Spectrum Forum
20th September 2007

HF Manager's Report

1. 136kHz

Management activity has been limited to supporting the successful outcome of Agenda Item 1.15 at WRC07 and seeking to resolve the problem of interference from LORAN that arises from UK operation, initially at Rugby and now Anthorn.

A technical paper on the levels of the spurious signals from LORAN transmissions from Anthorn and other nearby transmitters was submitted to Trinity House via Ofcom. The measurements showed that the problem was due to the fast rise time of the transmitting pulse, and not related to the Q of the aerial (which might have been easier to resolve). Our measurements were later confirmed by Trinity House, who pointed out that the levels were within the noise mask agreed for the system; Trinity House, however, offered to see if some modification of the system at Anthorn could be made to reduce the level of the signals in our 136kHz band. This is still outstanding.

In consultation with 136kHz users on the RSGB LF Reflector a more relaxed set of guidelines for the 136kHz Band Plan has been drafted for consideration at the IARU Region 1 Conference.

2. 500kHz

Experimental access to 501 – 504kHz continues through NoV issued following application of a Special Research Permit. We were successful in raising the ERP limit from –10dBW to 0dBW when the existing NoV's were extended by a year at the end February 2008. Activity is generally low, being mostly concentrated in the winter period because of the good nighttime skywave propagation.

The Society has proposed a further extension of the NoV to Ofcom, which would come into force from 29 February 2009, and suggested a further increase in ERP. This is needed because of the deep fades experienced on the band; other countries that have also licensed Amateur experimentation on nearby frequencies have allowed higher ERP and not noticed any interference to other Services or local RFI problems.

Significant input was provided to WRC07 at which the matter of Amateur access in this part of the spectrum will be formally discussed under Agenda Item 1.23 at WRC11. Already information on our current usage of 501 – 504kHz has been passed to Paul Rinaldo, W4RI, who is heading up IARU's preparation on the agenda item within ITU Working Party WP5A. Other liaison has taken place with Ulrich, DK6VW, who has been appointed the national coordinator in Germany for agenda item. Ofcom, MCA and CAA prefer for this role in the UK is taken by a member of Ofcom, however, Ofcom has agreed to appoint me to support work on the agenda

item within the IFPG. I attended an informal Region 1 meeting, whilst attending the Hamfest at Friedrickshafen, at which useful discussions on the approach for the preparation for the agenda item. I have also been active in preparing a draft on the matter and also a report for the forthcoming IARU Region 1 Conference, within the IARU Region 1 500kHz Working Group.

3. 5MHz

RSGB provided significant support to IARU at WRC07 in its quest to gain a small band, on a secondary basis, at 5MHz within a wider review of the spectrum between 4 and 10MHz (Agenda item 1.13). However, amid much disagreement over wider issues within the agenda item the opportunity for Amateur expansion in this area of spectrum both at WRC07 and for the next WRC in 2011 was lost. RSGB is IARU Region 1 in perusing a more localised arrangement through CEPT.

The 5MHz Experiment continues to collect data and within the year the database has been ported from its original ACCESS platform to MySQL and successfully been operated with online access on a development server. Moving this to a permanent server within the RSGB domain was agreed in principle in January 2008, but has not yet occurred. With little interest showed within the Amateur community to working on the analysis discussion has taken place with academia; currently interest is being shown by University of Warwick though it might be some time before a suitable research student if found who is interested in the specific nature and subject of the analysis. Given the nature of the current sunspot cycle several more years of data will be needed before we start to collect data from a time of higher sunspot number.

4. 7MHz

The main activity recently has been to work up proposals for the IARU Region 1 conference on the matter of the band plan for 40m for after the Broadcast Service relinquishes their use of 7.1 – 7.2MHz.

5. 14MHz – 30MHz

Nil activity to report.

6. HF Band Plan compliance

Work has continued on this somewhat emotive subject. Following various discussions a form of words for the RSGB proposal, to be put to the IARU Region 1 Conference, has been found that meets most people's needs.

7. Deliberate Interference

Progress on this matter in the last year has been mixed. This will make the difficulties of gaining agreement to the RSGB proposals at the forthcoming IARU Region 1 Conference all the more difficult.

At the policy level matters targets have been met. Following an RSGB proposal at the IARU Region 1 Interim Conference in 2007, and ongoing support by RSGB and IARU Region 1, the booklet written by ON4WW and ON4UN has been adopted by the IARU Administrative Council. Through G3PJT, as IARU Region 1 CEPT WGRA Liaison Officer, a comprehensive review of licence conditions in respect of the ability of administrations to respond to proven cases of deliberate QRM has been undertaken. This is an initial step towards a more harmonised response to the problem across CEPT countries.

Progress on the technical front has been less good, with a disappointment in the development of one of the technologies and a general lack of volunteers to develop other approaches identified in the scoping study. Coupled with this is the limited take-up by CDXC and GMDX club members to the challenge of experimenting with a development website, called the DQ Cluster.

John Gould, G3WKL
RSGB HF Manager
IARU Region 1 LF Coordinator