Another Vackar VFO

Phase noise is not one of the Vackar’s high points, but the receivers the author has built with this VFO;

the phase noise level has never been a problem. In most cases, the remarkable stability of this VFO

makes it a good compromise for any homebrew receiver.

One caution in building the Vackar must be noted. Use a wire wound or homebrew RF Choke (7 to 15

turns on an FT50-43) on the B+ line; a molded choke will smoke and blow the transistor if the tank circuit

is accidentally shorted to ground.



The high output of the circuit means a buffer amplifier is not needed and the low-noise feature of

the VFO yields a very good receiver with little effort. The VFO is also a very easy build. The parts count is

very low. And it is just unbelievable that such a good VFO can be built with a couple of very common

2N3904s.

The circuit does not key very well when used in CW transmitter circuits. A heterodyne circuit with a keyed crystal oscillator would be best for use in a transmitter.

For receiver designs this VFO has got to rank among the best. After a 10 minute warm up, stability was within 50 hertz for the first couple of hours. I have chosen this VFO for my transistor receiver, but I am just in the beginning stages, way behind Todd, who already has his receiver on the Internet.