

## **Proposed Amateur Class Licence and Considerations for Higher Power Operation**

Response by John Shutte (VK2EMF) Lic No. [REDACTED]

Firstly I would like to thank the ACMA for listening to my comments and concerns on the Proposal Papers.

### **Consultation Questions**

1. Do you see any reason for not extending secondary user access to the 50–52 MHz band for Standard amateurs

No, 50 to 52 MHz should be available for Standard Licensed Amateurs.

2. What are your views on the proposed policy on call sign transfer?

No issues with the proposed transfer of call signs.

3. Will the proposed 'regular check' – to confirm whether a person is still using their call sign – be a sufficient method of ensuring there are enough call

No, this needs to be more specific – eg Licensee required every five years to confirm that the call sign is in use and if no response cancelled and put back into the available call sign pool..

4. What are the benefits or disadvantages of our proposal not to limit the number of call signs that may be assigned to a person

I believe that there should be a limit to the number of call signs held to any one individual Licensee eg. Limit of 3. Clubs should be able to have access to more call signs for repeaters, Club houses ect. I do not see any advantage or benefit of an individual licensee holding any more than 3 call signs and the disadvantage is that it chews up available call signs for other users.

5. Do you have any concerns with the other proposed call sign management arrangements? If so, what are they?

Yes – I have concerns over the management of the call sign database and public registry of call signs, this should remain with the ACMA for validation

and integrity purposes. To try and pass this off to a third party like QRZ would be a disaster, that system is an opt-in style system and already has many incorrect and misleading data associated with a large percentage of the Australian call signs held within its database. Also passing to off to a third party commercial group like the AMC would incur a cost to be paid by Amateurs anyway.

6. In the absence of amateur and station information being contained in the Register of Radiocommunications Licences, are there any amateur-operated registers or other existing voluntary registers that you would use?

I do not believe that the Amateur License database should be moved to or handled by a third party like QRZ or the AMC, this needs to remain with the ACMA for validation and integrity purposes. The QRZ database is an opt-in style system and already has many incorrect and misleading data associated with a large percentage of the Australian call signs held within its system.

The ACMA will have to maintain their existing RRL Register for their other Licence categories; so it should not cost much more to also maintain the existing Amateur Licenses within this system. I personally refer to this database almost daily, because it is the only accurate way to check a license and/or the corresponding name associated with that license.

7. Do you anticipate any difficulties operating your station in Conference of Postal and Telecommunications Administrations signatory countries?

Yes - there will be issues, such as the validation of Licenses for Australian Amateurs if they need to travel and operate overseas in non CEPT countries like the USA. This also applies to certain digital modes where proof of License is required to apply for access: eg Echolink and IRLP repeater systems etc. Also when being pulled over by Police when using a mobile station, you need to be able to prove that you are an active license Amateur radio operator. Another issue is that CEPT has modified its documentation to accept the new AMC issued AOCP-A certificates, but does not recognise the older issued AOCP-A certificates – these will require an individual letter of equivalence from the ACMA by each Amateur wanting to travel to a CEPT country.

8. What are your views on the proposal to allow Advanced amateurs to apply for assigned scientific licences for certain experimentation uses, such as reflecting signals from a celestial body as well as inter-continental ionospheric and trans-equatorial propagation experiments?

Classifying Amateur EME (Earth-moon-Earth) communications under the Experimental Classification is a disastrous decision. In that this type of Scientific Apparatus Licence for these users will incur a very expensive yearly based fee of \$600, this goes against the whole idea of a hobby based experimentation and research activities.

9. Noting the proposal mentioned in 8, are there other amateur experimentation uses that require higher power that you think should also be considered under assigned scientific licensing arrangements?.

Yes, but as I have stated in the previous question this flies in the face of the whole concept of Amateur radio based experimentation and research. Amateurs do not gain any financial advantage for this type of activity so why classify them in an area that looks like it is for commercial based research activity under Apparatus style licencing.

10. What are your views on the medium-term proposal to allow Advanced amateurs to apply for authorisation for other higher power use-cases under certain conditions? Please provide brief information to help us understand your view.

I personally like the opportunity for Advanced Class Amateurs to obtain the privilege of using a higher power capability. But I have grave concerns that Amateurs wishing to take up this offer will have great difficulty meeting the APANSA EME requirements. These EME requirement are meant for commercial based operations that use expensive third party contractors and equipment to audit their sites, also these sites once they have met these requirements hardly ever change their configuration. Amateurs change their RF configuration on a regular basis for experimentation and home brew requirements. This would mean a total re-assessment every time a transmitter, feed line or antenna was changed, an expensive and huge time wasting exercise.

11. Is a 1kW power limit appropriate? Why or why not? If not, what alternative do you propose and why?

I believe that a 1.5KW power limit is more appropriate for an Advanced Class License in Australia, this would bring us into step with most other countries like the USA, NZ and Canada. Etc.

12. Are there particular bands that you consider should or should not be able to be accessed for Advanced amateur higher power operations? Which band(s) and why?

Yes - I think any frequency above the 70cm band (430Mhz) should be limited to 400Watts. As these higher frequencies introduce inherent health dangers at high power.

13. What use-cases would require stations to operate at power limits for Advanced amateurs higher than the 400W currently permitted?

When there are many stations competing for a rare contact and need to be heard over the pileup. Also with the increased RF noise from third party electronic devices throughout the world which is causing increased difficulty for the remote receiving stations, extra power will allow the transmitting station to get above the noise level and make that contact.

14. For each use-case mentioned in 13, please briefly answer:

a. Why is a higher power limit needed?

As detailed in answer for Q13.

b. What are the specific limitations of the current power limit?

Won't be heard in certain situations, as outlined in answer for Q13.

c. What power level is required?

Probably about 6dB gain over 400watts, so around 1500 Watts PEP.

d. What is the technical description of this power level requirements (for example, transmitter output power, emission mode)?

The transmitter would generally need an RF power amplifier capable of about 62dBm (1500Watts) of RF PEP output power and for best efficiency the use of SSB (J3E modes)

e. What amateur service frequency bands would be used?

Mostly the HF bands, but could extend up to the 70cm band.

f. How often will a higher power level be required?

Whenever pileup and high receiver noise levels are encountered.

g. What is the location of the station?

We think that provided the APRANSA requirements are met then location should be irrelevant. This will probably limit the use of higher power in high density built up areas.

15. Should potential higher power authorisations be limited by location, position, event or something else? (See section 6.) Please provide details to support your answer.

I believe that providing the station can meet the ARPANSA requirements then it should be authorised. I also believe that this can be met using further training and certification.

## **Other Concerns about the Class License and High Power Proposal.**

### **RFI Protection by the ACMA**

There is no text in either of these latest documents about RFI protection from Interference to the Amateurs parts of the spectrum. I would assume from this, that the ACMA is supplying no protection from RFI interference from other users, commercial or otherwise.

I believe this is unacceptable to the Amateur Radio community and the ACMA must supply some level of protection and procedures to help mitigate these problems. If we cause any interference we must immediately

shut down as outlined in the documentation, so I would expect that the ACMA should do likewise with interference to Amateur users, after all the ACMA is the Spectrum Manager in Australia.

### **Equipment Classification.**

Again there is no text in any of the documentation that is defining the type of equipment we should be using. Under normal Class Licencing arrangements the equipment used must be Type Certified, which would be totally against the whole ethos of experimentation and home equipment building that the Amateur community is built upon. So since it is not defined in the documentation are we to assume that this type of experimentation, modification and building of radio equipment is totally allowed.

### **The High Power Considerations**

After reading the Consultation Paper and the Proposed Class Licence LCD documents, I believe that they are at odds with each other.

The Consultation Paper talks about considering the use of Higher Power for Amateurs who wish to do EME or special case considerations on a case by case basis. This would require these users to be classified under the Scientific Apparatus Licence regime at \$600 for 12 months.

But in the proposed Class Licence LCD it states that Amateurs can use higher power as long as they meet the APANSA requirements and satisfy the Power Compliance Level 2 as defined by the ACMA.

Very confusing !!!!!

### **My Conclusion to the Proposals**

Again I would like to thank the ACMA for listening to my comments on the Proposal Papers.

I truly believe we should not be moving away from our Apparatus Licencing unless RFI safeguards can be met, Call sign management issues can be

solved, Equipment type clarified, Issuing of real Certified Licences and the "No Worse Off Test" can be applied.

The higher power debate is a total distraction (which seems to be working) and a totally separate issue to Class Licencing proposal and should not have been included with this proposal.

Finally to quote the ACMA's own document "Proposed changes to the class License" paper dated 9/3/21. The quote from this document was describing the Class Licence category and reads "**This makes the class license useful for authorising the use of the spectrum by 'unaware' users (end-users who are unaware of their use of the spectrum)**". This licence category obviously does not fit the classification, description or licencing for Amateur radio in Australia.

Yours Faithfully

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