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# Technician Question Pool

## July 2018 to June 2022

### The MORE Project

<http://n2re.org/m-o-r-e-project>

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# Station Equipment

## No-Nonsense pages 62 - 64

**Common transmitter and receiver problems:  
symptoms of overload and overdrive; distortion;  
causes of interference; interference and  
consumer electronics; part 15 devices; over-  
modulation; RF feedback; off frequency signals**

As Murphy's Law - *if anything can go wrong, it will* -  
applies to amateur radio as well as other pursuits, at  
some point you likely will encounter problems, such  
as overload, distortion, feedback and interference.



# T7B03

Which of the following can cause radio frequency interference?

- A. Fundamental overload
- B. Harmonics
- C. Spurious emissions
- D. All of these choices are correct



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FCC Tech 7/18 to 6/22  
Tx and Rx Problems

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# T7B06

Which of the following actions should you take if a neighbor tells you that your station's transmissions are interfering with their radio or TV reception?

- A. Make sure that your station is functioning properly and that it does not cause interference to your own radio or television when it is tuned to the same channel
- B. Immediately turn off your transmitter and contact the nearest FCC office for assistance
- C. Tell them that your license gives you the right to transmit and nothing can be done to reduce the interference
- D. Install a harmonic doubler on the output of your transmitter and tune it until the interference is eliminated





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# T7B12

What should be the first step to resolve cable TV interference from your ham radio transmission?

- A. Add a low-pass filter to the TV antenna input
- B. Add a high-pass filter to the TV antenna input
- C. Add a preamplifier to the TV antenna input
- D. Be sure all TV coaxial connectors are installed properly



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# T7B02

What would cause a broadcast AM or FM radio to receive an amateur radio transmission unintentionally?

- A. The receiver is unable to reject strong signals outside the AM or FM band
- B. The microphone gain of the transmitter is turned up too high
- C. The audio amplifier of the transmitter is overloaded
- D. The deviation of an FM transmitter is set too low



# T7B02

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# T7B05

How can overload of a non-amateur radio or TV receiver by an amateur signal be reduced or eliminated?

- A. Block the amateur signal with a filter at the antenna input of the affected receiver
- B. Block the interfering signal with a filter on the amateur transmitter
- C. Switch the transmitter from FM to SSB
- D. Switch the transmitter to a narrow-band mode



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# T7B07

Which of the following can reduce overload to a VHF transceiver from a nearby FM broadcast station?

- A. RF preamplifier
- B. Double-shielded coaxial cable
- C. Using headphones instead of the speaker
- D. Band-reject filter





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# T7B04

Which of the following is a way to reduce or eliminate interference from an amateur transmitter to a nearby telephone?

- A. Put a filter on the amateur transmitter
- B. Reduce the microphone gain
- C. Reduce the SWR on the transmitter transmission line
- D. Put an RF filter on the telephone



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# T7B09

What is a Part 15 device?

- A. An unlicensed device that may emit low-powered radio signals on frequencies used by a licensed service
- B. An amplifier that has been type-certified for amateur radio
- C. A device for long-distance communications using special codes sanctioned by the International Amateur Radio Union
- D. A type of test set used to determine whether a transmitter complies with FCC regulation 91.15



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# T7B08

What should you do if something in a neighbor's home is causing harmful interference to your amateur station?

- A. Work with your neighbor to identify the offending device
- B. Politely inform your neighbor about the rules that prohibit the use of devices that cause interference
- C. Check your station and make sure it meets the standards of good amateur practice
- D. All of these choices are correct



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# T7B10

What might be a problem if you receive a report that your audio signal through the repeater is distorted or unintelligible?

- A. Your transmitter is slightly off frequency
- B. Your batteries are running low
- C. You are in a bad location
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# T7B11

What is a symptom of RF feedback in a transmitter or transceiver?

- A. Excessive SWR at the antenna connection
- B. The transmitter will not stay on the desired frequency
- C. Reports of garbled, distorted, or unintelligible voice transmissions
- D. Frequent blowing of power supply fuses





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# T7B01

What can you do if you are told your FM handheld or mobile transceiver is over-deviating?

- A. Talk louder into the microphone
- B. Let the transceiver cool off
- C. Change to a higher power level
- D. Talk farther away from the microphone



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A non-profit initiative by the IEEE and ARDC to increase the numbers of youth (12-18) and non-males in Amateur Radio. Participants earn FCC licenses and receive free 2-way radios.

For MORE information: [n2re.org/m-o-r-e-project](http://n2re.org/m-o-r-e-project)  
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