

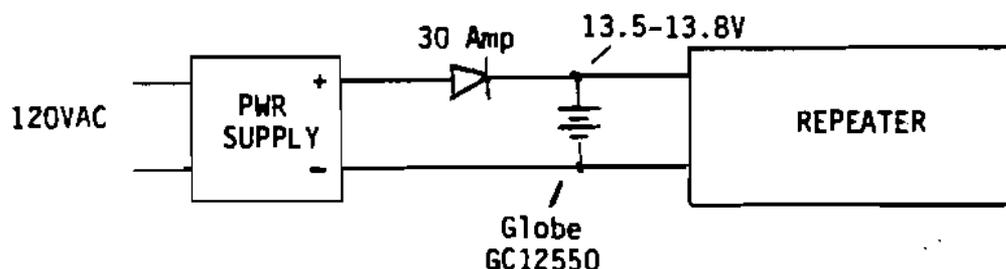
**BATTERY BACKUP YOUR REPEATER.** If you don't already have emergency power provisions at your repeater, it's a simple matter to add battery backup, if your entire repeater operates from a single 12 volt supply. Availability of a repeater during an emergency that results in power outages can be one of the most important public service features of the machine.

Probably the simplest backup scheme is to float a 12 volt battery across the power supply. A battery well suited to this which should provide 3-5 years of maintenance free service is a 55 amp hour gel cell from Globe Battery, part number GC12550. It costs about \$100, but doesn't require any complex charging circuits. Simply set the supply voltage to 13.5 to 13.8 volts, and connect the battery directly across the load, as shown below. Isolate the battery and the load from the supply with a high current diode, to prevent the battery from discharging into the powered down circuitry of the supply when ac power is gone.

Switchover to battery power is instantaneous, with no down time. One battery should provide about 1 day continuous, or 2-4 days intermittent service on a typical 10 watt repeater. More capacity can be added by paralleling batteries - Gel Cells operate OK paralleled.

The supply will keep the battery floated at 100% of capacity, with current into the battery of about 100 mA when fully charged. After an outage, a higher charging current will flow into the battery, and the supply should be current limited to about 10 amps max.

Get Globe's Charging Manual, GC12550 data sheet, and more information on suppliers from Globe Battery Division, Globe-Union Inc., 5757 North Green Bay Ave., Milwaukee, Wisconsin, 53201, attn: Gel/Cell Marketing. Phone (414)228-2393.



**REMOTE LOG YOUR AUTOPATCHES.** John Williams, KBJW, Annapolis, Md. reports a way to log autopatch activity conveniently. With a Comm Spec PL encoder at the repeater transmitter, use controller UF8 output to enable encoder output automatically during patches. UF8 is open collector, and goes high (releases) at the beginning of a patch and returns low about 15 seconds after hangup. UF8 can connect directly to the Comm Spec TS-32 junction of CSR202 and C18, or to SS-32 junction of CSR202 and R6. This enables subaudible tone during the patch and hangup announcement, which may be decoded at home off a monitor receiver and used to drive a tape recorder for logging.

This approach allows phone number readback, patch traffic, and hangup message with time and date to be recorded automatically, with the user only required to announce the third party traffic.