

## Section 6-6

G4A04 (B)

What reading on the plate current meter of a vacuum tube RF power amplifier indicates correct adjustment of the plate tuning control?

- A. A pronounced peak
- B. A pronounced dip
- C. No change will be observed
- D. A slow, rhythmic oscillation

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G4A05 (C)

What is a reason to use Automatic Level Control (ALC) with an RF power amplifier?

- A. To balance the transmitter audio frequency response
- B. To reduce harmonic radiation
- C. To reduce distortion due to excessive drive
- D. To increase overall efficiency

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G4A07 (D)

What condition can lead to permanent damage to a solid-state RF power amplifier?

- A. Insufficient drive power
- B. Low input SWR
- C. Shorting the input signal to ground
- D. Excessive drive power

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G4A08 (D)

What is the correct adjustment for the load or coupling control of a vacuum tube RF power amplifier?

- A. Minimum SWR on the antenna
- B. Minimum plate current without exceeding maximum allowable grid current
- C. Highest plate voltage while minimizing grid current
- D. Maximum power output without exceeding maximum allowable plate current

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G6A10 (A)

Which element of a triode vacuum tube is used to regulate the flow of electrons between cathode and plate?

- A. Control grid
- B. Heater
- C. Screen grid
- D. Trigger electrode

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G6A12 (A)

What is the primary purpose of a screen grid in a vacuum tube?

- A. To reduce grid-to-plate capacitance
- B. To increase efficiency
- C. To increase the control grid resistance
- D. To decrease plate resistance

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G7B01 (B)

What is the reason for neutralizing the final amplifier stage of a transmitter?

- A. To limit the modulation index
- B. To eliminate self-oscillations
- C. To cut off the final amplifier during standby periods
- D. To keep the carrier on frequency

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G7B02 (D)

Which of these classes of amplifiers has the highest efficiency?

- A. Class A
- B. Class B
- C. Class AB
- D. Class C

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G7B08 (B)

How is the efficiency of an RF power amplifier determined?

- A. Divide the DC input power by the DC output power
- B. Divide the RF output power by the DC input power
- C. Multiply the RF input power by the reciprocal of the RF output power
- D. Add the RF input power to the DC output power

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G7B10 (B)

Which of the following describes a linear amplifier?

- A. Any RF power amplifier used in conjunction with an amateur transceiver
- B. An amplifier in which the output preserves the input waveform
- C. A Class C high efficiency amplifier
- D. An amplifier used as a frequency multiplier

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G7B11 (B)

For which of the following modes is a Class C power stage appropriate for amplifying a modulated signal?

- A. SSB
- B. FM
- C. AM
- D. All these choices are correct

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