

# RF NOISE GENERATOR

The diode-generated radio-frequency noise has such a wide spectrum of energy that it can be detected by both long and short-wave receivers. Bringing a transistor radio near the circuit shown below will demonstrate the power and limitations of the generator. The noise generator may be used in checking out a defective receiver through RF and IF

stages by injecting it at various points. In the circuit, RF amplification was provided by running CMOS inverters in a linear mode. To reduce heating, an operating potential of about five volts was established through the use of a 1N751 zener diode, functioning normally, and not a noise generator in its own right, we hope!

## PARTS LIST FOR RF NOISE GENERATOR

- C1,C2—0.1- $\mu$ F capacitor, 15 VDC
- D1—1N758 or 1N759 diode
- D2—1N751 diode
- IC1—4009A hex buffer
- R1—500,000-ohm linear-taper potentiometer
- R2—10,000-ohm, resistor
- R3 R4—1,000,000-ohm, resistor
- R5—300-ohm, 1-watt resistor
- R6—1,000,000-ohm, resistor

