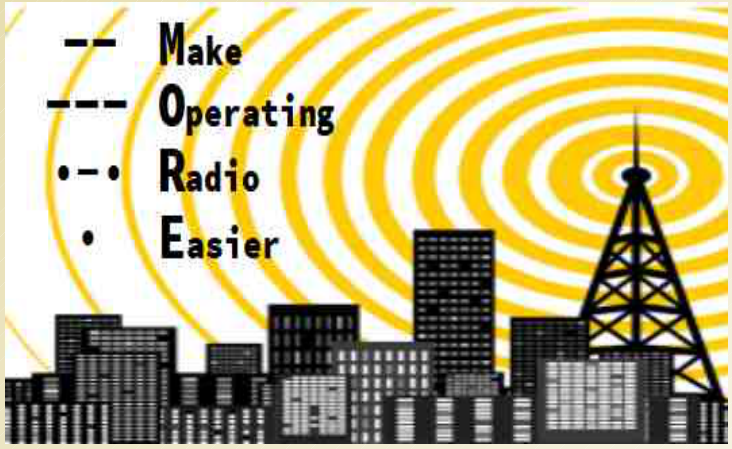
Technician Question Pool
July 2018 to June 2022

The MORE Project

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



Radio Wave Characteristics
No-Nonsense pages 31 - 32

HF Propagation

For reliable long-distance communications, amateurs use the HF frequencies. This is because HF signals bounce off of the ionosphere. This phenomenon allows amateur radio operators to contact other amateur radio stations around the world.

T3A11

Which part of the atmosphere enables the propagation of radio signals around the world?

A. The stratosphere
B. The troposphere
C. The ionosphere
D. The magnetosphere

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T3C02

Which of the following is an advantage of HF vs VHF and higher frequencies?

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B. HF accommodates wider bandwidth signals
C. Long distance ionospheric propagation is far more common on HF
D. There is less atmospheric interference (static) on HF

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A. 6 or 10 meter bands
B. 23 centimeter band
C. 70 centimeter or 1.25 meter bands
D. All of these choices are correct

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What is generally the best time for long-distance 10 meter band propagation via the F layer?

A. From dawn to shortly after sunset during periods of high sunspot activity
B. From shortly after sunset to dawn during periods of high sunspot activity
C. From dawn to shortly after sunset during periods of low sunspot activity
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T3A08

Which of the following is a likely cause of irregular fading of signals received by ionospheric reflection?

A. Frequency shift due to Faraday rotation
B. Interference from thunderstorms
C. Random combining of signals arriving via different paths
D. Intermodulation distortion

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Which of the following results from the fact that skip signals refracted from the ionosphere are elliptically polarized?

A. Digital modes are unusable
B. Either vertically or horizontally polarized antennas may be used for transmission or reception
C. FM voice is unusable
D. Both the transmitting and receiving antennas must be of the same polarization

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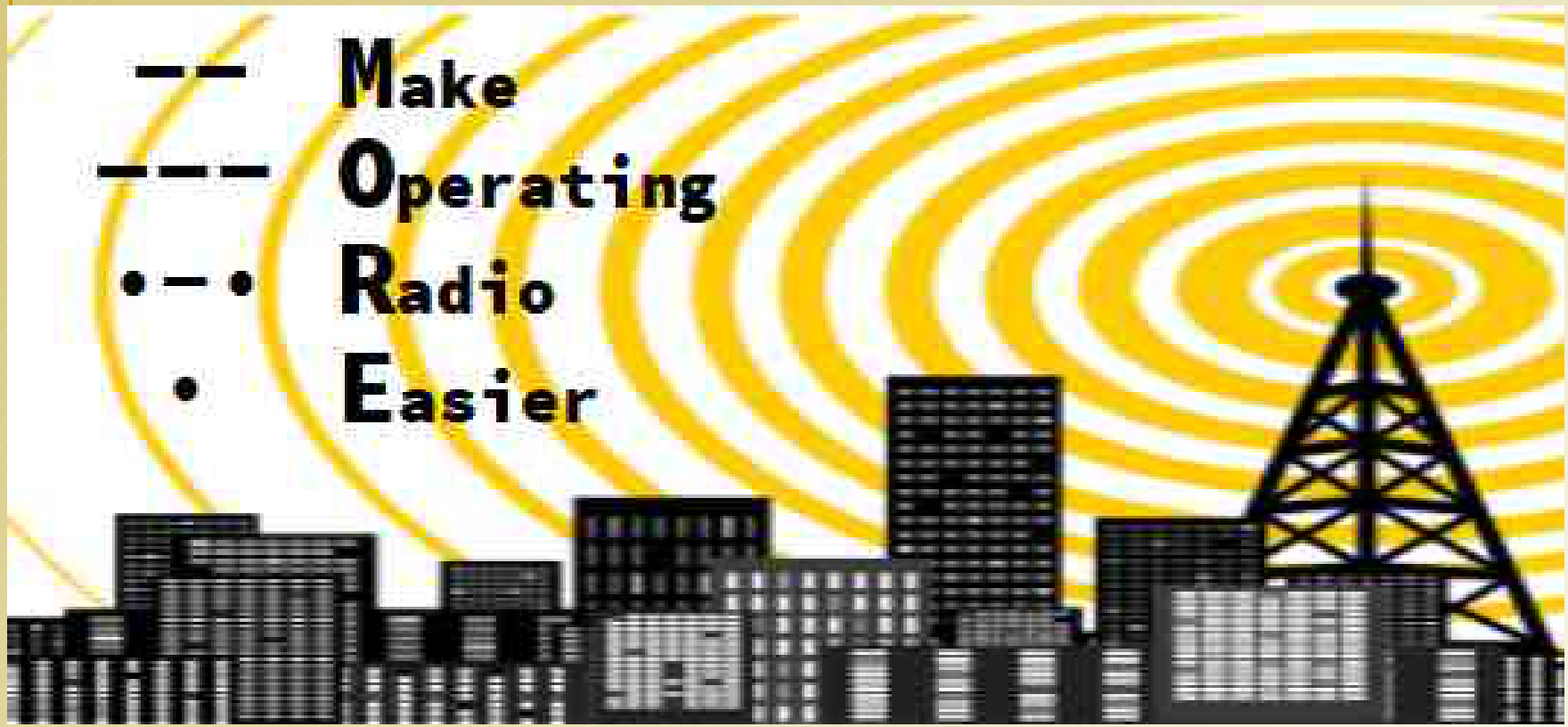

A non-profit initiative by the IEEE and ARDC to increase the numbers of youth (12-18) and non-males in Amateur Radio. Participants earn FCC licenses and receive free 2-way radios.

For MORE information: n2re.org/m-o-r-e-project
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