## RADIO SOCIETY

| of Great Britain | ` |  |  |  |  |  |   |
|------------------|---|--|--|--|--|--|---|
| oi Great Britaii |   |  |  |  |  |  | _ |

#### DRAFT/UNCONFIRMED

## PROPAGATION STUDIES COMMITTEE

Minutes of a meeting of the Propagation Studies Committee held in Leicester on 23 October 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 |           |
| Dr J. Worsnop      | G4BAO |           |
|                    |       |           |

Apologies for absence were received from G. Adams G3LEQ and B. Chambers G8AGN.

## 2. Minutes of last meeting

Section 5.6 in the minutes of the May 2010 meeting should read "Martin G3USF was presented with the RSGB Founders' Trophy for his OUTSTANDING services to amateur radio".

#### 3. Matters Arising from the minutes

## 3.1 70MHz Beacon

There have been a couple of reports of the 70MHz beacon (WE9XFT) from CT and EA8.

## 3.2 G4FKH Propagation Predictions on the RSGB website

Gwyn reported that the site is now getting a running average of 1,900 hits month. He also reported that he had a conversation at Newark about the predictions for sight-impaired readers. There then followed a discussion of screen readers for internet browsing.

## 3.3 Marcus G0IJZ's paper

Marcus G0IJZ presented his paper on 5MHz propagation at the Nordic HF conference in Sweden.

#### 4. PSC Membership

Gordon Adams G3LEQ has requested that he now become a corresponding member and this has been accepted. G3USF wished to thank Gordon for his valuable contribution to PSC's work over many years.

#### 5. Topics for discussion

#### 5.1 PSC involvement in Newark Hamfest/RSGB Convention

PSC had a stand at the Newark Hamfest, manned by Gwyn G4FKH, Ron G3SVW and Steve G0KYA on Friday and Steve and Leslie G0CIB on Saturday. The stand didn't have access to power at first, despite us asking for it in advance, but this was rectified. It was also felt that the area used for talks was not really suitable as it was too noisy. These are not complaints, but observations. The stand had visitors throughout the day and a wide range of topics were discussed.

As a result of the hamfest Steve G0KYA will approach Elaine Richards at RSGB to see if his (and Alan G3NYK's) features on HF propagation, which appeared in RadCom, could be bundled together as a single PDF and made available on the members' section of the RSGB website.

This is because there still seems to be a gap in people's knowledge about propagation and this would go some way to helping.

UPDATE 25/10/10: According to Mark Allgar all back issues of RadCom are available on the RSGB website and I will see if I can pick out the relevant pages and turn them into a single downloadable PDF – Steve G0KYA

Some of the committee stands had specially-designed vertical banners and it was felt that these were eye-catching. Leslie G0CIB will see if one could be provided for PSC by RSGB.

The RSGB Convention the following week featured propagation talks by PSC members Geoff G3NAQ (geomagnetic effects), Steve G0KYA (propagation prediction software for contesting) and Carl K9LA (top band propagation).

There were also talks on Es by Jim Bacon G3YLA and solar physics by Dr Lucie Green. Both were well attended, especially Lucie's which featured many videos from the Hinode spacecraft. It is hoped that she can be persuaded to come to the RSGB Convention again.

Geoff G3NAQ mentioned in his lecture that Charlie Newton's Radio Aurora book is now out of print and unavailable. He thought this was a great shame and Steve G0KYA will contact Mark Allgar at RSGB to see if it could a) be reprinted or b) sold as a PDF on a CD ROM.

UPDATE 25/10/10: The "Radio Auroras" book went out of print 15 years ago and was produced before PDF technology existed apparently. Therefore, we cannot issue it as a CD-ROM and RSGB remain unconvinced that there is sufficient demand for a full print run.

## 5.2 50MHz beacon frequencies

In the last minutes we reported that there has been a proposal to move the 50MHz beacon allocation to 50.400-50.500MHz.

Nothing further has been heard, but there is a Spectrum meeting coming up that will have papers presented to it prior to next year's Region 1 meeting in South Africa. UKSMG will be represented at the Spectrum meeting.

#### 5.3 PSC help with Bletchley Park

Don G3BJ and Steve G0KYA have now outlined the content for a multimedia presentation on "basic" propagation theory. The emphasis here is on basic as it is aimed at the general public. The Bletchley Park centre is due to open in April 2011.

## 5.4 Radio Communications handbook

Gwyn has received a request to update the propagation pages of the handbook. He has suggested some changes. Copies of some of the chapters have been sent to PSC members for other suggestions/changes. It was felt that the handbook could do with more practical advice and VHF/UHF content and other amateurs may be approached for help. Our deadline for changes is the end of the year.

## 5.5 PSC web page (G3USF)

RSGB is happy to go ahead with a PSC section on its web site. For maintenance and updating purposes we would be provided with templates and would update the HTML pages and FTP the pages up to the server.

We still need to find out what would be the preferred HTML editor and whether RSGB is prepared to build the site in the first instance.

We decided at the last meeting that the task really needs the attention of one person. Gwyn G4FKH has now volunteered to take the project on at this stage and contact RSGB to move it forward.

## 5.5 Board matters (G0CIB)

There were no board matters relating to PSC.

#### 6. Projects

#### 6.1 Six and Ten Report (G3USF)

Martin G3USF reported that he was deeply involved in a study of the general election earlier in the year and his time commitment meant that he got behind with the 6 and 10 report. He is currently working on the May 2010 issue

While working on the April report G3USF was interested to discover what a good (early) Es season we had had. He noted many 50MHz openings from Peru to the Iberian peninsula (CT/EA) via multi-hop Es. The season seemed to start earlier. John G4BAO felt that the season ended earlier as well.

There was also more activity on VHF from Africa (D44, TR, TL, 5N etc). Martin said that you could see that with more activity the level of performance is beginning to match that

found from South America. When paths are being tested it is showing that they can be open.

There was some discussion about the lower levels of activity being heard out of ZS. This has been noted both in terms of amateur activity and reception of the IBP network. Gwyn G4FKH postulated as to whether this could be due to the shifting magnetic north pole and therefore the geomagnetic equator. This needs further study.

## 6.2 LF/VLF Propagation (G3NYK)

Alan G3NYK continues to publish his report. It is still quiet geomagnetically and LF "natural radio" enthusiasts are not hearing "whistlers". Geomagnetic disturbances will get worse as we head towards and past the solar maximum in 2013.

There doesn't seem to be the interest in record-breaking DX activities on LF, but there is still activity. Alan reported that OfCom has released an NoV for experiments on 9 kHz. Some experiments are taking place, especially by G3XBM.

The Americans have also closed down LORAN, which has upset some of the frequency measuring fans in the USA.

## 6.3 GB2RS (Report from Gordon G3LEQ)

Nothing much to report. There was some discussion about whether we could give more information about some of the technical terms used in the report. Also, could we include information about VHF/UHF propagation. It was felt that trying to predict tropospheric enhancements 7-10 days ahead might be difficult, but meteor showers and potential auroral openings could be highlighted.

#### 7 Reports

#### 7.1 Chairman's report

Martin G3USF reported that the proposed new education forum appears to have folded.

A beacon panel has now been set up within RSGB to look at the funding requirements for applications for new beacons. It will look at helping with the capital costs or a contribution towards running costs, but for a limited period only. G3USF was representing PSC on the panel.

There is also a change in progress to remove the G4JNT-implemented data stream from the end of the beacon idents on the 5MHz beacons.

There was a discussion on slow morse QRSS transmissions often being heard on 28MHz. Steve G0KYA said that these were likely to be MEPT (Manned Experimental Propagation Transmitters)

See <a href="http://www.qrss.thersgb.net/Receiving-QRSS.html">http://www.qrss.thersgb.net/Receiving-QRSS.html</a> for more details. The low power signals are then displayed on grabbers around the world. Some of these can be found at: <a href="http://www.ik0vve.net/mept6.aspx">http://www.ik0vve.net/mept6.aspx</a>

#### 7.2 Leslie G0CIB - RSGB Board issues

Nothing to report.

#### 7.3 Other members' reports

# 7.3.1 Gwyn G4FKH Propagation Prediction pages on RSGB website Please see earlier comments.

Gwyn has written a chapter on propagation prediction programs for a new RSGB book coming out on "Computers in the Shack".

## 7.3.2 John G4BAO

A new 3.4GHz beacon is being set up at Bath University, funded by the UK Microwave Group. They are trying to encourage student projects around the use of the beacon.

The UK has won the bid to host the EME conference in August 2012. It will be held in Cambridge and more information will follow. See www.eme2012.com

## 7.3.3 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 <a href="https://www.g0kya.blogspot.com">www.g0kya.blogspot.com</a>. A monthly HF report and predictions using HamCap are also being published and news is regularly carried on the Southgate ARC news service.

His propagation update has also just been published in the 2011 Yearbook.

#### 7.3.4 Marcus G0IJZ

Marcus has now distributed his talk on 5MHz propagation via the PSC reflector.

## 7.3.5 Ron G3SVW

Ron is involved with a group of amateurs in Manchester who are interested in WSPR and continues to give talks on WSPR both there and in Berwick upon Tweed.

## 8. Any other business

Nothing to report

#### 9. Closure

The next meeting was provisionally booked for Saturday 2 April 2011. The meeting closed at 1615hrs.

Steve Nichols G0KYA PSC Secretary