



# 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. Q-Signals QRN and QRM describe interference:

QRN – Natural interference

- Thunderstorms.
- Geomagnetic disturbances.

QRM – Man-made

- Interference from appliances and power lines.
- Interference from stations close in frequency.
- QRM is usually unintentional.
- Avoid arguments with intentional QRM'ers.



# 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.
- *Willful Interference* is the intentional creation of harmful interference by another station.
  - 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 using a call sign

False or deceptive signals using someone else's call sign

False distress or emergency signals.

Obscene or indecent speech.

- up to interpretation

Playing Music for broadcast.

Communications which should be provided by another radio service.



# No Business Communications

Normally you cannot receive compensation for transmissions made via ham radio. 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 while using ham radio in their classrooms incidental to instruction.



# No Encrypted Transmissions

Encryption involves encoding information for transmission so that it must be decrypted for reception. Encryption is allowed 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

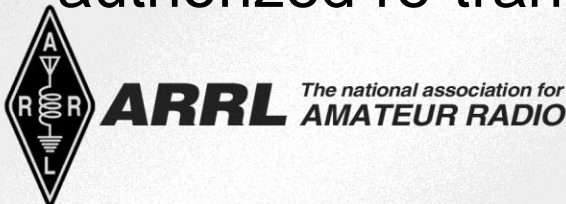
Broadcasting (sending one-way transmissions for reception by the general public) is prohibited.

- 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.

There are some allowed one-way transmissions:

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

Playing music is prohibited unless incidental to an authorized re-transmission.





# 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 generally 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.

