2001 ARRL International EME Competition Results

he Moon is the Earth's closest natural terrestrial neighbor. It's an average distance of 238,000 miles away and travels in its orbit at an approximate speed of 3700 miles per hour. Its diameter is about 2160 miles, about one-quarter that of the Earth.

For two weekends every fall, this moving target becomes the focus of high activity and much fun as hundreds of amateurs around the globe participate in the annual ARRL International EME Competition. Their imagination can be legendary as they push their creative talents to find an additional half dB that might mean the difference between a hard-earned complete QSO or a 10-minute exercise in futility.

In 2001, a total of 161 logs were received claiming a total of over 8400 QSOs completed on 6 VHF/UHF/microwave bands. While participation was down slightly from 2000, activity seemed good across the principal bands.

Because of the degree of technical skill required, you always seem to find familiar call signs leading the results. In the Single Operator Multiband category eight of the top 10 finishers from 2000 are found in the 2001 Top Ten in the category. Leading the pack was a 1-2-3 repeat of Gerald, K5GW (with a score of 1,731,600); Ernst, OE5EYM (1,574,400), and Stig, OZ4MM (1,548,800).



Francis, F5PAU, working on his antenna array before the start of the contest.

The 2001 Single Operator 144 MHz Top Ten finishers included 7 of the 2000 top finishers. After a second-place finish last year, Torborjn, SM5FRH, claimed top honors in 2001 with a score of 1,175,200. A score of 631,400 allowed Gianpaolo, I3DLI, to climb into second place this year after a fifth place in the last contest. Alexandr, RU1AA, improved one slot from fourth to third with a score of 516,600.



Philippe Pierrat, F2TU, and his 8-meter dish.

Returning as a three-peat winner in the Single Operator 432 Category is Jan, DL9KR, with a score of 381,600. Finishing strong on his heels once again is Mark, N2IQ, with a final count of 370,600. Six of the 2000 Top Ten made it back to the top of the 2001 list in the category. Gunther, DJ5NV, a newcomer to the box from 2000, took third place



The modest shack of Michael, DL1YMK, seems dwarfed by his 70 cm and 23 cm arrays.



Branimir, 9A9B, in front of his radios, ready for EME action.

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 K5GW 1.731.600 130 39				В	EA2LU LZ2US	429,000	110 94	39 34	B B	W7OE WO9Z	100 100	1	1	ВВ	Multioperator, Multibar			
KoGW	1,731,600	130 65	39 26	D	GM4JJJ	319,600 284,900	94 77	34 37	В	WO9Z	100	'	'	ь	HB9Q (HB9CRQ,HB9DE HB9AYX,ops)	פסח,ואוג	ınlıvı,	
		27	13	Ē	7K3LGC	266,800	92	29	B	Single Ope	erator, 432 M	Hz			2,921,100	131	43	В
OE5EYM	1,574,400	91	33	В	VE3KH	254,100	77	33	В	DL9KR	381,600	106	36	D		70	32	D
		46	23	D	SM5BSZ	189,000	63	30	В	N2IQ	370,600	109	34	D		72	32	Ε
		55	26	E	WB9UWA	189,000	63	30	В	DJ5NV	329,800	97	34	D				
OZ4MM	1,548,800	27	18	В	EA6VQ	180,900	67	27	В	K1FO	310,200	94	33	D D	JL1ZCG (JH1DYV,JR4E	NY,JM7	WXN,	
		74	31	Ď	W7FG	176,900	61	29	B B	DF3RU N9AB	273,900	83 81	33 33	D	JA1MOH,JG1XLV,ops)	0.4	00	_
		68 7	32 7	E F	S52LM OH3AWW	167,400 162,500	62 65	27 25	В	DJ6MB	267,300 254,100	77	33	D	870,000	94 56	29 29	B D
G3LTF	606.000	2	2	В	I3EVK	154.000	55	28	В	VK3UM	210,000	70	30	Ď		30	29	U
GSLII	000,000	38	25	Ď	RN6MT	127.500	51	25	В	UA3PTW	186,000	60	31	D	S53J (S57EA.S56TZJ.o	ns)		
		56	28	Ē	IK2DDR	123,900	59	21	В	KØRZ	170,800	61	28	Ď	178,200	49	28	В
		5	5	F	OK1DIG	121,900	53	23	В	EA8FF	148,200	57	26	D	,200	5	5	Ď
SM3AKW	594,000	9	8	В	WØPT	114,400	44	26	В	S52CW	117,500	47	25	D				
		43	24	D	EA2AGZ	101,200	44	23	В	KL6M	108,000	45	24	D	WD5AGO (+K5TTT,WB5	YWI,NO	6CL,	
		41	22	Е	DM2BHG	98,900	43	23	В	K5WXN	105,800	46	23	D	W6CL) 171,600	14	10	В
		6	6	F	RA4AOR	93,600	39	24	В	DJ3FI	_93,600	39	24	D		3	3	D
F2TU	535,800	22	16	D	SM7WSJ	89,700	39	23	В	ON5OF/OC				_		35	20	Е
		53	24	E	PA3CWI	88,000	40	22	В		73,500	35	21	D				
		8	7	F	9A9B	85,100	37	23	В	JH4JLV UT3LL	67,200	32 29	21 20	D D	Multioperator, 144 MHz	<u>:</u>		
		3	3 7	H	DL2OM	72,000	36	20 21	B B	JJ1NNJ	58,000 55,100	29 29	19	D	I2FAK (+IK2LZT) 926,400	193	48	В
DK3WG	356,700	8 42	7 19	В	K1CA LA9NEA	71,400 68,400	34 36	19	В	7M2PDT	31,200	29	13	D	F3VS (+F8PKC)	193	40	ь
DK3WG	330,700	45	22	Ď	JH2COZ	66,500	35	19	В	K9SLQ	30,400	19	16	Ď	855.600	186	46	В
JA6AHB	284,700	39	21	Ď	SP7DCS	63,000	30	21	В	DL4KG	30,000	20	15	Ď	KB8RQ (+N8DFN)	100	40	
JAOAIID	204,700	34	18	Ē	I2RV	58,000	58	10	В	SKØCC (SI				_	796.500	177	45	В
EA3DXU	264,000	36	19	B	SM5CFS	55,800	31	18	В		20,800	16	13	D	W5LBT (+W5UN)			
	- ,	30	21	D	SMØNKZ	46,400	29	16	В	K6JEY	18,000	15	12	D	` 483,600	124	39	В
W7SZ	141,900	15	12	D	YO2AMU	45,600	24	19	В	JA2TY	18,000	15	12	D	KJ9I 370,000	100	37	В
		27	20	Е	K6AAW	43,200	24	18	В	DL5LF	16,500	15	11	D	W6YX (W6QI,AD6FP,W6			
		1	1	ı	W3SZ	38,400	24	16	В						9,000	10	9	В
DL1YMK	134,400	21	18	D	JR3REX	33,000	22	15	В		erator, 1296		0.5	Е	TI5KD (+NØKE) 100	1	1	В
LIBORIUL		21	14	E	RA3QTT	27,000	18	15	В	K5JL KØYW	297,500 276,500	85 79	35 35	Ē	PY2HCD (PY2PPZ,ZZ2)	WK I,op: 1	S) 1	В
HB9BHU	99,000	41 4	18 4	E	PE1LWT	26,000	20 20	13 13	B B	G4CCH	261,800	77	34	Ē	100		1	ь
S51ZO	83,200	17	14	В	UA4ALU K8BI	26,000 25,200	21	12	В	F6CGJ	213.900	69	31		Multioperator, 432 MHz	,		
33120	03,200	15	12	Ď	K6PF	24,700	19	13	В	KAØY	194,300	67	29	E E	OH2PO (+OH6DD)	•		
WBØGGM	82,500	11	9	В	K7XQ	22.800	19	12	В	HB9BBD	176,900	61	29	Ē	353,600	104	34	D
W DD COW	02,000	22	16	Ď	SV1BTR	22,100	17	13	В	OZ6OL	165,200	59	28	Е	DL7APV (+DJ1SHF)			
JA9BOH	69,300	24	15	В	LU6KK	20,400	17	12	В	F5PAU	156,000	52	30	Е	223,200	72	31	D
	,	9	6	D	DL8UCC	18,000	15	12	В	K4QI	132,500	53	25	Ε	K4EME (+KR4V, AD4TJ			
W4ZRZ	56,000	1	1	В	IY1SP (I1AI	NP,op)				F1ANH	103,200	43	24	E E	71,400	34	21	D
		27	19	D		17,600	16	11	В	CT1DMK	74,000	37	20	Ē	F5KKD (F5PMB, F6GYF		_	_
YO2IS	47,500	11	7	В	UR5LX_	15,000	15	10	В	JH5LUZ	64,600	34	19	E	4,900	7	7	D
		14	12	D	JHØMHE	13,600	17	8	В	EA3UM F5HRY	63,000	35	18 16	E	Multionarator 1206 ML	J-		
W4AD	44,200	14	9	В	RA1ZC	11,700	13	9	В	F6ETI	54,400 52,700	34 31	17	E	Multioperator, 1296 MF DJ5MN (+DO6ME, DJ3N		5M\/\	
JHØWJF	11,000	12 7	8 6	E B	NØAKC WØEKZ	10,800 7,200	12 9	9 8	B B	DL4MUP	46.400	29	16	Ē	143,100	53	27	Е
JURMAL	11,000	4	4	D	NØKQY	7,200	10	7	В	WA6PY	44.800	32	14	Ē	W4OP (+W4SC)	00		_
		-	-	D	KB5MY	4.000	8	5	В	WA1JOF	36,400	26	14	Ē	54,400	32	17	Е
Single Operator, 144 MHz					W6TE	2,800	7	4	В	WA4OFS	24,000	20	12	Е	LU8EDR (+LW5DX)			
	1,175,200	226	52	В	JF4TGO/8	2,500	5	5	В	VK5MC	13,000	13	10	Е	20,000	20	10	Ε
I3DLI	631,400	154	41	В	K5TR	2.500	5	5	В	IK3COJ	4,800	8	6	Е	HA5SHF (HA5BGL,HA5	BMU,or		
RU1AA	516,600	126	41	В	UA4AQL	2,500	5	5	В	K9ZZH	3,500	7	5	Ε	12,000	15	8	Ε
G3ZIG	494,000	130	38	В	NQ2O	1,800	6	3	В	a					Marking Property			
DL1EJA	483,800	118	41	В	PA3BUT	1,600	4	4	В		erator, 2304		_	_	Multioperator, 5760 MF			
N5BLZ	464,100	119	39	В	N2VR	400	2	2	В	JA4BLC	2,500	5	5	F	OK1KIR (OK1DAI,OK1D	AK,ops 1	5) 1	Н
DL5MAE	436,600	118	37	В	YO3DMU	400	2	2	В						100	'	'	- 11

with a final score of 329,800.

The Single Operator 1296 MHz Category witnessed another three-peat champion as Jay, K5JL, won with a score of 297,500. The next two finishers, Bruce, KØYW, and Howard, G4CCH, returned to the Top Five box for the category with a score of 276,500 and 261,800, respectively. The final Single Band winner was on 2304 MHz with Yoshiro, JA4BLC, completing 5 QSOs on that challenging band for a score of 2500.

If, according to the old adage, two heads are better than one, then the various multioperator entries made good use of the extra ears and talents during the contest. The Multioperator Multiband winning entry was submitted by yet another repeat champion—the operators of the HB9Q station, who claimed a total of 2,921,100. In fact, all four of the entries received in this category finished in exactly the same place as 2000, with JL1ZCG (870,000), S53J (178,200) and WD5AGO (171,600) finish-

ing 2-3-4, respectively.

There was a bit of shuffling among the top Multioperator 144 MHz entries. 2001 fourth-place finisher I2FAK leaped ahead of last year's champion to claim the category, denying F3VS the repeat victory by a score of 926,400 to 855,600. Last year's runner-up KB8RQ slipped one notch to third with a score of 796,500. The operators at OH2PO repeated as the top 432 MHz Single Band winner with a score of 353,600. The DJ3MN stations improved from a second place finish in 2000 to take top honors on in the 1296 MHz Multioperator category with a score of 143,100. Rounding out the winning Multioperator stations were the ops at OK1KIR, who snared the only QSO claimed by a Multioperator station on the 5760 MHz band.

The 2002 ARRL International EME Competition will be held over the weekends of October 26-27 and November 23-24. It takes somewhere between 2-3

seconds for a signal to be transmitted from the Earth, bounced off the Moon and return, to Earth. When you have to consider such things as Doppler shift, apogee and perigee, moonrise and tracking antennas, now is the time to start planning to participate. In many minds, competing in just *one* EME contest makes you a "top of the box" entry.

STRAYS

RADIO LINE-OF-SIGHT PLOT SERVER

The line-of-sight plot server maintained by Matt Reilly, KB1VC, has a new Web address: users.ren.com/acreilly/los_form.html. This online tool was described in Matt's article "Radio Line-of-Sight Paths from the USGA Digital Elevation Database" in the September/October 2000 issue of QEX. By completing a simple form you can request and receive a GIF image that illustrates each point on the Earth between the starting point and ending point that you specify. This is particularly useful for VHF/UHF and microwave operators.—Tom Frenaye, K1KI, ARRL New England Division Director