

# Radio Frequency Exposure Rules Effective May 3, 2021

Jason Skretta, KC0EDE

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Story County Amateur Radio Club

# Overview

- FCC document 19-126 A1 (aprx. 160 pages)
- No changes to existing limits
- Stations in all services, including amateur radio, need to be evaluated against existing limits, unless exempt
- Existing stations must complete evaluation by May 3, 2023
- New stations (established after May 3, 2021) or modified stations need to complete evaluation before going on the air
  - Modified means altered in such a way as to affect the RF exposure profile, such as increased power or a moving an antenna

# Main Points

- Amateur Service no longer categorically excluded
- No longer able to avoid performing an assessment just by transmitting at low power levels
- Every ham must perform some calculation/evaluation
  - either determine if they qualify for an exemption
  - or perform a full exposure assessment
- Nothing needs to go to FCC, file your papers for your own records
- Those who have performed an exposure assessment in the past have nothing further to do

# ARRL Resources

- ARRL has stated that ARRL Lab staff are available to help make these determinations and to help perform calculations if needed
- Visit <http://www.arrl.org/rf-exposure>
- Free book “RF Safety and You” can be downloaded
  - link [http://www.arrl.org/files/file/Technology/RFsafetyCommittee/RF Exposure and You.pdf](http://www.arrl.org/files/file/Technology/RFsafetyCommittee/RF%20Exposure%20and%20You.pdf)
  - no changes to underlying rules, so the charts and calculations in the book are still accurate and valid, as are the instructions regarding how to perform routine station evaluations
- FAQ <http://www.arrl.org/files/file/Technology/RFsafetyCommittee/RFXFAQ.pdf>

# exemption

- determine if you qualify for an exemption
  - i Transmit less than 1mW
  - ii Specific Absorption Rate (SAR)
    - 0.5cm – 40cm distance and 300MHz to 6GHz
  - iii Maximum Permissible Exposure (MPE)

# assessment

- perform an exposure assessment
- ARRL <http://www.arrl.org/rf-exposure-calculator>
- RSGB <https://rsgb.org/main/technical/emc/emf-exposure/>

Questions

