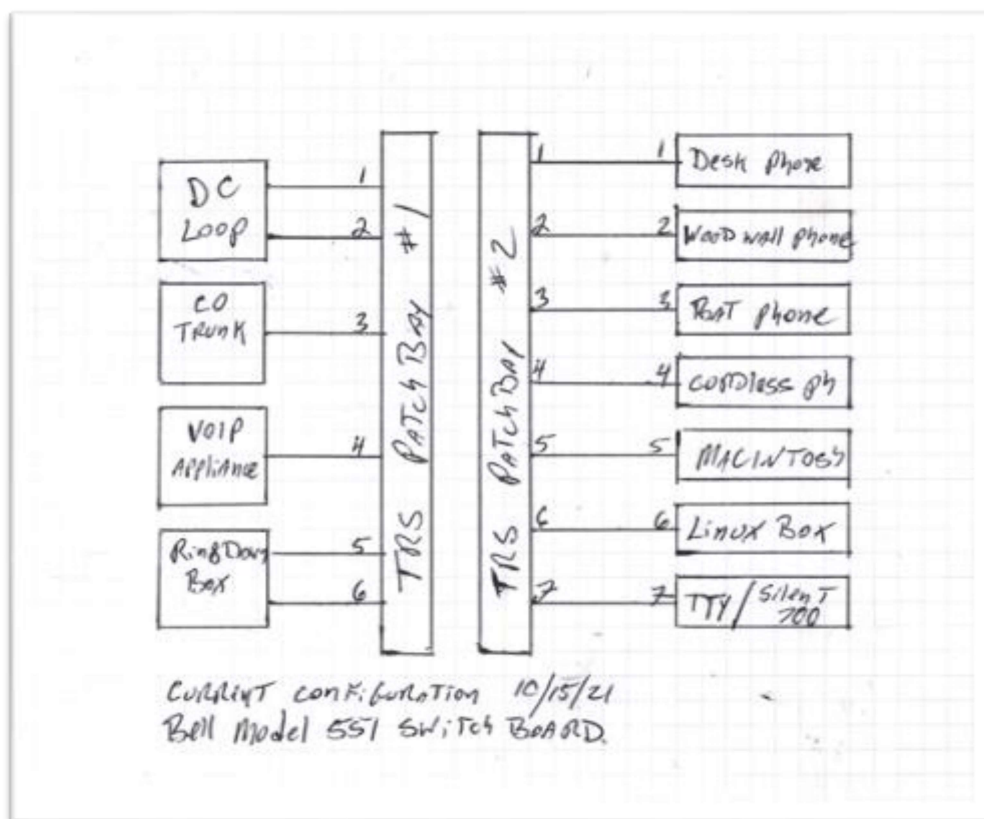


October 15, 2021

After a nightlong binge soldering ¼" TRS connectors to telephone wire and connecting them to surface-mount RJ-11 phone jacks, I have the most basic configuration of the switchboard completed. It's rather ugly and I don't have any functionality wired into the cord-circuits yet, but I can reconfigure my communications gear at will. Currently, there is no line supervision or comprehensive signaling, but I can connect two telephone devices together (including modems) and keep the connection internal to the switchboard without involving the phone company. Here's a rough schematic of what I have at the moment:



The DC loop is a simple set of connections that allows any two telephone devices to “talk” -- it simply provides talk battery. In other words, a basic “hoot and holler” circuit. The circuit labeled CO Trunk is my present landline telephone connection. The circuit labeled VOIP Appliance is a network device that connects to a second telephone circuit via Google Voice. The ringdown box is a commercial device built by Viking Electronics. Using simple patch cords, any device can be connected to any available circuit facilitating simple telephone communication at the local level. The next step is to get some actual PBX functionality enabled.