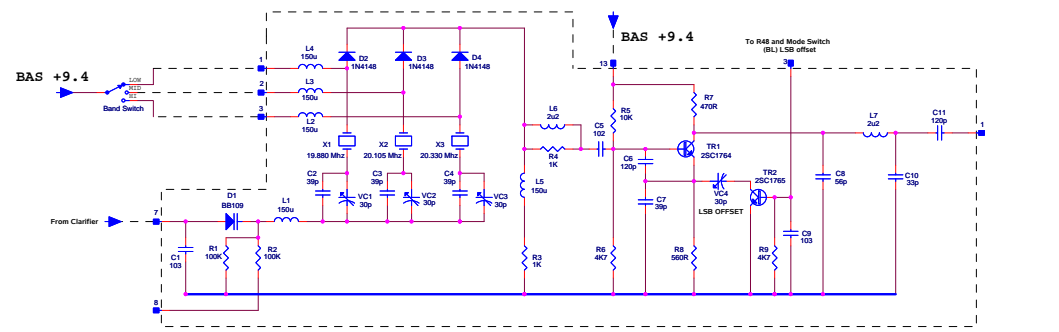
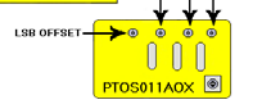
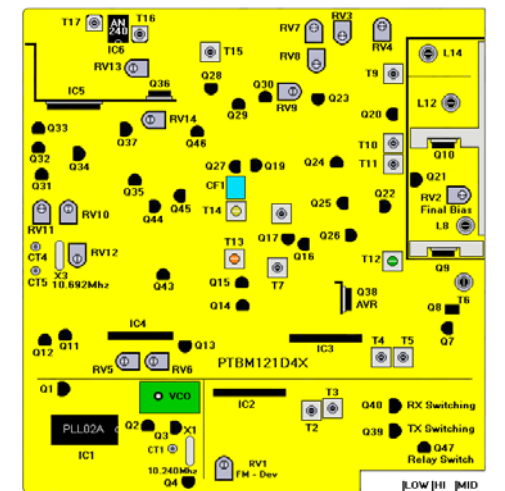
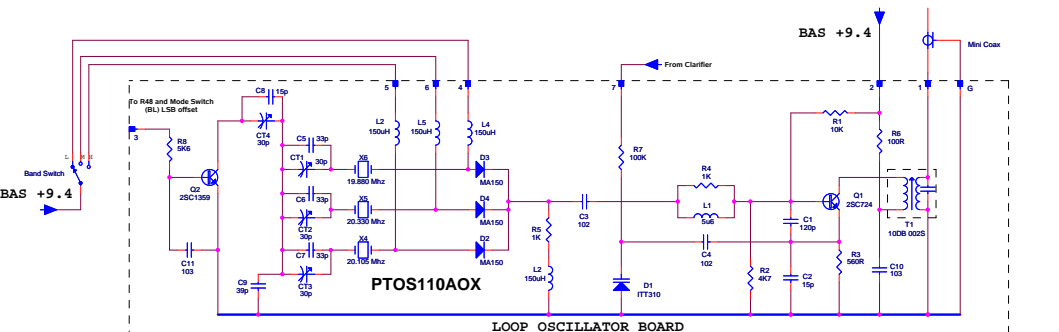
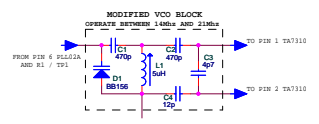


BAS = 9.4 VOLTS IN RX/TX
 BL = 13.8 VOLTS IN LSB
 BT = 7.9 VOLTS IN TX
 BR5 = 8.6 VOLTS IN SSB RX
 BRA = 8.6 VOLTS IN AM RX
 BS = 9.4 VOLTS IN SSB RX/TX
 BTA = 7.9 VOLTS IN AM TX
 BTS = 7.9 VOLTS IN SSB TX



SSB TX Audio
 All Cybernet 121D4X boards suffer with distorted 'gritty' sounding audio on SSB. This was caused by a low bias in the RF output stage, which caused the outgoing signal to distort. As a transistor requires a minimum of around 0.6 volts to conduct, signals below this level are clipped unless the transistor is biased to conduction with a constant dc current.

SSB for TX Audio
 The cure for this problem is to increase the bias. As the bias adjustment (RV2) will not usually take the bias high enough, a resistor will need to be changed.
 1. Replace R44 10 Ohm bias resistor with an 18 Ohm.
 2. Set mode to USB, connect DC milliammeter between Q10 emitter and ground and adjust RV2 for 50mA.

MODIFIED LOOP OSCILLATOR BOARD [PTOS110A0X] ± 5kHz

DRAWN BY Rick Jackson Euro Radio Co		
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