RSGB Propagation Studies Committee Report

October 2018

PSC Objectives

To inform members about predictions of propagation conditions by producing:

- The HF, VHF and up propagation report for GB2RS
- Monthly HF Propagation charts for the UK and ad-hoc charts for DXpeditions
- HF Propagation Predictions for RadCom
- A daily (summer) updated forecast chart of jet stream and severe thunderstorms for Es research for the RSGB "Propagation Questions" Forum (G3YLA)

To maintain / improve understanding of propagation by:

- Writing the propagation pages for the annual RSGB yearbook (G0KYA)
- Writing propagation features for RadCom as requested (all)
- Giving propagation-related talks to RSGB Convention and local clubs where possible (all)

Other ongoing work includes:

- Research into nanowaves (light propagation) (G8AGN)
- Low frequency propagation (LF) (G3NYK)
- HF Propagation (G0KYA
- Six metre propagation (G4IFX/G3YLA)
- VHF Propagation (G4LOH)
- Microwave propagation (G4DDK, G4BAO)

Update:

PSC has welcomed two new full members – Dr Peter Duffett-Smith G3XJE and George Jacob, G0HSV.

They have only just joined so we haven't had a chance to meet up and discuss how they can help with PSC studies, but both have excellent technical backgrounds and are a valuable addition to the team.

PSC has had another busy 12 months, culminating in a number of lectures due to be delivered at the 2018 RSGB Convention.

The two propagation video presentations for clubs (one on VHF and the other on HF) continue to be popular and have been used by more than 100 clubs, some with Skype-based Q&A sessions afterwards,

Work has also been completed by Jari OH6BG to create an online portal for RadCom readers. This allows you to change your antenna/power parameters and create a month's worth of HF propagation predictions for the locations listed in RadCom. This gets over a commonly-heard complaint that readers get better/worse results than the RadCom predictions, which are based on 100W to a dipole. See www.voacap.com/radcom

Jim G3YLA has updated his foF2 propagation display website to show real time foF2, foEs and F2 maximum useable frequencies (MUFs), which also contains the jet stream weather charts for Sporadic E triggers. The new propagation material is available on www.propquest.co.uk and contains both the foF2 data and the jet stream charts.

In terms of Spectrum-related matters, PSC remains concerned about QRM to beacon frequencies, especially the NCDXF International Beacon Project on 14.100MHz, which is often monitored automatically using the FAROS software. And also private, unlicensed beacons that pop up on bands below 20m.

The IARU recommendation is that there be no permanent beacons below 14MHz, unless previously agreed and for serious long-term propagation studies. This allowed for the 5 MHz beacons in the UK. IARU R1 policy is that beacon operation on 7 and 10 MHz is 'discouraged'. See http://www.iaru-r1.org/index.php/beacons/beacons

Steve Nichols, G0KYA
PSC Chairman
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