Attachment C

USING DIAL-UP NETWORKING IN WINDOWS 95/98/2000/XP FOR ULS FILING

This attachment describes how to use Windows 95/98/2000/XP Dial-Up Networking to establish a direct connection from your PC to the FCC Network and the Universal Licensing System (ULS) in order to file or review the Form 601. *This point-to-point connection is not routed through the Internet*.

This direct dial-up connection is **NOT** required to perform ULS online filing. You may file or review Form 601 on the Internet by entering ***http://wireless.fcc.gov/uls*** in your Web browser's address/location bar and clicking the **Online Filing** button on the ULS homepage.

Conventions

The instructions in this section use the following typographical conventions:

bold — Represents objects on the screen that you click with the mouse pointer, including buttons, Internet links, icons, tabs, menu items (e.g., **Cancel** button, **Auctions** link, **Save** option in the File menu).

italic — Represents field names or areas of a screen (e.g., *Applicant* field, *Selected Licenses* area of a screen).

bold italic — Represents characters that you must type exactly as they appear in the instructions. For example, if you are instructed to type ***http://wireless.fcc.gov/uls***, you should type all of the characters shown in bold italic exactly as they are printed.

SMALL CAPS — Represents keys on the keyboard (e.g., ENTER, CTRL, ESC).

Note: Throughout these instructions, "enter" means to type the appropriate information and then press the ENTER key.

Hardware and Software Requirements

Connecting to the FCC Network using Windows 95/98/2000/XP Dial-Up Networking requires *at a minimum* the following hardware and software:

Hardware Requirements

- CPU: Pentium 133 or above
- RAM: 32 MB (more recommended if you have multiple applications open)
- Monitor: VGA or above
- Modem: 28.8 Kbps, Hayes-compatible or faster (recommend 56.6 Kbps)
- Mouse or other pointing device

Software Requirements

- Web browser software is required. You may use Netscape Communicator (v. 4.5, 4.51, 4.61, 4.7x) or Internet Explorer (v. 5.5 or later) browser software to electronically register and file FCC Form 601 through ULS. You can download Netscape Communicator free of charge by accessing the Netscape download site at http://home.netscape.com/download/archive.html. You may also download Internet Explorer at http://www.microsoft.com/windows/ie/downloads/default.asp.

- Microsoft Windows 95/98/2000/XP

  Note: If you are running Windows in a networked environment, check with your local network administrator for any potential conflicts with Windows 95/98/2000/XP Dial-Up Networking. This usually includes any TCP/IP installed network protocol.

- Adobe Acrobat 4.0 Reader (or higher) is recommended as a plug-in to your browser. This provides a viewer for displaying files related to applications, such as attachments and exhibits. For best results, install the plug-in after you have installed the desired web browser. This will allow the plug-in to be fully integrated within the browser window.

  To download Adobe Acrobat version 4.0 or higher, access the Acrobat download site at http://www.adobe.com/support/downloads/main.html.

Configuring Dial-Up Networking

1. To start dial-up networking in **Windows 95/98:**

   a. Click the Windows 95/98 **Start** button.
   b. Click the **Programs** option to display the Programs menu.
   c. Click the **Accessories** option to display the Accessories menu.
   d. In Windows 95, click **Dial-Up Networking**.
      In Windows 98, click **Communications**, then **Dial-Up Networking**.

   If Dial-Up Networking is not an option on your Accessories menu, you should install it from your Windows 95/98 CD or diskettes.

   To start dial-up networking in **Windows XP** follow the steps below.
   a. Click the **Start** button.
   b. Click the **Programs** option to display the Programs menu.
   c. Click the **Accessories** option to display the Accessories menu.
   d. Click **Communications**
   e. Click **New Connection Wizard.**
   f. Click **Connect to the Network at My Workplace**.
   g. Click **Dial-Up Connection**.
   h. Specify connection name by entering the name of the dial-up location in the *Company Name* field, e.g. "FCC Dial-Up Connection."
   i. Enter dial-up phone number, 1-800-844-2784.
   j. Select Connection Availability:
      Anyone's use
      My use only

   To start dial-up networking in **Windows 2000**, the user must be logged in as an "administrator." Follow these steps:

   a. Click the **Start** button.
   b. Click **Settings**.
   c. Click on the **Network** icon.
   d. Click on **Dial-up Connections**.

NOTE: You must have administrative rights in Windows 2000 or XP to set up dial-up networking.

2. When the Dial-Up Networking window appears, double-click the **Make New Connection** icon.

   The Make New Connection window appears.

3. In the field entitled *Type a name for the computer you are dialing*, type ***ULS at FCC***.

4. In Windows 95, click the down arrow at the right of the *Select a modem* field and select your modem from the menu of available modems.

In Windows 98, click the down arrow at the right of the *Select a device* field and select your modem from the menu of available devices.

If your modem does not appear on this list, you must install your modem driver according to the modem manufacturer installation procedures, which are usually described in your modem's user manual.

5. Click the **Configure** button. Click the **Options** tab at the top of the Properties window.

6. In the *Connection control* area of the **Options** tab, verify that ***neither*** option is selected. If either option is selected, click the check box at the left of the option to deselect it. Then click the **OK** button.

7. Click the **Next** button.

8. Type ***800*** in the *Area Code* field and ***844-2784*** in the *Telephone Number* field. Verify that the correct country is selected in the *Country code* field. If necessary, click the down arrow at the right of the *Country code* field, and select the appropriate country from the menu of available countries.

9. Click the **Next** button.

10. Click the **Finish** button. An icon titled **ULS at FCC** appears in the **Dial-Up Networking window**.

11. Verify that properties are configured correctly before attempting a dial-up session. Position the mouse pointer on the **ULS at FCC** icon and click the ***right*** mouse button to display a menu. Select **Properties** from the menu.

12. Click the **Server Types** tab at the top of the Properties window.

13. In the *Advanced Options* area, verify that only *Enable software compression* is selected.

    If it is not selected, click the check box at the left of the option to select it. If either of the other options is selected, click the check box to deselect it.

14. In the *Allowed Network Protocols* area, verify that only *TCP/IP* is selected.

    If it is not selected, click the check box at the left of the option to select it. If either of the other options is selected, click the check box to deselect it.

15. Click the **TCP/IP Settings** button. In the **TCP/IP Settings** window, confirm that the *Server assigned IP address* option is selected. Then, in the section beneath, select *Specify name server addresses*.

16. Type ***192.104.54.1*** as the *Primary DNS*.

    Make sure that these two options are checked:

    - Use IP header compression
    - Use default gateway or remote network

17. Click **OK** on the **TCP/IP Settings** window and the **Server Type** window.

18. a. Click the Windows 95/98 **Start** button, then click the **Settings** option to display the Settings menu.

    b. Click **Control Panel** and then double-click the **Network** icon.

    c. In the *Configuration* tab of the **Network** window, select *TCP/IP* and click the **Properties** button. (If there are multiple TCP/IP protocols, select *TCP/IP*, then highlight *Dial-Up Adapter* and click **Properties**.)

    d. Click the *DNS Configuration* tab.

    e. Select *Enable DNS*. Type ***bidder*** in the *Host* box, type ***fcc.gov*** in the *Domain* box, then type ***192.104.54.1*** in the DNS Server Search Order box and click the **Add** button.

    f. Click **OK** on the TCP/IP Properties windows, then click **OK** on the **Network** window.

    g. If you are prompted to restart your computer, click **Yes** to restart, then begin the Dial-Up Procedure.

Dial-Up Procedure

1. If the Dial-Up Networking window is not currently open, do the following:

    a. Click the Windows 95/98 **Start** button.
    b. Click the **Programs** option to display the Programs menu.
    c. Click the **Accessories** option to display the Accessories menu.
    d. In Windows 95, click **Dial-Up Networking**
    In Windows 98, click **Communications**, then **Dial-Up Networking**.

    The Dial-Up Networking window appears.

2. Double-click the **ULS at FCC** icon in the Dial-Up Networking window.

3. Click the **Connect** button on the window. *Do not enter User name and Password*.

   The Connecting window appears, indicating the status of your connection as your modem dials into the system. This window must remain running during your dial-up session. You may minimize the window, if you wish.

   If your modem fails to establish a connection, please see the *Troubleshooting* section below.

4. Once the connection is established, open your Web browser.

5. In your browser's location field, enter ***http://wireless.fcc.gov/uls/***

   If nothing appears in your Web browser, see the *Troubleshooting* section below.

6. When you have finished, exit the Web browser, then click the **Disconnect** button on the Connecting window to end your dial-up session.

Troubleshooting

Following are problems you may encounter and possible solutions for resolving or isolating them.

Modem does not respond

1. Confirm that all physical connections for the modem are present.

2. Confirm that the phone line is active by connecting it to a telephone and checking for a dial tone.

3. Confirm that the correct modem driver is installed for your modem.

Modem dials but does not connect

1. Confirm that the number the modem is dialing is correct.

2. Confirm that the modem prefix, if any, is correct.

Modem dials and connects, but nothing appears when you enter the location in the Web browser

1. Check the settings in your dial-up networking icon, particularly that the *Primary DNS* is ***192.104.54.1*** and that *TCP/IP* is the only selected protocol.

2. Confirm that your Web browser is not using proxies; it should be set to "direct connection to the Internet."

3. If you do log into a TCP/IP LAN, confirm that your LAN network IP address is being released.

To do so, connect to the FCC Network using dial-up networking, then click the **Start** button in Windows 95/98 and select **Run**. Type ***winipcfg*** and press **OK**. If your IP address does not begin with "192.104.", then your LAN IP address is not being released. Click the **Release All** button, or consult your LAN administrator.

Receive an Internal Server error in the Web browser

1. Confirm that the address entered in the location field is correct (***http://www.fcc.gov/wtb/uls***).

2. Confirm that *Java* and *JavaScript* are enabled in your Web browser, and confirm that *Cookies* is set to Accept All.

Help

For technical assistance with installing or using FCC software, contact the FCC Technical Support Hotline at (202)-414-1250 (voice) or (202) 414-1255 (TTY). The FCC Technical Support Hotline is available Monday through Friday from 8 a.m. to 6 p.m. Eastern Time. There are no weekend hours and the hotline is closed all Federal holidays. All calls to the FCC Technical Support Hotline are recorded.