





**ON/OFF circuit, 5V and 9V5 supply and power-down**

IC8 is a 1% 5V precision regulator which is boosted by Q32. The 5V is used as reference to the 9V5 power supply around IC6B. This regulator is started by transferring 5V through D18.

HP1 is connected to handset # 1's earphone and ON key. The DC voltage on the HP line is sensed by  $\mu C$ , p38 through D17, and when low "ON" is pressed.

When "ON" is pressed, HP1 is grounded and C304 is quickly discharged, which causes Q29 to turn off and Q30 to go on. When C304 has been charged again through R163, Q29 switch on and Q30 go off, so Q30's collector voltage raise and turn on Q41 for a short while through C145.

Q41 shorts IC8, p3 to ground which enables the 5V power supply to start. This resets the  $\mu C$ , p9 which now continues the job to ground IC8, p3. This is done by making a 50 Hz square wave at p39 which is

rectified in D21 and keeps Q35 active. The  $\mu C$  can alternatively turn off 5V (and the VHF), by stopping the 50 Hz, when it senses that the ON key is pressed again.

IC8, p5 is high when 5V is within limits (5%) and several ON pulses from Q30 is grounded by Q45.

When the VHF is turned OFF, the circuit D20 and C300 grounds new on pulses in approx. 1 second to assure that 5V has gone to secure a reliable RE-SET function.

When the supply voltage disappears, Q37 is activated (by 8V), so the collector goes low. This drop in voltage (PD) is transferred by C349 to  $\mu C$ , p13, telling the  $\mu C$  to shut down.

When the voltage reappear (by 9V), Q37's collector goes high and this starts the charging of C301. When the charging ceases after approx. 2 seconds, Q46 goes off and Q29 goes on. When Q29 goes on, Q30 transfers a start signal through C145.