



ARRL EME Contest 2022 Results

By Skip Paulsen, W1PV (flathood@rcn.com)

“Where have all the flowers gone? 23 cm!”

The 2022 ARRL EME Contest is over, and results are now available. Before I go into the details, I need to thank Rick, K1DS, for his many years of writing these articles. Let’s hope I can approach the quality of his previous articles.

The 2022 Event brings an exciting change- a 4th contest weekend has been added to accommodate a second weekend for 13 cm and up participants. The additional microwave weekend seems to have attracted additional entrants in the top bands. The 3 cm only single operator and multioperator categories which has had 3 or 4 entries for the past several years rose to 8 entries.

Log Entries

209 logs were submitted this year, down from last year’s 237. It appears that the number of logs has declined since the peak of submissions in 2020. One unspoken cause for this may be the unrest in Eastern Europe which has silenced many EME stations from prior years. Others in the EME community have expressed displeasure in the log submission process, particularly the complexity of the Cabrillo log format, which may lead to participants not submitting their log. I will discuss this in more depth further in the article.

The Bands

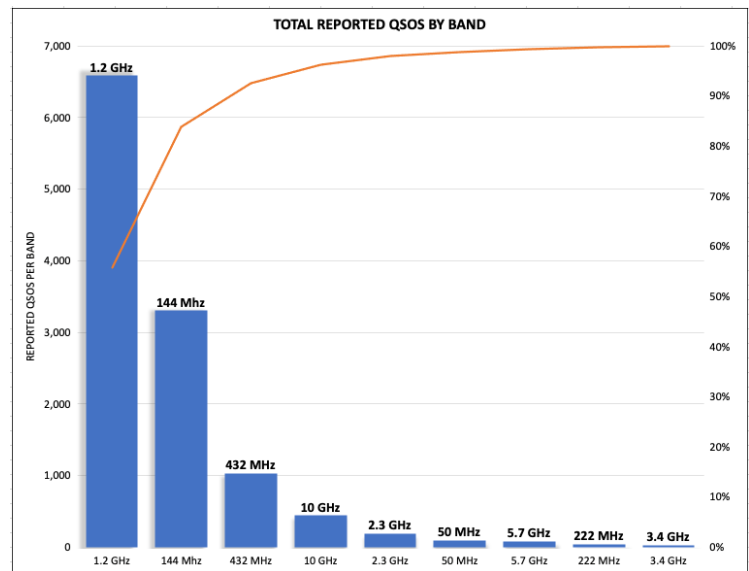
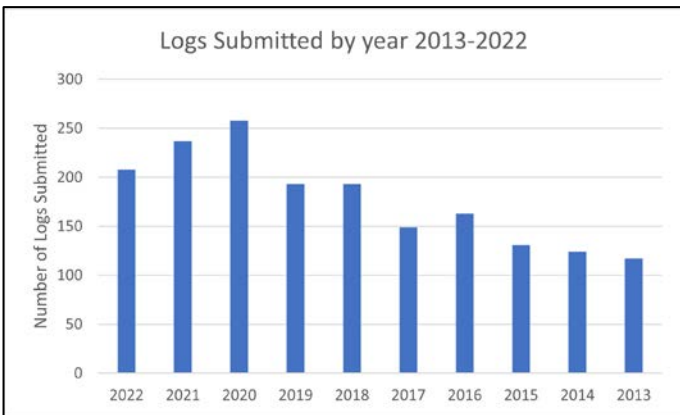
Each band had its own story to tell. KJ9I reported a 6 M QSO with ZL1RS which is not remarkable were it not for the fact that ZL1RS was running a DIPOLE! Doubtless Dave’s 4x10 array was doing the heavy lifting but congratulations to both ends of the QSO.

23 cm seems to be coming into its own with over 6,500 QSOs compared to 3,300 on 2 meters. Availability of commercial equipment as well as more compact antennas may explain this. The W6PQL amp is in a lot of shacks and the W2HRO dishes in a lot of yards. Not to mention Q65 and the popular ICOM IC-9700.

70 cm comes in third just over 1,000 QSOs. Four Yagi’s can provide a competitive array once the polarity issue is addressed.

3 cm was the 4th most popular band with an impressive 440 QSOs. This was likely aided by the additional microwave weekend. The challenges of this band include developing sufficient power and being able to accurately aim a dish. Where a 23 cm dish can be aimed with 1 degree accuracy, at 3 cm, .1 degree is necessary.

Dave, KJ9I graciously provided a bar graph analysis of QSOs per band. 23 cm leading other bands came as a surprise to many, including yours truly.



Total QSOs Reported by Band and Mode				
Band	CW&PH	Digital	Total QSOs	Logs
50	0	96	96	10
144	61	3,241	3,302	82
222	7	36	43	8
432	24	1,008	1,032	53
1.2GHz	1,811	4,867	6,678	108
2.3GHz	97	93	190	17
3.4GHz	20	7	27	8
5.7GHz	46	31	77	14
10GHz	33	407	440	20
24GHz	0	0	0	0
Total	2,099	9,786	11,885	

The Winners

There seems to be a tightening at the top of both single op as well as multi op, all mode, all band entrants. In the Single Operator category, the top 3 stations were clustered between 1.3 million and 2.3 million points, a much tighter grouping than previous years.

In the Single Operator, All Mode, All Band category, OK1CA led with 2.3 M points. Second place in the category was a cluster with N1AV leading PA3DZL, VE6TA and ON4AOI.

G3LTF took the lead in the Single Operator, CW Only, All Band category, making 99 QSOs to earn 544K points. K6LM came in in second place with WA6PY in third with 68,000 points separating them.

The overall highest scoring entries were in the Multioperator, All Mode, All Band category. There was a very close grouping with top finishers UA5Y, K5QE and K2UYH. UA5Y finished at 6.3 million points with K5QE at 5 million points and K2UYH at 4.5 million. A very close race!

SQ6OPG was the lone entrant in the Multioperator, CW Only, All Band category, with 1,600 points.

Top Three Scores in All Band Categories

Single Operator, All Mode, All Band			
Call Sign	Score	QSOs	Mults
OK1CA	2,352,000	210	112
N1AV	1,562,400	168	93
PA3DZL	1,368,000	152	90

Single Operator, CW/Phone Only, All Band			
Call Sign	Score	QSOs	Mults
G3LTF	544,500	99	55
KL6M	468,000	90	52
WA6PY	400,000	80	50
Multioperator, All Mode, All Band			
Call Sign	Score	QSOs	Mults
UA5Y	6,313,500	345	183
K5QE	5,088,700	337	151
K2UYH	4,524,100	281	161
Multioperator, CW/Phone Only, All Band			
Call Sign	Score	QSOs	Mults
SQ6OPG	1,600	4	4

In the single band categories, KJ9I turned in an impressive 410,800 points in the Single Operator, All Mode, 6 Meter category. Dave reported that he worked a number of smaller 6-meter EME stations, even completing a QSO with ZL1RS who was using a simple 6-meter dipole.

Top Three Scores in Single Operator, Single Band Categories

Single Operator, CW/Phone Only, 1.2 GHz			
Call Sign	Score	QSOs	Mults
DG5CST	479,600	109	44
G4CCH	472,500	105	45
OZ4MM	276,500	79	35
Single Operator, All Mode, 50 MHz			
Call Sign	Score	QSOs	Mults
KJ9I	410,800	79	52
AG6EE	4,900	7	7
JA1QJI	100	1	1
Single Operator, All Mode, 144 MHz			
Call Sign	Score	QSOs	Mults
PA5Y	2,133,600	254	84
SM2BYC	672,800	116	58
OK1DIX	632,200	109	58

Single Operator, All Mode, 222 MHz			
Call Sign	Score	QSOs	Mults
WA4NJP	8,100	9	9
Single Operator, All Mode, 432 MHz			
Call Sign	Score	QSOs	Mults
KU4XO	214,500	55	39
KD2LGX	197,200	58	34
VK2CMP	174,900	53	33
Single Operator, All Mode, 1.2 GHz			
Call Sign	Score	QSOs	Mults
OK1DFC	1,104,100	181	61
OK2DL	1,060,200	171	62
OM4XA	625,000	125	50
Single Operator, All Mode, 2.3 GHz			
Call Sign	Score	QSOs	Mults
DL1EMA	5,600	8	7
Single Operator, All Mode, 10 GHz			
Call Sign	Score	QSOs	Mults
OZ1LPR	126,900	47	27
OK2AQ	95,000	38	25
UR3VKE	42,500	25	17

Top Three Scores in Multioperator, Single Band Categories

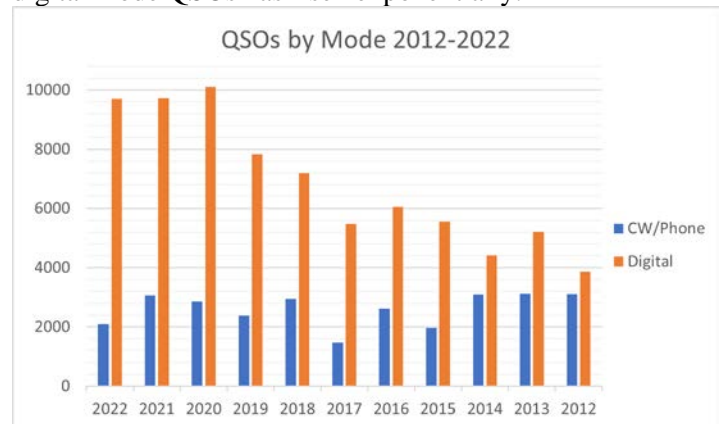
Multioperator, All Mode, 1.2 GHz			
DF3RU	836,000	152	55
IQ2DB	768,500	145	53
W2ZQ	673,100	127	53
Multioperator, All Mode, 10 GHz			
W3SZ	74,800	34	22
GB2FRA	73,500	35	21

The Delaware Valley Radio Association put together a club effort that placed them 3rd worldwide in the Multioperator, All Mode, 1.2 GHz category. What is interesting about their effort is that in addition to being led by a group of well known, highly experienced EME contesters, the team also included a dozen less experienced but nevertheless enthusiastic operators forming a basis for more operators in coming years.



Club station W2ZQ put together an impressive 23 cm multiop effort, making 127 QSOs. [Joe Taylor, K1JT, photo]

The use of digital modes in this event, as evidenced in the chart below, have grown steadily over the last several years. While the number of QSOs on CW/Phone have remained relatively steady since 2012, the number of digital mode QSOs has risen exponentially.



The 4x10 element 6-meter LFA array of Dave, KJ9I allowed him to work a number of small 6-meter stations. [Dave Schmocker, KJ9I, photo]

Multioperator, All Mode, 144 MHz			
S51ZO	921,100	151	61
ZC4RH	513,600	107	48
W9VW	218,300	59	37



This 3 cm 10-watt setup was acquired from the estate of KA2LIM and with the addition of a larger dish and possibly more power will be added to the W1PV effort later this year. Wish me luck. [Photo by the author]

Visit the ARRL Soapbox!

You can find additional comments and station photos at the ARRL collection of soapbox comments at contests.arrl.org/eme/soaps/2022/

A Visit to W3SZ

I took the opportunity to visit the W3SZ 3 cm multiop operation on the second Sunday morning to get a first-hand look at Roger's operation. Roger has a first-class setup and I got to observe a QSO with a JA station. The signal reports were amazing, and the digital exchange could have easily been accomplished on CW or possibly SSB. Guess where W1PV is heading for the 2023 contest!

2023 ARRL International EME Contest

The 2023 contest weekends are as follows:

- August 12 – 13** (2.3 GHz and Up)
- September 9 – 10** (2.3 GHz and Up)
- October 28 – 29** (50 – 1296 MHz)
- November 25 – 26** (50 – 1296 MHz)

Log Submission and Log Checking

While paper logs are still accepted for the event, ARRL prefers that logs be submitted electronically in the Cabrillo log format. As mentioned previously, several participants have expressed concern that submitting a Cabrillo log is too difficult. The ARRL Contest manager and other individuals have provided assistance with those who have difficulty with the log submission process.

Although the League has provided assistance in converting paper logs as well as other digital formats to Cabrillo, more needs to be done to convince moonbouncers that the Cabrillo format is really simple.

One of the major advantages of submitting logs electronically is that it assists greatly with accuracy in the log checking process. When an EME paper log is received at ARRL HQ, it is transcribed by ARRL staff and volunteers. While we take great care in assuring that the log transcriptions are accurate, often times errors do occur.

Additionally, with the increased use of digital modes in the event, the software used for these modes will generate an electronic log file. Often, paper logs have been received that are entirely composed of digital QSOs, yet a handwritten or non-Cabrillo formatted log is received. This log then must be converted to allow for log checking.

There are popular logging programs that provide contest support which generates a Cabrillo formatted log. However, despite repeated requests, some do not explicitly support the EME contest, citing a lack of interest. If you do use one of these programs, we suggest that you contact the software authors and request the EME Contest support be added.

The Future

This year's ARRL EME contest weekends are August 12 – 13 and September 9 – 10 for 2.3 GHz & Up; October 28 – 29 and November 25 – 26 for 50 to 1296 MHz. What are your plans for participation?

Category Winners (in Bold) – by Category by Score

Single Operator										
Call	Operator(s)	Category	Score	Mode	Band	QSOs CW/SSB	QSOs DIG	Mults US	Mults VE	Mults DX
G3LTF	G3LTF	SO-CW-ALL	544,500	CW	ALL	99	0	17	4	34
KL6M	KL6M	SO-CW-ALL	468,000	CW	ALL	90	0	15	4	33
WA6PY	WA6PY	SO-CW-ALL	400,000	CW	ALL	80	0	12	5	33
SP3XBO	SP3XBO	SO-CW-ALL	96,000	CW	ALL	40	0	4	1	19

DG5CST	DG5CST	SO-CW-1.2G	479,600	CW	1.2G	109	0	13	4	27
G4CCH	G4CCH	SO-CW-1.2G	472,500	CW	1.2G	92	13	16	3	26
OZ4MM	OZ4MM	SO-CW-1.2G	276,500	CW	1.2G	79	0	11	3	21
SP9VFD	SP9VFD	SO-CW-1.2G	178,200	CW	1.2G	66	0	7	1	19
IK1FJI	IK1FJI	SO-CW-1.2G	163,800	CW	1.2G	63	0	8	1	17
DU3T	DU3T	SO-CW-1.2G	152,500	CW	1.2G	61	0	7	2	16
LZ2US	LZ2US	SO-CW-1.2G	120,000	CW	1.2G	50	0	5	3	16
F5KUG	F6ABX	SO-CW-1.2G	86,100	CW	1.2G	41	0	7	1	13
DL1AT	DL1AT	SO-CW-1.2G	63,000	CW	1.2G	35	0	4	1	13
N8CQ	N8CQ	SO-CW-1.2G	57,600	CW	1.2G	32	0	6	1	11
WK9P	WK9P	SO-CW-1.2G	44,200	CW	1.2G	26	0	5	0	12
NQ7B	NQ7B	SO-CW-1.2G	34,500	CW	1.2G	23	0	3	0	12
OK2PE	OK2PE	SO-CW-1.2G	33,600	CW	1.2G	24	0	1	0	13
F6ETI	F6ETI	SO-CW-1.2G	16,000	CW	1.2G	16	0	0	0	10
N4PZ	N4PZ	SO-CW-1.2G	12,000	CW	1.2G	12	0	1	0	9
DJ3JJ	DJ3JJ	SO-CW-1.2G	4,900	CW	1.2G	7	0	0	0	7
SP6GWN	SP6GWN	SO-CW-1.2G	4,200	CW	1.2G	7	0	0	0	6

OK1CA	OK1CA	SO-ALL	2,352,000	ALL	ALL	66	144	34	7	71
N1AV	N1AV	SO-ALL	1,562,400	ALL	ALL	6	162	40	5	48
PA3DZL	PA3DZL	SO-ALL	1,368,000	ALL	ALL	40	112	29	2	59
VE6TA	VE6TA	SO-ALL	1,264,900	ALL	ALL	40	99	32	6	53
ON4AOI	ON4AOI	SO-ALL	1,096,000	ALL	ALL	2	135	27	5	48
K3WM	K3WM	SO-ALL	963,600	ALL	ALL	30	116	25	4	37
OH1LRY	OH3MCK	SO-ALL	805,600	ALL	ALL	26	80	23	4	49
KNØWS	KNØWS	SO-ALL	777,200	ALL	ALL	1	115	28	4	35
OK1KKD	OK1FAQ	SO-ALL	702,100	ALL	ALL	53	66	20	4	35
LZ1DX	LZ1DX	SO-ALL	678,000	ALL	ALL	19	94	16	3	41
WA3RGQ	WA3RGQ	SO-ALL	648,900	ALL	ALL	0	103	21	4	38
CX2SC	CX2SC	SO-ALL	644,800	ALL	ALL	0	104	24	2	36
IK3COJ	IK3COJ	SO-ALL	588,300	ALL	ALL	19	92	17	2	34
VE4MA	VE4MA	SO-ALL	298,900	ALL	ALL	5	56	15	3	31
YL2GD	YL2GD	SO-ALL	298,900	ALL	ALL	16	45	17	2	30
DL1SUZ	DL1SUZ	SO-ALL	295,200	ALL	ALL	2	70	8	2	31
K4EME	K4EME	SO-ALL	206,700	ALL	ALL	0	53	13	0	26

W5LUA	W5LUA	SO-ALL	201,600	ALL	ALL	5	43	15	3	24
LZ4OC	LZ4OC	SO-ALL	185,000	ALL	ALL	0	50	8	2	27
W3CJK	W3CJK	SO-ALL	168,000	ALL	ALL	0	48	15	1	19
R1NW	R1NW	SO-ALL	133,300	ALL	ALL	0	43	13	1	17
DL4DTU	DL4DTU	SO-ALL	110,400	ALL	ALL	19	27	2	0	22
W6TCP	W6TCP	SO-ALL	69,000	ALL	ALL	0	30	10	0	13
KC2HFQ	KC2HFQ	SO-ALL	64,400	ALL	ALL	0	28	9	1	13
K7ULS	K7ULS	SO-ALL	52,500	ALL	ALL	0	25	10	0	11
W1PV	W1PV	SO-ALL	43,200	ALL	ALL	0	24	6	0	12
DJ3AK	DJ3AK	SO-ALL	22,400	ALL	ALL	0	16	6	0	8
K1WHS	K1WHS	SO-ALL	18,200	ALL	ALL	14	0	7	0	6
JE1TNL	JE1TNL	SO-ALL	16,800	ALL	ALL	0	14	8	0	4
W8TN	W8TN	SO-ALL	12,000	ALL	ALL	0	12	4	0	6
4X1AJ	4X1AJ	SO-ALL	8,000	ALL	ALL	0	10	1	1	6
JH3AZC	JH3AZC	SO-ALL	6,300	ALL	ALL	1	8	4	0	3
K1DS	K1DS	SO-ALL	4,200	ALL	ALL	0	7	2	0	4
NY2NY	NY2NY	SO-ALL	400	ALL	ALL	0	2	0	0	2

KJ9I	KJ9I	SO-6M	410,800	ALL	6M	0	79	26	1	25
AG6EE	AG6EE	SO-6M	4,900	ALL	6M	0	7	3	0	4
JA1QJI	JA1QJI	SO-6M	100	ALL	6M	0	1	1	0	0
OZ1DJJ	OZ1DJJ	SO-6M	100	ALL	6M	0	1	1	0	0

PA5Y	PA5Y	SO-2M	2,133,600	ALL	2M	0	254	32	4	48
SM2BYC	SM2BYC	SO-2M	672,800	ALL	2M	0	116	22	2	34
OK1DIX	OK1DIX	SO-2M	632,200	ALL	2M	0	109	23	3	32
W9IP	W9IP	SO-2M	624,000	ALL	2M	0	120	18	1	33
WB9UWA	WB9UWA	SO-2M	577,700	ALL	2M	0	109	19	1	33
K1DG	K1DG	SO-2M	577,200	ALL	2M	0	111	17	1	34
KA1EME	KA1EME	SO-2M	414,000	ALL	2M	0	92	16	1	28
G8RWG	G8RWG	SO-2M	400,200	ALL	2M	0	87	15	1	30
OG3Z	OH2LHE	SO-2M	355,500	ALL	2M	0	79	16	0	29
UA9YJM	UA9YJM	SO-2M	294,000	ALL	2M	0	70	14	1	27
SM5CUI	SM5CUI	SO-2M	235,200	ALL	2M	0	56	12	0	30
AI1K	AI1K	SO-2M	207,400	ALL	2M	61	0	12	1	21
KØTPP	KØTPP	SO-2M	184,800	ALL	2M	0	56	12	0	21
WQ5S	WQ5S	SO-2M	177,600	ALL	2M	0	48	14	1	22
DF2ZC	DF2ZC	SO-2M	171,600	ALL	2M	0	52	14	1	18
UC1I	UC1I	SO-2M	167,200	ALL	2M	0	44	16	0	22
JP3EXR	JP3EXR	SO-2M	132,000	ALL	2M	0	44	11	0	19
YB2MDU	YB2MDU	SO-2M	122,200	ALL	2M	0	47	4	0	22
KG6NK	KG6NK	SO-2M	121,500	ALL	2M	0	45	9	0	18
AG4W	AG4W	SO-2M	108,000	ALL	2M	0	40	10	0	17
UA6LQZ	UA6LQZ	SO-2M	100,800	ALL	2M	0	42	4	0	20

VE7PS	VE7PS	SO-2M	88,400	ALL	2M	0	34	9	0	17
YO5TP	YO5TP	SO-2M	80,000	ALL	2M	0	32	7	0	18
OH1MA	OH1MA	SO-2M	64,400	ALL	2M	0	28	10	0	13
4Z5CP	4Z5CP	SO-2M	63,000	ALL	2M	0	30	6	0	15
F4HBY	F4HBY	SO-2M	58,000	ALL	2M	0	29	8	0	12
JHØWJF	JHØWJF	SO-2M	49,400	ALL	2M	0	26	9	0	10
UA4AQL	UA4AQL	SO-2M	36,800	ALL	2M	0	23	0	0	16
UA9CCL	UA9CCL	SO-2M	27,200	ALL	2M	0	17	5	0	11
OK2AB	OK2AB	SO-2M	22,400	ALL	2M	0	16	7	0	7
UA9HO	UA9HO	SO-2M	22,400	ALL	2M	0	16	2	0	12
W2LPL	W2LPL	SO-2M	16,800	ALL	2M	0	14	2	0	10
YO2NAA	YO2NAA	SO-2M	15,000	ALL	2M	0	15	0	0	10
IW4ARD	IW4ARD	SO-2M	13,200	ALL	2M	0	12	5	0	6
LY1G	LY1G	SO-2M	10,000	ALL	2M	0	10	5	0	5
WA3DRC	WA3DRC	SO-2M	7,200	ALL	2M	0	9	1	0	7
E27EK	E27EK	SO-2M	4,800	ALL	2M	0	8	0	0	6
YO6XK	YO6XK	SO-2M	4,800	ALL	2M	0	8	0	0	6
VE3WY	VE3WY	SO-2M	4,200	ALL	2M	0	7	1	0	5
SP9TTG	SP9TTG	SO-2M	4,000	ALL	2M	0	8	0	0	5
EW7T	EW7T	SO-2M	3,600	ALL	2M	0	6	2	0	4
SQ1GU	SQ1GU	SO-2M	1,600	ALL	2M	0	4	0	0	4
ON4EC	ON4EC	SO-2M	900	ALL	2M	0	3	0	0	3
JG2TSL	JG2TSL	SO-2M	400	ALL	2M	0	2	0	0	2
R7LP	R7LP	SO-2M	200	ALL	2M	0	2	0	0	1
EI2FG	EI2FG	SO-2M	100	ALL	2M	0	1	0	0	1
EI8KN	EI8KN	SO-2M	100	ALL	2M	0	1	0	0	1
N2AMC	N2AMC	SO-2M	100	ALL	2M	0	1	1	0	0
WO9Z	WO9Z	SO-2M	100	ALL	2M	0	1	0	0	1

WA4NJP	WA4NJP	SO-222	8,100	ALL	222	0	9	8	1	0
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KU4XO	KU4XO	SO-432	214,500	ALL	432	0	55	18	3	18
KD2LGX	KD2LGX	SO-432	197,200	ALL	432	0	58	18	1	15
VK2CMP	VK2CMP	SO-432	174,900	ALL	432	0	53	13	2	18
VK4EME	VK4EME	SO-432	105,300	ALL	432	0	39	10	0	17
DL1VPL	DL1VPL	SO-432	83,200	ALL	432	1	31	11	2	13
RD3FD	RD3FD	SO-432	58,800	ALL	432	0	28	10	1	10
SM4GGC	SM4GGC	SO-432	58,000	ALL	432	0	29	9	2	9
YO8RHI	YO8RHI	SO-432	43,200	ALL	432	0	24	6	1	11
7M2PDT	7M2PDT	SO-432	36,800	ALL	432	0	23	7	0	9
HG5BMU	HG5BMU	SO-432	34,500	ALL	432	0	23	5	0	10
NN3Y	KE4ZMY	SO-432	32,300	ALL	432	0	19	7	1	9
OK1TEH	OK1TEH	SO-432	26,600	ALL	432	0	19	5	1	8
S51LF	S51LF	SO-432	23,800	ALL	432	0	17	4	0	10

DL5DAW	DL5DAW	SO-432	16,500	ALL	432	0	15	3	1	7
BV3CE	BV3CE	SO-432	12,000	ALL	432	0	12	4	1	5
K7ATN	K7ATN	SO-432	1,600	ALL	432	0	4	1	0	3
JRØWFY	JRØWFY	SO-432	900	ALL	432	0	3	0	0	3
JG2XWH	JG2XWH	SO-432	100	ALL	432	0	1	1	0	0
JM2FCJ	JM2FCJ	SO-432	100	ALL	432	0	1	0	0	1
N1BUG	N1BUG	SO-432	100	ALL	432	0	1	0	0	1
N9ZL	N9ZL	SO-432	100	ALL	432	0	1	0	0	1

OK1DFC	OK1DFC	SO-1.2G	1,104,100	ALL	1.2G	56	125	20	4	37
OK2DL	OK2DL	SO-1.2G	1,060,200	ALL	1.2G	62	109	24	4	34
OM4XA	OM4XA	SO-1.2G	625,000	ALL	1.2G	18	107	17	4	29
IK2DDR	IK2DDR	SO-1.2G	597,800	ALL	1.2G	29	93	18	3	28
UA9FAD	UA9FAD	SO-1.2G	580,800	ALL	1.2G	20	101	15	3	30
ES3RF	ES3RF	SO-1.2G	575,000	ALL	1.2G	12	103	17	4	29
DL7UDA	DL7UDA	SO-1.2G	531,100	ALL	1.2G	20	93	16	3	28
SP5GDM	SP5GDM	SO-1.2G	528,000	ALL	1.2G	0	110	17	4	27
PA3FXB	PA3FXB	SO-1.2G	504,000	ALL	1.2G	17	95	17	3	25
N5BF	N5BF	SO-1.2G	475,200	ALL	1.2G	14	85	19	4	25
GØLBK	GØLBK	SO-1.2G	469,200	ALL	1.2G	15	87	16	2	28
RA4HL	RA4HL	SO-1.2G	464,600	ALL	1.2G	20	81	16	4	26
KB2SA	KB2SA	SO-1.2G	440,000	ALL	1.2G	1	99	18	2	24
K6VHF	K6VHF	SO-1.2G	418,500	ALL	1.2G	5	88	15	4	26
OK2ULQ	OK2ULQ	SO-1.2G	324,000	ALL	1.2G	30	51	15	2	23
KB7Q	KB7Q	SO-1.2G	280,000	ALL	1.2G	2	78	13	2	20
AA6I	AA6I	SO-1.2G	225,700	ALL	1.2G	0	61	15	3	19
CE3VRT	CE3VRT	SO-1.2G	204,600	ALL	1.2G	0	62	13	2	18
G7TZZ	G7TZZ	SO-1.2G	179,800	ALL	1.2G	0	58	13	1	17
KA1GT	KA1GT	SO-1.2G	169,600	ALL	1.2G	0	53	15	2	15
RX6AIA	RX6AIA	SO-1.2G	168,000	ALL	1.2G	0	56	11	1	18
W5GLD	W5GLD	SO-1.2G	145,700	ALL	1.2G	0	47	12	3	16
OK1USW	OK1USW	SO-1.2G	143,100	ALL	1.2G	0	53	11	0	16
AA4MD	AA4MD	SO-1.2G	132,000	ALL	1.2G	2	42	14	1	15
PE1LWT	PE1LWT	SO-1.2G	130,200	ALL	1.2G	0	42	12	2	17
VE3KRP	VE3KRP	SO-1.2G	110,000	ALL	1.2G	1	43	11	2	12
SV1CAL	SV1CAL	SO-1.2G	84,000	ALL	1.2G	3	37	8	1	12
N9JIM	N9JIM	SO-1.2G	81,400	ALL	1.2G	0	37	8	2	12
VE4SA	VE4SA	SO-1.2G	78,200	ALL	1.2G	6	28	8	1	14
VK3VJP	VK3VJP	SO-1.2G	70,300	ALL	1.2G	0	37	5	1	13
UA6AH	UA6AH	SO-1.2G	56,100	ALL	1.2G	1	32	5	0	12
DKØTE	DL1GLH	SO-1.2G	49,600	ALL	1.2G	0	31	3	1	12
DL7AIG	DL7AIG	SO-1.2G	45,900	ALL	1.2G	0	27	4	0	13
WA3GFZ	WA3GFZ	SO-1.2G	44,200	ALL	1.2G	0	26	6	1	10
K8ZR	K8ZR	SO-1.2G	32,000	ALL	1.2G	1	19	6	0	10

OK1IL	OK1IL	SO-1.2G	28,600	ALL	1.2G	1	21	4	0	9
DK1KW	DK1KW	SO-1.2G	26,400	ALL	1.2G	0	22	0	0	12
NX9O	NX9O	SO-1.2G	24,700	ALL	1.2G	0	19	5	0	8
W3HMS	W3HMS	SO-1.2G	23,800	ALL	1.2G	0	17	7	0	7
KN2K	KN2K	SO-1.2G	20,400	ALL	1.2G	0	17	8	1	3
LY3DE	LY3DE	SO-1.2G	7,000	ALL	1.2G	0	10	0	0	7
G4BRK	G4BRK	SO-1.2G	400	ALL	1.2G	0	2	0	0	2

DL1EMA	DL1EMA	SO-2.3G	5,600	ALL	2.3G	0	8	2	0	5
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OZ1LPR	OZ1LPR	SO-10G	126,900	ALL	10G	12	35	5	2	20
OK2AQ	OK2AQ	SO-10G	95,000	ALL	10G	2	36	4	2	19
UR3VKE	UR3VKE	SO-10G	42,500	ALL	10G	0	25	2	1	14
ON5TA	ON5TA	SO-10G	29,400	ALL	10G	0	21	1	1	12
IW2FZR	IW2FZR	SO-10G	17,600	ALL	10G	0	16	1	0	10
VK7ZBX	VK7ZBX	SO-10G	2,000	ALL	10G	0	5	0	0	4

Multioperator

Call	Operator(s)	Category	Score	Mode	Band	QSOs CW/SSB	QSOs DIG	Mults US	Mults VE	Mults DX
SQ6OPG	SP6JLW SQ6OPG	MO-CW-ALL	1,600	CW	ALL	4	0	1	0	3

UA5Y	R3EC R3YA RA3EME RA3Y UA3YY	MO-ALL	6,313,500	ALL	ALL	32	313	58	9	116
K5QE	K5QE KA6U KC5HOZ KI5MHB N5KDA N5YA	MO-ALL	5,088,700	ALL	ALL	0	337	67	8	76
K2UYH	K2TXB K2UYH NE2U W2HRO	MO-ALL	4,524,100	ALL	ALL	42	239	59	8	94
LU8ENU	LU8ENU	MO-ALL	372,400	ALL	ALL	0	76	14	4	31
NØAKC	K9MU NØAKC	MO-ALL	345,000	ALL	ALL	0	75	17	2	27
OZ9KY	OZ1DLD OZ1FKZ OZ1GWD OZ1PBS OZ3Z OZ5TG	MO-ALL	315,000	ALL	ALL	1	69	13	2	30
KØPRT	AAØL ADØCY KØFYR KCØFHN KL7YY KX4TH NOØT WA2JQZ WDØCUJ	MO-ALL	281,400	ALL	ALL	7	60	15	3	24
LU1CGB	LU1AEE LU7AMS	MO-ALL	266,600	ALL	ALL	1	61	16	1	26
NC1I	NC1I W1QA	MO-ALL	172,800	ALL	ALL	0	48	18	2	16
W4ZST	KI4US NX9O W4ZST WG8S WW8RR	MO-ALL	117,000	ALL	ALL	0	39	15	1	14

S51ZO	S51ZO S52EZ	MO-2M	921,100	ALL	2M	0	151	22	1	38
ZC4RH	PA2CHR PA3FYC ZC4RH	MO-2M	513,600	ALL	2M	0	107	16	1	31

W9VW	K9QFL WB9YCZ	MO-2M	218,300	ALL	2M	0	59	13	0	24
F6HEO	FØEUI F5UNH F6HEO	MO-2M	117,000	ALL	2M	0	39	8	0	22
KK4MA	KK4MA	MO-2M	91,200	ALL	2M	0	38	10	0	14
SK6EI	SA6BPD SA6FAX SM6BWD SM6LPF SM6LPG SM6THE SM6TOL	MO-2M	77,000	ALL	2M	0	35	3	0	19
JA1DYB	JA1DYB JI1VHV JJØWLM	MO-2M	54,600	ALL	2M	0	26	6	0	15

DF3RU	DF3RU DL6NAA	MO-1.2G	836,000	ALL	1.2G	56	96	19	3	33
IQ2DB	I2DGH I2GUJ I2JIN I2SVA I2UNE IK2XRL	MO-1.2G	768,500	ALL	1.2G	27	118	17	4	32
W2ZQ	AC2YD AD2CC K1JT K3EA KB2MT W2HRO W2LPL WX2S	MO-1.2G	673,100	ALL	1.2G	10	117	21	3	29
VA7MM	VA7MAY VA7MM VE7CNF VE7HRY	MO-1.2G	494,900	ALL	1.2G	11	90	18	3	28
SP3YDE	SP2DKI SP3PGN SP3TLJ SQ2EAR SQ3DZW SQ3EPX SQ3KLN SQ3KS SQ3NMV	MO-1.2G	469,200	ALL	1.2G	24	78	16	3	27
SKØCT	SAØCAN SAØDGC SMØBSO SMØKAK SMØNCL SMØPYH SMØRJV	MO-1.2G	462,000	ALL	1.2G	25	80	16	3	25
WR8AA	NC1I W1QA	MO-1.2G	372,000	ALL	1.2G	4	89	15	3	22
IK5VLS	IK5AMB IK5VLS	MO-1.2G	250,800	ALL	1.2G	20	56	10	2	21
W3HZU	K3WHC KB3RCT N3AIR N3BMX N3VQH W3TWB WA3USG WBØNDY	MO-1.2G	237,600	ALL	1.2G	1	71	13	2	18

W3SZ	NN3Q W3SZ WA3GFZ	MO-10G	74,800	ALL	10G	1	33	3	2	17
GB2FRA	GØAPI G3YGF G6NLC M5RAO	MO-10G	73,500	ALL	10G	1	34	4	2	15