

RADIO SOCIETY

of Great Britain

PROPAGATION STUDIES COMMITTEE

Minutes of a meeting of the Propagation Studies Committee held in Leicester on Saturday 6th October 2012, commencing at 1300hrs.

1. Members present

Steve Nichols	G0KYA	Chairman
Chris Deacon	G4IFX	Secretary
Ron Smith	G3SVW	
Gwyn Williams	G4FKH	
Dr John Worsnop	G4BAO	
Alan Melia	G3NYK	
Prof Barry Chambers	G8AGN	
Dr John Gould	G3WKL	RSGB Board Representative

Apologies for absence had been received from Prof Martin Harrison, G3USF and Neil Clarke, G0CAS.

2. Minutes of last meeting held on 12th May 2012

Accepted as a true and accurate record.

3. Matters arising from the minutes

Item 3: No response has been received from DL/GM4OGI despite further attempts to follow up. No further action to be taken.

Item 5.1: Unfortunately no-one was available to man a PSC stand at the Newark Hamfest but consideration will be given to attendance next year.

Item 5.2: actions overtaken by events.

4. PSC membership

There was a discussion about membership of and use of the PSC forum on Yahoo.

The new RSGB website may offer an alternative approach to an open propagation forum so it was decided to leave things as they are with the associate membership list and consider the way forward at the next meeting.

Action: G4IFX for agenda at next meeting.

It was agreed to ask the overseas 'associates' and former associates what they might be interested in as far as a 'propagation' reflector is concerned.

Action: G0KYA

Follow up whether the corresponding members who are not on the Yahoo reflector continue to have an interest in participation on the reflector.

Action: G0KYA/G4IFX

Suggestions for additional corresponding members to G0KYA.

Action: All

5. Topics for discussion

5.1 PSC Remit

The following formal remit for the PSC was proposed by G0KYA and agreed by the meeting:

The purpose of the Propagation Studies Committee (PSC) is to promote interest in radio propagation amongst amateurs and shortwave listeners, to enable them to make informed use of the amateur bands and develop a research interest into the subject.

Its activities include (but are not limited to):

- *Improving our understanding of radio propagation through promoting and coordinating research*
- *Liaising with academics and other experts on propagation matters*
- *Acting as consultants and advisors to RSGB members over propagation issues*
- *Writing propagation-related material, including HF predictions, for RSGB*
- *Giving educational talks and presentations to interested parties.*

Action: G3WKL/G4FKH to arrange for the new remit to be put it in the appropriate place in the new RSGB website.

6. Projects

6.1 Six and Ten Report (G3USF)

Martin reports (by email) that he is getting further and further behind with the main body of the report. However, thanks to SV1DH's speedy production of his monthly report, with its wealth of detail and commentary, that information is now displayed on the Report page only days after the end of the relevant month.

Martin also reports that he came across an intriguing phenomenon while working on the June 2011 data. The thousands of reports on 50MHz included hundreds for working between Brazil and North America, the Caribbean, Europe and North Africa and 99% of them related to a group of stations with a PV8 prefix. PV8 is the state of Roraima, the most northern state in the country -though a little more northerly than Amapa (PQ8), with Para (PY8) and Amazonas (PP8) a bit further south. I do not know how many amateurs there are in these states but a rough guide is that PV8 has a population of roughly half a million, PQ8 has 0.7million, PP8 3.5 million and PY8 7.6 million. The propagation mode was clearly not F2 or TEP so we are left with multi-hop Es and it looks as if the different characteristics of the equatorial ionosphere served as a quite sharply-defined, highly effective barrier to signals penetrating further south.

Martin asks whether he is missing something elementary and obvious? Comments welcome.

6.2 GB2RS propagation bulletins (G3USF)

Martin has also reported (by email) that the new arrangements well established. G0CAS takes on full preparation of the report; when appropriate Martin feeds in a sentence or so on propagation.

6.3 LF Propagation (G3NYK)

Alan helped set up, and is now the moderator for the RSGB LF reflector. Activity is increasing worldwide, stimulated by the availability of the new 'legitimate' LF allocations at 472 and 137 kHz. There has been a discussion on the reflector about Dst levels and whether they are affecting LF propagation, which shows the benefit of continuing to 'bang the drum' about propagation.

Regarding Alan's propagation page, the free BT website facility is coming to an end and he needs to find another provider. There is the possibility of using RSGB facilities to host the page.

Action: G3WKL/G3NYK discuss options.

6.4 Noise Measurement Campaign

Gwyn, G4FKH has written an article in RadCom requesting input on noise, in response to which twenty people have indicated that they will send data, including four in New Zealand.

John, G3WKL provided more information on the IARU Region 1 recommendation concerning noise floor monitoring (Recommendation CT08_C4_Rec_05) and he also made the point that reliable noise measurements could be essential information in dealing with the threat of PLT emissions.

It was noted that Marcus, G0IJZ has been coordinating noise floor measurements as part of the 5MHz experiment for the past five or six years. There may be useful insight to be gained from analysis of that data.

G4FKH described his proposal to develop a network of monitoring stations by persuading clubs to place SDR receivers in place for long term monitoring. Cross Country Wireless will be launching the receiver at the RSGB Convention. The proposed approach is to

monitor noise on several (currently five) frequencies with a 500Hz bandwidth every ten minutes, with an APRS system to send the data to a central internet site for collation. The initial focus is to be on radio astronomical reserved frequencies plus, for instance, spots a short distance below the bottom edges of amateur bands.

It was suggested that a standard active antenna would be a useful addition to this project in order to avoid the variation in antenna effectiveness.

Action: G4FKH to consider

7. Reports

7.1 Chairman's report (G0KYA)

The Chairman reported that Charlie Newton, G2FKZ, a former member of PSC, had left a legacy of £1000 to RSGB to fund propagation-related activities. In order to ensure that everyone with a viable project had the opportunity to bid for these funds, a request for proposals will appear in the November issue of RadCom with a deadline for submission of 31st December 2012. The plan is for a decision to be made as early as possible in 2013.

Steve also reported that he is to give two talks at the 2012 RSGB Convention, one on propagation prediction programs and the other on antenna modelling.

7.2 RSGB Board issues (G3WKL)

John, G3WKL reported that as part of the implementation of the new RSGB strategy, the interim board are proposing to change the 'instructions' to committee chairs into a set of policies including one governing how committees should run, with the aim of providing more transparency. Ratification is expected at the forthcoming EGM.

It was noted that, according to the new policy, committee minutes should be drafted, agreed and up on the RSGB website in three weeks.

Action: G4IFX

John also reported on the development of the new RSGB website. The first phase will be a relatively simple information-only system using Wordpress. The second phase will add integration with CRM and financial systems, an online store and a paywall. John asked whether content could be created by PSC which would help to stimulate activity - e.g. potential new projects, unanswered questions in a propagation sense, offers to review ideas and so on.

Action: All to consider.

The new General Manager will be more directly involved in the management of all the activities of the RSGB rather than just the HQ operation. He will therefore be more directly in contact about the activities of the PSC and in particular he will be asking committee chairmen to provide a statement of plans for the following year including statement of deliverables.

At the time of the meeting, the Society was still searching for a new VHF Manager.

7.3 Gwyn (G4FKH)

Gwyn has been making extensive changes to his new (personal) website.

7.4 Barry (G8AGN)

Barry reported that the Nanowaves Yahoo group is now up to 130 members in all countries around the world. He was also involved recently in breaking the nighttime optical distance record, now 130km. There is now some interest in extending communications into the ultraviolet.

The recent RadCom article on optical propagation generated some interest and a follow-up is planned, incorporating lifts etc.

A new Japanese satellite is planned which will transmit optical morse code messages using arrays of LEDs, initially over Japan only.

7.3 John (G4BAO)

John reported that the GB3WGI NOV has been obtained and the antenna has been built and tested. The antenna still in the US. Andy Talbot, G4JNT is involved in the development of the beacon for JT modes.

John will be the guest editor of the November RadCom VHF column and he has also recently delivered a number of talks on propagation to clubs.

Finally, he will be going to the island of Mull in May next year with CamHams with a site on the east coast of the island. The group is looking for 'wild card' activity to add to the expedition, e.g. 472kHz which will be on general release by then.

7.4 Ron (G3SVW)

Ron has been running regular antenna and propagation clinics for his local club, stimulating a lot of interest. He is considering undertaking mini expeditions to beach locations and expressed an interest in using those trips to conduct noise measurements from quiet locations. He also redistributes solar information onto the club website.

7.5 Chris (G4IFX)

Chris reported that he recently attended a talk by the solar physicist Lucie Green at Reading University, under the auspices of the Reading and District Amateur Radio Club. The talk was excellent and the subsequent question-and-answer session showed great interest in scientific and propagation-related topics from the audience.

7.5 Martin (G3USF)

By email, Martin reports that both beacon listings continue to be maintained on a near-daily basis. He has received a request from someone in the US to use some material in the HF list for a report he was preparing for a research outfit. He still doesn't understand

exactly what this was about but could not visualise any evil purpose that might be served so he said yes. Incidentally, the list is copyright because Martin once found another amateur taking it onto his web page under his own name.

Martin has been asked by Phillip Brooks on the RSGB Interim Board for an introductory article on beacons for RadCom, part of a series of such articles to appear in the February issue. This is not easy because he has a cluster of end-of-year reports at the relevant period. He knows his way around HF beacons well enough but he may need to tap one or two colleagues for information about points on which he is less familiar.

7.6 Neil G0CAS

Neil has offered the opportunity for PSC to bring his forum under the wing of PSC and this was agreed in principle by the meeting. There may be opportunities in the future for discussion forums to be set up on the new RSGB website. This is something that can be looked at as and when the new site is fully up and running.

During the discussion it was also agreed to start up a PSC Twitter feed under the name @rsgbpropnews

8. Any other business

It is understood that the RadCom Handbook is not going to be updated until the end of 2014. Les Barclay has agreed to completely re-write the propagation sections. Les has asked that someone should review what he's written to make sure it is intelligible to an amateur audience.

Action: G4FKH, G0KYA

G3SVW suggested putting on a PSC special event station at some point, possibly tied together with some sort of existing radio-related event. This could also be tied into next year's RSGB Centenary celebration.

Action: G3SVW

9. Closure

The next meeting was provisionally booked for Saturday 6th April 2013.

The meeting closed at 15.55 hrs.

**Chris Deacon G4IFX
PSC Secretary**