

# Vintage & Military Amateur Radio Society

## Report & Proposal by VMARS to the RSGB Radio Spectrum Forum 20th November 2010

**All amateur allocated bands from 160 metres to 10 metres inclusive:** In recognition of the rapidly growing popularity of the use of amplitude modulation and vintage equipment employing this mode of transmission, the Society proposes that formal recognition of AM centres of activity are included in the RSGB Bandplan and that these activities are included in RSGB representations of UK amateur radio users at international level.

### Proposal to:

1. Formally designate AM (full carrier) operation within the HF band-plans with associated bandwidths
2. Allocate frequencies as 'centres' of AM (full carrier) activity on the HF bands where appropriate

Although AM (full carrier) is historically the most significant form of speech modulation of wireless signals, and is still specified as an acceptable class of modulation within the terms of our licences, the current designation of AM as a foot note to the band plans does little justice to the high levels of AM activity evidenced on the HF bands at least. Even the casual listener finds it easy to locate AM transmissions at almost any time of the day on 80 m ( $3615 \pm 10$  kHz and 3705 kHz), and on 160 m (1940-1990 kHz with centres of activity at 1908, 1940 and 1963 kHz at least) in the late afternoons and evenings, increasingly now on 40 m (e.g., 7143 kHz) and 10 m ( $29025 \pm 20$  kHz) as conditions pick up, and also on 20 m (14286 kHz), and 15 m. In The US there is a high level of AM activity on 80 m (upper part of their band), and on 10 m. In Europe there is plenty of evidence of activity on 80 m from the Netherlands and France, but German and other signals have also been heard in the UK. Whilst it is difficult to estimate the number of individuals engaging in AM transmission, it would be safe to say that there are, in the UK, 100-150 active AM stations, not all members of VMARS or other specialist groups. VMARS itself has some 360 Members, a high proportion of whom are licenced and hold an interest in AM transmission. Further evidence regarding the popularity of AM on the air can be seen from the web (e.g., AM Window).

Those active in AM often (but not exclusively) operate equipment which has historical or other vintage interest, much of it is valued although the AM fraternity also embraces those who are at the forefront of AM transmitter technology employing Class E and PWM audio. AM offers the constructor an effective way to get on the air for the minimum of outlay, and has inspired many a youngster to become involved in amateur radio, whilst teaching the fundamentals of radio transmission. Vintage radio equipment is also a very effective way of 'selling' our hobby to the public, whilst at the same time it offers the potential for restoration projects which safeguard our wireless heritage. Above all, AM operators tend to be technically some of the most competent on the bands, as evidenced from their conversations on the air, and it is important to safeguard these interests and skills. This has also brought into the AM fraternity many operators who use modern equipment, and are relatively new to the hobby.

Unfortunately AM transmissions are vulnerable to interference from a wide range of sources not least being man-made devices such as SMPS, PLT, and electrical equipment, but also

from SSB stations and frequent jamming by those who seem to resent the presence of AM signals. Listening to AM transmissions on the air, it is obvious that those who use AM are well aware of their band widths and give due consideration to other users of the bands, but this courtesy is not necessarily shown by those using other modes. It is felt that the problem lies, at least in part, with the status afforded to AM within our regulations and band plans, and this proposal serves to address the issue. For this reason, we request that consideration be given to the formal listing of AM and associated bandwidths (e.g., 5 kHz) as recognised classes of emission on the HF bands and to designate 1963, 3615 (3705), 7143, 14286 and 29025 kHz as centres of AM activity.

In addition, VMARS supports the following strategies to defend radio spectrum allocations for radio amateurs in the UK .

**80 metres:** The Society would fully support the extension of the 80 metre amateur band in the UK by an additional 200kHz to cover the frequency range of 3500kHz to 4000kHz, as currently available to amateurs in North America . This would greatly relieve congestion on this band, particularly at weekends and during evenings.

**60 metres:** The Society would fully support RSGB lobbying of Ofcom for the introduction of a continuous 200kHz of bandwidth within the 60 metre band to replace the 7 spot frequencies currently allocated on an experimental basis. We would propose following the Danish model, which permits full band operation from 5250kHz to 5450kHz using VFO all modes with a maximum permissible transmit signal bandwidth of 8kHz.

**Interference:** The Vintage & Military Amateur Radio Society strongly supports the RSGB's efforts to ensure that Ofcom fulfils its legal responsibilities to ensure that businesses and organisations responsible for the manufacture and distribution of any apparatus that fails to meet agreed RF emission standards, are fully accountable. Where it fails to comply with RF emission standards, we believe that equipment should be removed from the market and manufacturers required to submit a satisfactory and compliant emission analysis over the full radio spectrum, carried out by an independent and fully recognised UK test facility, before it is permitted back onto the market.

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Chairman VMARS