## AMATEUR RADIO

COMMUNICATION

TECHNOLOGY SCIENCE DISASTER COMMUNICATION

South African Radio League

National Body for Amateur Radio in South Africa

Member of the International Amateur Radio Union



# THE NATIONAL RADIO FREQUENCY PLAN –

### **Amateur Radio allocations**

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#### AMATEUR FREQUENCY BAND 472 - 479 kHz

Amateur 5.80a - the SARL requests that the maximum power of 5 w eirp be retained as in annexure I of the 2015 Radio Frequency Regulations.

## **Amateur Frequency Band 1810 - 1850 kHz**

The SARL request that the band 1810 – 2000 kHz be retained as in annexure I of the 2015 Radio frequency Regulations. The increase in the band was agreed during various workshops and discussions between the SARL and ICASA.

- In many countries the amateur allocation covers 1 810 2 000 kHz.
- The ITU allocated 1 810 2 000 kHz to the amateur service in Region 1.

## **Amateur Frequency Band 1810 - 1850 kHz**

- Much about ionospheric and propagation on 160 metres is still not completely understood.
- Phenomena such as "chordal hop" propagation are frequently observed, as well as other unexplained long-distance propagation mechanisms.
- Inexplicable radio blackouts sometimes encountered on the AM broadcast band also occur on 160 metres.
- Many of these phenomena have been investigated in the scientific community, while radio amateurs continue to be in a unique position to further investigate such fascinating mysteries

The SARL request that ICASA allocate 5350 – 5450 kHz to radio amateurs in South Africa on a secondary basis and to encourage SADC countries to do the same and to maintain the allocation 5290 kHz for Propagation research beacons.

#### **WRC15**

- South Africa's position for WRC15 was the allocation of 5350 5450 kHz
- SA motivated SADC and ultimately it became the Africa position
- It was the Russian block that created many obstacles and ultimate a compromised position was reached. The Agenda item was not voted on
- Many countries have decided on their own allocation based on spectrum availability.

- The 5MHz band is well suited for Near Vertical Incidence Sky wave (NVIS) propagation of HF radio waves over short distances without the intervention of the skip which is generally associated with HF communication.
- Currently the beacon network operates on 5290 kHz a frequency licensed and sponsored by ICASA and consists of a number of automated unattended beacons while a number of radio amateurs will switch on their radios during times when they are available and then act as beacons.

#### **PROPOSAL**

- The SARL proposes to ICASA to maintain the frequency 5290 kHz so that the studies may be continued throughout the current solar cycle and the beginning of the next cycle to plot what effect the level of the sunspot count may have on propagation.
- In addition the SARL requests ICASA to follow the example of the Netherlands and other countries to allocate 5350 – 5450 kHz to radio amateurs in South Africa on a secondary basis and to encourage SADC countries to do the same.
- The SARL has also proposed a power limit of 26 dBW which is the power level most amateur radio transceivers available on the South African market deliver.

## Amateur Frequency Band 40.675 – 40.685 MHz

Current allocation as listed in Annexure I of the 2015 Radio Frequency Regulation. The SARL requests ICASA to keep this allocation as an Amateur allocation.

## Amateur Frequency Band 75 500 – 76 000 GHz

Missed from the proposed table. Current allocated to amateur as in annexure I of the 2015 Radio Frequency Regulations. The SARL requests that this be added. (Retained)

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Thank you for the opportunity to be part of the discussion

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