## CONTROL/INTERFACE PWB REPLACEMENT

- 1. Record the following information (as a minimum) from the front panel AUI:
  - Presets page: record settings for all desired presets
  - Scheduler page: record Rules and Daily Events information
  - Factory Settings page: record information in the RF Symmetry and Transmitter Type menus
  - System Settings page: record all information in the Exciter Clock Calibration and Power Lockout menus
  - User Settings page: record all information in the Network Setup menu
  - Remote I/O page: record all information for the user-defined remote Inputs and Outputs, including Channel and Control settings
  - Changeover page: record all information
- 2. Use a digital multimeter to measure the VSWR threshold voltage on the control/interface PWB at R73-LHS. Record this voltage.
- 3. Set the transmitter to its **RF Off** state. Turn off (disable or lock out) the ac power at the source. Open the front door to gain access to the exciter panel (see Figure 1.6 on page 1-55).
- 4. Disconnect all cables attached to the control/interface PWB (A11A1), taking note of the connector labels on the cables and the PWB.
- 5. Remove and retain the two screws securing the connector bracket in the upper, left portion of the control/interface PWB.
- 6. Remove either the remote interface PWB (A11A4) or both digital AM exciter PWBs (A11A2 and A11A3), whichever is easier. It may be helpful to gently pry the connectors loose with a screwdriver.
- 7. Remove and retain 13 sets of mounting hardware from the control/interface PWB (A11A1).
- 8. Obtain a replacement control/interface PWB (Nautel Part # NAPC160B/01).
- 9. Set the **COMB CONT INTLK** (E1) and **REMOTE SUPPLY** (E3) jumpers on the replacement PWB to the same positions as the defective PWB.
- 10. Install the new control/interface PWB by reversing Step 4 through Step 7. For connector mating assistance, refer to the connector mating tables in Section 4, "Wiring/connector lists" on page 4-1.

- 11. Disconnect P8 from J11 of the rack interface PWB (A15) in each cabinet.
- 12. Enable (switch on) the ac power for the transmitter.
- 13. From the front panel AUI's **Factory Settings Transmitter Type** page, press the Reset button for Rack Registration.
- 14. Disable (switch off and lock out) the ac power for the transmitter.
- 15. Reconnect P8 to J11 of the rack interface PWB in cabinet 1.
- 16. Enable (switch on) the ac power for the transmitter.
- 17. Use the AUI's **Meter List View** page to verify that Rack 1 meters are populated and the meters for all installed Modules in Rack 1 are populated. See the *NX200 Operations and Maintenance Manual* for detailed instructions.
- 18. Disable (switch off and lock out) the ac power for the transmitter.
- 19. Reconnect P8 to J11 of the rack interface PWB in cabinet 2.
- 20. Enable (switch on) the ac power for the transmitter.
- 21. Use the AUI's **Meter List View** page to verify that Rack 2 meters are populated and the meters for all installed Modules in Rack 2 are populated. See the *NX200 Operations and Maintenance Manual* for detailed instructions.
- 22. Re-enter all the AUI information recorded in Step 1.
- 23. Set the time using the front panel AUI's Factory Settings Time Setup page.
- 24. Measure the VSWR threshold voltage on the control/interface PWB at R73-LHS. Adjust VSWR THRESHOLD potentiometer R78 until the multimeter reading is the same as the voltage recorded in Step 2.
- 25. Upgrade the subsystem software using the AUI's **Upgrade Software** page under the **System Settings** menu. See the *NX200 Operations and Maintenance Manual* for detailed instructions.

## GPS SYNC PWB REPLACEMENT

1. Remove and retain four sets of mounting hardware from the GPS sync PWB being replaced (A11A5).