Comprehensive Identification from FrEquency Responses

An interactive facility for system identification and verification

INSTALLATION QUICK-NOTES
(Version 4-05 or Later)
RECENT RELEASE NOTES:

1. This WINTEL INSTALLATION procedure assumes that your computer or network has been set up and verified in a normal configuration for your enterprise. CIFER® Installations are typically on a single desktop. Server installations are possible but while CIFER® is a multi-user application it is not threaded, and multiple simultaneous users are not currently supported. Please consult with CasalCorp for procedures specific to your networks/architecture.

For WINTEL Installations; NT, W2K, and XP are supported operating systems.

If you are installing CIFER® in classroom network configuration, where each Student Station is standalone but some assets are shared (e.g. printers), please verify that any other software and device drivers needed for classroom support are installed before CIFER®. Please ensure as well that all shared assets functions (e.g. connecting to and sending jobs to printer) are verified prior to this installation. This will provide the best insurance for proper CIFER® functioning and also assist identification and resolution of any related problems in the unlikely event that they occur during the course.

2. Correct CIFER® error logging requires that the UserID (login) names for a CIFER®-installed desktop are a single string (e.g. *yourname* is ok; *your name* is not). This known anomaly is corrected in Versions 4.1.00 or later.

3. This installation may include a browser-interactive CIFER® Electronic Tutorial; providing an overview of frequency domain system identification techniques, the CIFER® software, a series of feature labs/demonstrations based upon the XV-15 data set included with each CIFER® installation, and Case Studies in using system identification techniques in a variety of airborne system applications. Please refer to the simple drag-and-drop installation procedure included with your Training Series Installation CD.

4. In a WINTEL configuration the CIFER® software system is installed with a Unix emulation layer (NutCracker, from MKS), and CIFER® screens/functions are accessed via a DOS window. (As an added value the Unix environment is executable for your use independent of CIFER® operation!) One known limitation of this configuration is that reading/saving CIFER®-produced batch job output files (*.OUT.* files) with WordPad, Word, or any other Windows editor can cause subsequent CIFER batch jobs to fail. This can be very difficult to undo! To view these files on-screen we recommend using the Unix “more” utility to view the output file one page at a time, or use the Unix “vi” editor. Alternatively for viewing or integrating these within your reports, without opening use your file system to copy the subject *.OUT.* to an alternative file name and you may operate on the new file without risk.

5. CIFER® now allows more than one screen plot to be open but the default is to for only one screen plot at a time. To change this setting, select utility 91 from the main menu.

6. Reflecting our expanding commitment to improving our support to your enterprise CIFER® releases now include 3rd party utilities that assist you in conditioning your outputs for viewing and reporting. Installation of these CIFER® Extras is discussed later in this Quick-Notes Manual. Each installation includes documentation regarding use, to the extent available from the utility’s provider.
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Comprehensive Identification from FrEquence Responses (CIFER®)

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CIFER® Software System Installation on a WINTEL Platform

The CIFER® installation procedure no longer requests a serial number. This does not affect the requirement to install your run-time (CIFLIC) and host (CIFHOST) license keys before accessing CIFER® features. Prior to Version 4.1.00 Release, your case sensitive Installation-Time Key remains CFR100132q7B55A6f0-2.

PLEASE NOTE that this procedure assumes that this is the first time that CIFER® has been installed on your computer.

If you are reinstalling or upgrading only an earlier version of the CIFER® applications and utilities then you should use your WINTEL system Add/Remove features to Uninstall CIFER® before proceeding. Alternatively, this Install CD will activate the uninstall automatically, and you will need to reinitiate the setup in order to Add the new software system. ALWAYS BACK UP THE CIFER® DIRECTORY AND ANY RELATED DATA/JOBS/PLOTS FILES before any Uninstall, so that you may restore these following your new installation.

If you are re-installing NutCracker, XVisions, or their equivalents in your enterprise, or if you are not experienced at these procedures or support, you should also refer to the more detailed instructions in the Installation Guide and Release Notes (IGRN) delivered with your new version. Several uninstall steps if ignored or taken out of sequence can create problems that have been known to make it impossible to repair without extreme measures.

YOU WILL REQUIRE Administrative Privileges for your computer.

CIFER INSTALLATION

When you load the CIFER® Install CD the Installation Wizard should automatically launch, and lead you through the process. If not you should launch Setup from the CD manually. The process itself is straightforward as long as you follow each step to its conclusion before moving on. UNLESS SPECIFICALLY REQUIRED FOR YOUR ENTERPRISE, you should accept all defaults in a normal installation. Here are other helpful notes to remember along the way:

What Will be Installed

Regardless of which CIFER® version you have purchased, the following components will be installed on your system:

• CIFER®. The CIFER® package itself is installed into a directory tree created explicitly for the CIFER® executables, scripts, databases and other miscellaneous components. Also, in addition to the usual registry entries made by application installers, two system-wide environment variables will be created during the installation process. Initially, these variables (“cifroot” and “cifhome”) will both point to the root of the CIFER directory tree; usually CIFER_PRO. A more detailed description of the contents of these directories and purpose of these environment variables is provided in the full CIFER® IGRN or User’s Manual.
Mortice Kern Systems (MKS) Toolkit COE (Client Operating Environment). CIFER® was ported to the WINTERL operating systems from the Unix platform, and many of its modules and scripts require elements of the Unix API. For this reason CIFER® relies on the MKS Toolkit COE (a.k.a. NuTCRACKER COE). Your CIFER® license includes an end-user license for the MKS Toolkit COE, which is automatically installed on your system by the CIFER® installer. (If your system already has MKS Toolkit installed, then the CIFER® installer will only update your installation as required for CIFER® support.)

If you already use NuTCRACKER, or if, for any other reason, you have files named 'profile.ksh' and/or 'environ.ksh' in your "logon directory" (i.e., %HOMEDRIVE%\HOME\) you should rename them. The CIFER® installer must create its own versions of these files in your directory. After the installation is complete, you can merge them as necessary (see IGRN section 4.4 for information on this process). The installer will warn you if it detects these files in your logon directory and you will be given a chance to terminate the installation.

PLEASE NOTE THAT in addition to support for CIFER®, with the MKS Toolkit COE we provide a fully operational Unix emulation that can be accessed via the "CIFER shell" shortcut, the MS-DOS command shell, or the "Run" command in the Start menu. In addition to the Korn shell, you will have access to many of the common Unix commands and utilities (e.g., vi, grep, sed, awk, perl, etc.).

After reading and acknowledging acceptance of the license agreement, you will be asked to enter your product serial number (prior to Version 4.1.00 only). Installation cannot proceed without a properly entered license key. Run-Time Keys will also be required to execute CIFER® functionality following a successful installation. These are described in a later section of this Notes manual.

You will be given the opportunity to select a destination folder for the CIFER software. If you elect to change the default location, please be careful to choose a path which does not contain embedded blanks. (Actually, you will be prohibited from doing so!)

When you are asked to enter a destination folder for the NuTCRACKER Client Operating Environment (COE), this will pertain to the location of that portion of the environment which resides on the "Installation Drive" as shown in Table 1. You cannot change the location of the "System Drive" component of the operating environment. Also, there is no requirement that CIFER® and the NuTCRACKER COE reside on the same disk drive (or partition).

Please note that the installation of the NuTCRACKER COE can run for several minutes and that no progress indicator is displayed for portions of the procedure. Allow ample time for its completion before proceeding.

On some earlier Windows XP systems, you may get a message that reads something like “The ordinal xyz could not be located…”. Dismiss such messages by clicking OK.
XVISION INSTALLATION and SETUP

CIFER® requires a local X server for on-screen display of graphical output. The SCO XVision server is suitable and can be installed from your 2nd distribution CD (please read the subsequent bullets for details). However, if your machine already has a local X server installed, you may wish not to install the SCO server. If you elect not to install the SCO server, you will be responsible for insuring that CIFER® can communicate with your server.

- To install XVision, remove the 1st CD from the drive and insert the 2nd CD (labeled “XVision”). If the XVision installer does not appear after a few moments, double-click on the My Computer desktop icon and then double-click on your CD-drive icon. If the XVision installer still does not appear you will see a listing of files on the CD; double-click on the “install” file to invoke the XVision installer.
- The XVision installer will ask what type of installation you wish to perform. A "Typical" installation is strongly recommended.
- For some versions of the SCO XVision server, installation can run for several minutes. During this time, you may not see a progress indicator and the installer may seem to disappear after updating the registry and telling you it is checking directory structure: please be patient and allow the installation to complete. When the installation is complete, you will be notified via a small dialog box (which will also ask if you wish to restart the computer; in order to avoid possible confusion, please choose No).

After completing the CIFER® installation and XVision installation it will be necessary to reboot your machine before attempting to use the software. In order to avoid possible confusion, please do the following before initiating a restart: close any windows (especially windows that are exploring or browsing the CIFER CD) and then remove the CD from the drive.

In order for CIFER® to be able to communicate with the XVision server, the TCP-Unix transport protocol must be enabled. You may check that this is the case by launching the “Vision Communications” applet from the Control Panel (Figure 1a). Then select the “Transports” tab and look for the “TCP-Unix” transport in the list box. If it is not enabled, select it in the list and click on the "Properties" button. In the property sheet (Figure 1b), select the "Enable this transport" radio button, then click "Apply". Finally, close the "Vision Communications" panel by clicking "OK".

![Figure 1a: Vision Communications Applet](image1)

![Figure 1b: Transport Properties Panel](image2)

Note: For older WINTEL installations (e.g., Windows 2000) this procedure may cause the process “dbserv.exe” to crash (click OK in the error dialog window); if this occurs, you will need to logout (or possibly even restart) to restore proper XVision operation (and enable CIFER® screen plotting).
Before attempting to generate any screen plots in CIFER®, please make sure that the XVision Server is running. If you do not see a green “XV” icon in the status bar (near the clock), then the XVision Server is not running. It can be invoked from the Start menu (Start -> Programs -> Vision -> XVision Server); wait until the green “XV” icon appears in the status bar before commencing with screen plots. If you would like the XVision Server to start when Windows starts, please refer to the next bullet.

To setup the XVision Server to start when Windows starts, follow these steps: select Start -> Settings -> Control Panel (on Windows XP select Start -> Control Panel and be sure to select the “classic view”); in the resulting window, double-click on the XVision Profiles icon; in the resulting window, click on the Global Settings tab, and then mark Load XVision at Windows Startup; then click Apply and OK. You will have to restart your PC and login again to verify that the Server is properly activated (check for the green “XV” icon in the status bar after restarting and logging in).

Please note that the first screen plot issued for any CIFER® utility may take several seconds to appear. Subsequent screen plots (issued in the same session of the given CIFER® utility) should appear more quickly.

The CIFER® documentation files are available as Microsoft Word files and Adobe “Portable Document Format” (PDF) files. The PDF files may be viewed and printed with the Adobe Acrobat Reader, which is a free program, available from the Adobe web site. As a convenience you will find a copy of the Adobe Acrobat Reader installer in an appropriately labeled folder. [For Version 4.1.00 or later, this will be found in the Extras subdirectory under the main CIFER® directory; usually CIFER_PRO/Extras. Prior to Version 4.1.00 please use the separately distributed EXTRAS CD.]
GETTING STARTED WITH CIFER®

Once you have completed the installation of the CIFER® package, made any necessary manual adjustments to the XVision transport protocols, and rebooted your machine, you should be able to invoke CIFER® either by double-clicking the shortcut that the installer placed on your desktop, or by selecting the START>Programs>Cifer>CIFER Shell menu item. Note that two different methods for starting CIFER® may give you CIFER® windows with slightly different properties (e.g., a CIFER® window started via the desktop shortcut may be shorter than a CIFER® window started from the Start menu; launching from the icon is preferred).

When you launch CIFER®, you are actually starting an MKS Korn shell which then ultimately executes the main CIFER® script, after first running several intermediate scripts to setup CIFER®’s environment. This startup process is discussed at some length in section 4.5 of the full IGRN, in connection with CIFER®’s environment variables; for now, it is sufficient to note that you will see the CIFER® “Splash” Screen. Depressing carriage return will then take you to CIFER®’s Main Menu screen, from which you may selectively execute individual CIFER® utilities.

When you have finished your CIFER® session, you will find your cursor at the “input prompt” of the CIFER® main menu screen. To exit CIFER®, simply enter a carriage return and you will be returned to the Korn shell from which CIFER® was initiated. This is a useful environment from which to manipulate CIFER® output files, re-launch CIFER®, or perform any other tasks for which you find a Unix-like command line interface well suited. You will find that most Unix tools and editors are available, and that features such as “pipes” and background processing work as you would expect. Furthermore, all CIFER® environment variables are defined and available for use, making manipulations of CIFER® directories and files quite straightforward. To restart CIFER® from within the shell, simply type ‘cifer’ (lower case!) at the command prompt. To exit the shell entirely, type any one of ‘exit’, ‘logout’, or ‘bye’
CIFER® Run-Time Licensing on a WINTEL Platform

The CIFER® main menu will function with or without valid license [CIFLIC] and host [CIFHOST] strings. However, most of the individual CIFER® programs (FRESPID, MISOSA, etc.) will not function without these run-time keys. In order to begin using CIFER® software system functions, follow this procedure:

1. If you have provided the necessary information your keys may be found in the table on the next page. If you have not already received your CIFER® license and host strings, please notify CasalCorp that you have completed (or are about to begin) your installation. This will also trigger your Support Registration. By email (casalcorp@ciferonline.com) or phone (937-848-4234 [USA]), please direct your notice to Mr. Paul W. Salchak.

Keys will be generated for your specific installation, and returned via email. To facilitate this, please have available email/phone information for the person responsible for installation, and also the computer name for the system on which CIFER® has been/will be installed. You can see your computer name by selecting Start->Programs->CommandPrompt. In the window that opens, type:

   echo %COMPUTERNAME% <CR>

The license and host string format is a combination of underscore-delimited numeric codes; e.g. 22975485_60392782_26768965_52718669 (actual number series and length will vary). PLEASE NOTE that it is CasalCorp’s policy to allow migration of CIFER® installations to other computers, so long as only one installation is active. Should such a need arise please contact us with the new computer name and evidence/confirmation that the existing installation has been removed.

2. Log on to your WINTEL CIFER® system. Select Start->Settings->Control_Panel. In the Control_Panel window, double-click on the System icon. In the System Properties Window, click on the Environment tab. Scan through the list of User Variables; if you see CIFLIC in the Variable column, click on it. [NOTE: actual key sequence/buttons may vary by WINTEL OS.]

3. Near the bottom of the System Properties window you will see fields for Variable and Value. If nothing appears in the Variable field, enter the string CIFLIC there. Then delete anything in the Value field and enter your CIFER® license string. Near the bottom of the System Properties window is a Set button. Click on it.

4. Scan through the list of User Variables again. Find and select CIFHOST in the Variable column, or enter a new Variable in the field near the bottom of the System Properties window. Once the CIFHOST variable is entered/selected, enter the run-time CIFHOST string (replace any prior entries).

5. Now scan through the User Variables list; you should now see the Variable CIFLIC along with its Value (the license string) and the Variable CIFHOST along with its value (the host string).

6. At the bottom of the System Properties window is a set of 3 buttons. Click on Apply and then click on OK. Now you can close the System Properties and Control Panel windows.

Please proceed with a short verification of your installed CIFER® features.
CIFER® Run-Time and Host Keys

If you have already provided the necessary information for keys generation, these will be provided in a separate document (for security purposes). You will receive a listing or table that looks like this:

<table>
<thead>
<tr>
<th>Computer Name</th>
<th>CIFLIC</th>
<th>CIFHOST</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PLEASE NOTE:** Correct CIFER® error logging requires that the UserID (login) names for a CIFER®-installed desktop are a single string (e.g. *yourname* is ok; *your name* is not). This known anomaly is corrected in Version 4.1.00 or later.

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### CIFER® Training Database Installation on a WINTEL Platform

**THIS PROCEDURE SHOULD NOT BE PERFORMED UNTIL YOUR STANDARD INSTALLATION IS COMPLETED AND VERIFIED** (see procedure later in this Notes manual).

CIFER® is now distributed with a number of pre-built datafiles, for use either to test installed features or to support familiarization and training. For Version 4.1.00 or later these files will be directly installed beneath the *data* subdirectory of the main CIFER® home directory (usually CIFER_Pro).

For Versions prior to Version 4.1.00, and depending upon your purchase combination, pre-built CIFER® databases may have been provided with your CIFER® ‘EXTRAS’ or ‘Documents and References’ CD. Installation is a simple process of saving the standard initial database and replacing it with your customized database. For example, when installing a Training Database for standard classroom training perform the following steps:

Under your CIFER directory structure (a standard installation will have deposited your CIFER program directory under the name CIFER_PRO):

1. Save the installed *data* and *jobs* directories under a different name (e.g., */save_data, /save_jobs*)
2. From the CIFER® ‘EXTRAS’ or ‘Documents and References’ CD, under the Training Datasets directory open the ‘XV15 Hover and Cruise’ sub-directory.
3. Drag the *data* directory from the CIFER® CD to the CIFER home directory structure on your C: drive.
4. Drag the *jobs* directory from the CIFER® CD to the CIFER directory structure on your C: drive.
5. Re-verify your CIFER Installation using the procedure provided later in this Notes manual.
Installing CIFER® Extras on a WINTEL Platform

Along with textual displays and files, CIFER® produces a variety of plots, reports, and tables. While these can be easily captured and integrated into documents/reports using standard Windows screen or window snapshot and (clipboard) paste features, typical WINTEL environments do not have the applications to read, edit, manipulate, or print the postscript and TeX formats that CIFER® stores. While not required, the following utilities will be helpful in meeting this requirement:

- Ghostscript and GSview (see also [www.cs.wisc.edu/~ghost/](http://www.cs.wisc.edu/~ghost/))
- MikTeX (see also [www.miktex.org](http://www.miktex.org))
- Adobe Acrobat – the industry standard for document display, printing, and distribution

These utilities may be installed at any time, and do not affect the normal CIFER® installation that has already been described.

For installations prior to Version 4.1.00, before proceeding with these installations, drag the desired utility directory from the CIFER EXTRAS CD to your C: drive.

**INSTALLING GHOSTSCRIPT ON MS WINDOWS**

Ghostscript releases for Windows are typically distributed as self-extracting archive files, since this is the most convenient form for users. These files can also be unpacked as if they were plain zip files.

For your ghostscript installation, from the ‘AFPL ghostscript 8-11’ sub-directory simply launch the gs811w32 install application.

Although not essential for printing CIFER’s postscript and TeX files, after installing Ghostscript, we strongly recommended that you install the GSview previewer. This provides an easier to use graphical interface for using Ghostscript features. From the ‘GSVIEW 4-5’ sub-directory run the gsv45w32 install application. Information on GSview is also available from: [http://www.cs.wisc.edu/~ghost/gsview/](http://www.cs.wisc.edu/~ghost/gsview/)

**Uninstalling Ghostscript on Windows**

To uninstall Ghostscript, use the Control Panel, Add/Remove Programs and remove "Ghostscript #.##" and "Ghostscript Fonts". (The entries may be called "Aladdin Ghostscript" or "AFPL Ghostscript", rather than just "Ghostscript", depending on what version of Ghostscript was installed.)
ABOUT MiKTeX

The following pages, excerpted from MiKTeX Help Screens, describe the purpose, installation, and startup of this utility.

1. About this document
This is the official MiKTeX FAQ list. Visit the MiKTeX Project page at www.miktex.org to view the latest version of this document.

2. General

2.1. What is MiKTeX?

MiKTeX is a complete TeX system for Windows.

2.2. Which Windows version is required for running MiKTeX?

MiKTeX requires one of the following Windows variants:

- Windows XP
- Windows 2000
- Windows Me
- Windows 98
- Windows NT 4.0 (with IE 4.0 or later)
- Windows 95 (with IE 4.0 or later)

2.3. Is MiKTeX Year 2000 compliant?

MiKTeX is Year 2000 compliant to the extent that it has been designed and tested to be compliant. But remember that MiKTeX comes with no warranty, and this applies to Y2K compliance.

3. Installation

3.5. How do I install MiKTeX?

The MiKTeX distribution includes a setup wizard (setup.exe). For most users it should be sufficient to start the wizard and then clicking the Next button until the installation process concludes.

Read the installation instructions, for a detailed description of the installation process.

PLEASE NOTE: there are three levels of feature installation provided on your CIFER EXTRAS CD: Small, Large, and Total. For CIFER purposes, a ‘Small’ installation is sufficient for most users.

3.7. Is it possible to install MiKTeX without installing Internet Explorer?

MiKTeX requires a recent version of wininet.dll. This DLL is a part of newer Windows systems. Older systems (i.e. Windows 95, Windows NT) must have at least IE 4.0 installed (IE includes wininet.dll).
4. Getting Started

4.1. I have installed MiKTeX. How do I use it?

TeX is a command-line oriented program witout a graphical user interface (GUI). “TeXing” a document involves these steps:

1. Edit the document with your favourite text editor.
2. Compile the document, i.e. say something like \texttt{latex MyDocu}
3. View/print the compiled document with a previewer (Yap, Acrobat Reader, ...).

You usually use a “TeX shell” to carry out these steps (see \texttt{Q:4.2}).

4.2. Which program should I use to edit TeX documents?

See \url{http://home.nexgo.de/itsfd/texwin.htm} for a comprehensive list of TeX shells. The MiKTeX CD-R includes TeXnicCenter, a freeware TeX shell \url{http://www.toolscenter.org/products/texniccenter/index.htm}.

Chapter 5. The MiKTeX Compiler Driver

\texttt{texify} is a command-line utility that simplifies the creation of DVI (PDF) documents. \texttt{texify} automatically runs LaTeX (pdfLaTeX), MakeIndex and BibTeX as many times as necessary to produce a DVI (PDF) file with sorted indices and all cross-references resolved.

To run \texttt{texify} on an input file \texttt{foo.tex}, do this:

\texttt{texify foo.tex}

As shown in the example above, the input file names to \texttt{texify} must include any extension (.tex, .ltx, ...).

There are several command-line optione you can use to control \texttt{texify} (see \texttt{Section 14, “texify”}). Here are some examples:

\texttt{texify --clean foo.tex}

All auxiliary files will be removed, i.e. only the output \texttt{foo.dvi} file will be left in the current folder.

\texttt{texify --tex-opt=--src foo.tex}

Passes the option \texttt{--src} to the TeX compiler.

\texttt{texify --run-viewer foo.tex}

Opens the output file \texttt{foo.dvi} (unless there are compile erros).

\texttt{texify --tex-opt=--src --viewer-opt=-1 -s"200 foo.tex" --run-viewer foo.tex}

Compiles \texttt{foo.tex} with source file information (\texttt{--src}) and then initiates forward DVI search to open \texttt{foo.dvi} at the source special location “200 foo.tex”. The viewer option \texttt{-1} re-uses a viewer window, if possible.
**Chapter 6. The MiKTeX Print Utility**

You can use the MiKTeX Print Utility to send TeX output files (*.dvi) to a printing device.

The MiKTeX Print Utility is started in the command prompt window. To print the DVI file `foo.dvi`, do this:

```
mtprint foo.dvi
```

Printing works as follows:

1. The DVI file is converted by Dvips into an intermediate PostScript file.
2. The PostScript file is then processed by Ghostscript to produce a series of Windows Bitmaps.
3. These bitmaps are then sent to the printer.

If you have a PostScript printer, then you can speed up the process by using the `--print-method` option:

```
mtprint --print-method=ps foo.dvi
```

This will omit steps 2 and 3, i.e. the intermediate PostScript file will be sent directly to the printer.
Verification of your CIFER® Software System Installation on a WINTEL Platform

If you selected the “typical” CIFER® installation during setup, various data components will be installed on your system along with the CIFER® software itself. One of these items, the 703.TEST database, is included in order to provide a means by which you may test your CIFER® system to determine if it is operating correctly. These tests are not intended to validate CIFER®’s numerical accuracy, but are intended rather to help you determine if CIFER®’s software components are communicating among themselves properly and to demonstrate that the installer has correctly configured your system.

Although brief, the following procedure will exercise all of the major software components in CIFER®’s infrastructure: CIFER®’s ability to execute PERL scripts, run “background” processes, locate and link with its DLLs, and produce graphics output via the local X Window display server. In addition, the process described is typical of an actual FRESPID/QPLOT CIFER® session, and so might profitably be studied by a new user as an example of CIFER® processing protocols.

No effort will be expended toward enumeration and/or remediation of errors that might possibly be detected during the execution of this procedure. The ways in which an installation might fail are too numerous to allow for treatment here. If you detect errors that you are unable to resolve, or if your installation’s behavior is significantly different from what is illustrated here, please contact CIFER® user support, via casalcorp@ciferonline.com.

CIFER® Test & Verification Procedure

1. Launch the CIFER® shell and, from the CIFER® main menu screen, select “Database Utilities...” (utility #10). You should then see this screen ⇒

   ![CIFER® Test & Verification Procedure](image)

   If this is the first time you have run CIFER® since its installation, the “status line” (the line that (maybe) is displayed in reverse video) should show

   ```
   ---> The active SIFDEF is 'default.default' <---
   ```

   If you have used CIFER® previously, the active SIFDEF may be something other than the ‘default.default’ case.

2. Enter a “16” in response to the input prompt. You will be presented with a list of available SIFDEF files, one of which should be “703.TEST”. Dismiss the list by depressing carriage return, and enter “703.TEST” at the subsequent input prompt.

   When you return to the Database Utilities menu, the status line should read

   ```
   ---> The active SIFDEF is '703.TEST' <---
   ```

   Dismiss the Database Utilities menu by depressing carriage return at the input prompt.
(3) From the CIFER® main menu screen (sic) select utility #18: “Search Frequency Response D/B. You should then see this screen –

(4) In the input field labeled “Enter Code” enter an “L” (upper case) and depress the ‘F1’ key. You should then see this screen –

Depress carriage return to return to the “Search” screen. Enter “Q” in the “code” field and depress ‘F1’; you will be returned to the CIFER® utilities menu screen. Depress carriage return again to return to the CIFER® Main Menu.

(5) Next, select menu item #1 (FRESPID) from the main CIFER menu. Enter “XVLATSWP” (upper case) in the “Case” field and depress ‘F1’. The display should then proceed to FRESPID screen two without any error or warning messages.

Depress ‘F1’ again. This time you will be shown FRESPID screen three. Near the bottom of the screen there will be a data entry field labeled “Time history source?”. The data field itself should contain a “1”. However, for the purposes of this test, the important item on this screen is in the list of options for this field. Next to option “4-READMIS,” you should see the phrase “READMIS F-STUB”. Its presence indicates that CIFER® has correctly loaded the default READMIS DLL.

(6) After verifying that the READMIS DLL has been correctly loaded, depress ‘F4’. This will cause a “Go to: “ navigation prompt to be displayed at the bottom of the screen. Enter “99” in response to the prompt and depress ‘F1’. You will then “skip” all of the remaining data entry screens for FRESPID. (The program will retrieve the stored parameters for this FRESPID case from the database.)

After skipping the remainder of the data entry screens, you will encounter several prompts asking if you are ready to continue, and to submit a batch job. Defaults for each prompt are presented in brackets. Respond to this dialog as follows:
Are you ready to continue without adjusting any window(s)? ([Y]|N) : Y

Are you ready to continue? ([Y]|N) : Y

You may
(B) Submit a batch job and save case
(S) Save case only
(E) Exit without saving case

Enter your choice [E]: B

Saving case information ....
Preparing batch job ...

The plot file will be: C:/CIFER_Pro/jobs/plots/FRE_XVLATSWP.PSC.01
Job file: C:/CIFER_Pro/jobs/FRE_XVLATSWP.COM.01 submitted.

Cleaning up... please wait...
To continue, press RETURN...

The particular sequence numbers attached to the job and plot files may be different on your system if you have run other jobs with the same case name before attempting this test procedure.

After a few seconds (less than two minutes on most current machines) you should see the following message displayed on your screen:

CIFER Batch job 2668 has completed.
   BATCH FILE: C:/CIFER_Pro/jobs/FRE_XVLATSWP.COM.01
   LOG FILE: C:/CIFER_Pro/jobs/FRE_XVLATSWP.OUT.01
   No error detected.

Here again, the job number will not be the same on your machine. The important thing is that the job should complete properly, i.e., without any detectable errors.

(7) Return to the CIFER® main menu by depressing carriage return. Next select utility #19, “Plot Frequency Responses”. You will see a data entry screen similar to that shown in Figure C-1. The figure also indicates data values that should be entered by you in order to complete the test. When you have finished entering the required data, depress ‘F1’.

You should then see the screen displayed in Figure C-2. No data entry is required on this screen for this test, but you should examine the information it contains. The data should agree with those shown in Figure C-2. When you are satisfied, depress ‘F1’ again.

You should next see an X Window containing a plot similar to that shown in Figure C-3. Sometimes it may take a few seconds for the display to appear. To dismiss the plot and return to CIFER®, make certain that the graphics window has “focus” by pointing at/clicking on the plot header bar, then depress carriage return. NOTE: on some systems, the plot window may not automatically pop to the top.

In order to exit QPLOT and return to the main CIFER® menu, depress ‘F2’ and use the arrow keys to highlight the “Exit” option in the navigation submenu that appears at the bottom of the screen. Depress ‘F1’ and you should be returned to the main CIFER® menu. Depress carriage return to exit CIFER®.

This completes the test.
Figure C-1: qplot Screen 1

Figure C-2: qplot Screen 2
Figure C-3: CIFER® Graphics Window (qplot)