

## Radio Weather Summary for February 2008

Essentially, a quiet and uneventful solar minimum month. There were no reports of solar flares of C-class or above. The solar flux began the month at 71, reached 73 on the 10<sup>th</sup> and ended the month at 70, averaging 71. The Sun was blank on all but 8 days, with the highest sunspot number 19 on the 1<sup>st</sup>. The 90-day average was 75 throughout. The X-ray flux stayed at the minimum A0 level, while particle densities, apart from brief periods, stayed in single figures.

The most variable feature was the geomagnetic level, influenced by high-speed coronal streams. The lowest speed reported by ACE was 315km/sec on the 27<sup>th</sup>, while the highest was 791km/sec on the 10<sup>th</sup>. The Ap index was in single figures on 14 days, with a low of 2 on the 9<sup>th</sup>. The most disturbed day was the 29<sup>th</sup>, which had an Ap of 27 - enough to produce aurora at high latitudes and degrade most east-west paths. The average over the month was 10. The highest 3-hour Kps were 5 on the 27<sup>th</sup> and 29<sup>th</sup>. Among British observatories, Lerwick recorded a single K5 3-hour period at 15-

Daily sum of 3-hour K figures at British observatories

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Lerw	19	21	19	12	4	7	11	9	6	20	20	16	16	15	17	11	6	15	18	6	9	1	6	4	2	5	11	22	<b>25</b>
Esk	23	23	21	14	5	8	11	13	9	<b>22</b>	23	21	18	<b>19</b>	20	16	8	18	21	7	11	3	11	7	4	5	13	<b>25</b>	<b>29</b>
Hart	27	24	24	17	7	10	12	13	8	26	24	24	21	<b>20</b>	21	17	10	19	22	10	11	6	10	8	5	8	<b>17</b>	<b>28</b>	<b>31</b>

1800 on the 29<sup>th</sup>. Eskdalemuir had K5 for 18-2100 on the 14<sup>th</sup>, 15-1800 on the 28<sup>th</sup> and 15-1800 and 21-2400 on the 29<sup>th</sup>. The most southerly of the three, Hartland, also had the most high readings: K5 at 18-2100 on the 27<sup>th</sup>, 15-1800 and 21-2400 on the 28<sup>th</sup>, K6 at 15-1800 on the 29<sup>th</sup> followed by K5 at 18-2100 and 21-2400.

## 50MHz

### Propagation to and from Britain

#### Auroral-Related Propagation

Feb 10 1728 OY6BEC>GM(IO75)(53a)

Feb 28 1736 OY6BEC>GM(IO75)(52a)

Feb 29 1615 OZ>G4DEZ(53a)1709 G4DEZ>LA

Low levels of geomagnetic and operator activity resulted in this tiny crop of UK reports – though G4DEZ's contacts were in fact the first from England for some months. Looks like some opportunities were missed that afternoon.

#### Sporadic-e

Es was reported on ten days in January, but only four in February, shown in the table below.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Esdays								+	+	+					+														

The openings on the 9<sup>th</sup>, 10<sup>th</sup> and 15<sup>th</sup> were strong, but geographically restricted within the UK. Our unfailing reporter, G2ADR, telephoning his report because of a damaged hand registered another 'nil' return and deplored conditions. Ted, G4UPS, was driven to exclaim 'dearie me!' for the second consecutive month. And yet some operators elsewhere were more fortunate. As the table shows signals, mainly from southerly or south-easterly bearings, were generally good: the numbers in the table are signal strength, where given, with a nominal '5' where there was no report. The events on the 9<sup>th</sup>, 10<sup>th</sup> and 15<sup>th</sup> all lasted well over an hour and occurred within a1608-1825UTC timeframe.

	CT	DL	EA	F	HA	I	IS	S5	SP	UZ	9A
Day	10	8	10	10	9	15	15	9	9	9	9
0600											
0900											
1200											
1500	9	9	5	5	7	5	9	5	9	9	5
1800						5			9		
2100											

### Tropo

Although a stable high-pressure system brought substantially extended tropospheric propagation for ten or so days in the second half of the month at 144MHz and up there seems to have been little gain for 6 metres. Most 'tr' reports were for unremarkable contacts within the British Isles. However, G3VYF (JO01) reported DL6KR 559 at a range of 475km at 1210 on the 10<sup>th</sup> and DL8PM at 1116 on the 12<sup>th</sup>; LX0SIX was 'above normal' at 0948 on the 23<sup>rd</sup>. DL3WJ gave M5BXB 52 from JO60 at 2150 on the 26<sup>th</sup>. ON5LGS reported 'lots' of G stations at 1624 on the 28<sup>th</sup>.

### Meteor Scatter

These days, the great majority of MS contacts use JT6M, but not all JT6M contacts are by MS. The tables below strip out all JT6M reports where tropo, Es or iono are identified and include all where MS or mixed-mode including MS are credited. Fortunately, most reports by one or both operators do identify a mode – though such credits are fallible. A small number of reports were excluded by reason of uncertainty. So the tables are an approximation of MS working on the basis of reports received. The daily pattern probably reflects operator activity more than the availability of MS.

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
QSOs	2	1	5	0	0	0	0	1	4	5	1	2	1	1	1	7	3	3	4	0	0	2	1	4	0	1	0	0	0

Activity across the day followed a familiar pattern, notably with the 08-1000 peak. JT6M operation is in some respects a fallback mode, with A1 or J3e predominating when other forms of propagation are available. This may explain why there are so few points for 15-1800 UTC.

UTC	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	00
QSOs	0	5	8	4	1	2	5	3	3	0	1	2	0	4	6	3	0	2

Countries contacted were CT,DL,EA,EI,F,HA,I,LA,LX,OE,OY,PA,SM,SP,S5,UZ,5Q

## EME

The only two G reports of eme activity were contacts between G5WQ and JR6EXN at 1848 on the 21<sup>st</sup> with G5WQ working OY3JE at 1914 the following day, with a report of -115dB. On the 22<sup>nd</sup> G4IGO made contact with JR6EXN at 2054, with a report of -26dB and MM0AMW worked OY3JE, receiving a -23dB report. Was that really the limit of UK EME activity?

Compilation and commentary by G3USF

## Continental Europe, Africa and the Middle East

### Auroral-related Propagation

Auroral backscatter or auroral-E propagation was reported on eleven days, the highest figure for some time. The 29<sup>th</sup> was the only day with an opening reaching south of the Baltic. These were essentially high-latitude events, in keeping with the modest level of geomagnetic disturbance. The prevalence of beacons in the reports suggests that opportunities were missed through low activity.

Feb 1 2154 JW5SIX>OH6(579 AuE) 2204 OH6>LA(JP53)(55a) 2207 OH7(KP42)>LA(JP53)

Feb 2 2128 OH9SIX>OH5(56a)

Feb 3 1853 JW7SIX>OH5(KP30)(559 AuE)

Feb 8 2055 OH9SIX>SM2(59a)

Feb 10 17-1800 OY6BEC>5Q(55a) OY6BEC>LA(53a) OZ>LA(au) SM3>LA(57a) 5Q>LA(57a) 2131 OH9SIX>SM2(56a)

Feb 11 1141 OH9SIX>SM2(57a)

Feb 12 15-1600 OH5RAC>SM2(54a) OH9SIX>SM2(55a) 2007 OY6BEC>5Q(55a)

Feb 14 1938-58 Au>SM5 OH8>SM2(au) Au>SM3(JP81) 20-2100 OH6,OH7,OH4,OH2,OH0>SK2(Au)

Feb 19 1509 OH9SIX>SM2(55a)

Feb 28 1723 OY6BEC>OZ(52a)

Feb 29 15-1600 OH9SIX>SM2(56a) OH5RAC>SM2(55a) OH9SIX>SM2(KP04)(55a) OY6BEC>OZ(51) OZ7IGY>OZ(52a) ES1>OZ(55a) SM1>OZ(au) DL>OZ(au) SM4>OZ(57a) 16-1700 JW7SIX>SM2(JP04 AuE) JW7SIX>OH7 OH5RAC>OH7(au) ES0SIX>SM3(JP92 56a)

ES1>OH7(au) SM4>SM6(au) SM6>SM7(au) OH3>LA(au) SM7>LA(au) SM3>LA(au)  
SM6>LA(au) 17-1800 OZ>LA(au) DL>LA(au) OY6BEC>LA(au) 2149-54 OY6BEC>OH7(599)

## Other Modes

Undeniably a no better than routine month. Yet it did have a couple of high spots: TR8CA twice reported reception of the S9SIX beacon – nice to know that someone is listening out there. EA8 activity was reported on several days, including a contact with CT and reception of the ZD8VHF beacon, noted by SV1DH in his report.

Otherwise, most reports relate to JT6M activity, which in the great majority of instances, probably implies MS. There is a fair sprinkling of tropo reports, though apart from reception of the HG1BVB beacon in DL at 521km and a report of OZ7IGY, also in Germany, at 416km, these appear to have been fairly run of the mill.

Sporadic-E was specifically identified in these reports on three days (4,9,15), to which should be added two days (8 and 10) from the UK reports.

Feb 1 1939 HA2>DL

Feb 2 0824 OE5>PA(jt) 16-1700 CT>EA3(jt) HB9SIX>DL(tr) 2233 OH8>LA

Feb 3 0833-54 OE5>EA3(jt) EA7>EA3(jt) 09-1000 EA7>EA3(jt) 1042-50 SP9>HG9 OE9>PA(jt) 14-1500 DF0ANN>DL(362km) OZ7IGY>DL(476km) SR3FHB>DL(322km) 1657 EA7>EI(jt 1700km) 1703 CT>EA(jt) 1957 **S9SIX>TR8CA**

Feb 4 0929 LA>OE5(jt/Es) 1431 SM2>SM7(ms)

Feb 5 2007 LA>LA(jt)

Feb 6 0849-53 CT1ART,CQ3SIX>EA8 0956 EA1>PA(jt) 1713 OE5>LZ(jt) 1813 DL>S5(jt) 1930 I0ICR>S5(tr)

Feb 7 2123 DL>PA

Feb 8 0919 LX0SIX>ON 1429-45 ES3>OZ(jt) EA4>EA5(tr) 1537 LX0SIX>PA 1730 DL>DL F5TND>DL(Es) 2141 OH8>LA(jt)

Feb 9 0824 ZL3NW>S51DI(eme) 1104 EA2>EA3(jt) 1602 UZ5>PA(jt) 1808 EI>SP6(Es) EI>S5

Feb 10 0908 5Q>SP9(ms) 10-1100 LX>DL 5Q>LA(jt) CT1ART>EA8 HG1BVB>DL(tr) HA4>5Q(ms) 11-1200 HA2>5Q(ms) S5>DL LZ0SIX>PA(tr) HG1BVB>OE5(tr) 12-1300 HG1BVB>SP6(tr) 1321 S5>DL 1550 OE5>DL(tr) 16-1700 HB>DL(tr) OE5>DL CS1RLA>DL(Es) HG1BVB>DL(tr) OE5>DL CT1ART,CT0SIX>DL(Es) DL>CT(Es) LX0SIX>DL DL>EA3(ms/Es) DL>SP6(tr) HB9SIX>DL(tr) EA4Q>DL(Es) EI0SIX>CT EA3>5Q(Es) F>DL(Es) EA3>DL(fai?) 17-1800 OE5>EA1(Es) LX>EA1(Es) LX>DL DL>EA1(Es) LX,DL>F 1933 W1JJ>5Q7A(eme)

Feb 11 0728 HG1BVB>SP6(tr) 0829-31 OKtv>DL HB1BVB>DL

Feb 12 1026-37 DL>SM0(jt) HG1BVB>SP6(tr) 1112-33 5Q7A>SM0(jt) HG1BVB>DL(tr) I4>SM7(ms) 1203 HB>PA(jt) 1520 DL>SM7(jt) 21-2200 W7GJ>5Q7A(eme) PA>EI(ms) W1JJ>PE1BTX(eme)

Feb 13 0627 HG1BVB>SP6(tr) 1346 SP6>IT9 1749 HG6>9A 2115 UZ5>SM7(jt) 2209 SM0>PA(jt)

Feb 14 0819 JR6EXN>5Q7(eme -22dB) 1044 HB9SIX>DL(tr) 1142-3 DF0ANN,HG1BVB>DL(tr) 1642-53 HB1BVB(tr),OH5RAC(ms)>SP6 18-1900 OH5>SK2 I1>S5(tr) SM3>S5(ms) OH8>LA(jt) OH8>SM7(jt) SK4>LA LA>LA(jt) 19-2000 LA>LA(jt) OZ>SM3(jt) LA>LA(jt) LA>S5(jt) I0ICR,IK5ZUL>S5(tr) S5>I0(tr) 20-2100 OH0>OH4 SP9>LZ(ms) OH6>OH4 LA>SP9(ms) OZ>LA(jt) OH8>OH4 OH0>S5 21-2200 LA>SM3(jt) DL>OH4(jt) OE9>LA(ms) SM0>OH4(jt) 2206 OH4>SM7(jt)

Feb 15 1141 HG1BVB>OE5 1540-57 OZ7IGY>EA4 CTtv>DL(Es) EA4Q>OZ EA4Q>DL 16-1700 I5MXX>EI(Es) EA3>DL EA4Q>DL(Es) I0JX,IK5ZUL,I0ICR>EI(Es) EA4Q>OZ 17-1800 I1,I5>EI EA4Q,CT0SIX>DL(Es) OZ7IGY>EA3 EA3>DL,OZ,F(Es) F>DL(Es) EA5>OZ 18-1900 DL>EA3 EI>I5,I0(Es) F>DL DL>EA3 DL>EA6 LX0SIX>DL(tr) EA6>EA3(tr)

Feb 16 1055 HB9SIX(tr) 1134 HG1BVB(tr/ms) 1254 EA7>EA3(jt) 17-1800 HG1BVB>DL(tr) 2101 OY>LA(jt) 2231 EI>LA(jt) LA>LA(jt)

Feb 17 0340 K6QXY>S51DI(eme -25dB) 0905-18 LX0SIX>DL(tr) SM2>LA(jt) 11-1200 PA>HA2(jt) 1607 DF0ANN>DL(tr) 2210 OE9>SM7(ms)

Feb 18 LX>DL(tr 398km) 1233 HG1BVB>DL(tr/ms) 1536 HB9SIX>DL(tr) 1628 **S9SIX>TR8CA**

Feb 19 0853-7 LX0SIX>DL(tr) HB9SIX>DL(tr) 1025-48 DF0ANN>DL(tr) HG1BVB>DL(tr),SP6(tr) 1117-21 CT1ART>EA8 LX0SIX>F(tr) 1215 CT1ART>EA8 1606 DL>EI(jt) 2011-23 LA>LA(jt) LA>OZ(jt)

Feb 20 1528 LX>DL 2203 LA>LA(jt)

Feb 21 08-0900 HB9SIX,LX0SIX,HG1BVB,DF0ANN>DL(tr) OZ7IGY>DL(tr/ms) 2028-46 SM4>SP9(ms)

Feb 22 JF1FJ C>OY3JE(eme -21dB) JQ1BPP>OY3JE(eme -19dB)

Feb 23 0920 OE5>EA3(jt) 2024 EA7>EA3(jt) 2244 OH8>LA(jt)

Feb 24 0532 KR7O>OY3JE(eme -23dB) 0742 EA3>HB(ms) 08-0900 EA1>EA3(jt) DL>EA3(ms/iono) OE5>EA1(ms) EA7>EA1(ms) 0902-58 I4>DL(tr) DL>IS0(ms) OE5>EA3(ms/iono) 1104 SM0>SM7(jt) 1320 I5>I4

Feb 25 1053 LX0SIX>DL(tr) 1105 HG1BVB>DL(tr 521km) LX>DL(tr) HB9SIX>DL(tr)

Feb 26 1540 SV1>SV8 1852 5Q6>OZ(jt) 1956 5Q6>ES3 2245 ES3>SM7(ms)

Feb 27,28 nil

Feb 29 1520-40 SV9SIX>SV8 SV8>SV1 20-2100 SV9SIX>SV8 SV8>SV2(tr)

## 50MHz PROPAGATION REPORT FOR FEBRUARY 2008 BY SV1DH

1. Data for all days (29)
2. Relatively good days on: NIL
3. 48 MHz AF video (9L+3C) on: NIL

4. 55 MHz AF video (5N) on: NIL
5. Opening to SV9 on: 23,24(T)
6. Special events on:
  - 1(SSN=19 month max)
  - 10(2200 JA to LU on 10m F2)
  - 11(0700 VK8 to S5 on 10m F2)
  - 13(0945 VK8 to S5 on 10m F2)
  - 14(0945 VK8 to DL on 10m F2)
  - 18(1630 S9/B to TR+ZD8/B to EA8 TEP)
  - 20(1530 VP6DX to I8 on 10m F2)
  - 25(0545 VP6DX to UR+VK4 on 10m both LP!!)
  - No flares and Xray level to min A0 level all month
7. DXCC entities heard/worked during February 2008: 1 on 1 cont.
8. DXCC entities heard/worked during 23rd Feb 2008: 1 on 1 cont.

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## The Americas

### Auroral-related Modes

Openings on 6 days were relatively brief and weak.

Feb 1 2146-54 VE2YAT>VE2(FN07 41a) K0KP>VE2(FN07)(41a) VA2FZN>VE2(FN07)(41a)  
 2215-50 VE4VHF>VE2(FN07)(41a) K1MS>VE2(FN07)(41a) VE2(FN07)>VE2(FN48)(55a) 2318  
 VE3(FN15)>VE2(FN07)(51a)

Feb 2 0351-7 VE4VHF>W9(EN44)(52a) VE4ARM>W9(EN44 51a) K0KP>W9

Feb 10 1632 K0KP>VE2(EN36)(AUE)

Feb 20 0714 VE6EMU>W7(CN88 55a)

Feb 28 0205-14 VE2YAT>VE2(FN07 41a) VE8BY>VE2(FN07 55a) K0KP>VE2(FN07 41a) 0323  
 VE6EMU>W7(CN88 51a) 23-2400 K0KP>VE2(FN07 61a) VE2YAT>VE2(FN07 51a)  
 VE2(FN07)>VE2(FN35 52a)

Feb 29 0303-10 VE2YAT>VE2(FN07)(41a) VE6EMU>W7(CN88 52a) VE6(DO20)>W7(CN88  
 59a) 2215 K0KP>VE2(FN07)(51a)

### Other Modes

While Europeans were having a thin time, some western hemisphere operators were faring considerably better. (One reflects that results in Europe might have been more substantial had there been more activity at the southern end of the tep zone.) Tep was less consistent in February than in January, when contacts were reported on 26 days. Nevertheless, this was a good result for February. As the detailed table indicates, the most favoured paths were between the Caribbean (plus FY and YV) at the northern end and PY in the south. There were no reports of openings extending to the US. CX and ZP, like TI, featured on only one day. There were good openings on the 28<sup>th</sup> and 29<sup>th</sup>, coinciding with increased geomagnetic activity.

## Trans-equatorial Propagation

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Tep	+	+	+	+		+		+	+		+			+			+	+		+	+							+	+

### Trans-equatorial propagation

V4>PY 9 days: 1 3 6 8 9 11 17 28 29	FJ>LU 2 days: 2 18
9Y>PY 9 days: 1 3 4 6 8 9 11 17 28	YV>LU 4 days: 8 14 21 29
FJ>PY 6 days: 1 2 6 11 18 20	FJ>CX 1 day: 18
YV>PY 7 days: 1 8 11 17 20 28 29	YV>ZP 1 day: 29
KP4>PY 2 days: 1 11	V4>ZP 1 day: 29
FM>PY 3 days: 1 11 29	TI>ZP 1 day: 29
FY>PY 4 days 9 17 28 29	
TI>PY 1 day: 29	

In addition to tep the Americas enjoyed considerably more sporadic-E than Europeans. Reports specifically mentioned it on no fewer than twelve days, with particularly good openings on the 25<sup>th</sup> and 26<sup>th</sup>, which included some double-hop contacts in the US. Sporadic-E is also the most likely agent for contacts between YV and W4 on the 11<sup>th</sup> and HP3 and W4 on the 29<sup>th</sup>. Other contacts between W4 and TI or Caribbean islands may also have been due to that mode. In contrast to European operation the US reports make much less mention of JT6M or ms.

Feb 1 00-0100 V44KAI,9Y4AT,WP4AZT,KP4TG,FJ5DX>PY5HOT WP4AZT>PY2REK,PT9PA  
 PY5>PT9 PY5HOT>YV5ESN FJ5DX>PY2REK 01-0200 FJ5DX>PY2NY  
FM5AA>PY2NY,PY2REK,PY5HOT 04-0500 9Y4AT,V44KAI>PY5HOT 1237 W4>W8 2349-53  
YV4AB,TI2NA,V44KAI,P43JB,KP4>KE4WBO

Feb 2 00-0100 KP4>W4 FJ5DX>KE4WBO,LU3EE,PY2DA W0MTK>W9 TI2NA>KE4WBO(Es)  
 0421-44 VE3,W4>W8 W3DOG,K1MS>W4 0504-27 W3CCX,K2ZD>W4(Es) C6AFP>W3 0612  
C6AFP>W3 1957 K0KP>W8 20-2100 W3DOG,YV4AB>KE4WBO(ES) C6AFP>W3 2101  
TI2NA>KE4WBO(Es) 22-2300 C6AGN,YV4AB>KE4WBO(Es) XE2>W5,W0

Feb 3 00-0100 W4>W4 9Y4AT,V44KAI>PY5HOT 1308 W2,W3>W4(Es) 1439 C6AFP>W8 15-  
1600 W5>W8 W0>W4 19-2000 W3CCX,VE3UBL,P43JB>W4 VE3>VE2(tr) VE3>W3(Es) W3>W9  
W3CCX>W5 W4>VE2,W8(Es) NL7XM>W5 W8>VE2 W4>W1,W2(Es) 20-2100 W4>VE2(ES)  
W5GPM>W2,W1 W4>W9,W1 W8>W9 W3HH/4>W8 W0>W2,W4 K8EB,TI2NA>KE4WBO

Feb 4 00-0100 W4>W8 9Y4AT>PY5EW 1054 PY2>PY2 1121 PY2>PY2 1815 PY2>PY2

Feb 5 0052 W5>XE3 23-2400 K8EB>W4 W4>VE2(Es)

Feb 6 00-0100 W4>W8,VE2 01-0200 FJ5DX,V44KAI,9Y4AT>PY2REK  
FJ5DX>PP5ZP.PY2HT,PP5AR

Feb 7 2027 K4TQR>VE2(ms)

Feb 8 00-0100 9Y4AT>PY5HOT 0126 W4>W4 02-0300 9Y4AT,V44KAI,YV4AB>PY5HOT  
YY4ACU>LU6HTR W4>W8 V44KAI>PY2REK 1140 W9>W4 2042 NOLL>W8

Feb 9 00-0100 9Y4AT,FY7THF>PY5HOT 0105 V44KAI>PY2REK 1258 W4>W8 1308 W5>W8  
1521 W4>W8 17-1800 W0>W8(ms) W8>VE2(ms) 23-2400 TI3NA>XE3ARV KD4AOZ>VE1  
W4CHA>W3

Feb 10 00-0100 W4>W3,VE1 C6AFP>VE2(Es) W5RP>W9 XE1>XE3 W8>VE1 XE1>W3  
C6AGN>W3,W1 01-0200 W4>W1 K4HRS,W4CHA>W3 C6AGN>W3 KP4>W4 1551  
VA2ZFN>VE2 2241 W4>W2 2350-5 K8EB,W8IF>W4(Es)

Feb 11 01-0200 9Y4AT,V44KAI,YV4AB,FJ5DX,YY7ABC,WP4AZT,FM5AA>PY5HOT W5>XE3  
XE3>W4 02-0300 PY5HOT>FM5AA 9Y4MYA>PY5HOT K5AB>W8 19-2000  
YV4AB,K4KWK>KE4WBO(Es) 2115 YV4AB>KE4WBO(Es)

Feb 12 13-1400 W4>W8(Es) W4>W8(ms) W5>W5 1406 W4>W8 21-2200 5Q7A>W7GJ(eme  
-26dB) W1JJ>W7GJ(eme -22dB)

Feb 13 0216 TI9KK>KD4JRX 1543 W4>W8

Feb 14 0222 YV4AB>LU8MB

Feb 15 2349 W4CHA>W4

Feb 16 2253 TI2NA>KE4WBO

Feb 17 02-0300 9Y4AT,YV4AB,V44KAI,FY7THF>PY5HOT 0335 V44KAI>PY2REK

Feb 18 00-0100 LU7FTF,PY1CW,PP5BI>FJ5DX FJ5DX>PP5AR 01-0200  
CX1DDO,CX4CR,PY4AQA,WP3UX>FJ5DX 11-1200 W4CHA,W3HH/4>W4 1317 W4>W8 1657  
W4>W8

Feb 19 01-0200 W4>W4 0217 W4>W4 1233 W4>W8(ms) 1305 W8>W4(Es) 1646  
K0KP>VE2(ms) 1712 V44KAI>KE4WBO 1824-36 V44KAI>KE4WBO VE6EMU>W7 1952  
K4TQR>XE3 2046 KD4AOZ>XE3 21-2200 XE3>W5 W8>XE3

Feb 20 00-0100 FJ5DX>PU2KSQ,PY2UDX,PY2HT,PY2MTV YY4ACU>PY2HT  
WP4AZT.YV5IAL>PY2MTV 01-0200 V44KAI,TI2NA,FM5AA>PY2MTV CX1DDO>YY4ACU  
FJ5DX>PP5AR,LU5CAB PJ2/W9VA>LU5CAB PJ2/W9VA,YY4ACU>LU3EE 02-0300  
V44KAI>PY2REK

Feb 21 00-0100 YV4AB>LU3EE LW3EX>YV4AB

Feb 22 1254 W4>W4 13-1400 W3,W1>W4 15-1600 W9>W4(Es) KD4AOZ>VE1 19-2000  
W8,W4>W8 20-2100 W4>VE3,W9 K4TQR,WB5LLI>W3 W8>W9(Es) 21-2200 W4,W8>W9(Es)  
W5,W4>W3

Feb 23 nil

Feb 24 1358 W0>W8 14-1500 W4>W8 23-2400 49.8,48.3(CEb/c)>XE3

Feb 25 00-0100 W0>W3(Es) W5>W8 W0>W4 01-0200 W3>W0 W5>W4,W3 W0>W2,W8  
N6NB>W6 0250 WZ8D>W8 2142 VE7>W6 22-2300 VE7>W7 W9>W2,W3(Es) W5GPM>W3,VE3



W5,W9>VE2 VE7FG,VE5ARC>W7 W8,W4,W5>W8 W0>W3(Es),VE2 23-2400 W5>VE2,W1  
W4,W5>W3 W0>W2,W3,W1 W3,W0,W9,W4,W5GPM,W5HN,W8>VE2 W0>W4,W2 W5GPM>W8  
K0KP>W1 K8PLF,W8IF>W0 VE2>W9 VE3>W4

Feb 26 00-0100 K8PLF,W9>W5 W3>W0,W7 W4,W5>VE2 W4,W0,W9>W4 W0>W4,W7 W8>W7  
W7>W3 W4,C6ANF>W8 W4>VE3,W5 W8,C6ANM>W9 W9VW>W4 01-0200 W4,C6ANM>W9  
W3,W4,W9>W5 W4,W0,W9>W7 W5>W4,W9 N0LL,W5RP>W4 W0>W8,W9 K5AB,WB5LLI>W3  
02-0300 W6>W0,W7,W4 W0,W5,W4>W4 K5AB>W8 W0>W5,W7 W5,XE2>W9 W5,W7,W8>W0  
XE2>W4,W0 W7>W4(2x) 03-0400 W0,W5>W7 XE2>W7,W9 W7>W3,W4 W5>W8,W6,W0  
W7,N6NB>W6 W4>W8 04-0500 W7,W6,W5>W5 W0>W7 W7>VE6,W4 W0,W5>W9 W4>W6 05-  
0600 W5GPM,N0LL,VE7>W6 W2>W5 15-1600 W5GPM,W3,W2>W4 VE2>W5 W9>W3,W2  
W4>W8 W4,W5>VE3 W5,W0>W7 VE3>W3,W4 K8EB,VE3>W4 16-1700 W7>W7 W3,W4>W9  
VE2>W4 W6,W9>W7 VE3>W5 17-1800 W9,W0,W7>W7 VA2ZFN>VE2 18-1900 W3DOG>W4  
W0,W9>W7 W5,W7>W5 W7>W6 19-2000 W9>W7 W7>W6 2210 W3>W3

Feb 27 00-0100 W0>W3 N0LL>VE2(Es) 01-0200 WB0RMO,KA0CDN>VE2(Es) KD4NMI>W4 02-  
0300 W0>W8,W9,W5 KA0CDN.K0EC,NA7XX>W9 03-0400 W6,VE4VHF,W0>W7 W7>W5  
VE4VHF>VE7(Es) 04-0500 W7>W5 KA0CDN,NA7XX,N0LL,VE7>W7 VE5,VE6EMU>W6(Es) 05-  
0600 W7,VE7FG>W6(Es) 18-1900 N0LL,W7,WB0RMO>W7 19-2000 W0,W7>W7 2041 W7>VE7

Feb 28 aurora 0252 W5>W4(sc) 03-0400 W5GPM,NA7XX>W7 23-2400  
V44KAI,9Y4AT,YV4AB,FY7THF>PY5HOT

Feb 29 00-0100 FM1HM,V44KAI>PY5HOT TI5XP>W9DR/4,W4HY,K4RX  
TI2NA>K4RX,N4IS,KK4XO(Es) YV5IAL>PY5HOT,PY2XAT W4>W8 HP3XUG>W9DR/4,K4RX  
01-0200 YV5ESN>PY5HOT YV4AB,YV5IAL,V44KAI,TI5XP>ZP6CW  
YV4AB,FY7THF,TI5XP,YY4ACU>PY5HOT W4TAA>HP3XUG LU5FCI,LU3EE>YY4ACU 02-  
0300 TI2NA>KE4WBO aurora 12-1300 W4CHA>W4 1919 TI8M>WP4NIX

## Asia and the Pacific

### Asia

Feb 2 0546 9M4SIX>9M6XRO 0622 9M2IDJ>9M6 0730 YF1OO>9M6 0749 VK6RSX>9M6 08-  
0900 VK8AH,VK4ZDP,VK4BKP>9M6 09-1000 VK4SIX,VK3OT>9M6 10-1100  
VK3SIX,VK4FNQ,VK4BKP,VK4BEG>9M6

Feb 4 09-1000 YF1OO,VK6RSX,VK4TL>9M6 11-1200 9M4SIX,YF1OO>9M6

Feb 5 07-0800 BG4CZX>JA3 VR2SIX>JA2 KG6DX>JA6,JA1 08-0900 AH2G>JA1,JA7

Feb 6 0739 BD9>BG7 08-0900 VR2IL>BG7

Feb 7 0612 BG7>BG9

Feb 12 0557 46172(VK)>JA3

Feb 14 0620 K6MYC>JR6EXN(eme -22dB) 0919 5Q7A>JR6EXN(eme -23dB)

Feb 17 1205-13 OY3JE,OY6FRA>JR6EXN(eme -20dB)

Feb 19 1101 K2ZD>JR6EXN(eme -21B)

Feb 21 1846 G5WQ>JR6EXN(eme -17dB)

Feb 26 0406 45240,45250(ZL)>JA3

Feb 28 0901 46172(VK)>JA3

### **Pacific/VK,ZL**

For VK/ZL and thereabouts February is the month when 50MHz Es falls away – which it did, quite rapidly, around the middle of the month. Before that, however, most parts of VK and ZL enjoyed many hours of propagation, extending at one time or other to all areas. While most reports were within VK/ZL or with A35 or FK, which lie comfortably within single-hop range of much of both countries, many were at well beyond single-hop range. 2xEs doubtless accounts for many, but the longer distances – some 11,000 km in one instance - are more problematic. Multihop Es looks the more likely agent but some may have involved Es+tep. It would be rash to attempt firm rulings, particularly and few of the reports offer clues.

The most eagerly awaited event of the month was the Ducie Island expedition. For most operators VP6 was a difficult path, particularly once the main sporadic-E season had ended. The VP6DX team apparently had difficulty in getting their 6m station working and are understood to have worked with a simple vertical. In the end, the beacon was heard weakly in A35 and VK4, but no QSOs were made. (The VP6DX page shows a nil return for 50MHz.)

Looking back over the summer, David Vitek, an assiduous monitor of frequencies around 50MHz, summed it up as a good season with something of interest every day. There were numerous east-west openings within VK but the more northerly path to VK8, including VK8RAS/b was well down on usual for him. In consequence, there were fewer Es/tep links. He notes that he logged only one opening to JA. He heard 55250 TV from the Philippines a number of times and 53750 Malaysian TV more occasionally, but little was heard of 55250 TV from American Samoa. David notes the need for more operators to be active in the Pacific, and the absence of signals from Antarctica. A35RK provided some stimulus, but there appear to have been no QSOs with FK,P29 or H44, for example. From David's report one gains the feeling that this was a good month that could have been better with more activity. There are hopes of (re)establishing beacons on a number of Pacific islands that would be readily workable from VK/ZL, with local operators looking hopefully to DUBUS as provider, but there are no signs of progress to date.

The detailed listings below draw on David's report and VK logger. Postings on the latter are not currently picked up by either the OH2AQ DX Summit or the JA 50MHz page: [www.vklogger.com](http://www.vklogger.com).

Feb 1 0454 45240(NZ)>VK4 05-0600 VK2>VK4 FK8SIX>VK2 VK2RHV>VK4,VK5  
VK4RGG,FK8SIX(3052km)>VK5 06-0700 VK4>VK2 FK8SIX>VK6(5149km) VK8RAS>VK3  
59750.0(OM99),49754.9(BY PP42)>VK3 07-0800 FK8SIX>VK5(3052km),VK6(4985km)  
VK4RGG,VK8RAS>VK3 VK8RAS>VK5,VK4 VK5>VK2 VK7RAE,VK4RGG,FK8SIX, VK2RSY>VK4  
FK8SIX>VK5(3178km) VK1>VK3 VK2>VK3(646km – short) 08-0900 VK5RBV>VK4,VK2 VK2RSY>VK3  
FK8SIX>VK3(2920km) VK4>VK3,VK2 VK5RBV>VK3(bs) VK7>VK4(2691km) VK2>VK6 09-1000  
VK4ABP>VK4 VK4,VK5RBV>VK2 VK4RGG>VK3 VK8RAS>VK2 VK4RGG,VK2RHV>VK5 10-1100  
VK3FGN,VK6RBU>VK2 VK4ABP>VK3 VK6RBU>VK2 VK7RAE>VK4 11-1200 VK8RAS>VK4  
VK4RGG>VK5 VK2RHV>VK5,VK2,ZL2 2329 FK8SIX>VK4

Feb 2 04-0500 46240>VK3(AuE QTF 165) 06-0700 49750(BY OM88)>ZL2,VK3(8840km)  
VK5RBV,VK7RST>VK6 49749>VK5 48239.6(OJ03)>ZL2,VK3(6231km) 49747(OK59)>VK3(7139km)  
49758,1(PO32)(10092km),49555.5(PP42)(11198km)>VK3 VK5RBV>VK3 08-0900  
**9M6XRO**>VK8MS,VK4(4590km),ZL2TPY VK4>VK3 **9M1IDJ**>VK8MS 48239.5(9M2)>VK2 YB0>VK5 09-  
1000 ZL2>VK4 **9M6XRO**>VK3OT(5457km),VK4SIX(4133km) VK2RHV>ZL2,VK5 VK4RGG>VK3  
VK7RAE>VK5 10-1100 **9M6XRO**>VK3OT(5548km) VK4BEG,VK8MS 48249.7(OJ80)>VK3(4963km)

48249.4(OJ74)(5484km),48239,5(OJ03) (6231km)>VK3 VK2RHV>ZL2 VK2>VK5 11-1200  
VK5RBV>VK5,VK3 VK5RBV>VK2 20-2100 FK8SIX>A35 21-2200 FK8SIX,VK2RHV>ZL2  
55239(NZ),50740(NZ),VK3,VK7,FK8SIX>VK4 22-2300 VK4>VK2 VK1,VK5>VK4 VK2RHV>ZL3 23-2400  
ZL3SIX>A35(2917km) VK4RGG>VK3

Feb 3 01-0200 FK8SIX,VK2RHV>ZL2 02-0300 VK2RHV>ZL3 ZL3SIX>A35(2917km) VK5RBV>ZL3  
FK8SIX>A35,ZL3,VK4,VK2 ZL3>VK5(3008km) ZL3>A35(2887km),VK5(3164km) 03-0400 ZL3>VK7  
A35>ZL3(2899km) 55250(9AH45)>ZL3 FK8SIX>ZL2 0426 **V73SIX**(3806km)>A35 05-0600  
FK8SIX>VK2,ZL3 ZL3SIX>A35(2917km) 06-0700 FK8SIX,VK5RBV(3148km),VK2>ZL2 ZL3SIX>A35 07-  
0800 VK6>ZL3(5020km) ZL3>VK5(3008km) FK8SIX>ZL2 VK7RAE>ZL3 08-0900  
VK4RGG(3385km),VK2RHV(3671km) VK5>ZL3(3039km) A35>VK4(3420km) FK8SIX>VK4  
ZL3SIX>A35(2917km) VK4RGG>A35(3388km) 09-1000 FK8SIX>VK4,VK2 1040 FK8SIX>VK4 1141  
FK8SIX>ZL2 21-2200 VK2RHV>ZL2 22-2300 VK7RAE,FK8SIX,VK7RST>VK4 VK5RBV,FK8SIX>VK2  
VK2RHV>VK4,ZL3 22-2300 FK8SIX>VK2,VK4 VK2RHV>ZL3

Feb 4 00-0100 57250>VK2 VK2,VK5>VK4 0103 VK4RGG>VK5 87.27(VK4)>VK2 03-0400 VK4>VK2 06-  
0700 **V73SIX**>VK4(3931km) VK2RHV>ZL2 48239.6(OJ03),FK8SIX,49750(BY OM88)(10407km)>ZL2 07-  
0800 VK2>VK4 VK2,VK4>ZL2 **AH2G**>VK4(3425km) FK8SIX>ZL2 08-0900 FK8SIX>ZL3 **AH2G**>VK4,VK7  
9M2tv>ZL2 08-0900 FK8SIX>DL3 09-1000 **9M6XRO**>VK4 10-1100 VK7RST>VK5 VK5RBV>VK4  
VK4>VK5 20-2100 50740(NZ)>A35 2344 VK4RGG>VK5

Feb 5 00-0100 VK4>VK2,VK5 VK8RAS>VK6 VK5RBV>VK4

Feb 6 0725 FK8SIX>VK4 08-0900 49750>VK2 49751(OM34)>VK3 VK5RBV>VK3 09-1000 VK8RAS>VK2

Feb 7 08-0900 VK7RAE>ZL3 VK3>ZL4 VK2RHV>ZL2 22-2300 VK7RAE,VK3>ZL3

Feb 8 0159 49751(OM34)>VK3 0623 VK2RSY>ZL3 07-0800 FK8SIX>VK4 VK4>ZL4 23-2400 VK4>VK2  
VK4RGGmVK4RTL,VK4ABP>VK5 52760(QF23)>VK6(2642km)

Feb 9 0000-0100 VK2,VK4>VK5 VK4RGG,VK4RTL,VK4ABP>VK3 VK2RHV>ZL3 01-0200  
VK5RBV,VK2RHV,VK2RSY>VK3 VK5>VK4 VK2RHV>VK5 VK8RAS>VK2 VK7RAE>ZL3 02-0300  
VK3,VK5>VK2 ZL3SIX>VK7 05-0600 VK6RSX>VK6 09-1000 ZL4>VK2  
FK8SIX,VK2RHV,51670(QG53)>ZL2 2254 FK8SIX,VK2RHV>ZL2 23-2400 VK4>ZL2 ZL4>VK3

Feb 10 00-0100 VK2RSY,VK2RHV>ZL3,ZL2 FK8SIX>ZL2,VK2 01-0200 VK2RHV,VK2RSY>ZL2 0256  
VK2RSY>ZL3 03-0400 49750(OM88)(10407km),VK3(ZL2) FK8SIX>VK3 04-0500 FK8SIX>VK2  
49750(OM88)>ZL2(10407km) 1205 55250(NZ)>VK2 2138 55250.1(AH45)>ZL3(3616km) 22-2300  
VK2RHV,FK8SIX,VK3>ZL2 ZL2MHF>VK5,VK3 ZL2>VK2 VK5RBV>ZL2 ZL3SIX>VK4 23-2400  
VK5,VK3,FK8SIX>ZL2

Feb 11 00-0100 VK5,VK6RPH(5229km)>ZL2 ZL1>VK5 ZL2>VK3 01-0200 VK8RAS>ZL2(4144km)  
FK8SIX,VK2RHV,VK6RPH(5229km)>ZL2 02-0300 VK5RBV,FK8SIX,VK2RHV,49750(OM88)(10407km)  
ZL3SIX>VK3 VK5TBV,VK2>ZL3 VK6>ZL2(5235,5219,5229km) 03-0400 ZL2>VK3 ZL3>VK5  
VK6RPH>ZL2(5229km) ZL3>VK6(5039km) ZL3SIX>VK5 04-0500 VK6>ZL3(5020km)  
49750.4(OK59)>VK3(7039km) FK8SIX>ZL2 22-2300 55239.6(RF73)>ZL3(749km)  
55250(RE79)>ZL3(450km) 55276(RE78)>ZL3(311km, b/s) 55250(AH45)>ZL3(3619km) 23-2400  
55250.9(AH45)>VK3(5276km) 55249.9(RE65)(2672km),55239.6(RF73)(2909)>VK3 ZL3SIX>VK3(2672km)  
FK8SIX,VK5RBV,VK2RHV>ZL2

Feb 12 0012 51740(QF35)>ZL2 01-0200 ZL2>VK3,VK4,VK5(3168km) ZL3,VK7RST >VK4 02-0300  
VK5,VK7RAE>VK4 VK2>ZL3 03-0400 VK2RSY,VK2RHV,VK3>VK5(bs)  
VK4RGG,FK8SIX,VK2RHV,VK7RST,VK5RBV>VK2(bs) 0421 VK4RGG>VK5 0553 46172>KG6 0711  
VK8SIX>ZL2 22-2300 FK8SIX>ZL2,VK4

Feb 13 00-0100 FK8SIX>VK5,VK2 03-0400 ZL3SIX>VK5 05-0600 VK2RHV>ZL2  
49750(OM88)>ZL2(10407km) 0749 VK2RHV>ZL2 22-2300 55250.1(AH45)>ZL3 2255 FK8SIX>VK4 23-  
2400 FK8SIX>VK5

Feb 14 0116 50750(NZ)>VK3(2909km)

Feb 15-19 numerous TV signals around 45-46MHz but nothing at 50MHz

Feb 20 0131 VK2RSY,VK2RHV>ZL3 0308 FK8SIX>VK2

Feb 21 2054 **VP6DX**/b>A35RK(5082km)

Feb 22 0148 **VP6DX**/b>VK4SIX(9185km) 0340 57250(PF96)>VK6

Feb 23 0242 57250(PF96)>VK6

Feb 24 06-0700 FK8SIX>VK4,VK2 0745 FK8SIX>VK4

Feb 26 0704 VK8RAS>VK5 0814 VK4RTL>VK5

Feb 27 0045 VK4RGG>VK5 2355 VK4RGG>VK5

## 28 MHz

### 28 MHz in Britain

Beyond doubt, February was a very thin month for UK operators, with a paltry count of countries heard or worked. Those reported were DL, EA,F,I,LA,OE,OK,SM,S5,SP,VP8,W,ZD7,ZS,9V – well down on the preceding months..

#### Beacons Heard

UTC BCN	06- 09	09- 12	12- 15	15- 18	18- 21	21- 24	Bcn	06- 09	09- 12	12- 15	15- 18	18- 21
DB0FKS				1			IW3FZQ		1	2	2	
DK0TEN		1	1	1	1		IZ3LCJ				1	1
DL0IGI					1		IY4M			1	2	1
DM0AAB		1	1				LA5TEN	2	6	1	1	
DM0ING		1		1			OH2B	1	1			
EA4Q			2	1			OK0EG			2	4	1
F5ZUU			1	1			SK5AE		3			
I1M			1	2	2		SK0CT		6	4	1	
IQ1SP			2	2	2		SM5HUA	2	10	1	1	
I3GNQ		1	1	1								

The table on the previous page speaks for itself. Markedly fewer beacons heard in February than in January, mainly from Germany, Italy and Scandinavia, with a tendency to cluster in the hours before or after noon. The propagation mode in most cases appears to have been sporadic-E.

### 28 MHz Worldwide

Britain was not alone in having a poor month – though the table below should be used with caution, as there is no way of telling how far the multiple zeros reflect activity and how far conditions. As usual, the tabulation is a baseline recording what is known to have happened. It cannot tell what might have been if more operators had spent more time testing the band; some of the best results occurred during the weekends of the FOC and

WPX contests when that extra effort was being put in. (However, the REF contest seemed to produce little besides contacts within France.)

As always, openings to one part of a continent may not have been available elsewhere on that continent. So, while many operators were hunting VP6DX the one good opening on the evenings of the 20<sup>th</sup> and 24<sup>th</sup>, until around 2130, appears to have been confined to Iberia, while morning openings to Oceania scarcely reached beyond southern and south-eastern Europe. Paths between Europe and Africa, usually among the most dependable, produced only modest results and South America was worked on only six days.

(However, this includes reports of the VP8ADE beacon, of which nothing had been heard for some time, on the 9<sup>th</sup>.) Asia and North America were, not surprisingly, particularly difficult – though G4NCA reported 9v1PC on the morning of the 2<sup>nd</sup> and G3SED reportedly worked W3RJ at 1705 on the 10<sup>th</sup>. AF5U reported HB0/DJ5MW and MJ0AWR around 1705 on the 16<sup>th</sup>. Working within Europe was reported on 24 days, with good Es openings on the 8<sup>th</sup>, 13<sup>th</sup> and 15<sup>th</sup>. The NAC contest attracted support on the evening of the 7<sup>th</sup>, when the band would almost certainly have been empty otherwise.

Among the other continents, the relatively substantial results for Oceania, in part reflect the fact that so many beams were directed towards VP6DX, which reported 8791 10m contacts – though few appear to have been with VK or ZL. However, there were also good openings outside the period when VP6DX was operational: North America<>Oceania contacts were recorded on no fewer than 24 days. So, too, were contacts between North and South America, with the afternoon and evening of the 29<sup>th</sup> giving particularly good results while geomagnetic levels were rising. KP3FT reported hearing no fewer than 45 beacons from North and South America in the course of the 25<sup>th</sup>. By contrast, there was only a single report of a contact between North America and either Asia or Africa. Within North America (including the Caribbean) contacts were also made on 24 days, including the 26<sup>th</sup> when propagation extended to all US call areas and VE, which tends to be left out of events which more frequently favour more southerly latitudes.

	OC				AS				EU				AF				NA				SA				
	M	N	A	E	M	N	A	E	M	N	A	E	M	N	A	E	M	N	A	E	M	N	A	E	
OC	48	40	38	17	14	42	27	14	21	00	03	10	21	00	00	03	58	45	06	03	38	10	00	03	
AS	48	27	06	00	10	21	17	06	03	06	00	03	03	00	00	00	03	00	00	00	00	03	00	00	00
EU	17	00	03	21	10	06	00	00	69	58	39	57	24	40	06	06	00	00	03	06	00	00	00	21	
AF	00	00	00	21	03	00	00	00	10	45	06	24	00	00	00	03	00	00	00	03	00	00	00	24	
NA	14	58	69	58	00	00	03	00	03	06	00	00	00	03	00	00	45	60	69	58	06	58	48	48	
SA	00	14	30	24	00	00	00	03	00	17	14	00	00	06	17	00	03	39	52	55	00	03	21	10	

M=before 1130 N=1130-1430 A=1430-1700 E=after 1700 LMT. Results show per cent of days paths proved workable

Compilation and commentary by G3USF. Thanks to G4UPS, SV1DH, G0IHF, G3ADR, David, SWL/VK5