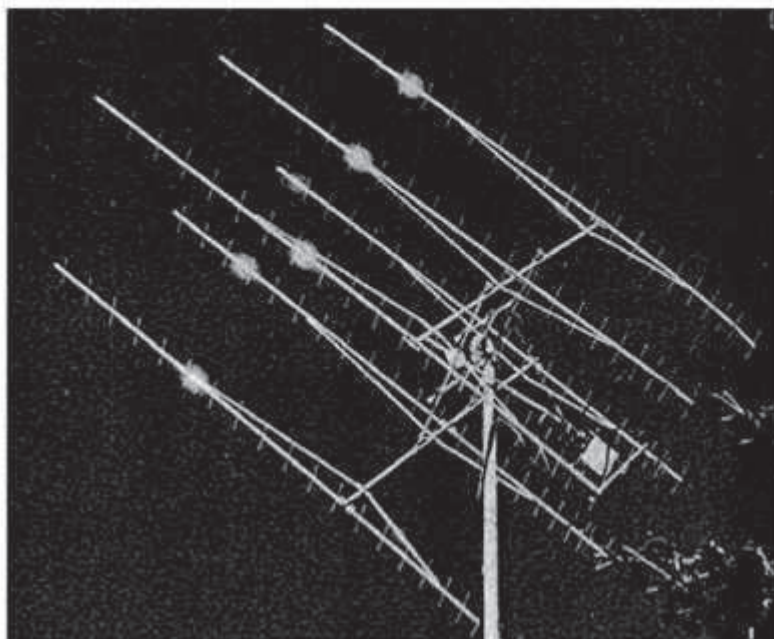


Results, Seventh ARRL International EME Competition

By Edith Holsopple,* N1CZC



From Alaska, "the last frontier," KL7WE's 6 x 22-element Yagis search the sky for signals from another frontier.

The tide is turning as more and more stations become equipped to join the once elite group of radio-lunarians. EME enthusiasts in many parts of the globe fought high winds and stormy weather to work other EME stations in the Seventh ARRL International EME Competition. Participation is rising, as this year we received 123 logs from the October 29-30 and November 26-27, 1983 event.

Weather systems did not cooperate as much this year as last. K2UYH rated the 1983 conditions as average at best and even poor at times. In Europe, he reported, weather conditions were at their worst during the November weekend with rain and hurricane force winds present over much of the continent. Working EME stations is the ultimate challenge of amateur radio. For more information, see the *Radio Amateur's Handbook* and *The Lunar Letter Magazine*, 312 12th Ave. S., Nampa, ID 83651, and write to Allen Katz, K2UYH, editor/publisher, 432 and Above EME News, c/o Department of Engineering Technology, Trenton State College, Trenton, NJ 06825.

This year the single-op 2-meter-band category was again the most populous, accounting for over half of the entries received. WA1JXN/7 retained his position as the leader of the pack, beating his last year's score by 165,000 points and working 19 more stations. Fifty-eight percent of his contacts were with DX stations. W5UN was right on his heels, with the same number of contacts but with two fewer multipliers.

DL9KR was the star of the 432 MHz band, working 86 stations after rebuilding his antenna. N9AB shared the limelight by completing 83 QSOs, all on random. Activity levels were superb



The EA2BK team was very happy to complete the first EME QSO on 432 MHz from Spain during the contest.

on this band both weekends, and things stayed interesting with the appearance of many new stations.

On 1296 MHz, activity was incredibly slow, with only three logs received. According to K2UYH, N6CA achieved just about the ultimate in low-power EME QSOs. Using a single water-cooled 7289 (160 W at the antenna) and 16 x 24-element loop Yagis, he worked VE7BBG (O/O) on random. Chip also copied K2UYH (2-dB peak), W7GBI (4-dB), K4Q1F (2-dB) and OE9XXI (1.5-dB).

The highest position in the multiop division was taken by another EME pioneer K2UYH, up

from third last year. This score is impressive, especially considering that none of the contacts were on 144 MHz. OZ1EME zoomed up to second place from seventh last year.

Congratulations to all who conquered the difficult and made at least one EME contact. Certificates should be in the mail by the end of March.

SOAPBOX

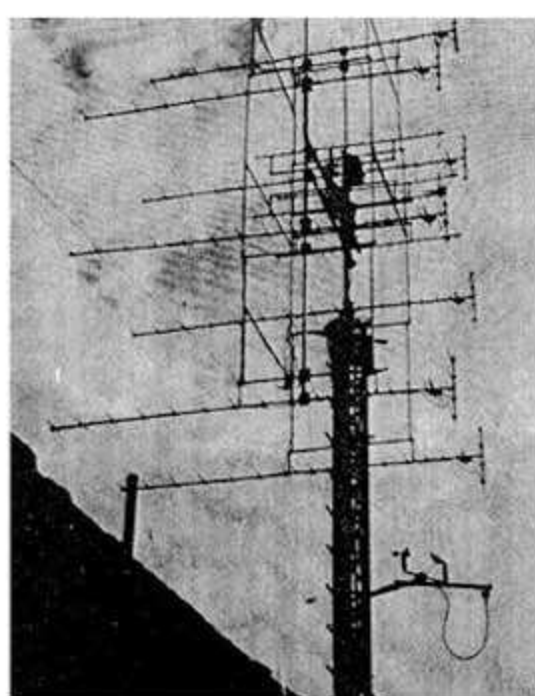
Selective scheduling produces a significant scoring advantage (N4GJV). I get rather perturbed to hear the fellows in the southern part of the country complaining about the heat and sunlight while I am dressed up in fur lined parkas and face masks with a blow torch trying to heat up electrical tape in a 40-mile wind. Anyone for checkers? (K1WHS). As we move away from the sunspot maximum, the auroras are much less frequent and so the conditions should become more stable. At last we are spreading out on 432 away from .010 (G3LTF). The November part was severely hampered by a stormy weather situation (DJ8QL). Conditions were very changeable, mostly bad. I worked 42 new stations (YU3USB). This was the best contest for EME yet. Both weekends were clear and 70 degrees (WA4NJP). The test was nice, but conditions were very poor here in the first part. Why not have two contests, spring and fall (SM4IVE). It was a hard fight against the monstrous antenna stations (SM4GVF). QRM was incredible at times. Imagine 2 meters from Connecticut sending QKZ THE SM4 ONLY PSE (K1FO). I had lots more fun this year with a big antenna. I could not operate the second weekend because of holiday/family commitments (W7IUV). The last weekend of November I operated in a blizzard with a manually aimed antenna. Try keeping an array on the moon in driving snow and 50-mph winds. Eleven of the 45 contacts were with other 4 yagi stations. This is very good considering that WB6COR and GW3NYY were using only four Junior Boomers and were 1.5-2 dB down from my four yagis (KX80). I would like to see an indication of the antenna system used by each station (DJ5DT). If you run high power you need a "high power RX" and a brain. I have the first but I'm still trying for the latter, as I find it hard to get call signs from a weak pileup (G4DZU). I spent much time listening and getting familiar with the antenna. Many hours were completely dead — like the moon had disappeared (K9MRI). I operated only the October weekend. My antenna relay failed just before the second weekend. I lost two

*Communications Assistant, ARRL

GaAsFETs and two MOSFETs before deciding to quit and rebuild the whole works (K2QR). The weather just could not have been any worse! (60-mph gales and torrential rain). I was out at 2 A.M. on both mornings, struggling in a sea of mud to lash down the antennas with ropes (GW3NYY). Moonbounce is supposed to be synonymous with problems, right? ... I enjoyed it immensely. I'm hooked. Now bigger and bigger amp, ant., etc. (K9RX). The nowadays crowded community behaved politely. I was crazy enough to rebuild the antenna completely, sometimes working in the dark and sub-zero temperatures. The antenna survived its initial test — 85-mph gusts. Thanks for another fine contest (DL9KR). I enjoyed my first EME contest very much. I would like to see the multipliers changed to include each state as a multiplier, instead of the call areas (W8RRY/5). There were also heavy winds in west and central Europe at this time (Switzerland winds peaked at 125 mph!) and kept off many EME activities (OE9PMJ). The appearance of KL7WE shortly after our moonrise caused a heated argument as to whether he could be genuine, but we managed to convince ourselves that he was genuine and worked him. Being a long way to the north must give you a very different perspective on the moon (G4EZN). As newcomers in EME, it seems to be difficult to be heard. Even if DK8MA/p was a real portable station (antenna was built up one week before contest, operator shack was a trailer coach), we all thought that the contest time in autumn was chosen very well. But after antenna breakdown during the second weekend, we weren't sure at all (DB5ML). Our results are much better than last year. The conditions were "FB" during nighttime, but during one hour at the sunrise time they went down and nobody was heard. After that, conditions here in Saturday were poor; on Sunday good, with lots of QSB. Really, we think that a contest with more nighttime would be better (EA3LL).

Antennas Used by Leading Stations

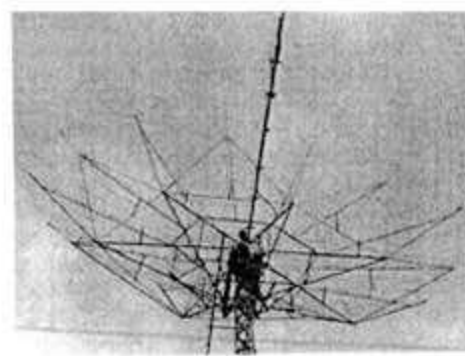
Class	Call	Antenna
Single Op, Multiband	K9HMB	16 x 19-el Yagi (144 and 432) 8 x 11-el Yagi (220) (not specified)
	OESJFL	12.2-meter dish (144 and 432)
	YU1AW	6.5-meter dish (1296)
	HB9SV	16 x 16-el Yagi (144) 16 x 21-el Yagi (432)
	N4GJV	4-meter dish (1296) 16 x 3-el quad (144) 16 x 13-el quagi (432)
Single Op, 144 MHz only	WA1JXN/7	12 x 19-el Yagi (not specified)
	W5UN	16 x 15-el Yagi
	SM2GGF	16 x 15-el Yagi (not specified)
	SM7BAE	24 x 12-el Yagi
Single Op, 432 MHz	DL9KR	16 x 13-el Yagi (Oct.) 16 x 20-el Yagi (Nov.)
	N9AB	16 x 19-el quagi
	W8RRY/5	8 x 21-el Yagi
	JA6CZD	30-ft dish
	W6ABN	24-ft dish
Single Op, 1296 MHz	WA8NLC	17-ft dish
	ZL3AAD	(not specified)
	N6CA	16 x 24-el loop Yagis
Multiop	K2UYH	28-ft dish
	OZ1EME	12 x 9-el Yagi
	OE9XXI	25.5-ft dish (432 and 1296)
	I5MSH	11-meter dish
	G4EZN	40-ft dish
Commercial	K3NSS	84-ft dish



DJ6MB used this 8 x 20-element Yagi to work on 432 MHz.



Dr. John W. Thompson, K3MD, operated 2 meters from here.



JA6DR worked 40 stations with the help of this 40-ft dish.



Evald Karlsson, SM2GGF picked up third place on 2 meters.

Scores

Scores list: call, score, stations heard, stations worked, multipliers, band (A — 144 MHz; B — 220 MHz; C — 432 MHz; D — 1296 MHz).

Single Operator

144 MHz Only	
WA1JXN	528,900-134-129-41-A
W5UN	503,100-129-129-39-A
SM2GGF	467,400-123-123-38-A
SM7BAE	357,200-107-102-38-A
YU3USB	385,200-121-107-36-A
WA4NJP	357,200-94-94-38-A
K8BRQ	290,500-83-83-35-A
YU3ZY	261,800-77-77-34-A
SM5FRH	244,900-79-79-31-A
OH7PI	183,000-61-61-30-A
SM4IVE	182,900-59-59-31-A
SM4GVF	167,400-54-54-31-A
F6CJE	156,800-56-56-28-A
K1FO	156,000-67-60-26-A
W7IJI	124,800-58-48-26-A
KX80	117,000-45-45-26-A
K8MYC	116,100-43-43-27-A
DLJSDT	100,000-52-40-25-A
UA1ZCL	98,400-41-41-24-A
OK1MBS	93,600-36-36-26-A
JA6DR	92,000-40-40-23-A
Y2ZME	86,400-47-36-24-A
OK2TU	81,600-34-34-24-A
UA3TCF	69,300-65-33-21-A
W5LUJ	60,000-46-30-20-A
K20S	49,400-39-26-19-A
WA8ZHE	42,500-25-25-17-A
G4DZU	35,200-30-22-16-A
WDBISK	34,500-39-23-15-A
SM5CFS	28,500-19-19-15-A
ZS6AVL	25,200-18-18-14-A
N6AMG	25,200-18-18-14-A
KG6DX	23,800-23-17-14-A
W8RWH	23,400-24-18-13-A
OH5IY	22,100-17-17-13-A
WA4CGG	22,100-17-17-13-A
K9MRI	20,000-20-20-10-A
W9BOZ	18,000-15-15-12-A
W7HAH	16,800-14-14-12-A

W7HAH	16,800-14-14-12-A
DL2OM	15,400-32-14-11-A
GM4IPK	15,400-28-14-11-A
LX1GR	15,000-15-15-10-A
DK4MM	14,300-30-13-11-A
W8PAT	13,000-24-13-10-A
KESC	12,100-11-11-11-A
OK1KRA (OK1GD,opr.)	12,000-25-12-10-A
K2QR	12,000-12-12-10-A
WA3DJG	7200-9-9-8-A
F1HI (F6DRD,opr.)	7000-29-10-7-A
K5WE	7000-10-10-7-A
GW3NYY	5400-14-9-6-A
OZ1ASL	4800-8-8-6-A
VE3EQO	4800-8-8-6-A
EA3ADW	4200-25-7-6-A
K9RX	4200-12-7-6-A
K3MD	4200-10-7-6-A
K9TI	4200-7-7-6-A
W2CNS	3600-6-6-6-A
W7ID	3600-6-6-6-A
WBKOR	3600-6-6-6-A
K7KOI	3000-6-6-5-A
K1BKK	2900-7-7-4-A
XE2BC (WB6NMT, opr.)	1600-8-4-4-A
W5LAWB	1600-7-4-4-A
W8BART	400-2-2-2-A
GM4JJJ	100-15-1-1-A
SM3LBN	100-1-1-1-A

432 MHz Only

DL9KR	275,200-86-86-32-C
N9AB	257,300-83-83-31-C

W8RRY	248,400-77-77-32-C
JA6CZD	134,400-56-56-24-C
W6ABN	71,300-32-31-24-C
JA4BLC	62,700-33-33-19-C
OJ6MB	57,000-30-30-19-C
KL7WE	53,200-37-28-19-C
JA9BOH	39,000-26-26-15-C
DK1PZ	32,200-43-23-14-C
G3SEK	32,200-24-23-14-C
F2TU	30,000-20-20-15-C
W5ITI	24,000-16-16-15-C
SP5CIC/SM8	23,800-28-17-14-C
N2CB	22,500-15-15-15-C
W8RAP	18,000-36-15-12-C
SM5CPD	15,000-15-15-10-C
DF7VX	9000-16-10-9-C
DF6NA	3600-6-6-6-C
W1ZX	3600-6-6-6-C
JATUQ	2000-12-5-4-C
ZL2AQE	1600-4-4-4-C

1296 MHz Only

W8NLC	11,000-11-11-10-D
ZL3AAD	3600-6-6-6-D
N6CA	100-8-1-1-D

Multioperator

K2UYH (+W3GPY,WB3ESS)	555,900-7-7-4-B
	89-83-31-C
	24-19-16-D
OZ1EME (OZs 1FTU,2GZ,5IQ,opr.)	308,000-90-90-34-A
OE9XXI (OE9s MCI,PMJ,opr.)	196,000-54-36-20-C
	21-20-15-D

I5MSH (5s MZY,TDJ,W1LJ,opr.)	147,500-59-59-25-C
G4EZN (+G3IOR,G4JXX)	140,000-61-56-25-C
OZ5VHF (OZ1s BGO,EXZ,OZ4MM,opr.)	96,000-40-40-24-A
DK3MA/P (+DB5ML,DL1MBV,DL8MAS,DL9MCC)	78,200-10-10-9-A
	24-24-16-C
EA3LL (+EA3AEO)	66,000-65-30-22-A
W8SD (+WB8TEM)	45,800-8-8-7-B
	16-16-12-C
F1FEN (+F1GHU,F6s GRB,GRG,IED,F9HS,opr.)	30,800-22-22-14-C
UK5JAX (UB5s JIN,JMR,JW,opr.)	24,700-49-19-13-A
YU3DAN (YU3s HBW,UJM,UMV,opr.)	13,000-13-13-10-A
EA2BK (EA2s AFM,AVY,HO,LU)	7000-16-10-7-C
LA1K (LA9MW,LA9UX,opr.)	1200-8-4-3-C

Non-Amateur Equipment

K3NSS (K3LFO,W1ZX,opr.)	10,800-12-12-9-C
-------------------------	------------------

SWL

PA-3249 (26 stns-144 MHz)

Check-Log

I2001