60	145	3,313
Total	488,295	489,718	582,845	534,551	662,385	609,294

#### Where was the FT?

Another common refrain were complaints about not being able to find FT activity on the bands, and cries for the ARRL to publish recommended frequencies. As of January 2022, there was guidance out there, in the form of an "old" article in the January 2019 *QST* (No! Don't look. Leave it be!), and in newer list for the major WW Digi and FT Roundup contests. I ran an analysis of all logged frequencies and found that most operators found their way to the frequencies on the newer list, however, the old 2019 list dominated- especially on 10 and 15 meters. And I found there was also a fair amount of logging going on around some of the default general calling frequencies (e.g. 14074 and 7048).

While it's true one should be able to tune around and find activity, when you are dealing with a mode that you might not even be able to hear, it's nice to have a sub band to focus on.

The good news is that the new ARRL International Digital Contest has a list of recommended frequencies, copied here for your enjoyment. Let's spread the word and let that 2019 list fade away\*.

Suggested FT* Contest Frequencies (KHz)				
Band	FT4	FT8		
160	1840-1844	1844-1848		
80	3580-3589	3590-3599		
40	7080-7089	7090-7099		
20	14080-14089	14090-14099		
15	21080-21089	21090-21099		
10	28080-28089	28090-28099		
6*	50330-50340	50340-50350		

\*That 2019 list is especially problematic for JA hams, who aren't allowed to have domestic FT8 QSOs in most of those 2019 recommended subbands. For the sake of the JAs, let's let that older list go. By the way, CQ WW Digi has a great list of recommended subbands for JA QSOs, go check it out!

Affiliated Club Competito	on		Wayne County Amateur Radio Club 33,087 3 Rochester (NY) DX Assn 25,505 3		
Club	Score	Entries	Sierra Nevada ARS 22,911 5		
			Texas DX Society 20,668 3		
Unlimited			South Jersey Radio Assn 19,899 3		
Northern California Contest Club	3,118,045	75	Phil-Mont Mobile Radio Club 16,350 4		
Potomac Valley Radio Club	2,738,000	80	Local		
Society of Midwest Contesters	2,094,171	63			
Minnesota Wireless Assn	1,598,692	53	Orleans County Amateur Radio Club 511,727 8		
	1,330,032	33	New Mexico Big River Contesters 319,476 4		
Medium			CTRI Contest Group 175,300 5		
Frankford Radio Club	1,858,118	41	Bristol (TN) ARC 134,907 5		
Arizona Outlaws Contest Club	1,179,674	21	BOULDER AMATEUR RADIO CLUB 122,908 4		
Yankee Clipper Contest Club	1,082,231	30	Boeing Employees ARS - St. Louis 121,727 4		
Florida Contest Group	789,495	31	Providence Radio Assn 95,210 4		
Willamette Valley DX Club	699,985	17	Metro DX Club 76,348 3		
Tennessee Contest Group	667,353	16	Silver Comet Amateur Radio Society 67,552 6		
Contest Club Ontario	649,280	20	The Villages Amateur Radio Club 66,591 3		
Western Washington DX Club	562,334	16	Meriden ARC 21,570 3		
South East Contest Club	505,980	12	OH-KY-IN ARS 21,502 3		
DFW Contest Group	452,857	12	Lake Area Amateur Radio Klub 3,548 3		
Kentucky Contest Group	390,473	12			
Northeast Maryland Amateur Radio			Once again the Northern California Contest Club		
Contest Society	372,116	18	<del>_</del>		
Southern California Contest Club	357,604	16	took the top spot in Unlimited Club over the		
Central Texas DX and Contest Club	308,638	8	Potomac Valley Radio Club. The PVRC did scare		
Grand Mesa Contesters of Colorado	302,657	10	up 16 more logs than last year to make it a little		
Alabama Contest Group	302,502	8	closer. The Frankford Radio Club also repeated in		
Spokane DX Association	289,577	13	the Medium Club category, but those Arizona		
Carolina DX Association	272,045	10	Outlaws made a big push into second place. And in		
Niagara Frontier Radiosport	260,653	9	Local Club the Orleans County ARC just keeps		
599 DX Association	246,790	3	rollin' along, with the New Mexico Big River		
Swamp Fox Contest Group	243,884	7	Contesters making a good showing in second with		
Great Places Contest Club	241,426	3	only 4 logs.		
Louisiana Contest Club	238,328	4	Affiliated Club Caval Winners 2004 to present		
Skyview Radio Society	237,143	5	Affiliated Club Gavel Winners, 2004 to present		
Kansas City Contest Club	229,406	5	Unlimited		
Order of Boiled Owls of New York	196,964	6	Year Club Logs Score		
Orca DX and Contest Club	196,204	7	2022 Northern California Contest Club 75 3,118,045		
Valley Amateur Radio Association	168,362	4	2021 Northern California Contest Club 75 3,286,060		
Driftless Zone Contesters	107,504	5	2020 Northern California Contest Club 51 2,250,767		
New Providence ARC	103,129	4			
Oklahoma DX Assn	83,780	4	2019 Northern California Contest Club 63 2,233,702		
Mad River Radio Club	75,650	12	2018 Northern California Contest Club 74 3,486,901		
Heartland DX Association	69,155	4	2017 Potomac Valley Radio Club 62 1,929,695		
Hudson Valley Contesters and DXers	64,580	6	2016 Northern California Contest Club 67 3,809,079		
North Coast Contesters	62,911	3	2015 Minnesota Wireless Assn 56 1,891,478		
Maritime Contest Club	62,364	5	2014 Northern California Contest Club 65 3,202,878		
Western Kansas ARC	58,110	3			
Oklahoma City Autopatch Association	54,897	4	2013 Northern California Contest Club * 71 4,044,558		
Portage County Amateur Radio	44 760	,	2012 Northern California Contest Club 73 3,715,609		
Service	41,768	4	2011 Minnesota Wireless Assn 64 2,183,630		
Dupage ARC	34,815	3	2010 Northern California Contest Club 60 2,502,251		

2009 Northern California Contest Club 86 3,307,797 2007 Alabama Contest Group 7	453,854
	,
2008 no winner 2006 Maritime Contest Club 5	262,279
2007 no winner 2005 Spokane DX Assn 3	131,022
2006 no winner 2004 Dauberville DX Assn 3	125,534
2005 no winner * Record score	
2004 no winner  The Winners	
B. G. a. Ultrama	

	Medium			Tau Tau Huitad States and Counds
Year	Club	Logs	Score	Top Ten- United States and Canada
2022	Frankford Radio Club	41	1,858,118	Single Operator, RTTY Only, High Power
2021	Frankford Radio Club *	48	2,550,431	AA3B 274,944
2020	Frankford Radio Club	39	1,592,104	W7RN (WK6I, op) 218,056 AI9T 191,019
2019	Society of Midwest Contesters	49	1,788,349	N5HC 134,352
2018	Society of Midwest Contesters	47	1,811,579	K5XH 133,200
2017	Northern California Contest Club	43	1,879,145	AE1P 128,688
2016	Frankford Radio Club	19	1,178,489	NG1M 118,919
2015	Potomac Valley Radio Club	47	2,406,478	NG7M 106,846
2014	Society of Midwest Contesters	28	1,524,519	AD5XD 105,570
2013	Minnesota Wireless Assn	43	1,607,832	WØPR 103,103
2012	Potomac Valley Radio Club	49	2,500,870	Single Operator, RTTY Only, Low Power
2011	Potomac Valley Radio Club	37	1,833,820	W4AAA (KK9A, op) 180,264
2010	Potomac Valley Radio Club	40	1,813,567	K3AJ 105,502
2009	Potomac Valley Radio Club	37	1,778,086	K9WX 99,827
2008	Potomac Valley Radio Club	35	1,440,226	N4TB 96,558
2007	Potomac Valley Radio Club	37	1,966,378	KØTI 95,832
2006	Potomac Valley Radio Club	28	1,355,040	AA5B 95,684
2005	Northern California Contest Club	31	1,231,336	N9CK 93,870
2004	Northern California Contest Club	35	1,439,443	KM6Z 84,480
	Local			K3RWN 80,808
Year	Club	Logs	Score	NØAT 79,716
2022	Orleans County ARC	8	511,727	Single Operator PTTV Only OPP
2021	Orleans County ARC	10	609,977	Single Operator, RTTY Only, QRP
2020	Orleans County ARC	10	583,258	K2YG 34,672 WE6EZ 19,370
2019	Orleans County ARC	8	492,003	AA5KD 14,310
2018	Orleans County ARC	10	455,258	N6MA 11,804
2017	Orleans County ARC	6	475,347	VE3KJQ 10,300
2016	Orleans County ARC	7	748,161	KO3T 10,034
2015	Orleans County ARC	6	533,555	WW2G (WU2M, op) 7,872
2014	Orleans County ARC	10	655,255	W4/KP4KE 6,528
2013	Orleans County ARC*	10	1,065,283	N7GR 6,288
2012	Orleans County ARC	10	936,547	K6OO 6,251
2011	Dominion DX Group	10	639,851	
2010	Orleans County ARC	6	449,103	Single Operator Unlimited, Mixed Mode, High Power
2009	Orleans County ARC	4	294,392	KK6P (W7IV, op) 180,180
2008	Maritime Contest Club	4	297,018	NA3M 162,992

KI6DY	140,672	KM4RL	43,120
AG4W	135,184	WB9Z	41,905
KA6BIM	112,752	W3PAX	41,676
W6SX	104,240	N7UVH	40,524
KT4Q	102,432		
KE2D	81,282	Single Operator Unlimited, Digital On	•
WA3AAN	77,896	KG7CW	10,070
W1RH	72,048	кт80	9,750
		WØKI	8,668
Single Operator Unlimited, Mixed M		VA4BEN	8,505
VE2CSM	78,302	W6CZ	3,219
VE3PJ	73,790	N5PLO	943
AA4DD	64,108	кøнw	936
N8CWU	59,760	KEØPRK	902
WQ5L	53,728	N6MW	432
K7VAP	49,728	N4NQY	384
KC2WUF	47,502	Single Operator Unlimited, RTTY Only	, High Power
KB9S	46,725	КЗММ	286,488
W7BOB	46,376	К9СТ	267,197
K8BL	45,448	N6WM	218,880
		W9SN	209,536
Single Operator Unlimited, Mixed M	lode, QRP	N2WK	193,421
NØUR	51,552	K6LL	183,590
N8URE	6,321	N3QE	180,500
KD4ADC	4,998	W3LL	178,704
KE6YLH	2,975	N4ZZ	174,340
K8ZT	2,646	N6IE	162,250
K6MI	391		
		Single Operator Unlimited, RTTY Only	, Low Power
Single Operator Unlimited, Digital O	nly, High Power	AA5AU	228,750
K9OM	126,378	WT9U	126,672
K3QH	67,320	K7QA	104,808
KB1IKC	62,624	KG9X	97,812
NE4S	58,320	VE3MGY	86,730
KW6S	47,334	K9PW	71,640
N1EK	42,254	KG5VK	61,470
AA4SS	39,390	W7RY	56,529
W2TT	36,852	W4GKM	54,530
K7UT	36,113	W3KB	52,812
KE8FT	34,362		
		Single Operator Unlimited, RTTY Only	, QRP
Single Operator Unlimited, Digital O	nly, Low Power	K6EI	20,306
W1UE	107,046	KD2EFR	6,862
NA5M	59,128	K6JS	6,860
W4UWC	49,425	W4ER	5,616
KC3PIB	48,822		•
WA2BOT			
WAZBOT	48,128	Multioperator, Single Transmitter, Hi	gh Power

WØSD	226,576
K5RZA	220,125
N7AT	206,119
ND2T	162,720
N4SS	135,713
NY6DX	131,322
W6DR	130,536
NW6P	122,879
K3CCR	75,936
WW7E	71,368

#### Multioperator, Single Transmitter, Low Power

WTØDX	93,016
K9NR	75,700
W1OP	69,460
WA1F	33,096
W4TMO	26,013
K7VT	25,132
WSØZ	23,040
K4MM	12,760
NJ1F	9,600
N7ECM	9,234

#### **Multioperator, Two Transmitter**

NJ4P	356,868
W6YX	307,680
NW8S	217,080
NA5NN	208,920
NA4DA	180,682
K7RU	175,600
KT7E	173,985
WA3EKL	96,255
WB8PKK	84,600
W5NN	49,306

#### Multioperator, Multitransmitter

W3GH	223,608
NF3R	208,376
W8BAP	31,330
K5LRW	14,045

### **Regional Highlights**

W/VE Logs Received by Region					
Region	2018	2019	2020	2021	2022
Central	171	268	226	260	236
Midwest	197	284	230	247	259
Northeast	213	326	260	332	339
Southeast	201	342	246	333	319
West Coast	228	364	242	297	285
Total	1,010	1,584	1,204	1,469	1,438

As with overall participation, when we look at logs by regional participation, there was not much change. And the same goes for section participation, the Top Ten sections are pretty much the same, with the exception of a nice jump up by MDC. But the real news here is that we have a FULL LIST of sections for the first time in maybe ever. I can't recall another time we had at least one log for every Section!

Domestic Participation, Logs Received by Section			
Section ID	Logs Received	2021 Rank	2021 logs
IL	69	1st	62
VA	61	2nd	60
MDC	58	7th	46
MN	58	3rd	59
ОН	50	6th	52
EPA	46	4th	56
NC	44	5th	52
TN	38	10th	35
SCV	36	11th	34
СО	35	13th	32
WWA	33	8th	40
STX	32		
WI	31		
WNY	30	9th	39
МО	29		
GA	28		
MI	27		
NTX	27		
NFL	25		
SFL	25		
AL	24		
AZ	24		
IN	24		
OR	24		

NNJ	21		
SV	21		
WPA	21		
ENY	19		
KY	19	9th	30
СТ	18		
EB	18		
LAX	17		
WCF	17		
NLI	16		
QC	16		
AR	15		
EMA	15		
EWA	15		
SC	15		
GTA	14		
ID	14		
ОК	14		
SNJ	14		
NH	13		
NV	13		
SJV	13		
WMA	13		
ВС	11		
IA	11		
ONE	11		
RI	11		
KS	10		
NM	10		
LA	9		
MS	9		
ONS	9		
SB	9		
SDG	9		
WV	9		
ME	8		
MT	8		
NE	8		
SF	8		
AK*	8		
SD	7		
MAR	6		
AB	6		
DE	6		
UT	6		
PAC*	5		

ORG	4	
PR*	4	
MB	3	
NL	3	
SK	3	
VT	3	
WY	3	
VI*	3	
ND	2	
NT	2	
ONN	2	
NNY	1	
PE	1	
WTX	1	
* DX Sectio	n	

# **West Coast Region**

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

Alberta, British Colui	iibia aliu Ni	sections)
W7RN (WK6I, op)	218,056	SO-RTTY-HP
N7GP	102,396	SO-RTTY-HP
W7GES	100,725	SO-RTTY-HP
W6EU	96,162	SO-RTTY-HP
N6JV	82,503	SO-RTTY-HP
VE6BBP	63,294	SO-RTTY-LP
AC7S	44,472	SO-RTTY-LP
WB3JFS	43,290	SO-RTTY-LP
WN6K	42,408	SO-RTTY-LP
WS7V	40,796	SO-RTTY-LP
N7GR	6,288	SO-RTTY-QRP
K600	6,251	SO-RTTY-QRP
W6QU (W8QZA, op)	4,515	SO-RTTY-QRP
N6HI	1,750	SO-RTTY-QRP
K3GX	35	SO-RTTY-QRP
KK6P (W7IV, op)	180,180	SOU-MIX-HP
KA6BIM	112,752	SOU-MIX-HP
W6SX	104,240	SOU-MIX-HP
W1RH	72,048	SOU-MIX-HP
K6OK	67,008	SOU-MIX-HP
K7VAP	49,728	SOU-MIX-LP
W7BOB	46,376	SOU-MIX-LP

AA2IL W7OM	45,290	
N7BT	28,050 13,158	
KE6YLH	2,975	SOU-MIX-QRP
K6MI	391	
KW6S	47,334	
KE8FT	34,362	
W7MEM	-	SOU-DIG-HP
W6TCP (K6KM, op)	-	SOU-DIG-HP
KO6LU	14,040	SOU-DIG-HP
N7UVH	40,524	SOU-DIG-LP
W7OSG	16,343	SOU-DIG-LP
N7PMS	16,017	SOU-DIG-LP
WA8ZNC	14,934	SOU-DIG-LP
W7LD	14,000	SOU-DIG-LP
KG7CW	10,070	
W6CZ	3,219	
N6MW	432	
KG6YJ	63	SOU-DIG-QRP
N6WM	218,880	SOU-RTTY-HP
K6LL	183,590	SOU-RTTY-HP
N6IE	162,250	SOU-RTTY-HP
K9YC	113,730	SOU-RTTY-HP
KO7SS	110,316	SOU-RTTY-HP
K7QA	104,808	SOU-RTTY-LP
W7ZRC	37,800	
WAØWWW	27,072	
WN6W	24,857	
N7WLC	20,532	
147 4426	20,332	300 KIII EI
K6EI	20,306	SOU-RTTY-QRP
K6JS	6,860	SOU-RTTY-QRP
N7AT	206,119	MSHP
ND2T	162,720	
W6DR	130,536	
NW6P	122,879	
WW7E	71,368	
	, 1,000	
W6YX	307,680	M2
K7RU	175,600	M2
KT7E	173,985	M2

I think it's interesting to note that every region, but one had at least 3 overall first place W/VE finishes, including the West Coast. The top of the podium in SOU-MIX-HP was occupied by Paul, W7IV, operating as KK6P. Paul noted that "It seems like people lost interest in 40 Saturday night... so I finally switched over Saturday night to FT4 and worked a bunch... I was glad to see that the vast majority of DG contacts were on FT4, where the motto is: 'FT4: Only half as painful as FT8!'" Hope to see KK6P in the new Digi contest this June!

Up in Idaho, Jeff, KG7CW, showed up big time to take first place overall SOU-DIG-QRP. In the QRP, category, Jim, K6EI, took first overall in SOU-RTTY-QRP with over 20,000 points, setting a new overall record!

In notable regional results, this year there was only a half a foot or so of snow at the W7RN Comstock Memorial Station for your humble scribe to navigate to achieve a first place SO-RTTY-HP and second overall (I can take solace that AA3B had to set a new SO-RTTY-HP record to beat me!) Tom, N7GP, had a bunch of weekend commitments but still showed up enough for second place in the region.

In SOU-DIG-HP, Tom, KW6S, set out to do FT8 but found RTTY in the recommended FT8 frequencies. "Moved to FT4 and found a home. A few non-contesters, mostly my error calling them, rather than them calling me. FT4 seems more like 10dB less effective than FT8, many repeats and 'hung' contacts. Very little DX in the contest, but regular frequencies (FT8) had lots of DX activity. I look forward to next year and improving. Using two radios in FT4 with repeats and 'problem' contacts can keep you busy." Indeed.

Chris, N6WM, (operating the super N6RO station) reached first place SOU-RTTY-HP with a great score (third overall), echoed many west coasters' opinion of 40m "was not able to work as much EU as we want from the West." But on 10m "the band was open all day Saturday according to the RBN as I interleaved CQs as the 3rd band!" Runner-up David, K6LL, (sixth overall): "The EU opening on Sunday was a flop... I guess I should have paid more attention to mults on Saturday, but it was fun running like crazy."

Regional first (third overall) in SOU-RTTY-LP was Tom, K7QA, who quipped "Little by Little, I seem to be getting the hang of this Radio Dittle Dittle." His amp was in pieces on the bench, so he "figured LP was worth a try. Especially since hardly any of the MT Big Sky Contesters do RTTY. So, I ran like rare DX. The spotters didn't disappoint, dishing up plenty of callers chasing mults. Picked a clear QRG on each band and let the spotters loose." That was worth a few dB!



Jim, W6EU, didn't let his snow encrusted antenna keep him from a second-place finish in the Single Operator, RTTY-Only, High Power category in the Pacific Division. [James Duffy, W6EU, photo]

Also, third overall SOU-RTTY-QRP was Jim, K6JS, who decided to operate QRP in his first RTTY contest. To run SO2R "I put a TA33 (50+ years old, my 1st beam) on an 8' ladder for the 2nd antenna:) I was surprised to work many stations with 5 Watts and this setup. I'm still having high SWR issues with the DB18 on 40M. The 80M Inverted L over an FCP (Folded counterpoise) plays well on my 45' X 100' city lot.

"I was testing the new setup 30 minutes before the contest running 5 watts. My 1st RTTY QSO was an EA5, so I started the contest QRP and was amazed

how easy it was to make Q's. This was a very casual effort. 5-6 hours on and off on Saturday and a couple hours Sunday morning. I made a handful of Q's Sunday afternoon during commercial breaks while watching the 49ers game."

In multi-ops N7AT scored third overall MSHP, and N6WP eighth from their hilltop location: "We decided to do an MS this year, though we were not sure about staffing. We managed to cover most of the hours, with WD6T taking the first 12, NW6P doing some operating late Saturday and early Sunday, and WX5S finishing the contest on Sunday.

"A one-radio MS is certainly a different kettle of fish from SO2R, but we worked on maximizing rate and mults through call stacking, SO2V, band map, 'available mults', and bouncing between bands (less than 10/hour!). Propagation was nothing to write home about: 40m had a few workable-EUs, at around 2300z, but not much. 40m went very long by 0300z. EU sunrise was a bust on 40m. EU was workable on 20m from 1600z, an hour later than in recent years. 15m was good to JA in the last hour; too bad they were only 1-pointers and one mult."

The big station at Stanford U, W6YX grabbed second overall in M2 - despite also having only 3 operators. Mike, N7MH: "We had at least one operator for the entire 30 hours but had 7 or 8 hours with only a single operator. During the overnight shift I operated SO2R on 40 and 80 to keep two radios active for the low rates while almost all the participants were sleeping.



Kevin, N3KA, took home second place in the Pacific Division in the Single Operator, RTTY-Only, Low Power category. [Kevin Strishock, N3KA, photo]

Runner-up K7RU (sixth overall) "Our first year as M2. Conditions fairly good during the day, but it was very slow at night with most of the other stations which were limited to only 24 hours of on time, taking their mandatory break. It was a lot of fun and we had our highest score and the greatest number of q's ever in this contest."

#### **Midwest Region**

				330	555 B15 Q111
(Dakota, Midwest,	. Rocky Mounta	in and West Gulf	KEØPRK	902	SOU-DIG-QRP
Divisions; Manitoba and Saskatchewan Sections)					
N5HC	134,352	SO-RTTY-HP	KØMD	137,994	SOU-RTTY-HP
NG7M	106,846	SO-RTTY-HP	KØIR	118,650	SOU-RTTY-HP
AD5XD	105,570	SO-RTTY-HP	NØXR (@NØNI)	111,320	SOU-RTTY-HP
WØPR	103,103	SO-RTTY-HP	WØMB	100,674	SOU-RTTY-HP
W5AP	89,420	SO-RTTY-HP	WØGJ	96,408	SOU-RTTY-HP
			KG5VK	61,470	SOU-RTTY-LP
KØTI	95,832	SO-RTTY-LP		•	
AA5B	95,684	SO-RTTY-LP	W7RY	56,529	SOU-RTTY-LP
NØAT	79,716	SO-RTTY-LP	WØPI	47,302	SOU-RTTY-LP
N7WY	77,212	SO-RTTY-LP	K4IU	43,364	SOU-RTTY-LP
KØAD	63,414	SO-RTTY-LP	VA4HZ	34,255	SOU-RTTY-LP
	40.000		WØSD	226,576	MSHP
WE6EZ	19,370	SO-RTTY-QRP	K5RZA	220,125	MSHP
AA5KD	14,310	SO-RTTY-QRP	KØDDD	25,517	MSHP
NØKRE	5,576	SO-RTTY-QRP	מטטעא	25,517	IVISHP
KF9LI	1,920	SO-RTTY-QRP	window	02.046	1461.5
			WTØDX	93,016	MSLP
NØTA	69,520	SOU-MIX-HP	K7VT	25,132	MSLP
NØBAK	36,360	SOU-MIX-HP	WSØZ	23,040	MSLP
KØVG	13,632	SOU-MIX-HP	KK5OV	3,640	MSLP
			W5NN	49,306	M2
N5YHF	21,960	SOU-MIX-LP	VVOINI	75,500	1412
NØFJP	19,293	SOU-MIX-LP	K5LRW	14,045	MM

KAØBOJ

W5TRL

AJ4F

NØUR

KB1IKC

KG5EIU

K7UT

K6DJ N5EKO

NA5M

ACØDA

KG5RJ

WD5G

KIØD

WØKI

VA4BEN

N5PLO

**KØHW** 

17,160

16,038

14,986

51,552

62,624

36,113

34,103

8,668

8,505

943

SOU-MIX-LP

SOU-MIX-LP

SOU-MIX-LP

SOU-MIX-QRP

SOU-DIG-HP

SOU-DIG-HP

SOU-DIG-LP

SOU-DIG-QRP

SOU-DIG-QRP

SOU-DIG-QRP

936 SOU-DIG-QRP

31,088 SOU-DIG-HP 30,336 SOU-DIG-HP

28,224 SOU-DIG-HP

59,128 SOU-DIG-LP

28,260 SOU-DIG-LP

27,392 SOU-DIG-LP

23,718 SOU-DIG-LP

The Midwest also had 3 first place overall. Bill, WTØDX, in Colorado was first in MSLP. Jim, NØUR, braved the Minnesota winter to take first place in SOU-MIX-QRP and set a new overall record. Next door in South Dakota WØSD no doubt enjoyed a few extra rareness dBs on the way to a top MSHP effort: "Had a great time operating this year, and wonderful to see the high bands back in action! This was the first year in a while that we were able to get any sort of rate while running on 15m and it was nice to see 10m open. 20m and 40m performed as well as they normally do which was surprising considering the 40m beam lost half of its driven element two weeks prior. 80m was a great workhorse during the evening hours, with over three hours of 100+ gsos/hr."

In regional results, Frank, NA5M, (second overall SOU-DIG-LP) was delighted: "Everything worked! Had a fun time with my only disappointment being the unexpected lack of multipliers on 15m. FT4 is fast but the FT8 S/N ration is so much better. Last year there was a lot more FT8. I kept checking 15m and couldn't find FT8 ops anywhere on the band except 21.074 where there were many multipliers decoding from SA, EU and AF but none were operating RU. 21.090 had no FT8 but was wall to wall RTTY. FT4 on 15m was mostly short skip. I worked over 100 dupes and non-test Qs. Most of the non-test dupes were my fault for calling CQ stations that were not calling CQ RU."

Steve, KG5VK, decided to give low power RTTY a try: "Yes, 100 watts or less. My goal was 800 Q's I fell a tad short. It has been many years since I played in this one, glad I came back." Good enough for seventh overall is SOU-RTTY-LP!

Max, NG7M: "Didn't plan on putting this much time in but got on a roll. :)" right to eighth place overall. But he lamented "So many poorly driven AFSK signals. And several non-dupe workers which limits their score. It pays to read the rules and work dupes. Ironically, these same stations will expect you to work them if they are already a dupe and they call you. What is good for the goose clearly isn't good for the gander. Anyway, this was fun! Thanks for the Qs."

Achieving second place overall in MSHP were Deborah and Gator at K5RZA: "Always a fun contest - and a pleasure for the two of us to operate together. Deborah made about 2/3 of the QSO's, and

the Gator pulled the all-night shift. Decided not to utilize the FT-x modes. Improved high band conditions (especially 15m!) were offset by heavy static crashes on the low bands and what seemed to be pretty flat conditions on 40M for us, so our score was just a bit below last years'. WY was the last state in the log (on 15M Sunday afternoon) after having all the other states + DC worked pretty early on. Only missed NT and NU in Canada. Checked 10 meters several times to find nothing going on there. Still rebuilding after the ice storm damage in February 2021 and the low band receiving systems are still not back up yet. Everything worked with no failures. Went into town for Pizza and Beer immediately afterwards - yummy! Thanks to all for the QSO's!" Sounds like a great date!

#### **Central Region**

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

7 ii ca sections,		
AI9T	191,019	SO-RTTY-HP
VE3JI	84,735	SO-RTTY-HP
W9ILY	71,676	SO-RTTY-HP
VE3GYL	71,656	SO-RTTY-HP
K4BWP	68,556	SO-RTTY-HP
K9WX	99,827	SO-RTTY-LP
N9CK	93,870	SO-RTTY-LP
KM6Z	84,480	SO-RTTY-LP
KD9PLD	56,595	SO-RTTY-LP
NI8Z	39,312	SO-RTTY-LP
VE3KJQ	10,300	SO-RTTY-QRP
KN4QDE	989	SO-RTTY-QRP
KI6DY	140,672	SOU-MIX-HP
N2BJ	68,646	SOU-MIX-HP
KBØV	20,640	SOU-MIX-HP
VA3WW	17,794	SOU-MIX-HP
VE3PJ	73,790	SOU-MIX-LP
N8CWU	59,760	SOU-MIX-LP
KB9S	46,725	SOU-MIX-LP
K8BL	45,448	SOU-MIX-LP
VE3BR	35,720	SOU-MIX-LP
K8ZT	2,646	SOU-MIX-QRP

N8XCO	18,700	SOU-DIG-HP
WA8LRW	11,210	SOU-DIG-HP
KD9QGE	5,719	
W9JA	2,280	
KN9P	1,320	SOU-DIG-HP
	ŕ	
W4UWC	49,425	SOU-DIG-LP
N4NP	30,375	SOU-DIG-LP
AC8ZU	23,004	SOU-DIG-LP
WO9G	20,069	SOU-DIG-LP
WQ9F	19,116	SOU-DIG-LP
KT8O	9,750	SOU-DIG-QRP
KC9AXZ	144	
К9СТ	267,197	SOU-RTTY-HP
AC9S	72,922	SOU-RTTY-HP
K9WO	64,311	SOU-RTTY-HP
WB8BZK	59,840	SOU-RTTY-HP
N9LQ	52,917	SOU-RTTY-HP
WT9U	126,672	SOU-RTTY-LP
KG9X	97,812	SOU-RTTY-LP
VE3MGY	86,730	SOU-RTTY-LP
K9PW	71,640	SOU-RTTY-LP
KYØQ	44,424	SOU-RTTY-LP
N4SS	135,713	MSHP
K9NR	75,700	MSLP
NW8S	217,080	M2
W8BAP	31,330	MM
	•	

Oddly there were no first-place overall results for the Central region, but they did get 5 seconds and 6 thirds! Craig, K9CT, got his in SOU-RTTY-HP: "All in all a good contest in many respects. Propagation was good and we dodged the ice and rain moving into our area Saturday. There were a couple of noisy times and that may have been some charged clouds moving through. Activity was good and most everyone took about the same 6 hours off. You could tell when NFL football was on but the last few hours picked up when it opened to EU on 40 and JA on 20.

"No problems that I know of during the contest. MMTTY was used for the primary TX and both MMTTY and 2 Tone decoding. I always ran on one band and interleaved with the second band. Sometimes it was useful do alternating CQs. It would be nice if some operators would take a few seconds to see if the frequency is busy before launching a CQ and then wonder why there is QRM. Occasionally there was some soul that would put a carrier on one of my tones to just annoy me. There is also some digital crud that would appear out of nowhere and just take up a few KHz of the bands. Kind of like SSTV but digital. Seemed intentional.....

"Thanks to some good online competition from N6WM and a few others I was able to focus and likely broke the Central Division record [you did!]. Nothing like some friendly competition to keep you on your toes! I am surprised that any assisted operator is not online...they are probably watching our scores though...See you in the next one!"

Other second-placers included VE3PJ in SOU-MIX-LP, and KT8O in SOU-DIG-QRP. WT9U in SOU-RTTY-LP, "Had more time to play than originally planned. Blew up an Astron RS35 power supply which was exciting." I bet! And in Multis, K9NR was second in MSLP despite thinking it was "Not a very good effort! Spent most of Saturday with family for holiday get together. Rotor on 100ft tower frozen. W/E two wire Beverage antenna broken in heavy wind. Local DX Cluster was down...drove out to see what could be done. Propagation seemed only fair." Get all that solved, and we'll see you at the top next time!

AI9T got a solid third place in SO-RTTY-HP: "I thought the conditions Saturday were much better than Sundays. Still, lots of fun and participation." K9WX took third in SO-RTTY-LP, and Bob, KI6DY, third in SOU-MIX-HP: "Think this is my personal best. Almost an even split between RTTY and FT4 QSOs. All my Dig Q's except for 1 were FT4. Did manage to work all states including DC. VT and DC were the last 2 and I got those on 40 meters. Actually worked two DC stations. I'm sure after log checking, the score will come down more than a tad, mostly due to NIL FT4 contacts. Had fun, hope you did too." Check your LCR, your score held up just fine!

Continuing the third place hit parade, W4UWC scored theirs in SOU-DIG-LP, W8BAP in MM, and NW8S in M2: "More digital non-RTTY Qs than we planned on working, but sometimes you have to go pick up the stations where they are, so throughout the contest we'd jump on digital and grab what was there for the taking. Hopefully they don't end up as a gazillion busted contacts as tends to happen on FT modes where everyone has their own opinion on how many 73s you have to send. (You hang up first. No, you hang up first. No, YOU hang up.) Sigh.... All in all, a fun contest again. It was nice to see activity on 15m, maybe we can get more of that through the rest of 2022. As always, enjoyed using the online scoreboard to keep pushing us along and the real-time ribbing via text messages with some of the other teams on the board!"

N4SS placed fifth overall in MSHP, Bryan, W5MX, explains that it isn't always about a high score: "Terry, AJ4A; and Clayton, KJ4YLR, came down for a MS using the club call N4SS in this one. We started a bit late and all 3 slept from about 2am to 7am local time Sunday morning hihi. Would have been great to have kept the station going the whole 30 hours but you know, we are all there to have a good time. If everyone gets tired and wants to sleep, that's what we do hihi.

"One very dangerous thing that I did to 'improve' the contest station was put a 65-inch TV in the living room. I say dangerous because we may get hooked on a good tv show and lose focus on the contest. Example: Clint Eastwood movie Fist Full of Dollars came on Saturday night. Between that and the very warm woodstove in the living room, it got hard to stay on the contest hihi.

"But we managed to stay on 24.5 hrs., and all did well. I am happy with our score, but of course we could always do better. I am always looking for ways to improve the station for guest ops, some additional automation would be good.

"Conditions were reasonable for a 'work everyone' contest although it would have been nice to work more EU on 15 and about anything on 10 but no such luck. 80 was quite noisy here, and even 40. Storms to the south, rain/snow static locally. We ended up using beverages on RX several times. 40 went long early so missed a lot of stuff within 500 miles or so although it was the money band for us overall. Need to put up some sort of NVIS type

antenna for 80/40 to raise the angle of radiation for domestic tests. Always something to do antenna wise:-), never enough....

"In any case, was great to have Terry and Clayton down. Good food, a couple movies and storytelling is always a great thing, right up there with the contest itself!"

#### **Southeast Region**

(Delta, Roanoke and So	utheastern	Divisions)
K5XH	133,200	SO-RTTY-HP
N5ZM	79,500	SO-RTTY-HP
WS6X	74,074	SO-RTTY-HP
K8RRT	69,920	SO-RTTY-HP
K2PS	55,335	SO-RTTY-HP
W4AAA (KK9A, op)	180,264	SO-RTTY-LP
N4TB	96,558	SO-RTTY-LP
WA1FCN	72,864	SO-RTTY-LP
K8ARY	65,800	SO-RTTY-LP
KF4FC	57,500	SO-RTTY-LP
N6MA	11,804	SO-RTTY-QRP
W4/KP4KE	6,528	SO-RTTY-QRP
AD4TT	1,863	SO-RTTY-QRP
KH6KG/W5	1,680	SO-RTTY-QRP
KN4FTT	1,218	SO-RTTY-QRP
AG4W	135,184	SOU-MIX-HP
KT4Q	102,432	SOU-MIX-HP
AI4WW	35,155	SOU-MIX-HP
K8AC	20,540	SOU-MIX-HP
W4GHV	19,667	SOU-MIX-HP
AA4DD	64,108	SOU-MIX-LP
WQ5L	53,728	SOU-MIX-LP
K2MK	38,038	SOU-MIX-LP
W6NCB	34,503	SOU-MIX-LP
KT3T	23,850	SOU-MIX-LP
KD4ADC	4,998	SOU-MIX-QRP
K9OM	126,378	SOU-DIG-HP
K3QH	67,320	SOU-DIG-HP
NE4S	58,320	SOU-DIG-HP
AA4SS	39,390	SOU-DIG-HP
W3GQ	21,490	SOU-DIG-HP

KM4RL WB9Z KB4KBS WE4BE AJ6T	43,120 41,905 38,150 29,175 22,360	SOU-DIG-LP
N4NQY N1MT	384 156	SOU-DIG-QRP SOU-DIG-QRP
W9SN N4ZZ N4IQ AA8R W4NF	209,536 174,340 125,070 110,966 93,240	SOU-RTTY-HP SOU-RTTY-HP
AA5AU W4GKM KG4IGC N2OG KN4GDX	228,750 54,530 37,556 26,936 24,948	SOU-RTTY-LP
W4ER AD4ES	5,616 45,746	
W4VIC	35,615	MSHP
WA1F W4TMO K4MM	33,096 26,013 12,760	MSLP MSLP MSLP
NJ4P NA5NN NA4DA W5YD	356,868 208,920 180,682 33,192	M2 M2 M2 M2

The Southeast tallied four first-place overalls (sounds like an article of clothing the ARRL store should carry). John, KK9A, operated W4AAA to first in SO-RTTY-LP. "This contest started out a little slow for me with long skip on 15m and 20m. 15m was especially poor, I only was able to make 24 QSOs on that band during the entire first half of the contest. Fortunately, the propagation on 40m was fantastic and I made the most QSOs on this band. 80m was also good at night however there was some QRN from storms in the southeast. On Sunday morning at sunrise, I had a great opening to

Europe on 20m. Shortly later I was happily surprised to find 15m also open to Europe and I had my best hourly rate of the contest (100) running on these two bands. I ran on both radios almost the entire contest. In hindsight I should have spent a little more time searching and pouncing for new multipliers and stations. [Nah, it worked out!] I first tried the ARRL RTTY Roundup contest five years ago and I have operated every year since. This contest is so much fun!"

Dick, K9OM, got his first place in SOU-DIG-HP. He "decided to go full bore in the new RU 'Digital Only' category and see how many FT4 Qso's I could make. There was a great deal of confusion with FT4 exchanges as most FT4 RU activity took place on the standard FT4 frequencies. The RU uses a different exchange than the standard FT4 exchange so about 100 QSOs went unlogged due to non-contesters calling in with a non-compatible exchange. Hopefully in future years the ARRL will publish unique FT4 and FT8 RU frequencies to avoid this mass confusion from happening year after year. All in all, I enjoyed the RU!"

Then we have Don, AA5AU, in his usual position at the top of SOU-RTTY-LP, noting "This could be my fifth highest score ever in 34 years of RTTY Roundup. [and in fact, a new overall record for SOU-RTTY-LP] That in itself is remarkable considering conditions were OK, but not really great as they were in the years 2012-2016. It was the first contest with my new Icom IC-7610 and this radio is a winner when it comes to RTTY. One remarkable note is working all 50 states in the first 5 hours. Another is the excellent jobs the RTTY skimmers did. It seems they have fixed the busted call issues of the past. Congrats to all the skimmer ops."

And at the top of M2 (and with a new overall record) was NJ4P doing 100% RTTY with a "thrown together 100% remote effort that nobody really knew how much time, if any they would have to work it. We brought in Larry, NN5O 2/3 of the way through with no prior warning to help give a few breaks. Some Long hours and BIC but nobody complained! FUN... Watching the online scoreboard and the battles on it was very entertaining. The NW8S crew worked through some equipment issues and clawed their way back up to second place, Excellent work. Thunderstorms all around us and heavy rain made it tuff on the low bands, thankfully

we had a great crew that worked through the crashes and made things happen!"

In other notable results, AG4W came in fourth in SOU-MIX-HP: "It was nice to see conditions were good on 80-15 meters. I still have some issues with FT4 with one acknowledgement. I will be interested to see how many log errors there are. When RTTY is good, rates are much faster than FT4, so I tried to stick with RTTY unless the rate dropped." Steve, KT4Q, was seventh, saying the Roundup "has become one of my favorite contests. Always a way to improve my score but this was my best effort yet. I enjoy the FT8/FT4 aspect of the contest. Very much a tossup as to which is faster to log contacts. When one digital mode slows, you can rely on the other." In low power Ray, WQ5L, (fifth overall) like many mixers stuck with "RTTY and FT4 only. Wish I had more time for this one as conditions seemed pretty good, especially on 20 with short skip continuing into the evening. QRN from nearby t-storms was annoying at times. Worked all states except ND (never heard) and missed some of the rarer Canadian mults. 15 meters provided most of the DX mults."

Jim and Bert operated W4TMO to fifth in MSLP, where "tree cutting near tower at N4CW forced last minute change to use my station as remote op. Missed first few hours with technical problems (luv ya Murphy). Once ironed out, we had some fun with 100 watts and a Windom antenna." Nice! And NA5NN (at W5UE) was fourth in M2, with a "goal going in to exceed the NA5NN M/2 score from last year when we established the M/2 W5 Call Area/Mississippi record.. Accomplished that by a considerable margin. We took our usual casual approach, both of us sleeping several hours Saturday night... Red Beans and rice courtesy of W5UE's wife Saturday evening probably contributed to that..." And hopefully avoiding recreating the campfire scene from Blazing Saddles...

Don, N4ZZ, (ninth place SOU-RTTY-HP) had "a whole lot of fun. Really enjoyed the exchange which is perfect for so2r. I wish we could have a summer one in addition to this one." Us too!

#### **Northeast Region**

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

Maritime and Quebec Se	ections)	
AA3B	274,944	SO-RTTY-HP
AE1P	128,688	SO-RTTY-HP
NG1M	118,919	SO-RTTY-HP
K5ZD	100,164	SO-RTTY-HP
NN2NN	98,124	SO-RTTY-HP
КЗАЈ	105,502	SO-RTTY-LP
K3RWN	80,808	SO-RTTY-LP
NN1D	71,825	SO-RTTY-LP
AH2O	63,630	SO-RTTY-LP
W1QK	60,705	SO-RTTY-LP
K2YG	34,672	SO-RTTY-QRP
KO3T	10,034	SO-RTTY-QRP
WW2G (WU2M, op)	7,872	SO-RTTY-QRP
VE9AA	726	SO-RTTY-QRP
NA3M	162,992	SOU-MIX-HP
KE2D	81,282	SOU-MIX-HP
WA3AAN	77,896	SOU-MIX-HP
NY3B	59,996	SOU-MIX-HP
NE3F	45,496	SOU-MIX-HP
VE2CSM	78,302	SOU-MIX-LP
KC2WUF	47,502	SOU-MIX-LP
VE2HEW	39,732	SOU-MIX-LP
NS2N	25,872	SOU-MIX-LP
N1EN	23,250	SOU-MIX-LP
N8URE	6,321	SOU-MIX-QRP
N1EK	42,254	SOU-DIG-HP
W2TT	36,852	SOU-DIG-HP
VA1MM	5,320	SOU-DIG-HP
W1UE	107,046	SOU-DIG-LP
KC3PIB	48,822	SOU-DIG-LP
WA2BOT	48,128	SOU-DIG-LP
AB1J	47,971	SOU-DIG-LP
W3PAX	41,676	SOU-DIG-LP
КЗММ	286,488	SOU-RTTY-HP
N2WK	193,421	SOU-RTTY-HP
N3QE	180,500	SOU-RTTY-HP

W3LL	178,704	SOU-RTTY-HP
N1QD (@K1KP)	130,250	SOU-RTTY-HP
W3KB	52,812	SOU-RTTY-LP
K2DFC	49,674	SOU-RTTY-LP
N3AM	40,125	SOU-RTTY-LP
K3NO	32,400	SOU-RTTY-LP
W3MAM	27,459	SOU-RTTY-LP
KD2EFR	6,862	SOU-RTTY-QRP
NY6DX	131,322	MSHP
K3CCR	, 75,936	MSHP
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-
W1OP	69,460	MSLP
NJ1F	9,600	MSLP
N7ECM	9,234	MSLP
W1FM	3,045	MSLP
WA3EKL	06.255	M2
_	96,255	
WB8PKK	84,600	M2
W3GH	223,608	MM
NF3R	208,376	MM

Capping off the regional wrap-up with the Northeast sporting SIX first place finishes! We've got Bud, AA3B, in SO-RTTY-HP (new overall SO-RTTY-HP record), Hugh, K2YG, in SO-RTTY-QRP (new Hudson Division record), Sylvain, VE2CSM, in SOU-MIX-LP (new Canada record), Tyler, K3MM, in SOU-RTTY-HP (new Atlantic Division record), and W3GH in MM, who simply noted "Had big fun."

First place SOU-DIG-LP (and new overall record!) Dennis, W1UE, at W1KM had "finally got the Remote Station setup for SO2R, but only had one linear available, so I decided to do a Low Power effort. 15m had a reasonable opening, with Sunday being better than Saturday. 10M had signals, but no one playing in the contest. Since Roundup has a non-standard Digital exchange, trying to contact ops not in the contest often resulted in endless repeats, despite my sending the RR message. It was easier not to try and work them in the first place. Still, a fun 22 hours over the weekend! WA2BOT in fifth place reported "the contest started off slowly due to a series of technical challenges. Yes, Murphy was an optimist. Just like 2021, FT4 dominated my contest QSOs. 69% of all my contest contacts were made using FT4 with the majority of the QSOs with US/CA stations and a handful of stations from Europe and Japan. I wish our friends outside of North America received the memo about looking for QSOs on FT4. For 2023 it would be appreciated if the ARRL could also suggest a FT4 frequency for each band for the contest just like they did for FT8. Maybe someone could help get the word out to everyone who is a part of the RTTY contest community to look for QSOs using FT4.

"So where was everyone? I kept switching bands looking for people and I kept on seeing the same familiar callsigns. While I am grateful for the introduction of this new category in 2021, it would be more fun if there was more depth to the number of unique stations operating FT4/FT8. This said, it was refreshing to be able to work DX on 3.590, 7.080, 14.130 and 21.130. Maybe 2023 will be the year we can experience FT4 contest QSOs on 10 meters. I am grateful to everyone I was able to work on at least 3 bands. I hope next year it will become more common to work the same station on 4 bands."

Sixth place SOU-DIG-LP Ken, AB1J, "wasn't planning to do this contest until WØLSD emailed me to find out how I was going to enter. I'd entered last year, all FT, but forgot about it and had never checked my result. I didn't even know there was a separate digital v. RTTY category. Ken's email renewed my interest and after much emotional turmoil, I decided to enter again in the digital category. I regard it as my "Breaking Bad" moment. I think Ken would agree. It was almost all FT4. And I have remorse."

Sixth place SO-RTTY-HP Neil, AE1P, in New Hampshire "wanted to best his previous RU score, and get 1000 q's... did both, so no complaints... Wasted about 2 hours Sunday looking for AK, never could hear em and only worked one HI station on 15m. And not a lot of EU or SA for mults, I guess I just wasn't hearing them, but there sure were a lot of US stations on." KD2EFR had a nice score for second in SOU-RTTY-ORP.

In Second place, and also QRP, Stephen, N8URE, in SOU-MIX-QRP observed "On 20m, FT4 must be the definition of a congested channel! Even working the edges of the window didn't make contacts any easier. RTTY still worked better despite being QRP. I'm not sure whether it's because the RTTY stations are using higher gain antennas or there's just less QRM. On 80m where my EIRP is even worse, FT4

worked better, and I'm guessing the smaller region of propagation means less QRM. DX was not as good as during the WW RTTY contest, which hurt the multipliers."



Mike Jacoby, N3MA, placed seventh in the Eastern Pennsylvania section in the Single Operator, RTTY-Only, Low Power category. Mike built the Heathkit SB-610 in 1972. [Mike Jacoby, N3MA, photo]

#### **Score Reductions and Golden Logs**

Like last year there is great disparity in error rates and score reductions between RTTY logs and FT logs. I did a little math... RTTY-only logs across all categories averaged 9.1% score reduction, while FT-only logs averaged 15.0%! And you'll see in the table below there were very few golden logs outside of RTTY-only categories, only 5 out of 38. I suspect the understanding over what constitutes a properly logged FT contest QSO continues to be an issue.

It's also interesting to note that power matters. Score reduction in HP categories varied between an average of 6.1% to 9.6%, while LP varied from 9.1% to 15.1% and QRP varied from 10.2% to 27.3% - the higher numbers being in the DIG categories. High scoring stations in general do better than the average - for example, RTTY-only leaders typically see 3-5% reduction - but the DIG and MIX categories still see higher reductions than that.

Anyway, a Golden Log is arbitrarily defined as a log with no errors and with at least 100 QSOs. Historically the top logs have always had around 300-400 QSOs, but this year bucked that trend.

Congratulations to this year's top Golden Log, submitted by John, KEØYI, with 230 QSOs and a respectable 11,960 points in the Single Op RTTY HP category. This year we have two repeat appearances in this listing. Last year N6VH and K6BIR also had Golden Logs with 150 and 214 QSOs respectively. Keep up the good work!

#### **Golden Logs**

- "		_	
Call	Category	Score	QSOs
KEØYI	SO-RTTY-HP	11,960	230
WØDC	SO-RTTY-LP	12,644	218
N2RC	SOU-RTTY-HP	16,380	210
KIØJ	SOU-RTTY-LP	9,660	210
VE3KJQ	SO-RTTY-QRP	10,300	206
VE3VSM	SO-RTTY-LP	11,800	200
N3CKI	SOU-DIG-LP	11,904	192
7N2UQC	SO-RTTY-LP	10,070	190
NSØM	SO-RTTY-HP	7,695	171
PD8DX	SOU-DIG-LP	9,519	167
W8KRZ	SO-RTTY-LP	9,512	164
N6VH	SOU-RTTY-LP	8,000	160
K6BIR	SO-RTTY-LP	7,854	154
VE6SPS	SO-RTTY-LP	6,000	150
KT4DW	SO-RTTY-LP	6,149	143
KCØRET	SOU-RTTY-HP	5,720	143
N3MK	SOU-MIX-HP	6,950	139
VA7ZM	SO-RTTY-LP	5,838	139
W8WTS	SO-RTTY-LP	5,934	138
IU4JJP	SOU-RTTY-LP	6,713	137
KB7AZ	SOU-RTTY-HP	9,520	136
NN1SS	SOU-RTTY-HP	6,800	136
WØTY	SO-RTTY-HPB25	4,995	135
K600	SO-RTTY-QRP	6,251	133
LA5LJA	SOU-RTTY-LP	6,500	130
NQ7R	SO-RTTY-LP	6,223	127
VA3TTB	SO-RTTY-LP	6,096	127
WB8EJN	SOU-DIG-LP	4,712	124
N1RDN	SO-RTTY-LP	6,100	122
WA5LXS	SOU-RTTY-HP	4,329	111
EA3HKA	SOU-RTTY-LP	3,300	110
K2EJ	SO-RTTY-HP	4,280	107
PC2K	SOU-DIG-LP	4,876	106
K8VT	SO-RTTY-LP	4,452	106
W6QU	SO-RTTY-QRP	4,515	105
KA6W	SO-RTTY-HP	4,444	101
KT8X	SO-RTTY-LP	4,500	100
NN4NT	SO-RTTY-HP	4,400	100

#### **DX Results**

DX Participation, by Continent					
Continent	2018 logs	2019 logs	2020 logs	2021 logs	2022 logs
Africa	5	8	4	3	4
Asia	117	209	152	150	153
Europe	490	683	620	636	607
North America (non W/VE)	22	18	27	17	40
Oceania	33	69	40	47	41
South America	26	71	40	31	47
Total logs	693	1072	883	884	892

DX participation was once again flat as compared to last year, but this time with DX in both Americas trending up, but Europe and Oceania trending down - the opposite of last year. 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	
ZF1A (W9KKN, op)	331,680
OK7W	201,308
9A5W	191,436
F6AGM	153,360
PY2MNL	120,990
OZ11A	87,859
KH6ZM	80,880
DL3BQA	76,659
GW5NF	73,842
YL2CI	67,599
Single Operator, RTTY Only, Low Power	

OK1WCF	100,796
HI3T	98,022
IC8TEM	73,206
F5BEG	58,140
UB7K	47,783
KP4JRS	46,250
PY2NY	43,882
PZ5RA	40,560
IK2BUF	39,336
TG9ANF	35,287

#### Single Operator, RTTY Only, QRP

UA3QJJ	17,278
TI2YO	17,228
SP4NKJ	10,718
SN3ØWOSP (SP2UUU, op)	5,032
EW8G	3,219
EA3F	2,030
UD2F	1,886
OK7PZ	1,596
PU2YMH	1,540
OK2BXW	1,342

#### Single Operator Unlimited, Mixed Mode, High Power

	_
5B4AMM	117,216
YO9HP	64,944
YQ6A (YO6BHN, op)	55,335
IK4UOA	32,760
OZ1FHU	27,000
LZ1ZJ	25,547
RT9A	21,861
JA1WSK	16,940
IZ4FUE	16,066
IK5FKF	15,691

# Single Operator Unlimited, Mixed Mode, Low Power

EW7B	41,791
YV4ABR	41,680
2EØINN	33,726
SP3EMA	25,270
Z36W	24,455
S56A	21,508
G1P (MØIEP, op)	16,432
RN5AA	14,000
RA3FD	12,838
SP2FOV	12,152

#### Single Operator Unlimited, Mixed Mode, QRP

RV3DBK	2,072
NH6O	442
7L4IOU	63

#### Single Operator Unlimited, Digital Only, High Power

CT2FEY	43,596
KL7TC	38,346
IK2TDM	35,700
UA6CE	18,981
OH3EX	11,224
GØHDB	10,602

LU6ETB	8,533	HI3K	32,370
RU6YJ	8,520		5_,55
PA6AA (PB7Z, op)	, 7,956	Single Operator Unlimited,	RTTY Only, QRP
JA1EPJ	5,625	RM5F	29,184
		CM3EFM	8,007
Single Operator Unlimited, Digital O	nly, Low Power	JG1LFR	2,592
DG5LP	26,568	PE2K	2,160
NP4TX	24,069	JHØDUG	49
OZ1ADL	22,650		
CO7HNS	21,886	Multioperator, Single Trans	smitter, High Power
CO7DSR	21,280	9A5Y	186,368
9A5ST	15,753	UZ2I	119,175
DL9SAD	15,075	F8KCF	74,672
LZ2INP	14,000	OK7O	62,916
LZ2JA	13,454	DL4A	19,460
YO4RDW	12,201	VR2CC	17,544
		OH3D	5,880
Single Operator Unlimited, Digital O	nly, QRP	VK2W	162
PA3EOU	10,865		
DM8MH	2,730	Multioperator, Single Trans	smitter, Low Power
NP2Q	2,117	S57ZT	26,460
R3IBT	1,920	XE2N	4,601
BI1EIH	65	9A7B	3,168
JA1KPF	20	OK1OFM	55
JE1ILP	12		
		Multioperator, Two Transn	nitter
Single Operator Unlimited, RTTY On	ly, High Power	YU5R	106,782
SN7Q (SP7GIQ, op)	201,128		
UW1M	176,295	Bill, W9KKN, remotely op	_
EA4GOY	140,346	place in SO-RTTY-HP, an	
M7T (G3YYD, op)	114,478	record - almost doubling the	, ,
CX7SS	90,858	OK7W (this year's second quite a writeup on 3830sca	-
IK3ORD	85,144	tried RTTY RU from ZF in	
OH2HAN	80,999	things didn't quite go as nl	

For one thing, my radios didn't work as they were supposed to, but for another thing, I wasn't prepared. I didn't know the station, I didn't know the openings, I didn't know the contest as well as I thought I did. The last few years I've grown a bit in contesting -- I've changed my attitudes about several little things in terms of pre-contest prep, strategy, and such. With a couple of CQWW RTTY (and a CQ WPX) under my belt, I felt like the next attempt would be different.

In 2021, as much as I wanted it, I didn't get the chance to retry my RTTY RU effort from ZF. Even

9A5D (9A3ID, op)

G3ORY

HG5D (HA8QZ, op)

, , , , , , , , , , , , , , , , , , ,	
EA4AOC	102,592
UR7GO	84,656
DF2SD	81,852
F4DSK	68,782
EA4BAS	50,050
SV2AEL	49,217
PA3DUU	46,023
YT2U	38,313
UT4LW	32,863

76,232 67,648

63,168

though the remote was well-established and I was able to take advantage of it earlier in 2020 for WW RTTY, due to some local responsibilities, I ended up doing the contest in 2021 from Northern California.

So, 2022 was my chance to make it right. I studied the logs that were available (let's face it, most of them were P49X logs.) I watched the openings for a few days and figured out when stuff was supposed to happen, and this time, I showed up determined and ready to leave a mark.

"The station has a few bruises from years of us not being there, namely, not all of the rotors turn as well as they used to (some of them not at all) but that's alright, we've got things set the way we like them. In terms of the remote GHE control and the remoterig network quality, we've made steady improvements as time has gone on -- everything that was expected to work worked flawlessly.

"Further, hoping for not another repeat from CQWW, I told myself that I WOULD NOT UNDER ANY CIRCUMSTANCE look at the scoreboard before the contest was over. I was certainly tempted a few times, but I made it. I also really wanted to peek at my own spots on the RBN or some other things to see how propagation was working, but I had to keep that all closed on this computer -- choosing to operate in the unassisted category.

A few of my friends did let a bit of the secret out --The operation was going as smoothly as it felt like it was going, which is a good feeling.

"The propagation was interesting -- None of the bands were particularly amazing, of course I got the most mileage out of 15/20/40, but 20 felt a bit weak, in particular to EU, which the totals reflect. I dare not touch 10m on Saturday, but on Sunday, starting around 15z, I tried CQing every 15 minutes or so (for 5 minutes at a time.) Eventually, around 16z, I started getting some bites -- pretty much all of them were in W1/W2 (and the occasional W3), but all of them were extremely loud.

I didn't hear anyone else on 10m and when that supply dried up, that was it. I tried a few more times throughout the afternoon and found that this spotlight opening kept traveling west, leaving behind the stations east of it. It wasn't enough rate to justify keeping a radio there unless I had a 3rd radio, which I didn't -- just two remote radios.

"Without a remote pan adapter, I mostly ran with 2BSIQ (hence the inflated QSO total at the expense of multipliers.) I can definitely tune stations by ear, but I found that it takes a much longer time than just waiting for a caller and that a panadapter is really an important tool unassisted when doing search and pounce on the other radio.

There were also definitely times where I didn't get an answer for a long time because I had probably hit the saturation of the band and worked everyone that was going to call me -- during such times I ended up just going to one of the marginal bands (40 or 10 while 15 and 20 were the primary bands) for a sudden burst of activity.

"Anyway, many congratulations to all of the big scores, I'm not going to join the chorus of people exclaiming that FT8/FT4 has ruined RTTY roundup RTTY-only activity just yet. It seems like there are more and more FT\* only contests out there, but it seemed like there were plenty of people around to work; I just don't have the basis of comparison to previous years at this QTH to tell you.

I did note a few people that were clearly new at this (and one can only speculate that maybe they came over from the other modes) --- as always, there are those that send the exchange first to the running station (which I now have a special set of macros to deal with), but there were a few particularly trying moments -- such as people trying to call people I'm working on my frequency, or immediately starting to CQ on my frequency after we had just had a QSO (this isn't the sprint after all =P) -- It's OK, they'll figure it out, but I'll still vigorously defend my frequency. Sometimes all it takes is a storm of repeats on the other radio to lose a frequency -- which is always a tricky part of this game."

Standa, OK7W, (second place overall SO-RTTY-HP) "enjoyed 2BSIQ operation a lot (as usual), it's much more fun as the synchronization is more challenging and rates are higher. Even quite complicated SO2R setup worked most of the time -thanks to Jan, OK2ZAW, and his QRO.CZ

company for providing such reliable technical solution. Thanks to Pavel, OK1MU, for great support and all the callers for lots of nice QSOs,"

TI2YO missed first place overall in SO-RTTY-QRP by a mere 50 points, but a great showing nonetheless: "This is my first RTTY contest in QRP mode. QRP is like fishing in a lagoon, where you see the fish, but it is difficult for them to catch the bait. In other words, you see everyone, but not

bait. In other words, you see ev	eryone, but r	not	Only, QRP	PA3EOU	10,865
everyone sees me. I like it." As	well you sho	ould!	Single Operator Unlimited, RTTY	SN7Q (SP7GIQ,	10,603
			Only, High Power	op)	201,128
<b>Continental Winners</b>			Single Operator Unlimited, RTTY	ΟΡ)	201,120
Continental Williers			Only, Low Power	EA4AOC	102,592
Africa			Single Operator Unlimited, RTTY		,
			Only, QRP	RM5F	29,184
Single Operator, RTTY Only, High Power	EA8DO	11,529	Multioperator, Single Transmitter,		-, -
Single Operator, RTTY Only, Low	LAODO	11,329	High Power	9A5Y	186,368
Power	EA8AQV	10,360	Multioperator, Single Transmitter,		
Single Operator Unlimited, Digital	LHOHQV	10,500	Low Power	S57ZT	26,460
Only, High Power	ZD7BG	3,182	Multioperator, Two Transmitter	YU5R	106,782
Asia Single Operator, PTTV Only, High			North America		
Single Operator, RTTY Only, High Power	JA7ACM	15,466	Single Operator, RTTY Only, High	ZF1A (W9KKN,	
Single Operator, RTTY Only, Low	JA/ACIVI	13,400	Power	op)	331,680
Power	JA1BJI	25,456	Single Operator, RTTY Only, Low		
			Power	HI3T	98,022
Single Operator, RTTY Only, QRP	JH7UJU	846	Single Operator, RTTY Only, QRP	TI2YO	17,228
Single Operator Unlimited, Mixed		117 216	Single Operator Unlimited, Mixed		
Mode, High Power	5B4AMM	117,216	Mode, Low Power	KL7DE	5,577
Single Operator Unlimited, Mixed Mode, Low Power	JH4UTP	6,622	Single Operator Unlimited, Digital		
Single Operator Unlimited, Mixed	JH401P	0,022	Only, High Power	KL7TC	38,346
Mode, QRP	7L4IOU	63	Single Operator Unlimited, Digital		
Single Operator Unlimited, Digital	714100	05	Only, Low Power	NP4TX	24,069
Only, High Power	JA1EPJ	5,625	Single Operator Unlimited, Digital		
Single Operator Unlimited, Digital	37(1213	3,023	Only, QRP	NP2Q	2,117
Only, Low Power	JA7WXL	6,375	Single Operator Unlimited, RTTY		
Single Operator Unlimited, Digital	•///-	3,373	Only, High Power	NP2X	15,930
Only, QRP	BI1EIH	65	Single Operator Unlimited, RTTY	111214	22.270
Single Operator Unlimited, RTTY			Only, Low Power	HI3K	32,370
Only, High Power	RAØFLP	22,260	Single Operator Unlimited, RTTY	CNADEENA	0.007
Single Operator Unlimited, RTTY		•	Only, QRP	CM3EFM	8,007
Only, Low Power	RWØSR	5,016	Multioperator, Single Transmitter, Low Power	XE2N	4 601
Single Operator Unlimited, RTTY			Low Power	AEZIN	4,601
Only, QRP	JG1LFR	2,592			
Multioperator, Single Transmitter,			Oceania		
High Power	VR2CC	17,544	Single Operator, RTTY Only, High		
			Power	KH6ZM	80,880
Europe			Single Operator, RTTY Only, Low		
Single Operator, RTTY Only, High			Power	YC1AYO	7,626
Power	OK7W	201,308	Single Operator, RTTY Only, QRP	YC4SIZ	476
Single Operator, RTTY Only, Low			Single Operator Unlimited, Mixed		
Power	OK1WCF	100,796	Mode, Low Power	4F3BZ	11,745
Single Operator, RTTY Only, QRP	UA3QJJ	17,278	Single Operator Unlimited, Mixed		
Single Operator, NTTT Only, QNF	مريري	17,270	Mode, QRP	NH6O	442

Single Operator Unlimited, Mixed

Single Operator Unlimited, Mixed

Single Operator Unlimited, Mixed

Single Operator Unlimited, Digital

Single Operator Unlimited, Digital

Single Operator Unlimited, Digital

YO9HP

EW7B

**RV3DBK** 

CT2FEY

DG5LP

64,944

41,791

2,072

43,596

26,568

Mode, High Power

Mode, Low Power

Only, High Power

Only, Low Power

Mode, QRP

Single Opera	tor Unlimited, Digital			N42	Mark Culf	VA/E NINI	40.200
Only, Low Po		VL3M	2,628	M2	West Gulf	W5NN	49,306
• •	tor Unlimited, RTTY		·	MM	Great Lakes	W8BAP	31,330
Only, High Po		VJ4T	30,732	MM	Rocky Mountain	K5LRW	14,045
Single Opera Only, Low Po	tor Unlimited, RTTY	VJ5W (VK5GR,	1,410	MSHP	Hudson	NY6DX	131,322
	or, Single Transmitter,	op)	1,410	SO-RTTY-HP	Atlantic	AA3B	274,944
High Power	,	VK2W	162	SO-RTTY-HP	Central	AI9T	191,019
				SO-RTTY-HP	Dakota	WØPR	103,103
South Ameri	ca			SO-RTTY-HP	Delta	K5XH	133,200
Single Opera	tor, RTTY Only, High			SO-RTTY-HP	Northwestern	W7YAQ	72,720
Power		PY2MNL	120,990	SO-RTTY-HP	Rocky Mountain	N5HC	134,352
Single Opera	tor, RTTY Only, Low	PY2NY	43,882	SO-RTTY-HP	Southwestern	N7GP	102,396
	tor, RTTY Only, QRP	PU2YMH	1,540	SO-RTTY-HP	West Gulf	AD5XD	105,570
	tor Unlimited, Mixed	1 02110111	1,540	SO-RTTY-HP	Canada	VE3JI	84,735
Mode, Low P		YV4ABR	41,680	SO-RTTY-LP	Delta	WB5BHS	50,160
• .	tor Unlimited, Digital			SO-RTTY-LP	Great Lakes	KM6Z	84,480
Only, High Po		LU6ETB	8,533	SO-RTTY-LP	Hudson	AH2O	63,630
Only, Low Po	tor Unlimited, Digital	PP5TI	759	SO-RTTY-LP	Midwest	N7WY	77,212
• •	tor Unlimited, RTTY	11311	733	SO-RTTY-LP	Pacific	WB3JFS	43,290
Only, High Po	ower	CX7SS	90,858	SO-RTTY-LP	Rocky Mountain	AA5B	95,684
	tor Unlimited, RTTY			SO-RTTY-LP	Southwestern	WN6K	42,408
Only, Low Po	wer	PY1FI	20,824	SO-RTTY-LP	Canada	VE6BBP	63,294
The Reco	ords			SO-RTTY-QRP	Atlantic	козт	10,034
THE REEL	31 do			SO-RTTY-QRP	Delta	N6MA	11,804
W/VE score	s this year produce	ed a bountiful h	arvest	SO-RTTY-QRP	Great Lakes	KN4QDE	989
	overall category re			SO-RTTY-QRP	Hudson	K2YG	34,672
	cords (versus 86	• •		SO-RTTY-QRP	Northwestern	N7GR	6,288
	ords still unclaimed		•			W6QU	
	ew overall categor tinental records.	y records, as v	well as	CO DTTV ODD	Couthwestern	(W8QZA,	4 5 1 5
32 Hew Con	illileritai records.			SO-RTTY-QRP SO-RTTY-ORP	Southwestern West Gulf	op)	4,515
That said, w	ve are looking at ar	nother inflection	n point			WE6EZ	19,370
	keeping as we go			SOU-DIG-HP	Dakota	KØTLG	10,422
•	up. First, the 2020			SOU-DIG-HP	Midwest	NFØN	14,022
	retired will remair in 2021 or 2022 in			SOU-DIG-HP	Pacific	KW6S	47,334
	carry over to the 2			SOU-DIG-HP	Rocky Mountain	KB1IKC	62,624
	, M2, and MM reco	•		SOU-DIG-HP	Southeastern	K90M	126,378
<b>-</b>			<b>.</b>	SOU-DIG-HP	West Gulf	KG5EIU	31,088
•	rusal, here is a huç erity both the 2020		•	SOU-DIG-LP	Dakota	ACØDA	34,103
	122 records for W			SOU-DIG-LP	Delta	AJ6T	22,360
	nline bits are free!			SOU-DIG-LP	Great Lakes	W4UWC	49,425
Jeff, WK6I		·		SOU-DIG-LP	Midwest	KB3HF	17,766
	Now Division Ro	cords		SOU-DIG-LP	New England	W1UE	107,046
	New Division Re	corus		SOU-DIG-LP	Northwestern	N7UVH	40,524
M2	Delta	NJ4P	356,868	SOU-DIG-LP	Pacific	W6US	11,607
M2	New England	WB8PKK	84,600	SOU-DIG-LP	Roanoke	N3KN	19,008
M2	Northwestern	K7RU	175,600	SOU-DIG-LP	Southeastern	KM4RL	43,120
M2	Pacific	W6YX	307,680	SOU-DIG-LP	West Gulf	NA5M	59,128
M2	Southeastern	NA4DA	180,682	SOU-DIG-QRP	Central	KT8O	9,750
			•	SOU-DIG-QRP	Dakota	KØHW	936

COLL DIC ODD	N 4: do o a a t	KEADDK	002
SOU-DIG-QRP	Midwest	KEØPRK	902
SOU-DIG-QRP	Northwestern	KG7CW	10,070
SOU-DIG-QRP	Pacific	W6CZ	3,219
SOU-DIG-QRP	Rocky Mountain	WØKI	8,668
SOU-DIG-QRP	Southwestern	N6MW	432
SOU-DIG-QRP	Canada	VA4BEN	8,505
SOU-MIX-HP	Atlantic	NA3M	162,992
SOU-MIX-HP	Central	N2BJ	68,646
SOU-MIX-HP	Dakota	NØBAK	36,360
SOU-MIX-HP	Great Lakes	KI6DY	140,672
SOU-MIX-HP	Northwestern	KA6BIM	112,752
SOU-MIX-HP	Pacific	W6SX	104,240
SOU-MIX-HP	Roanoke	KT4Q	102,432
SOU-MIX-HP	Rocky Mountain	NØTA	69,520
SOU-MIX-HP	Southeastern	AG4W	135,184
	Southwestern	KK6P	180,180
SOU-MIX-HP		(W7IV <i>,</i> op)	
SOU-MIX-LP	Central	KB9S	46,725
SOU-MIX-LP	Dakota	NØFJP	19,293
SOU-MIX-LP	Great Lakes	N8CWU	59,760
SOU-MIX-LP	Hudson	KC2WUF	47,502
SOU-MIX-LP	Midwest	KAØBOJ	17,160
SOU-MIX-LP	Southwestern	AA2IL	45,290
SOU-MIX-LP	West Gulf	N5YHF	21,960
SOU-MIX-LP	Canada	VE2CSM	78,302
SOU-MIX-QRP	Atlantic	N8URE	6,321
SOU-MIX-QRP	Dakota	NØUR	51,552
SOU-MIX-QRP	Great Lakes	K8ZT	2,646
SOU-MIX-QRP	Pacific	KE6YLH	2,975
SOU-MIX-QRP	Southeastern	KD4ADC	4,998
SOU-RTTY-HP	Atlantic	кзмм	286,488
SOU-RTTY-HP	Central	к9СТ	267,197
SOU-RTTY-HP	Dakota	кØMD	137,994
SOU-RTTY-HP	Delta	W9SN	209,536
SOU-RTTY-HP	Pacific	N6WM	218,880
SOU-RTTY-HP	Southeastern	AA8R	110,966
SOU-RTTY-HP	West Gulf	WBØTEV	85,680
SOU-RTTY-LP	Central	WT9U	126,672
SOU-RTTY-LP	Delta	AA5AU	228,750
SOU-RTTY-LP	Midwest	W7RY	56,529
SOU-RTTY-LP	Northwestern	K7QA	104,808
SOU-RTTY-LP	Pacific	WQ6X	13,053
SOU-RTTY-LP	Southwestern	N7WLC	20,532
SOU-RTTY-LP	West Gulf	KG5VK	61,470
SOU-RTTY-LP	Canada	VE3MGY	86,730
SOU-RTTY-QRP	Atlantic	KD2EFR	6,862
SOU-RTTY-QRP	Pacific	K6EI	
			20,306
SOU-RTTY-QRP	Southeastern	W4ER	5,616

New	DX	Cont	inental	Records

New DX Continental Records							
Category	Continent	Call	Score				
SO-RTTY-HP	Europe	OK7W	201,308				
		ZF1A (W9KKN,					
SO-RTTY-HP	North America	op)	331,680				
SO-RTTY-HP	Oceania	KH6ZM	80,880				
SO-RTTY-HP	South America	PY2MNL	120,990				
SO-RTTY-LP	Europe	OK1WCF	100,796				
SO-RTTY-LP	North America	HI3T	98,022				
SO-RTTY-LP	South America	PY2NY	43,882				
SO-RTTY-QRP	North America	TI2YO	17,228				
SO-RTTY-QRP	Oceania	YC4SIZ	476				
SO-RTTY-QRP	South America	PU2YMH	1,540				
SOU-MIX-HP	Asia	5B4AMM	117,216				
SOU-MIX-LP	North America	KL7DE	5,577				
SOU-MIX-LP	Oceania	4F3BZ	11,745				
SOU-MIX-LP	South America	YV4ABR	41,680				
SOU-MIX-QRP	Oceania	NH6O	442				
SOU-DIG-HP	Africa	ZD7BG	3,182				
SOU-DIG-HP	Europe	CT2FEY	43,596				
SOU-DIG-HP	North America	KL7TC	38,346				
SOU-DIG-HP	South America	LU6ETB	8,533				
SOU-DIG-LP	North America	NP4TX	24,069				
SOU-DIG-LP	Oceania	VL3M	2,628				
SOU-DIG-QRP	Europe	PA3EOU	10,865				
SOU-DIG-QRP	North America	NP2Q	2,117				
SOU-RTTY-HP	Oceania	VJ4T	30,732				
SOU-RTTY-HP	South America	CX7SS	90,858				
SOU-RTTY-LP	Asia	RWØSR	5,016				
SOU-RTTY-LP	Europe	EA4AOC	102,592				
SOU-RTTY-LP	South America	PY1FI	20,824				
SOU-RTTY-QRP	Asia	JG1LFR	2,592				
SOU-RTTY-QRP	Europe	RM5F	29,184				
SOU-RTTY-QRP	North America	CM3EFM	8,007				
M2	Europe	YU5R	106,782				
	·						

Overall Records - DX						
	(new reco	rds in bold)				
Call	Score	Category	Cty	Year		
P49X (WØYK, op)	468,720	SOHP	P4	2015		
НІЗТЕЈ	183,885	SOLP	НІ	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		

7F1 A (\AIOIZIZA)\	224 600	CO DTTV US	75	2022	71.41011	245	COLL MALV ODD	10	2024
ZF1A (W9KKN, op)	331,680	SO-RTTY-HP	ZF	2022	7L4IOU	345	SOU-MIX-QRP	JA	2021
OK1WCF	100,796	SO-RTTY-LP	OK	2022	JO7KMB	13,969	SOU-DIG-HP	JA	2021
F5BEG	37,101	SO-RTTY-QRP	F	2021	BG8GAM	12,152	SOU-DIG-LP	BY	2021
5B4AMM	117,216	SOU-MIX-HP	5B	2022	TA3OWL	931	SOU-DIG-QRP	TA	2021
EW7B	50,310	SOU-MIX-LP	EU	2021	P3X (5B4AMM, op)	95,034	SOU-RTTY-HP	5B	2021
PC2F	7,956	SOU-MIX-QRP	PA	2021	RWØSR	5,016	SOU-RTTY-LP	UA9	2022
CT2FEY	43,596	SOU-DIG-HP	СТ	2022	JG1LFR	2,592	SOU-RTTY-QRP	JA	2022
SV2AEL	30,178	SOU-DIG-LP	SV	2021	RW9C	100,548	MSHP	UA9	2002
PA3EOU .	10,865	SOU-DIG-QRP	PA	2022	UO6P	26,904	MSLP	UN	2005
SN7Q (SP7GIQ, op)	218,375	SOU-RTTY-HP	SP	2021					
WP3C	106,488	SOU-RTTY-LP	KP4	2021			rope 	1	l
RM5F	29,184	SOU-RTTY-QRP	UA	2022	G6PZ (UT5UDX, op)	278,528	SOHP	G	2013
PJ2N	279,554	MSHP	PJ2	2012	F6IRF	130,806	SOLP	F	2006
KP2D	171,454	MSLP	KP2	2007	F5BEG	49,036	SOQRP	F	2020
YU5R	106,782	M2	YU	2022	LZ8E (LZ2BE, op)	255,080	SOUHP	LZ	2014
					IT9BLB	122,428	SOULP	1	2016
Caustin					YO9BCM	12,656	SOUQRP	YO	2020
Contine		ords by Contine	nt		OK7W	201,308	SO-RTTY-HP	ОК	2022
0.11		rds in bold)			OK1WCF	100,796	SO-RTTY-LP	ОК	2022
Call	Score	Category	Cty	Year	F5BEG	37,101	SO-RTTY-QRP	F	2021
		rica	1		YO9HP	99,327	SOU-MIX-HP	YO	2021
V5/DL9NDS	183,655	SOHP	V5	2014	EW7B	50,310	SOU-MIX-LP	EU	2021
5C5W (CN8KD, op)	146,133	SOLP	CN	2009	PC2F	7,956	SOU-MIX-QRP	PA	2021
EA8PT	27,440	SOUHP	EA8	2020	CT2FEY	43,596	SOU-DIG-HP	СТ	2022
EA8OM	50,140	SOULP	EA8	2014	SV2AEL	30,178	SOU-DIG-LP	SV	2021
D4Z (IK2NCJ, op)	89,688	SO-RTTY-HP	D4	2021	PA3EOU	10,865	SOU-DIG-QRP	PA	2022
EA8OM	17,064	SO-RTTY-LP	EA8	2021	SN7Q (SP7GIQ, op)	218,375	SOU-RTTY-HP	SP	2021
ZD7BG	3,182	SOU-DIG-HP	ZD7	2022	EA4AOC	102,592	SOU-RTTY-LP	EA	2022
СТ9М	206,142	MSHP	CT3	2008	RM5F	29,184	SOU-RTTY-QRP	UA	2022
CS9Z	51,775	MSLP	CT3	2006	EI7M	219,604	MSHP	EI	2013
					EA1DR	129,840	MSLP	EA	2012
	Anta	rctica		1	YU5R	106,782	M2	YU	2022
DP1POL (DL5XL, op)	19,278	SOHP	CE9	2010					
						North	America		
	Α	sia		1	ZF2WF	246,736	SOHP	ZF	2020
5B4AIF	117,824	SOHP	5B	2012	НІЗТЕЈ	183,885	SOLP	НІ	2009
ZC4LI	73,429	SOLP	ZC4	2012	TG9ADQ	18,018	SOQRP	TG	2020
JH7UJU	240	SOQRP	JA	2020	XE2K	174,570	SOUHP	XE	2014
P3X (5B4AMM, op)	139,810	SOUHP	5B	2017	XE2K	139,314	SOULP	XE	2016
JP1QDH	30,618	SOULP	JA	2014	CO2VE	7,595	SOUQRP	СМ	2020
JG1LFR	3,885	SOUQRP	JA	2020	ZF1A (W9KKN, op)	331,680	SO-RTTY-HP	ZF	2022
JA7IC	17,424	SO-RTTY-HP	JA	2021	НІЗТ	98,022	SO-RTTY-LP	н	2022
JA6GCE	26,791	SO-RTTY-LP	JA	2021	TI2YO	17,228	SO-RTTY-QRP	TI	2022
JA6WFM	3,030	SO-RTTY-QRP	JA	2021	KL7DE	5,577	SOU-MIX-LP	KL	2022
5B4AMM	117,216	SOU-MIX-HP	5B	2022	KL7TC	38,346	SOU-DIG-HP	KL	2022
JH7RTQ	20,448	SOU-MIX-LP	JA	2021	NP4TX	24,069	SOU-DIG-LP	KP4	2022

NP2Q	2,117	SOU-DIG-QRP	KP2	2022
KL7SB	66,123	SOU-RTTY-HP	KL	2021
WP3C	106,488	SOU-RTTY-LP	KP4	2021
СМЗЕГМ	8,007	SOU-RTTY-QRP	СМ	2022
WP2NN	269,008	MSHP	KP2	2013
KP2D	171,454	MSLP	KP2	2007
	Oce	eania		
KH6ZM	163,822	SOHP	KH6	2012
KH6ZM	108,388	SOLP	KH6	2013
KH6ZM	83,472	SOUHP	KH6	2017
KH6ZM	98,212	SOULP	KH6	2016
YB2BNN	140	SOUQRP	YB	2020
KH6ZM	80,880	SO-RTTY-HP	кн6	2022
KH6CJJ	36,180	SO-RTTY-LP	KH6	2021
YC4SIZ	476	SO-RTTY-QRP	YB	2022
4F3BZ	11,745	SOU-MIX-LP	DU	2022
NH6O	442	SOU-MIX-QRP	KH6	2022
DU3TW	6,360	SOU-DIG-HP	DU	2021
VL3M	2,628	SOU-DIG-LP	VK	2022
VJ4T	30,732	SOU-RTTY-HP	VK	2022
YB8RW	2,568	SOU-RTTY-LP	YB	2021
KH7Q	82,104	MSHP	KH6	2005
YB1ALL	34,191	MSLP	YB	2012
	South	America	Т	I
P49X (WØYK, op)	468,720	SOHP	P4	2015
P4ØYL (AI6YL, op)	177,480	SOLP	P4	2012
P49X (WØYK, op)	309,348	SOUHP	P4	2019
YV1KK	167,388	SOULP	YV	2016
PY2MQ	42	SOUQRP	PY	2020
PY2MNL	120,990	SO-RTTY-HP	PY	2022
PY2NY	43,882	SO-RTTY-LP	PY	2022
PU2YMH	1,540	SO-RTTY-QRP	PY	2022
LU5VV	72,474	SOU-MIX-HP	LU	2021
YV4ABR	41,680	SOU-MIX-LP	ΥV	2022
LU6ETB	8,533	SOU-DIG-HP	LU	2022
		i	1/1/	2024
YV5KAJ	14,904	SOU-DIG-LP	YV	2021
CX7SS	14,904 <b>90,858</b>	SOU-DIG-LP SOU-RTTY-HP	CX	2021 2022
			1	
CX7SS	90,858	SOU-RTTY-HP	СХ	2022
CX7SS PY1FI	90,858	SOU-RTTY-HP SOU-RTTY-LP	CX PY	2022
CX7SS PY1FI PJ2N	<b>90,858 20,824</b> 279,554	SOU-RTTY-HP SOU-RTTY-LP MSHP	CX PY PJ2	<b>2022 2022</b> 2012
CX7SS PY1FI PJ2N	90,858 20,824 279,554 119,886	SOU-RTTY-HP SOU-RTTY-LP MSHP	CX PY PJ2	<b>2022 2022</b> 2012

	Overall Records - W/VE							
	(new 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				
AA3B	274,944	SO-RTTY-HP	EPA	2022				
W4AAA (KK9A,								
ор)	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	51,552	SOU-MIX-QRP	MN	2022				
W1UE	141,504	SOU-DIG-HP	EMA	2021				
W1UE	107,046	SOU-DIG-LP	EMA	2022				
WM5L	10,945	SOU-DIG-QRP	WTX	2021				
KI1G	316,416	SOU-RTTY-HP	RI	2021				
AA5AU	228,750	SOU-RTTY-LP	LA	2022				
K6EI	20,306	SOU-RTTY-QRP	SCV	2022				
NØNI	298,934	MSHP	IA	2014				
NØNI	210,500	MSLP	IA	2010				
NA5NN	55,272	MSQRP	MS	2020				
NJ4P	356,868	M2	TN	2022				
W3GH	240,218	MM	WPA	2021				

Division Records						
	(new re	cords in bold)				
	Atlan	tic Division				
Call	Score	Category	Section	Year		
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		
ААЗВ	274,944	SO-RTTY-HP	EPA	2022		
КЗАЈ	106,428	SO-RTTY-LP	MDC	2021		
козт	10,034	SO-RTTY-QRP	EPA	2022		
NA3M	162,992	SOU-MIX-HP	MDC	2022		
WA3AAN	60,630	SOU-MIX-LP	EPA	2021		
N8URE	6,321	SOU-MIX-QRP	MDC	2022		
AG2J	55,752	SOU-DIG-HP	SNJ	2021		
WA2BOT	66,833	SOU-DIG-LP	NNY	2021		
WA9QXY	836	SOU-DIG-QRP	WPA	2021		

W28484	206 400	COLL DITTY LID	NADC	2022
КЗММ	286,488	SOU-RTTY-HP	MDC	2022
WW3S	139,040	SOU-RTTY-LP	WPA	2021
KD2EFR	6,862	SOU-RTTY-QRP	WNY	2022
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
	Centr	al Division		
AI9T	218,377	SOHP	IL	2013
N9CK	192,120	SOLP	WI	2015
K9CT	234,438	SOUHP	IL	2013
WE9V	187,354	SOULP	WI	2014
AI9T	191,019	SO RTTY ID	IL INI	2022
K9WX	112,792	SO-RTTY-LP	IN	2021
K9AWM	3,034	SO-RTTY-QRP	IN 	2021
N2BJ	68,646	SOU-MIX-HP	IL	2022
KB9S	46,725	SOU-MIX-LP	WI	2022
NE9U	27,145	SOU-DIG-HP	WI	2021
N7ZZ	33,152	SOU-DIG-LP	WI	2021
KT8O	9,750	SOU-DIG-QRP	IN	2022
К9СТ	267,197	SOU-RTTY-HP	IL	2022
WT9U	126,672	SOU-RTTY-LP	IN	2022
K9NS	222,176	MSHP	IL	2003
K9NR	128,810	MSLP	IL	2015
	Dako	ta Division	T	
KØIR	Dako 196,000	ta Division SOHP	MN	2010
KØIR NØAT			MN MN	2010
•	196,000	SOHP		
NØAT	196,000 199,200	SOHP SOLP	MN	2013
NØAT W6GMT	196,000 199,200 2,460	SOHP SOLP SOQRP	MN MN	2013
NØAT W6GMT KØCN	196,000 199,200 2,460 91,300	SOHP SOLP SOQRP SOUHP	MN MN MN	2013 2020 2018
NØAT W6GMT KØCN NØHJZ	196,000 199,200 2,460 91,300 73,781	SOHP SOLP SOQRP SOUHP SOULP	MN MN MN	2013 2020 2018 2015
NØAT W6GMT KØCN NØHJZ NØUR	196,000 199,200 2,460 91,300 73,781 60,876	SOHP SOLP SOQRP SOUHP SOULP SOUQRP	MN MN MN MN	2013 2020 2018 2015 2020
NØAT W6GMT KØCN NØHJZ NØUR WØPR	196,000 199,200 2,460 91,300 73,781 60,876 103,103	SOHP SOLP SOQRP SOUHP SOULP SOUQRP SO-RTTY-HP	MN MN MN MN MN	2013 2020 2018 2015 2020 2022
NØAT W6GMT KØCN NØHJZ NØUR WØPR KØTI	196,000 199,200 2,460 91,300 73,781 60,876 <b>103,103</b> 117,990	SOHP SOLP SOUHP SOULP SOUQRP SO-RTTY-HP SO-RTTY-LP	MN MN MN MN MN MN	2013 2020 2018 2015 2020 2022 2021
NØAT W6GMT KØCN NØHJZ NØUR WØPR KØTI NØSTP	196,000 199,200 2,460 91,300 73,781 60,876 103,103 117,990 1,200	SOHP SOLP SOURP SOULP SOUQRP SO-RTTY-HP SO-RTTY-LP SO-RTTY-QRP	MN MN MN MN MN MN MN MN MN	2013 2020 2018 2015 2020 <b>2022</b> 2021 2021
NØAT W6GMT KØCN NØHJZ NØUR WØPR KØTI NØSTP NØBAK	196,000 199,200 2,460 91,300 73,781 60,876 103,103 117,990 1,200 36,360 19,293	SOHP SOLP SOURP SOULP SOUQRP SO-RTTY-HP SO-RTTY-LP SO-RTTY-QRP SOU-MIX-HP	MN	2013 2020 2018 2015 2020 2022 2021 2021 2022 2022
NØAT W6GMT KØCN NØHJZ NØUR WØPR KØTI NØSTP NØBAK NØFJP NØUR	196,000 199,200 2,460 91,300 73,781 60,876 103,103 117,990 1,200 36,360 19,293 51,552	SOHP SOLP SOURP SOULP SOUQRP SO-RTTY-HP SO-RTTY-LP SO-RTTY-QRP SOU-MIX-HP SOU-MIX-LP SOU-MIX-QRP	MN	2013 2020 2018 2015 2020 2022 2021 2021 2022 2022 2022
NØAT W6GMT KØCN NØHJZ NØUR WØPR KØTI NØSTP NØBAK NØFJP NØUR	196,000 199,200 2,460 91,300 73,781 60,876 103,103 117,990 1,200 36,360 19,293 51,552 10,422	SOHP SOLP SOURP SOUHP SOULP SOUQRP SO-RTTY-HP SO-RTTY-LP SO-RTTY-QRP SOU-MIX-HP SOU-MIX-LP SOU-MIX-QRP SOU-DIG-HP	MN	2013 2020 2018 2015 2020 2022 2021 2021 2022 2022 2022
NØAT W6GMT KØCN NØHJZ NØUR WØPR KØTI NØSTP NØBAK NØFJP NØUR KØTLG ACØDA	196,000 199,200 2,460 91,300 73,781 60,876 103,103 117,990 1,200 36,360 19,293 51,552 10,422 34,103	SOHP SOLP SOURP SOUHP SOULP SOUQRP SO-RTTY-HP SO-RTTY-LP SO-RTTY-QRP SOU-MIX-HP SOU-MIX-LP SOU-MIX-QRP SOU-DIG-HP SOU-DIG-LP	MN M	2013 2020 2018 2015 2020 2022 2021 2021 2022 2022 2022
NØAT W6GMT KØCN NØHJZ NØUR WØPR KØTI NØSTP NØBAK NØFJP NØUR KØTLG ACØDA KØHW	196,000 199,200 2,460 91,300 73,781 60,876 103,103 117,990 1,200 36,360 19,293 51,552 10,422 34,103 936	SOHP SOLP SOURP SOUHP SOULP SOUQRP SO-RTTY-HP SO-RTTY-LP SO-RTTY-QRP SOU-MIX-HP SOU-MIX-LP SOU-MIX-QRP SOU-DIG-HP SOU-DIG-LP SOU-DIG-QRP	MN M	2013 2020 2018 2015 2020 2022 2021 2022 2022 2022 2022
NØAT W6GMT KØCN NØHJZ NØUR WØPR KØTI NØSTP NØBAK NØFJP NØUR KØTLG ACØDA	196,000 199,200 2,460 91,300 73,781 60,876 103,103 117,990 1,200 36,360 19,293 51,552 10,422 34,103	SOHP SOLP SOURP SOUHP SOULP SOUQRP SO-RTTY-HP SO-RTTY-LP SO-RTTY-QRP SOU-MIX-HP SOU-MIX-LP SOU-MIX-QRP SOU-DIG-HP SOU-DIG-LP	MN M	2013 2020 2018 2015 2020 2022 2021 2021 2022 2022 2022

Delta Division           KI5XP         266,936         SOHP         LA         2009           AASAU         274,944         SOLP         LA         2012           W9SN         256,053         SOUHP         TN         2016           AA5AU         280,704         SOULP         LA         2015           K5XH         133,200         SO-RTTY-HP         AR         2022           WB5BHS         50,160         SO-RTTY-LP         AR         2022           N6MA         11,804         SO-RTTY-QRP         TN         2022           N8OO         255,996         SOU-MIX-HP         LA         2021           W9SN         158,662         SOU-MIX-LP         TN         2021           KF8PD         4,032         SOU-DIG-HP         MS         2021           AA5AU         22,360         SOU-RTTY-HP         TN         2022           W9SN         209,536         SOU-RTTY-HP         LA         2012           KN5O         219,648         MSHP         LA         2012           KN5O         219,648         MSLP         AR         2012           NA5NN         55,272         MSQRP         MS				
KISXP         266,936         SOHP         LA         2009           AASAU         274,944         SOLP         LA         2012           W9SN         256,053         SOUHP         TN         2016           AASAU         280,704         SOULP         LA         2015           KSXH         133,200         SO-RTTY-HP         AR         2022           WBSBHS         50,160         SO-RTTY-LP         AR         2022           N6MA         11,804         SO-RTTY-LP         AR         2022           N8OO         255,996         SOU-MIX-HP         LA         2021           W9SN         158,662         SOU-MIX-LP         TN         2021           KF8PD         4,032         SOU-DIG-HP         MS         2021           AJ6T         22,360         SOU-RTTY-HP         TN         2022           W9SN         209,536         SOU-RTTY-HP         TN         2022           KNSO         219,648         MSHP         LA         2014           N5ZM         177,580         MSLP         AR         2012           NJ4P         356,868         M2         TN         2022           NSBIQ <td< td=""></td<>				
AASAU         274,944         SOLP         LA         2012           W9SN         256,053         SOUHP         TN         2016           AASAU         280,704         SOULP         LA         2015           K5XH         133,200         SO-RTTY-HP         AR         2022           WB5BHS         50,160         SO-RTTY-LP         AR         2022           N6MA         11,804         SO-RTTY-LP         TN         2022           N80O         255,996         SOU-MIX-HP         LA         2021           W9SN         158,662         SOU-MIX-LP         TN         2021           KF8PD         4,032         SOU-DIG-HP         MS         2021           AJ6T         22,360         SOU-BIG-LP         TN         2022           W9SN         209,536         SOU-RTTY-HP         TN         2022           KNSO         219,648         MSHP         LA         2014           N5ZM         177,580         MSLP         AR         2012           NASNN         55,272         MSQRP         MS         2020           NJ4P         356,868         M2         TN         2022           K9TM         1				
W9SN         256,053         SOUHP         TN         2016           AASAU         280,704         SOULP         LA         2015           K5XH         133,200         SO-RTTY-HP         AR         2022           WB5BHS         50,160         SO-RTTY-LP         AR         2022           N6MA         11,804         SO-RTTY-QRP         TN         2022           N8OO         255,996         SOU-MIX-HP         LA         2021           W9SN         158,662         SOU-MIX-LP         TN         2021           KF8PD         4,032         SOU-DIG-HP         MS         2021           AJ6T         22,360         SOU-RTTY-HP         TN         2022           W9SN         209,536         SOU-RTTY-HP         TN         2022           K9SO         219,648         MSHP         LA         2014           N52M         177,580         MSLP         AR         2012           NA5NN         55,272         MSQRP         MS         2020           NJ4P         356,868         M2         TN         2022           K9TM         117,705         SOLP         OH         1999           K4WW				
AA5AU         280,704         SOULP         LA         2015           K5XH         133,200         SO-RTTY-HP         AR         2022           WB5BHS         50,160         SO-RTTY-LP         AR         2022           N6MA         11,804         SO-RTTY-QRP         TN         2022           N8OO         255,996         SOU-MIX-HP         LA         2021           W9SN         158,662         SOU-MIX-LP         TN         2021           KF8PD         4,032         SOU-DIG-HP         MS         2021           AGT         22,360         SOU-DIG-LP         TN         2022           W9SN         209,536         SOU-RTTY-HP         TN         2022           KN5O         219,648         MSHP         LA         2014           N5ZM         177,580         MSLP         AR         2012           NA5NN         55,272         MSQRP         MS         2020           NBJQ         167,680         SOHP         OH         2013           K9TM         117,705         SOLP         OH         1999           K4WW         99,960         SOUHP         KY         2017           AA8R         1				
K5XH         133,200         SO-RTTY-HP         AR         2022           WB5BHS         50,160         SO-RTTY-LP         AR         2022           N6MA         11,804         SO-RTTY-QRP         TN         2022           N8OO         255,996         SOU-MIX-HP         LA         2021           W9SN         158,662         SOU-MIX-LP         TN         2021           KF8PD         4,032         SOU-DIG-HP         MS         2021           AIGT         22,360         SOU-DIG-LP         TN         2022           W9SN         209,536         SOU-RTTY-HP         TN         2022           KN5O         219,648         MSHP         LA         2014           N5ZM         177,580         MSLP         AR         2012           NA5NN         55,272         MSQRP         MS         2020           NJ4P         356,868         M2         TN         2022           N8BJQ         167,680         SOHP         OH         2013           K9TM         117,705         SOLP         OH         1999           K4WW         99,960         SOUHP         KY         2017           AC8ZU         18				
WB5BHS         50,160         SO-RTTY-LP         AR         2022           N6MA         11,804         SO-RTTY-QRP         TN         2022           N8OO         255,996         SOU-MIX-HP         LA         2021           W9SN         158,662         SOU-MIX-LP         TN         2021           KF8PD         4,032         SOU-DIG-HP         MS         2021           AJ6T         22,360         SOU-DIG-LP         TN         2022           W9SN         209,536         SOU-RTTY-HP         TN         2022           KN5O         219,648         MSHP         LA         2014           N5ZM         177,580         MSLP         AR         2012           NA5NN         55,272         MSQRP         MS         2020           NJ4P         356,868         M2         TN         2022           NBJQ         167,680         SOHP         OH         2013           K9TM         117,705         SOLP         OH         1999           K4WW         99,960         SOUHP         KY         2017           AA8R         127,897         SOULP         MI         2014           AC8ZU         18,904 </td				
N6MA         11,804         SO-RTTY-QRP         TN         2022           N8OO         255,996         SOU-MIX-HP         LA         2021           W9SN         158,662         SOU-MIX-LP         TN         2021           KF8PD         4,032         SOU-DIG-HP         MS         2021           AJ6T         22,360         SOU-DIG-LP         TN         2022           W9SN         209,536         SOU-RTTY-HP         TN         2022           KN5O         219,648         MSHP         LA         2014           N5ZM         177,580         MSLP         AR         2012           NA5NN         55,272         MSQRP         MS         2020           NJ4P         356,868         M2         TN         2022           NBJQ         167,680         SOHP         OH         2013           K9TM         117,705         SOLP         OH         1999           K4WW         99,960         SOUHP         KY         2017           AA8R         127,897         SOULP         MI         2014           AC8ZU         18,904         SOUQRP         OH         2022           W5MX         114,654				
N8OO         255,996         SOU-MIX-HP         LA         2021           W9SN         158,662         SOU-MIX-LP         TN         2021           KF8PD         4,032         SOU-DIG-HP         MS         2021           AJ6T         22,360         SOU-DIG-LP         TN         2022           W9SN         209,536         SOU-RTTY-HP         TN         2022           AA5AU         228,750         SOU-RTTY-LP         LA         2012           KN5O         219,648         MSHP         LA         2014           N5ZM         177,580         MSLP         AR         2012           NA5NN         55,272         MSQRP         MS         2020           NJ4P         356,868         M2         TN         2022           NBJQ         167,680         SOHP         OH         2013           K9TM         117,705         SOLP         OH         1999           K4WW         99,960         SOUHP         KY         2017           AA8R         127,897         SOULP         MI         2014           AC8ZU         18,904         SOURP         OH         2020           W5MX         114,654				
W9SN         158,662         SOU-MIX-LP         TN         2021           KF8PD         4,032         SOU-DIG-HP         MS         2021           AJ6T         22,360         SOU-DIG-LP         TN         2022           W9SN         209,536         SOU-RTTY-HP         TN         2022           AA5AU         228,750         SOU-RTTY-LP         LA         2022           KN5O         219,648         MSHP         LA         2014           N5ZM         177,580         MSLP         AR         2012           NA5NN         55,272         MSQRP         MS         2020           NJ4P         356,868         M2         TN         2022           NBBJQ         167,680         SOHP         OH         2013           K9TM         117,705         SOLP         OH         1999           K4WW         99,960         SOUHP         KY         2017           AA8R         127,897         SOULP         MI         2014           AC8ZU         18,904         SOUQRP         OH         2020           W5MX         114,654         SO-RTTY-HP         KY         2021           KM6Z         84,480				
KF8PD       4,032       SOU-DIG-HP       MS       2021         AJ6T       22,360       SOU-DIG-LP       TN       2022         W9SN       209,536       SOU-RTTY-HP       TN       2022         AA5AU       228,750       SOU-RTTY-LP       LA       2022         KN5O       219,648       MSHP       LA       2014         N5ZM       177,580       MSLP       AR       2012         NA5NN       55,272       MSQRP       MS       2020         Great Lakes Division         N8BJQ       167,680       SOHP       OH       2013         K9TM       117,705       SOLP       OH       1999         K4WW       99,960       SOUHP       KY       2017         AA8R       127,897       SOULP       MI       2014         AC8ZU       18,904       SOUQRP       OH       2020         W5MX       114,654       SO-RTTY-HP       KY       2021         KM6Z       84,480       SO-RTTY-LP       OH       2022         KN4QDE       989       SO-RTTY-QRP       KY       2022         K16DY       140,672       SOU-MIX-HP       OH       2022				
AJ6T         22,360         SOU-DIG-LP         TN         2022           W9SN         209,536         SOU-RTTY-HP         TN         2022           AA5AU         228,750         SOU-RTTY-LP         LA         2012           KN5O         219,648         MSHP         LA         2014           N5ZM         177,580         MSLP         AR         2012           NA5NN         55,272         MSQRP         MS         2020           NJ4P         356,868         M2         TN         2022           Great Lakes Division           N8BJQ         167,680         SOHP         OH         2013           K9TM         117,705         SOLP         OH         1999           K4WW         99,960         SOUHP         KY         2017           AA8R         127,897         SOULP         MI         2014           AC8ZU         18,904         SOUQRP         OH         2020           W5MX         114,654         SO-RTTY-HP         KY         2021           KM6Z         84,480         SO-RTTY-LP         OH         2022           KN4QDE         989         SO-RTTY-QRP         KY         2022 </td				
W9SN         209,536         SOU-RTTY-HP         TN         2022           AA5AU         228,750         SOU-RTTY-LP         LA         2022           KN5O         219,648         MSHP         LA         2014           N5ZM         177,580         MSLP         AR         2012           NA5NN         55,272         MSQRP         MS         2020           NJ4P         356,868         M2         TN         2022           Great Lakes Division           N8BJQ         167,680         SOHP         OH         2013           K9TM         117,705         SOLP         OH         1999           K4WW         99,960         SOUHP         KY         2017           AA8R         127,897         SOULP         MI         2014           AC8ZU         18,904         SOUQRP         OH         2020           W5MX         114,654         SO-RTTY-HP         KY         2021           KM6Z         84,480         SO-RTTY-LP         OH         2022           KN4QDE         989         SO-RTTY-QRP         KY         2022           KIGDY         140,672         SOU-MIX-HP         OH         2022				
AA5AU         228,750         SOU-RTTY-LP         LA         2022           KN5O         219,648         MSHP         LA         2014           N5ZM         177,580         MSLP         AR         2012           NA5NN         55,272         MSQRP         MS         2020           NJ4P         356,868         M2         TN         2022           Great Lakes Division           N8BJQ         167,680         SOHP         OH         2013           K9TM         117,705         SOLP         OH         1999           K4WW         99,960         SOUHP         KY         2017           AA8R         127,897         SOULP         MI         2014           AC8ZU         18,904         SOUQRP         OH         2020           W5MX         114,654         SO-RTTY-HP         KY         2021           KM6Z         84,480         SO-RTTY-LP         OH         2022           KN4QDE         989         SO-RTTY-QRP         KY         2022           KIGDY         140,672         SOU-MIX-HP         OH         2022				
KN5O       219,648       MSHP       LA       2014         N5ZM       177,580       MSLP       AR       2012         NA5NN       55,272       MSQRP       MS       2020         NJ4P       356,868       M2       TN       2022         Great Lakes Division         N8BJQ       167,680       SOHP       OH       2013         K9TM       117,705       SOLP       OH       1999         K4WW       99,960       SOUHP       KY       2017         AA8R       127,897       SOULP       MI       2014         AC8ZU       18,904       SOUQRP       OH       2020         W5MX       114,654       SO-RTTY-HP       KY       2021         KM6Z       84,480       SO-RTTY-LP       OH       2022         KN4QDE       989       SO-RTTY-QRP       KY       2022         KI6DY       140,672       SOU-MIX-HP       OH       2022         N8CWU       59,760       SOU-MIX-LP       OH       2022				
N5ZM         177,580         MSLP         AR         2012           NA5NN         55,272         MSQRP         MS         2020           Great Lakes Division           W8BJQ         167,680         SOHP         OH         2013           K9TM         117,705         SOLP         OH         1999           K4WW         99,960         SOUHP         KY         2017           AA8R         127,897         SOULP         MI         2014           AC8ZU         18,904         SOUQRP         OH         2020           W5MX         114,654         SO-RTTY-HP         KY         2021           KM6Z         84,480         SO-RTTY-LP         OH         2022           KN4QDE         989         SO-RTTY-QRP         KY         2022           KIGDY         140,672         SOU-MIX-HP         OH         2022           N8CWU         59,760         SOU-MIX-LP         OH         2022				
NA5NN         55,272         MSQRP         MS         2020           NJ4P         356,868         M2         TN         2022           Great Lakes Division           N8BJQ         167,680         SOHP         OH         2013           K9TM         117,705         SOLP         OH         1999           K4WW         99,960         SOUHP         KY         2017           AA8R         127,897         SOULP         MI         2014           AC8ZU         18,904         SOUQRP         OH         2020           W5MX         114,654         SO-RTTY-HP         KY         2021           KM6Z         84,480         SO-RTTY-LP         OH         2022           KN4QDE         989         SO-RTTY-QRP         KY         2022           KI6DY         140,672         SOU-MIX-HP         OH         2022           N8CWU         59,760         SOU-MIX-LP         OH         2022				
NJ4P         356,868         M2         TN         2022           Great Lakes Division           N8BJQ         167,680         SOHP         OH         2013           K9TM         117,705         SOLP         OH         1999           K4WW         99,960         SOUHP         KY         2017           AA8R         127,897         SOULP         MI         2014           AC8ZU         18,904         SOUQRP         OH         2020           W5MX         114,654         SO-RTTY-HP         KY         2021           KM6Z         84,480         SO-RTTY-LP         OH         2022           KN4QDE         989         SO-RTTY-QRP         KY         2022           KI6DY         140,672         SOU-MIX-HP         OH         2022           N8CWU         59,760         SOU-MIX-LP         OH         2022				
Great Lakes Division           N8BJQ         167,680         SOHP         OH         2013           K9TM         117,705         SOLP         OH         1999           K4WW         99,960         SOUHP         KY         2017           AA8R         127,897         SOULP         MI         2014           AC8ZU         18,904         SOUQRP         OH         2020           W5MX         114,654         SO-RTTY-HP         KY         2021           KM6Z         84,480         SO-RTTY-LP         OH         2022           KN4QDE         989         SO-RTTY-QRP         KY         2022           KI6DY         140,672         SOU-MIX-HP         OH         2022           N8CWU         59,760         SOU-MIX-LP         OH         2022				
N8BJQ       167,680       SOHP       OH       2013         K9TM       117,705       SOLP       OH       1999         K4WW       99,960       SOUHP       KY       2017         AA8R       127,897       SOULP       MI       2014         AC8ZU       18,904       SOUQRP       OH       2020         W5MX       114,654       SO-RTTY-HP       KY       2021         KM6Z       84,480       SO-RTTY-LP       OH       2022         KN4QDE       989       SO-RTTY-QRP       KY       2022         KI6DY       140,672       SOU-MIX-HP       OH       2022         N8CWU       59,760       SOU-MIX-LP       OH       2022				
N8BJQ       167,680       SOHP       OH       2013         K9TM       117,705       SOLP       OH       1999         K4WW       99,960       SOUHP       KY       2017         AA8R       127,897       SOULP       MI       2014         AC8ZU       18,904       SOUQRP       OH       2020         W5MX       114,654       SO-RTTY-HP       KY       2021         KM6Z       84,480       SO-RTTY-LP       OH       2022         KN4QDE       989       SO-RTTY-QRP       KY       2022         KI6DY       140,672       SOU-MIX-HP       OH       2022         N8CWU       59,760       SOU-MIX-LP       OH       2022				
K9TM       117,705       SOLP       OH       1999         K4WW       99,960       SOUHP       KY       2017         AA8R       127,897       SOULP       MI       2014         AC8ZU       18,904       SOUQRP       OH       2020         W5MX       114,654       SO-RTTY-HP       KY       2021         KM6Z       84,480       SO-RTTY-LP       OH       2022         KN4QDE       989       SO-RTTY-QRP       KY       2022         KI6DY       140,672       SOU-MIX-HP       OH       2022         N8CWU       59,760       SOU-MIX-LP       OH       2022				
K4WW       99,960       SOUHP       KY       2017         AA8R       127,897       SOULP       MI       2014         AC8ZU       18,904       SOUQRP       OH       2020         W5MX       114,654       SO-RTTY-HP       KY       2021         KM6Z       84,480       SO-RTTY-LP       OH       2022         KN4QDE       989       SO-RTTY-QRP       KY       2022         KI6DY       140,672       SOU-MIX-HP       OH       2022         N8CWU       59,760       SOU-MIX-LP       OH       2022				
AA8R       127,897       SOULP       MI       2014         AC8ZU       18,904       SOUQRP       OH       2020         W5MX       114,654       SO-RTTY-HP       KY       2021         KM6Z       84,480       SO-RTTY-LP       OH       2022         KN4QDE       989       SO-RTTY-QRP       KY       2022         KI6DY       140,672       SOU-MIX-HP       OH       2022         N8CWU       59,760       SOU-MIX-LP       OH       2022				
AC8ZU       18,904       SOUQRP       OH       2020         W5MX       114,654       SO-RTTY-HP       KY       2021         KM6Z       84,480       SO-RTTY-LP       OH       2022         KN4QDE       989       SO-RTTY-QRP       KY       2022         KI6DY       140,672       SOU-MIX-HP       OH       2022         N8CWU       59,760       SOU-MIX-LP       OH       2022				
W5MX       114,654       SO-RTTY-HP       KY       2021         KM6Z       84,480       SO-RTTY-LP       OH       2022         KN4QDE       989       SO-RTTY-QRP       KY       2022         KI6DY       140,672       SOU-MIX-HP       OH       2022         N8CWU       59,760       SOU-MIX-LP       OH       2022				
KM6Z         84,480         SO-RTTY-LP         OH         2022           KN4QDE         989         SO-RTTY-QRP         KY         2022           KI6DY         140,672         SOU-MIX-HP         OH         2022           N8CWU         59,760         SOU-MIX-LP         OH         2022				
KN4QDE         989         SO-RTTY-QRP         KY         2022           KI6DY         140,672         SOU-MIX-HP         OH         2022           N8CWU         59,760         SOU-MIX-LP         OH         2022				
KI6DY         140,672         SOU-MIX-HP         OH         2022           N8CWU         59,760         SOU-MIX-LP         OH         2022				
N8CWU 59,760 SOU-MIX-LP OH 2022				
K8ZT 2,646 SOU-MIX-QRP OH 2022				
KC8GAE         19,890         SOU-DIG-HP         OH         2021				
W4UWC 49,425 SOU-DIG-LP KY 2022				
N8ME         7,992         SOU-DIG-QRP         OH         2021				
K8YE 73,040 SOU-RTTY-HP MI 2021				
KI6DY         65,208         SOU-RTTY-LP         OH         2021				
K8ZT 840 SOU-RTTY-QRP OH 2021				
N8NR         146,850         MSHP         OH         2011				
AA8R 123,308 MSLP MI 2015				
NW8S 227,808 M2 OH 2021				
W8BAP 31,330 MM OH 2022				
Hudson Division				
Call Score Category Section Year				

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	63,630	SO-RTTY-LP	NLI	2022
K2YG	34,672	SO-RTTY-QRP	NNJ	2022
K4KGG	65,758	SOU-MIX-HP	ENY	2021
KC2WUF	47,502	SOU-MIX-LP	NNJ	2022
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
NY6DX	131,322	MSHP	NLI	2022
K2DS	98,333	MSLP	ENY	1998
	Midw	est 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
N7WY	77,212	SO-RTTY-LP	МО	2022
NØNI	32,163	SO-RTTY-QRP	IA	2021
W7II	66,483	SOU-MIX-HP	IA	2021
KAØBOJ	17,160	SOU-MIX-LP	NE	2022
NFØN	14,022	SOU-DIG-HP	NE	2022
KB3HF	17,766	SOU-DIG-LP	МО	2022
KEØPRK	902	SOU-DIG-QRP	МО	2022
W7RY	169,510	SOU-RTTY-HP	МО	2021
W7RY	56,529	SOU-RTTY-LP	МО	2022
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
i e				

W1HS	41,574	SOU-MIX-LP	NH	2021
W1UE	141,504	SOU-DIG-HP	EMA	2021
W1UE	107,046	SOU-DIG-LP	EMA	2022
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
WB8PKK	84,600	M2	WMA	2022
WW4LL	174,615	MM	ME	2021
	Northwe	stern 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
W7YAQ	72,720	SO-RTTY-HP	OR	2022
N7UVH	57,768	SO-RTTY-LP	ID	2021
N7GR	6,288	SO-RTTY-QRP	OR	2022
KA6BIM	112,752	SOU-MIX-HP	OR	2022
AK6A	78,958	SOU-MIX-LP	OR	2021
W7YAQ	31,084	SOU-MIX-QRP	OR	2021
N7PHY	27,880	SOU-DIG-HP	WWA	2021
N7UVH	40,524	SOU-DIG-LP	ID	2022
KG7CW	10,070	SOU-DIG-QRP	ID	2022
W6OAT	132,613	SOU-RTTY-HP	WWA	2021
K7QA	104,808	SOU-RTTY-LP	MT	2022
NK7U	206,700	MSHP	OR	2012
WB7AVD	85,002	MSLP	EWA	1993
K7RU	175,600	M2	WWA	2022
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	43,290	SO-RTTY-LP	NV	2022
K6EI	11,542	SO-RTTY-QRP	SCV	2021
W6SX	104,240	SOU-MIX-HP	SJV	2022
K6GHA	47,212	SOU-MIX-LP	SCV	2021
KE6YLH	2,975	SOU-MIX-QRP	SCV	2022
KW6S	47,334	SOU-DIG-HP	SCV	2022
W6US	11,607	SOU-DIG-LP	NV	2022
W6CZ	3,219	SOU-DIG-QRP	SJV	2022

N6WM	218,880	SOU-RTTY-HP	EB	2022
WQ6X	13,053	SOU-RTTY-LP	EB	2022
K6EI	20,306	SOU-RTTY-QRP	scv	2022
N6DE	192,416	MSHP	SV	2009
W6YX	114,648	MSLP	SCV	2003
W6YX	307,680	M2	scv	2022
	Roand	ke 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,	207 000	SO-PTTV LD	NC	2021
op)	207,900	SO-RTTY-LP		2021
NE3R	5,074	SOLIMIY HD	WV	2021
KT4Q	102,432	SOU-MIX-HP	NC	2022
KT4Q	57,362	SOU DIC HP	NC	2021
KQ4AV	46,065	SOU-DIG-HP	NC	2021
N3KN	19,008	SOU-DIG-LP	VA	2022
KK4BZ	10,476	SOU-DIG-QRP	VA	2021
N4IQ	141,435	SOU-RTTY-HP	SC	2021
K3JT	39,302	SOU-RTTY-LP	WV	2021
W4RM	199,936	MSHP	VA	2016
NTØK	114,688	MSLP	NC	2021
		untain Division	1	
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	134,352	SO-RTTY-HP	NM	2022
AA5B	95,684	SO-RTTY-LP	NM	2022
NØTA	69,520	SOU-MIX-HP	СО	2022
WØGJT	17,871	SOU-MIX-LP	СО	2021
KB1IKC	62,624	SOU-DIG-HP	NM	2022
KB1IKC	44,880	SOU-DIG-LP	NM	2021
WØKI	8,668	SOU-DIG-QRP	со	2022
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
NODO				

W4/LY5W	477.540	COLID	651	2045
(@N8PR)	177,548	SOHP	SFL	2015
WW4LL	177,749	SOLP	GA	2011
KI4MZC	2,774	SOURP	GA	2020
W4DXX	229,274	SOUHP	GA	2016
K9OM	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 AG4W	17,152 135,184	SO-RTTY-QRP SOU-MIX-HP	GA AL	2021
K90M	143,910	SOU-MIX-LP	NFL	2022
KD4ADC	4,998	SOU-MIX-QRP	AL	2021
КЭОМ	126,378	SOU-DIG-HP	NFL	2022
KM4RL	43,120	SOU-DIG-LP	NFL	2022
K4PQC	3,640	SOU-DIG-QRP	GA	2021
AA8R	110,966	SOU-RTTY-HP	WCF	2022
NA4DA	99,746	SOU-RTTY-LP	NFL	2021
W4ER	5,616	SOU-RTTY-QRP	AL	2022
W4UH	205,692	MSHP	SFL	2012
к90М	148,302	MSLP	NFL	2012
NA4DA	180,682	M2	NFL	2022
	Southwe	stern 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
N7GP	102,396	SO-RTTY-HP	AZ	2022
WN6K	42,408	SO-RTTY-LP	SDG	2022
W6QU (W8QZA,	4 515	SO BITY ORD	SDG	2022
op) KK6P (W7IV, op)	4,515 180,180	SO-RTTY-QRP SOU-MIX-HP	SB	2022
AA2IL	45,290	SOU-MIX-LP	SDG	2022
NT6X	40,940	SOU-DIG-HP	ORG	2021
KC7CS	27,540	SOU-DIG-LP	AZ	2021
N6MW	432	SOU-DIG-QRP	SB	2022
K6LL	199,808	SOU-RTTY-HP	AZ	2021
N7WLC	20,532	SOU-RTTY-LP	SB	2022
N7AT	212,628	MSHP	AZ	2021
N6MA	81,654	MSLP	AZ	2012
W9CF	36	M2	AZ	2021
	West 0	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
кıøg	609	SOUQRP	STX	2020
AD5XD	105,570	SO-RTTY-HP	NTX	2022
AD5LU	40,348	SO-RTTY-LP	NTX	2021
WE6EZ	19,370	SO-RTTY-QRP	STX	2022
AA5H	14,884	SOU-MIX-HP	ОК	2021
N5YHF	21,960	SOU-MIX-LP	STX	2022
AA5KD	9,000	SOU-MIX-QRP	ОК	2021
KG5EIU	31,088	SOU-DIG-HP	NTX	2022
NA5M	59,128	SOU-DIG-LP	NTX	2022
WM5L	10,945	SOU-DIG-QRP	WTX	2021
WBØTEV	85,680	SOU-RTTY-HP	NTX	2022
KG5VK	61,470	SOU-RTTY-LP	NTX	2022
NR5M	272,718	MSHP	STX	2015
KU5B	199,821	MSLP	STX	2014
W5NN	49,306	M2	STX	2022
	C	anada	1	1
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	MB	2020
VE2NCG	5,170	SOUQRP	QC	2020
VE3JI	84,735	SO-RTTY-HP	GTA	2022
VE6BBP	63,294	SO-RTTY-LP	AB	2022
VE3KI	35,700	SO-RTTY-QRP	ONE	2021
VE5MX	163,449	SOU-MIX-HP	SK	2021
VE2CSM	78,302	SOU-MIX-LP	QC	2022
VE6WQ	35,446	SOU-DIG-HP	AB	2021
VE1ANU	23,714	SOU-DIG-LP	MAR	2021
VA4BEN	8,505	SOU-DIG-QRP	МВ	2022
VA3DF	103,282	SOU-RTTY-HP	ONS	2021
VE3MGY	86,730	SOU-RTTY-LP	ONS	2022
VE6EX	6,400	SOU-RTTY-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	Brian Moran, N9ADG
K3MM	W/VE Single Operator Unlimited High Power	Steve Dyer, W1SRD and Doris Wong, KØBEE
wøsd	W/VE Multioperator High Power	John Lockhart, WØDC
WTØDX	W/VE Multioperator Low Power	Dan Karg, KØTI
W3GH	W/VE Multioperator, Multitransmitter	In memory of "Captian Jack", KA3HPM
ZF1A (W9KKN, op)	DX Single Operator High Power	Yankee Clipper Contest Club
OK1WCF	DX Single Operator Low Power	Rich Cady, N1IXF
9A5Y	DX Multioperator High Power	Paolo Cortese, I2UIY, Memorial by WØYK
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
WT9U	Central Division Single Operator Unlimited Low Power	Society of Midwest Contesters
WØPR	Dakota Division Single Operator High Power	Minnesota Wireless Association
кøті	Dakota Division Single Operator Low Power	Minnesota Wireless Association
KØMD	Dakota Division Single Operator Unlimited High Power	Minnesota Wireless Association
WØPI	Dakota Division Single Operator Unlimited Low Power	Minnesota Wireless Association
AC7S	Northwestern Division Single Operator Low Power	Brian Moran, N9ADG
KA6BIM	Northwestern Division Single Operator Unlimited High Power	Brian Moran, N9ADG
K7QA	Northwestern Division Single Operator Unlimited Low Power	Brian Moran, N9ADG
N6WM	Pacific Division Single Operator Unlimited High Power	Northern California Contest Club
W4TMO	Roanoke Division Multioperator Low Power	Sheila Blackley, K4WNW
KAØKVW	Rocky Mountain Division Single Operator, Digital Only, Low Power	Bob Darlington, N3XKB
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