C. OPERATION

WARNING

DANGEROUS HIGH VOLTAGE IS PRESENT ON THE PLATE OF THE POWER AMPLIFIER WHENEVER THE POWER SUPPLY IS ENERGIZED. NEVER TURN POWER ON WHEN THE POWER AMPLIFIER COVER IS REMOVED. HIGH VOLTAGE IS ALSO PRESENT AT PIN EIGHT OF THE POWER PLUG.

The Swan Model 400 may be operated with either the Model 406 or Model 420 Frequency Control Unit, and may be operated from 117 volts, ac , 50 to 60 cycle power with the Model 117B power supply or the Model 117 AC power supply. The Model 400 may be operated from a 12.6 volt dc source with the Swan Model 512 power supply.

The following modification must be made to most Model 117 AC power supplies.

1. Disconnect the supply from the power line.
2. Remove the bottom cover from the supply.
3. Locate R6, the 1000 ohm 1/2 watt resistor on the component board. Short out this resistor with a piece of hookup wire.
4. Locate R5, the 12 ohm 1/2 watt resistor connected to the red and black diode, remove this resistor and replace with 4.7 ohm, 1/2 watt.
5. Replace the bottom cover before applying power.

Before connecting any cables to the Swan 400, perform the following steps:

1. Rotate the PA Bias control on the rear chassis apron, fully counter clockwise.
2. Rotate the Function Switch located on the lower left of the front panel counter clockwise to STBY.
3. Rotate the AF Gain Control counter clockwise to operate the power switch to OFF.

POWER SUPPLY AND ANTENNA CONNECTIONS

1. Connect either the Swan 406 or 420 Frequency Control Unit to the 9 pin connector near the center of the rear chassis apron.
2. Connect a 50 to 75 ohm antenna to the coaxial connector on the rear chassis panel.
3. Connect the power supply cable to the Jones connector on the rear chassis apron.
4. Connect the power supply to the proper voltage source.

RECEIVE OPERATION

1. Rotate the AF Gain Control clockwise to about the 3 o'clock position. The power switch will operate applying filament, relay, bias, and 800 volt high voltage to the transceiver.
2. Wait approximately one minute to allow the tube filaments to reach operating temperature. During this period, perform the following steps:
   (a) Rotate the Sideband Selector to the counter-clockwise position, providing lower sideband on 40 and 80 meters, and upper sideband on 20, 15, and 10 meters. The opposite sideband will be selected when the switch is in the clockwise position.
   (b) Rotate the Phone-CW switch to Phone.
   (c) Rotate the Bandswitch to desired band.
   (d) Rotate Mic. Gain fully counter-clockwise.
   (e) Rotate Car. Bal. control to the midscale position, with white dot on knob aligned with the long index mark on the panel.
   (f) Preset PA Plate control to mid-position.
   (g) Preset PA Grid Control to mid-position.
   (h) Preset PA Load Fine to mid-position.
   (i) Rotate PA Load Coarse to position 6.
   (j) Rotate Bandswitch on Frequency Control Unit to desired band.
   (k) Set Frequency Control Unit tuning dial to desired operating frequency.
   (l) Set RF Gain Control to approximately 3 o'clock position.
3. Rotate the Function Switch clockwise to the REC position.