
QUALITY OF EMISSIONS AND SELF-REGULATION

As collectors and users of vintage radio equipment which are capable of transmitting, we all hold valid Amateur Transmitting Licences. We are all aware of licensing regulations. Other considerations, such as type approval, ideas from the European Community, an apparent ban on the use of ex-military wireless equipment in Belgium and rumours of draconian prohibitions are being mentioned. If we wish to continue with our hobby for whatever reason, I suggest that not only should we remain strictly within the law but that we should be seen to set a very high standard of electromagnetic compatibility (EMC) and of operating procedures.

This offering is only concerned with EMC.

1) Power Output

In the days of the modes CW and AM, the maximum power allowed was 150 watts input. Anode volts times anode current gives the watts, and this is simple to measure. I suggest the owners of sets capable of higher powers hard-wire in a step-down transformer to the output stage. At an efficiency of 67% we expect 100 watts of RF available, or 20 dBW. The alternative is for a complaint to be made, the radio inspector calls and the owner/operator tries to assure the inspector that the set was never operated on high power. (Pull the other one!)

2) Harmonics and Sproggies

Vintage military gear was not designed paying attention to these points. Some were known to be very "dirty" and do not pass muster these days. If we are to continue to use them, I suggest that we put them through basic tests for untoward emissions. Once problems are identified, the appropriate filters, especially bandpass filters, can be designed and hard-wired in the output circuits. Re-testing such gear now should show satisfactory and acceptable levels of any emissions.

3) Type Approval

I am told the standards are so strict that none of our equipment would pass. If this is so, then I suggest that we should seek, using the evidence in 1) and the test results in 2) above, to have recognition of the vintage nature of these sets, as it is with 'Historic Vehicles'. The Authorities can allow that it is impossible to bring some gear up to modern standards providing basic standards are met.

In summary, I suggest that:

- a) we are very careful about our public image, especially the power output
- b) we set up self-regulation and own/get access to test gear which is used to identify and remove any problems
- c) we are seen to be mindful and doing our best not to make the environment even worse.

If we do not think about these points, I foresee that we may lose it all.

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