By Billy Lunt, KR1R Contest Manager and Bev Fernandez, N1NAV Assistant Contest Manager

# 1997 ARRL International EME Competition Results

an this contest get any better? It's grown from a handful of contacts among a few experimenters to a contest that is drawing in more mainstream hams every year. Folks are finding that EME QSOs are becoming more plentiful and easier to complete than they were about five to 10 years ago. Of course, this is largely due to improved technology, but another leading factor is the growing popularity of EME. With more people in the contest, it is easier to find someone you can work.

For the 1997 EME Competition, we received 231 entries—an 18% increase from last year. Every year we hear stories about people completing their first EME contacts. Give it a try. You'll probably be surprised at how easy it may be. In this year's contest alone, we had entries from 11 stations that completed only one contact, and 32 stations reported making up to three contacts off the Moon. It doesn't take a lot of equipment or a monster antenna array if you are working one of the "big stations." Let their antennas do all the work.

### Pins

EMEers at the 1996 EME Convention in Bowie, Maryland, asked if we could add a pin program to their favorite contest— ARRL International EME Competition. We started working on the forms and procedures and then—voila!—it became a reality for the 1997 contest. To be perfectly honest, we weren't expecting such an impressive response. Pin orders exceeded our most conservative expectations. If you didn't get one of these beautiful EME pins, we still have a few available for those who qualified (completed at least one EME QSO during the contest). Contact ARRL HQ for more information.

### Who Won

Perennial winner, Hannes, OE5JFL was blessed with no equipment problems this year and had good weather to boot. Hannes secured the top spot in the single operator



OZ4MM's homebrew 10-meter dish helped him to earn 3rd place in the singleoperator multiband category.

multiband category with an impressive 3.1 million points. Mori, KN6M, tried multiband this year, and finished second place world, and first in North America with 1.3 million points. Stig, OZ4MM, was third.

In the single operator, single band classes, Torbjorn, SM5FRH, using a massive antenna array, took top honors in the 144 MHz category with 1.7 million points. Dave, W5UN, finished in second place, and first in North America. Dave uses an array of 48 17-element Yagis. Leif, SM5BSZ, was close behind in third place with 1.1 million points. Leif uses a rather modest antenna array consisting of  $4 \times 14$  crosselement Yagis. On 432 MHz, Jan, DL9KR, feeding his antenna array consisting of 16 24-element Yagis, won first place with 575,000 points. Mark, N2IQU, was in second place with 501,000 points. The race for the top spots in the 1296 MHz category was quite tight. Peter, OE9XXI, took first place, completing 72 QSOs and 36 multipliers. Louis, F6CGJ worked 35 multipliers, and contacted 70 stations putting him in second place. Frank, W2UHI, completed 61 QSOs, and 34 multipliers for third place and first in North America.

In the multioperator category, the ops at JL1ZCG topped the list with 2 million points. WD5AGO and crew finished in second place with 422,000 points. F3VS and ops out score the rest of the 2 meter multiops with 1.1 million points. The group at I2FAK was close behind with 1 million points finishing in second place. The crew at OH2PO finished first among a field of five in the multiop 432 MHz category.



John, W7OE, in Washington, didn't need a giant antenna to participate in this year's EME competition. He operated from his Toyota pickup truck in an open field about 1/2 mile from his house.



I2FAK's impressive antenna array helped his crew attain 2nd place in the multiop, single band 144-MHz category.



Takuhei, JA2TY, is happy that he competed in the EME, and commented," I did it! It wasn't as hard as I thought it was going to be."

K2DH and group finished first among a field of five in the multiop 1296 MHz category.

# Dates for the 1998 ARRL EME Competition

After listening, sorting, and sifting through all the comments both direct and from the Moon Net, there are a couple of



Alan, BA1DU, (left) and Chen, BA1HAM, are pictures of concentration as they tune the band looking for EME signals from club station BY1QH.

dates that stand out as the best weekends for the 1998 EME contest. We have set the dates for the first weekend as October 10-11, and the second weekend as December 5-6, 1998. Check your calendar and start planning now. Please help us spread the word. We want as many people to participate using their favorite mode (EME, of course!) as possible.

## **Something New**

We received several comments from hams who enjoy operating on the microwave bands. They say that to be competitive in the contest they must operate on the lower bands, or enter the multiband category. They can't afford to spend as much time during the contest on the bands that they prefer (1296 MHz and up) for only a few contacts. Thus they avoid the microwave bands as they strive for a high score.

Since there is a Region 1 scheduling conflict for the best time for the contest in November, we have an open weekend with good conditions. For 1998, we are trying a one-time experiment—a noncompetitive microwave EME weekend, to be held November 7-8, 1998. This will provide a chance to operate on the microwave bands in a contest-like event without jeopardizing your chances to place high in the EME competition standings. Good luck and happy hunting!

#### Scores

Each line score lists call sign, score, stations worked, multipliers, and band (A= 50 MHz, B = 144 MHz, C = 222 MHz, D = 432 MHz, 9 = 902 MHz, E = 1296 MHz, F = 2304 MHz, I = 10 GHz).

Single Operator, Multiband				Single Operator, 50 MHz				7N2TCC	14,000	14	10 B	DL4MEA	49,300	29	17	D	WD5AGO (+WB5BKY,KC5VOY,
OE5JFL	3,135,000	101 120	40 E 39 E	K6QXY	100	1	1 A	JH7SIA JR5JXV	12,600 10,000	14 10	9 B 10 B	KD4LT KL7HFQ	48,600 45,900	27 27	18 17	D	KD5APG,KD5APH) 422,400 3 3 B
KN6M	1,330,000	64 169	31 E 54 E	Single C	perator, 14	4 MHz		SP2JXN Z3OB	9,800 9,600	14 12	7 B	HB9SUL ISTDJ	43,200 41,400 39,100	27 23 23	16 18 17	D D D	42 22 D 43 23 E GD4IOM (GDØTEP,GD4GNH,G4XUM,
OZ4MM	1,296,000	21 112 64	36 L 32 F	SM5FRH W5UN	1,724,800 1,479,600	308 274 212	56 B 54 B	F8DO W5UWB	6,000 5,600	12 8	5 B 7 B	JA2TY DL3EAG	38,400 32,300	24 19	16 17	D	G4UJS,G1GEY,ops) 35,000 24 13 B
SM3AKW	786,500	4 31 59	4 F 16 E 30 E	K7CA EA2LU	801,600 634,500 576,200	167 141 134	48 B 45 B 43 B	KE7NS N6PI K5AM	4,200 4,200 4,200	7 7 7	6 B 6 B 6 B	K5WXN IK5WJD JO3RNL	31,500 27,000 20,800	21 18 16	15 15 13	D D D	1 1 D N2HLT (+N2OLB) 27,000 3 2 B 15 13 D
OFFEVM	750 000	30 1	18 E	RU1AA SM5DCX	537,100 524,800	131 128	41 B 41 B	I2RV WA1JOF	3,000 2,400 2,400	10 6	3 B 4 B	JH1EFA HO3A	16,500 16,500 16,500	14 15 15	12 11 11	D D D	Multioperator, 144 MHz
UESETM	756,000	52	32 E 24 E	IK1MTZ	496,000 480,000	124	40 B 40 B	W7OE	2,400	6	4 B	KFØM 9M2BV	14,300	13	11	D	F3VS (FB1PKC,F5JTA,F6EPY, F6HVA ops)
VE1ZJ	643,800	79 11 21	33 E 11 E	AA8BC IK1FJI	380,000 367,500	100 105	38 B 35 B	IW4BLG F6CRP K7MAC	2,400 2,400 2,000	6 6 5	4 B 4 B 4 B	JHØYSI JR1RCH	8,000 6,300	10	8 7	D D	1,155,400 218 53 B 12FAK (+IK2LZT)
K4QI	567,100	72 35	30 E 23 E	WØHP WA6PEV	272,000 269,700	85 87	30 B 32 B 31 B	SP7DCS NØKQY	1,200 900	4 3	3 B 3 B	JJ3JHP NA4N	4,900 4,900	7 7	7	D	1,060,800 204 52 B I5JUX (IK5QLO,IK5EHR,ops) 614,900 143 43 B
G3LTF	550,800	55	22 D	7K3LGC	234,900	81	29 B	WØEKZ	900	3	3 B 3 B	ZS6PT	3,000	6	5	D	N2WK (+K2DH,K2OS)
EA3DXU	540,600	66 36	30 E 23 E	K8BHZ K8DDR	230,400 219,000 207,400	73 61	30 B 34 B	WA8RJF JHØISW	600 600	3	2 B 2 B	JJ3JRK JH7PAV	900 900	3 3	3 3	D D	151,200 56 27 B KL7X (+AL7FS) 46,400 29 16 B KK5IH (W5AL KK5KK ops)
CT1DMK	436,800	33 17	17 E 14 E	WØAH AA7A	205,900 204,000	71 68	29 B 30 B	KB9MLA IW5DRA	400 400	2	2 B 2 B	Single C	Operator, 12	96 MH	lz		12,600 14 9 B SM2LKW (+SM2ELN)
DF3RU	382,700	34 66 23	21 E 27 E	LA9NEA	187,600 180,000	67 90	28 B 20 B	W1VT VE3EQQ	400 200 200	2	2 B 1 B 1 B	OE9XXI F6CGJ	259,200 245,000	72 70	36 35	E E	VE2JWH (+VE2AAY,VE2PSU,VE2GUQ)
EA3UM	368,000	40	21 E	OH3AWW	170,100	63	20 B 27 B	N6ZE	200	2	1 B	W2UHI LA8LF	207,400 185,600	61 58	34 32	E	2,800 7 4 B NX2Q (+N2PBY.N2SWG)
F5AQC	367,200	40 26 46	25 E 21 E 30 F	EA6VQ	168,000 164,700 163,800	60 61	28 B 27 B	JHØBBE N5XU	200 100 100	2 1 1	1 B 1 B	EA6ADW OK1DFC	168,200 156,800	58 49	29 32	E	400 2 2 B BY1QH (BZ1BM,SMØKAK,PA3BZO,
JA4BLC	354,200	35 18	16 E 13 E	DJ7OF SMØFFS	162,000 153,900	60 57	27 B 27 B	IW2MNV K4TAX	100 100	1 1	1 B 1 B	W4OP	150,000 111,800	50 43	30 26	E	7N3OOY,ops) 300 3 1 B
	244.000	22 2 72	15 E	EA5GIY K1CA	137,200 124,800	49 52	28 B 24 B	DF1IAZ IW2LKS	100 100	1 1 1	1 B 1 B	ON5RR N6BQ	100,800 92,000	42 40	22 24 23	Ē	100 1 1 B
W/ HAH	344,000	13	11 D	WA2GSX	115,000 110,000	50 50	23 B 22 B	VV551N	100	'	1 0	F5PL DC6UW	91,200	38 35	24	E	Multioperator, 432 MHz
VE6TA	335,400	52 20	22 E 16 E	W9HLY WØPT	92,000 86,400	46 36	20 B 24 B	Single (	Operator, 43	32 MHz	42 0	JA6CZD NU7Z	32,200 31,500	23 21	14 15	Ē	OH2PO (OH2JTE,OH2PO,OH6DD,ops) 632,100 147 43 D
PA2CHR	319,800	6 64	28 E	EA2AGZ	81,900 79,800 74,100	39 38	21 B	N2IQU UR5LX	501,600 452,400	132 116	38 D 39 D	JH3EAO WA4OFS	26,600 22,800	19 19	14 12	E E	I2COR (+I2TFI,IK2TLA,IK2PCG,IW2ATM) 156,800 56 28 D
S51ZO	257,400	38 28	20 E 19 E	WØRWH	74,100	39 38	19 B 19 B	K1FO DL9NDD	447,700 388,800	121 108	37 D 36 D	NP4B	4,200	7	6	E	K2OS (+K2DH,N2WK) 36,800 23 16 D
UT5EC	185,600	14	9 E	JH5FOQ	68,400	36	19 B	JA5OVU N4G.IV	297,000 272,600	90 94	33 D 29 D	Single C	Operator, 23	04 MH	lz		26,000 26 10 D
N3WCM	176,400	36 13	25 E 11 E	WA7TDU	57,800 57,600	36 34 32	17 B 18 B	G3SEK KØRZ	256,000 217,500	80 75	32 D 29 D	W4HHK ZS6AXT	3,600 3,600	6 6	6 6	F F	W7KK/6 (+K7XC)10,000 10 10 D
F2TU	159,300	4	4 D	JK1HIX	56,000	35	16 B	W7FN ON4KNG	170,100 153,400	63 59	27 D 26 D	Single (	Decretor 57	60 ML	1-		Multioperator, 1296 MHz
		3	20 E 3 F	WP4G	52,700	32	17 B	G4ERG	134,400	48	28 D	I6PNN	100	1	1	н	K2DH (+K2OS,N2WK) 255.600 71 36 E
YO2IS	87,500	11 24	7 E 18 E	I1ANP WA6YDI	49,600 49,300	31 29	16 B 17 B	EA8FF ON5OF	127,500 120,000	51 48	25 D 25 D	IK2RTI	100	1	1	H	OH2AXH (OH2BNH,OH2BSH, OH2LCT,ops)
Rapol	41,000	14	11 E	OM4JJJ N7EIJ	43,500 41,600	29 26	15 B 16 B	KAØRYT	81,700	43	19 D	Single C	Operator, 10	GHz			168,000 60 28 E S59DCD (S50X S54X S52BT.ops)
KB3PD	39,600	7 15	6 E	PE1OGF DJ1EJA	41,600 36,400	26 28	16 B 13 B	W8MQW WI7Z	78,000 74,100 66,000	39 39 33	20 D 19 D	W6/SMØPY OK1KIR	YP 1,500 400	5 2	3 2	I I	137,800 53 26 E DDØSB (+DL2SBY)
VVDZVVV	10,500	10	4 E 7 D	DF9CY	30,800 30,800	22 22	14 B 14 B	ISCTE	60,900	29	20 D	Multion	orator Multi	ihand			51,000 30 17 E N4SZ (KB4FEM.KF4UGB.ops)
NØHJZ	5,600	3	2 E 5 F	K4VJ	25,200	21	12 B	JH4JLV DL4KG	60,800 58,900	32 31	19 D 19 D	JL1ZCG (J	O1BMV,JH1DY	V,JR4E	NY,		600 3 2 E
		0	5 6	IN3TWX	20,900	19	11 B	W7CI	53,200	28	19 D	F7TFK,J	E8EVF,ops)	400	,		Checklogs
				K6AAW OK1MAC	16,500 14,300	15 13	11 B 11 B	JJ1NNJ S52CW	52,200 50,400	29 28	18 D 18 D		2,011,400	129 63 34	38 30 21	Б Б В	4X1IF, 9H1PA, IW5CNS, K6MYC, K9DTB, N8XA.