

Amateur Extra – The Right Answers

Chapter Two – Operating Practices

E2C01. Which of the following is true about contest operating?

Operators are permitted to make contacts even if they do not submit a log

E2C02. Which of the following best describes the term self-spotting in regards to contest operating?

The generally prohibited practice of posting one's own call sign and frequency on a spotting network

E2C03. From which of the following bands is amateur radio contesting generally excluded?

30 m

E2C04. What type of transmission is most often used for a ham radio mesh network?

Spread spectrum in the 2.4 GHz band

E2C05. What is the function of a DX QSL Manager?

To handle the receiving and sending of confirmation cards for a DX station

E2C06. During a VHF/UHF contest, in which band segment would you expect to find the highest level of activity?

In the weak signal segment of the band, with most of the activity near the calling frequency

E2C07. What is the Cabrillo format?

A standard for submission of electronic contest logs

E2C08. Which of the following contacts may be confirmed through the U.S. QSL bureau system?

Contacts between a U.S. station and a non-U.S. station

E2C10. Why might a DX station state that they are listening on another frequency?

Because the DX station may be transmitting on a frequency that is prohibited to some responding stations

To separate the calling stations from the DX station

To improve operating efficiency by reducing interference

E2C11. How should you generally identify your station when attempting to contact a DX station during a contest or in a pileup?

Send your full call sign once or twice

E2C12. What might help to restore contact when DX signals become too weak to copy across an entire HF band a few hours after sunset?

Switch to a lower frequency HF band

E2C13. What indicator is required to be used by U.S.-licensed operators when operating a station via remote control where the transmitter is located in the U.S.?

No additional indicator is required

E2A14. What technology is used to track, in real time, balloons carrying amateur radio transmitters?

APRS

E2D04. What is the purpose of digital store-and-forward functions on an Amateur Radio satellite?

To store digital messages in the satellite for later download by other stations

E2D05. Which of the following techniques is normally used by low Earth orbiting digital satellites to relay messages around the world?

Store-and-forward

E2D07. What digital protocol is used by APRS?

AX.25

E2D08. What type of packet frame is used to transmit APRS beacon data?

Unnumbered Information

E2D10. How can an APRS station be used to help support a public service communications activity?

An APRS station with a GPS unit can automatically transmit information to show a mobile station's position during the event

E2D11. Which of the following data are used by the APRS network to communicate your location?

Latitude and longitude

E2A01. What is the direction of an ascending pass for an amateur satellite?

From south to north

E2A02. What is the direction of a descending pass for an amateur satellite?

From north to south

E2A03. What is the orbital period of an Earth satellite?

The time it takes for a satellite to complete one revolution around the Earth

E2A04. What is meant by the term mode as applied to an amateur radio satellite?

The satellite's uplink and downlink frequency bands

E2A05. What do the letters in a satellite's mode designator specify?

The uplink and downlink frequency ranges

E2A06. On what band would a satellite receive signals if it were operating in mode U/V?

435 - 438 MHz

E2A07. Which of the following types of signals can be relayed through a linear transponder?

**FM and CW
SSB and SSTV
PSK and Packet**

E2A08. Why should effective radiated power to a satellite which uses a linear transponder be limited?

To avoid reducing the downlink power to all other users

E2A09. What do the terms L band and S band specify with regard to satellite communications?

The 23 centimeter and 13 centimeter bands

E2A10. Why may the received signal from an amateur satellite exhibit a rapidly repeating fading effect?

Because the satellite is spinning

E2A11. What type of antenna can be used to minimize the effects of spin modulation and Faraday rotation?

A circularly polarized antenna

E2A12. What is one way to predict the location of a satellite at a given time?

By calculations using the Keplerian elements for the specified satellite

E2A13. What type of satellite appears to stay in one position in the sky?

Geostationary