

**Chapter 7.0 Safety**  
**Section 7.2 RF Exposure**

G0A01 (A) p.267

What is one way that RF energy can affect human body tissue?

- A. It heats body tissue
- B. It causes radiation poisoning
- C. It causes the blood count to reach a dangerously low level
- D. It cools body tissue

G0A02 (D) p.268

Which of the following properties is important in estimating whether an RF signal exceeds the maximum permissible exposure (MPE)?

- A. Its duty cycle
- B. Its frequency
- C. Its power density
- D. All of these choices are correct

G0A03 (D) p.270 [97.13(c)(1)]

How can you determine that your station complies with FCC RF exposure regulations?

- A. By calculation based on FCC OET Bulletin 65
- B. By calculation based on computer modeling
- C. By measurement of field strength using calibrated equipment
- D. All of these choices are correct

G0A04 (D) p.269

What does "time averaging" mean in reference to RF radiation exposure?

- A. The average amount of power developed by the transmitter over a specific 24 hour period
- B. The average time it takes RF radiation to have any long-term effect on the body
- C. The total time of the exposure
- D. The total RF exposure averaged over a certain time

G0A05 (A) p.270

What must you do if an evaluation of your station shows RF energy radiated from your station exceeds permissible limits?

- A. Take action to prevent human exposure to the excessive RF fields
- B. File an Environmental Impact Statement (EIS-97) with the FCC
- C. Secure written permission from your neighbors to operate above the controlled MPE limits
- D. All of these choices are correct

G0A06 (D) p.263

What precaution should be taken when installing a ground-mounted antenna?

- A. It should not be installed higher than you can reach
- B. It should not be installed in a wet area
- C. It should be limited to 10 feet in height
- D. It should be installed such that it is protected against unauthorized access

G0A07 (A) p.269

What effect does transmitter duty cycle have when evaluating RF exposure?

- A. A lower transmitter duty cycle permits greater short-term exposure levels
- B. A higher transmitter duty cycle permits greater short-term exposure levels
- C. Low duty cycle transmitters are exempt from RF exposure evaluation requirements
- D. High duty cycle transmitters are exempt from RF exposure requirements

G0A08 (C) p.269

Which of the following steps must an amateur operator take to ensure compliance with RF safety regulations when transmitter power exceeds levels specified in FCC Part 97.13?

- A. Post a copy of FCC Part 97.13 in the station
- B. Post a copy of OET Bulletin 65 in the station
- C. Perform a routine RF exposure evaluation
- D. All of these choices are correct

G0A09 (B) p.270

What type of instrument can be used to accurately measure an RF field?

- A. A receiver with an S meter
- B. A calibrated field strength meter with a calibrated antenna
- C. An SWR meter with a peak-reading function
- D. An oscilloscope with a high-stability crystal marker generator

G0A10 (D) p.270

What is one thing that can be done if evaluation shows that a neighbor might receive more than the allowable limit of RF exposure from the main lobe of a directional antenna?

- A. Change to a non-polarized antenna with higher gain
- B. Post a warning sign that is clearly visible to the neighbor
- C. Use an antenna with a higher front-to-back ratio
- D. Take precautions to ensure that the antenna cannot be pointed in their direction

G0A11 (C) p.269

What precaution should you take if you install an indoor transmitting antenna?

- A. Locate the antenna close to your operating position to minimize feed line radiation
- B. Position the antenna along the edge of a wall to reduce parasitic radiation
- C. Make sure that MPE limits are not exceeded in occupied areas
- D. Make sure the antenna is properly shielded