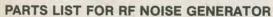
## RF NOISE GENERATOR

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!



C1,C2-0.1-uF 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

