

3-2 POWER UP AND TESTING CONSIDERATIONS.

Whenever power is applied to the transceiver it will execute a Power On Self Test sequence. This sequence tests several functions inside the transceiver including memory tests, a confidence test of the configuration options stored in non-volatile memory, and a BITE (built in test equipment) test of transceiver functions. Since it is often required that the transceiver not send any unsolicited bus messages, the transceivers will not announce a wait condition over the bus. During the wait condition, the transceiver will only respond to a limited subset of commands from the bus. These are:

: ?	Request interface status message
PO ?	Request results of Power On Self Test
!	Clear wait condition and proceed with startup

While in the wait condition, if the : ? command is sent, the transceiver will respond with:

TE:EEPR or TE:POST

This indicates that the transceiver is waiting. This condition can only be cleared by sending the ! command. To determine the reason for POST failure, the user should then request POST results (PO?) and if this shows BITE failure, also request the BITE results (BI?) after clearing the Power on Wait condition with the ! command.

NOTE:

In the event of a POST failure, the radio will emit a sequence of failure codes in morse code. These codes should be relayed to CCI in order to assist in troubleshooting.

The proper way to structure a remote control program to handle this condition is to query each transceiver for interface status (: ?) before sending any other commands at power up and wait for the reply. A reply will not be sent until a wait condition has been entered or normal operation has been entered. If the wait condition is indicated, send the ! command and test again. This process should be repeated until the transceiver responds with an interface status other than TE: (serial interface.)

3-3 EEPROM FAILURE.

If a POST failure was caused by a corrupted EEPROM, send the VFCLR command to reset the vector feedback constant table values in EEPROM to zero. Next, connect the transceiver to a 25 watt, 50Ω dummy load. Then send the VFCAL command to rebuild the table.