FCC Novice Exam Question Pool. Subelement 2H.
Signals and Emissions. 2 Question.

One (1) question must be from the following:

2H 1.1 A
Which type of emission is an INTERRUPTED CARRIER WAVE?

A. A1A
B. A3J
C. F3C
D. F2B

2H 2.1 B
What does the term BACKWAVE mean?

A. A radio wave reflected from the Ionosphere
back to the sending station.
B. A small amount of RF that a CW transmitter produces
even when the key is not closed.
C. Radio waves reflected back down the feed line
from a mismatched antenna.
D. The reflected power in a feedline.

2H 2.2 B
What is a possible cause of BACKWAVE?

A. Low voltage.
B. Poor neutralization.
C. Excessive RF drive.
D. Mismatched antenna.

2H 3.1 B
What does the term KEY CLICK mean?

A. The mechanical noise caused by a strait key.
B. An excessively square CW keyed waveform.
C. An excessively fast CW signal.
D. The sound of a CW signal being copied
on an AM receiver.

2H 3.2 D
How can KEY CLICKS be eliminated?

A. By carefully adjusting your antenna matching network.
B. By increasing power to the maximum allowable level.
C. By using a power supply with better regulation.
D. By using a Key Click filter.

2H 4.1 C
What does the term CHIRP mean?

A. A distortion in the receiver audio circuits.
B. A High-Pitched audio tone transmitted with a CW signal.
C. A slight shift in oscillator frequency each time a CW transmitter is keyed.
D. A slow change in transmitter frequency as the circuit warms up.

2H 4.2 B
What can be done to a telegraph transmitter power supply to avoid CHIRP?

A. Resonate the power supply filters.
B. Regulate the power supply output voltages.
C. Use a buffer amplifier between the transmitter output and the feed line.
D. Cause the power supply output to vary with the load.

2H 5.1 D
What is a common cause of SUPERIMPOSED HUM?

A. Using a nonresonant random-wire antenna.
B. Sympathetic vibrations from a nearby transmitter.
C. Improper neutralization of the transmitter output stage.
D. A defective filter capacitor in the power supply.

2H 6.1 A
28.160 MHz. is the 4th. harmonic of what fundamental frequency?

A. 7.040 MHz.
B. 112.64 MHz.
C. 7.160 MHz.

D. 1.760 Mhz.

2H 7.1 C
What problem in a transmitter power amplifier stage may cause spurious emissions?

A. Excessively fast keying speed.
B. Undermodulation.
C. Improper neutralization.
D. Tank circuit current dip at resonance.

2H 8.1 B
What emission designator describes the use of Frequency Shift Keying to transmit radioteletype messages.

A. F2D
B. F1B
C. J1F
D. A1B

2H 8.2 A
What keying method is used to transmit F1B Radioteletype messages?

A. Frequency Shift Keying.
B. On/Off Keying of the radio wave.
C. Split Baud Keying.
D. Tuned Output Keying.

One (1) question must be from the following:

2H 9.1 C
What emission designator describes Single Sideband Supressed Carrier (SSB) voice transmissions?

A. J2D
B. A3J
C. J3E
D. F3E

2H 9.2 B
What type of signal is emission J3E?

A. Frequency Modulated Voice.
B. Single Sideband Supressed Carrier Voice.
C. Frequency Shifted Keyed RTTY.
D. Packet Radio.

2H 10.1 C
What emission designator describes
Frequency Modulated Voice transmissions.

A. F1B
B. F2D
C. F3E
D. A3F

2H 10.2 A
What type of signal is emission F3E?

A. Frequency Modulated Voice.
B. Single Sideband Supressed Carrier Voice.
C. Frequency Shifted Keyed RTTY.
D. Packet Radio.

2H 11.1 A
What may happen to body tissues that
are exposed to large amounts of RF Energy?

A. The tissue may be damaged because of the heat produced.
B. The tissue may suddenly be frozen.
C. The tissue may be immediately
destroyed because of the Maxwell effect.
D. The tissue may become less resistant to cosmic radiation.

2H 11.2 C
What precautions should you take before working near a High Gain
UHF or Microwave Antenna (such as a Parabolic or Dish Antenna) ?

A. Be certain the antenna is FCC type approved?
B. Be certain the antenna and
transmitter are properly grounded.
C. Be certain the transmitter can not be operated.
D. Be certain the antenna safety locks are in place.

2H 11.3 B
How should the antenna on a Hand Held Transceiver
be positioned while you are transmitting?

A. As close to your body as possible, to
take advantage of the directional effect.
B. Away from your head and away from others
standing nearby, to minimize RF exposure.
C. Close to the ground, since a Hand Held
Transciever has no ground connection.
D. As close to a vertical position as
possible, to minimize Corona Effect.

2H 11.4 B
Why should you always locate your antennas so that no one
can come into contact with them while you are transmitting?

A. To prevent damage to the antennas.
B. To prevent RF burns and excessive exposure to RF Energy.
C. To comply with FCC regulations concerning antenna height.
D. To prevent unexpected changes in your Standing Wave Ratio.

2H 11.5 D
What is a good way to prevent RF burns and
excessive exposure to RF from your antennas?

A. Shield your antenna with a grounded RF screen.
B. Make sure you use plenty of radial wires
in your antenna installation.
C. Use burn proof wire for your antenna feed line.
D. Always locate your antennas so that no one can
come in contact with them while you are transmitting.

2H 12.1 C
What type of interference will you cause if you operate your
SSB Transmitter with the microphone gain adjusted too high?

A. You may cause digital interference to
computer equipment in your neighborhood.
B. You may cause atmospheric interference
in the air around your antenna.
C. You may cause splatter interference
to other stations on nearby frequencies.
D. You may cause processor interference
to the microprocessor in your rig.

2H 12.2 B
What may happen if you adjust the microphone gain or deviation control on your FM Transmitter too high?

A. You may cause digital interference to computer equipment in your neighborhood.
B. You may cause atmospheric interference in the air around your antenna.
C. You may cause splatter interference to other stations on nearby frequencies.
D. You may cause processor interference to the microprocessor in your rig.

2H 12.3 B
If you are using an excessive amount of speech processing with your SSB Transmitter, what type of interference are you likely to cause?

A. You may cause digital interference to computer equipment in your neighborhood.
B. You may cause atmospheric interference in the air around your antenna.
C. You may cause splatter interference to other stations on nearby frequencies.
D. You may cause processor interference to the microprocessor in your rig.

2H 12.4 B
If you are operating SSB Voice and another operator tells you that you are causing SPLATTER, what might be the cause of the interference?

A. Your rig may be switching from transmit to receive too quickly.
B. You may have your microphone gain control set too high.
C. Your rig may have a defective modulator transistor.
D. You may have your transmitter splatter control set incorrectly.

2H 12.5 A
If you are operating FM Voice and another operator tells you that your signal is TOO WIDE and that you are causing interference to other stations on nearby frequencies,

what might be the cause of the interference?

A. You may have your transmitter deviation control or microphone gain set too high.
B. The Spectral Width control on your transmitter may be set incorrectly?
C. Your microphone may be defective.
D. You may need to use an amplified POWER MICROPHONE.

End of Subelement 2H.