Electronic Filing and Remote Access Information

This section of the Bidder Information Package is broken down into the following functional and technical areas:

- functionality and cost of the FCC Remote Electronic Auction System;

- hardware and software requirements and instructions; and

- auction round results file formats.

Functionality and Cost of the FCC Remote Electronic Auction System

The FCC Remote Electronic Auction System was recently developed to provide auction applicants the opportunity to fully participate in an FCC auction from their offices. The Remote Electronic Auction System allows auction participants to:

1. file an FCC Form 175 application;
2. review other FCC Form 175 applications filed;
3. submit and withdraw bids;
4. receive auction messages/announcements and submit suggestions; and
5. create and download customized round results files.

The FCC recently issued a Report and Order (WT Docket No. 95-69) establishing fair and reasonable fees for auction software and on-line access to the Commission's wide area network which can also be used to place and withdraw bids and access other auction information. The Report and Order established the following schedule of fees:

	SOFTWARE	ACCESS PER MINUTE
Form 175 Filing	$0.00	$0.00
Form 175 Review	$0.00	$2.30
Bid Submission	$175.00	$2.30
Messages/Announcements	$0.00	$2.30
Suggestion Box	$0.00	$2.30
Round Results Viewer	$0.00	$2.30

Payments for software will be taken by Tradewinds International, Inc., and can be made by credit card (Visa or Mastercard only) or check made payable to the Federal Communications Commission or "FCC" (see order form). Access charges will appear on the customer's long distance telephone bill.

Hardware and Software Requirements and
Instructions for Installing Electronic Filing Software

About Your Software

All FCC Remote Electronic Auction System Software requires **ppp** software that is Winsock v1.1 compliant to access the FCC system. Configuration parameters for Trumpet v2.1f, NetManage Chameleon v4.1 and Wollongong Pathway Access for Windows v3.2 software are included in the appendix.

Recommended Hardware and Software Requirements to Access the FCC Auction System

You will need at minimum the following hardware:

- CPU: Intel® 80386 or above (80486 or faster recommended)

- RAM: 8MB RAM (more recommended if you have multiple applications open)

- Hard Disk: 10MB available disk space

- 1.44MB 3.5" Floppy Drive (to install the FCC Form 175)

- Three blank MS-DOS® formatted 1.44MB floppy disks

- Modem: v.32bis 14.4kbps Hayes© compatible modem

- Monitor: VGA or above

- Mouse or other pointing device

- Microsoft® Windows™ 3.1 or above, or Microsoft® Windows for WorkGroups™ v3.11 or above*

- PPP asynchronous communications package Winsock v1.1 compliant*

*The FCC is in the process of testing Windows95. Contact the FCC Technical Support Hotline at (202) 414-1260

Installing Your PPP Software

Before you can use the FCC Form 175, you will need to install the ppp software. The ppp software should include documentation sufficient to install their product. Please see the appendix for various ppp software hints and configuration parameters.

Where to get Form 175 Application Software

Applicants who wish to file their FCC Form 175 applications electronically through the FCC Remote Access System must first download the FCC-provided application software from the Internet or the FCC Bulletin Board System.

Detailed Internet Instruction

To access the FCC ftp server, you will need to have access to the Internet and ftp client software. Graphical ftp interfaces may differ; please check with your local computer specialist.

> **FTP:** The following instructions are for the command line version of ftp.
>
> 1. Connect to the FCC ftp server by typing ftp fcc.gov
>
> 2. At the user name prompt, type anonymous **[Enter]**
>
> 3. At the password prompt, type your Internet e-mail address **[Enter]**
>
> 4. To allow the file to be downloaded type:
>   binary **[Enter]**
>
> 5. Change your current directory to the FCC175 directory by typing:
>   cd /pub/Auctions/SMR/900/FCC175 **[Enter]**
>
> 6. Use the get command to download files from the FCC ftp server by typing:
>   get F175V4.EXE **[Enter]**
>
> 7. If you wish to exit, type:
>   bye **[Enter]**
>
> **Gopher:** gopher.fcc.gov or use any gopher to get to "all the gophers in the world" then 'U.S.' then 'DC' then 'FCC'.
>
> **World Wide Web:** ftp://fcc.gov

Detailed BBS Instructions

The FCC Auction Bulletin Board System (BBS) provides dial-in access for the FCC-provided application software. In order to access the FCC Auction BBS, use a communications package that can handle at least xmodem protocol (e.*g.,* pcAnyWhere, Telix, Procomm) to dial in to (202) 682-5851. Use the settings of 8 data bits, no parity and 1 stop bit (8,N,1).

For new users follow steps 1-6, otherwise go to step 7:

1. Type New, **[Enter]**. If the word ANSI is blinking, type Y for yes. If the word ANSI is not blinking, type N for No

2. Type in your first and last name and press **[Enter]**. This will be your login name

3. Type in your Telephone number and press **[Enter]**

4. Type in your Fax number and press **[Enter]**

5. Type in what you want your password to be and press **[Enter]**

6. Retype the password for verification and press **[Enter]**

Once the account is generated:

7. Type S for SMR Auction Files and press **[Enter]**

8. Type B for SMR 900 and press **[Enter]**

9. Type P for Programs and Applications and press **[Enter]**

10. Move the cursor to the file named F175V4.EXE and type **[Control]-D** (hold the Ctrl key down and press the D key) for Download and press **[Enter]**

11. Type the letter representing the transfer protocol desired and press **[Enter]**. How the file is downloaded and where it gets downloaded depends on the transfer protocol package used.

12. Repeat steps 10 and 11 to download additional files, or press X and **[Enter]** to Exit the screen

To Exit:

13. Type X to Exit and press **[Enter]** and continue to do so until asked if you want to Exit the BBS. Press Y for Yes when asked to verify your leaving.

Creating Installation Disks from Downloaded Files

The FCC-provided application software available through Internet and the FCC Auction BBS will be in a self-extracting compressed file format. Once the compressed file has been downloaded, you will need to generate the installation disks. You will need to have three (3) blank MS-DOS® formatted 3.5" 1.44MB disks. To generate the installation disks, type F175V4.EXE /! and press **[Enter]**.

Installing FCC Form 175 Disks

If you had previously downloaded and installed the FCC Form 175 application, then, during installation, the setup program will prompt you to update any existing files. You MUST update all the existing files.

The extracted files will be executable programs for submitting and reviewing FCC Form 175 applications along with a README.TXT file. The text file will provide instructions for installing the software on the applicant's personal computer. After you create the installation disks, restart Windows and run SETUP.EXE from installation Disk 1 of 3 and follow the instructions on the screen. For technical assistance in downloading, extracting or installing the FCC application software contact the FCC Technical Support Hotline at (202) 414-1260.

Running FCC Form 175

After the FCC Form 175 installation is complete, you will have a new Program Manager group called FCC Auction with two icons: Remote FCC Form 175 Submit and Remote FCC Form 175 Review. You must start the ppp software and be connected before you start either program. To start up either the Remote FCC Form 175 Submit or Remote FCC Form 175 Review, double click the respective icon. When you are finished with either program, be sure to disconnect from the FCC Network via your ppp software.

DETAILED INSTRUCTIONS FOR USING ALL FCC REMOTE ELECTRONIC AUCTION SYSTEM SOFTWARE CAN BE FOUND IN THE README FILE ASSOCIATED WITH THE RESPECTIVE SOFTWARE MODULE AS WELL AS IN THE CONTEXT SENSITIVE HELP FUNCTION ASSOCIATED WITH EACH MODULE.

Appendix

General Setup for Unsupported or Unlisted PPP Software

It is possible to use ppp software that we have not tested. The following information should provide enough information to make your software work. However, if your software cannot confirm/establish the following parameters, you will need to get one of the tested ppp software. The FCC will not provide support for any untested software product.

1. Set the ppp software to ppp mode (do not set for slip)
2. Set the domain name server to 165.135.22.249
3. Set the domain suffix to fcc.gov
4. Set the phone number to: (this number will be provided in the README.TXT file included with the F175V4.EXE). You may need to add a dialing prefix
5. Be sure to set the Baud Rate to the maximum DTE modem speed. This is usually 57600 bps for 14.4 kbps modems
6. Set the modem parameters to 8 data bits, no parity and 1 stop (if needed, set flow control to hardware)

Note: Spry's Internet-in-a-Box failed our testing procedures.

Installing Trumpet v2.1f

Trumpet can be found on the Internet. It can be downloaded via ftp (be sure to download in binary mode). Trumpet v2.1f can be found at ftp.trumpet.com.au in the directory /winsock as twsk21f.zip. You will need PKWare's v2.04g pkunzip.exe to uncompress these files. PKWare v2.04g can be found at oak.oakland.edu in the directory /simtel/msdos/zip as pkz204g.exe. This is a self-extracting file. Type pkz204g.exe to extract the file pkunzip.exe. Please be aware of any licensing issues for these shareware products. The information is included in the respective package.

If you already have some kind of TCP/IP networking package installed, the Trumpet Winsock program may not run. Contact your LAN administrator for assistance. Trumpet versions 2.0b and 2.1f have successfully been tested to work with the FCC network.

Copy the files **winsock.dll, tcpman.exe, hosts, services, login.cmd, bye.cmd, setup.cmd, sendreg.exe,** and **protocol** to a suitable directory.

e.g., c:\trumpet

The essential files are:

winsock.dll   the core of the Trumpet TCP/IP driver
tcpman.exe   controlling program for the Winsock
sendreg.exe   registration program
hosts   list of host names
services   list of Internet services
protocol   list of Internet protocols
login.cmd   Trumpet script file to connect to the FCC Network
bye.cmd   Trumpet script file to disconnect from the FCC Network
setup.cmd   Trumpet setup file to connect to the FCC Network

Modify the path line in your autoexec.bat to contain a reference to that directory.

        e.g., path c:\trumpet;c:\dos;c:\windows

Make sure it is active by rebooting your computer. Now you are ready to start Windows.

From Windows, start up tcpman by selecting File | Run from the file manager, then type tcpman. If this fails, the path is probably not set up correctly. Please fix it before proceeding. Later, you can set up tcpman as an icon so it can be started directly.

Assuming you are a first time user, a setup screen will appear giving you a number of options to fill in. You will need to fill in the following details to enable the TCP package to function. If you are unclear on any of them, try to seek some help from qualified Internet support staff -- it will save you a lot of time.

First click on Internal PPP. The parameters available for your use will be darkened, while the parameters not available will be shaded gray and will be disabled.

Name server
- Enter name server IP address 165.135.22.249 for DNS searches.

Domain suffix
- Enter domain suffix fcc.gov

MTU
- Maximum Transmission Unit, set to 1500. Related to TCP MSS usually TCP MSS + 40 (Numeric).

TCP RWIN
- TCP Receive Window, set to 4096. It is recommended that this value be roughly 3 to 4 times the value of TCP MSS (Numeric).

TCP MSS
- Maximum Segment Size, set to 1460.

SLIP port
- your modem port number 1=com1, 2=com2 etc., (numeric).

Baud rate
- The speed you wish to run at (numeric), set to the maximum modem DTE speed or 57600. Up to 115200 is supported although speeds greater than 19200 require suitable hardware.

Hardware
- Handshake should be checked.

The rest of the details should be grayed out and you need not try to fill them in. When you are done, click on [OK].

Under the Dialler | 1. setup.cmd:

- Set the telephone number to: (this number will be provided in the README.TXT file included with the F175V4.EXE). You may need to add a dialing prefix
- Leave the login username blank (i.e., no username)
- Leave the login password blank (i.e., no password)

Under the File | PPP Options

- Do not enable PAP

If you decide to use the login script login.cmd, you will need to use a text editor to delete all after line 132 inclusive.

Line 132:

input % logintimeout $userprompt

If all goes well, the Trumpet Winsock will be initialized. You are now ready to start using the Winsock.

Remember, before you use the FCC Form 175, you will need to be connected. To connect, select Dialler | Login on the menu bar. **For applications with an associated access charge, the charging begins as soon as the connect is established.** After finishing the FCC Form 175, you should disconnect from the FCC network by selecting Dialler | Bye. **For applications with an associated access charge, the charging continues until the disconnect has been completed.**

Detailed Configuration Information Using NetManage Chameleon v4.1

Install the software as instructed by the NetManage installation routine. Activate the Custom - Connect Here icon in the Program Manager Internet Chameleon group. Setup Chameleon's parameters with the following:

Under the Custom menu Interface | Add:

- Set the Name to FCC
- Set the Type to PPP

Under the Custom menu Setup | Port:

- Set the Baud Rate to the maximum DTE speed of your modem, usually 57600 bps for 14.4 kbps modems
- Set the Data Bits to 8
- Set the Stop Bits to 1
- Set the Parity to none
- Set the Flow Control to Hardware
- Set the Connector to match your modem comm port

Under the Custom menu Setup | Modem:

- Select the modem that most closely matches your modem. Hayes© is the most common choice.

Under the Custom menu Setup | Dial:

- Type in the dial edit box: (this number will be provided in the README.TXT file included with the F175V4.EXE). You may need to add a dialing prefix.

Under the Custom menu Setup | Login:

- Leave User Name blank
- Leave User Password blank

Under the Services | Domain Servers:

- Set an IP address to the number 165.135.22.249

Remember, before you use the FCC Form 175, you will need to be connected. To connect, click on **Connect** on the menu bar. **For applications with an associated access charge, the charging begins as soon as the connect is established.** After finishing the FCC Form 175, you should disconnect from the FCC network by clicking on **Disconnect. For applications with an associated access charge, the charging continues until the disconnect has been completed.**

Configuration Information For Using Wollongong Pathway for Windows v3.2

Install the Pathway Runtime for Windows v4.0 software using the Wollongong installation routine. During setup, you will be required to provide the following parameters: (you may enter anything for information not listed):

- Set the Adapter to SLIP/CSLIP/PPP connection
- Set the Domain Name to fcc.gov
- Set the IP Address to 0.0.0.0
- Set the Subnet Mask to 255.255.0.0
- Set the **DNS Server** to the number 165.135.22.249

After the installation, start Dialer found in the Pathway Access Program Manager group. Enter a new profile (File | New) and supply the following relevant information:

- Set the Telephone Number to: (this number will be provided in the README.TXT file included with the F175V4.EXE). You may need to add a dialing prefix.
- Set the Port to match your modem comm port
- Set the Baud Rate to the maximum DTE speed of your modem
- Check Driver Parameters' Flow Control
- Under Protocol, select PPP
- In the script text box, have only the following command:

  SEND:

When you are finished, click on [Save] and provide a filename for your new profile.

Before you use the FCC Form 175 programs, you must be connected. To connect, click on **Dial** on the tool bar. **For applications with an associated access charge, the charging begins as soon as the connect is established.** After you are connected, Dial will gray out and **Disconnect** will be made available. After finishing the FCC Form 175 programs, you should disconnect from the FCC Network by clicking on **Disconnect. For applications with an associated access charge, the charging continues until the disconnect has been completed.**

Round Results File Formats

The Commission will be providing electronic files containing round results that can be accessed through the Round Results Viewer software, Internet and the FCC Bulletin Board System (BBS). Since this auction and future auctions will contain significantly more licenses and more bidders, the Commission has modified these file formats to make them smaller to minimize download times. The following file formats are the default file formats and will be provided in both .DBF and ASCII text formats. Anyone accessing round results from the FCC Remote Electronic Auction System Round Results Viewer software can create customized file formats. The naming conventions of the files appear above the file format.

The **All Bids, High Bids Before Withdrawal, Withdrawals and High Bids After Withdrawal** file formats are identical:

Format of File Name:	Where:
XXX_NNNT.FFF	XXX = Auction ID NNN = Round Number

For example:
7_110S.DBF
7_110W.DBF
	T = S - All Bids entered during Bid Submission
	     X - High Bids Before Withdrawal
	     Y - High Bids After Withdrawal
	     W - Withdrawn Bids

	FFF = txt or dbf format

The valid values for bid_type are: S, W, and H which represent Submitted Bid, Withdrawn Bid, and High Bid respectively.

Field	Length
bid_type	1
market	4
freq_block	2
round_num	3
bid_amt	11
bidder_num	4
date	8
time	8
Total Record Size:	41

Maximum Eligibility:

Format of File Name:	Where:
XXX_NNNT.FFF	XXX = Auction ID
	NNN = Round Number
For example:	T = E - Maximum Eligibility
7_110E.DBF	
	FFF = txt or dbf format

Field	Length
round_num	3
bidder_num	4
max_elig	11
rmng_waivr	3

Total Record Size: 21

Minimum Bid:

Format of File Name:	Where:
XXX_NNNT.FFF	XXX = Auction ID
	NNN = Round Number
For example:	T = M - Minimum Bid
7_110M.DBF	
	FFF = txt or dbf format

Field	Length
market	4
freq_block	2
round_num	3
previous_h	11
min_accept	11

Total Record Size: 31

The Commission will provide an additional file to provide the mapping of the bidder number to the FCC account number and name. This file will only have to be downloaded once.

Bidder Cross Reference:

Format of File Name:	Where:
XXX_T.FFF	XXX = Auction ID T = XREF - Cross Reference
For example: 7_XREF.TXT	FFF = txt or dbf format

Field	Length
bidder_num	4
fcc_account_num	10
co_name	50

Total Record Size: 64

FCC Remote Bidding Software

Order Form

Please return this Order Form no later than 5:30 p.m., Friday, November 17, 1995 to Tradewinds International, Inc., GAT Washington National Airport, Suite 215, Washington D.C., 20001, or fax to (703) 417-0692

The cost of the FCC Remote Bidding Software is $175.00. Payment may be made by credit card (Visa or Mastercard only) or check made payable to the "Federal Communications Commission" or "FCC". Only those qualified bidders that filed their FCC Form 175 applications electronically have the option of using the FCC Remote Bidding Software to participate in the auction bidding process.

Name _____

Company _____

FCC Account # _____

Address* _____

_____

Phone Number _____

Fax Number _____

Fax Modem Number _____

Credit Card ___ Visa ___ Mastercard

Card Number _____ Expiration Date_____

Name on Card _____

Amount ___ $175.00

Signature _____ Date _____

The software is Microsoft Windows compatible and will be provided in 3.5 inch high density diskettes. *See* hardware and software requirements for installation of electronic filing software in this Bidder Information Package. A user manual will accompany your software package which will include detailed instructions for installing and using the FCC remote bidding software.

* Software packages will be delivered to the contact person at the address specified on the FCC Form 175 application filed with the Commission.

FCC SMR 900 Applicant Seminar

The Federal Communications Commission will sponsor a one day auction workshop and seminar for those applicants whose FCC Form 175 have been filed. This seminar will provide applicants instruction and assistance in the processing and filing of the FCC Remittance Advice Form (FCC Form 159) which is required with all upfront payments. Additional topics to be covered include: FCC Bid Submission Software, available bidding options, and auction activity rules.

Two representatives per company may attend. **Space is limited.**

The seminar will be held: Thursday, November 9, 1995,   Time: 9:00 am - 5:00 pm ET

The seminar address is: Postal Square Museum Bldg.
2 Massachusetts Ave, N.E.
Washington, D.C. 20002
(Adjacent to Union Station; entrance on North Capitol Street)

Please fill out the information outlined below and return by mail or fax to:

Tradewinds International, Inc
GAT Washington National Airport
Suite 215
Washington, D.C. 20001

Telephone Number: (202) 637-FCC1 (637-3221)
Fax number: (703) 417-0692

** The registration form must be returned no later than Thursday, November 2, 1995.

I/We will attend the Auction Seminar on Thursday, November 9, 1995.

1. Name of Attendee: _____

2. Name of Attendee: _____

Company Name: _____

Address: _____

City/State: _____   Zip:_____

Phone: _____   Fax:_____

(Upon receipt of this registration a confirmation letter and program outline will be faxed to the contact person on your FCC Form 175)