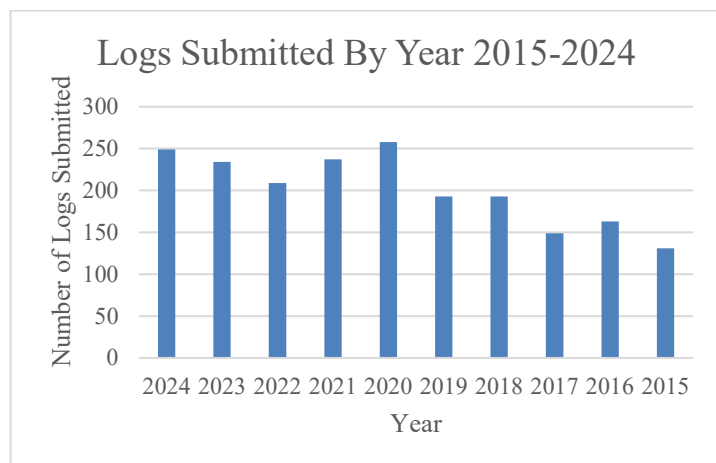




ARRL International EME Contest 2024 Results

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

The 2024 ARRL International EME Contest is in the books, and activity levels were high. Two hundred forty-nine logs were submitted in the contest, the highest number of entries in recent years. A total of 13,384 contacts were reported, which is up from 12,923 in 2023. 2024 heralded a major change in the contest's scoring, as multipliers were changed to Maidenhead grid squares from US states, Canadian provinces, and DXCC entities, spurring greater interest in the contest.



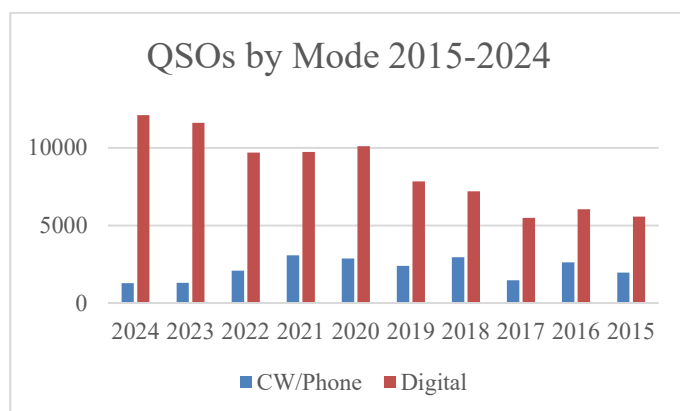
The Bands

The band with the highest number of contacts reported is 1.2 GHz, with more than 50% of all contacts in the contest made on that band. Seven thousand thirty-four contacts were reported on the band, an increase of 663 logs from 2023. The increasing popularity of 1.2 GHz can likely be attributed to two factors.

First, the availability of smaller antenna systems makes it a popular choice for stations that wish to deploy a portable EME station. Second, a number of operators are chasing the ARRL Worked All States and VHF/UHF Century Club awards on that band. Some operators are taking advantage of the portability of these stations to activate more than one state or Maidenhead grid square during the two 1.2 GHz weekends of the contest.

144 and 432 MHz were also very popular bands in the contest, with 3,091 and 1,881 contacts reported on those bands, respectively. 144 MHz saw a drop of 1,069 contacts last year, while 432 MHz saw an increase of 570 contacts. The two bands comprised 37% of the total contacts reported during the contest. 10 GHz also saw a healthy growth in activity in 2024, with 803 contacts reported, which is 289 more than in 2023.

Total QSOs Reported by Band and Mode				
Band	CW&PH	Digital	Total QSOs	Logs
50	0	291	291	64
144	18	3,073	3,091	75
222	0	53	53	8
432	1	1,880	1,881	60
902	0	22	22	3
1.2GHz	1,147	5,887	7,034	115
2.3GHz	46	113	159	15
3.4GHz	4	5	9	3
5.7GHz	18	15	33	7
10GHz	37	766	803	30
24GHz	8	0	8	4
Total	1,279	12,105	13,384	



In addition to the earlier mentioned, a new generation of VHF/UHF transceivers has been released. The Yaesu FT-726R and Kenwood TS-790, while excellent radios, have become a little long in the tooth. The ICOM 9700 and 905 have

done a good job of replacing them. Both provide excellent performance as well as ease of connectivity between computers and radios. The IC-905 also features frequency coverage not available just a few years ago. In addition, there have been a number of articles published on optimizing smaller dishes to match the performance of much larger dishes.

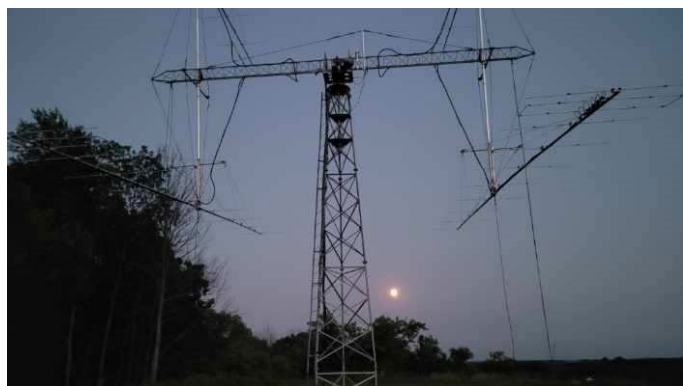
Bill, KB2SA, made an excellent presentation at the 2024 EME Conference outlining how he has optimized his 1.9 M dish to the point where it will match the performance of a 3- or 4- meter dish on 1.2 GHz. His results in the contest testify to that.

10 GHz will probably be the next breakout band. As I write this, my own 10 GHz station, complete with 10W and a 1.2-meter dish sits at my feet, begging to be put up on a small tower.

The Winners

I'm not going to list every winner in each category. That information can be found in the attached spreadsheets. I will attempt to concentrate on the interesting numbers.

While 6 meters is not generally considered an EME band, Dave, KJ9I, has proven otherwise. It seems that if you worked anyone on 6 meters, it was Dave. His 1.8-million-point score was just short of OK1DIX also single op but on 2 meters. Well done to both Dave and Ladislav. Clark, W8TN, reports working Dave on 6 meters for his first QSO on that band. Considering that Clark's history on EME goes back to 1980, his excitement was notable.



Half of the 4x10 6 Meter LFA array at KJ9I's station. [Peter Martin, WD9EKV, photo]

At the top of the results are 2 very notable stations. In the Single Op, All Band category, Zdenek, OK1DFC scored an amazing 7.5 million points and finished just behind K5N at 7.7 million points. K5N was a Multioperator, All Band station that was a memorial operation remembering Marshall, K5QE (SK). Both stations put in a monumental effort in their respective categories.

Gone, but Not Forgotten

I feel that I would be remiss if I did not make note of three stations that were not in the results this year. We lost several EME stations that need to be honored.

Al, K2UYH, was a pioneer in EME. Most notably he organized the first EME contact on 432 MHz between North America and South America, allowing the first Worked All Continents award on that band. Al was the organizer of the 2024 EME Conference but, sadly, passed away shortly before the event. He was a fellow member of the Mt. Airy VHF Radio Club (PackRats) and will be missed.

Marshall, K5QE, was a well-known contester on both EME as well as VHF/UHF. He could be found on the EME boards during each VHF/UHF contest drumming up QSOs to drive the multiplier count up for K5QE. Marshall was also an EME Dxpeditioner. I remember working him at VP8DQE in 2015. Marshall was happy to work from the Falklands to New England. I never told him that W1PV had moved to PA in 1986.

Last but not least, Bernd, DL7APV, was mostly noted for his work on 432 MHz where his array of 128x11 element Yagis was unmatched. The multiyear construction project is well documented and can still be found online.



The station of Carsten, DM9EE, sports an 8x11 element 432 MHz array that was given to him by Bernd, DL7APV (SK). It was a prototype for Bernd's 128x11 array. [Carsten-Thomas Dauer, DM9EE, photo]

2026 EME Conference

I have been asked by a few commentators to promote the 2026 EME conference. I think that is an appropriate idea and I am glad to do so. It will be held in Tenerife in the Canary Islands from May 28 – May 31, 2026. Since I knew little about that location, I searched and found an excellent YouTube video produced by Steve Marsh. It tells you all you need to know about the location. I know that I'll be going. Get ready and make your plans now.

Lastly, it seems that there are no logging programs for the EME contest. Now that our logs need to be submitted online and the number of QSOs has reached a significant number some help would be nice. That would also ease submission to LoTW. I personally use one of the popular loggers for day-to-day as well as contesting. I nudge the designer every year and remind him that if he can support all the state QSO parties, he should be able to do likewise for the growing number of EME Contesters.

Top Three Scores in All Band Categories

Single Operator, All Mode, All Band			
Call Sign	Score	QSOs	Mults
OK1DFC	7,504,900	299	251
N1AV	6,490,400	266	244

NØAKC	1,945,800	141	138
Single Operator, CW/Phone Only, All Band			
Call Sign	Score	QSOs	Mults
G3LTF	517,500	75	69
WA6PY	189,000	45	42
SP3XBO	78,300	29	27
Multioperator, All Mode, All Band			
Call Sign	Score	QSOs	Mults
K5N	7,660,800	288	266
OH1LRY	2,006,400	152	132
W3SZ	1,495,000	130	115
Multioperator, CW/Phone Only, All Band			
Call Sign	Score	QSOs	Mults
SP6JLW	239,200	52	46
OK1KIR	900	3	3



Mila, OK1VUM, used this impressive homebrew 32x9 element array to take first place in the Single Operator, All Mode, 432 MHz category. [Mila Hakr, OK1VUM, photo]

Top Three Scores in Single Operator, Single Band Categories

Single Operator, CW/Phone Only, 1.2 GHz			
Call Sign	Score	QSOs	Mults
KL6M	495,000	75	66
DG5CST	456,000	76	60
G4CCH	388,600	67	58
Single Operator, All Mode, 50 MHz			
Call Sign	Score	QSOs	Mults
KJ9I	1,805,500	157	115

K1UU	6,400	8	8
ZD9GJ	6,400	8	8
JG1TSG	3,600	6	6
Single Operator, All Mode, 144 MHz			
Call Sign	Score	QSOs	Mults
OK1DIX	1,870,500	145	129
SM2BYC	1,744,600	143	122
W9IP	1,411,200	126	112

Single Operator, All Mode, 432 MHz			
Call Sign	Score	QSOs	Mults
OK1VUM	1,108,800	112	99
VK2CMP	530,400	78	68
SM4GGC	501,600	76	66
Single Operator, All Mode, 902 MHz			
Call Sign	Score	QSOs	Mults
W5AFY	3,600	6	6
Single Operator, All Mode, 1.2 GHz			
Call Sign	Score	QSOs	Mults
OK2DL	2,590,000	185	140
DF3RU	1,844,500	155	119
PA3FXB	1,612,400	139	116
Single Operator, All Mode, 2.3 GHz			
Call Sign	Score	QSOs	Mults
IK3COJ	27,200	17	16
KU4XO	24,000	16	15
N6NU	5,600	8	7
Single Operator, All Mode, 10 GHz			
Call Sign	Score	QSOs	Mults
OZ1LPR	375,200	67	56
PAØPLY	226,800	54	42
OK2AQ	196,000	49	40

Top Three Scores in Multioperator, Single Band Categories			
Multioperator, All Mode, 144 MHz			
Call Sign	Score	QSOs	Mults
S51ZO	1,720,200	141	122
SK6EI	1,058,400	108	98
VA2WA	474,500	73	65

Multioperator, All Mode, 1.2 GHz			
Call Sign	Score	QSOs	Mults
SP3YDE	1,800,000	150	120
W2ZQ	1,500,800	134	112
KØPRT	1,452,000	132	110
Multioperator, All Mode, 10 GHz			
Call Sign	Score	QSOs	Mults
DL3WDG	252,000	56	45

Soapbox Comments

“This was the first time I had ever participated in an ARRL EME contest, so it was an uncertain undertaking for me and I didn't know what to expect. I had agreed with Zdenek, OK1DFC beforehand that he would work the 23cm band in the first part and I would work the 70cm band in the second, in November, we'll switch. The purpose of the agreement was to eliminate mutual QRM, our antennas are less than 5km apart.” – OK1VUM

“It's my 4th ARRL EME contest on 23 cm. I made 137 QSOs, 27 of them on cw. I found a very good conditions and a good activity. As written on my log I try to suggest to permit twice QSOs with same station. One on digi and the other on analogue (ssb/cw). This for help to those stations that use only analogue modes to meet more stations. Anyway, i'm quite sure that this was my best result, since I started on 23 cm in May 2021.” – IK2DDR

“During this first part, activity was high from Europe with good conditions with low spreading. The second part activity in September was amazing. In memory of Jean Jacques F1EHN SK.” – F2CT

“My first EME Contest - with just 2 Yagi's and severely handicapped by a 50 watt limitation, every QSO is a major triumph! I'm greatly appreciative of the super stations whose investments and friendly patience allow folks like me to participate!” – WB1BQE

The Future

The 2025 ARRL EME contest weekends are August 16 – 17 and September 13 – 14 for 2.3 GHz & Up;

October 11 – 12 and November 8 – 9 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	CW/SSB QSOs	Digital QSOs	Mults
G3LTF		SO-CW-ALL	517,500	CW	ALL	75	0	69
WA6PY		SO-CW-ALL	189,000	CW	ALL	45	0	42
SP3XBO		SO-CW-ALL	78,300	CW	ALL	29	0	27

KL6M		SO-CW-1.2G	495,000	CW	1.2G	75	0	66
DG5CST		SO-CW-1.2G	456,000	CW	1.2G	76	0	60
G4CCH		SO-CW-1.2G	388,600	CW	1.2G	53	14	58
LZ2US		SO-CW-1.2G	202,100	CW	1.2G	47	0	43
SP6ITF		SO-CW-1.2G	201,600	CW	1.2G	48	0	42
CT1DMK		SO-CW-1.2G	189,000	CW	1.2G	45	0	42
SP9VFD		SO-CW-1.2G	188,600	CW	1.2G	46	0	41
F6ETI		SO-CW-1.2G	96,000	CW	1.2G	32	0	30
OK2PE		SO-CW-1.2G	86,400	CW	1.2G	32	0	27
FX1A	F4IEY	SO-CW-1.2G	67,600	CW	1.2G	26	0	26
SP7EXY		SO-CW-1.2G	50,600	CW	1.2G	18	5	22
W4OP		SO-CW-1.2G	48,400	CW	1.2G	22	0	22
JH1KRC		SO-CW-1.2G	36,100	CW	1.2G	19	0	19
DJ3JJ		SO-CW-1.2G	15,600	CW	1.2G	13	0	12

KJ9I		SO-6M	1,805,500	ALL	6M	0	157	115
K1UU		SO-6M	6,400	ALL	6M	0	8	8
ZD9GJ	W7GJ	SO-6M	6,400	ALL	6M	0	8	8
JG1TSG		SO-6M	3,600	ALL	6M	0	6	6
OG2A	OH2RA	SO-6M	900	ALL	6M	0	3	3
UW1HM		SO-6M	900	ALL	6M	0	3	3
F4BKV		SO-6M	400	ALL	6M	0	2	2
G4IFX		SO-6M	400	ALL	6M	0	2	2
I4YRW		SO-6M	400	ALL	6M	0	2	2
JH2COZ		SO-6M	400	ALL	6M	0	2	2
OZ4VV		SO-6M	400	ALL	6M	0	2	2
4O6AH		SO-6M	100	ALL	6M	0	1	1
ES6RQ		SO-6M	100	ALL	6M	0	1	1
F1IXQ		SO-6M	100	ALL	6M	0	1	1
F5LNU		SO-6M	100	ALL	6M	0	1	1
FR4OO		SO-6M	100	ALL	6M	0	1	1
GM3POI		SO-6M	100	ALL	6M	0	1	1
JA3EGE		SO-6M	100	ALL	6M	0	1	1
JA3JTG		SO-6M	100	ALL	6M	0	1	1
JA4LKB		SO-6M	100	ALL	6M	0	1	1
JE6KYA		SO-6M	100	ALL	6M	0	1	1
JM1OAX		SO-6M	100	ALL	6M	0	1	1

JR1LZK		SO-6M	100	ALL	6M	0	1	1
K1TO		SO-6M	100	ALL	6M	0	1	1
K6EME		SO-6M	100	ALL	6M	0	1	1
K7KX		SO-6M	100	ALL	6M	0	1	1
KL7HBK		SO-6M	100	ALL	6M	0	1	1
N2EME		SO-6M	100	ALL	6M	0	1	1
N3FTI		SO-6M	100	ALL	6M	0	1	1
N4WLO		SO-6M	100	ALL	6M	0	1	1
NK1K		SO-6M	100	ALL	6M	0	1	1
OH2RA		SO-6M	100	ALL	6M	0	1	1
OX3LX		SO-6M	100	ALL	6M	0	1	1
PY2XB		SO-6M	100	ALL	6M	0	1	1
S5ØA		SO-6M	100	ALL	6M	0	1	1
SM6LPF		SO-6M	100	ALL	6M	0	1	1
SP4MPB		SO-6M	100	ALL	6M	0	1	1
UR5LAK		SO-6M	100	ALL	6M	0	1	1
UT7QF		SO-6M	100	ALL	6M	0	1	1
UW5ZM		SO-6M	100	ALL	6M	0	1	1
VK2XN		SO-6M	100	ALL	6M	0	1	1
VK3BD		SO-6M	100	ALL	6M	0	1	1
VK3ZL		SO-6M	100	ALL	6M	0	1	1
VK4QG		SO-6M	100	ALL	6M	0	1	1
VK5PJ		SO-6M	100	ALL	6M	0	1	1
W3UUM		SO-6M	100	ALL	6M	0	1	1
WA1NLG		SO-6M	100	ALL	6M	0	1	1
WW1L		SO-6M	100	ALL	6M	0	1	1
XV9T		SO-6M	100	ALL	6M	0	1	1
YL2AO		SO-6M	100	ALL	6M	0	1	1
ZL1RQ		SO-6M	100	ALL	6M	0	1	1
ZL3NW		SO-6M	100	ALL	6M	0	1	1

OK1DIX		SO-2M	1,870,500	ALL	2M	0	145	129
SM2BYC		SO-2M	1,744,600	ALL	2M	0	143	122
W9IP		SO-2M	1,411,200	ALL	2M	0	126	112
LZ1DX		SO-2M	1,206,400	ALL	2M	0	116	104
JF1AMX		SO-2M	946,400	ALL	2M	0	104	91
OZ7UV		SO-2M	900,900	ALL	2M	0	99	91
K1FMS		SO-2M	729,800	ALL	2M	0	89	82
VE3WY		SO-2M	678,600	ALL	2M	0	87	78
G8RWG		SO-2M	662,200	ALL	2M	0	86	77
KG6NK		SO-2M	621,600	ALL	2M	0	84	74
UA9YJM		SO-2M	319,000	ALL	2M	0	58	55
JP3EXR		SO-2M	286,000	ALL	2M	0	55	52
YU7SMN		SO-2M	180,400	ALL	2M	0	44	41
K1DG		SO-2M	168,000	ALL	2M	0	42	40
K6KLY		SO-2M	168,000	ALL	2M	0	42	40

YO6DBA		SO-2M	168,000	ALL	2M	0	42	40
ND4X		SO-2M	136,500	ALL	2M	0	39	35
KE8JCD		SO-2M	133,200	ALL	2M	0	37	36
KØTPP		SO-2M	122,500	ALL	2M	0	35	35
NJ9R		SO-2M	122,400	ALL	2M	0	36	34
NH6V		SO-2M	115,600	ALL	2M	0	34	34
AG4W		SO-2M	102,300	ALL	2M	0	33	31
TA2NC		SO-2M	90,000	ALL	2M	0	30	30
TI1K	TI5CDA	SO-2M	84,100	ALL	2M	0	29	29
CT7ABA		SO-2M	78,400	ALL	2M	0	28	28
JHØWJF		SO-2M	75,600	ALL	2M	0	28	27
LZ3AK		SO-2M	72,900	ALL	2M	0	27	27
SM5CUI		SO-2M	34,200	ALL	2M	0	19	18
IK8YSS		SO-2M	32,400	ALL	2M	18	0	18
YL2FZ		SO-2M	28,900	ALL	2M	0	17	17
YO5TP		SO-2M	24,000	ALL	2M	0	16	15
R2DMD		SO-2M	22,500	ALL	2M	0	15	15
RW9FT		SO-2M	22,500	ALL	2M	0	15	15
JA1DYB		SO-2M	19,600	ALL	2M	0	14	14
SP8OOU		SO-2M	14,400	ALL	2M	0	12	12
SQ1GU		SO-2M	14,400	ALL	2M	0	12	12
N4HB		SO-2M	10,000	ALL	2M	0	10	10
KG7P		SO-2M	8,100	ALL	2M	0	9	9
CT9/OM3RG	OM3RG	SO-2M	3,600	ALL	2M	0	6	6
N8SAN		SO-2M	900	ALL	2M	0	3	3
K6UFO		SO-2M	400	ALL	2M	0	2	2
EA3BZ		SO-2M	100	ALL	2M	0	1	1
EW7RF		SO-2M	100	ALL	2M	0	1	1
JG2TSL		SO-2M	100	ALL	2M	0	1	1
OM8WG		SO-2M	100	ALL	2M	0	1	1

OK1VUM		SO-432	1,108,800	ALL	432	1	111	99
VK2CMP		SO-432	530,400	ALL	432	0	78	68
SM4GGC		SO-432	501,600	ALL	432	0	76	66
OZ9AAR		SO-432	494,000	ALL	432	0	76	65
KD2LGX		SO-432	408,700	ALL	432	0	67	61
GDØTEP		SO-432	389,400	ALL	432	0	66	59
ON7EQ		SO-432	341,600	ALL	432	0	61	56
VK4EME		SO-432	341,600	ALL	432	0	61	56
DL1VPL		SO-432	323,300	ALL	432	0	61	53
DL5BBH		SO-432	259,200	ALL	432	0	54	48
G4RGK		SO-432	259,200	ALL	432	0	54	48
PA6Y	PA2V	SO-432	235,000	ALL	432	0	50	47
W6TCP		SO-432	235,000	ALL	432	0	50	47
OM4EX		SO-432	210,700	ALL	432	0	49	43
DM9EE		SO-432	180,400	ALL	432	0	44	41

S56P		SO-432	156,000	ALL	432	0	40	39
RD3FD		SO-432	151,700	ALL	432	0	41	37
OK1TEH		SO-432	136,500	ALL	432	0	39	35
UT5DL		SO-432	65,000	ALL	432	0	26	25
SP2WRH		SO-432	57,500	ALL	432	0	25	23
DL5DAW		SO-432	46,000	ALL	432	0	23	20
DL7URH		SO-432	37,800	ALL	432	0	21	18
GMØICF		SO-432	23,800	ALL	432	0	17	14
BV3CE		SO-432	19,600	ALL	432	0	14	14
KBØZ		SO-432	19,600	ALL	432	0	14	14
N7GP		SO-432	19,600	ALL	432	0	14	14
SV8CS		SO-432	19,600	ALL	432	0	14	14
JRØWIFY		SO-432	11,000	ALL	432	0	11	10
W4NH	KI4US	SO-432	6,400	ALL	432	0	8	8
JG2XWH		SO-432	4,900	ALL	432	0	7	7
UD2F		SO-432	2,500	ALL	432	0	5	5
DF6LH		SO-432	1,600	ALL	432	0	4	4
K7ATN		SO-432	1,600	ALL	432	0	4	4
ON4PB		SO-432	400	ALL	432	0	2	2
DJ3AK		SO-432	100	ALL	432	0	1	1
WB1BQE		SO-432	100	ALL	432	0	1	1

W5AFY		SO-902	3,600	ALL	902	0	6	6
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OK2DL		SO-1.2G	2,590,000	ALL	1.2G	35	150	140
DF3RU		SO-1.2G	1,844,500	ALL	1.2G	36	119	119
PA3FXB		SO-1.2G	1,612,400	ALL	1.2G	16	123	116
IK2DDR		SO-1.2G	1,567,800	ALL	1.2G	27	107	117
UA9FAD		SO-1.2G	1,467,200	ALL	1.2G	17	114	112
RA4HL		SO-1.2G	1,335,600	ALL	1.2G	18	108	106
DL7UDA		SO-1.2G	1,160,000	ALL	1.2G	11	105	100
YO2LAM		SO-1.2G	1,118,700	ALL	1.2G	0	113	99
JJ3JHP		SO-1.2G	947,600	ALL	1.2G	8	95	92
SP5GDM		SO-1.2G	936,000	ALL	1.2G	0	104	90
YU1SAN		SO-1.2G	913,500	ALL	1.2G	0	105	87
PAØTBR		SO-1.2G	824,500	ALL	1.2G	0	97	85
DL1AT		SO-1.2G	806,400	ALL	1.2G	7	89	84
PE1LWT		SO-1.2G	799,800	ALL	1.2G	3	90	86
OM4XA		SO-1.2G	753,300	ALL	1.2G	8	85	81
DF7KB		SO-1.2G	687,300	ALL	1.2G	0	87	79
G7TZZ		SO-1.2G	686,400	ALL	1.2G	0	88	78
VE4SA		SO-1.2G	686,400	ALL	1.2G	4	84	78
KB2SA		SO-1.2G	630,000	ALL	1.2G	2	82	75
N5TM		SO-1.2G	615,000	ALL	1.2G	1	81	75
UA4LCF		SO-1.2G	489,600	ALL	1.2G	0	72	68
KB7Q		SO-1.2G	482,400	ALL	1.2G	0	72	67

OK1IL		SO-1.2G	474,500	ALL	1.2G	0	73	65
OK2ULQ		SO-1.2G	472,500	ALL	1.2G	20	55	63
AA6I		SO-1.2G	468,600	ALL	1.2G	0	71	66
VK4CDI		SO-1.2G	434,700	ALL	1.2G	0	69	63
DU3T		SO-1.2G	427,000	ALL	1.2G	19	51	61
BA7NQ		SO-1.2G	382,800	ALL	1.2G	0	66	58
CE3VRT		SO-1.2G	377,600	ALL	1.2G	0	64	59
CT1WO		SO-1.2G	306,800	ALL	1.2G	0	59	52
YB2MDU		SO-1.2G	290,700	ALL	1.2G	1	56	51
OK1KKD	OK1FAQ	SO-1.2G	280,800	ALL	1.2G	0	54	52
DLØSHF	DF9CY	SO-1.2G	275,000	ALL	1.2G	27	28	50
K6FOD		SO-1.2G	249,900	ALL	1.2G	0	51	49
LB6B		SO-1.2G	249,900	ALL	1.2G	0	51	49
AB6A		SO-1.2G	235,000	ALL	1.2G	0	50	47
VK3NFI		SO-1.2G	234,600	ALL	1.2G	0	51	46
ES3RF		SO-1.2G	220,800	ALL	1.2G	0	48	46
RN6MA		SO-1.2G	220,500	ALL	1.2G	1	48	45
W3TI		SO-1.2G	211,200	ALL	1.2G	0	48	44
JQ3JWF		SO-1.2G	210,700	ALL	1.2G	0	49	43
RX3DR		SO-1.2G	189,000	ALL	1.2G	3	42	42
KGØD		SO-1.2G	184,800	ALL	1.2G	0	44	42
BG7XWF		SO-1.2G	163,400	ALL	1.2G	0	43	38
RX6AIA		SO-1.2G	156,000	ALL	1.2G	0	40	39
KH6FA		SO-1.2G	148,200	ALL	1.2G	0	39	38
KD5CHG		SO-1.2G	125,800	ALL	1.2G	0	37	34
DK1KW		SO-1.2G	108,000	ALL	1.2G	0	36	30
N5BF		SO-1.2G	105,600	ALL	1.2G	1	32	32
F4KLO	F1EBK	SO-1.2G	102,000	ALL	1.2G	0	34	30
SV1CAL		SO-1.2G	96,000	ALL	1.2G	1	31	30
W3IPA		SO-1.2G	93,000	ALL	1.2G	0	31	30
CT2GUR		SO-1.2G	81,200	ALL	1.2G	0	29	28
IØNAA		SO-1.2G	81,200	ALL	1.2G	1	28	28
MØFXX		SO-1.2G	75,400	ALL	1.2G	0	29	26
KN2K		SO-1.2G	70,200	ALL	1.2G	0	27	26
HG5BMU		SO-1.2G	62,400	ALL	1.2G	0	26	24
JA4LJB		SO-1.2G	55,200	ALL	1.2G	0	24	23
W1FKF		SO-1.2G	44,100	ALL	1.2G	0	21	21
JA4UMN		SO-1.2G	400	ALL	1.2G	0	2	2
VE3DS		SO-1.2G	100	ALL	1.2G	0	1	1

IK3COJ		SO-2.3G	27,200	ALL	2.3G	4	13	16
KU4XO		SO-2.3G	24,000	ALL	2.3G	1	15	15
N6NU		SO-2.3G	5,600	ALL	2.3G	0	8	7

OZ1LPR		SO-10G	375,200	ALL	10G	9	58	56
PAØPLY		SO-10G	226,800	ALL	10G	3	51	42

OK2AQ		SO-10G	196,000	ALL	10G	0	49	40
OZ1FF		SO-10G	174,800	ALL	10G	0	46	38
F2CT		SO-10G	173,900	ALL	10G	6	41	37
KMØT		SO-10G	166,500	ALL	10G	0	45	37
ON5TA		SO-10G	159,100	ALL	10G	1	42	37
IK6CAK		SO-10G	118,400	ALL	10G	0	37	32
LZ4OC		SO-10G	70,000	ALL	10G	0	28	25
GW3TKH		SO-10G	52,800	ALL	10G	0	24	22
W2HRO		SO-10G	50,600	ALL	10G	0	23	22
YO8RHI		SO-10G	48,400	ALL	10G	0	22	22
I6YPK		SO-10G	46,200	ALL	10G	0	22	21
I4TTZ		SO-10G	30,600	ALL	10G	0	18	17
IZØJNY		SO-10G	22,500	ALL	10G	0	15	15
VK7ZBX		SO-10G	10,000	ALL	10G	0	10	10
CT1BYM		SO-10G	4,900	ALL	10G	0	7	7

OK1DFC		SO-ALL	7,504,900	ALL	ALL	50	249	251
N1AV		SO-ALL	6,490,400	ALL	ALL	2	264	244
NØAKC		SO-ALL	1,945,800	ALL	ALL	1	140	138
7K3LGC		SO-ALL	1,423,800	ALL	ALL	0	126	113
WA3RGQ		SO-ALL	1,110,000	ALL	ALL	0	111	100
DL1SUZ		SO-ALL	1,069,200	ALL	ALL	8	100	99
KNØWS		SO-ALL	1,008,000	ALL	ALL	2	103	96
YL2GD		SO-ALL	863,300	ALL	ALL	7	90	89
K1WHS		SO-ALL	756,000	ALL	ALL	0	90	84
K4EME		SO-ALL	639,600	ALL	ALL	0	82	78
PA2CHR		SO-ALL	631,800	ALL	ALL	0	81	78
K1OR		SO-ALL	546,700	ALL	ALL	0	77	71
K5DOG		SO-ALL	296,400	ALL	ALL	9	48	52
W5ZN		SO-ALL	291,500	ALL	ALL	0	55	53
NY1V		SO-ALL	270,000	ALL	ALL	0	54	50
WA3GFZ		SO-ALL	260,100	ALL	ALL	0	51	51
UA4AQL		SO-ALL	211,200	ALL	ALL	0	48	44
RJ3DC		SO-ALL	202,100	ALL	ALL	0	47	43
W2LPL		SO-ALL	148,200	ALL	ALL	0	39	38
KØDSP		SO-ALL	105,600	ALL	ALL	0	33	32
K7ULS		SO-ALL	102,400	ALL	ALL	0	32	32
KC2HFQ		SO-ALL	99,200	ALL	ALL	0	32	31
W7TZ		SO-ALL	99,200	ALL	ALL	0	32	31
AG6EE		SO-ALL	67,600	ALL	ALL	0	26	26
WQ5S		SO-ALL	67,600	ALL	ALL	0	26	26
R1NW		SO-ALL	67,500	ALL	ALL	0	27	25
W6BVB		SO-ALL	57,600	ALL	ALL	0	24	24
PJ4MM		SO-ALL	44,100	ALL	ALL	0	21	21
W3HMS		SO-ALL	38,000	ALL	ALL	0	20	19
HA2NP		SO-ALL	36,100	ALL	ALL	0	19	19

KK4MA		SO-ALL	28,900	ALL	ALL	0	17	17
4Z5CP		SO-ALL	22,500	ALL	ALL	0	15	15
SM5EPO		SO-ALL	10,000	ALL	ALL	0	10	10
ZS4TX		SO-ALL	2,500	ALL	ALL	3	2	5

Multioperator

SP6JLW	SP6JLW SP6OPN SQ6OPG	MO-CW-ALL	239,200	CW	ALL	52	0	46
OK1KIR	OK1DAI OK1DAK	MO-CW-ALL	900	CW	ALL	3	0	3

F5KUG	F5DYD F6ABX	MO-CW-1.2G	102,400	CW	1.2G	32	0	32
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K5N	AF8Z KØAXX K2EZ K5RMN KF5LKG KJ5BLU NV5E	MO-ALL	7,660,800	ALL	ALL	0	288	266
OH1LRY	OH3LWP OH3MCK OH4MVH	MO-ALL	2,006,400	ALL	ALL	27	125	132
W3SZ	NN3Q W3SZ	MO-ALL	1,495,000	ALL	ALL	2	128	115
W4ZST	KI4US W4ZST WG8S	MO-ALL	730,800	ALL	ALL	0	87	84
LU8ENU		MO-ALL	495,800	ALL	ALL	0	74	67
OZ9KY	OZ1DLD OZ1FKZ OZ1GWD OZ1PBS OZ2OE OZ3Z OZ5TG OZ8ZS	MO-ALL	461,500	ALL	ALL	0	71	65
G4RFR	GØAPI G3PFM G3YGF	MO-ALL	196,800	ALL	ALL	1	47	41
K3WM	AC3IE K3WM	MO-ALL	176,300	ALL	ALL	0	43	41

S51ZO	S51ZO S52EZ	MO-2M	1,720,200	ALL	2M	0	141	122
SK6EI	SA6AIN SA6AQD SA6BPD SA6FAX SM6BWD SM6LPF SM6LPG SM6THE SM6TOL	MO-2M	1,058,400	ALL	2M	0	108	98
VA2WA	VA2KI VA2WA	MO-2M	474,500	ALL	2M	0	73	65
F6HEO	F5UNH F6HEO	MO-2M	447,300	ALL	2M	0	71	63
W9VW	K9QFL WB9YCZ	MO-2M	84,000	ALL	2M	0	30	28
UA9HO		MO-2M	6,400	ALL	2M	0	8	8

DL3WDG	DL3WDG DL4KGC	MO-10G	252,000	ALL	10G	0	56	45
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W2ZQ	K1JT K2AOA K3DFD KB2MT N2VY W2HRO W2LPL	MO-1.2G	1,500,800	ALL	1.2G	6	128	112
KØPRT		MO-1.2G	1,452,000	ALL	1.2G	6	126	110
IQ2DB	I2DGH I2GUJ I2SVA I2UNE	MO-1.2G	1,138,500	ALL	1.2G	9	106	99
IK5VLS	IK5AMB	MO-1.2G	731,500	ALL	1.2G	7	88	77
VA7MM	VA7MM VE7CNF VE7HRY	MO-1.2G	688,000	ALL	1.2G	10	76	80
PI4Z	PA5KT PE9GHZ	MO-1.2G	418,900	ALL	1.2G	1	70	59
SP3YDE	SP3CET SP3CGR SP3LCD SP3PGN SP3RNY SP3THA SP3TLJ SQ2EAR SQ3DZW	MO-1.2G	181,500	ALL	1.2G	26	124	121
W4ATC	W4WXL WY3O	MO-1.2G	67,500	ALL	1.2G	0	27	25
F5KDK		MO-1.2G	36,100	ALL	1.2G	4	15	19