
Technician Question Pool

July 2022 to June 2026

The MORE Project

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



Operating Procedures

No-Nonsense pages 102 - 104

Amateur Satellite Operation

Making contacts via amateur radio satellites and other space stations is one of the coolest things a ham can do. As a Technician Class licensee, you will have the privileges to do this.



T1B02

Which amateurs may contact the International Space Station (ISS) on VHF bands?

- A. Any amateur holding a General class or higher license
- B. Any amateur holding a Technician class or higher license
- C. Any amateur holding a General class or higher license who has applied for and received approval from NASA
- D. Any amateur holding a Technician class or higher license who has applied for and received approval from NASA



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T8B08

What is meant by the statement that a satellite is operating in mode U/V?

- A. The satellite uplink is in the 15 meter band and the downlink is in the 10 meter band
- B. The satellite uplink is in the 70 centimeter band and the downlink is in the 2 meter band
- C. The satellite operates using ultraviolet frequencies
- D. The satellite frequencies are usually variable



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T8B04

What mode of transmission is commonly used by amateur radio satellites?

- A. SSB
- B. FM
- C. CW/data
- D. All these choices are correct



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T8B02

What is the impact of using excessive effective radiated power on a satellite uplink?

- A. Possibility of commanding the satellite to an improper mode
- B. Blocking access by other users
- C. Overloading the satellite batteries
- D. Possibility of rebooting the satellite control computer



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T8B12

Which of the following is a way to determine whether your satellite uplink power is neither too low nor too high?

- A. Check your signal strength report in the telemetry data
- B. Listen for distortion on your downlink signal
- C. Your signal strength on the downlink should be about the same as the beacon
- D. All these choices are correct



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T8B10

What is a LEO satellite?

- A. A sun synchronous satellite
- B. A highly elliptical orbit satellite
- C. A satellite in low energy operation mode
- D. A satellite in low earth orbit



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T8B05

What is a satellite beacon?

- A. The primary transmit antenna on the satellite
- B. An indicator light that shows where to point your antenna
- C. A reflective surface on the satellite
- D. A transmission from a satellite that contains status information



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- B. An indicator light that shows where to point your antenna
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T8B01

What telemetry information is typically transmitted by satellite beacons?

- A. The signal strength of received signals
- B. Time of day accurate to plus or minus 1/10 second
- C. Health and status of the satellite
- D. All of these choices are correct



T8B01

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- A. The signal strength of received signals
- B. Time of day accurate to plus or minus 1/10 second
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- D. All of these choices are correct



T8B11

Who may receive telemetry from a space station?

- A. Anyone
- B. A licensed radio amateur with a transmitter equipped for interrogating the satellite
- C. A licensed radio amateur who has been certified by the protocol developer
- D. A licensed radio amateur who has registered for an access code from AMSAT



T8B11

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T8B03

Which of the following are provided by satellite tracking programs?

- A. Maps showing the real-time position of the satellite track over the earth
- B. The time, azimuth, and elevation of the start, maximum altitude, and end of a pass
- C. The apparent frequency of the satellite transmission, including effects of Doppler shift
- D. All these choices are correct



T8B03

Which of the following are provided by satellite tracking programs?

- A. Maps showing the real-time position of the satellite track over the earth
- B. The time, azimuth, and elevation of the start, maximum altitude, and end of a pass
- C. The apparent frequency of the satellite transmission, including effects of Doppler shift
- D. All these choices are correct**



T8B06

Which of the following are inputs to a satellite tracking program?

- A. The satellite transmitted power
- B. The Keplerian elements
- C. The last observed time of zero Doppler shift
- D. All these choices are correct



OP4 Q11 of 13

T8B06

Which of the following are inputs to a satellite tracking program?

- A. The satellite transmitted power
- B. The Keplerian elements**
- C. The last observed time of zero Doppler shift
- D. All these choices are correct



T8B07

What is Doppler shift in reference to satellite communications?

- A. A change in the satellite orbit
- B. A mode where the satellite receives signals on one band and transmits on another
- C. An observed change in signal frequency caused by relative motion between the satellite and Earth station
- D. A special digital communications mode for some satellites



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T8B07

What is Doppler shift in reference to satellite communications?

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- B. A mode where the satellite receives signals on one band and transmits on another
- C. An observed change in signal frequency caused by relative motion between the satellite and Earth station**
- D. A special digital communications mode for some satellites



T8B09

What causes spin fading of satellite signals?

- A. Circular polarized noise interference radiated from the sun
- B. Rotation of the satellite and its antennas
- C. Doppler shift of the received signal
- D. Interfering signals within the satellite uplink band



OP4 Q13 of 13

T8B09

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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
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