



Technician License Course  
Chapter 8  
Lesson Module 19:  
Operating Regulations:  
Interference; Remote & Automatic  
Operation; Prohibited Transmissions



**ARRL** *The national association for  
AMATEUR RADIO*

# Interference

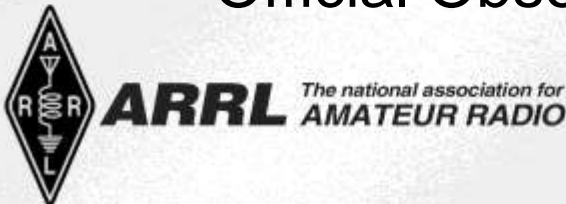
Operators should try to avoid interfering with other users of a frequency. Hams usually use Q-Signals (even on voice) to describe interference.

QRN – Natural interference

- Thunderstorms.
- Geomagnetic disturbances.

QRM – Man-made (includes appliances and power lines).

- Interference from stations close in frequency.
- Other hams or other users of the frequency.
- May be unintentional.
- Intentional QRM should be ignored but FCC or Official Observers may be notified.



# Types of Interference

Interference may prevent you from receiving a signal.  
Noise and signals on adjacent frequencies are normal.

- *Harmful Interference* seriously degrades, obstructs, or interrupts the communications of a regulated service.
  - Improperly adjusted or defective equipment
  - Signals from other stations in the same service.
- *Willful Interference* is the intentional creation of harmful interference by another station.
  - Is never allowed
  - Usually unidentified
  - Best to ignore it and carry on or change frequency



# Handling Interference

You will encounter interference and you may occasionally cause interference. You can facilitate communications by remembering a few rules.

- Use common sense and courtesy.
- Keep equipment in proper operating order.
- No one owns a frequency – be a good neighbor and share.
- Yield to special operations and special circumstances.
- Report suspected intentional interference to FCC but don't discuss or threaten on the air.



# Prohibited Transmissions

Unidentified transmissions .

- not giving your call sign

False or deceptive signals.

- using someone else's call sign

False distress or emergency signals.

- fake calls for help

Obscene or indecent speech.

- up to interpretation

Music.

Communications which could (and should) be provided by another radio service.



# No Business Communications

Normally you cannot receive compensation for the use of transmissions made via ham radio. There are some exceptions and special circumstances covered in the FCC rules.

- Advertising **your** ham radio gear for sale or trade is okay as long as it's not your regular business
- Employees can not be paid for operating, but
- An employer's radio may be operated by ham employees during drills and tests or by ARRL staff while sending bulletins.
- Teachers may be paid to use ham radio in their classrooms incidental to instruction.



# No Encrypted Transmissions

Encryption involves encoding information for transmission that must be decoded upon reception to interpret the information. This is okay if:

- Coding is open source.
- Intention is not to hide the message or deceive.
- Used for radio control or control transmissions to a spacecraft to avoid unauthorized control or detection.





# No Broadcasting

Broadcasting is sending one-way transmissions for reception by the general public.

- News – Hams may not participate in news gathering.
- You may send reports to other amateur stations as part of a communication but not on a regular basis.

Music is prohibited unless incidental to an authorized re-transmission.

There are some allowed one-way transmissions:

- Code practice.
- Ham radio related bulletins.
- Re-transmission of shuttle communications.





# Special Circumstances

Ham communication is generally intended for hams and from a location under your control.

You must have permission before transmitting from a ship or aircraft when you are a passenger.

You can not use the ship or aircraft equipment for amateur radio.

RACES stations may communicate with government stations during emergencies.

During declared emergencies, government stations may communicate with hams on amateur frequencies.

FCC permits communications with military affiliated stations on Armed Forces Day in May.

Normal rules return when the situation returns to normal.



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