

Technician Licensing Class

Mind the Rules

Presented by

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Amateur Radio Technician Class Element 2 Course Presentation

➤ **ELEMENT 2 SUB-ELEMENTS** (Groupings)

- **About Ham Radio**
- **Call Signs**
- **Control**
- **Mind the Rules**
- **Tech Frequencies**
- **Your First Radio**
- **Going On The Air!**
- **Repeaters**
- **Emergency!**
- **Weak Signal Propagation**

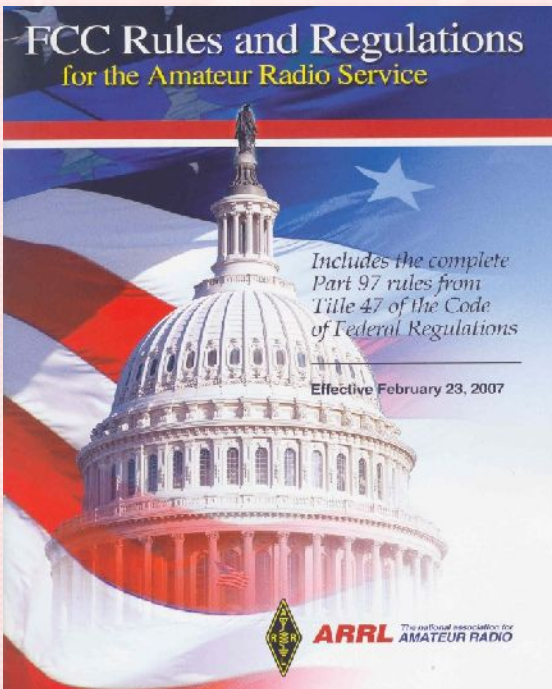
Amateur Radio Technician Class Element 2 Course Presentation

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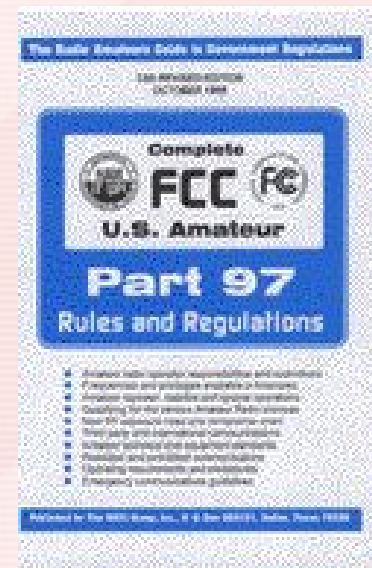
- **Talk to Outer Space!**
- **Your Computer Goes Ham Digital!**
- **Multi-Mode Radio Excitement**
- **Run Some Interference Protection**
- **Electrons - Go With the Flow!**
- **It's the Law, per Mr. Ohm!**
- **Go Picture These!**
- **Antennas**
- **Feed Me with Some Good Coax!**
- **Safety First!**

Mind the Rules

- T1A3 Part 97 of the FCC rules contains the rules and regulations governing the Amateur Radio Service.



FCC governs Amateur Radio Service



Part 97 Amateur Radio regulations are contained in Title-47 Telecommunication.

Mind the Rules

- T1D6 Transmissions that contain obscene or indecent words or language are prohibited.
 - Absolutely not allowed = indecent and obscene language
- T2A11 FCC rules regarding power levels used in the amateur bands state that an amateur must use the minimum transmitter power necessary to carry out the desired communication.



Amateur accepted simplex frequencies



Use the minimum amount of power output to make contact with another station

Mind the Rules

- T1D10 Transmissions intended for reception by the general public is the meaning of the term broadcasting in the FCC rules for the amateur services.
- T1D9 Amateur stations are authorized to transmit signals related to broadcasting, program production, or news gathering, assuming no other means is available only where such communications directly relate to the immediate safety of human life or protection of property.
 - Protecting lives and property
- T1D11 Brief transmissions to make station adjustments is a type of communications permitted in the Amateur Radio Service.

Mind the Rules

- T1A4 Any transmission that seriously degrades, obstructs, or repeatedly interrupts a radio communication service operating in accordance with the Radio Regulations is defined by the FCC as harmful interference.
- T1D3 The transmission of codes or ciphers is allowed to hide the meaning of a message transmitted by an amateur station only when transmitting control commands to space stations or radio control craft.



Space
station



Radio
control
craft

Mind the Rules

- T1D4 The only time an amateur station is authorized to transmit music is when it is incidental to an authorized retransmission of manned spacecraft communications.



Music in the background at your station is not permitted.

- T1D5 Amateur radio operators may use their stations to notify other amateurs of the availability of equipment for sale or trade when the equipment is normally used in an amateur station and such activity is not conducted on a regular basis.

Mind the Rules

- T1F13 Any time upon request by an FCC representative is when the station licensee must make the station and its records available for FCC inspection.
- T1C7 Revocation of the station license or suspension of the operator license may result when correspondence from the FCC is returned as undeliverable because the grantee failed to provide the correct mailing address.

The FCC has suspended two Amateur Radio licenses because the holders had failed to maintain correct mailing addresses in the Commission's licensee database.

Special Counsel in the FCC Spectrum Enforcement Division Riley Hollingsworth wrote **Larry L. Smith, KC7LJR, of Middleton, Idaho, and Larry J. Maniag, KD7JTG, of Payson, Arizona**, on June 28, 2006 to inform them the FCC was suspending their Technician tickets for the remainder of their license terms or until each licensee provides a valid mailing address.

<http://www.arrl.org/news/stories/2006/07/18/100/>

Element 2 Technician Class Question Pool

Mind the Rules

Valid July 1, 2010

Through

June 30, 2014



T1A03

Which part of the FCC rules contains the rules and regulations governing the Amateur Radio Service?

- A. Part 73
- B. Part 95
- C. Part 90
- D. Part 97

T1D06 Which of the following types of transmissions are prohibited?

- A. Transmissions that contain obscene or indecent words or language
- B. Transmissions to establish one-way communications
- C. Transmissions to establish model aircraft control
- D. Transmissions for third party communications

T2A11 What are the FCC rules regarding power levels used in the amateur bands?

- A. Always use the maximum power allowed to ensure that you complete the contact
- B. An amateur may use no more than 200 watts PEP to make an amateur contact
- C. An amateur may use up to 1500 watts PEP on any amateur frequency
- D. An amateur must use the minimum transmitter power necessary to carry out the desired communication

T1D10

What is the meaning of the term broadcasting in the FCC rules for the amateur services?

- A. Two-way transmissions by amateur stations
- B. Transmission of music
- C. Transmission of messages directed only to amateur operators
- D. Transmissions intended for reception by the general public

T1D09

Under which of the following circumstances are amateur stations authorized to transmit signals related to broadcasting, program production, or news gathering, assuming no other means is available?

- A. Only where such communications directly relate to the immediate safety of human life or protection of property
- B. Only when broadcasting communications to or from the space shuttle.
- C. Only where noncommercial programming is gathered and supplied exclusively to the National Public Radio network
- D. Only when using amateur repeaters linked to the Internet

T1D11 Which of the following types of communications are permitted in the Amateur Radio Service?

- A. Brief transmissions to make station adjustments
- B. Retransmission of entertainment programming from a commercial radio or TV station
- C. Retransmission of entertainment material from a public radio or TV station
- D. Communications on a regular basis that could reasonably be furnished alternatively through other radio services

T1A04 Which of the following meets the FCC definition of harmful interference?

- A. Radio transmissions that annoy users of a repeater
- B. Unwanted radio transmissions that cause costly harm to radio station apparatus
- C. That which seriously degrades, obstructs, or repeatedly interrupts a radio communication service operating in accordance with the Radio Regulations
- D. Static from lightning storms

T1D03

When is the transmission of codes or ciphers allowed to hide the meaning of a message transmitted by an amateur station?

- A. Only during contests
- B. Only when operating mobile
- C. Only when transmitting control commands to space stations or radio control craft
- D. Only when frequencies above 1280 MHz are used

T1D04 What is the only time an amateur station is authorized to transmit music?

- A.** When incidental to an authorized retransmission of manned spacecraft communications
- B.** When the music produces no spurious emissions
- C.** When the purpose is to interfere with an illegal transmission
- D.** When the music is transmitted above 1280 MHz

T1D05

When may amateur radio operators use their stations to notify other amateurs of the availability of equipment for sale or trade?

- A. When the equipment is normally used in an amateur station and such activity is not conducted on a regular basis
- B. When the asking price is \$100.00 or less
- C. When the asking price is less than its appraised value
- D. When the equipment is not the personal property of either the station licensee or the control operator or

T1F13

When must the station licensee make the station and its records available for FCC inspection?

- A. Any time upon request by an official observer
- B. Any time upon request by an FCC representative
- C. 30 days prior to renewal of the station license
- D. 10 days before the first transmission

T1C07 What may result when correspondence from the FCC is returned as undeliverable because the grantee failed to provide the correct mailing address?

- A.** Fine or imprisonment
- B.** Revocation of the station license or suspension of the operator license
- C.** Require the licensee to be re-examined
- D.** A reduction of one rank in operator class