

RADIO SOCIETY

of Great Britain_

DRAFT/UNCONFIRMED

PROPAGATION STUDIES COMMITTEE

Minutes of a meeting of the Propagation Studies Committee held in Leicester on 8 May 2010, commencing at 1300hrs local.

1. Members Present

Prof. M. Harrison	G3USF	Chairman
Mr S. Nichols	G0KYA	Secretary
Mr A. Melia	G3NYK	
Mr R. Smith	G3SVW	
Mr G. Williams	G4FKH	
Mr L. Butterfields	G0CIB	
Mr J. Worsnop	G4BAO	
Mr C. Deacon	G4IFX	

Apologies for absence were received from Prof. B. Chambers G8AGN, Dr M Walden G0IJZ and G. Adams G3LEQ.

2. Minutes of last meeting

These were approved without change.

3. Matters Arising from the minutes

3.1 _____ RSGB Yearbook

Steve G3VZW has been in contact about the Yearbook. Steve G0KYA offered to write the content for the 2011 version again.

3.2 _____ Microwaves

G0GHK (Finningley) on 10GHz is on the air and has been heard in Saltash (Cornwall). G4BAO said that there are a number of microwave beacons in the pipeline.

3.3 _____ Microwave beacon week-long Autumn activity session

Nothing to report

3.4 _____ Technical Forum

Leslie G0CIB reported that there are now about 480 people on the forum and about 1,800 postings have been made. It is a Yahoo group and moderated, covering a wide range of topics.

4. PSC Membership

Thomas NZ4O has now been added to the member list as an associate. The committee welcomed John G4BAO to the committee as a full member, with a specialism in VHF/UHF/Microwave. As nothing has been heard recently from Steve G0AEV, G0KYA said that he would contact him to ask if he wished to remain on the PSC list.

5. Topics for discussion

5.1 PSC involvement in Newark Hamfest/RSGB Convention

It was felt that the 2009 Newark event had been a success and PSC hopes to attend the 2010 event. Steve G0KYA said that he was prepared to organise it again, but was looking for some help. There was some discussion about new material for the display and we may include some audio recordings of different propagation modes and movies from the new Solar Dynamics Observatory.

Carl K9LA is giving a talk at the RSGB Convention on top band propagation and Steve G0KYA will probably be delivering the propagation seminar at the Icom Contest University, which is also being held at the event.

5.2 50MHz beacon frequencies

There has been a proposal to move the 50MHz beacon allocation to 50.400-50.500MHz by the end of 2012. Beacons not moved by end of 2012 are to be closed down. Some countries are currently unable, for regulatory reasons, to have beacons in that part of the band and would be exempt from the deadline until such time as their regulator permits the move.

Chris G4IFX said that The Six Metre Group is pretty unhappy about the proposal. While DX on 50MHz is on CW and is crammed into 20/30kHz, there is some merit in having beacons at the bottom of the band to catch openings as the MUF raises.

Region 1 has now written to the other regions to ask for this to be reconsidered. G4IFX said that the timeline for this move is not good as the time for the change would be around the time of sunspot maximum and therefore the F2 MUF peak. The difference between propagation from TV on 49MHz and the bottom of 6m is quite marked. Therefore G4IFX argues that it is better to have the beacons at the bottom of the band.

However, if beacons are to be moved it might be an opportunity to upgrade them to include other modes, such as JT65. The USA would have to get FCC approval and the large numbers of 6m beacons means that it would be a difficult task.

5.3 ROS data mode and resolution of interference to the 20m IBP network (G0KYA)

Steve G0KYA explained that a new multi-frequency data mode called ROS had been released earlier in the year. One of the frequencies suggested for its use had been 14.099MHz. This was heard to interfere with the International Beacon Project chain on 14.1MHz almost immediately. The originator of ROS had been contacted and he kindly agreed to move the frequencies to 14.0972MHz and 14.102MHz. G0DJA had disagreed with the speed in which the PSC secretary had moved on this issue (and that he did it under his own initiative) and had subsequently resigned over the matter, but the committee felt that we were right to intervene quickly before the mode had gathered more users.

5.4 PSC help with Bletchley Park

There was a discussion about what aspects of propagation could be represented at the new RSGB shack and demonstration station at BP. There was also talk about how a presentation could be linked to the national curriculum. Steve G0KYA said he would contact Don G3BJ to offer some of his Powerpoint material and perhaps adapt some of it to include Auroral, EME, MS propagation etc. Steve will contact Sam G4DDK for some EME recordings.

5.5 PSC web page – (G3USF)

There was a discussion as to whether the PSC web pages should be moved from Keele University to the RSGB, or to a separate host. The general feeling is that the PSC web pages should continue in some form, preferably under the auspices of the RSGB. Gwyn G4FKH said he would prefer to see it out of the control of the RSGB so that it could be updated more quickly. However, no one on the committee could take the project on and it was felt that, overall, as the Committee is part of RSGB, the site should be there. Martin G3USF will contact RSGB about the site. The discussion with RSGB should also include a reference to the possible incorporation of G0CAS's page

5.6 Board matters (G0CIB)

There were no board matters relating to PSC. However, Martin G3USF was presented with the RSGB Founders' Trophy by Leslie for his services to amateur radio and the PSC team congratulated him.

6. Projects

6.1 Six and Ten Report (G3USF)

Martin said he got into problems with the June 2009 report due to the vast number of Es contacts. He will shortly finish the February 2010 report. Martin has been in contact with Steve G0AEV about some of the back reports, but has not heard back.

6.2 LF/VLF Propagation (G3NYK)

Interest in LF in Japan is increasing as they have received access to 136kHz. Alan G3NYK showed some interesting data from VE7TIL on LF propagation. There is a report of a 800km transmission and reception on 9kHz in Germany. This was done using 100W to a kite antenna and using QRSS with 600 second dots.

6.3 GB2RS (Report from Gordon G3LEQ)

There is a proposal that GB3RS at Bletchley Park will be used for the broadcast of the GB2RS Broadcast Schedule on Sundays. Thus, the Propagation Report will be read out, along with general news several times on a Sunday, and maybe on weekdays as well. It is already intended that the public will see the station GB3RS in action and broadcasting news bulletins.

New 40-metre GB2RS news readings are taking place on Sundays using 7150kHz at 10.00am and 10.30am from Aachen in Germany and Stornoway in the Scottish Isles. Gordon reports that these two readings are proving to be highly successful.

The two locations used enable the South of the UK to be covered from Stornoway, with the Midlands and North of the UK being covered by the reading from Germany (in English of course).

This arrangement has enabled us to fill in the skip zone which would otherwise occur at this time in the sunspot cycle. The result is that we have more stations calling in on the 7MHz after-news net than on any other GB2RS news broadcast.

Gordon's surveys at radio rallies also tell us that there are still more radio amateurs listening to the news on air (approx. 60 percent) than those taking it off the internet (approx. 40 percent).

This includes the Propagation Report, and the readers always employ the Saturday evening updated version. Gordon says I think it is safe to say that we now have many more listeners hearing our Propagation Report in Northern Europe than ever before, thanks to 40-metre propagation.

7 Reports

7.1 Chairman's report

Martin G3USF reported that the VP8ADE Adelaide Island beacon on 10m (28.285MHz) in the Antarctic has been restored and has been heard in the UK.

3B8MS on 28.210MHz in Mauritius is also back on air after previously being swept away by a cyclone.

GB3VHF in Kent is operational again on 144.430MHz.

VK6RIO is building a 2m 100W beacon using 4 x 7-element Yagis beaming at ZS and Reunion Island. A VK6 has reported hearing ZS on 6m in February.

John G3WKL has submitted a paper to the IARU on interference to amateurs between 80 and 200MHz.

NW7US has revamped his propagation site to include near real-time magneto-spheric simulation (see <http://propagation.hfradio.org>).

OZ2M has circulated a very detailed paper on next-generation beacons which applies mainly to VHF and UHF. Andy G4JNT has updated his beacon software – see www.g4jnt.com/uwbcnMon_updated.zip

On Monday May 3, at 12:00 UT, an amateur radio 70 MHz beacon, WE9XFT in Bedford, Virginia, USA, became operational and it may be receivable in the British Isles and Europe. John G4BOA offered to collate any reception reports. 70MHz multi-hop Es across the Atlantic should be possible.

7.2 Leslie G0CIB - RSGB Board issues

Nothing to report.

7.3 Members reports

7.3.1 G4FKH Propagation Prediction pages on RSGB website

Gwyn G4FKH reports that the propagation prediction web page on the RSGB site had 2,796 hits this month, making the running average since inception – 1,443. He believes this will help justify the space that we are given on that site.

Gwyn also said that there are now two-hour predictions available on the RSGB web site as well.

7.3.2 Steve G0KYA

Steve said that he is continuing to produce a monthly radio programme for the “This Week In Amateur Radio” Podcast in the USA. The podcast is also now on iTunes and at www.g0kya.blogspot.com. A monthly HF report is also being published and carried on the Southgate ARC news service. He has also just written a 1,500 feature for RadCom on VHF/UHF propagation, which had to be completed very quickly for Elaine Richards.

7.3.3 Leslie G0CIB

Leslie is giving two talks on the International Beacon Project – one at Horndean and the other at Southgate..

7.3.3 Marcus G0IJZ

Marcus has had a paper accepted for the Nordic HF Conference to be held in Sweden in August this year. The paper will present a comparison of the 5 MHz beacon measurements and VOACAP predictions.

Title: "A Comparison of Measurements and Propagation Simulations for Mid-Latitude HF NVIS Links at 5 MHz During Sunspot Minima"

7.3.4 Ron G3SVW

Ron is involved with a group in Manchester and has been promoting WSPR. He has also been involved in some frequency measuring tests from K5CM in the USA. This is showing differing Doppler effects on paths.

8. Any other business

Nothing to report

9. Closure

The next meeting was provisionally booked for Saturday 30 October 2010. The meeting closed at 1615hrs.

Steve Nichols G0KYA
PSC Secretary