

Great Ideas From Our Readers

Have a quick'n'easy circuit idea? Share it and get a one year subscription or extension to 73! Clearly mark all entries as submissions for Circuits to distinguish them from manuscripts. Send your entries to Circuits, 73 Magazine, Peterborough, NH 03458.

29 MHz Amplifier

Ten meters does not require huge power. The 10 Watts from my Asden 2800 was a little skimpy, however, so I built a pair of 6146s to follow it. The circuit is

very conventional, and I constructed it in a case that once held a battery charger. As long as you are neat in your physical layout, you could build it in almost anything.

The only adjustments that require close attention are input, output, and neutralization. All the rest are one-time,

set-and-forget adjustments.

The 150 pF capacitor in the input line compensates for impedance mismatch. You tune for maximum signal transfer from exciter to final. (Use an in-line meter or external field strength meter.)

The final is conventional Pi-network. I used two 75 pF APCs because I had them and they fit well, but a single 150 pF cap would work as well. You need nearly full capacity in either case.

When neutralized, the plate current dip should be at about the same setting of the 20 pF plate capacitor as maximum output. This is often difficult to obtain with tetrodes, but you can usually come close.

Power supply can be whatever you have handy or can build. The one shown used an old TV transformer from an RCA color set of about 1968 vintage. Adjust bias to let tubes idle at about 30 mA. (See Figures 1 and 2.)

Bruce Cameron WA4UZM
Temple Terrace FL

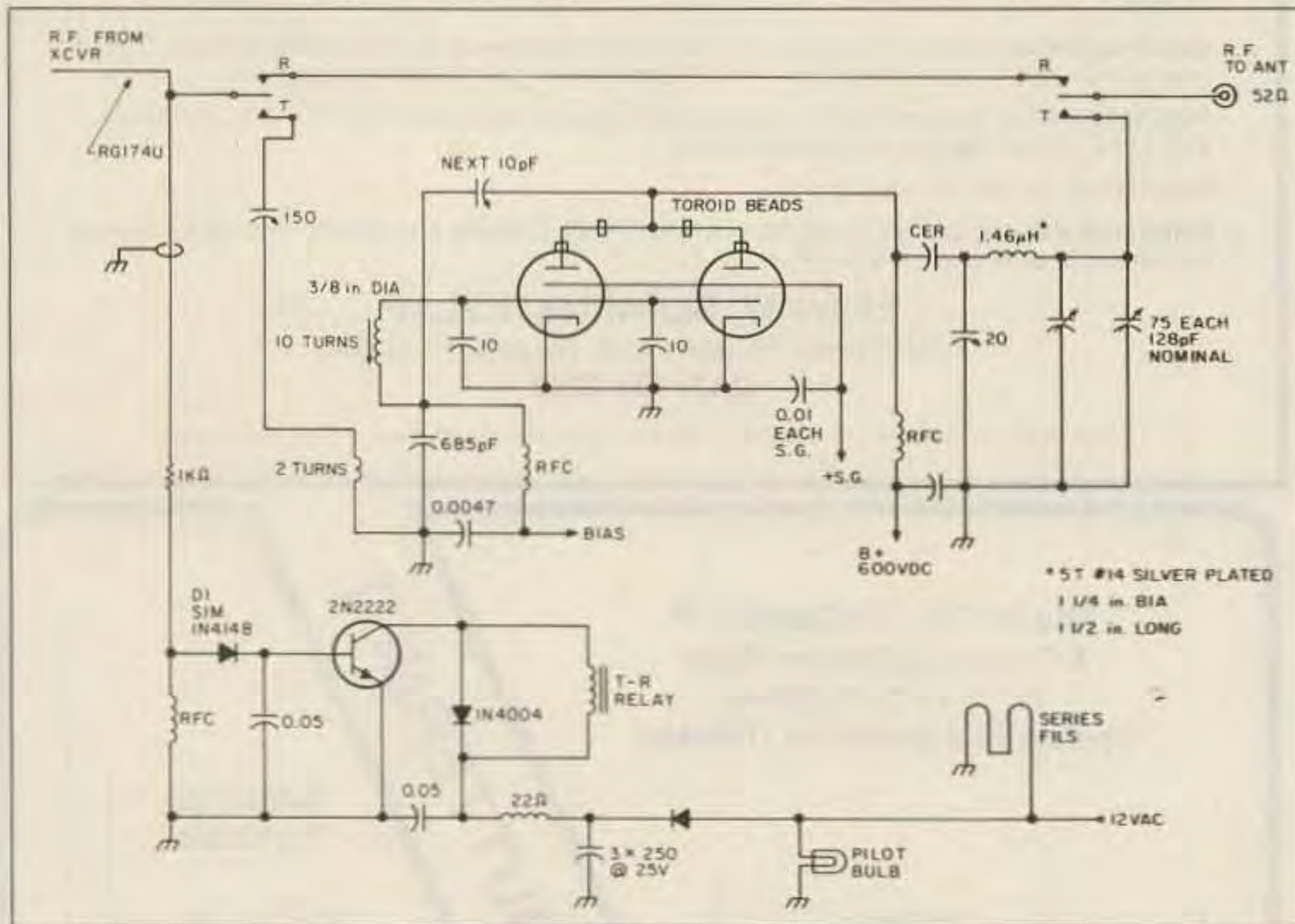


Figure 1. 29 MHz amplifier.

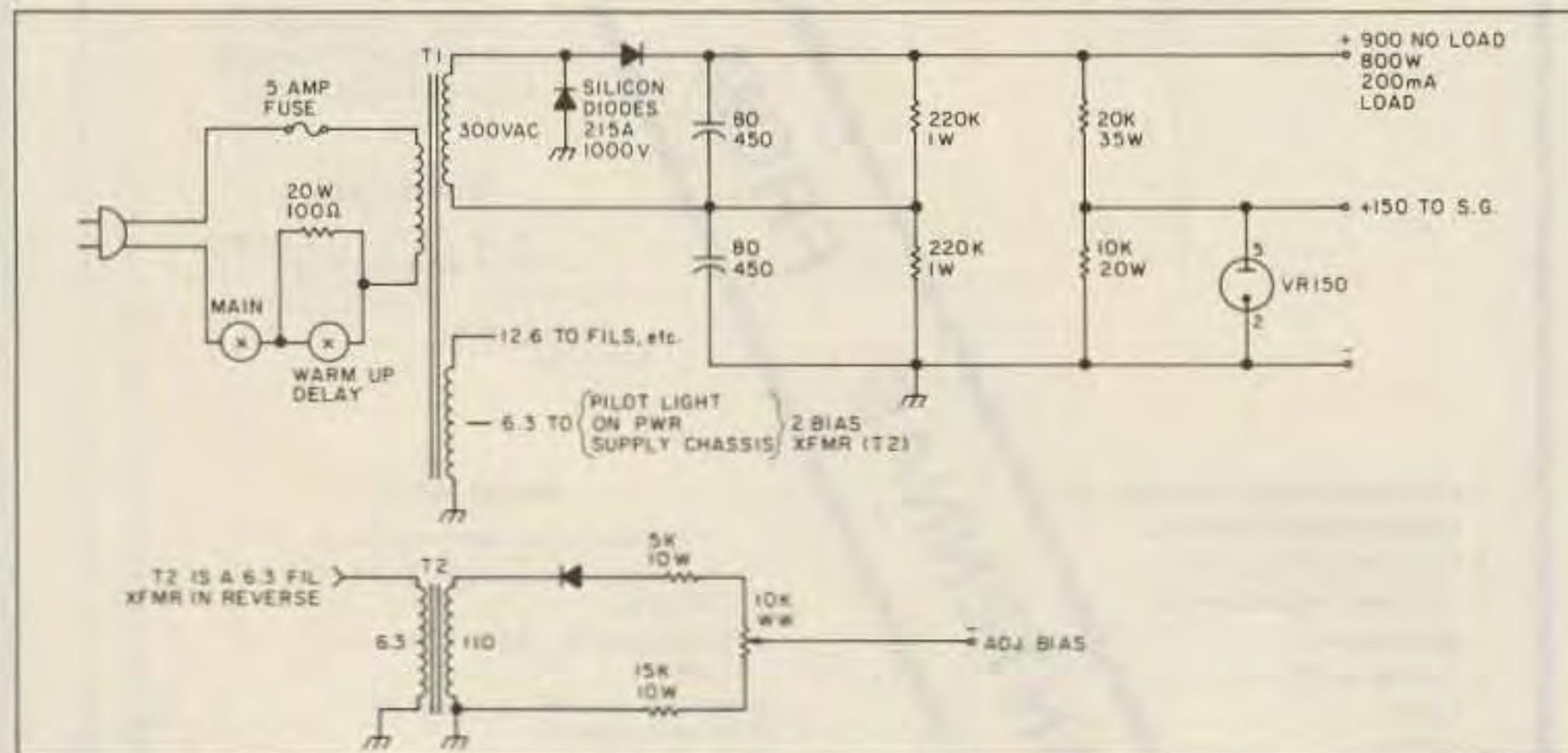


Figure 2. PS for the 29 MHz amplifier.

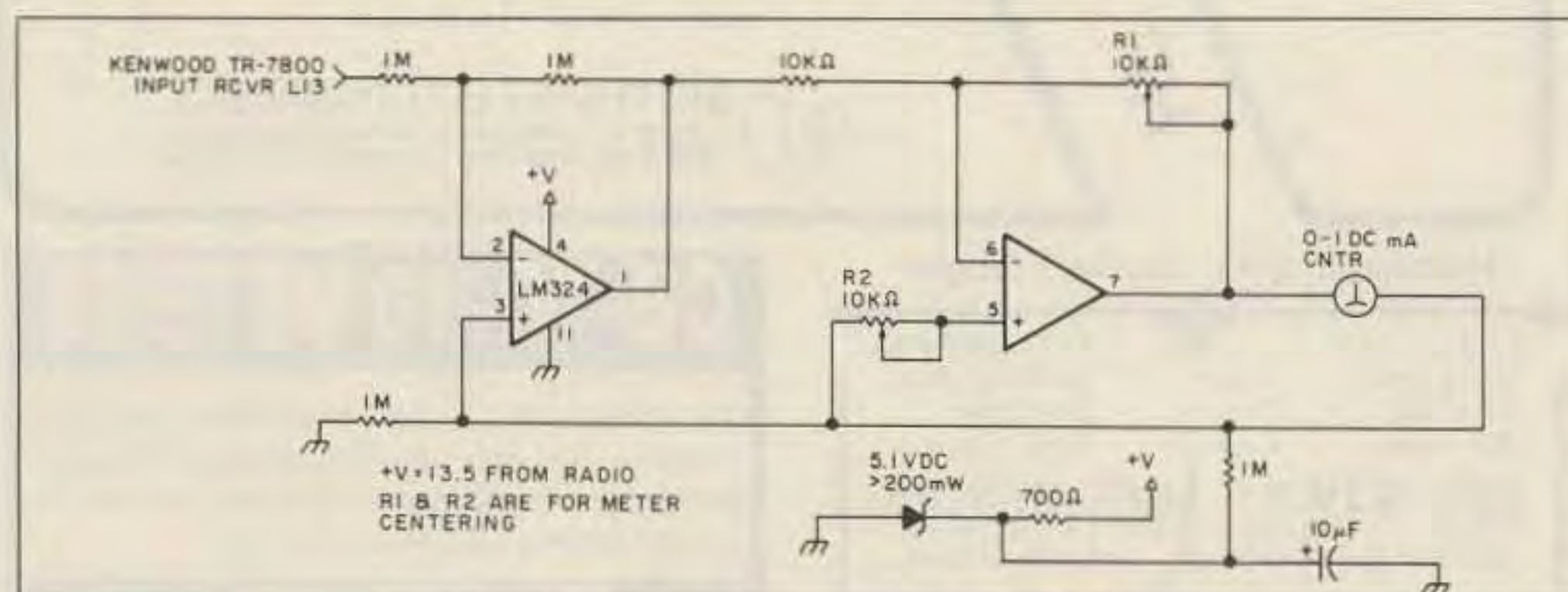


Figure 3. Deviation Meter Circuit.

Deviation Meter Circuit

You can use this circuit in most FM VHF receivers. Hookup is off the FM discriminator. I use a three-wire shielded mike wire and a subminiature stereo jack/plug. The plug tip for B+ is from the radio, center for signal, and shield for ground. This makes for a clean installation. I put this circuit into a small box and attached it to the dash of my car, using Velcro. Every signal transmitted has its own deviation signature. This can be a real plus in jammer hunting. You can obtain most parts at Radio Shack. (See Figure 3.)

Also from N6JSX:

Automatic PTT Switch

This little circuit for T-hunters lets you set your transmitter to turn on automatically at a specific time. The T-hider can vacate the area and even go to the starting point to watch the confusion!

Set the alarm to the time trip point. Push S1 to hold the PTT open and the relay on. Dead power default is PTT closed. The alarm trips and fires the SCR, which shorts out the relay circuit, drops the relay, and removes voltage.

You need a single cell alarm clock, RS 63-716; KL-DPDT, RS 275-215; SCR, RS 276-1067; S1, RS 275-1571; and 1/4 W carbon resistors. (See Figure 4.)

Dale R. Kubichek N6JSX
Rowland Heights CA

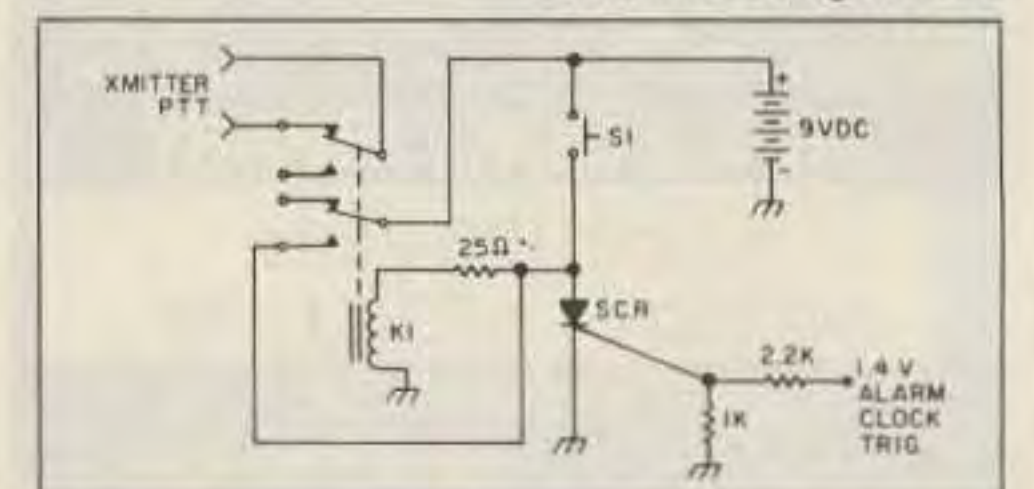


Figure 4. Automatic PTT Switch.