SB PROP @ ARL $ARLP022
ARLP022 Propagation de K7RA

ZCZC AP22
QST de W1AW
Propagation Forecast Bulletin 22 ARLP022
>From Tad Cook, K7RA
Seattle, WA May 30, 2014
To all radio amateurs

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The instruments used to measure solar flux at the observatory in British Columbia were overloaded on May 24, and the estimated solar flux was 118. The actual measured value was 124.5. Something went wrong at the Fredericksburg, Virginia magnetometer which supplies our mid-latitude magnetic K and A indices, so there is no data for May 24-27. The mid-latitude A index numbers for those dates that appear at the end of today's bulletin are also estimates, but they are my own.

The predicted solar flux values for Field Day weekend, Friday through Sunday, June 27-29 have also been on the decline. On May 15 the prediction was 125, 135 and 135. Then on May 19 they were adjusted down to 120 for all three days, and on May 26 the estimate declined again, to 108, 108 and 110, where they remain today. Field Day does not begin until Saturday, June 28, but it is useful to see the prediction for the day before.

The latest prediction has solar flux at 105 on May 30-31, 100 on June 1-3, 95 on June 4-5, 105 on June 6, 120 on June 7-8, 125 on June 9-11, 120 on June 12-13, 115 on June 14, 110 on June 15-25, 108 on June 26-28, 110 on June 29-30, 115 on July 1-2 and 120 on July 3-5.

Predicted planetary A index is 5 on May 30-31, 8 on June 1, 5 on June 2, 8 on June 3-4, 5 on June 5, then 8, 10 and 8 on June 6-8, 5 on June 9-30, then 8 on July 1-3 and 10 on July 4.

OK1HH provides us with his weekly geomagnetic outlook which predicts quiet to active conditions May 30, quiet to unsettled May 31, mostly quiet June 1, quiet June 2, quiet to active June 3, mostly quiet June 4-5, active to disturbed June 6, quiet to unsettled June 7, quiet on June 8, mostly quiet June 9-10, quiet to unsettled June 11, quiet on June 12, mostly quiet June 13, quiet on June 14-17, quiet to active June 18-19, and quiet on June 20-24.

On May 24, Jon Jones, N0JK wrote: "Back in 2013, on May 9 was a major 6 meter Es to TEP opening to South America from the Midwest and Alberta, Canada to South America.

"The Dogs 'had another day' on 6 meters May 24, 2014.

"6 meters opened via Es linking to TEP on to South America starting

around 2050z May 24. Here in eastern Kansas, LU1FP FF99, LU1FAM and LU5FF FF97 were peaking 20 over S-9 on my attic M2 HO loop around 2120z. The opening lasted until about 2230z.

"Logged PP5XX, PY1RO, LU1FP, LU5FF, LU1FAM, PY2HN and PY2XB. Other stations were spotting/working CE and CX, but I did not hear them.

"Many low power 'dogs' made South American DX contacts with loops, dipoles and whips on 6 meters during this opening. One ham in Iowa e-mailed me that he worked LU5FF from his car sitting in the driveway with an M2 loop! It didn't take a Herculean station with a Yagi stack and big amplifier to work the DX. Just being on the radio at the right time.

"The opening extended north to W7GJ MT, VE7SL BC, VE5UF SK and NT0V ND. CE3SX worked NT0V to complete the 48 continental states on 6 meters.

"LU5FF worked VE7SL in BC at 2212z.

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Jim Henderson, KF7E wrote on May 28: "The current SFI has dropped to 99. It was approx 160 just 2 weeks ago, and 184 on 4/16.

"I think the last time it was this low was mid September 2013.

"A substantial dip, and worth watching."

Yes, almost frightening, isn't it? However I am happy to report that after a solar flux reading of 99.4 on May 28, it rose to 102.7 on May 29. In other news of declining solar numbers, the daily sunspot numbers on May 26-29 were 110, 96, 72 and 55.

Carl Zelich, AA4MI of Chuluota, Florida wrote: "Last weekend was the 'CQ World Wide WPX Contest (CW).' Not being a contester, I, of course, decided to explore the 'no-contest' bands.

"Activity was extremely quiet; you could count the number of stations on one hand. And the SFI at 118 with a K at 1.

"Nevertheless I heard a very, very weak CW signal! Further investigation revealed FW5JJ in Wallis and Futuna!

"A few RST exchanges and a short QSO on 18.082 MHz on May 24 at 2156 UTC.

"After locating the country on my giant wall chart, I measured the distance at approximately 7,480 miles!

"Wow! And this was with 40 watts to a dipole under impossible, unpredictable conditions!

"The conclusion is to keep trying to communicate even when all indicators tell you to don't bother trying."

Probably the actual great circle distance between AA4MI and FW5JJ is about 7,028 miles. It is tough to estimate long distances on a Mercator projection map, but if you use a great circle projection with your location at the center, you can get a pretty good estimate of distances, but only between your location and any other.

Here is what running the numbers for that day on W6ELprop revealed.

Looks like the band would open around 1800 UTC on 18.1 MHz and after 2330 UTC, signal strength should improve, reaching a peak around 0500-0600 UTC. There is another much shorter opening around 1100-1230 UTC.

Carl is correct. The band sounds dead if nobody is transmitting. Of course the band may have sounded dead because so many were in the contest.

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Dennis Egan, W1UE/HR9 wrote about a 6 meter opening to Honduras: "I'm here on Roatan Island, NA057 grid EK66 for the week, saw some activity on 6 meters on the cluster, so on a lark I tuned up to the band. Station here isn't much, a barefoot K3, 90 feet of LMR240 coax, and a G5RV antenna up 15 feet. To get any power out, I had to use the K3 internal tuner, so if one does the math I probably had less than 20w at the antenna. So, I wasn't expecting much.

"I heard KP4KD/4, he was loud, so I gave him a call. One call, one Q. Over the next several hours I worked 45 stations, from VY2ZM (FN86) to W7DN (CN95). While most of the stations were in the EM grids, it was still exciting. Last station worked was N5DG, at 0017Z on May 27.

"Moral of the story: if you can get a match on whatever antenna you have, give 6M a try! You have only QSOs to make."

Laurence, GJ3RAX from Jersey sent a nice clarification about his QTH and its relation to the British Isle. Last week I said Jersey is part of the UK, and it is not.

"I feel the need to give you a correction to your latest news report. The island of Jersey is not in the United Kingdom. We are self governing for all internal matters but external matters are administered from the UK. Our taxes are set locally and are different to those in the UK. A rather inexact analogy could be the relationship between Puerto Rico and the USA as PR is not a State but the licenses are administered by the FCC in the USA. I usually say that where I live is the real Jersey as opposed to the new one that was founded in 1664 by Sir George Carteret who was from Jersey.

"Great Britain is G, GW and GM. The UK is Great Britain and Northern Ireland, GI. The British Isles consist of the UK plus GJ, GU, GD and EI and so is a geographic definition rather than political. The British Islands are all those with a G series prefix (and the new ones starting with M or 2) and does not include EI.

"My passport says that I am a citizen of the British Islands and does not mention the UK. I am actually a citizen of the UK as I was born in London while the Channel Islands were under German occupation. As I was born in London I would be allowed to work anywhere in the EU, should I want to, whereas those born here to parents who were also born here would not be automatically entitled to work in Europe. The UK is part of the EU but the Channel Islands are not:

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"For the purposes of Amateur Radio I tend to assume that my callsign is my last name! I stopped having my full name and address listed in the callbook some time after I started using the HF bands and wanted to avoid getting QSL cards. I now respond to them through the bureau but for VHF and UHF QSOs only. Unlike those licensed by the FCC we can choose to prevent our details being listed.

"When I was first licensed, in 1962, the 4 meter band was from 70.2 MHz to 70.4 MHz. My license then, without having passed the Morse test, allowed me to use 70 cm and higher frequency bands. We were allowed to use 2 meters as well in 1968.

"I passed my Morse test in 1979 and then started to use the HF bands as well as VHF. I was also allowed on 4 meters which had then become 70.0 MHz to 70.5 MHz. I was able to get QSOs with the rest of the British Isles, including EI, and also ZB2 (Gibraltar) during the Es season. Now most countries in Europe also have access to 4 meters although my neighbours in France are not allowed on it yet.

"We did not have 6 meters until I was given a special permit to use it in 1983 but that was for late at night only outside Band 1 TV hours. Only 40 such permits were issued in the British Islands and some time later that was extended to 100 permits. Before then I was able to work stations crossband from 10 meters and did so after being persuaded to do so by Bob VE1YX.

"This morning (May 23) there was another Es opening on 6 meters and I worked several stations in LA (Norway) and one in OZ (Denmark) for the first time this year. Then I looked south again and worked 7X5QB (Algeria). Those were new countries and grids for me for this year so I was able to update the tables again including, http://www.uksmg.org/standings/annual-table.php."

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"On Tuesday my only DX was down to EA9 again. On Wednesday it was better with QSOs to YL, DL, OK, SP, OE and 9A. Some of them were indicating well over 30 dB over S9 until the opening suddenly closed and I was able to relax again.

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