DV27 - Heil Oscillator, 10 cm

This is an undocumented Heil oscillator. Likely developed around 1940 for application as local oscillator in 10 cm radar receivers. The reflex klystron developed by Robert Sutton, or the **Sutton tube**, was quite critical and required 1700 volts to operate. Almost certainly other solutions were tried and Heil tubes were investigated for their relatively low operating voltage. This Heil tube was not even approved in the CV list.

Thanks to Danial Stocks we learn that it was used as basic component for a super-secret experiment performed in Great Britain in 1943 on the effectiveness of a frequency modulated barrage jamming technique. Even if the output power of the above device was too little to lead to any practical set, the experiment proved a range reduction from 30.000 to 27.000 yards in a GL radar. All the experiment was so secret that a note on the report stated ‘Closed until 1972’, well after the declassification date of the more recent carcinotron devices.

14 cm high, stepped glass bulb. The prefix DV is common to other Heil oscillators built by STC.

Also see the **DV57**, 3 cm Heil oscillator, coming form the same source and maybe used in a similar experiment over the X-band.