

2007 ARRL International EME Competition Results

Three weekends of skill, technology and endurance.

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Earth-Moon-Earth (EME) enthusiasts around the world continue to show grit with the 29th annual, 2007 ARRL International EME Competition. Advances in weak signal reception, communications software and operating ability are pushing this competition and its participants to new heights.

Good science is the very essence of EME contesting — as much good science as one can muster with a large dose of concentration and gusto. High scores come to those who put all they have into listening for weak signals in the noise for hours on end to dig out that next log entry. One's hope of contact quantity is secondary to signal strength and quality. Many EME contesters log fewer unique call signs in the entire event than a small HF station in just an hour or two on 20 meters in an HF contest!

Participation offers the ultimate climate for honing one's operating skills and ability, communications apparatus and stamina. Yet the ARRL International EME Competition has something to offer everyone with interests in weak signal communications. Categories are available from the big gun CW and SSB diehard, to the single antenna QRP digital newcomer, on all bands from 50 MHz to light.

Entrants can participate at levels from the single operator, mixed mode and assisted classes attractive to the EME newcomer to the most intense and historical sense of EME — the prestigious single operator, analog category. There are categories for multiple operators, digital-only enthusiasts and more, described in the online contest rules.

The 2007 competition was held on the last weekends of September, October and November — each 48 hours long.

September was for 2304 MHz and up. The October and November weekends were for 50 through 1296 MHz. All three segments are entered by the all-band competitor.

The results yielded 183 log entries, a total of nine new logs over 2006 with some big scores. Only single-band 222 MHz had no entries this year. Nearly 10,100 contacts were completed — up more than 30% from nearly 7200 last year, apparently due to the increase in digital, mixed mode and assisted entries.

First and second overall highest scores were achieved by two veterans of the EME community. The highest overall score goes to the K1JT team with a score of 4,253,400 points in the Multi-Op All-Band Mixed Mode. Second place overall goes to Alex, RU1AA, who used both analog and digital modes exclusively on 144MHz to achieve 2,618,700 points. The top scorers in all categories are shown in Table 1. (The complete score listings, including several very close races can be found at www.arrl.org/contests/results/.)

In the 144 and 1296 MHz analog categories activity was often brisk, with the big guns working many smaller stations on CW. The Assisted categories, gaining popularity, were also very competitive. There were new stations trying SSB EME, too. In October, for instance, many signals could be found on both 144 and 1296 MHz as these bands continue to show high occupancy. Also of increasing interest are 2304 MHz and up, with an enlarging population on 13 cm.

EME contesting can be a reality to anyone able to construct the hardware and station infrastructure for enjoying weak signal operating at its finest. Many hams seem awed and intimidated by EME communications — in part due to photographs of fantastic antennas, marvelous high power amplifiers and such. The Web site results of several leading stations in the online version of this article show that complexity of EME need not be extreme. In fact, a single Yagi, 150 W station with a reasonable receive system sensitivity, along

with some understanding of EME, may compete on 144 MHz — the mainstay band. Many compete on 144 MHz as it is the quickest and most affordable way to get “on the moon.” Personally, I have enjoyed 2 meter EME going on two decades.

The results show several “baseline” markers for 144 MHz EME success with a modest station. I consider these to consist of four long Yagis (see photo on page 5), a kW at the antenna and the best receiving system you can achieve. At this level of participation there will be few stations you cannot work. Granted, a modest station cannot complete a contact with the instant ability of a big gun, but it can compete! Smaller stations can work the big guns, too. Got 6 meters and up? Try the sARRL International EME 

2007 ARRL International EME Competition — Category Winners

Category	Mode	Call	Score	Bands
Single-Operator				
50 MHz	Digital	PE1BTX	48,600	
50 MHz	Mixed	JR6EXN	30,400	
144 MHz	Analog	L22US	284,900	
144 MHz	Digital	KB8RQ	1,245,600	
144 MHz	Mixed	RU1AA	2,618,700	
144 MHz	Assisted	K9DX	1,339,600	
432 MHz	Analog	DL9KR	230,400	
432 MHz	Digital	JH0TOG	100	
432 MHz	Mixed	OK1TEH	2,000	
432 MHz	Assisted	KE2N	52,800	
1296 MHz	Analog	G4CCH	417,100	
1296 MHz	Mixed	PA3FXB	20,400	
5.7 GHz		OK1CA	3,600	
50 - 1296 MHz	Analog	OZ4MM	1,224,500	BDE
50 - 1296 MHz	Digital	EB5EEO	475,200	BD
50 - 1296 MHz	Mixed	UA4AQL	82,800	BD
2.3 GHz and Up		F2TU	193,800	FHI
All band	Analog	RW1AW	1,513,200	BDEFI
Multi-Operator				
144 MHz	Mixed	YO9FRJ	881,600	
144 MHz	Assisted	IK1UWL	1,724,800	
432 MHz	Mixed	OH2PO	360,400	
1296 MHz	Analog	IZ1BPN	207,700	
1296 MHz	Assisted	RD3DA	183,000	
2.3 GHz		HB9Q	37,800	
50 - 1296 MHz	Analog	SP6JLW	460,600	DE
50 - 1296 MHz	Mixed	K4EME	428,600	BD
2.3 GHz and Up		OK1KIR	127,100	FHI
All band	Mixed	K1JT	4,253,400	BDEF

Band Definitions: A = 50MHz, B = 144MHz, C = 222MHz, D = 432MHz, 9 = 902MHz, E=1.2GHz, F = 2.3GHz, G= 3.4GHz, H = 5.7GHz, I = 10GHz, J = 24GHz, K = 47GHz, L = 75GHz, M = 119GHz, N = 142 GHz, O = 241 GHz, P = Light. Checklogs: SM2CEW and RV9JD.

The complete scores in each category, additional photos and tables, Soapbox and records are available online at www.arrl.org/contests.