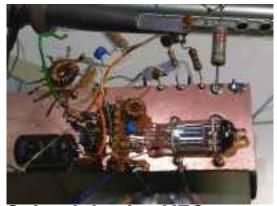


This is the story of my quest to build an all-tube VFO for 26.0 to 26.5MHz, for use in a 21MHz SSB/CW

An oscillator needs to be reasonably stable - the frequency should not drift too severely as the temperature changes. This is more challenging with a valve VFO than a solid state oscillator. Even with solid state, it would be very difficult to build a stable enough LC VFO at 26MHz. The best approach is to build a lower frequency VFO and mix it with a stable crystal oscillator to get the desired output. Right from the start, my aim was to build an LC-VFO for 6.0-6.5MHz, mix it with a 20MHz crystal oscillator, and select the 26MHz sub with suitable filtering.



1. Sub-mini valve VFO

First attempt is to build anstable of the VFO using a type CK512AX sub-miniature tube, originally used in



2. Mixer VFO mk1

The next attempt uses 1 PATO prostal. oscillator and VFO; 6BE6 mixer, and EF91 buffer. It produces a 26



3. Mixer VFO with insulated tank components

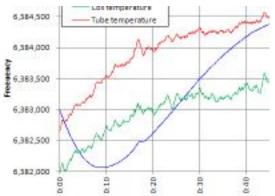
The same circuit as 2, betterdwwottethe tank components insulated, and the tubes in the open for better



4. Mixer VFO using battery valves

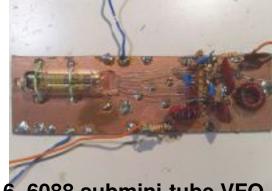
To reduce the warm-up detadhisoreixer VFO now uses low power battery valves - DF96 VFO, 1T4 crysta

Written by Hans Summers Saturday, 03 December 2011 13:35 - Last Updated Wednesday, 20 May 2015 09:13



5. DF96 VFO and logger

The next rebuild abando and the idea of insulation, which seems to slow down drift but not eliminate it, in



6. 6088 submini-tube VFO

One reader kindly sent reader with 6088 pencil tubes to experiment with, and they seem much more su



Another dream, was to the marklin VFO. Here I did so using the pair of 6088's, and had no trouble



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8. BC221 Tuning capacitor

I found a very nice air-valishbrhming capacitor in the junk box, which seems to have been designed for



Since the dual-6088 VF@eachynfave.urite, and seems the most stable, of any of those so far tried on this