BATC Spectrum forum report October 2011

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Innovation through new equipment designs and self training through construction is a core element in amateur radio and television. This is especially relevant today when such a project for new equipment impinges directly on the spectrum usage.

The BATC committee has in the last year, sought to enable the distribution of several electronic kits for the ATV and the take up for the kits has been a pleasant surprise.

Good quality articles in the BATC magazine and electronic support for constructors through the "ATV Forum" is providing essential support of the projects.

DigiLite. One of the innovations, "DigiLite", has a direct impact on the bandwidth used for ATV transmissions. The project has been a truly international collaborative effort from a wide range of amateurs beginning in France and continuing with a practical kit from the Bournemouth ATV group. (details from www.batc.org.uk)

DigiLite is a cost effective method of encoding video and audio signals and modulating the data on a 23cm QPSK carrier. The resultant occupied bandwidth is 20% of the older FM ATV modulation.

The software and hardware effort to produce the DigiLite is first class example of freely given support by amateurs, which significantly increases the interest for new younger amateurs. A key element of the work to produce the kit came from the Bournemouth group who have been waiting for several years for their repeater application to OFCOM.

Repeaters. We need to continue to support the repeater applications from Bournemouth and other groups. The individual groups drive the interest in their area and we should therefore be seen to be vigorously pursuing the outstanding applications with OFCOM. The present lack of achievement in this arena is acting as a major disincentive to further developments and activity.

BATC streamer. Dissemination of technical knowledge through the BATC streamer site continues apace. Technical papers and operating information are available for beginners and advanced levels. Streamers create valuable indirect support for repeater groups, from viewers joining "Net nights" around the UK. In this way remote viewers, frequently exceed 20 or 30 amateurs from the UK, mainland Europe and the USA.

The "streamer" acts in support of the active RF based repeater groups and clubs. The reverse path from repeaters around the UK has promoted greater ATV DX and experimentation and band occupancy in digital modes. Narrow bandwidth 2MS/s digital 70cms ATV is often seen through the Isle of Wight GB3IV repeater from a north London station.

The excellent quality papers in 26th AMSAT Colloquium in July 2011 was broadcast live to a world wide audience with the lectures still available from the BATC steamer archive. (See www.batc.tv.)