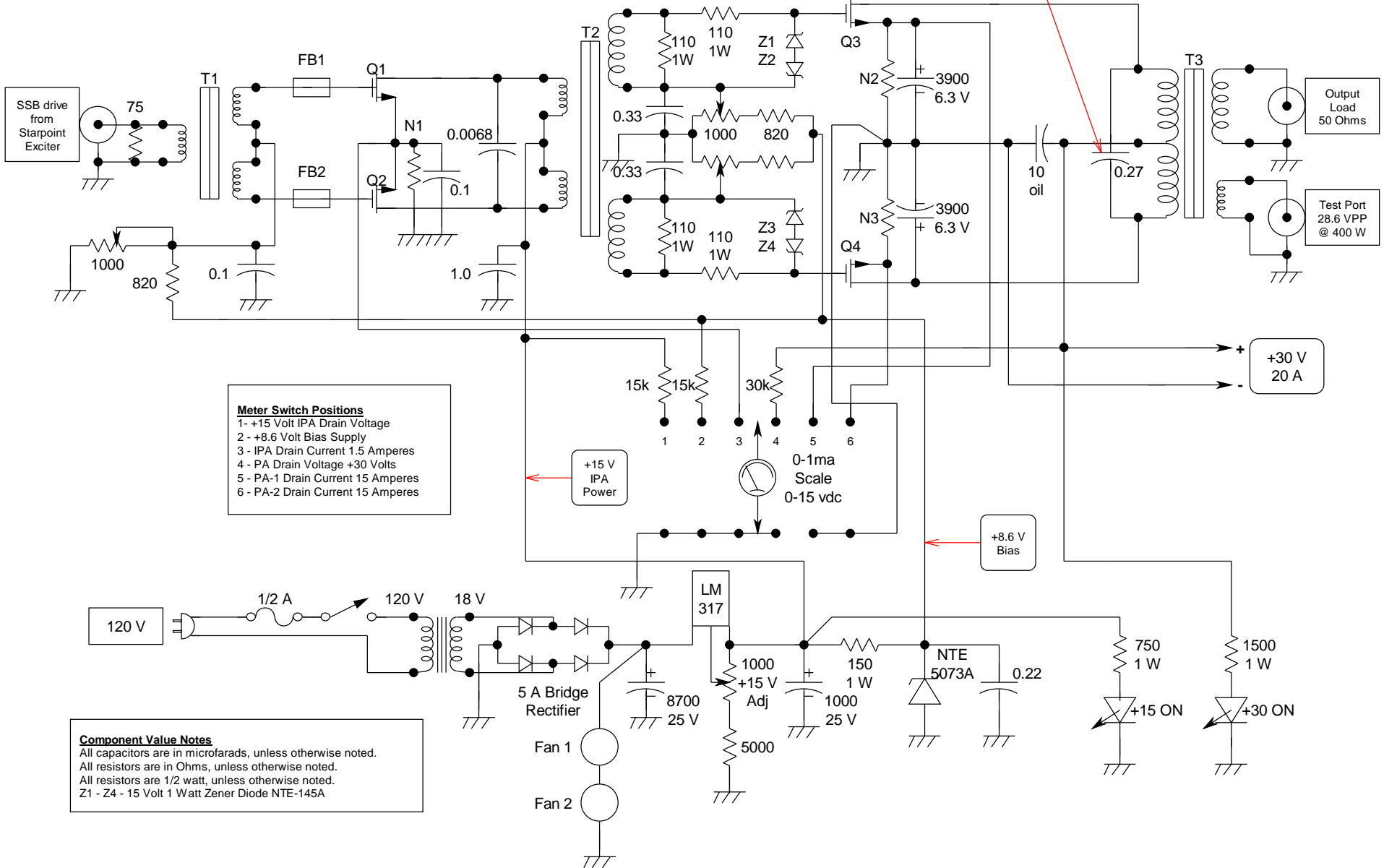
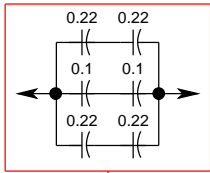


166.5 KC 400 Watt Single Sideband Linear Amplifier
 for WC2XSR / 13
 Designed by Ralph Hartwell W5JGV
 13 April 2005



Meter Switch Positions
 1 - +15 Volt IPA Drain Voltage
 2 - +8.6 Volt Bias Supply
 3 - IPA Drain Current 1.5 Amperes
 4 - PA Drain Voltage +30 Volts
 5 - PA-1 Drain Current 15 Amperes
 6 - PA-2 Drain Current 15 Amperes

Component Value Notes
 All capacitors are in microfarads, unless otherwise noted.
 All resistors are in Ohms, unless otherwise noted.
 All resistors are 1/2 watt, unless otherwise noted.
 Z1 - Z4 - 15 Volt 1 Watt Zener Diode NTE-145A

Output Load
 50 Ohms

Test Port
 28.6 VPP
 @ 400 W

+30 V
 20 A

+15 V
 IPA
 Power

+8.6 V
 Bias

5 A Bridge
 Rectifier

Fan 1

Fan 2

750
 1 W

1500
 1 W

+15 ON

+30 ON

0-1mA
 Scale
 0-15 vdc

LM
 317

NTE
 5073A

120 V

18 V

8700
 25 V

5000

1000
 +15 V
 Adj

150
 1 W

1000
 25 V

0.22

15k

15k

30k

1

2

3

4

5

6

0.0068

0.1

1.0

0.33

0.33

110

1W

110

1W

Z1

Z2

Q3

N2

3900

6.3 V

1000

820

Q4

N3

3900

6.3 V

Z3

Z4

0.27

10 oil

T2

T3

0.1

75

1000

820

0.1

FB1

Q1

N1

FB2

Q2

T1

SSB drive from Starpoint Exciter

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