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.