

2007 ARRL International EME Competition

Categorically Speaking

by Jeremy Alexander W7EME

[A note from the editor, Ward Silver NØAX] The EME competition covers a large number of bands and in several different modes of operation. This means a lot of categories! 144 categories, to be exact. Only 28 categories had entries from a total of 184 entries, so perhaps this pie is being sliced a bit too narrowly? As a counter-example, the DUBUS EME competition (<http://www.dubus.org>) has six basic categories: QRP/QRO/PRO, SSB-CW/Digital, and Multi-Op. You might offer your thoughts on the appropriate number of entry categories for this event to contest@arrl.org.

Single-Operator Categories

Single-operator categories include multi-band and single-band operations, further divided into analog (CW and SSB modes) and digital (any data mode) sub-categories, plus a mixed category for stations using both analog and digital modes. Assisted sub-categories include operations that employed externally-obtained resources, such as Internet chat rooms or spotting networks.

Single-Operator Multi-Band categories:

- Stig, OZ4MM operated Single-Op Multi-Band 50 - 1296 Mcs Analog and wins this category with a huge score of 1,224,500 points. In second place is SV1BTR and in third, VK3UM.
- The Single-Op Multi-Band 50 – 1296 Mcs Digital was won by Vicente, EB5EEO with total score of 475,200 points. Vincente was followed by EB2FJN and RZ3AED.
- Alexander, UA4AQL puts away the Single-Op Multi-Band 50 – 1296 Mcs Mixed Mode (analog and digital) with a grand total of 82,800 points. Alex was closely followed by W8PAT at 81,000 points and by RK3WWF in third.
- The Single-Op Multi-Band 2304 Mcs And Up bracket goes to Philippe, F2TU finishing up with score of 193,800. ES5PC and SP6GWN were the following entrants in this category.
- In the Single-Op All Band Analog class yet another fine year for Boreisha, RW1AW pounding out his big signal across the bands for a final score of 1,513,200. He was closely followed by G3LTF with 1,424,000 points. DF3RU (972,400) and WA6PY (972,000) battled it out for third place separated by the slimmest of margins!

Single-Operator Single-Band categories:

- 50 Mcs
 - Mixed Mode: Hideki, JR6EXN, won this category with 30,400 points
 - Digital category: Gerard, PE1BTX, made a great score of 48,000 points
- 144 Mcs
 - Analog: Marko, LZ2US scored 284,900 total points, ahead of F3VS (210,800) and OK1MS (189,000). There were 19 logs in this category.
 - Digital: Gary, KB8RQ, crushed the competition with 1,245,600 points, well ahead of EA3BB (236,800) and LU1CGB (236,000) who finished in a virtual tie in this 25-entry category!
 - Mixed Mode, Unassisted: Alex, RU1AA, pulled an amazing 2,618,700 points, thus owning this category. W3SZ scored 792,000 points and RA6DA 534,100 points to place second and third.
 - Mixed Mode, Assisted: By far the most popular category with 34 contestants, first place score goes to John, K9DX, with a final score of 1,339,600. John was followed by RX1AS with 1,043,700 points and AO6VQ with 947,200.
- 432 Mcs
 - Analog: Johann, DL9KR finishes with a very sweet score of 230,400. UA3PTW (198,400) and I1NDP (122,500) were in second and third place of the 16 entries.
 - Digital: Katsumi, JHØTOG, mustered a QSO as the only entrant in this category

- Mixed Mode: Solo entries by Ken, KE2N, (52,800) and Matej, OK1TEH, (2000) filled out the Assisted category. There were no entrants in the Unassisted category.
- 1296 Mcs
 - Analog: This category had high participation (17 logs) and big scores. Placing first was Wayne, K9SLQ, with 356,000 points. The runner up in this category was Zdenek, OK1DFC, with a total of 334,400.
 - Mixed Mode, Assisted: Howard, G4CCH took top honors with a score of 514,800.
 - Mixed Mode, Unassisted: Van, PA3FXB, totaled 20,400 points as the only entrant in this category.
- 5.7 Gcs
 - Analog: OK1CA scored 3600 points as the only single-op entry on a band higher than 1296 Mcs.

Multi-Operator Categories

In the Multi Operator category participation there were and normally are the largest scores in the event.

- All Band, Mixed Mode: The partnership of two stations in two locations within the same state brought Joe, K1JT and Allen, K2UYH the highest overall score in the 2007 competition, a huge 4,253,400 points.

[A Note From ARRL Contest Branch Manager Sean Kutzko, KX9X: In the original scores posting in the April 2008 *QST*, HB9Q was listed as the winner of the Multi-Operator, Multi-Band, Mixed Mode category. Unfortunately, HB9Q used assistance, which is not permitted under EME contest rules for that entry class. HB9Q was contacted and presented with a list of acceptable entry categories, and HB9Q chose to enter as a multi-operator, single band 2.3 GHZ entrant. HB9Q was NOT disqualified, merely re-classified to an acceptable category.]

- 50 – 1296 Mcs, Analog: first-place goes to the team of SP6JLW amassing 460,600 points.
- 50 – 1296 Mcs, Mixed Mode: the K4EME team scored 428,400 points to take the category. The N9JIM team did score more points, but used commercial equipment in accomplishing their QSO's.
- 2.3 Gcs and Up, Mixed Mode: OK1KIR brought home 127,100 points.
- Single Band 144 Mcs, Mixed, Assisted: IK1UWL took 1,724,800 points for their participation, ahead of KA1VHF (319,800) and F5KCH (220,500).
- Single Band 144 Mcs, Mixed, Unassisted: team YO9FRJ scored 881,600 points.
- Single Band 432 Mcs, Mixed, Unassisted: OH2PO finished with a nice score of 360,400.
- Single Band 1296 Mcs, Analog: once again very high scores, with 5 of the 7 logs entered here in six figures. Team IZ1BPN took first place in this category with 207,700 points, followed by SM3LBN (195,300) and SK0UX (186,000).
- Single Band 1296 Mcs, Mixed, Assisted: RD3DA won with 183,000 points ahead of VA7MM with a total of 122,200 points.
- Single Band 2.3 Gcs, Analog: The team of HB9Q scored 37,800 points, just ahead of WD5AGO with 34,000. HB9Q also operated on several other bands and modes, but this was the only category matched by their entry.

**2007 ARRL International EME Competition
Category Winners**

| Category | Mode | Call | Score | Bands |
|------------------------|-------------|--------|-----------|-------|
| <u>Single-Operator</u> | | | | |
| 50 MHz | Digital | PE1BTX | 48,600 | |
| 50 MHz | Mixed | JR6EXN | 30,400 | |
| 144 MHz | Analog | LZ2US | 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 | K9SLQ | 356,000 | |
| 1296 MHz | Mixed As'd | G4CCH | 514,800 | |
| 1296 MHz | Mixed Unasd | 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 |
| <u>Multi-Operator</u> | | | | |
| 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.

2007 ARRL International EME Competition

Line Scores by Class

| CALL | SCORE | QSOS | Phone/CW | Digital | TotalMults | Band | Operators |
|---|---------|------|----------|---------|------------|------|-----------|
| Single Operator, Multi-Band 50-1296 Analog | | | | | | | |
| OZ4MM | 1224500 | 155 | 155 | 0 | 79 | BDE | |
| SV1BTR | 1048800 | 152 | 152 | 0 | 69 | BD | |
| VK3UM | 510000 | 102 | 102 | 0 | 50 | DE | |
| SP7DCS | 509600 | 91 | 91 | 0 | 56 | BDE | |
| DL1YMK | 367500 | 75 | 75 | 0 | 49 | DE | |
| JA6AHB | 347600 | 79 | 79 | 0 | 44 | DE | |
| SV3AAF | 132000 | 44 | 44 | 0 | 30 | BD | |
| Single Operator, Multi-Band 50-1296 Digital | | | | | | | |
| EB5EEO | 475200 | 99 | 0 | 99 | 48 | BD | |
| EB2FJN | 104000 | 40 | 0 | 40 | 26 | BD | |
| VK4CDI | 20800 | 16 | 0 | 16 | 13 | BD | |
| RZ3AED | 4900 | 7 | 0 | 7 | 7 | BD | |
| Single Operator, Multi-Band 50-1296 Mixed Mode | | | | | | | |
| UA4AQL | 82800 | 36 | 8 | 28 | 23 | BD | |
| W8PAT | 81000 | 30 | 3 | 27 | 27 | AB | |
| RK3WWF | 32300 | 19 | 1 | 18 | 17 | BDE | |
| UT3LL | 5600 | 8 | 3 | 5 | 7 | DE | |
| WB2SIH | 2000 | 5 | 1 | 4 | 4 | BD | |
| Single Operator, Multi-Band 2.3 GHz And Up | | | | | | | |
| F2TU | 193800 | 51 | 51 | 0 | 38 | FHI | |

| | | | | | | | |
|--|---------|-----|-----|----|----|-------|--|
| ES5PC | 68200 | 31 | 31 | 0 | 22 | FH | |
| Single Operator, All Band Analog | | | | | | | |
| RW1AW | 1513200 | 156 | 156 | 0 | 97 | BDEFI | |
| G3LTF | 1424000 | 160 | 160 | 0 | 89 | BDEFG | |
| DF3RU | 972400 | 143 | 143 | 0 | 68 | DEF | |
| WA6PY | 972000 | 120 | 120 | 0 | 81 | BDEFI | |
| SM3AKW | 810700 | 121 | 121 | 0 | 67 | BDEF | |
| DL4MEA | 499800 | 102 | 102 | 0 | 49 | EF | |
| IW2FZR | 330000 | 75 | 75 | 0 | 44 | EF | |
| F5JWF | 198000 | 55 | 55 | 0 | 36 | EFI | |
| W5LUA | 183300 | 47 | 47 | 0 | 39 | EFGH | |
| IQ4DF | 180200 | 53 | 53 | 0 | 34 | EI | |
| NA4N | 140800 | 44 | 44 | 0 | 32 | EF | |
| JA4BLC | 101400 | 39 | 39 | 0 | 26 | EF | |
| Single Operator, Single Band 50 MHz Digital | | | | | | | |
| PE1BTX | 48600 | 27 | 0 | 27 | 18 | A | |
| K1SG | 1600 | 4 | 0 | 4 | 4 | A | |
| K7CW | 100 | 1 | 0 | 1 | 1 | A | |
| Single Operator, Single Band 50 MHz Mixed | | | | | | | |
| JR6EXN | 30400 | 19 | 1 | 18 | 16 | A | |
| | | | | | | | |
| Single Operator, Single Band 144 MHz Analog | | | | | | | |
| LZ2US | 284900 | 77 | 77 | 0 | 37 | B | |

| | | | | | | | |
|---|---------|-----|----|-----|----|---|--|
| F3VS | 210800 | 68 | 68 | 0 | 31 | B | |
| OK1MS | 189000 | 63 | 63 | 0 | 30 | B | |
| LA8YB | 132300 | 49 | 49 | 0 | 27 | B | |
| UR5LX | 89100 | 33 | 33 | 0 | 27 | B | |
| YO2AMU | 88800 | 37 | 37 | 0 | 24 | B | |
| IK2DDR | 79800 | 38 | 38 | 0 | 21 | B | |
| K6PF | 42500 | 25 | 25 | 0 | 17 | B | |
| JHØWJF | 40600 | 29 | 29 | 0 | 14 | B | |
| RA3EC | 24700 | 19 | 19 | 0 | 13 | B | |
| 9A9B | 12600 | 14 | 14 | 0 | 9 | B | |
| DL8UCC | 11000 | 11 | 11 | 0 | 10 | B | |
| DG5CST | 5600 | 8 | 8 | 0 | 7 | B | |
| VA3TO | 2500 | 5 | 5 | 0 | 5 | B | |
| DF1VH | 900 | 3 | 3 | 0 | 3 | B | |
| SP3XBO | 900 | 3 | 3 | 0 | 3 | B | |
| SM1MUT | 400 | 2 | 2 | 0 | 2 | B | |
| KB2YCC | 100 | 1 | 1 | 0 | 1 | B | |
| HA8V | 100 | 1 | 1 | 0 | 1 | B | |
| Single Operator, Single Band 144 MHz Digital | | | | | | | |
| KB8RQ | 1245600 | 173 | 0 | 173 | 72 | B | |
| EA3BB | 236800 | 64 | 0 | 64 | 37 | B | |
| LU1CGB | 236000 | 59 | 0 | 59 | 40 | B | |
| OK1UGA | 204000 | 60 | 0 | 60 | 34 | B | |

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|---|---------|-----|----|-----|----|---|--|
| RA3GES | 153600 | 48 | 0 | 48 | 32 | B | |
| HAØHO | 105000 | 35 | 0 | 35 | 30 | B | |
| OK1KKD | 96100 | 31 | 0 | 31 | 31 | B | |
| EB1DNK | 77000 | 35 | 0 | 35 | 22 | B | |
| K5GMX | 52500 | 25 | 0 | 25 | 21 | B | |
| PA3ECU | 36000 | 24 | 0 | 24 | 15 | B | |
| W9JN | 30400 | 19 | 0 | 19 | 16 | B | |
| NF2V | 28800 | 18 | 0 | 18 | 16 | B | |
| YO3DMU | 18000 | 18 | 0 | 18 | 10 | B | |
| AF4JF | 10000 | 10 | 0 | 10 | 10 | B | |
| SP2NJI | 7200 | 9 | 0 | 9 | 8 | B | |
| WA4EWV | 4900 | 7 | 0 | 7 | 7 | B | |
| CT1DHM | 4200 | 7 | 0 | 7 | 6 | B | |
| CT1EKD | 3600 | 6 | 0 | 6 | 6 | B | |
| LZ1LP | 3500 | 7 | 0 | 7 | 5 | B | |
| K5AM | 2000 | 5 | 0 | 5 | 4 | B | |
| RA3LW | 400 | 2 | 0 | 2 | 2 | B | |
| W8UJX | 100 | 1 | 0 | 1 | 1 | B | |
| DJØMY | 100 | 1 | 0 | 1 | 1 | B | |
| SP6HED | 100 | 1 | 0 | 1 | 1 | B | |
| EA1FBU | 100 | 1 | 0 | 1 | 1 | B | |
| Single Operator, Single Band 144 MHz Mixed Mode Assisted | | | | | | | |
| K9DX | 1339600 | 197 | 32 | 165 | 68 | B | |

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|--------|---------|-----|----|-----|----|---|--|
| RX1AS | 1043700 | 147 | 12 | 135 | 71 | B | |
| AO6VQ | 947200 | 148 | 0 | 148 | 64 | B | |
| 7K3LGC | 754600 | 154 | 3 | 151 | 49 | B | |
| WQ5S | 726000 | 121 | 6 | 115 | 60 | B | |
| AO5SE | 631300 | 107 | 0 | 107 | 59 | B | |
| N5KDA | 608400 | 117 | 12 | 105 | 52 | B | |
| K4SV | 577700 | 109 | 0 | 109 | 53 | B | |
| SM5CUI | 530100 | 93 | 5 | 88 | 57 | B | |
| N6CW | 400500 | 89 | 8 | 81 | 45 | B | |
| WB9PNU | 262200 | 69 | 0 | 69 | 38 | B | |
| DC2MW | 222000 | 60 | 0 | 60 | 37 | B | |
| PY4OG | 188700 | 51 | 1 | 50 | 37 | B | |
| KØKP | 184800 | 56 | 5 | 51 | 33 | B | |
| WA3BZT | 148800 | 48 | 0 | 48 | 31 | B | |
| DL2FCN | 128800 | 46 | 5 | 41 | 28 | B | |
| PA3CWN | 92000 | 46 | 32 | 14 | 20 | B | |
| DL2LAH | 85000 | 34 | 2 | 32 | 25 | B | |
| KL7UW | 76800 | 32 | 0 | 32 | 24 | B | |
| I2RV | 70400 | 32 | 3 | 29 | 22 | B | |
| YU7XL | 52700 | 31 | 4 | 27 | 17 | B | |
| DK5WL | 49400 | 26 | 1 | 25 | 19 | B | |
| JS3CTQ | 47500 | 25 | 0 | 25 | 19 | B | |
| SM5CFS | 21600 | 18 | 0 | 18 | 12 | B | |

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|---|---------|-----|-----|-----|----|---|--|
| RA3WDK | 18700 | 17 | 0 | 17 | 11 | B | |
| 7Z1SJ | 16500 | 15 | 0 | 15 | 11 | B | |
| W2DBL | 7000 | 10 | 0 | 10 | 7 | B | |
| JJ3JHP | 5600 | 8 | 0 | 8 | 7 | B | |
| VE5UF | 5600 | 8 | 0 | 8 | 7 | B | |
| EA5ADH | 2500 | 5 | 0 | 5 | 5 | B | |
| K7XC | 400 | 2 | 0 | 2 | 2 | B | |
| JE1NTL | 300 | 3 | 0 | 3 | 1 | B | |
| EA5MT | 100 | 1 | 0 | 1 | 1 | B | |
| Single Operator, Single Band 144 MHz Mixed Mode Unassisted | | | | | | | |
| RU1AA | 2618700 | 301 | 60 | 241 | 87 | B | |
| W3SZ | 792000 | 132 | 14 | 118 | 60 | B | |
| RA6DA | 534100 | 109 | 13 | 96 | 49 | B | |
| EA2AGZ | 523200 | 109 | 7 | 102 | 48 | B | |
| YU7AA | 514800 | 117 | 114 | 3 | 44 | B | |
| IK7EZN | 415800 | 99 | 5 | 94 | 42 | B | |
| I3EVK | 409200 | 93 | 28 | 65 | 44 | B | |
| K1CA | 393600 | 82 | 6 | 76 | 48 | B | |
| JM1GSH | 173600 | 56 | 2 | 54 | 31 | B | |
| UA4NX | 45000 | 25 | 0 | 25 | 18 | B | |
| RA4NAG | 600 | 3 | 1 | 2 | 2 | B | |
| Single Operator, Single Band 432 MHz Analog | | | | | | | |
| DL9KR | 230400 | 72 | 72 | 0 | 32 | D | |

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|---|--------|----|----|----|----|---|--|
| UA3PTW | 198400 | 64 | 64 | 0 | 31 | D | |
| I1NDP | 122500 | 49 | 49 | 0 | 25 | D | |
| FR5DN | 92000 | 40 | 40 | 0 | 23 | D | |
| JJ1NNJ | 85800 | 39 | 39 | 0 | 22 | D | |
| RW3PX | 77000 | 35 | 35 | 0 | 22 | D | |
| KØRZ | 70400 | 32 | 32 | 0 | 22 | D | |
| W8TXT | 65100 | 31 | 31 | 0 | 21 | D | |
| K1FO | 60800 | 32 | 32 | 0 | 19 | D | |
| UT2EG | 56000 | 28 | 28 | 0 | 20 | D | |
| JA9BOH | 42500 | 25 | 25 | 0 | 17 | D | |
| SM3JQU | 27000 | 18 | 18 | 0 | 15 | D | |
| DL7UDA | 27000 | 18 | 18 | 0 | 15 | D | |
| JH4JLV | 22400 | 16 | 16 | 0 | 14 | D | |
| KL7HFQ | 14400 | 12 | 12 | 0 | 12 | D | |
| YO2IS | 8000 | 10 | 10 | 0 | 8 | D | |
| Single Operator, Single Band 432 MHz Digital | | | | | | | |
| JHØTOG | 100 | 1 | 0 | 1 | 1 | D | |
| Single Operator, Single Band 432 MHz Mixed Mode Assisted | | | | | | | |
| KE2N | 52800 | 24 | 11 | 13 | 22 | D | |
| OK1TEH | 2000 | 5 | 2 | 3 | 4 | D | |
| Single Operator, Single Band 1296 MHz Analog | | | | | | | |
| K9SLQ | 356000 | 89 | 89 | 0 | 40 | E | |
| OK1DFC | 334400 | 88 | 88 | 0 | 38 | E | |

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|---|--------|-----|----|----|----|----|----------------|
| LA9NEA | 281200 | 76 | 76 | 0 | 37 | E | |
| K2DH | 155000 | 50 | 50 | 0 | 31 | E | |
| IK3COJ | 142800 | 51 | 51 | 0 | 28 | E | |
| RA3AQ | 135200 | 52 | 52 | 0 | 26 | E | |
| JR4AEP | 81900 | 39 | 39 | 0 | 21 | E | |
| AL7RT | 77700 | 37 | 37 | 0 | 21 | E | |
| SM5LE | 42500 | 25 | 25 | 0 | 17 | E | |
| JH5LUZ | 39100 | 23 | 23 | 0 | 17 | E | |
| JF3HUC | 38400 | 24 | 24 | 0 | 16 | E | |
| EA3UM | 33300 | 37 | 37 | 0 | 9 | E | |
| JH1KRC | 27000 | 18 | 18 | 0 | 15 | E | |
| JA4LJB | 23800 | 17 | 17 | 0 | 14 | E | |
| W9IIX | 100 | 1 | 1 | 0 | 1 | E | |
| Single Operator, Single Band, 1296 MHz, Mixed Mode, Assisted | | | | | | | |
| G4CCH | 514800 | 117 | 97 | 20 | 44 | E | |
| Single Operator, Single Band 1296 MHz Mixed Unassisted | | | | | | | |
| PA3FXB | 20400 | 17 | 11 | 6 | 12 | E | |
| Single Operator, Single Band 2.3 GHz | | | | | | | |
| SP6GWN | 900 | 3 | 3 | 0 | 3 | F | |
| Single Operator, Single Band 5.7 GHz | | | | | | | |
| OK1CA | 3600 | 6 | 6 | 0 | 6 | H | |
| Multi Operator, Multi-Band 50-1296 Analog | | | | | | | |
| SP6JLW | 460600 | 94 | 94 | 0 | 49 | DE | SP6JLW, SP6OPN |

| Multi Operator, Multi-Band 50-1296 Mixed Mode | | | | | | | |
|--|---------|-----|-----|-----|-----|------|---|
| N9JIM* | 1456000 | 182 | 92 | 90 | 80 | BE | N9JIM, W6BY, N5XSA, KK6MK, AD6IW, WD6CDE, WB8VAO, K6KLY |
| K4EME | 428400 | 84 | 26 | 58 | 51 | BD | K4EME, AD4TJ, KR4V |
| Multi Operator, Multi-Band 2.3 GHz and Up | | | | | | | |
| OK1KIR | 127100 | 41 | 41 | 0 | 31 | FHI | OK1KIR, OK1DAI, OK1DAK, OK1VAO |
| Multi Operator, All Band Mixed Mode | | | | | | | |
| K1JT | 4253400 | 306 | 146 | 160 | 139 | BDEF | K1JT, K2UYH, K2LNS, K1DS, KC2TA, N4HY, AB2KT |
| Multi Operator, Single Band 144 MHz Mixed Mode Assisted | | | | | | | |
| IK1UWL | 1724800 | 224 | 20 | 204 | 77 | B | IK1UWL, I1ANP |
| KA1VHF | 319800 | 82 | 0 | 82 | 39 | B | KA1VHF, KA8HOK |
| F5KCH | 220500 | 63 | 4 | 59 | 35 | B | F5KCH, F6HEO, F1UKQ, FØEUI, F4FPK |
| WW8M | 81000 | 30 | 6 | 24 | 27 | B | WW8M, KB8U, NE8I |
| Multi Operator, Single Band 144 MHz Mixed Mode Unassisted | | | | | | | |
| YO9FRJ | 881600 | 152 | 31 | 121 | 58 | B | YO7FRJ, YO9AFE |
| AA1YN | 132000 | 44 | 2 | 42 | 30 | B | AA1YN, NS1O |
| Multi Operator, Single Band 432 MHz Mixed Mode Unassisted | | | | | | | |
| OH2PO | 360400 | 106 | 70 | 36 | 34 | D | OH2PO, OH2HYT, OH6DD |
| Multi Operator, Single Band 1296 MHz Analog | | | | | | | |
| IZ1BPN | 207700 | 67 | 67 | 0 | 31 | E | IZ1BPN, IK1MTZ |
| SM3LBN | 195300 | 63 | 63 | 0 | 31 | E | SM3LBN, SM3EVR |
| SKØUX | 186000 | 60 | 60 | 0 | 31 | E | SMØMXO, SMØDFP, SMØEPO |

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|---|--------|----|----|---|----|---|-----------------------------------|
| ON4BCB | 168200 | 58 | 58 | 0 | 29 | E | ON4BCB, ON4CO, ON4CCM |
| LA2Z | 131600 | 47 | 47 | 0 | 28 | E | LA2PKA, LA5SKA, LA6MV, LA7VH |
| N2UO | 95000 | 38 | 38 | 0 | 25 | E | N2UO, W9EQ |
| UA3DJG | 26600 | 19 | 19 | 0 | 14 | E | UA3DJG, UA3ATS, RA3WND |
| Multi Operator, Single Band 1296 MHz Mixed Mode Assisted | | | | | | | |
| RD3DA | 183000 | 61 | 55 | 6 | 30 | E | RD3DA, RU3ACE |
| VA7MM | 122200 | 47 | 38 | 9 | 26 | E | VE7CMK, VE7CNF |
| Multi Operator, Single Band 2.3 GHz | | | | | | | |
| HB9Q | 37800 | 21 | 21 | 0 | 18 | F | HB9CRQ, HB9DRI, HB9EHJ, HB9JAW |
| WD5AGO | 34000 | 20 | 20 | 0 | 17 | F | WD5AGO, KC5HRW |

2007 ARRL International EME Competition

The Digital/Analog Divide

by H. Ward Silver, NOAX

What is all the fuss about digital and analog scores? There certainly is a lot of vigorous discussion about the relative merits of each mode, with each camp holding firm to its position and operating habits. (There are a number of operators and teams that use both digital and analog moonbounce techniques, of course.) To an EME newcomer or the casual reader, the reason for the differences of opinion may not be so obvious.

Analog, in the context of moonbounce, means the use of human hearing and brainpower as the means by which audio from the received echoes is translated into call signs and messages. The two modulation techniques used are CW and SSB. Of the two, SSB requires the strongest signal strength. CW signals can be detected by a highly trained and sensitive pair of ears (certainly not the author's) down into the receiver noise floor and slightly beyond in exceptional cases and circumstances. The resulting EME station is very much an alloy of operator and machine.

Digital moonbounce is dominated by the use of signal processing in the form of special protocols and codes known as JT65, part of the WSJT software suite developed by Joe Taylor K1JT (<http://physics.princeton.edu/pulsar/K1JT>). In these modes, the received audio is translated into call signs and messages by signal processing software that uses a PC sound card to digitize the audio. JT65 can dig a lot farther into the noise to recover signals than can even the best human ear. This extra ability to recover a signal is known as "processing gain."

By using JT65 codes, a much more modest station can successfully complete moonbounce contacts than is required for analog modes.

As a result, many more stations are now making moonbounce contacts.

Somewhat justifiably, this rankles some analog operators who feel their operations are distinct from those of the software-driven systems. Digital techniques continue to evolve and so more stations are likely to try their hand at moonbounce in the future. To accommodate both views and techniques, different categories have been established in the ARRL EME Contest.

Another point of divergence between groups is the use of the Internet to coordinate contacts in nearly real-time. On-line "chat rooms", such as <http://www.on4kst.com/chat/start.php> are often used to set up or schedule EME contacts. Stations are sometimes observed "talking each other in" until they are able to complete a contact. This is a big change from "random"

QSO's, in which one station calls CQ off the moon and then listens for replies without knowing who may be calling or when. Random QSO's are definitely more difficult to complete, but as with digital mode contacts, smaller stations can complete contacts with this form on on-line assistance.

As you might imagine, random QSO proponents consider contacts made with the aid of the Internet much less difficult and thus less worthy of note.

As long as one is clear about the techniques used to make QSO's, there are plenty of stations to work, big and small, on both sides of the digital/analog fence. Although the traditional analog mode dominance is being eroded, its practitioners can take some solace from the fact that as digital mode operators become more proficient, they may want to add CW and even SSB to their capabilities. The moon is big and does not care what type of signal it reflects - there is room for all.

2007 ARRL International EME Competition

Getting Started In Moonbounce

by H. Ward Silver, NOAX

Moonbounce is an awesome achievement and fairly intimidating to the average ham, but it has never been more accessible than it is today. As you'll discover, the special digital sigital processing algorithms and protocols of WSJT by Joe Taylor K1JT (see the sidebar "The Digital/Analog Divide") put moonbounce within reach of even modest stations, leveraging the power of the microprocessor to copy extremely weak signals.

If the idea of making a QSO over a half-million mile path sounds like fun, you need to start by learning the terminology and fundamentals of EME operation. There is an HF Moonbounce Net at 1500Z on 14.345 MHz for EME operations on 432 MHz and the higher bands. It is followed by the 2 meter EME net on the same frequency at 1600Z or 1700Z. This is a good place to meet hams that will answer questions (probably off-line and not during the net).

To learn more about the basics of EME, try the ARRL Technical Information Service EME pages at <http://www.arrl.org/tis/info/moon.html> where you'll find some QST articles and links to other moonbounce sites.

N1BUG publishes a good how-to guide for the EME beginner at www.n1bug.net/operate/emebasic.html. A good US site is maintained by K7XQ at <http://www.elite.net/~k7xq/k7xq.html> and a good European site by DK5YA at <http://www.vhfdx.de/eme.html>.

Suffice it to say that you won't need a NASA-sized steerable dish. A couple of long-boom Yagi's will get you "on the moon" on either 144 or 432 MHz, the two most popular bands for EME operation. There may even be a moonbouncer in your town or region that wouldn't mind showing you the ropes.

You can also find moonbounce operators through the regional VHF/UHF contest clubs and those can be located those via the ARRL Club Search Web page at <http://www.arrl.org/FandES/field/club/clubsearch.phtml>.

With all of these resources and the excellent VHF/UHF all-band all-mode radios so widely available, the barriers to moonbounce have never been lower. Why not make it a group or club project? The moon is closer than you think!

2007 ARRL International EME Competition

From The Participants

G4CCH:

At times, the bottom 35 KHz of 23cm was crammed with stations, and some of them were VERY loud... like HB9SV, HB9BBD, K5SO, HB9Q, OZ4MM and OK1DFC.

SV3AAF:

Dear All,

I have been QRV for the most of my moon-time during ARRL EME contest '07 on 70cm & 2m. Was happy to hear the bands alive although there were extended periods with the CQ callers receiving no replies, mostly during second leg.

I completed with the following stations working unassisted on CW mode:

144Mhz:

SV1BTR, IK3MAC, RN6BN, RA6DA, F1FLA, OK1MS, F0CXO, SP7DCS, LZ2US, F3VS, K9MRI, IK2DDR, OK1VVP, K9DX, YO2AMU, OZ1HNE, RU1AA, LA8YB, OK1KKD.

432Mhz:

DL9KR, HB9Q, K1FO, OH2PO, UA3PTW, I1NDP, K1RQG, OE5JFL, KL6M, SV1BTR, DF3RU, DL7APV, G4RGK, RW3PX, K0RZ, VK3UM, OZ4MM, JA6AHB, JA9BOH, SP6JLW, JJ1NNJ, G3LTF, DK3WG, FR5DN, YO2IS.

Conditions _____ at _____ this _____ end:

Thankfully WX cooperated during the two weekends while some days before or after it could have spelt disaster with high winds and rain.

Equipment/antenna system worked seamlessly throughout the long hours of operation. EME propagation was from good to excellent with some faraday and extra attenuation during second leg mostly effecting 2m while long libration periods made operation on 70cm more enjoyable both weekends.

Best

Regards,

73 de Petros sv3aaf [km17ko]

SV1BTR:

Lunar Reflection Fans

Here are my results for ARRL EME Competition 2007, Single Operator Multiband 50-1296MHz , ANALOG.

All QSOs in CW mode, all QSOs on Random (no passive / active internet use, no skeds, no external help).

Total: 152 stations, 157 QSOs
2m: 100 stations, 104 QSOs (4 dupe)

70cm: 52 stations, 53 QSOs (1 dupe)

I would like to take the opportunity and thank all the 2m & 70cm dedicated and occasional EME ops, regardless of mode. Those I worked and those not completed due to partial copy or merely qrz. Know that I tried hard and hope next time I will not miss you. Especially I would like to thank the 2m new to EME, newcomers to CW and QRP mixed operators. It has been a real pleasure to me to work again down to single yagi and 250w stations on random, as well as being the 1st or 2nd ever CW QSO to previously only digital, ops. The EME old timers always wisely said for CW: "if you can't hear them you can't work them". Therefore copying and working QRP stations in CQ EME has been once more a real pleasure to me, since my 2m array has similar gain to 4*11m long yagis.

Activity on 70cm was good. I am glad because this band has long time lasting, dedicated, excellent CW ops.

Conditions:

WX was perfect. I was vy lucky in this respect. In 2nd leg, propagation conditions on 2m featured deep QSB in all 3 passes for both polarities. On 70cm there were periods with good signals without problems of Faraday, and extended periods with signals in both polarities being steady, but down by 2db. Echoes on both bands indicated the same findings as above, all over the weekend.

Murphy visits 2nd leg:

I faced problems with 70cm new azimuth, pointing errors (fortunately there was full moon so i tracked it by going out of the shack every now and then:-)) On both bands I had lesser elevation errors this time due to some improvements, of up to 2.5 degrees which varied non-stop according to the readout wishes...not the best in narrow main lobe, arrays. On 70cm continuous PA flashovers forced me to decrease power by 1.5db to be able to remain QRV.

But as they say....no pain, no gain!

Below are the stations worked in each band, per leg:

2m - 2nd leg:

ON4DPX (dup) WA4NJP F8DO OK1VVP (dup) WW8M DL2FCN W3SZ OZ1HNE K9MRI LA8YB AD4TJ K6AAW N6CW SM3AKW OK1KKD (dup) VA3TO YU7AA (dup) SM5TSP ON7EH RU1AA I5WBE G4PCS PA3CEE DF0BV G3LTF W8PAT DK3T HB9Q DK5WL YU7XL RN6MT JH0WJF OK2POI JH5FOQ EA2AGZ F5KCH YU1HO DF9YF SM5CUI OZ1LPR

2m - 1st leg:

RN6BN IK2DDR K9DX DL8UCC SV3AAF RA3EC RX1AS IK1UWL I3EVK LZ2US WA8CLT 9A9B YO9FRJ UA4AQL DK5YA PA3CWN OK1MS OK1KKD IK3MAC W0PT OK1VVP SP7DCS W5UN 4X1IF RW1AW K9JI YO2AMU OZ4MM K6PF F9HS SM7GVF K1CA SM2CKR F3VS DK3BU IV3GBO JN1CSO F1FLA HA6NQ RZ3BA/1 F0CXO VE2JWH ON4DPX SK0UX RA6DA LZ1DP AA1YN K1JT N5KDA WA6PY DL5MAE W7MEM WQ5S JH0MHE YU7AA PA2DW UT2XQ DG5CST CT1HZE OK1TEH JH2COZ EI4DQ DF2ZC DL7FF

70cm - 2nd leg:

VK3UM JJ1NNJ SM3BYA OE5JFL UT5JCW DK8VS YO2IS JS3SIM S53RM DL5FN (dup) K4EME F3VS WE2Y UA6LGH KE2N RW1AW K3MF

70cm - 1st leg:

FR5DN UA3PTW SV3AAF RW3PX UT2EG VK4AFL KL6M DL9KR DF3RU DL5FN OH2PO DL1YMK G3LQR I1NDP OZ4MM DL7APV SM3JQU JH4JLV HB9Q SM2A PE1ITR K1FO K1RQG DL7UDA W8TXT G3LTF K0RZ KL7HFQ SP6JLW I5CTE JA9BOH JA5NNS G4RGK JA6AHB JA0TJU SM3AKW

Thank you all & 73

Jimmy SV1BTR

2m: 16*6el. xpol 21.5dbd

70cm: 8*26el. H pol & 8*20el. V pol

KM18no

DL8EBW:

Hi there LUNAticks...I was QRV a lot during December and as well during the secondpart of contest for some hours as well and found condition very nice Saturday. Sunday it was very noisy here, and lots of QSB on the sign! Was happy for a lot of new Initials and as well 2 fine CW QSOs... (sorry Jimmy, did call you 2x30min and maximum was a QRZ from you...)Did work as follows in Nov (only C QSOs - the list of NC is much longer, hi):

| DATUM | ZEITRUFZEICHEN | LOCATOR | TX | RX | ART |
|------------|----------------|---------|----|----|-----------|
| 17/11/2007 | 13:28 OH6JW | KP12AJ | RO | O | JT65 best |
| -20db | 1530 | | | | |
| 18/11/2007 | 19:50 RZ4HF | LO43 | RO | O | JT65 best |
| -23db | 2815+- | | | | |
| 21/11/2007 | 00:15 K7MI | CN73TC | RO | O | JT65 best |
| -23db | 8528 | | | | |
| 21/11/2007 | 17:01 RW3WR | KO71IM | RO | O | JT65 best |
| -24db | 1903 | | | | |
| 21/11/2007 | 17:22 OM3BC | JN98VG | O | RO | JT65 best |
| -24db | 966 | | | | |
| 21/11/2007 | 18:46 EA3BB | JN01VS | RO | O | JT65 best |

| | | | | | |
|-------------------------|--------|----|----|------|------|
| -21db 1127 | | | | | |
| 21/11/2007 19:00 HA6NQ | JN98WA | O | RO | JT65 | best |
| -20db 983 | | | | | |
| 21/11/2007 23:29 S52LM | JN65TX | O | RO | JT65 | best |
| -19db 754 | | | | | |
| 22/11/2007 17:30 LZ1DP | KN22TR | RO | O | JT65 | best |
| -24db 1684 | | | | | |
| 22/11/2007 17:40 OE5MPL | JN78CJ | O | RO | JT65 | best |
| -24db 597 | | | | | |
| 23/11/2007 00:19 EB2FJN | IN83QE | RO | O | JT65 | best |
| -25db 1156 | | | | | |
| 23/11/2007 00:35 PA3COB | JO32MF | O | RO | JT65 | best |
| -26db 111 | | | | | |
| 23/11/2007 22:14 W9JN | EN54DN | O | RO | JT65 | best |
| -27db 6714 | | | | | |
| 23/11/2007 23:27 AN3JT | JN01 | O | RO | JT65 | best |
| -22db 1175+- | | | | | |
| 24/11/2007 01:33 W0HP | EN34IJ | RO | O | JT65 | best |
| -21db 6927 | | | | | |
| 24/11/2007 02:49 N6KK | DM03 | O | RO | JT65 | best |
| -20db 9218+- | | | | | |
| 24/11/2007 03:35 KA1VHF | EM89 | RO | O | JT65 | best |
| -20db 6703+- | | | | | |
| 24/11/2007 19:55 RN6BN | KN95LC | O | RO | JT65 | best |
| -12db 2435 | | | | | |
| 25/11/2007 00:10 CN3A | IM52JJ | RO | O | JT65 | best |
| -29db 2480 | | | | | |
| 25/11/2007 00:39 IK1UWL | JN33VT | O | RO | JT65 | best |
| -20db 826 | | | | | |
| 25/11/2007 01:56 AO6VQ | JM19 | O | RO | JT65 | best |
| -19db 1339+- | | | | | |
| 25/11/2007 03:00 OK1MS | JO70SL | O | RO | CW | best |
| 419 | | | | | |
| 596 | | | | | |
| 25/11/2007 04:00 K6AAW | CN80TE | RO | O | CW | best |
| 319 | | | | | |
| 8730 | | | | | |
| 26/11/2007 19:02 SM5CFS | JO99IQ | RO | O | JT65 | best |
| -21db 1187 | | | | | |
| 26/11/2007 19:15 VK7JG | QE38NN | RO | O | JT65 | best |
| -26db 16798 | | | | | |
| 28/11/2007 01:10 3X5A | IJ39JJ | RO | O | JT65 | best |
| -27db 5007 | | | | | |
| 28/11/2007 05:00 RV9UV | NO34GA | O | RO | JT65 | best |
| -26db 5079 | | | | | |
| 28/11/2007 05:44 K6MYC | DM07DB | O | RO | JT65 | best |
| -18db 8914 | | | | | |
| 29/11/2007 02:50 WA2ODO | EM94NX | O | RO | JT65 | best |
| -21db 6925 | | | | | |
| 29/11/2007 03:15 VE3FGU | FN04GG | RO | O | JT65 | best |
| -24db 6134 | | | | | |

Special thanks to K6AAW for his patience with me in CW and ofcourse to CN3A and 3X5A for their nice expeditions!

kind regards, sincerely
 73 de D L 8 E B W Guido (Guy)
 qrv from JO31NF for VHF-DX: MS & EME
 RIG: IC275H 2*12eIM2 750W ATF-Preamp
 A Team-Member of MMonVHF DX Portal
 look: <http://www.MMonVHF.de/>
 Email: dl8ebw@MMonVHF.de

K7XQ:

I had a great time operating all three weekends of the contest. Conditions were extremely unusual on 144 MHz where signals would vary from 20 dB out of the noise, even moving the S meter at times, to NIL in a matter of seconds but with no faraday changes. This was why I didn't do too well on 144 but 1296 was stable as a rock with unusually stronger signals. I did much better on 2304 after the contest after I found a blown/shorted regulator in the preamp causing a overvoltage condition to the front end device creating excessive gain and a very high noise figure.

I will be submitting as single operator, CW only, random unassisted, mixed band entry (all call signs included below).

Any assisted contacts will not be included in the ARRL submitted log but are located on my webpage logbook.

| First | Contest | Weekend: |
|--|---------|----------|
| 2304: OK1MS#, KL6M# | | |
| Second | Contest | weekend: |
| 144: F3VS, IK3MAC, OK1MS# | | |
| 1296: SM4DHN#, K9SLQ, N9JIM, K4QI#, OK1DFC, G3LTF, LA9NEA, HB9Q, OZ6OL, RW1AW, K1JT, G4CCH, N9JIM, WA6PY | | |
| JA4BLC#, JA6CZD#, JR4AEP#, OK1CA, OE5JFL#, RW1AW#, IW2FZR#, OZ4MM, DL4MEA#, OH2DG#, AL7RT#, N0OY# | | |

| Third | Contest | Weekend: |
|---|---------|----------|
| 432: G3LTF# | | |
| 1296: DF3RU#, K2DH#, K5SO, K5JL, VK3UM#, VE6TA#, VK4AFL#, W2DRZ#, JR4ZZS#, VA7MM# | | |

The 432 array is only partially built as 2 X 9 W.L. XPOL @ 20 dBd total gain but was pleased that the GS35b amp stayed stable with very little power drift on this band at a full 1500 watts.

Next contest will alternate the bands more often and try not to stay on any one band too long. Could have picked up more on 144 although as K6PF described recently, it is not as populated on CW like it used to be.

Congrats to K2TXB on his only contact during the contest :)))

K7XQ Jeff

Atwater , CA. Grid: CM97qi EME, Satellites, Meteor Scatter CW, JT-65 , SSB 50 MHz: 2 X M2 6M7 1000 watts 2 X 3-500 144 MHz: 4 X XPOL M2 2MPX28 XPOL 1500 Watts Single GS35b 222 MHz: 1 X M2 5 W.L. 350 watts Single 8930 432 MHz: 4 X M2 9 W.L. Modified for XPOL 1500 Watts single GS35b 1296 MHz: 3.0 meter dish VE4MA circular feed 350 Watts single GS15 water-cooled 2304 MHz/2320 MHz/2424 MHz: 3.0 meter dish VE4MA circular feed 200 watts Spectrian SSPA 10 GHz: early 2008 K7XQ Webpage: <http://www.elite.net/~k7xq/k7xq.html>

SP7DCS:

Hello!

During the first weekend I was QRV only on 2m and 23cm, but during second weekend I added also 70cm band. I was QRV on CW random only, without assistance, internet etc... and I managed to work 98qsos (6 duplicates).In my opinion conditions were good on all bands, even for single polarized stations. On 2m I used big system and QRO so I had good echo almost all the time, up to 25dB over the noise.

On 70cm I was totally QRP, but I was very happy to put 7 big gun stations into my log. 23cm was nice surprise once again, even with so small station I was able to hear a lot - band was sometimes like on HF.

Unfortunately many stations were not able to hear my small signal, so maybe I just need to increase my power before next time. So, I was my first contest on 3 bands and I very liked it. Multiband work is totally different thing and is very interesting.

During first weekend I spent about half of QRV time on 2m and on 23cm. During second, I was only short time QRV on 2m and I decided to concentrate on 23cm and 70cm. Of course it decreased my total QSO count as I am QRP on those bands, but I had great time and a lot of fun!

The only exception from random work was sked with P43L on 23cm. Unfortunately I did not have luck. Pity, because I could hear them ok the day before. Anyway congrats for great expedition! Congratulations goes also to OZ1HNE and LA8YB for getting back to 2m eme!!!

144MHz, CW, 60 QSOs (4dupe)

Equipment: 16x8elH-polYagi/GS35b/LNA-FHX35/IC746/DSP MFJ784b/WINRAD/

27.10.2007
RA3EC# RN6BN IK2DDR PA3CWN I3EVK OK1MS RX1AS LZ2US IK1UWL IK3MAC N9JIM#
OK1KKD OK1TEH SV1BTR YO9FRJ W5UN F3VS SM7GVF OZ4MM JN1CSO DL5MAE YO3FFF
OK1IA 9A9B F0CXO SK0UX

28.10.2007
SV3AAF SP3XBO# K6PF K9MRI K1JT WA6PY JH0WJF F1FLA UT2XQ# HA6NQ DG5CST
RA6DA VE1ZJ EI4DQ RU1AA YO2AMU

24.11.2007
OZ1HNE JH0MHE LA8YB#300 OK1KKD F0CXO(dupe) IK1UWL(dupe) G4PCS#
SV3AAF(dupe) WA8CLT W0EKZ#302

25.11.2007
ON4DPX W0PT G4DHF DK3T(station DK3EE) RN6MT JH0WJF(dupe) OK1VVP YU1IO
432MHz, CW, 7qso
Equipment: 4x25el.H-polYagi/250W at shack/LNA-FHX35/MMT432-144/IC746/DSP
MFJ784b/WINRAD/

24.11.2007
DL9KR OH2PO UA3PTW# OZ4MM VK3UM# OE5JFL# DF3RU#10
1296MHz, CW, 31qso(2dupe)
Equipment: 3m dish/150W at feed RA3AQ/LNA-ATF54143/TCVR23cm by
SP9WY/IC746/DSP-MFJ784b/WINRAD/

27.10.2007
OE5JFL G3LTF N9JIM# K1JT(station K2UYH) SP6JLW K9SLQ# HB9Q# G4CCH OK1CA
RW1AW# SK0UX# OK1KIR# OZ4MM# N9JIM(dupe) W5LUA# WA6PY# OK1DFC

28.10.2007
DF3RU# RA3AQ# OZ6OL

24.11.2007
LA9NEA VE6TA# K5JL# DL1YMK# DL4MEA# OE5JFL(dupe) ON7UN#

25.11.2007
K2DH# HB9BBD# ES5PC IZ1BPN#35
Some signals are already on my page and I hope to add more soon.
My next activity is planned for 21-22 December during Dubus Event:
<http://www.sm2cew.com/dubus-aw.html> <http://web.telia.com/~u37031777/>

GL 73 de Chris SP7DCS
--

Chris SP7DCS
email - sp7dcs@wp.pl, sp7dcs@o2.pl, sp7dcs@smrw.lodz.pl
EME PAGE - <http://sp7dcs.webpark.pl>

OZIHNE:

Hi EME'ers-

I was QRV in the second part of the ARRL EME contest on 144 MHz CW and worked 27 stations in about eight hours. I was calling CQ all the time just to test and play with the new antenna. Weather was very bad with rain and strong wind, so I had to close down. Thanks to all for the QSO's and sorry for the stations I not could dig out of the noise. I am very glad to be back on EME and I will be QRV on CW in the future.

Here are the stations I worked:

IK2DDR
I3EVK
WA4NJP
W3SZ
F8DO
F1FLA
F0CXO
SV1BTR
LA8YB
YO2AMU
OK1KKD

#

OK1VVP #
YO9FRJ
K1JT #
OK1MS
K6AAW #
LZ2US
WA8CLT
SV3AAF #
K6PF
WA6PY
JH0MHE
SP7DCS
OZ4MM
WQ5S #
IK1UWL
DK3T #

Best 73, OZ1HNE Jorgen.
8 x 8 elm. Crossyagi's and 8877.

OK1DFC:

Everything what happened here in ARRL EME 07 you can find and download here:
<http://www.ok1dfc.com/EME/arrl07/arrl07.html>

More info about my station here: <http://www.ok1dfc.com/EME/emeweb.htm> All is available and free download for you.

| | | | | |
|----------------|-----|-----|-----|---|
| Zdenek | - | | | OK1DFC |
| www.ok1dfc.com | | | | < http://www.ok1dfc.com > |
| QRV | | EME | | 144-432-1296MHz |
| WAC | 432 | | - | 1296 MHz |
| QRO | | | 10m | dish |
| ICQ-397994501 | | | | |

SM2CEW:

Pretty much everything has been either not possible to use, or has been running in "limp mode" during this years ARRL contest. During the first leg we had very strong winds that prevented operation except for a few hours when I could be QRV on 144 MHz. This resulted in 11 contacts.

The second leg was no different.. The 144 MHz array was totally iced up, and SWR very high -> "unusable" My dish elevation was frozen solid in the park position, and while trying to get it going on Friday I managed to damage the elevation mount. Early Sunday morning I could get the dish going, but only at very limited elevation angles. The problem was not the snow, but the thick layer of ice under the snow.

http://www.sm2cew.com/sm2cew_dish_nov_07.jpg

At 0630 GMT on Sunday I heard P43L working N2UO on 1296 MHz, and Al (K2UYH, guest at P43L) had a really good signal. Unfortunately P43L had to stop operation right then and there as torrential rain was making the /portable operation under a tarp impossible.

I worked 18 stations in an hour and a half on 23cm, new initial was AL7RT. On 432 managed to get on for an hour as the moon came above the trees on moonrise, and worked 8 stations. Conditions on 432 sounded really good, despite heavy aurora. Due to the earlier problems, my elevation drive jammed at 29 deg elevation, so I had to stop with many hours of good moon still available on Sunday evening.

Sorry for missing those treasured CW QSO's with a lot of you guys, but this is life at the Arctic circle. 37 QSO's only in this years contest, snow and ice last weekend, and strong winds that kept me off for most of the time during the first leg.

But best of all, all QSO's were done on CW, without the help of loggers...hi!

The new rules that allow chat board communications and self spotting by using Internet communications really bother me. This has absolutely no place in a radio contest. As the rules were written this time, the

a chance to work EME. For many of them it is their very first experience and the first QSO off the moon. Many got started that way and are now QRV with bigger antennas and/or more power. Several of them start to become QRV on CW as well. In an effort to help newcomers we chose to use self-spotting on the loggers. The effort did pay-out well, we worked on 432 14 stations (for 7 it was their very 1st EME QSO) with 1 yagi and 100W or less. Some of the smaller ones are VE2DSB (1x22y 30W), IT9CJC (1x13y 40W), ZS6TW (50W into a 3ft long yagi) and WD6DBM (1x18y 33W).

vy 73

Dan,
head of HB9Q

HB9CRQ/KT6Q

K1JT:

The EME stations of K1JT and K2UYH, just six miles apart, were combined into a multi-operator effort under the competition's "neighborhood provision." We used the callsign K1JT. Our operating strategy aimed to take best advantage of prevailing activity patterns on the 144, 432, 1296, and 2304 MHz bands, using both CW and JT65. We used no internet or other liaison assistance during the contest.

Our team grew progressively through the three contest weekends, starting with the home-station operators Joe and Al in September. We operated on the 2.3 GHz band using the K2UYH 8.5 m dish, with circular polarization, an 80 Watt solid state amplifier, and separate IF radios covering the 2304 and 2320 MHz band segments simultaneously. All operation during this weekend was on CW.

In October Al operated his station on 432 and 1296 MHz, this time aided by KC2TA. Feeds on the 8.5 m dish provided rotatable linear polarization on 432 and circular on 1296 MHz; transmitter power was 1000W and 500 W, respectively. We used mostly CW, but did make one digital QSO on 1296 MHz.

Meanwhile Joe was operating the K1JT station on 144 MHz. His station hardware includes four dual-polarization 14-element yagis with separate receive preamplifiers for the two polarizations. The two resulting signals are converted to baseband and then digitized under control of the Linrad software package. For CW operation, Linrad was configured to display a 60 kHz range on a slow, high-sensitivity waterfall. Tuning a CW signal is a point-and click operation on the waterfall. A few additional clicks serve to match the received linear polarization angle to that of the incoming signal, and once the received polarization angle is known, the best transmit polarization (H or V) is determined. For JT65 operation a full 90 kHz passband is sent in digital form from Linrad to a second software program, MAP65. This program searches a specified frequency range for JT65 signals, optimizes the received polarization angles separately for each one, and decodes them. We normally set the range to 144.100--144.160 MHz (or 144.070--144.130 when the Moon was up in Japan). Selection of a particular EME signal is again a point-and-click operation, and the program advises the operator on the optimum Tx polarization angle. On 144 MHz we operated almost exclusively in search-and-pounce mode, because with this hardware/software setup it is easy to find stations calling CQ or to tail-end on other QSOs in both CW and JT65 modes. The transmitter at K1JT provides about 1100 W to the antenna.

In the November contest weekend Al operated as P43L, putting Aruba on the moon for a few days on both 432 and 1296 MHz while enjoying the Caribbean sunshine. This time the K2UYH station was manned by K2LNS and K1DS, and again most of the effort on these bands was on CW. However, when the going got slow a number of JT65 QSOs were made as well. Operations on 144 MHz were aided this time by N4HY and AB2BK. Both JT65 and CW were used on 144, according to the perceived activity levels in each mode.

WD5AGO:

We were on 13cm with our 8 foot extended to 9ft dish and had our best score ever on 13cm EME. Heard over 25 stations and worked most of them, students had interest when it is speaker copy!

The following month we designed a new scalar feed for 23cm and put it in with only 100watts. Worked 10 stations but heard 30! As this was just for fun and not to compete we did not turn a log in for this band, maybe next year.

73

Tommy WD5AGO

N6CW:

My first EME contest since 1988. Conditions were good during both weekends for me. I entered mixed mode and worked 8 CW and 81 digital contacts with my modest 4x9 antenna system. While JT65B is an easy way to get on EME, I find it to be a very frustrating contest mode. It can be a mighty long minute to find out if someone has answered you or someone else.

Terry Baxter/N6CW