

2011 DXCC Year End Review By Joe Reisert, W1JR

An Overview:

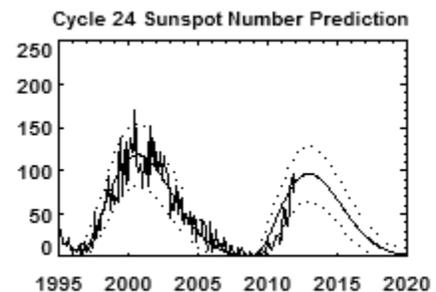
DX wise 2011 was a winning year. Radio propagation greatly improved, especially on the upper HF bands. There were approximately 287 entities activated, a couple more than in the last several years with one newly created entity. There were many large scale DXpeditions that took advantage of the better conditions and were often available to “The Deserving” on all bands from 10 through 160 meters. Activity from the Caribbean Islands was still high with many operations from the four new 2010 PJ entities.

A Quick Review of 2011:

There were several DXpeditions from places that are high on the just released “2011 Worldwide Most Wanted Survey” in “The DX Magazine” by N4AA although only one (ZS8M) was in the “Top 10”. The top 10 in order on the present list are P5, KP1, 3Y/B, VK0H, 7O, FT5Z, FT5W, BS7H, VP8/S. Sand., and ZS8. Unfortunately as frequently happens, several DXpeditions such as KH5 were delayed (hopefully only into late 2012), had to be cancelled entirely (DX0DX), were affected by the Japanese earthquakes in March or were thwarted from operating for one reason or another. Most entities activated were available on SSB. CW still did not die since there were at least 265 entities active on CW during 2011. The “599 TU” QSOs on CW are still very popular although it is evident that some operators are advocating a return to the days when signal reports meant something! Computer sending and receiving were very evident as well as many DXers using the DX Clusters. RTTY (now called “Digital” by ARRL) was also used by most large DXpeditions.

A Solar Review:

We are definitely well into Solar Cycle 24. However, in contrast to prior Solar Cycles, it has been a rocky start with periods of improvements followed by quiet times. Some of the computer models of late are now undergoing modifications. It doesn't look like Solar Cycle 24 will be a memorable one with record numbers of sunspots. The computer models are now predicting this solar cycle to peak in February 2013 with 99 smoothed sunspots.



The solar flux (SF) did get into the mid-nineties during the start of the year and by mid-February SF topped 114 with improved conditions on the higher bands. By early March the SF peaked near 150 with some weak auroras and 10 meters took off. There was a lower SF (130) peak in April but then things cooled down until late July (SF=125). However, in late September SF peaked near 190 with a few weak auroras. Mid-October SF peaked at 168, with early November at near 190 for a new high since about 2004. Some East-West F2 was experienced on 6 meters on several days! In early December the peak was lower (165) and then decreased but conditions were still fair up through 10 meters. The smoothed sunspot count (based on six months of data) is estimated to be around 73.9 at the end of 2011 so we are still a long way to go until the predicted sunspot peak in early 2013. NOAA has the “Stereo” satellites looking at the Sun from

the front and back so now sunspots can be easily spotted ahead of time on the internet by interested parties.

Activity:

There was plenty of DX activity in 2011 but it was spread out from 160 through 10 meters. 160 Meters is generating lots of LF DX activity especially by DXpeditions usually operating between 1815 and 1830 KHz. 80 Meters is often quiet except during contests. 80 Meter DXpeditions on CW often operate at either the low end of the band or near 3525 KHz. Several more entities have received permission to operate on 60 Meters. G0HNN, Paul, has claimed working DXCC on December 29th. The FCC has proposed raising the 60 Meter ERP level to 100 Watts and permitting RTTY and CW in the established fixed channels. Start date to be announced. 40 Meters is still the night time breadwinner and was great all year as usual. DXpeditions used to operate CW near the bottom of the band but nowadays many opt to operate near 7025 KHz to reduce QRM. The expansion of 40 meter SSB from 7100 to at least 7200 KHz for many of the World's entities has generated lots more activity, especially during SSB contests. Remember that USA stations can't operate SSB below 7125 KHz. For safety stay above 7128 KHz. 30 meters is becoming very popular, especially for QRP and digital modes and is sometimes open 24 hours a day. 20 Meters is still the daytime breadwinner along with 17 meters. 15 meter conditions are now improving and sharing some of the load when the solar flux rises. During this past year 12 and 10 meters really came alive with worldwide DX. It was easy to work over 200 entities on 10 meters during 2011. Some F2 and Transequatorial propagation DX has been happening on 6 meters. Sporadic E propagation especially during June, July and December often enhances HF and 6 meter DX but this was not due to increased sunspots.

Equipment and Publications:

Some new equipment came on the market. The five major radio manufacturers all introduced new transceivers and peripherals. New receiving arrays became available for the Low Bands. SDR (Software Defined Radios) also increased. Some new test equipment is available. In addition, some do-it-yourself low cost SDR kits became available. More QRP kits and rigs are now available. New antennas were introduced, especially compact multiband verticals and Yagis. The ARRL released the 22nd revision of the ARRL Antenna Book. Finally, Heath Corporation announced new production with possible Amateur Radio products in the future.

Ham Radio and the Internet:

The Amateur Radio sites, DX clusters and of course emails etc. on the internet are really supplying lots of good services. Most major contest logs and some awards now have to be submitted via the Internet. Internet use and abuse by Amateurs continues to increase especially for DX spotting clusters. The DX clusters are an amazing tool for finding and spotting rare DX. One popular one is "DX Summit." Clusters are a far cry from the way we used to spot DX using either the telephone, spotting frequencies on HF or VHF repeaters. W3LPL and others are now using special software and sending out cluster spots that are captured by CW skimmers on the Reverse Beacon Network.



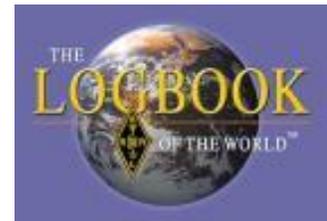
There are several downsides to using the cluster. All too often incorrect or extremely rare call signs (not on the air at the time!) are spotted. A rare call sign can cause a huge pileup that may even cover up the DX station. Always listen before you call to be sure it is the right station and especially if there are special instructions such as listening UP. In these days of seldom signing call signs, never rely solely on the accuracy of the spot as you may receive a NIL (Not in Log) to your QSL request. During 2011 there were often two or more DXpeditions operating simultaneously on or near the same frequency and often pileups coincided or overlapped. Some still use the cluster to boast about working a rare one, receiving a rare QSL or spotting a test with a rare call sign. These are quite an annoying and uncalled for practice. Also don't post QSY request addendums. **No one cares** and in the case of DXpeditions, they seldom are continuously connected to the clusters so they usually don't see your spot.

QSLing:

There is no denying that the cost of QSLing is becoming too expensive. The European postage rates have greatly risen and on January 22, 2012 so will postage rates in the USA for both domestic and foreign. I prefer paper QSLs but realize that I am now in the minority. The ARRL outgoing QSL Bureau can lower QSLing cost. This year they shipped over 800,000 QSLs, about a 4% increase over 2010, weighing over 5,400 pounds!



To further offset QSLing cost, the ARRL LOTW (Log Book of the World) is becoming extremely popular. The DXCC has been the prime user but other awards are being added. There are now over 390 million LOTW QSO records and over 46,000 registered LOTW users, an increase of over 30% since 2010! There were some very long (up to days) delays in uploading to the LOTW after contests when the system was severely overloaded. Many DX stations, especially the large scale DXpeditions now update their logs on the Internet during their operation. Also, several of the large 2011 DXpeditions put their logs directly into the LOTW. Finally, over the years many DXers find out that they need a QSL from a rare DX station that is no longer available and need a source to obtain a QSL. Hence, N200 has now volunteered to establish a "**Save Log Bank**" for past operations from rare entities. Contact Bob directly if you can help with such logs.



Operating techniques:

Change happens, sometimes for the better and sometime for the worse. Some new modes of communications have recently appeared on HF. The JT65 digital mode similar to operation used on VHF is now being widely used on HF even on 160 meters. Also, the WSPR mode (See QST November 2010) is now being used. Split frequency operation, especially by DXpeditions has its own problems. Often calling stations are not aware of the split and QRM the DX. During several of the major DXpeditions I carefully monitored the DX station frequency. Often someone would hear this relatively clean frequency, jump right in, hear the DX station giving reports, imagined that they had a QSO and with impeccable timing would hear the DX station say TU and think they had a valid QSO! It goes without saying that if you aren't copying the DX station well enough to properly identify the station or aren't aware of what technique is being used by the DX

station, **DON'T CALL!** There is a good reason to check internet logs if they are posted rather than receiving back a NIL reply to your QSL request. This doesn't mean that we should call continuously and later check the internet hoping to see if your call sign is in the log!

Also, there are the usual problems with "frequency policeman". If you can't refrain from saying something to the interfering stations, drop in a **SHORT** reminder like "**UP.**" Sending or saying a long string of **UP UP UP UP UP UP or Hi Hi** or calling a station a lid often does more harm than good and often QRMs the DX station. Of course, obscenities are NEVER appropriate. Steady tuning up especially on top of a DX station is still a problem. Also many start calling the DX station before the last QSO is completed causing much confusion. Another problem is directional calls and partial calls with too many responding that are not from the area or call sign in question. This holds up DX and deprives many of a QSO. Also, try not to rag chew on frequencies frequented by rare DX such as 3.795, 14.195, 21.295 and 28.495 as well as 14.260 and 21.260 MHz for IOTA. These are just a few frequencies that come to mind. You may not hear the DX station but transmitting on those frequencies will make it difficult for others that are experiencing better propagation than you are.

Space does not permit more info on operating but the following references are highly recommended reading. First see "DX Etiquette" by W6SJ in March 2010 QST, pg. 100. Then look up on the Internet the following: The "DX Code of Conduct" by the FOC (First Class CW Operators Club) and "Ham Radio Ethics and Operating Procedures" by John, ON4UN and Mark, ON4WW. More and more DXpeditions are recommending and following these procedures.



Pirates and Unauthorized Operations:

As usual, many pirate operations showed up in 2011 using existing or unlicensed call signs. 3A2ARM, 3A2DL, 3A2EE, 3A2IM, 3A9A, 4U1UN (Not QRV in 2011), A71BI/5A, C31YL, EZ (all QRT since 2006), EZ7V, FP8AA, HB0X, HS0ZDZ, T33LP, T77DX, TN2T, Y11H, Y11HR, Y11SA, VK0MIA, ZD8UO, ZD9GI (on CW), ZK5A, ZL7PW, ZL9BI and ZL9BS are just a few. Also many calls are often improperly spotted (typos) on the DX Clusters (i.e. 5U3HQ is really 5J3HQ). Also some DXpedition call signs were even pirated during their operation. WFWL (work first, worry later) these stations but this does little good if they are a pirate so sending a QSL is a waste of time and money.

Silent Keys:

It is sad to note that several well-known Amateurs became Silent Keys (SK) during 2011 and deserve to be mentioned. Many were well known DXers who were near the top of the DX Honor Roll such as HB9QQ, K4YR, KH6CD, KI6T, VK5MS, VK5WO, W2AX, W2BXA, W6FR, and W7IR. The age of DX Honor Roll leaders is increasing. Other notable silent keys were 5B4AGF (ex A92BW and MP4BBW), 7Q7HB, AH0W (4J1FM etc.), F9RM (top IOTA leader), K0BIT (Peter Dahl transformers), N0SS (Dayton CW Copying), N9AG (QSL manager), W4RIM (ex HS1C, my first HS in 1958), K1YZW (COMDEL speech processor developer) and Z22JE (6 Meter pioneer). Finally VE7BBG, who was my first EME QSO on 432 MHz in 1971.

2011 DXCC Changes:

ST0 (temporary prefix), Republic of South Sudan was added to the DXCC list on July 14, 2011 when the UN voted to seat it as a member nation. A distinctive prefix is expected shortly. Therefore the current DXCC list now has 341 active entities. If you add the 60 deleted entities, the DXCC total is now 401 entities. It is doubtful that anyone can achieve 400 entities for some time since all of the top leaders missed at least three of the deleted entities. Therefore, until more entities are added, 400 will be an elusive number. Furthermore, Malyj Vysotskij Island (4J1FS, R1MV etc.) will probably be added to the deleted entity list as early as February 2012 when the Russian Federation terminates the treaty with Finland that originally qualified this DXCC entity. Recent attempts for a last minute operation have apparently been rejected. At the present time, only Kosovo looks like a possible new entity. Finally the ARRL has decided to use the term “Digital” for all RTTY and other digital modes.

DXpeditions:

Several large scale DXpeditions were operational during 2011.

Some scheduled DXpeditions were not successful for one reason or another. Hopefully they will be rescheduled. Still others had to hand carry their own gear when large container shipments were unexpectedly delayed. Still no word on Navassa but I’m sure that will eventually happen. It looks like some of the most needed entities in the top 20 will be activated in 2012 starting with HK0/M.

The agreement to allow limited operations from some of the restricted access US Possessions in the Pacific area was penciled in 2010. However, they must conform to special regulations and will probably not be activated more often than once every five (5) years. The first one affected to be activated is probably going to be KH5 (Jarvis) but now that has been delayed until late 2012 at the earliest.



The 2011 DX Review:

The following is a brief summary of monthly activity during 2011. Emphasis is on rare to semi-rare operations and DXpeditions especially where no resident Amateurs are active.

January is always a tough month for DXers but this year conditions were helped by the solar flux being above 90 at the start of the year. A very active DXer could have worked 100 entities over the long New Year’s Day weekend. There were at least 235 entities activated during January, several more than in 2010 so a well-equipped DXer could have worked at least 200 entities in January. Unfortunately the DX0DX operation never got to their destination on the Spratly Islands and was finally cancelled altogether. The popularity of working the new PJ entities hasn’t worn off yet. ZS8M and ZD9GI were still active as well as VK0KEV from Macquarie (until November) all mostly on SSB. 5T0JL, 5W, H40FN, KH8, KH9, C5YK, H44, TL0A, TT8ET, SV2ASP/A, VK9X and XT2RJA were all active during the month as well as other semi-rare DXpeditions such as 1A0KM (12K Q) and VP8ORK (63K Q).

February conditions were poor with some aurora at the start of the month. VP8ORK and TL0A were still active. A few lucky stations worked FT5XT who was only active for a few hours. During mid-February HF conditions really improved. S9DX, TT8DX, T30s, several KG4s, HV0A, VK9C, 5V7DX, and J5NAR were activated as was TJ9PF (67K Q) which set a new

RTTY record (17K Q). It was also a very good month for DXers on 160 meters which was still yielding some very good DX such as T30YA.

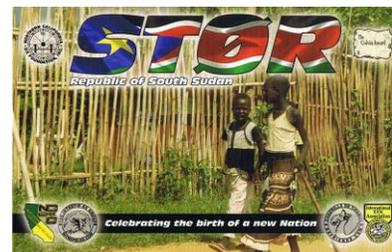
March propagation greatly improved with some good openings on 12 and 10 meters. Even some Long Path openings occurred. T30AQ/RH were active on all bands as well as 4A4A (XF4 for 73K Q), FO8RZ/P (FO/M), VK9CF, S21YZ, H44MS, TZ6TR, S79UFT, 9N7s, and several CY0s. VP8DLM did a surprise stop at South Georgia for 51 QSOs. ZS8M signed off with about 8,500 QSOs. However the big story during March was VU4PB (33K Q) from the Andamans mostly on 40-10 meters. They worked as far West as W6 on 10 meters. Many 6 meter transequatorial openings were reported especially from Europe to Africa.

April saw some more 6 meter transequatorial propagation. 5M2TT came on from Liberia introducing instantaneous internet logging. They were followed by 9L5MS, 9N7DX, ZD8RPL, SV2ASP/A, TO2FH (FH), KH8, A25, FJ, T31A (31.5K Q) and 5V7CC.

May had its ups and downs. OJ0W was active in what would become a string of OJ0 operations for the summer season using the newly installed wind generators and permanent antennas. KH8 and TT8PK were active as well as PP0T from Trindade on all modes. T2XG made a short operation.

DX wise, **June** can be a mixed month as the summer approaches in the Northern Hemisphere. KH4/W5FJG fired up and is now a resident. Also active was TZ6TR, ZD7XF (12K Q) on CW only and VK9CI only operating PSK31. 6 Meters was brimming with activity from all of the four (4) new PJ entities. PJ6D made an amazing 3,500 QSOs.

July for a change was really jumping with A25, FO/A, PY0FO (F/N), JX5O (18K Q), VK9HR (LHI-15K Q), C21YY, TY1KS, and JF7MTO/JD1 (MT) activated. Many “kids” were active from TI5. However, July will probably be most remembered for the fantastic operation by ST0R from the new entity of Southern Sudan. They activated all HF bands and modes as well as 6 meters.



August saw ST0R was still very active. They put over 121,000 QSOs with 28K unique call signs into the log on all bands giving a new entity to many. They also set a new record of over 18,000 QSOs on Digital. Also active were CE0Y/I2DMI (RTTY only), TY1KS, and VK0KEV.

September DX activity as usually happens comes alive. 9U7T, A25s, ZK2s and YJ0 were all active. However the big news was 4W6A (41K QSO) followed by T32C and 3D2R (Rotuma). VK0TH joined VK0KEV on Macquarie and is expected to stay active mostly on SSB until April 2012.

October was very busy month with 3D2R (60K Q) and T32C still active. T32C set a new world record of 213,000 QSOs with 49,000 unique calls giving many in Europe a new one. The amazing thing about the 3D2R and T32C operations is that both stations for extreme circumstances did not



receive their shipment of gear and had to hand carry their own rigs, coax and wire for antennas. Other operations were C21UF, 6O0M (Somalia), HK0/A, H40, 3XY1D (54K Q), TX7M (FO/M made 79K Q), TL0CW, TU2T, A52s, YJ, and ZK2s. The advance team for HK0NA (Malpelo) made nine (9) QSOs with five (5) different NA/SA stations on 30 and 17 meters. MM0RAI made 1,100 QSOs from Rockall Island, the very rare IOTA EU189.

November also was an active DX month. TU2T (77K Q) was still active. Native operator HC8GR was also active as were CE0Y, VK9CM (C/K), V63, 7Q7GM, VK9XM, A52's (10K Q), T2s, HVs, XW3DT, 9N7MD, E51MAN (16K Q from N. Cook), S01MZ, C5s, ELs, C91NW, 3DA0NW, GJ6UW (14K Q), and 9L0W (28K Q). VE3LYC operated CE4A on SA095 for a new IOTA but this doesn't count for South Shetlands as noted on the DX Clusters.

December solar activity slowed down. K3LP and crew operated as ET3AA and ET3SID while installing new antennas and gave VE FCC license tests to 62 students with most passing! E44PM (7.5K Q) put on a solo effort from Bethlehem. 3D2AG/P (Rotuma) came on using solar power. Also active were VK0TH, 9X0PY, 5V7SI, and 9U3TMM.



And now the Drum Roll: Those 54 entities that were NOT believed to have been active during 2011 are as follows:

Africa (15): 3B6, 3C, 3C0, 3Y/B, 5A, 5U, D6, E3, FR/G, FR/J, FR/T, FT/W, FT/Z, TN and VK0/H.

Antarctica (1): 3Y0 (Peter 1).

Asia (9): 1S, 7O, BS7H, BV9P, EZ, P5, VU7, XZ, and YK.

Europe (1): R1M (MV Island).

North America (7): 4U (UN), CY9, FO/C, KP1, KP5, TI9, and YV0.

Oceania (17): 3D2/C, FK/C, FW, KH1, KH3, KH5, KH5K, KH7K, KH8 (Swains I.), T33, VK9/M, VK9/W, VP6/D, ZK3, ZL7, ZL8, and ZL9.

South America (4): CE0/X, CE0Z, PY0/S, and VP8/S. Sandwich.

Please note that some rare entities may not be on this list. This is because some operations, however short, were conducted during 2011. An example is the HK0/M operation as mentioned above.

A list of DXCC entities that are believed to have not been activated in over seven (7) years are: 7O, BV9P, CE0X, E3, FR/T, FT/Z, KH1, KH3, KH5K, KP1, P5, VK0/H, VP8 (S. Sandwich), XZ, and ZL9. This shows that an avid DXer working hard at DXCC may take at least 7-10 years to make the DXCC Honor Roll. This list also serves as a guide to those planning DXpeditions to

rare entities. As for me, the top of my need list for the DX Challenge is not surprising and goes to P5, BS7H, FT5W, and VK0M in that order.

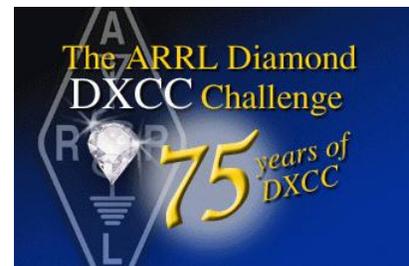
Looking ahead to 2012:

Solar Cycle 24 sunspots are slowly increasing although sporadically. This will improve propagation on the higher HF bands, especially 12 and 10 meter and perhaps even open 6 meters on peak solar activity (SF>150). Look for the solar flux to go over 100 with low A (<20) and K (<3) indices. Solar wind below 300 KM per second and dynamic pressure less than 0.5 nPa as show on NOAA Space Weather are also good indicators of improved HF propagation.

January is shaping up to be a very exciting month with more sunspots and some rare entities scheduled such as 3D2/R, 5V, 9U, FH, FW, HK0NA (Malpelo), TN2T, and VP6T. The following few months will hopefully feature 3B9, 9M0, C21A, CY0, FO/C, H40, KH3, S9, T30, T33, XZ (on PSK31 only), ZK2 and KH5 (at the end of the year) to name a few. VK0/H maybe scheduled for February 2013.

DX means many different things to many people. Some DXers are only interested in the ARRL DXCC Honor Roll and soon run out of interest and challenges. Others pursue the never ending ARRL Challenge competition. This award includes all the bands from 160-6 meters. 6 meters is a tough band for stations outside of Europe. Over 30 stations in Europe have worked over 200 entities on 6 meters while 176 entities is the maximum for NA with only 15 above 150! Hence the Europeans will probably dominate the top of the DXCC Challenge award for the foreseeable future.

The ARRL has just announced that the **Diamond DXCC Award** will be introduced in 2012 to commemorate the 75th anniversary of the DXCC. Rules are on the ARRL website. Also N7NG and G3SXW have just announced DX University (www.dxuniversity.com), a DX training course similar in concept to Contest University. The first session will be held at the International DX Convention in Visalia, CA on April 20, 2012. Also don't forget to support the various DX Foundations around the world that help make DXpeditions possible!



Some DXers also like to chase Islands for the IOTA (Islands on the Air) program by the RSGB. There are approximately 1200 IOTA Island Groups and many have never been activated so there are lots of challenges. 2012 is the 50th anniversary of IOTA and with it a two (2) year Marathon contest. For the last several years, CQ Magazine has reinstated the yearlong CQ DX Marathon to see who can work the most entities in each calendar year. This program has a few more challenges by also adding several entities recognized only by CQ Magazine but not on the ARRL DXCC list as well as working all 40 zones. And there are the never ending DX Contests. There are lots of things to do. Don't let the airways die for lack of activity. Conditions are improving. Stay active and join the fun.

Finally once again I am honored to be asked by Bernie, W3UR to write this review and for his valuable inputs and critique. We'd like to congratulate the following stations that worked over

250 DXCC entities during 2011: 5B4AHJ, G6LP, IK2DJV, K3BZ, K3WA, K4MWB, K6ND, K9CT, M0AID, N5ZM, N8RR, OM3DX, PY2ADR, SM6CNN, VE1DX, VE3KKB, VK3HJ, VK4CC, W0VX, W1JR, W1RM, W2QO, W4VIC, WA5VGI, W6XK, W7ALW, and W8FAF for their inputs. Thanks also to Frank, W3LPL and K1MK for their inputs and to my son Jim, AD1C for all his computer help! Obviously all the opinions etc. expressed are solely mine as are any errors (I hope there aren't many) that I have made.

NOTE: This write up is copyrighted. Therefore copies or use of this review **MUST** first be approved by Bernie and then a courtesy copy of the reprint sent to W1JR.

Best of DX to you in 2012 and here's hoping to see you in the pile ups.

Joe Reisert, W1JR