

RADIO SOCIETY

of Great Britain

DRAFT/UNCONFIRMED

PROPAGATION STUDIES COMMITTEE

Minutes of a meeting of the Propagation Studies Committee held in Leicester on Saturday 21st September 2013, 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	

Apologies for absence had been received from John Rogers, M0JAV.

2. Minutes of last meeting held on 6th April 2013

Accepted as a true and accurate record.

3. Matters arising from the minutes

None.

4. PSC membership

An item will be put in RadCom advertising for a new full member with an active interest in HF propagation.

Action: G0KYA

Corresponding membership - four corresponding members are still not on the reflector. There will be a final attempt at communication with them to ask if they wish to remain on the list, then any remaining non-joiners will be removed from the list.

Action: G0KYA/G4IFX

The associate member list was reviewed and it was agreed to remove those who have not yet signed up for the Yahoo group.

Action: G4IFX

5. Topics for discussion

5.1 2013 Objectives - Review

The committee agreed to write up progress on the 2013 objectives in due course.

Action: G0KYA

5.2 2014 Objectives

It was agreed to ask the RSGB to take forward the actual PSC spend for 2013 as the budget for 2014. This is expected to be made up mainly of travel expenses.

Unfortunately no recent report of actual expenditure has been forthcoming from RSGB.

The following list of key activities was agreed for 2014:

- To continue to produce HF Propagation Predictions for RadCom (G4FKH)
- To write the propagation pages for the annual RSGB yearbook (G0KYA)
- To produce the solar and ionospheric report for GB2RS (G0CAS and G3USF)
- To write propagation features for RadCom as requested (all)
- To offer propagation-related talks to RSGB Convention and local clubs where possible (all)
- To consider producing a set of video presentations for sharing via (for instance) YouTube and via RSGB. This would be intended not to replace face-to-face presentations but as an alternative, particularly for use by clubs in remote locations.
- Specifically in 2014, to produce a pilot video on general propagation topics, with potential follow up with a set of more specific presentations later.

There are also other activities that are being run by PSC members, but are not PSC projects per se. These include:

- Production of the 6 and 10 report (G3USF)
- IARU Beacon coordination (G3USF)
- The production of monthly HF Propagation charts for the UK, ad-hoc charts for DXpeditions and audio podcasts etc (G0KYA)
- The HF Noise Measurement Campaign (G4FKH)

Other ongoing work includes:

- Research into nanowaves (light propagation) (G8AGN)
- Low frequency propagation (LF) (G3NYK)
- Microwave propagation (G4DDK, G4BAO)
- Six metre propagation (G4IFX)
- 5MHz propagation (G0IJZ).

The committee also agreed to request permission from RSGB to re-issue the propagation eBook with the addition of recent VHF/UHF articles from RadCom.

Action: G0KYA

Steve, G0KYA will find out who the beacon co-ordinators are for IARU Regions 2 and 3.

Action: G0KYA

5.3 RSGB Hamfest 27th/28th September - plans

PSC is running a stand at the Hamfest, led by G0KYA and with updated presentation materials.

5.4 Propagation Forum – needs, options, way forward

Considerable doubt was expressed about the usefulness and practicality of the PSC running a forum specifically for propagation-related discussions at this stage. If and when RSGB begins to actively promote on-line forums then the potential for a propagation forum will be reviewed.

Feed back this decision to Neil, G0CAS with thanks for his offer.

Action: G0KYA

5.5 G2FKZ Bequest – Noise Measurement Campaign

Gwyn reported that the campaign is underway with about ten operators regularly submitting manual observations. Five automatic recording stations are also in operation using the standard equipment. Funding has also been agreed by RSGB for the establishment of a website to collect and display the readings from each of the participating sites.

For the avoidance of doubt, Gwyn is acting as the link between the Noise Measurement Campaign (NMC) project and the EMC Committee - sponsored Noise Floor Study (NFS), which is based around an MSc project at Leicester University. Although the two projects are related, they are separate initiatives.

Gwyn discussed a potential proposal for the use of the remaining £500 of the G2FKZ Bequest to fund an additional NMC receiving station. The exact details of where it could be sited and the timescale have yet to be decided. The proposal will be submitted to PSC when all the detail is complete.

Action: G4FKH

6. Projects

6.1 Noise Measurement Campaign (G4FKH)

See above.

6.2 GB3WGI beacon (G4BAO)

Further to the agreement to provide £500 funding from the G2FKZ Bequest, the 2m transatlantic beacon is now operational. Reports have been received from Spain and Portugal via Es but not from across the Atlantic at this stage. Some frequency stability problems are currently being experienced but they are being dealt with.

The group expect to approach OFCOM in six to twelve months to request an increase in power to 1kW.

The committee expressed its thanks to John, G4BAO and the team for having pushed this project to successful implementation.

6.3 Six and Ten Report (G3USF)

No report received.

6.4 GB2RS propagation bulletins (G3USF)

No report received.

6.5 LF Propagation (G3NYK)

Alan has now updated the propagation chapter for 'LF Today'.

Alan has suspended his daily LF propagation report because his old web site has closed. The Dst information is readily available to all, from Kyoto and Colorado university sites and active DXers are using it direct. He has no reliable 24/7 monitoring data on 136kHz over 3000km paths which would aid in interpreting the solar and geomagnetic conditions at the previous level of detail. Current emphasis in the community is on 470kHz where 'beacons' are not readily available. A recent re-analysis of old data against Dst has revealed another source of attenuation of LF/MF signals not readily correlated with any of the indexes or indicators.

Action: G3NYK

7. Reports

7.1 Chairman's report (G0KYA)

The Chairman reported that he is expecting to meet John Rogers, M0JAV at the Hamfest and will report back on any issues relating to PSC.

John, G4BAO attended the recent RSGB Leadership Meeting on behalf of PSC but no items specifically relevant to PSC were raised at that meeting.

7.2 RSGB Board issues relevant to PSC (M0JAV)

No issues raised.

8. Any other business

John, G4BAO reported on a number of what are believed to have been tropo-assisted meteor-scatter contacts from Europe to EA8 have been reported recently on 144MHz. The Hepburn plot suggests that a tropo duct existed between EA and EA8 at the date and time in question. Barry, G8AGN commented that he has observed similar combined/mode effects on the Graves radar station in France although he believed that aircraft-scatter was involved in that case, rather than meteor-scatter. It was agreed that John will secure full details of the contacts and initiate further discussion on the PSC reflector.

Action: G4BAO

Steve, G0KYA reported that he has re-started his regular propagation podcasts. He commented that the range of likely outcomes this autumn is wide, in terms of whether East-West F2 propagation will occur on 10m. Steve also reported that he is adding propagation information to the beginners' newsletter that he produces on behalf of RSGB.

Barry, G8AGN reported recent activities in nanowave communication, including extensions to the daylight and night-time distance records. He also showed a video including a demonstration of SSTV via nanowaves, believed to be a UK first. This will be covered in a subsequent issue of RadCom.

Martin, G3USF had reported by email that he will in due course be preparing a beacon report for the next IARU Region 1 meeting.

9. Closure

The next meeting will be in April 2014, date to be confirmed.

The meeting closed at 16.45 hrs.

Chris Deacon G4IFX
PSC Secretary