MASTER-TRAINER SYSTEM

For trainer operation, transmitters need not be on the same frequency, and may have 5 or 7 channels. Mode I is compatible only with another Mode I transmitter. Mode II is compatible with Mode II and also with single stick transmitters.

The receiver in the aircraft to be flown must be matched to the master or instructor's transmitter.

The transmitter interconnect cable determines which transmitter is to be used as the master. The end of the interconnect cable marked with the black ring is plugged into the slave or student transmitter. Remove or retract the antenna on the slave transmitter. Both transmitters must be switched "ON." When the master transmitter transfer control switch is operated, it transfers control to the slave transmitter. Releasing the switch instantly transfers control back to the master transmitter.

Since the R.F. oscillator in the slave unit must be disabled, it is necessary to shunt power away from the oscillator by returning base power through a low value of resistance to ground through a shorting wire in the slave end of the connecting cable. Because the modulator in the slave unit is not disconnected from the logic output line, capacitive triggering was used on the modulator to prevent locking out the master transmitter modulator if the battery voltage in the slave unit is substantially higher than the battery voltage in the master transmitter.

OPERATIONAL CHECKS

Check the oscillator disabling to be sure the oscillator is indeed "off" in the slave mode, i.e., when the slave end of the cable is plugged into the student transmitter, the R.F. output meter should indicate zero output. Modulator operation may be checked by using a second transmitter and the interconnecting cable.

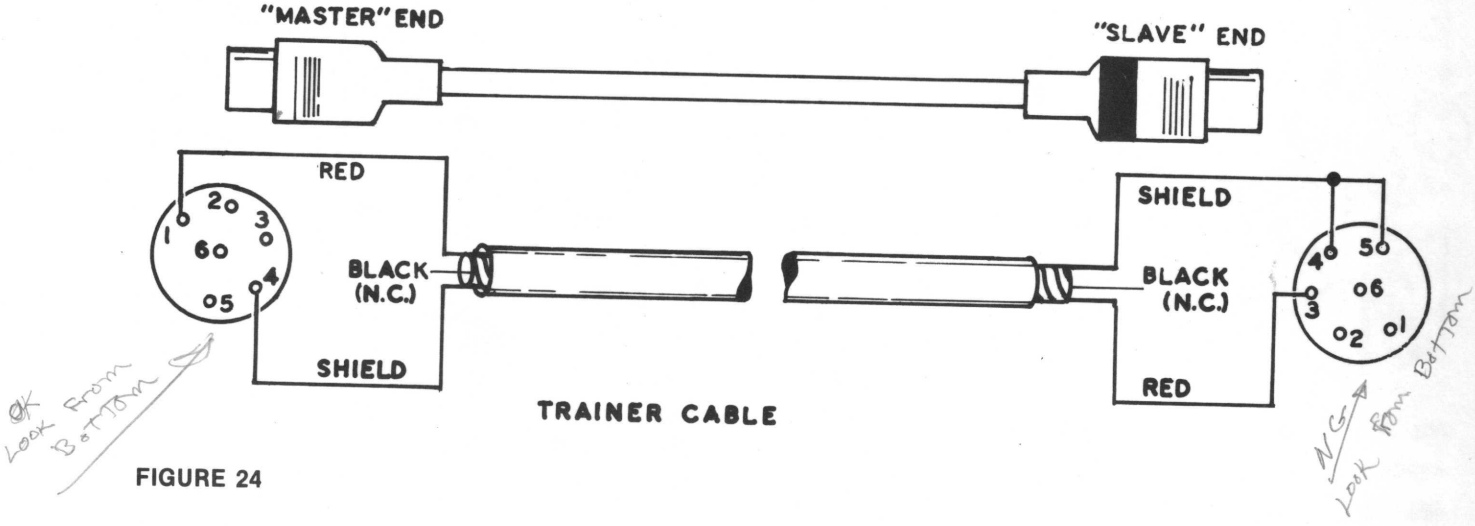

FIGURE 24