## **Technician Question Pool July 2018 to June 2022**

#### **The MORE Project**

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



# **Operating Procedures No-Nonsense pages 67 - 69**

#### **FM Operation**

This section addresses the types of operations that typically occur with VHF/UHF FM transceivers and repeaters in amateur radio.



FCC Tech 7/18 to 6/22 FM Operation

#### **T1F09**

What type of amateur station simultaneously retransmits the signal of another amateur station on a different channel or channels?

- A. Beacon station
- B. Earth station
- C. Repeater station
- D. Message forwarding station



FCC Tech 7/18 to 6/22 FM Operation OP1 Q1 of 15

#### **T1F09**

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- **B.** Earth station
- **C. Repeater station**
- D. Message forwarding station



FCC Tech 7/18 to 6/22 FM Operation OP1 A1 of 15

## **T1D07**

What types of amateur stations can automatically retransmit the signals of other amateur stations?

A. Auxiliary, beacon, or Earth stations
B. Repeater, auxiliary, or space stations
C. Beacon, repeater, or space stations
D. Earth, repeater, or space stations



FCC Tech 7/18 to 6/22 FM Operation OP1 Q2 of 15

## **T1D07**

What types of amateur stations can automatically retransmit the signals of other amateur stations?

A. Auxiliary, beacon, or Earth stations
B. Repeater, auxiliary, or space stations
C. Beacon, repeater, or space stations
D. Earth, repeater, or space stations



FCC Tech 7/18 to 6/22 FM Operation OP1 A2 of 15

Which of the following describes a linked repeater network?

A. A network of repeaters where signals received by one repeater are repeated by all the repeaters
B. A repeater with more than one receiver
C. Multiple repeaters with the same owner
D. A system of repeaters linked by APRS



FCC Tech 7/18 to 6/22 FM Operation OP1 Q3 of 15

Which of the following describes a linked repeater network?

A. A network of repeaters where signals received by one repeater are repeated by all the repeaters
B. A repeater with more than one receiver
C. Multiple repeaters with the same owner
D. A system of repeaters linked by APRS



FCC Tech 7/18 to 6/22 FM Operation OP1 A3 of 15

Which of the following is a common repeater frequency offset in the 2 meter band?

A. Plus or minus 5 MHz
B. Plus or minus 600 kHz
C. Plus or minus 500 kHz
D. Plus or minus 1 MHz



FCC Tech 7/18 to 6/22 FM Operation OP1 Q4 of 15

Which of the following is a common repeater frequency offset in the 2 meter band?

A. Plus or minus 5 MHz
B. Plus or minus 600 kHz
C. Plus or minus 500 kHz
D. Plus or minus 1 MHz



FCC Tech 7/18 to 6/22 FM Operation OP1 A4 of 15

What is a common repeater frequency offset in the 70 cm band?

A. Plus or minus 5 MHzB. Plus or minus 600 kHzC. Plus or minus 500 kHzD. Plus or minus 1 MHz



FCC Tech 7/18 to 6/22 FM Operation OP1 Q5 of 15

What is a common repeater frequency offset in the 70 cm band?

#### A. Plus or minus 5 MHz

B. Plus or minus 600 kHz
C. Plus or minus 500 kHz
D. Plus or minus 1 MHz



FCC Tech 7/18 to 6/22 FM Operation OP1 A5 of 15

What term describes the use of a sub-audible tone transmitted along with normal voice audio to open the squelch of a receiver?

A. Carrier squelchB. Tone burstC. DTMFD. CTCSS



FCC Tech 7/18 to 6/22 FM Operation OP1 Q6 of 15

What term describes the use of a sub-audible tone transmitted along with normal voice audio to open the squelch of a receiver?

A. Carrier squelchB. Tone burstC. DTMFD. CTCSS



FCC Tech 7/18 to 6/22 FM Operation OP1 A6 of 15

Which of the following could be the reason you are unable to access a repeater whose output you can hear?

A. Improper transceiver offset
B. The repeater may require a proper CTCSS tone from your transceiver
C. The repeater may require a proper DCS tone from your transceiver
D. All of these choices are correct



FCC Tech 7/18 to 6/22 FM Operation OP1 Q7 of 15

Which of the following could be the reason you are unable to access a repeater whose output you can hear?

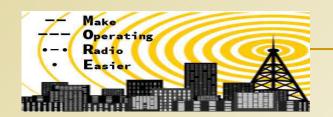
A. Improper transceiver offset
B. The repeater may require a proper CTCSS tone from your transceiver
C. The repeater may require a proper DCS tone from your transceiver
D. All of these choices are correct



FCC Tech 7/18 to 6/22 FM Operation OP1 A7 of 15

If a station is not strong enough to keep a repeater's receiver squelch open, which of the following might allow you to receive the station's signal?

A. Open the squelch on your radio
B. Listen on the repeater input frequency
C. Listen on the repeater output frequency
D. Increase your transmit power



FCC Tech 7/18 to 6/22 FM Operation OP1 Q8 of 15

If a station is not strong enough to keep a repeater's receiver squelch open, which of the following might allow you to receive the station's signal?

A. Open the squelch on your radio
B. Listen on the repeater input frequency
C. Listen on the repeater output frequency
D. Increase your transmit power



FCC Tech 7/18 to 6/22 FM Operation OP1 A8 of 15

What is the most common use of the "reverse split" function of a VHF / UHF transceiver?

- A. Reduce power output
- B. Increase power output
- C. Listen on a repeater's input frequency
- D. Listen on a repeater's output frequency



FCC Tech 7/18 to 6/22 FM Operation OP1 Q9 of 15

What is the most common use of the "reverse split" function of a VHF / UHF transceiver?

- A. Reduce power output
- **B.** Increase power output
- C. Listen on a repeater's input frequency
- D. Listen on a repeater's output frequency



FCC Tech 7/18 to 6/22 FM Operation OP1 A9 of 15

What might be the problem if a repeater user says your transmissions are breaking up on voice peaks?

A. You have the incorrect offset
B. You need to talk louder
C. You are talking too loudly
D. Your transmit power is too high



FCC Tech 7/18 to 6/22 FM Operation OP1 Q10 of 15

What might be the problem if a repeater user says your transmissions are breaking up on voice peaks?

A. You have the incorrect offset
B. You need to talk louder
C. You are talking too loudly
D. Your transmit power is too high



FCC Tech 7/18 to 6/22 FM Operation OP1 A10 of 15

What is an appropriate way to call another station on a repeater if you know the other station's call sign?

- A. Say "break, break," then say the station's call sign
- B. Say the station's call sign, then identify with your call sign
- C. Say "CQ" three times, then the other station's call sign
- D. Wait for the station to call CQ, then answer it



FCC Tech 7/18 to 6/22 FM Operation OP1 Q11 of 15

What is an appropriate way to call another station on a repeater if you know the other station's call sign?

- A. Say "break, break," then say the station's call sign
- **B. Say the station's call sign, then identify with your call sign**
- C. Say "CQ" three times, then the other station's call sign
- D. Wait for the station to call CQ, then answer it



FCC Tech 7/18 to 6/22 FM Operation OP1 A11 of 15

What brief statement indicates that you are listening on a repeater and looking for a contact?

A. The words "Hello test" followed by your call sign
B. Your call sign
C. The repeater call sign followed by your call sign
D. The letters "QSY" followed by your call sign



FCC Tech 7/18 to 6/22 FM Operation OP1 Q12 of 15

What brief statement indicates that you are listening on a repeater and looking for a contact?

A. The words "Hello test" followed by your call sign **B. Your call sign** 

C. The repeater call sign followed by your call sign

D. The letters "QSY" followed by your call sign



FCC Tech 7/18 to 6/22 FM Operation OP1 A12 of 15

What term describes an amateur station that is transmitting and receiving on the same frequency?

A. Full duplexB. DiplexC. SimplexD. Multiplex



FCC Tech 7/18 to 6/22 FM Operation OP1 Q13 of 15

What term describes an amateur station that is transmitting and receiving on the same frequency?

A. Full duplexB. DiplexC. SimplexD. Multiplex



FCC Tech 7/18 to 6/22 FM Operation OP1 A13 of 15

Why are simplex channels designated in the VHF/UHF band plans?

- A. So that stations within mutual communications range can communicate without tying up a repeater
- **B.** For contest operation
- C. For working DX only
- D. So that stations with simple transmitters can access the repeater without automated offset



FCC Tech 7/18 to 6/22 FM Operation OP1 Q14 of 15

Why are simplex channels designated in the VHF/UHF band plans?

A. So that stations within mutual communications range can communicate without tying up a repeater

- B. For contest operation
- C. For working DX only
- D. So that stations with simple transmitters can access the repeater without automated offset



FCC Tech 7/18 to 6/22 FM Operation OP1 A14 of 15

What is the national calling frequency for FM simplex operations in the 2 meter band?

A. 146.520 MHz
B. 145.000 MHz
C. 432.100 MHz
D. 446.000 MHz



FCC Tech 7/18 to 6/22 FM Operation OP1 Q15 of 15

What is the national calling frequency for FM simplex operations in the 2 meter band?

# A. 146.520 MHz B. 145.000 MHz C. 432.100 MHz D. 446.000 MHz



FCC Tech 7/18 to 6/22 FM Operation OP1 A15 of 15



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 Dr. Rebecca Mercuri, Grant Administrator, rtmercuri@ieee.org

