
VHF/UHF – An Expanding World

David Smith VK3HZ

Weak Signal

David Smith - VK3HZ

Welcome back from the break.

This month, we're covering two months of activities – November and December. Normally, this is a busy time of year for the VHF/UHF enthusiast. However, things were looking decidedly flat up until the last days of the year prompting speculation that the breaking of the drought, or the turning of the sunspot cycle had chased the good conditions away. Then things turned, and the final days of 2011 largely made up for the quiet times.

The early days of November saw a continuation of the good conditions between VK2/4 and ZL. On 7/11, Adrian VK4OX worked Bob ZL3TY on 2 m with 5x3 reports over the 2407 km path. John VK4JMC also worked Bob. On 16/11, Adrian again worked Bob ZL3TY and also ZL1AVZ on 2 m.

On the morning of 15/11, Adrian VK4OX worked up the coast on 70 cm to Ian VK4AFC – up to 5x7 over 1300 km - and John VK4FNQ (5x5 over 1000 km),

On 24/11, conditions across the Bight were in good form. Wally VK6WG in Albany on 2 m worked Phil VK5AKK (5x9), Brian VK5BC (5x9) and Bill VK5ACY (5x5). Wally also worked Phil (5x9) and Brian (5x5) on 70 cm.

Nothing much of any note then happened until after Christmas day.

On the morning of 28/12, The VK6REP 2 m beacon was heard in Melbourne. As well, the VK7RAE 2 m and 70 cm beacons were heard in Adelaide, 970 km away.

That evening, the VK6REP 2 m beacon returned to the east with a vengeance. Norm VK7AC (2365 km) reported it as 5x4, 5x1 for Jim VK3ZYC in east Gippsland (2320 km), 30 over 9 for Nick VK3VFO/P in central Gippsland (2265 km) and many reports from the Melbourne area. However, for all that, nobody was on at the VK6 end, so no contacts resulted.

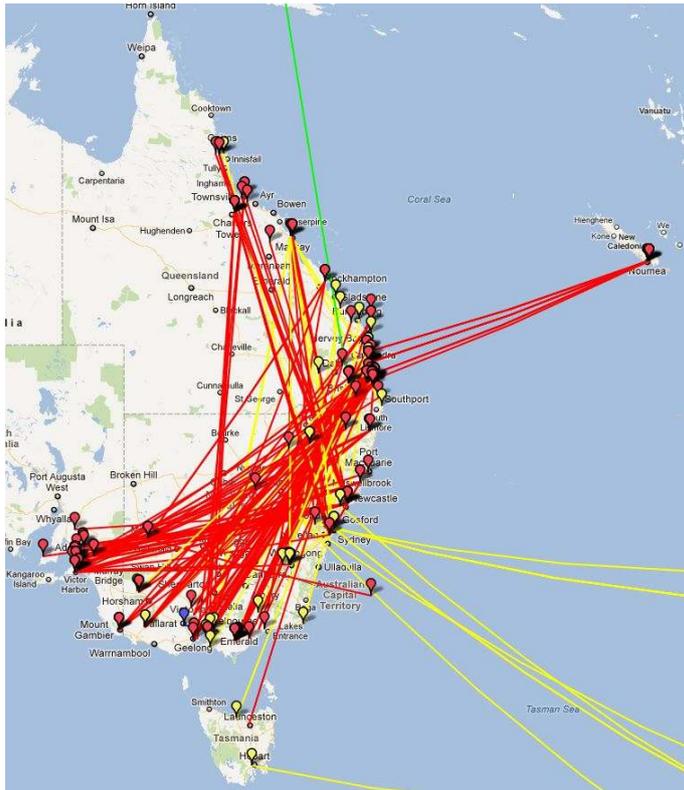
The following morning (29/11), the VK6REP beacon was still in and this time Ron VK6VOX at Katanning worked Jim VK3II (2560 km), Andrew VK3OER and Ian VK3AXH.

That evening, Wally VK6WG worked Jim VK3II and Phil VK5AKK on 2 m. Wally also worked Phil on 70 cm (5x9) and 23 cm (5x7) – a distance of nearly 1900 km.

The middle of the day on December 30th saw an Es opening from VK2 to VK4 with distances of 1250 km to 1850 km.

And so we come to the final day of 2011 and the Es god turned on a blinder. From about 0130Z to 0530Z, 2 m was open every which way with contacts from VK5 to VK1/2/4, VK3 to VK4, VK2 to FK8 and ZL. There were dogpiles on 144.1 and it was sometimes difficult to find a clear frequency to QSY.

The map below from the VKLogger shows the extent of the opening:



2m Es Contacts - 31/12/11 from 0130Z to 0530Z

It was good to hear at least 2 F calls in the fray – Peter VK4FPFH at Hervey Bay and Nick VK4FMAG on Magnetic Island. Nick possibly took out the longest distance Es contact for the day working Lou VK3ALB over 2122 km.

Adrian VK4OX (the second of 17 stations I worked) had this to say about it:

The 144MHz Sporadic E (Es) season had been very poor so far with only a minor opening to VK5 on 2011-12-27 for about 25 minutes for me, and the odd opening for VK2 up to north Qld.

Then THE event occurred. Things looked promising from 0000z on New Year's Eve. I was copying short skip 6 metre beacons from all over the place. When this happens, the usual problem on 144MHz for me is, "Where to point the Beam?"

This year, I had bought an old Watkins Johnson VHF/UHF surveillance receiver covering 88 MHz to 260 MHz on one band and 230 MHz to 500 MHz on another. This Rx has a very useful Panadaptor which can span about 3 MHz of the spectrum, +/-1.5 MHz from the received centre frequency. I built an 88 MHz to 260 MHz Log periodic antenna.

The 88MHz to 108MHz FM band is chokka here and finding DX stations is just too much trouble so I began looking at the 112 MHz-118 MHz VOR beacon band.

At about 0115z I began "seeing" DPO, the Devonport VOR beacon on 116.3 MHz in QE38. Then at 0128z I worked VK3PY. Nothing for 20 minutes, then all hell broke loose. The Band was then open until 0539z, when the last vk5 was heard.

Summary: 32 VK3's... 8 VK5's....1 VK2 and 2 FK8's

Grids worked QF02, QF03, QF12, QF15, QF21, QF22, QF23, QF31, QF43, PF85, PF94, PF95, RG37.

Interesting VOR's heard: DPO in QE38; BOR in QF03; WJS in QF44; NAR in QF35;

WG in QF34; MTP in PF95; LEC in PF99; MCO in QF42; CWS in QF21; LVG in QF32; NHL in QF03; MIA in QF15. There were probably many others but I was busy working stations. The Panadaptor proved very useful, as I could watch the display for signals while working the DX.

An unforgettable opening.

Gavin VK3HY – a veteran of VHF – had this to say:

Lots of 144 MHz QSOs ranging from northern NSW to Charters Towers in FNQ. This was the longest 144 MHz Es opening I have experienced. I managed to add two new Grid Squares bringing my modest tally up to 52.

I reckon QSO of the day might go to Perrin VK3XPT who worked VK4FNQ at Charters Towers on 144.130 MHz using an FT817 and a hand held 4-element Yagi in his back yard. 5x1 reports were exchanged just before his 'Armstrong antenna mount' and FT817 battery both lost power.

Barry VK3BJM also managed a good tally:

Just after 0215z I was "encouraged" to go outside and check that the fire-pumps were working ok – so naturally I dived into the shack to grab my sunglasses (there was a lot of sun about). I noticed there were voices coming from the radio – a lot of voices – VK4-type voices. Between 0219 and 0238z I worked seven VK4s, six from QG62 and Adrian, VK4OX, in QG63. I reluctantly paused and went to play with the pumps. Returning at 0345z it was apparent that things were still running hot, but the footprint had spread a bit, and in the next 25 minutes I worked VK4UH in QG62, VK4BLK in Yeppoon (QG56), VK4FNQ in Charters Towers (QG39), VK4FPFH in Hervey Bay (QG64), and VK4VN in QG62. I left the shack again, returning just after 0500z to work Ron VK4BRG in Bundaberg.

At 0428z I noted hearing Colin VK5DK at 52 on backscatter, calling/working a VK4, who I could also hear at a similar RS (I foolishly didn't note the call of the VK4).

John, VK4FNQ, reminded me that we last worked in 2006 – so it's been a while since I had the luck to be home during an Es event.

In all, 13 VK4s worked, with the bonus of an addition of four new grid locators to my personal tally. I'd not worked into the Brisbane area on 2 m before. VK4FNQ was the most distant station worked, at 1917 km. The nearest was Dennis, VK4ACE, at 1321 km.

I also noted failing to complete contacts with VK4BKP, VK4VFO and VK4KR – with potentially another two new grid locators in that group.

It was really good to see so many stations calling and then immediately QSYing to a nominated frequency for completion of the contact. Frankly it made finding new stations to work a breeze – just take the VFO for a spin up and down the band! Only one of my 13 contacts was carried out on 144.100, which was always busy but was not unusable.

It was just nice to have been home at the time of such an event – for a change!

Bob ZL3TY missed the Es opening, but received some spectacular compensation:

After a day out yesterday I arrived home and checked into the VKlogger to find the aftermath of the huge Es opening in VK. Checked 2 m and found nil so left the receiver on 138.276 MHz, the Channel 5A carrier from Newcastle. At about 5pm local time it started to lift out of the noise and a couple of hours later it was up to S3. The carrier was steady so it was apparently tropo, not Es.

Started calling on 144.1 and at 0658z worked Steve VK2ZT 53/53. Later at 0940z (1040NZDT) I found VK3RED and VK3RGI beacons and started calling again on

144.1. *By this time Ch5A was S9 and VK2ZT up to S7, then worked VK3EK, VK3DUT, VK3OE and heard VK3VFO but he had high noise level and was unable to hear me.*

Then I heard VK5DK, Mt Gambier calling CQ, called him but again he couldn't hear me. I called him on CW and he came back with a 529 report and we completed the QSO at 1050z. At 2629 km this is the longest distance I have worked on 2 m tropo.

Now looking forward to some good 2 m Es...

It was certainly a very good day to finish up 2011.

70 cm Meteor Scatter SSB Contact

Meteor Scatter contacts on 70 cm are extremely difficult because of the very short duration of pings. To complete an SSB contact is quite an achievement. Adrian VK4OX and Arie VK3AMZ succeeded with such a contact recently as reported by Adrian:

On 2011-12-14 between 1700z and 1830z, I completed a successful 2-way SSB QSO with Arie VK3AMZ, on 432.360 MHz via meteor scatter. We were using pre-recorded voice messages similar in format to FSK441, stored in a Meteor Scatter program called Multikeyer. We were using 15-second periods.

The Geminids Meteor shower was predicted to be maximum that morning. OH5IY and other programs predicted the best time for a QSO between QG63kf and QF22fe as being 1730z to 1830z on 2011-12-14. That was Thursday, 15th Dec between 0300 and 0430 my local time or 0400-0530 Melbourne time.

We started at 1700z. I got only a few pings in the first hour but no useful information. I had been transmitting the same message, Callsigns only, for over one hour. At 1808z I received a beautiful burst from Arie with both callsigns and a report. I changed my Tx message to mostly "Roger 27" because I know that Arie must have both callsigns, otherwise he would not be sending a report. Nothing for about 20 minutes then the best "QSL" I have ever received.

Similarly, Arie received one burst of callsigns and another of "Roger 27".

This then, I believe, satisfied our requirements for a valid SSB QSO over a distance of 1457 km. I believe this to be the first ever 2-way SSB QSO on 432 MHz meteor scatter in Australia and perhaps the first ever 2-way SSB QSO on 432 MHz between VK3 and VK4 via any, non-eme, propagation mode.

Spring VHF/UHF Field Day

Unfortunately, the Spring Field Day was a washout in much of the country, coupled with high winds in some areas. This meant that participation from field stations was down, but activity was reasonable nonetheless.

Tim VK5ZT was busy roving around South Australia as he reports:

As usual I was out and about in the van carrying all bands to 24 GHz.

I trialled a new mount system on the van so that I did not have to deploy tripods etc. when arriving at a site. This included three dishes and a yagi on a frame on the back of the van and other antennas on the roof. Unfortunately pressures of work meant I had little preparation time and could not include the rotator I wanted to install. This proved to be a frustration when dealing with stations that were anywhere within a 180 degree arc. I had to move the van sometimes to get good signals.

I started out at the bottom of Yorke Peninsula at the Port Giles silos PF84 (see the photo on the WIA VHF/UHF Contests page, if its still there!). Conditions were pretty poor for some reason. I was beaming into a raincloud to get across St Vincents Gulf. Only a few contacts on 23 and 9 cms were made, along with a few on the VHF bands. Realising I was getting nowhere, I moved north, calling in on Andy VK5LA who was operating out of a beachshack at Wool Bay. On arrival at Ardrossan PF85 I found the lookout was closed for maintenance so had to move up into the hills behind the town. I found a likely spot and was able to work Iain VK5ZD operating as VK5LZ in PF96 on all bands to 10 GHz. We could hear signals on 24 GHz but there was some sort of noise problem and we were not able to exchange numbers. I also worked John VK5NI across the gulf on various bands up to 10 GHz and a collection of VHF stations around Adelaide.

Moving north, I stopped at Port Clinton, just across the transition to PF95. My initial site turned out to be in the middle of the world's largest bullant nest and they were somewhat upset with my presence. Rapid redeployment was required! From here I managed all bands to 10 GHz up to Iain who was still in PF96 at Nantawarra and also a few contacts to VK5NI and others north of Adelaide. 24 GHz was no better...plenty of signal but all noise!!

I continued my northward travel until I crossed into PF96, just south of Iain's location. Working him was easy at the range involved. Made a few other contacts on bands up to 23 cm before moving on to meet Iain and the 5LZ crew at Nantawarra. This is a favourite site of mine and only about 20 mins south of my home in Snowtown. As the 23 cm beam had suffered a mechanical failure and 24 GHz was a dead loss I decided to go home to make repairs and do some tests on the 12 GHz synthesiser in the 24 GHz unit. All this took about an hour with no joy on the 24 GHz setup. While I did that, VK5LZ relocated to a site we have used before near Kulpara in PF95.

Hitting the road again at around 1930 local, I headed west into the fields northwest of Kulpara in PF86. From a low hill I could work back to VK5LZ on all bands to 10 GHz. The hill I was on was actually in the middle of a wheat field which fortunately had recently been harvested. I did not come to the attention of the local farmer who lived just down the hill so avoided the usual lengthy explanation of what I was doing. Not many other contacts out there as it is shielded from the city by low hills. By now it was around 2100 local so I relocated to PF95, just down the road and worked VK5LZ on all bands again before joining them at Kulpara and enjoyed a coffee with the crew. As things were pretty quiet, I headed back home at around 2200 for some much needed rest.

On Sunday I went back to Nantawarra PF96 and worked a few stations up to 23 cm and a solid contact to Keith VK5AKM at Wasleys on 9 cm. The Nantawarra site is just north of a grid transition so a 5 minute drive put me into PF95 to work everyone again! I discovered I had left some items of clothing on the roadside the previous night at Kulpara when I was getting changed into warmer clothing. I decided to retrieve them before returning to Nantawarra for the last half hour of the contest and 3 hours since I was last there. This turned out to be a messy exercise as I took a wrong turn when coming back on an unfamiliar road and when trying to correct the error without retracing my steps I found myself in a huge wheat field and ended up crossing it to get to a convenient exit - remember, I am not in a four wheel drive!! Some interesting moments were had dealing with very sandy soil and deep weeds!!

I made it back to PF96 with 15 mins to go and managed contacts with everyone I could hear including Keith at Wasleys again on 9 cm.

Total travelling distance...just under 600 km. Equipment failures...broken 23 cm beam which I fixed, 24 GHz non-functional...still under investigation.

Interference from computer monitor in the van on 2 metres. I will be replacing that with an industrial RF screened unit with a touchscreen before the next outing. All other microwave gear worked well and the dishes survived the rough roads (around 100 km of dirt and paddocks!)

In terms of numbers, there seemed to be a lack of operators around but a couple of new faces on the microwave bands. Not checked the final score but it was just short of about 5000 points I think.

Just another roving weekend.....

Please send any Weak Signal reports to David VK3HZ

Digital DX Modes

Rex Moncur – VK7MO

Meteor Scatter - Call for North Queensland Operators

A number of stations including Kevin VK4UH, active on 2 m Meteor Scatter from South East VK4, are interested in turning their beams around and arranging tests and skeds to stations to their north. Contacts out as far as Cairns and Mount Isa should be easily within range. Any 2 m station equipped with a sound card interface, an 8 element Yagi and 100 or so watts should be quite capable of having a go even with no experience of Meteor Scatter operation. Suitable times, frequencies and guidance can be arranged. Any operators interested in participating in some skeds or finding out more about Meteor Scatter activity are invited to contact Kevin VK4UH (vk4uh@wia.org.au).

2 metres FSK441

Welcome to Wayne, VK2XN who completed his first FSK441 QSO with Arie, VK3AMZ.

Congratulations to Arie VK3AMZ on working Bob ZL3TY on 15 November over a distance of 2327 km. This is the first completed FSK441 Meteor scatter contact to ZL from west of Melbourne. The contact was probably the result of Leonids even though we are well past the Leonids peak and the next peak won't occur for another 20 years.

70 cm FSK441

Arie, VK3AMZ reports –

On the 13th of December at 1919 UTC, Adrian VK4OX and I completed another FSK441 432 MHz meteor scatter QSO. This was the day before the Geminids were expected to reach their maximum hourly rate. The total time to complete was approximately an hour and forty five minutes. It was an excellent primer for the 70cm SSB M/S contact on 14 December (reported separately in the "Weak Signal" section of this column).

The pings for the better part of the schedule were very short but Adrian had received a huge ping very early into the schedule which lasted over 2 seconds. In our experiences the duration of this ping was extraordinary for 432 MHz! Not to be out done, an hour into the schedule I received a 2.6 second ping from Adrian. For the

remainder of the sked, pings where very infrequent and short lived until 1916 UTC when I successfully decoded Adrian's confirmation report with a brief but very strong ping.

It's been our experience to date that meteor pings on 432 MHz are very short but can be very strong. It's not unusual for pings to be 20 dB above the receiver noise floor.

Please send any Digital DX Modes reports to Rex VK7MO

The Magic Band – 6 m DX

Brian Cleland – VK5BC

November and December were very interesting on 6 m. The band opened to Japan and China on many days with most call areas of VK and ZL experiencing openings. Hawaii also made several appearances into VK including VK6 on 18th November. Contacts were also made into Central America in particular Costa Rica TI5 and Mexico XE from the east coast of

South Cook Is E51EME, New Caledonia (several FK8 stations), Samoa 5W1SA and Rotuma Is 3D2AG/p.

The real surprise though came on New Year's Day 1st Jan 2012 with a great opening to the W5 area of San Antonio, Texas. The band opened at approx. 0030z to 0130z with contacts being made from VK2, 3, 5 and 7 in both CW and SSB with several W5 stations and XE. John VK5PO reported working 2 x W's at 0020z in CW which started the fun which followed with contacts being made by several stations. Garry VK5ZK managed contacts with W5OZI (CW 5/5), W3XO/5 (SSB 5/7 excellent), K5RK(SSB 5/5) and N5TSP(CW 5/5). Garry was using 4el yagi and 100w. Roger VK5NY reported working 3 x W's plus one XE station while Bill VK5ACY worked W3XO/P in EM00 SSB 5/5 both ways, K5RK in EL29ii at 5/2 and received 5/5. Bill also heard XE2HWP. Bill was using an 8el ATN yagi and running 400w. Peter VK5PJ in the Barossa Valley also completed several contacts CW and SSB. Jeff VK5GF in Victor Harbour also worked W3XO/5 SSB.

Several VK3's also managed contacts into W5 including Steve VK3ZAZ, Andrew VK3OER, Ken VK3AKK, Geoff VK3AMK and Arie VK3AMZ. Andrew's VK3OER remote station certainly proving a big success for him. Meanwhile Frank VK7DX completed a contact with W3XO/5 SSB 5/5 both ways. The opening extended north to Leigh VK2KR at The Rock near Wagga Wagga with Leigh also completing with Bill W3XO/5 at 5/5 both ways.

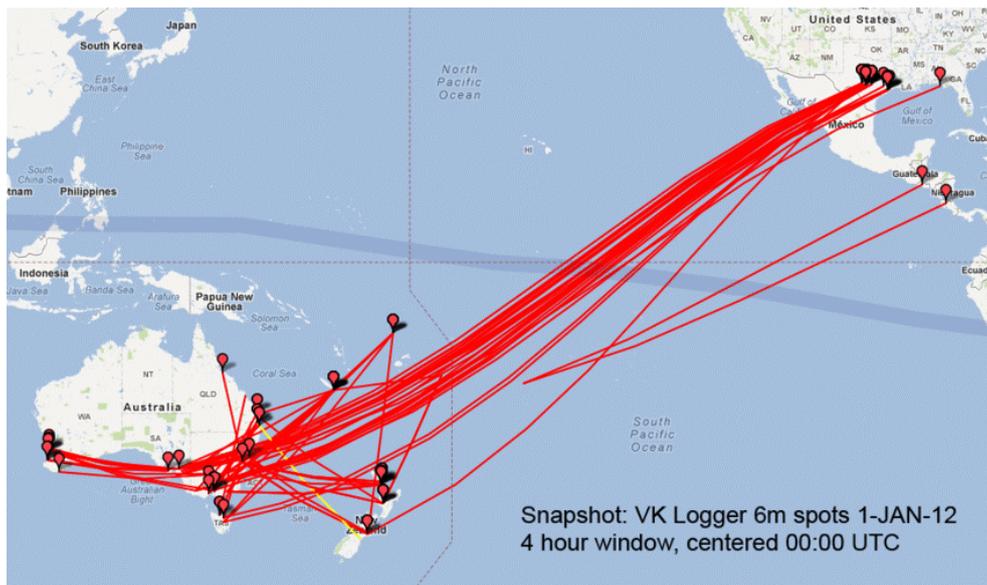
Pat W5OZI log shows CW contacts not in order as follows;

ZL1GO, ZL1NK? VK5PO, VK5ZK, VK3AMK, VK3AKK, VK3AMZ, VK3ZAZ, VK7NO ?

1st worked 0045z, last 01.45z.

Certainly probably one if not the best W opening from southern VK.

Pictured below is a snapshot from VKLOGGER from the morning of the 1st January.



In some late news this was followed by an opening from VK2 and 4 to Costa Rica TI5 on the morning of the 2nd January.

Certainly a great start to the new year and with the sunspot cycle on the improve it certainly should be an exciting year on 6m.

In some other news, some good openings to KH6 from VK5 the best on the 28th November when signals were up to 20 over S9.

1st Dec – some E's from VK5 to northern VK4 in the morning which gave VK3 some TEP extension to JA a little later. Mid afternoon saw Li BA4SI working into VK3 and VK7 with Joe VK7JG reporting 5/9 signals.

3rd Dec – Good day in New Zealand with all ZL call areas working into Mexico and some W's in the morning, unfortunately there was no extension to VK. This was followed a little later with an opening from ZL to JA. In VK very little to report with the only excitement being Willem DU7/PA0HIP working VK4's CZ, DDC and WR later in the afternoon followed with contact to Mark VK8MS in Darwin and Rod VK6KP in Karatha WA.

5th Dec – Great day for Bob ZL1RS in northern NZ, Bob worked several countries including TI, YS, TG, YN, XE, YV, W6, KH6, DU, JA, ZL, E5 and VK.

7th Dec – mainly E's vk5 – vk6 and VK4, late in afternoon VK6 to JA.

Tony VK6PP reported a very good 6m opening here in Perth on 16 November with many JA's Stations worked as follows;

JP1LRT 0753z SSB on 50.200Mhz

JR6EXN 0757z SSB on 50.200Mhz

JA4UDN 0806z SSB on 50.130Mhz

18th November stations worked

JA6TEW 0906z SSB on 50.140Mhz

BA4SI 1011z CW on 50.100Mhz (China new country on 6m)

Andy VK6OX reports the following activity from VK6.

The source of this info is Graham VK6RO, a widely-known and respected 6m operator who's carefully recorded activities on this band across the last few sunspot cycles. Graham has advised me that on October 19th there was an opening to not only VR2 but also DU (stns being heard or worked VR2XMT and DU7/PA0HIP). This

opening occurred from about 1300Z to around 1430Z (10:30PM local). According to Graham, this was a rare occurrence, the last time an opening like this was March 29th 2001 and it was open until 00:30 local time (past midnight).

On to November: Compared to October this was a much better month for the lower half of VK6. With "Old Sol" finally making the ionosphere (in several levels) more reflective than absorptive we in VK6 finally had some activity.

From this QTH, the 1st Es activity for the season occurred on the 2nd Nov, with VK5BC and VK5PO being worked around 0750Z.

3/11/2011: Band opened to JA with areas 1,2,3,5 and 6 being worked from 0525Z to 0600Z.

9/11/2011: Very brief Es propagation to VK5.....worked VK5BC to s5

14/11/2011: R1/C1 TV sigs around 49.75MHz were in early...by 0540Z JA6 stations were heard. Worked JAH6CDI, JJ6JGJ and JH6BPG over a sixty minute period. Sigs to S7 from Japan.

16/11/2011: The first really good opening to JA for this cycle with JA1,2,4,5,6 and 7 areas worked from 0700 – 0800Z.

18/11/2011: With the assistance from Sporadic-E across central VK, worked Fred KH7Y in Hawaii at 0328Z CW 559 both ways, and again at 0334Z SSB 55 both ways. Several other stations in Perth area also got in on the action including VK6RO, VK6KXW and VK6JJ. Art KH6SX was also heard or worked during the opening. Later on in the day, (0900 – 0920Z) the band opened to JA6 area with Masa JA6TEW and Hide JR6EXN being worked during this period. The 2nd highlight for me occurred just a short time later when I worked Li BA4SI from WuJiang City both CW and SSB with sigs to s5. All in all a good day on 6m!

26/11/2011: More Es propagation during the late afternoon towards the East, with VK5s BC, PO, RO, PJ and ZPS being worked along with VK3DUT and VK3ER/P.

28/11/2011: ZL TV video carriers on 45.2396, 45.250 and 45.260 to S5 with deep QSB from 27/2330Z. At 0052Z, worked Bob ZL1RS CW 529 both ways. Throughout the day, further Es openings occurred to VK5.

Meanwhile from VK2, Kerry VK2BXT reports almost daily TEP to Japan in November with better openings as follows:

7/11 Worked JR6EXN, JH1WHS. Heard JA7, JA4, JA3, JH6.

8/11 Worked JA8TSG, JA7OQ, JE1SSE, JA8CAR, JA3EGE. Chinese TV 49.750 S9 plus with spots across lower end of 50mhz and 43.650 S9 plus plus.

9/11 Worked JA1CUOI, JA1FNA, JL8GFB. 43.650 only indicator.

11/11 Worked JA3EGE only at 0742Z. FK8 beacon and FK8CP heard at the same time. (he does not reply to calls if he has you in his log!!!)

13/11 FK8CP S9 calling CQ on phone and CW constantly. No VK replies!

From Wayne VK4WTN's log the following:

1.11.11 KH6SX 579,FK8CP 59+, XE1FAA 529, TI2CDA 53, TI5XP 519.

6.11.11 HL5BMX 529.

7.11.11 BD6AHU 55, BA4SI 589.

8.11.11 HL1IBG 559, DU7/PA0HIP 429.

9.11.11 BH4QFI 54, HL3ERG 59+, DS2CYI 42, KH6U 55.

10.11.11 BA4SI 529, KH6SX 55.

14.11.11 KH6SX 529.

18.11.11 BA4SI 599.

19.11.11 KH6SX 539, KH7Y 56.
20.11.11 KH7Y 539.
23.11.11 KH7Y 59, KH6RH 55, KH6SX 599.
28.11.11 AH7C 559.
6.12.11 KH6HI 559, KH7JJ 559, KH6SX 53.

Graeme VK4CAG reports a great opening to JA. Yesterday 9/11/11 at around 0500z I heard a few weak JAs and decided to call CQ on 50.130. That started a pile-up that lasted for nearly 3 hours with 108 JAs from all JA call areas and one Korean station DS1QMV worked. Sigs were mostly 59+. Many were still calling as the band faded out at 0745z. JA2DBQ reported his first 6m DX QSO... he was using a 24MHz dipole. JH1ACA, a YL operator using a ground plane, her second VK contact (check out her QRZ page)! Two QRP stations, one running 1 watt and a couple of mobiles.

The experience was entirely different to when we used to work into JA with 10 watts of AM and most transmissions crystal locked to a fixed frequency, back in the early 1970s. Just as well we worked "split" as it would have been impossible to work a pile-up on AM!

Thank you for all those who have forwarded me information to assist me in putting these notes together each month.

Please send any 6 m information to Brian VK5BC