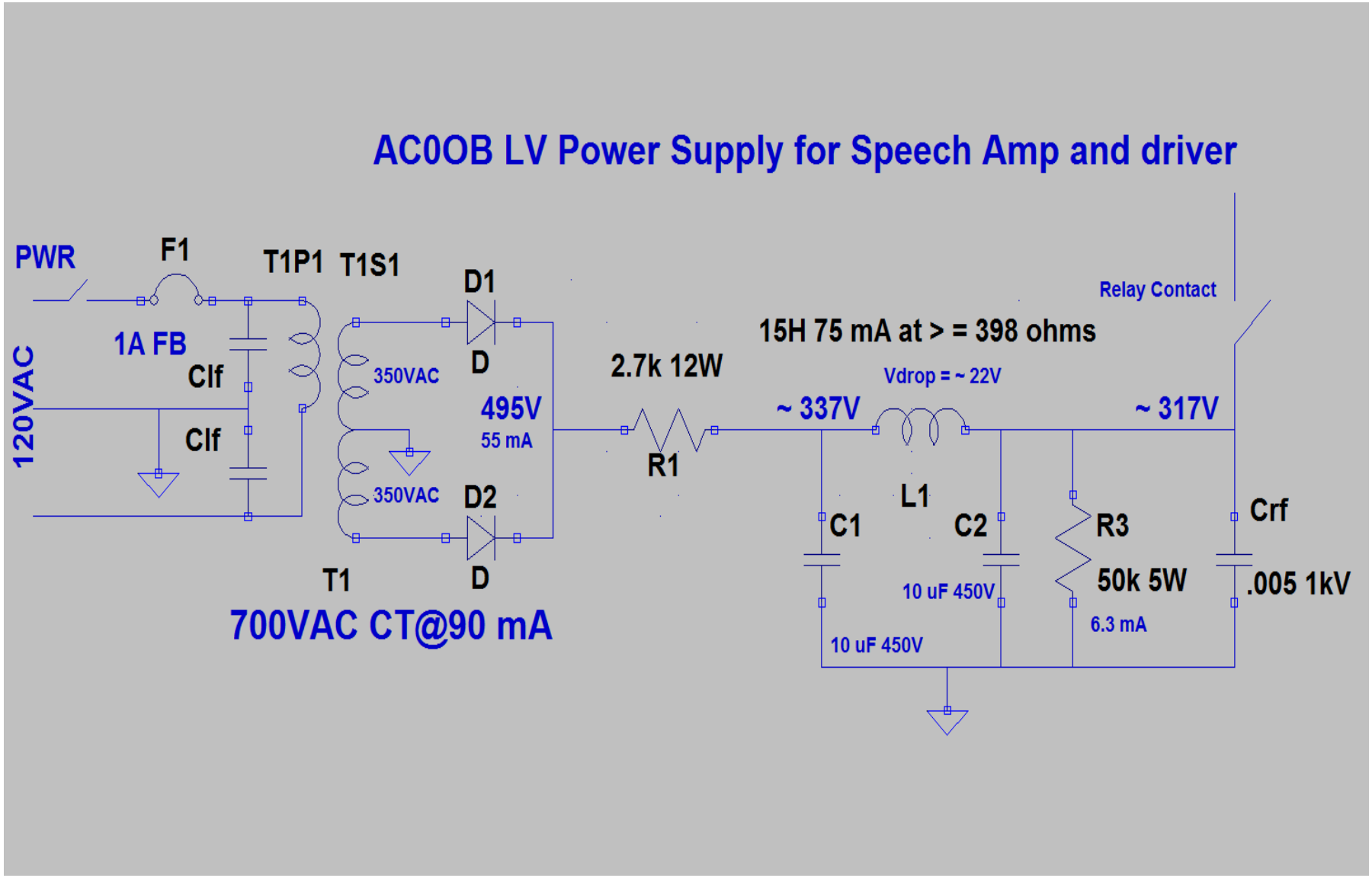
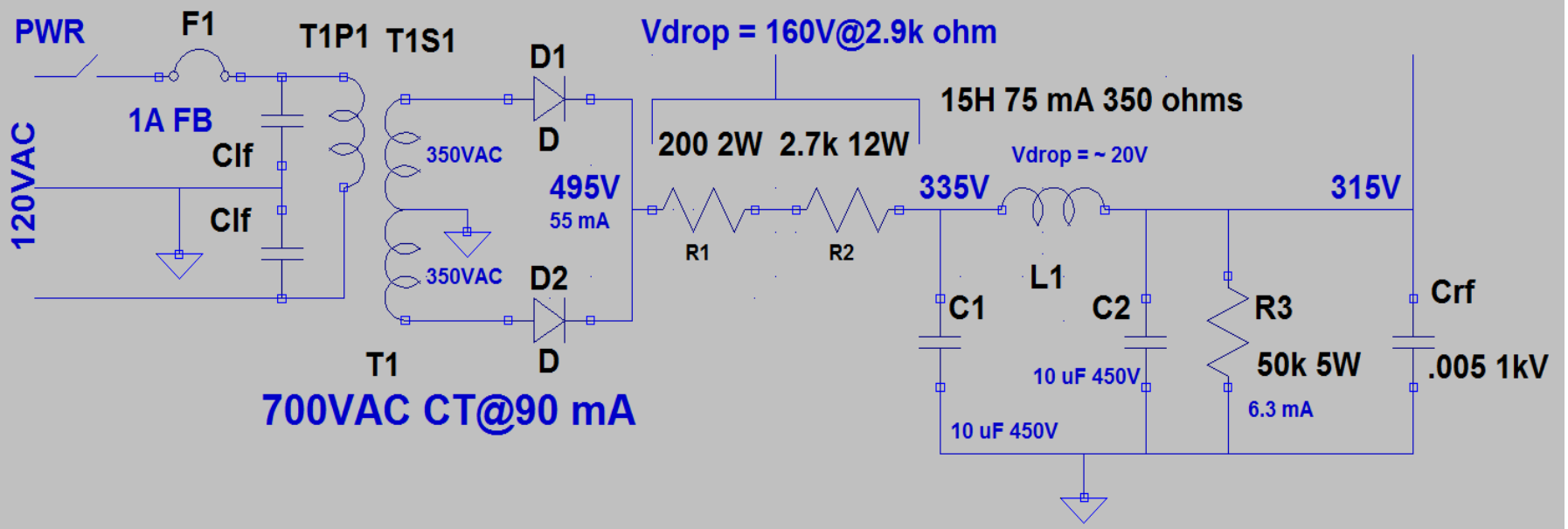
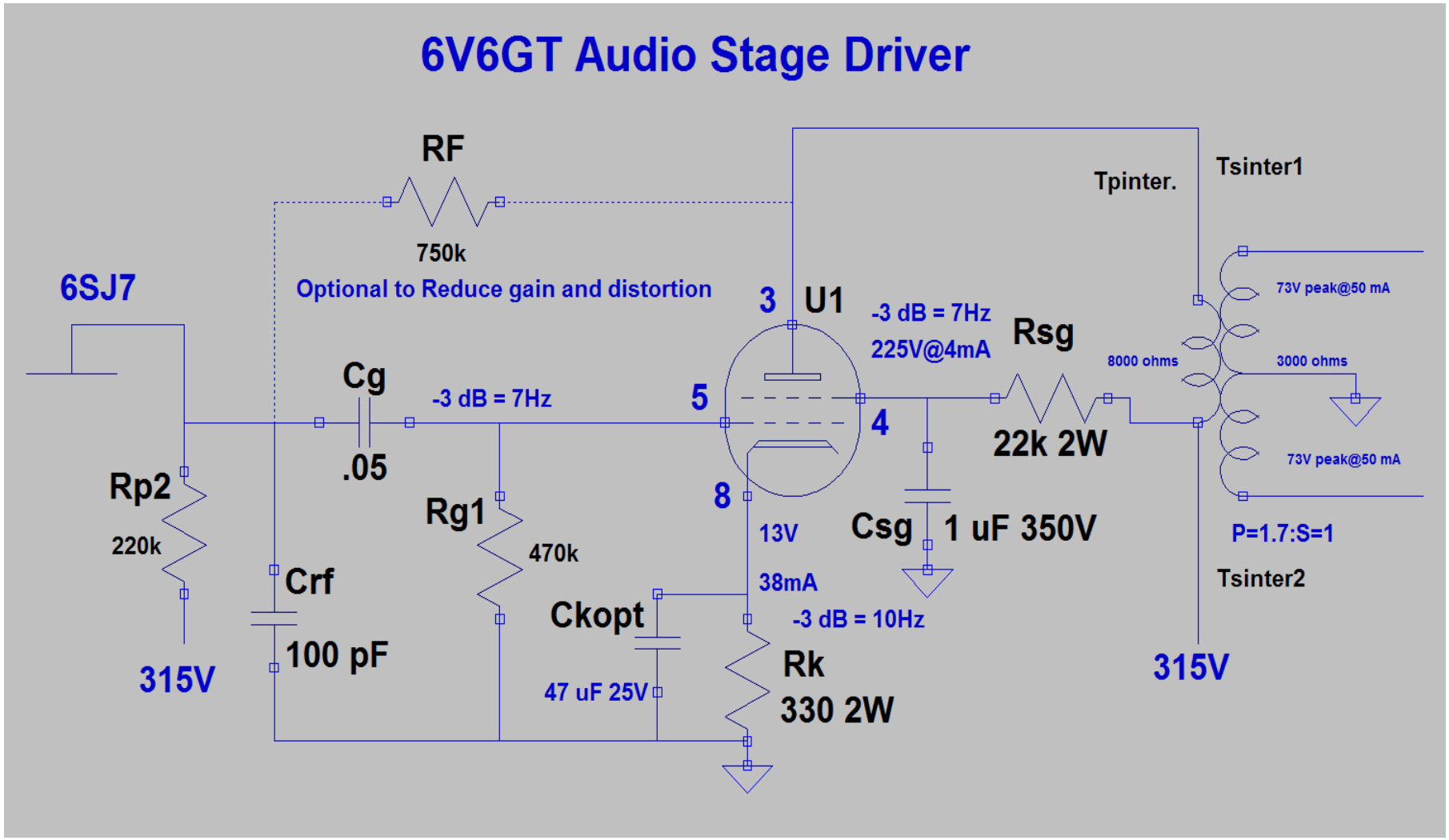

AC0OB LV Power Supply for Speech Amp and driver
PWR
F1
T1P1
T1S1
D1
Relay Contact
15H 75 mA at > = 398 ohms
1A FB
120VAC
Clf
Clf
350VAC
D
2.7k 12W
Vdrop = ~ 22V
~ 337V
~ 317V
495V
55 mA
350VAC
D2
R1
L1
C1
C2
R3
Crf
T1
D
10 uF 450V
50k 5W
.005 1kV
6.3 mA
10 uF 450V
700VAC CT@90 mA

AC0OB LV Power Supply for Speech Amp and driver




6V6GT Audio Stage Driver
RF
750k
Optional to Reduce gain and distortion
6SJ7
Cg
.05
-3 dB = 7Hz
3
U1
5
4
8
-3 dB = 7Hz
225V@4mA
Rsg
22k 2W
Tpinter.
Tsinter1
8000 ohms
3000 ohms
73V peak@50 mA
73V peak@50 mA
P=1.7:S=1
Tsinter2
Rp2
220k
315V
Crf
100 pF
Rg1
470k
Ckopt
47 uF 25V
13V
38mA
Csg
1 uF 350V
-3 dB = 10Hz
Rk
330 2W
315V

From the GE data on the 6V6 the actual simple calculations show otherwise:

https://frank.pocnet.net/sheets/093/6/6V6GT.pdf (see page 2, Class A1 amplifier, characteristics and typical operation).

Specifications: Vp = 315V, Ip = 34 mA, Grid Bias = -13V, so Vk = 13V, Average Screen current Isg = 4 mA@225V.

There is nothing wrong with running the tube at a Vp of 315V as long as the screen current/voltage is limited.

Total current through the cathode = 38 mA.

Rk = 13V/0.038 = 342 ohms so I chose 330 ohms as nearest common resistor.

PRk = I^2XR = 0.001444 A^2.Ohms = 0.477Watts = 477 mWatts, choose 2W for headroom

Rsg = 315V-225V/0.004 = 90V/0.004 = 22.5k, choose 22k ohms as nearest common resistor

PRsg =1.6e-5A^2X22k ohms = 0.352Watts = 352 mWatts = choose 2W for headroom

So I could care less what that ridiculous original schematic shows, the actual simple calculations show otherwise.