

## 5.5.1 FCC INITIALIZATION AND CONFIGURATION

The first time the AFCS is turned on in a new installation, the FCC must be configured via an RS232 interface with a PC. This interface capability is provided to facilitate diagnostic and configuration functions with the FCC during the post installation checkout. The PC menu commands given are based on the terminal emulator capabilities within Microsoft® Windows™. Other terminal emulation programs will have similar functions.

### 5.5.1.1 RS232 INTERFACE

The RS 232 interface to the flight control computer is through a Remote Terminal Interface (RTI) jack located in the cockpit. Plug the 155-02794-0001 computer cable assembly to the RTI jack. Connect the computer cable assembly connector to the desired COM port on the PC. The autopilot system cannot be configured without using the RTI.

The PC will communicate through the RTI by using the terminal emulator in the "ACCESSORIES" group of Microsoft® Windows™ version 3.1 or later (Hyper Terminal in Windows 95/98/NT). Use of other interface software is acceptable. The displays are identical when using an alternate terminal emulator. Regardless of software, configure the communications port as follows: 9600 baud rate, 8 data bits, 1 stop bit, no parity (none), Xon/Xoff flow control and the desired COM port (typically COM1).

**NOTE:** Verify that the terminal emulator being used is configured to strip out all line feeds and carriage returns (this is the Windows® Terminal emulator default setting). Failure to do so will result in a "CHECKSUM ERROR" when uploading the installation file.

#### A. Windows 3.1®

Double click the "TERMINAL" icon. Upon entering the terminal emulator, select the "Settings" menu item, then select "Communications" menu option. Configure the communication port as described above. Click on the "OK".

Select the "Settings" menu item again, and select "Terminal Preferences..." menu option. Deselect the "Use Function, Arrow, and Ctrl Keys for Windows" option at the bottom of the dialogue box. Click the "OK".

It is recommended that the settings that have been entered be saved for future interface to the FCC.

#### B. Windows 95/98/NT®

Select the Hyper Terminal folder in accessories. Double click the "HYPERTERM" icon in the Hyper Terminal program group.

Enter a name for your connection (i.e. 225) and select an icon (this setup will work regardless of which icon is chosen.) Click "OK"

The phone number pop-up box will appear listing several options for a phone connection. Select "Direct to COM 1" for the "Connect Using" option. Click "OK".

The COM 1 Properties pop-up box will now appear. Configure this box as described above. Click "OK".

The terminal is now ready to communicate with the KC 225. Press the Enter key to establish communication. If communication is not established verify the computer cable assembly is properly installed.

### 5.5.1.2 RTI MAIN MENU

Apply ground power to the aircraft. Turn the AP MASTER switch to the "ON" position. The FCC will initiate the preflight test sequence, but may fail if the unit has not been previously configured. The RTI main menu should appear after a few seconds. If it does not, press <ENTER> or CRTL-W. If communications cannot be established, check RS 232 interconnect and terminal setup.

The main menu provides the selections for entering diagnostic mode, displaying the error log, displaying the software identification number or configuring the system. The following sections provide specific instructions on using these selections to perform the required installation and ground checkout procedures. Use of the diagnostics mode will inhibit the normal operation of the FCC.

### 5.5.1.3 CONFIGURATION PROCEDURE

Communications should be established with the FCC. It should be noted that <ENTER> is the same as the <CR>. Follow the steps below to configure the FCC.

- A. Once the RS 232 cable is connected, the remote terminal should display the menu shown in Figure 5-1, RTI Main Menu Screen.

```
System Mode: Normal

KC 225 Flight Computer
-----
D - Diagnostics
L - Error Log
S - Display SW ID
N - Installation

Press key for desired option
```

**Figure 5-1, RTI Main Menu Screen**

- B. Press "N" to enter the installation menu. The terminal should display a menu as Figure 5-2, Installation Menu Screen

```
System Mode: Normal

Set Install Options
-----
1. Install Certification File
2. Installation Offset
3. Factory offsets
4. Altimeter Alignment
5. KC225 SW Bulletin Update
6. Audio Volume (0-7): 2
7. Select 350/256 (1/0): 0
8. Flaps Analog/Discrete (1/0): 0
9. Voice Msg. Enabled/Disabled (1/0): 1
10. ARINC 429 (HSI) Heading (1/0): 1
11. ARINC 429 (GPS) Steering (1/0): 0
12. Dim Bus Voltage 5V/28V (1/0): 0
13. AP DISC Disengages FD/Not (1/0): 1
14. Tone Alert at Sel Alt/Not (1/0): 0
15. Gyro/Power Valid (1/0): 0

Press key for desired option (<CR> to exit)
```

**Figure 5-2, Installation Menu Screen**