

Candelstein Laboratories

DIV. DAYSTORM ELECTRO-OPTICS

A subsidiary of Magnetosphere Consulting

"Keeping America Great, One Electron at a Time"

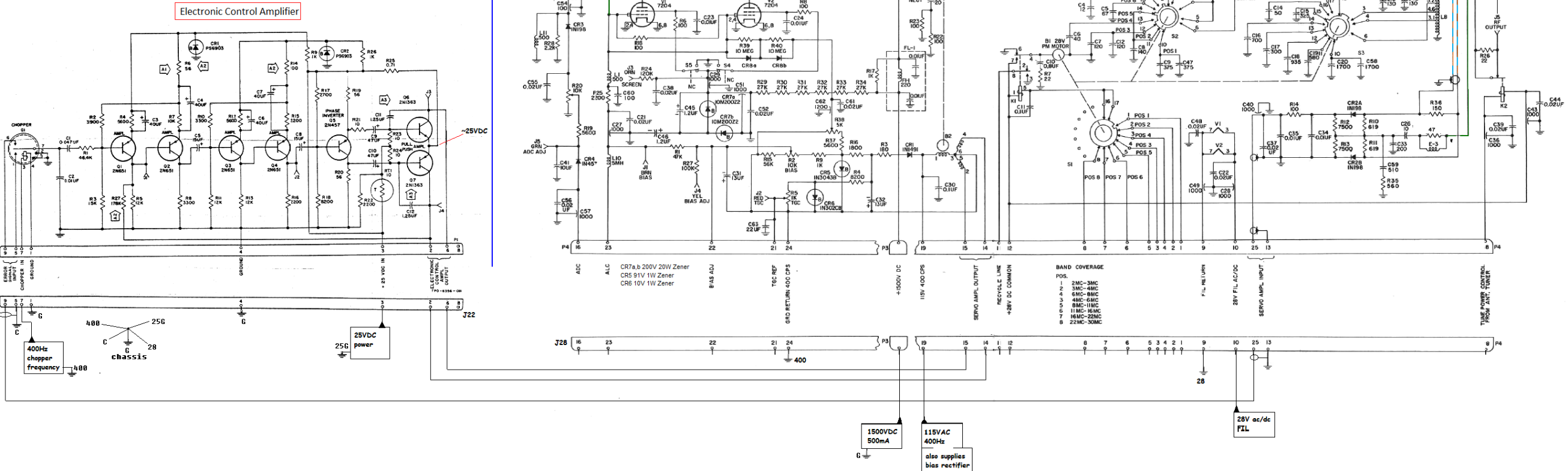


Figure 1

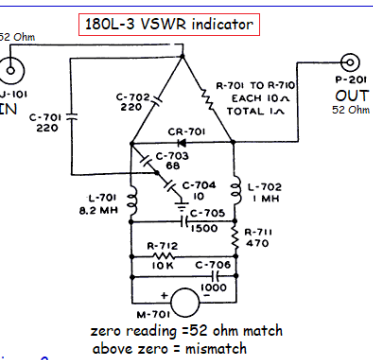


Figure 2

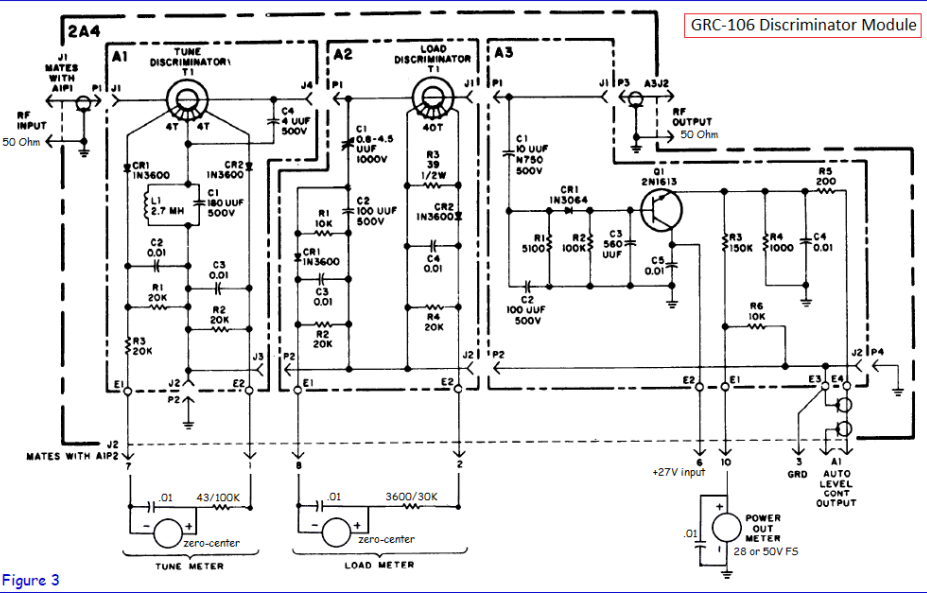


Figure 3

2-30MHz ARC-105 'Power Amplifier' module lash-ups for use in the wild:

- Operation class AB1, output 400W.
- 8 bands, switched by 28VDC motor and open-seek rotary switch logic.
- Provision for tune-up, and tuning recycle, other functions used in ARC-105 and 618T.
- (618T components may alternately be used: slightly different component values, etc.).
- Optional recommended automatic resonating via ARC-105 'Electronic Control Amplifier'.
- 50 Ohm input, 25W drive for 400W output, grid tuning optional per user.
- Screen grid current limited by series resistance & clamped @400V by Zener diodes.
- Optional metering:
 - Basic VSWR indicator from 180-L autotuner (modified Schering bridge)
 - Tuning indicator, Loading indicator, and Power indicator using GRC-106 discriminator.
- Convenient Power Requirements:
 - 1500VDC for 7204/4CX250F power amplifier anodes and screen grids.
 - 115VAC 400Hz for tuning servo motor and control grid bias.
 - 26.5V@1.16A for tube heaters. Optional 6V@5.2A for 7203/4CX250B substitution.
 - 27-28VDC for electronic control amplifier, relays. and band-change motor.
 - 6.3VAC 400Hz for chopper, Electronic Control Amplifier.
- Cooling: minimum 7.6CFM @ 0.3 in. H2O.

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Project Name:	Upcycle-ARC-105 rev. 20200524.001
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