The Swan Universal Power Supply systems are designed to provide all necessary voltages required by Swan Transceiver models 240, 250, 300-C. 350, and 400. The model 117-X basic A.C. supply. is designed for an input of 117 Volts at 50 or 60 cycles. The model 230-X is identical except. that it operates with either 117 or 230 volts. For fixed station use, the 117-X or 230 X is Installed in a cabinet which matches the Swan transceivers. This cabinet also contains a speaker, phone jack, and indicator light. The complete combination is designated as model 117-XC or 230-XC. The A.C. line cord plugs into the back of the supply. In the 230-XC, provision for changing from 117 to 230 volts input is made by simply changing line cords. Wiring changes are taken care of in the line cord plug.

12 VOLT OPERATION:

A D.C. Module attaches to the back of the A.C. supply, and converts it for 12 volts D.C. Input. The model 14-X D.C. Module is for negative ground systems, the most common type. (For positive ground systems, the model 14-XP D.C. module is available.) The combined units are designated as model 14-117 or 14-230 depending on which A.C. supply is used. The positive ground models are designated as model 14P-117 or 14P-230.

With the versatility of this power supply design, a number of advantages become apparent. The D.C. supply may be operated from an A.C. line by detaching the D.C. module, making a simple wiring change, and plugging in an A.C. cord. (See instructions under "Mobile Installation."

The matching A.C. supply, model 117-NC or 230-XC, may be converted easily to 12 voits input by attaching the 14-X D.C. module to the back. This provides for portable or emergency operation from a 12 volt battery. There may also be times when it will be desireable to operate temporarily in an automobile, such as during a vacation trip. field day, or emergencies. The 117-XC can be set on the floor or front seat, and with the 14-X attached it becomes a 12-volt power supply, complete with speaker.

SPECIFICATIONS:

Power Rating: 200 watts average, 500 watts peak. Input:

Model 117-X: 117 volts nominal, 50-60 cycles. Model 230-X: 230 volts or 117 volts, 50-60 cycles. Model 14-X: 13 volts D.C. nominal, 40 amps peak. Julput:

800 volts at 200 ma, average, 600 ma, peak, 275 volts at 150 ma, continuous,

110 volts negative bias, at 100 ma.

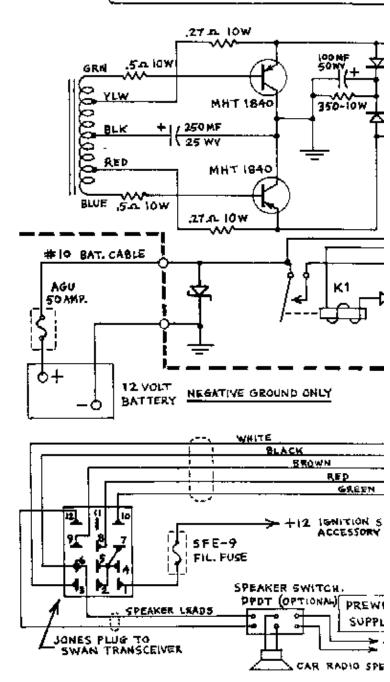
12 volts D.C. at 200 ma., relay supply.

12.6 volts A.C. at 5.5 amps. (with A.C. input only). Battery Drain with Swan Transceiver

Rec: 3.5 amps. Trans: 16 amps average, 40 amps peak (not including filament drain of transceiver).

DESIGN;

Both the A. C. and D. C. sections are conservatively designed for long, reliable service with a minimum.



failure rate. At the same time, they are designed for easy access and servicing for those times when it is required. Any component can be readily checked out and replaced in a matter of moments. The D.C. module and A.C. supply can be detached quickly from one another and tested individually, thus isolating the source of trouble.

The A.C. supply is quite conventional, using a silicon rectifier bridge for the medium voltage, and another for high voltage. The 117-X has a single primary winding for 117 volt input, while the 230-X has a pair of primary windings which connect in parallel for 117 volts, and in series for 230 volts. The switching is taken care of in the A.C. line cord plug.

The D.C. module uses two power transistors for