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REUTERS



User Guide
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Customized Display

There is a choice of window zone arrangements in this release. (See Section 1.4.) In the fixed format, the Trading window displays in the upper two-thirds of the screen, with as many as 20 instruments on display in a one-up view; 40 instruments in a two-up view. Trader Mailbox and Ticker windows are displayed in a side-by-side arrangement across the lower third of the screen, below the Trading window. The trader has the ability to increase or decrease the size of the Trader Mailbox and Ticker window, receiving a warning if instrument lines are about to be covered up. The trader can also change the spacing between instrument lines.

The trader can instead choose a freeform window zone display, where the trader determines size, position, type size, and/or line spacing of the various windows. Again, a maximum of 20 instruments can be displayed; 40 in a two-up view.

In both window zone arrangements, the trader can also determine whether or not to display the Price Page. (See Section 10.4 for information on the Price Page.)

Active Markets Window

The trader can display current quotes of all active instruments on one or both Services. (See Section 9.5) The movable pop-up Active Markets Snapshot window can remain on the screen while the trader uses other windows. The trader can select an instrument from the set of instruments and immediately:

- Display the page with that instrument.
- Enter a bid or offer or combined bid/ask orders.
- Hit a bid or take an offer.

Fields in the Active Markets window are not updated automatically with new bids/offers. Choose the **REFRESH** command button to display updated data.

Order Entry

The order-entry dialog boxes (**Bid**, **Offer**, **Hit**, **Take**, and **Bid/Ask**) have been re-designed, with larger fonts, new controls to make it easier to change the price and quantity, colors to differentiate Buy (blue) and Sell (red), and a clearing key to quickly recall pre-defined clearing data. (See Section 2.5 and Section 7.)

The system now gives the trader a graphical warning if he or she attempts to enter a price off the market.

The More Quantity function has been removed from all order-entry boxes.

Quick Page Retrieval

Traders will be able to display system and custom pages through a pop-up list or by using the keyboard to cycle through a sequence of pages. (See Sections 9.3.1 and 9.3.2.)

New Soft Keys

Two new soft keys have been added to the keyboard. ACTV MKTS displays the Active Markets window. QUICK PAGE displays the pop-up list of system or custom page names. (See Sections 9.5 and 9.3.1.)

Changes to GLOBEX 2A+ Menus

The complete set of menu bar functions and menu choices is shown on the next page.

Display Menu

The Display menu now includes the Active Markets choice. This choice displays the pop-up window of all active instruments. (See Section 9.5.)

Window Menu

The new Window menu allows the trader to customize the display. (See Section 10.)

Price Page on the Window menu lets the trader determine whether to display the Price Page and which of two GLOBEX Price Pages to display.

The Style choice on the Window menu allows the trader to pick from two screen formats:

- *Fixed* where the Trading window, Trader Mailbox, and Ticker window appear in fixed positions on the screen. Trader Mailbox and Ticker window can be increased or decreased in size using control arrows on the screen.

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Introduction

About GLOBEX

GLOBEX is an after hours automated centralized matching system designed for computerized trading of futures and options.

GLOBEX matches buyers and sellers with each other, based on price, quantity, and time.

The system supports order matching in a variety of ways.

- Current summary market information is visible on the screen at all times. This information includes the highest Bid and the lowest Offer (along with their associated quantities). The individual trader's best Bid and/or Offer price and quantity for each instrument are also shown, as well as the last trade price and net change.
- The most recent activity in all markets can be viewed on the screen.
- Relevant cash quotes can also be displayed on the screen.

The matching system maintains a "book" of open Bids and Offers. Using a keyboard or computer mouse, the trader interacts with the book by submitting Bid, Offer, Hit, or Take orders. All parties to a transaction receive real time messages regarding success or failure of trades. Messages appear on the screen and on an attached printer. The trading screen is updated as orders are matched or new orders are accepted into the book.

Entries are always processed according to strict price/time priority. Complete security and tracking of all transactions is assured.

The GLOBEX system is dedicated to order matching. The clearing and position keeping functions are performed by external systems.

New in GLOBEX 2A+

GLOBEX 2A+ includes a number of new features, which are described in the following paragraphs. These features are described in detail in the appropriate sections of this User Guide.

Introduction

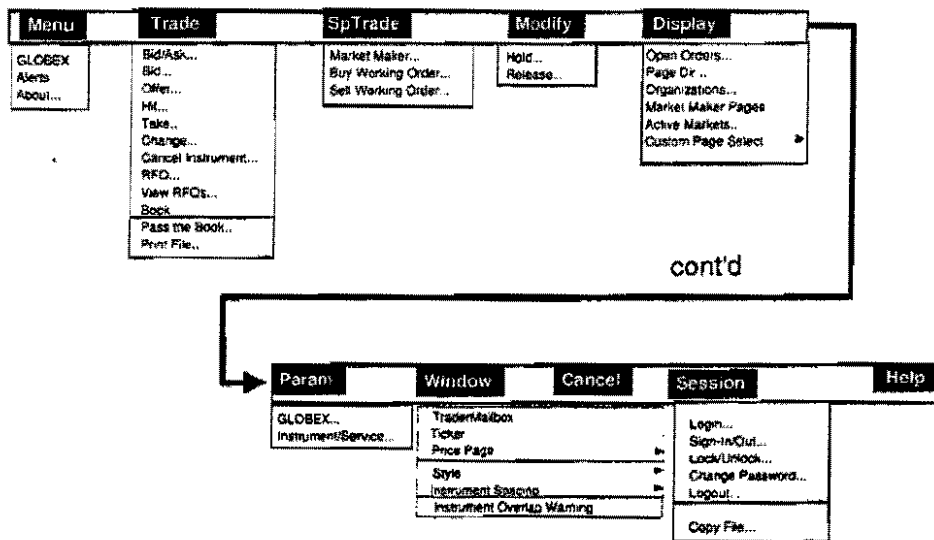
- *Freeform* where the trader can move or overlap the various windows, and choose whether to display the Trader Mailbox and Ticker windows.

The Instrument Spacing choice lets the user determine how far apart to space instruments in the Trading window.

In Fixed Display Mode, the Instrument Overlap Warning choice lets the user receive a warning when a window will obscure instrument data.

Page Menu Functions

The Page menu has been eliminated; functions on the Page menu have been incorporated in the new Window menu.



Using this Manual

The first two sections of this manual — **Using the GLOBEX Keystation** and **Basic GLOBEX Functions** — include all the basic information you need to use the system. Techniques, details, and background are presented separately from actual functions (whenever possible) to avoid repetition.

Section 3 of the manual describes **Service/Emergency Procedures**.

Section 4 offers important information about the **GLOBEX Session**.

Section 5, **Session Functions**, describes the Session menu, including login, passwords, logout, and other access functions used in each Session.

Section 6, **Parameters Functions**, describes the Parameters menu, including GLOBEX parameters and trader defaults. This section explains how to define custom pages.

Section 7 details **GLOBEX Trading Functions** (from the Trade and Modify menus), such as how to enter Bid, Offer, Buy, and Sell orders, and how to place orders on hold or cancel them. This section also explains how to view the GLOBEX Standing Order Book.

Section 8, **Special Trade Functions**, describes the Special Trade menu—entering Market Maker or Working Orders. This section describes how to create or modify clearing data and market maker pages.

Section 9, **Display Functions**, includes procedures for viewing Open Orders; the Active Markets window; and lists of GLOBEX subscribers, system pages, custom pages, and market maker pages. This section tells how to design a Trading window with one or two selected pages.

Section 10, **Window Functions**, describes the Window menu, including customizing the display with Trader Mailbox, Ticker window, and/or Price Page; choosing the fixed or freeform window display; and setting instrument line spacing.

Section 11 describes on-screen **Messages and Keystation Records**.

Section 12 explains how to use the **GLOBEX Offline Utilities** to produce reports and keep records concerning GLOBEX Session activities.

Section 13, **Operating Principles**, explains the rules and restrictions for order entry and describes how automated matching is managed within GLOBEX.

Appendix A defines the **Futures and Options Symbols** listed on GLOBEX.

Appendix B specifies **Clearing Information** to be used by each Exchange trading on GLOBEX.

Appendix C, **Additional Price Information for Partner Exchanges**, concerns valid prices and price checks specific to each Exchange trading on GLOBEX.

Appendix D is a chart showing how GLOBEX functions have been assigned to menus and keys.

Introduction

Appendix E describes **Printer Maintenance**.

Appendix F provides information on **Programming Soft Keys** on the keystation.

Appendix G (colored pages) contains detailed **Emergency Procedures**. (See the following paragraphs for additional information on these procedures.)

GLOBEX America GCC Emergency Procedures

This GLOBEX User Guide employs colored pages for the GLOBEX America GLOBEX Control Center Emergency Procedures. These procedures will guide you and your firm through possible GLOBEX malfunctions that might affect your keystation, part of the GLOBEX network, or the entire system.

These GCC Emergency Procedures are subject to change by the Exchange. Other GLOBEX Services and Partner Exchanges that operate separate GLOBEX Control Centers may issue different GCC Emergency Procedures for their markets.

1. Using the GLOBEX Keystation

The GLOBEX keystation is your link to one or more GLOBEX Services. A Service is the set of facilities that support the GLOBEX system. These include a GLOBEX central computer (known as the Host), a GLOBEX Control Center (GCC), and a ticker/clearing feed. The way orders are accepted, sequenced, and processed is the same for each Service. An individual keystation is permissioned for and connected to a Service, and a trader is permissioned to trade on one or more Exchanges within a Service.

The components of your keystation are a display screen, keyboard, mouse, one or more printers, a modem, and a processor. In this section of the User Guide, you will learn about these components.

Your keystation is one of a group of keystations linked to one or more administrative keystations for the purpose of routing trade confirmations. Trade confirmation tickets for the group are produced on an additional printer connected *only* to administrative keystations. All keystations allow trading; however, since the administrative keystation's printer receives the tickets, it is possible that it may not respond as quickly as a trading keystation during order entry.

1.1. GLOBEX Login

The Login dialog box is always displayed if you are not logged into a Service. You cannot log into a Service until the Service name and **Start Session** button are enabled (black). If you are not permissioned for a Service, its name will not appear in the Service list.

RDTs / GLOBEX® SYSTEM





PLEASE COMPLETE THE FORM BELOW TO START THE SESSION.

SERVICE LIST	SUBSCRIBER NAME	<input type="text"/>
GLOBEX America	TRADER ID	<input type="text"/>
GLOBEX Europe	PASSWORD	<input type="text"/>
	OPERATOR ID	<input type="text"/>

EXIT SESSION START SESSION QUIT

Figure 1.1 Login Dialog Box

1 The GLOBEX Keystation

1. Highlight a Service. Press . The cursor moves to the Subscriber Name box.
2. Type the subscriber name as assigned by the Exchange; press . The cursor moves to the Trader ID box.
3. Type your trader identifier (your Exchange-assigned user identification); press . The cursor moves to the Password box.
4. Type your password. Its characters are shown as asterisks only (***). Press . The cursor moves to the Operator Identifier box.
5. Type your assigned operator identifier. Check for errors, then press



or



or click

Start Session. If your login is accepted, the GLOBEX keystation display fills the screen.

Once a Service is logged in, you must display the Login dialog box (see Section 5.2) to log into another Service. In the Service list, a logged-in Service name is disabled and preceded by an asterisk.

Section 5.1 includes login information vital for new or inexperienced operators. Each firm is responsible for ensuring that login codes are not disclosed to unauthorized parties.

Section 5.6 tells how to log out from a single Service. Repeat these steps to log out from multiple Services.

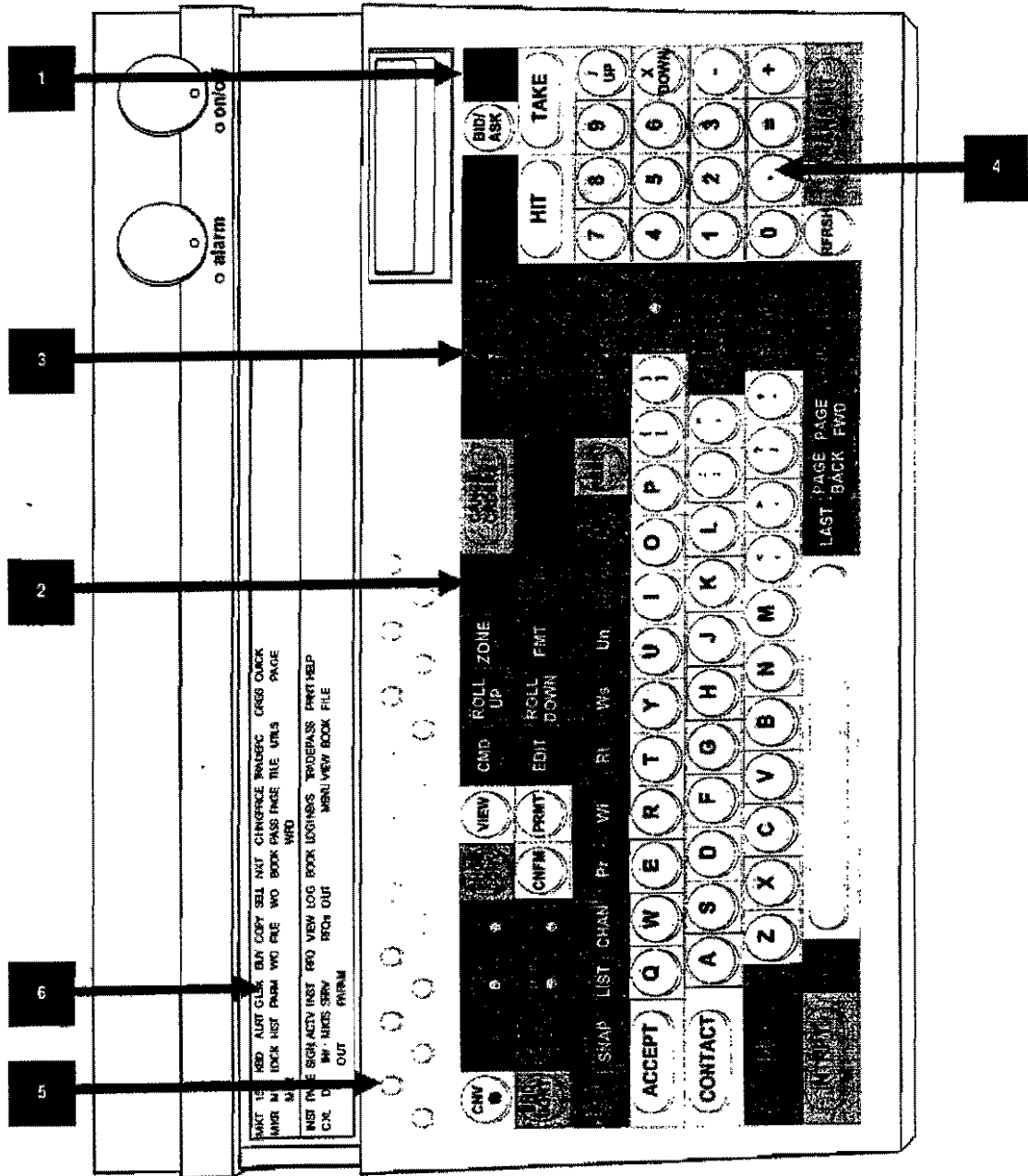


Figure 1.2 GLOBEX Keyboard

1.2. The Keyboard

The GLOBEX Keystation keyboard is shown in Figure 1.2. Features of the keyboard are explained below.

1.2.1. Hard Keys

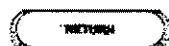
The majority of keys on the keyboard are "hard" keys, some of which, labeled **1** and **2** in Figure 1.2, are assigned to the most frequently used trading functions.

1.2.2. Other Important Keys

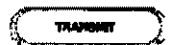
Use arrow keys, shown with **3** in the keyboard diagram, to move the insertion point in a dialog box; use number keys **4** to enter prices and quantities.



Cancels any function.



Complete and execute a function, submitting the entry to the Host.



Allows use of the keyboard as a calculator.

1.2.3. Soft Keys

"Soft" keys, so named because they can have more than one function, are arranged in two staggered rows **5** above the main keyboard. In this user guide, soft keys are illustrated as shown at left. The soft key label **6** shows the function(s) assigned to each key.

SYS MENU



Press  + soft key to access the function in the top part of the label.

Programming Soft Keys

At any time your keystation is operating, you can program the unlabeled soft keys at the right end of each row to perform macros. A macro is an automated procedure that reduces the number of keystrokes required by repetitive operations. Once you save the macro, you can press the soft key to implement the operation. Appendix F tells how to program soft keys. Keep a written record of each macro and the key to which you assign it.

1.3. The Mouse

The mouse is a pointing device that simplifies GLOBEX operations. The mouse has a left and a right button. Use the left button unless otherwise instructed.

1.3.1. Mouse Pointer

As you roll the mouse on the desk top, a mouse pointer moves on the screen. Use the mouse to point to a menu choice, instrument on a screen page, item in a list, or command button in a dialog box. Pressing (clicking) the mouse button selects the item the mouse is pointing to, or activates the command button. Point and click anywhere in a window to make the window active so you can move, size, or make a selection in it. (The window has "focus" when it is active.)



When you point to the characters in a text box (in a dialog box), the arrow pointer changes to an I-beam. When you click in a text box, the I-beam becomes a flashing insertion point that shows where a character you type will appear.



If a procedure requires you to wait for completion, the mouse pointer becomes an hourglass symbol.



The mouse pointer becomes the move indicator when you are moving a pop-up window.



1.3.2. *Using the Mouse*

- Click** Press the mouse button once. A click selects the item indicated by the mouse pointer. The item you click on is highlighted or the insertion point appears. Use the left mouse button, unless instructions specify that you use the right button.
- Double-click** Press the mouse button rapidly twice. In some procedures, this confirms or executes the item being pointed to.
- Drag** Press and hold down the left mouse button while moving the mouse. Dragging the mouse pointer through characters in a text box highlights a group of characters. You can then delete or type over the selected characters.

More information on when and where to use the mouse is given as needed.

1.4. The GLOBEX Keystation Display

Figure 1.3 shows a typical GLOBEX display and identifies the windows and areas on the screen.

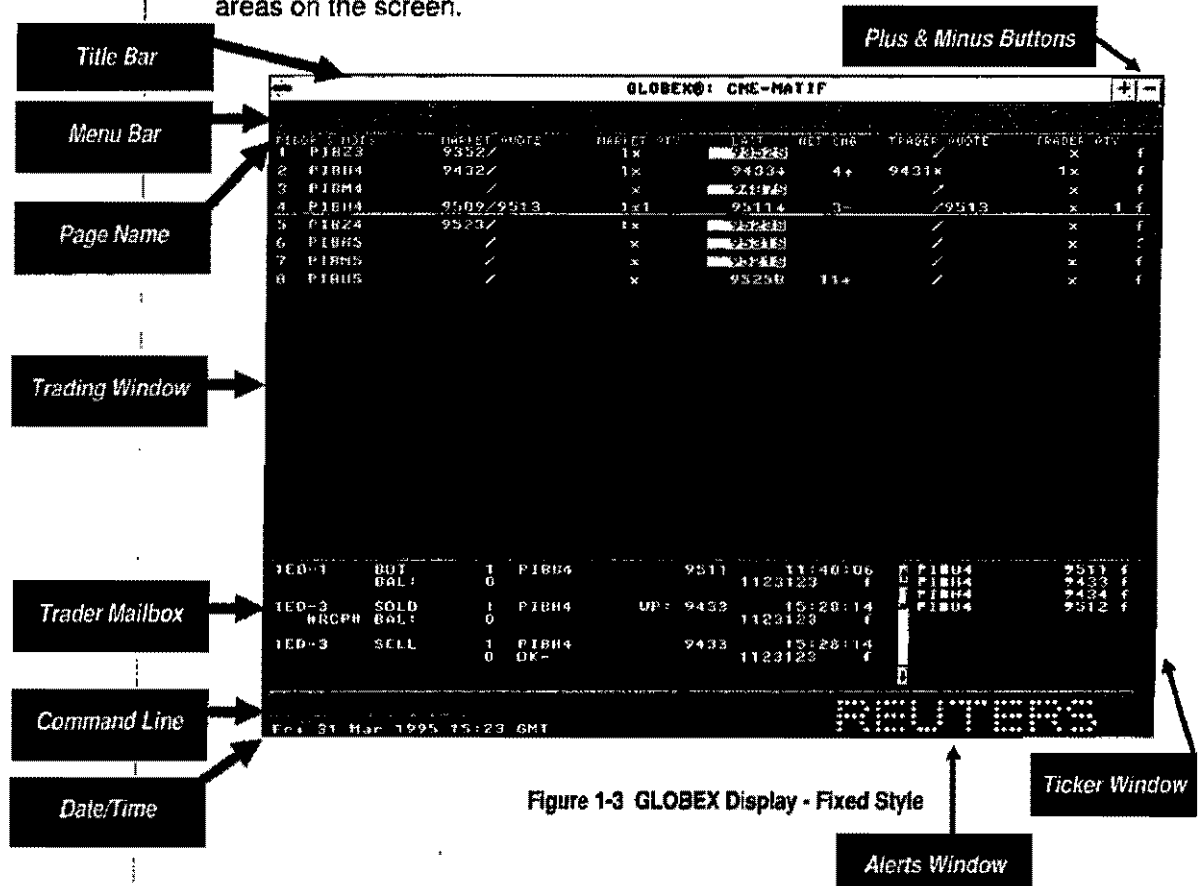



Figure 1-3 GLOBEX Display - Fixed Style

- GLOBEX functions are listed on menus whose titles are shown in the **menu bar**.
- In the **Trading window** you can see, at a glance, quotes and quantities at the top of the market as well as your best orders entered at the keystation for a set of instruments.

The Trading window can display one or two sets of instruments — “pages.” See Section 9.3.

- The **Trader mailbox** shows responses from the Service’s GLOBEX Host computer concerning your most recent entries.
- The **Ticker window** displays last price data.
- The **Price Page** (shown in Figure 1.17) shows indicative cash market and statistics information. You can decide whether to display the page and choose between two pages of information from Reuters Monitor.
- You can use the **Command Line** to display a page with a specific instrument.
- The current **date and time** according to Greenwich Mean Time are always shown in the lower left corner of the screen.
- Alerts of various kinds appear in the **Alerts window**. When there are no alerts, the REUTERS logo is displayed.

Trade Tile

Click the mouse in an area to move “focus” to that area, or press  to move focus from one area to another on the screen. Actions you take affect the region of the screen with focus. (The screen area with focus is highlighted.)

1.4.1. Display Styles

About Display Styles

There are two display styles:






- **Fixed** where the Trading window, Trader Mailbox, and Ticker window display in fixed positions, as shown in Figure 1.3.
- **Freeform** where the trader can move or overlap the various windows and decide which windows should display. An example of the freeform style is shown in Figure 1.4.





Figure 1.4 GLOBEX Display - Freeform Style

Changing the Display

To change the display from one style to another:

1. Move the mouse pointer to Window on the menu bar. Click the . The drop-down Window menu displays.
2. Move the pointer to Style in the drop-down menu. Click the . Icons (picture symbols) for the two style choices appear. . The top icon is for fixed display style; the bottom icon, freeform .
3. Move the mouse pointer to the style you want. Click the mouse . The display changes to the selected style.

When you change to the freeform style, GLOBEX uses the window  ment chosen when this style was last used. Any new settings will  when you logout.

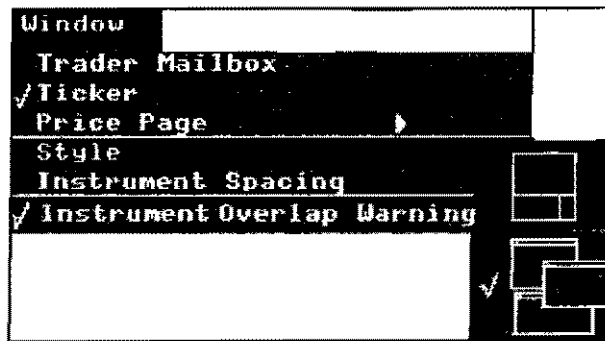








Figure 1.5 Drop-Down Window Menu

Moving and Sizing Windows

When the display is in fixed style, you can size the Trader Mailbox  window. When the display is in freeform style, you can move, size  Trader Mailbox and Ticker window. In either style, you can move,  the Price Page or change its font size.

Sizing Windows

When the display is in fixed style, increase or decrease the size of  Mailbox and the Ticker window together by clicking the + or - butto  right corner of the screen title bar. (The buttons are shown in Figur 




There are three ways to size the Trader Mailbox and Ticker window in freeform display style. The Price Page can be sized with these methods in either display style.


Click the + or - buttons in a window title bar until the window is the desired size.

Or

Click the system menu box in the window title bar. The popup System menu shown in Figure 1.6 displays. Click Grow or Shrink in the System menu to increase or decrease the window size. Repeat until the window is the desired size.

Or

With focus in the window (title bar is gray), press  to display the System menu shown in Figure 1.6. Use the  or  to highlight Grow or Shrink.

Press  Repeat until the window is the desired size.

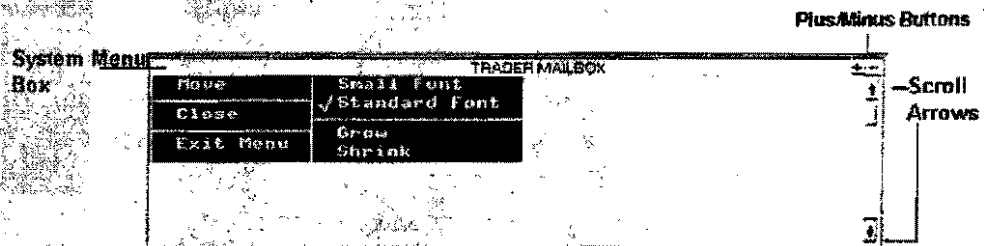


Figure 1.6 Trader Mailbox with Popup System Menu

When a window shrinks so all lines do not display, scroll bars appear. (See Figure 1.6.) Click the Up or Down Scroll Arrows to bring additional lines into view.

Displaying or Hiding Windows


To display the Trader Mailbox, Ticker window, or Price Page:

1. Click Window in the menu bar to display the Window menu.
2. Click either Trader Mailbox or Ticker in the Window menu to display that window in freeform style. Click Price Page to display a menu with a choice of available Price Pages. Click the name of the desired page.

A check appears beside Trader Mailbox, Ticker, or Price Page if it is displayed on the screen. The selected Price Page is checked in the list of available pages.

To hide the Trader Mailbox or Ticker window (only in freeform style):

1. Click Window in the menu bar to display the Window menu.
2. Click Trader Mailbox or Ticker. The window is removed from the display.






When Trader Mailbox is hidden, it appears as an icon  at the bottom of the screen with a number indicating the number of new messages, up to 100.

To hide the Price Page:

1. Click Window in the menu bar to display the Window menu.
2. Click Price Page. Click the name of the currently checked page. The Price Page is removed. (To change the displayed page, click another page in the list.)

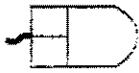
To display or hide windows with the keyboard:

SYS MENU

1. Press  to activate the menu bar. (Focus must be in the Trading window.)
2. Use  to highlight the Window menu.
3. Use  or  to highlight menu choices. Press  to choose a highlighted option. (Menu choices are the same as those described above for the mouse.)

PRICE PAGE

-  displays the Price Page if it is currently hidden.




Double click the control box to close a window.



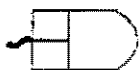
To close a window, you can also press

SYS MENU


 with focus in a window and choose **Close**.

Moving Windows

You can move Trader Mailbox or Ticker window in freeform display style. Price Page can be moved in either display style.









Using the mouse:

1. Click anywhere in the title bar of the window. The mouse pointer changes to .
2. Move the mouse pointer anywhere on the screen.
3. When the tip of the arrow is where you want the upper-left corner of the window to be, click again. The window will display as close as possible to the selected location. Windows will not overlap the Command Line, date and time, or the Alerts window.



Using the keyboard:

SYS MENU

1. Press  to display the System menu shown in Figure 1.6. (Focus must be in the window.) Use  and  to highlight Move. Press . The mouse pointer changes to .
2. Use the arrow keys to move the pointer.
3. When the tip of the arrow is where you want the upper-left corner of the window to be, press . The window will display as close as possible to the selected location. Windows will not overlap the Command Line, date and time, or the Alerts window.

See Section 10 for additional information on these windows.

Changing Font Size





You can change the size of the font in the Trader Mailbox or Ticker window in freeform style. The two font choices are standard font and small font, which allow the text to display in a narrower window.

Using the mouse:

1. Click the System menu box in the window title bar. In the popup System menu, the check mark next to the Small Font or Standard Font tells you which font is currently displayed.
2. Click Small Font or Standard Font to change the displayed font size. The window automatically changes in width to adjust to the new font.

Using the keyboard:

SYS MENU

1. Press  to display the System menu. (Focus must be in the window.) The check mark next to the Small Font or Standard Font tells you which font is currently displayed.
2. Use  and  to highlight Small Font or Regular Font. Press . The window automatically changes in width to adjust to the new font.

1.4.2. Trading Window

Each numbered line in the **Trading window** shows current data for a single instrument: the system's current "best" Bid and Offer quote and quantity information; the Last price and net change; your best Bid and Offer quote and quantity at that keystation; and at the end of the line, the Exchange identifier — m (CME) or f (MATIF). The page in the display remains until you replace it with another, communication with the Service owning the page is lost, or you log out of that Service. If either of the latter two events takes place, the page is replaced by the default page from a Service that is still logged in, based on Service display priority (see Section 6.3.2). The default page is the first page the keystation receives from that Service. In the case of a displayed custom page,

lines showing instruments from the lost or logged-out Service are blanked. Whenever the keystation is forced to select a page for display, it always displays a single default system page.

The **Normal view** of the Trading window, visible when you log in, contains four blocks of information: **instrument block**, **market block**, **statistics block**, and **keystation block**. See Figure 1.7, which shows the four blocks. The information in the instrument, market, and statistics blocks is visible to all traders logged into the Service. Keystation block information pertains only to orders entered at your Keystation.

GLOBEX: CME-MATIF									
Menu	Trade	SpTrade	Modify	Display	Param	Window	Cancel	Session	Help
TRADE PAGE		MATIF /0000		TRADE WTS	LAST	NET CDS	TRADE DATE	TRADE WTS	
1	LUM4	/	x	x	92453		/	x	m
2	BPM4	/	x	x	92453		/	x	m
3	EDM4-EDM4	/	x	x	92453		/	x	m
4	BPM4	/	x	x	92453		/	x	m
5	P1BZ3	/	x	x	92453		/	x	f
6	P1BM4	/	x	x	92453		/	x	f
7	P1BM4	/9486	x	x			/	x	f
8	P1BU4	/9513	x1	x	9513a	1-	/9513	x	1 f

Instrument Block Market Block Statistics Block Keystation Block

Figure 1.7 Normal View of Trading Window

Instrument Block

The system or custom page name appears above a numbered list of instruments. Each page can contain up to 20 contract identification codes, referred to in this manual as **instrument names**.

Menu	Trade	S
TRADE 1		
1	EDU3	
2	EDZ3	
3	EDU3 C9600	
4	EDU3UP9600	
5	EDU3-EDZ3	
6	JYM3	
7	DMM3	

Figure 1.8 Instrument Block

Market Block

The information in the market block is based on all orders for each instrument listed by the Service. The Market Quote column (Bid/Offer) shows the best (highest) Bid and best (lowest) Offer prices for that Service. The character separating the values is also used to indicate an instrument's state before the market opening (**closed, halted, or non-cancel period**) and, after the market is open, the level of information available about the current market (**normal, drop book, and snapshot** modes). Figure 1.9 shows the market block as it might appear prior to opening and after opening. (See Sections 4.2 and 4.3.)

The Market Quantity column (Bid quantity/Offer quantity) shows the total quantity of all orders at the best price. When you have orders at the best price on either side of the market, that price is displayed in white on a black background (the on-market indicator).

SpTrade	Modify	Display
MARKET QUOTE		MARKET QTY
C		X
H		X
F		X

SpTrade	Modify	Display
MARKET QUOTE		MARKET QTY
9423/9424		1x1
9437/9438		1x1
23/24		X

Figure 1.9 Market Block at Two Different Times

Statistics Block

The Last column shows one of the following events:

- The latest trade price (Last).
- Settle price (displayed in reverse video until a new Last is received).
- A subsequent Bid higher than the previous Last (including entry occurring prior to the first trade of the day).
- A subsequent Offer lower than the previous Last (including entry occurring prior to the first trade of the day).
- A new **Indicative Opening Price** (displayed in reverse video during staging period prior to market opening).

Param	Car
LAST	NET CH
9648	unch
9605+	2+
9	unch
8779+	2+

Fig. 1.10 Statistics Block

After Market Opening, the **Last indicator** following the Last value identifies its origin:

- B** A Bid better than the prior Last.
- A** An Offer better than the prior Last.
- ↑** A trade at a higher price than the previous Last.
- ↓** A trade at a lower price than the previous Last.
- I** Indicative Opening Price.
- S** Settle price from prior day.

A blank indicates that no Last is available or that another trade occurred at the previous Last.

The Net Change column shows the difference between the previous day's settlement price and the current Last value, and a suffix:

- + increase.
- - decrease.
- unch unchanged.
- N/A — there is a Last but no prior day's settlement exists to compute the net change.

Keystation Block

The information in this block shows you details about your orders. GLOBEX permits multiple orders for the same instrument, at the same or different prices. The keystation block always shows the "best" quotes, and not necessarily the most recent. In the event that you have multiple orders at the best price on the same side of a book, the one displayed is the oldest one, the one which would trade first. The Trader Quote column (Bid/Offer) shows the best Bid and Offer prices entered from this keystation. If you have more than one order for an instrument on the same side of the book, the slash separator changes to an asterisk.

The Trader Quantity column (Bid quantity/Offer quantity) shows the quantity of the oldest best Bid and Offer entered from this keystation.

Cancel	Session	Help
TRADER QUOTE	TRADER QTY	
/	x	f
9431*	1x	f
/	x	f
/9513	x	1 f

Figure 1.11 Keystation Block

Additional Views of the Keystation Block

Since all the information available for an instrument cannot fit on one line in the trading window, you can display three additional views of the keystation block. Click the mouse anywhere in the keystation block column headings or press

TRADE VIEW



to cycle through the different views. The three views cycle in this order:

- Normal View
- Net Positions View
- Statistics View

TRADE VIEW



When you click in the column headings or press in the third view, Statistics, the Normal View redisplay.

Figures 1.7, 1.12, and 1.13 show the three views. In any view, the last character in the instrument line is the Exchange identifier.

Net Positions View

For this view, keystation block values for each instrument are replaced by the accumulated Quantity Bought, Quantity Sold, and resulting Net quantity, followed by a suffix (+, -), based on the current login session. Column headings are white.

GLOBEX: CME-MATIF									
Menu	Trade	SpTrade	Modify	Display	Param	Window	Cancel	Session	Help
1	PIBZ3	/9353		x1	93504	2-		1	1
2	PIBH4	/		x	9429	unch		1	1
3	PIBM4	/		x	95173				
4	PIBU4	/9511		x1	95114	3-			
5	PIBZ4	/		x	95283				
6	PIBH5	/9530		x1	95294	2-		1	1
7	PIBU5	9514/9519		1x1	95196	2-			

Net Positions

Figure 1.12 Net Positions View

Statistics View

For this view, keystation block values are replaced by the daily High, Low, and Volume for each instrument in the current Service, based on the current login session. The High and Low are the highest and lowest Last prices; each may be followed by an indicator (A for Ask, B for Bid, or blank for trade price). Volume is the total volume actually traded. Column headings are black on yellow.

Note: After trading begins but before the first trade, High represents highest Bid above the prior day's settlement; Low represents lowest Offer below the prior day's settlement.

GLOBEX: CME-MATIF									
Menu	Trade	SpTrade	Modify	Display	Param	Window	Cancel	Session	Help
1	EDM4	9423/9424		1x1	9424A	1-		HIGH	LOW
2	BPH4	/		x	9424B			25B	24A
3	EDM4-EDM4	23/24		6x8	24A	unch			
4	BPM4	/		x	9424B				
5	PIBZ3	/		x	93504				
6	PIBH4	/		x	9429				

Statistics

Figure 1.13 Statistics View


Two-Up View

You can split the trading window and display two pages side-by-side. (See Figure 1.14.) Instrument and Market blocks are displayed for each page. Section 9.3 explains how to display a two-up view.

ORDER #	INSTR	MARKET QUOTE	MARKET QTY	ECU	ECU	MARKET QUOTE	MARKET QTY
1	PIBZ3	9392	1x	5	ECU23		1x1
2	PIBH4	9432	1x	6	ECUH4		x
3	PIBM4		x				
4	PIBU4	9509/9513	1x1				

Figure 1.14 Two-Up View

TRADE VIEW

If you press  while showing a two-up view, only the left page remains, showing the Normal view. You can also click on either page heading to restore that page to the Normal view in a one-up display.

Market Maker and Working Order Views

Special Trade functions (see Section 8) display instruments in dialog boxes designed for users who specialize in certain types of order entry.

1.4.3. Trader Mailbox

1ED-1	BDT	1	PIBU4	9511	11:40:06
	BAL:	0			1123123 f
1ED-3	SOLD	1	PIBH4	WP: 9433	15:28:14
	#RCP#	0			1123123 f
1ED-3	SELL	1	PIBH4	9433	15:28:14
	OK-				1123123 f

Figure 1.15 Trader Mailbox

The Trader Mailbox shows the results of your use of GLOBEX. Every entry at the keystation results in a response from the GLOBEX Host. New messages

display at the top of the Mailbox. Older messages appear in descending time order in the box. For instance, the Mailbox in Figure 1.15 shows the user's last three actions: the earliest action (the message at the bottom of the mailbox), entering an Offer; second, confirmation that an offer was matched; and, at the top, confirmation that a bid was matched. The Mailbox holds 300 lines, which is approximately 100 messages. Message fields are defined in Section 11. The same messages, in a slightly different format, are listed in the tradelog, along with additional messages (see Section 11.3).

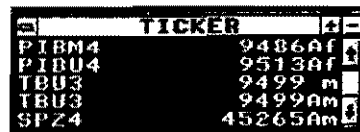
Messages are displayed in color: green for order entries, including hold and release; white for match notifications; red for order cancellations. Orders not processed or refused by the Host are in yellow.

To display, move, size, or hide the Trader Mailbox, see Section 1.4.1.

Messages about a specific instrument include the instrument's Exchange identifier and account number. A message that is specific to a Service includes the Service code. Your keystation will *not* receive match notification messages in the Trader Mailbox, Audit Trail, or tradelog if communications to the Service's Host have been lost, the keystation has failed, or you have logged off.

1.4.4. Ticker Window

The Ticker window reflects the most recent activity in all markets and shows changes to the Last value. A new Last can result from a Bid, Offer, or trade. A last that is a Settle price is not reflected in the ticker window. Ticker messages include instrument name, Last price, Last indicator (**B** for Bid, **A** for Offer, blank for trade), and Exchange identifier. Each new price is displayed at the top of the window. The Ticker Window holds 100 messages.



TICKER	
PIBM4	9486Af
PIBU4	9513Af
TBU3	9499 m
TBU3	9499Am
SPZ4	45265Am

Figure 1.16 Ticker Window

To display, move, size, or hide the Ticker window, see Section 1.4.1.

1.4.5. Price Page Window

The Price Page can display one of a selection of Monitor pages. See Figure 1.17, which shows two Price Page Formats.

PRICE PAGE: GLB1			
INDICATIVE	CASH	QUOTES	SLBT
DM 1.4440/50-14:10	E Y 3MO	1.31/37	
JY 86.81/86-14:13	E BP 3MO	B 6.68	UK T8 07 02.02
SF 1.2028/30-14:13	E DM 3MO	B 4.56/6	BOND
BP 1.3690/00-14:16	PIB 3MO	B 07.210	NOT L JUN FUT 115.40
CD 1.3532/37-14:16	SP 300	525.43	USBOND 30YR 107.24-25
AD 0.7413/18-14:14	HK225	16420.76	
FF 5.0565/75-14:03	FTSE	3310.3	GOLD 383.10/3.60-14:16
	DAX	2102.	SILVER 5.22/24-14:17
ED3MO 5.87-12-09:25	CAC40	1845.97	BRENT-M/J +0.50 8.

PRICE PAGE: GLB2							
WINDOW ON THE MARKETS							
COURS DE REFERENCE/REFERENCE PRICES							
	M5	U5	Z5	H6	M6	U6	H7
PIBOR	9341	9392	9387	9376	9362	9348	9331
NOTIONNEL	11558	11495	11462	11462			9319
ECU	8566	8560					
	K5	M5	N5	U5	Z5	H6	U6
CAC 40_20080	19910	19920	20115	20555	20875	20935	21660

HOT ON LINE, PIBOR & OPTION PIBOR OPEN / OUVERTS

Figure 1.17 Two Price Pages

To move, size, or hide the Price Page, see Section 1.4.1.

1.4.6. Alerts Window

The Alerts window usually displays the REUTERS logo. High and low price limit breaks are shown in this area as they occur, as do Request for Quote (RFQ) alerts, system events, and messages from the GLOBEX Control Center. A beep announces display of certain messages.

The window holds three lines of text. The most recent alert message is always on the top line, and the oldest message scrolls off when there is no room to display it. Instrument- and Service-specific messages include the Exchange identifier and Service code. Each message is displayed for a maximum of thirty seconds (unless "rolled-off" by another message) before being replaced by the logo. During a GLOBEX Session, alerts are saved to a displayable Alert list. (See the GLOBEX Menu item in Section 1.5.2.)

1.4.7. Command Line

The Command Line, above the date/time, lets you select an instrument and display the custom or system page with that list. (See Section 2.2.1.)

1.5. GLOBEX Menus

You can use the GLOBEX menus to select all keystation functions. The GLOBEX menu bar displays major keystation choices. When you select a choice in the menu bar, a drop-down menu displays with other choices. Figure 1.18 shows all the drop-down menus.

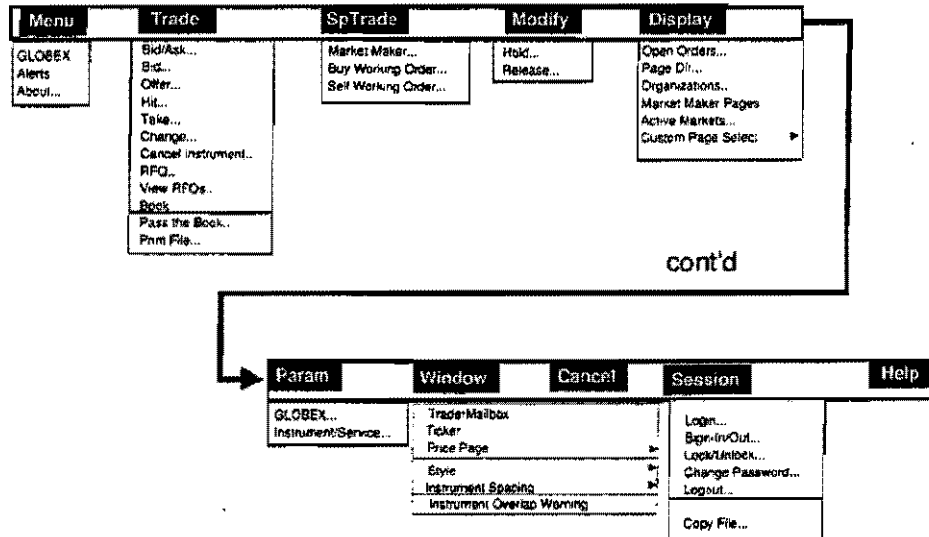


Figure 1.18 Keystation Menus

Figure 1.19 shows a close-up view of the Display drop-down menu

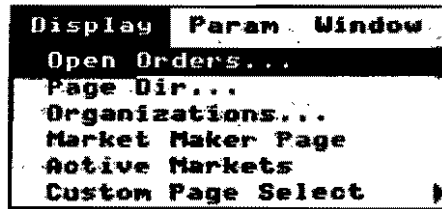


Figure 1.19 Display Drop-Down Menu

Some choices in a drop-down menu are followed by three dots; when you choose on one of these functions, a dialog box displays. Functions without dots are executed immediately when you choose them.

Some choices are followed by a right arrow. When you choose these functions, an additional set of menu choices displays. See Figure 1.20.

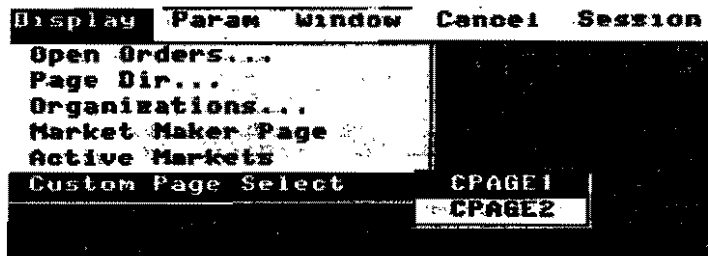
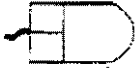


Figure 1.20 Additional Menu Choices

1.5.1. *Selecting from Menus*



To choose an item on a menu:

1. Click the menu choice in the menu bar. The drop-down menu displays.
2. Move the mouse pointer so it points to a choice. Click the mouse button.
3. If an additional set of menu choices displays, click your choice in the second set of menu choices.



To choose a menu item with the keyboard:

SYS MENU

1. Press **Alt** when focus is in the Trading window to activate the menu bar.
2. Use **Right Arrow** or **Left Arrow** to move to a menu choice. Press **Return** when the menu choice is highlighted.
3. Use **Up Arrow** or **Down Arrow** to highlight your choice. Press **Return** when the menu choice is highlighted.
4. If an additional set of menu choices displays, use the arrows to highlight your choice; press **Return**.

1.5.2. *GLOBEX Menu Bar*

Each of the items in the menu bar is described here briefly. Additional information is found in the relevant sections of this User Guide.

Menu

This menu item includes choices that allow you to:

- Display the version number of your GLOBEX software.

- **Display the Alerts History.** Messages that describe system status, special messages from the GLOBEX Control Center, and RFQ and price limit alerts are displayed in the Alerts window. System status messages describe download progress, login success, connection progress, printer malfunction, and failure/recovery. These messages are stored in a scrollable list. To display the alert list, choose Alerts under Menu in the menu bar.

The active alert list shows messages received in the last 30 seconds; most of these become part of the history list when their time limit expires or when the active list contains more than 60 messages. The history list shows up to 70 messages, which are available for view until they are scrolled off by the arrival of new messages. Additional information is provided for some messages in the list.

Trade

This menu choice allows you to perform trading functions such as entering a Bid or Offer, or Hit or Take. You can also enter a request for a quote, cancel by instrument or change an open order, or pass the book.

SpTrade

Special trade functions include market maker and working order functions.

Modify

The Modify menu allows you to hold open orders or release held orders

Display

Choices on this menu allow you view one of the following: open orders; Active Markets Snapshot window; lists of GLOBEX subscribers, system pages, custom pages, and market maker pages. You can also determine which pages to display.

Param

The Parameters menu allows you to set GLOBEX parameters and trader defaults. It also allows you to define custom pages and clearing keys.

Window

Choices on this menu allow you to customize the keystation display.

Cancel

This menu choice allows you to cancel open orders.

Session

Choices on this menu allow you to login or out of GLOBEX services, change your password, and lock or unlock the keystation.

Help

This menu choice displays online help.

1.6. Printers

1.6.1. Audit Trail Printer

Every keystation has an audit trail printer that prints a record of all trading activity at that keystation as it occurs. This includes all messages that appeared in the Trader Mailbox and a portion of those that comprise the tradelog.

Do not turn off the printer while you are logged into a Service. If you do, audit trail data sent to the printer but not yet printed will be lost. If this occurs, you can print the tradelog (Section 7.15) to recover lost data.

1.6.2. Ticket Printer

An additional printer connected only to administrative keystations receives and prints only trade confirmation tickets. The ticket printer uses special, multipart, perforated forms. If multiple administrative keystation operators are logged on for a group, each operator receives a set of *all* tickets for that group.

1.6.3. Printer Problems

A printer error message (**Check Audit Printer** or **Check Ticket Printer**) identifying a printer problem appears in the Alerts window if a printer is off-line, out of paper, turned off, or disabled to the extent that it cannot receive data. The printer message repeats once every five minutes until printing is re-enabled.

An audit trail of all orders must be maintained when you trade on the GLOBEX system. Therefore, if your audit trail printer stops functioning, it is strongly recommended that you use another keystation with a working audit trail printer. Otherwise, you will not have a record of transactions entered into the system.

Always check the Alerts window for printer error messages and correct any printer problems before logging out from a Service. Failure to do so will prevent access to Offline Utilities.

Appendix E describes general printer maintenance for such requirements as changing ribbons, reloading paper, and clearing paper jams.

1.6.4. Reprinting Data

The audit trail is a subset of the internal system tradelog. If the audit trail has not printed for any reason, you can print the tradelog (see Section 7.15).

If the ticket printer malfunctions, data for trade confirmation tickets is also recorded in the tradelog. Lost trade tickets cannot be reprinted at the ticket printer. However, you can reprint ticket information on the audit trail printer using the Offline Utilities (see Section 12.7.2).

2. Basic GLOBEX Functions

2.1. Overview

To trade on GLOBEX, you need to know how to:

- Select an instrument.
- Select a function — **Bid, Offer, Bid/Ask, Hit, Take, etc.**
- Execute that function.

Section 2 explains these operations, tells how to get on-screen help, and describes what will happen in the event GLOBEX service is lost. This material, along with the material in Section 1, comprises all the basic information needed to operate the GLOBEX keystation. Other sections of this user guide give detailed information on keystation features and functions. Refer to these sections for a complete understanding of GLOBEX.

Logging and Signing In

To operate the keystation, you must be logged in, signed in, and have a valid password.

For information see:

- GLOBEX Login (Sections 1.1, 5.1, and 5.6).
- Entry Operator Sign-In/Out (Section 5.3).
- Lock/Unlock Keystation (Section 5.4).
- Change Password (Section 5.5).

2.2. Selecting an Instrument

The Trading Window shows a set of instruments — a “page.” Each line of the Trading Window shows data for a single instrument. The instrument line number displays at the far left on the line. (See Section 1.4.2 for an overview of the Trading Window.) The displayed page may be a system page or custom page.

- System pages contain Exchange-defined sets of instruments.
- Custom pages display specialized selections of instruments that can include instruments from more than one Service. Custom pages are defined by the trader and can contain instruments from more than one Service.

Before you perform most functions, you must select the instrument you will be working with. If the instrument you need is not on the currently displayed page, use Page Directory (See Section 9.3) to substitute the correct page. You can also use Quick Page Find (Section 2.2.1) to locate the instrument.



A thin line displays below the selected instrument.

To select an instrument using the keyboard, use number keys to key the instrument line number. When you press the number key, a thin line appears below the instrument, indicating that it is selected. If you press another number, the underline will move to the new selected instrument.

Selecting Two-Digit Line Numbers

For two-digit instrument line numbers, do not key the line number. When you press a number key, the underline moves to the first instrument in the display that ends with that number. For example, press 1 and the underline moves to line 1. When you press the number again, the underline moves to the *second* instrument line ending in that number. For example, the second time you press 1, the underline moves to line 11. When there are no more line numbers ending in the number, the underline returns to the first line. The cycling continues as you press the number.

Examples:

To choose instrument line 12:

Press 2 to select instrument line 2.

Press 2 again to select 12, the next line number ending in 2.

To choose instrument line 21 in a two-up view where more than 20 instruments display:

Press **1** to select instrument line 1.

Press **1** again to select 11.

Press **1** again to select instrument line 21.

If you press **1** again, the selection returns to line 1.

To choose instrument line 13:

Press **3, 3**.

To choose instrument line 10:

Press **0**.

To choose instrument line 20:

Press **0, 0**.

If an instrument line is blank, the underline does not move to the line.



To select an instrument using the mouse:

1. Point the mouse anywhere in the instrument name, line number, or market block.
2. Click the left mouse button. A thin line appears below the selected instrument, and the Trading Panel displays. The Trading Panel shows all available functions. (See Figure 2.1.)

Mouse Shortcuts

Use the mouse to start some functions:

- To change an open order, click the *left* mouse button in an instrument's *keystation block* (the Trader Quote and Quantity columns), or in any of the fields in the alternate keystation block views (see Section 1.4.2). If there are Open Orders, the **Hold and Change Open Order** dialog box displays. (See Section 7.7.)

- To cancel an order for an instrument, click the *right* mouse button in the instrument's keystation block. The **Cancel Open Orders** dialog box displays with orders for the selected instrument. (See Section 7.13.)
- To choose the order(s) to cancel, double-click the *right* mouse button anywhere in the Trading Window *except* the keystation block. The **Cancel Open Orders** dialog box displays with all open orders. (See Section 7.12.)

2.2.1. Quick Page Find

Use the Command Line, located above date/time, to find, display, and select an instrument.

1. Click in the Command Line. The insertion point appears. The command line is active *only* when it shows the insertion point.

Or

TRADE TILE

Press  until the insertion point appears in the command line.

2. Key the instrument name in one of the following formats:

Instrument name

Example:

EDZ6

Or

Exchange identifier space instrument name

Example:

m  EDZ6

3. Press  or .

For the first format, the keystation searches the currently displayed page, all custom pages, and then system pages for each Service logged in. The keystation

When you press
TRADE TILE



, you move
focus to each active
window, in turn.

Exchange Identifiers:

f = MATIF

m = CME

tion searches the system pages for Services in display priority order. (See Section 6.3.2.)

When the keystation finds a page containing the instrument, it displays that page in a one-up view with the instrument selected. If the keystation does not find the instrument, it displays an error message in the date/time area.

Use the second format only if you know the Exchange to which the instrument belongs. For this format, the keystation searches the currently displayed page, all custom pages, then system pages only for the Service that supports the specified Exchange.

Error Messages:

The following error messages may display. Each is explained here.

Instr. not found – The instrument name you entered is not on the currently displayed page or any custom or system page for the connected Services.

Exchange id <identifier> is invalid – You have entered an Exchange identifier that does not exist.

Instr not found on <service identifier> – You used the Exchange identifier-instrument format, and the instrument was not found on any page for the Exchange.

Not logged into service <identifier> – You used the Exchange identifier-instrument format, and you are not logged into the Service to which the Exchange identifier belongs.

2.3. Selecting a Function

After an instrument is selected, choose a keystation function to apply to the selected instrument. A function dialog box for that instrument will be displayed.

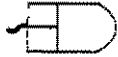
To select a function, press the key labeled with the function's name. This may be either a "hard" key on the main keyboard or one of the small, round "soft" keys above the standard keys. (See the keyboard diagram—Figure 1.2 in Section 1.) The function dialog box displays.



2 Using the Keystation

Or

Choose a function on the Trade menu or Special Trade menu.



Use the mouse to choose a function in the Trade menu or Special Trade menu.

(See Section 1.5.1 for information on selecting from menus with the mouse or keyboard.)

Using the Trading Panel

When you point and click an instrument to select it, the Trading Panel shown in Figure 2.1 displays. The Trading Panel, contains command buttons for all choices on the Trading and Special Trade menus. To select a function, click the Trading Panel command button. The function dialog box displays.

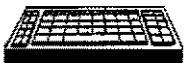
Functions for which you are not permitted are grayed.



Figure 2.1 Trading Panel



You cannot move the mouse pointer outside the Trading Panel border. Click **Quit** to remove the panel.

The trading panel is disabled when a market maker page is active.



To select a function in the Trading Panel with the keyboard:

1. Display the Trading Panel by clicking the left mouse button on an instrument.

2. Press  or  until the command button is selected. It will have a dark border and an inner dotted outline.

3. Press  to display the function dialog box.

Press  to remove the panel from the display.

2.4. Using Dialog Boxes

A dialog box is a window on the screen that displays options and allows you to enter information and choose commands. Dialog boxes display for all the functions on the Trading Panel and for other keystation functions. Two sample dialog boxes are shown in Figure 2.2.

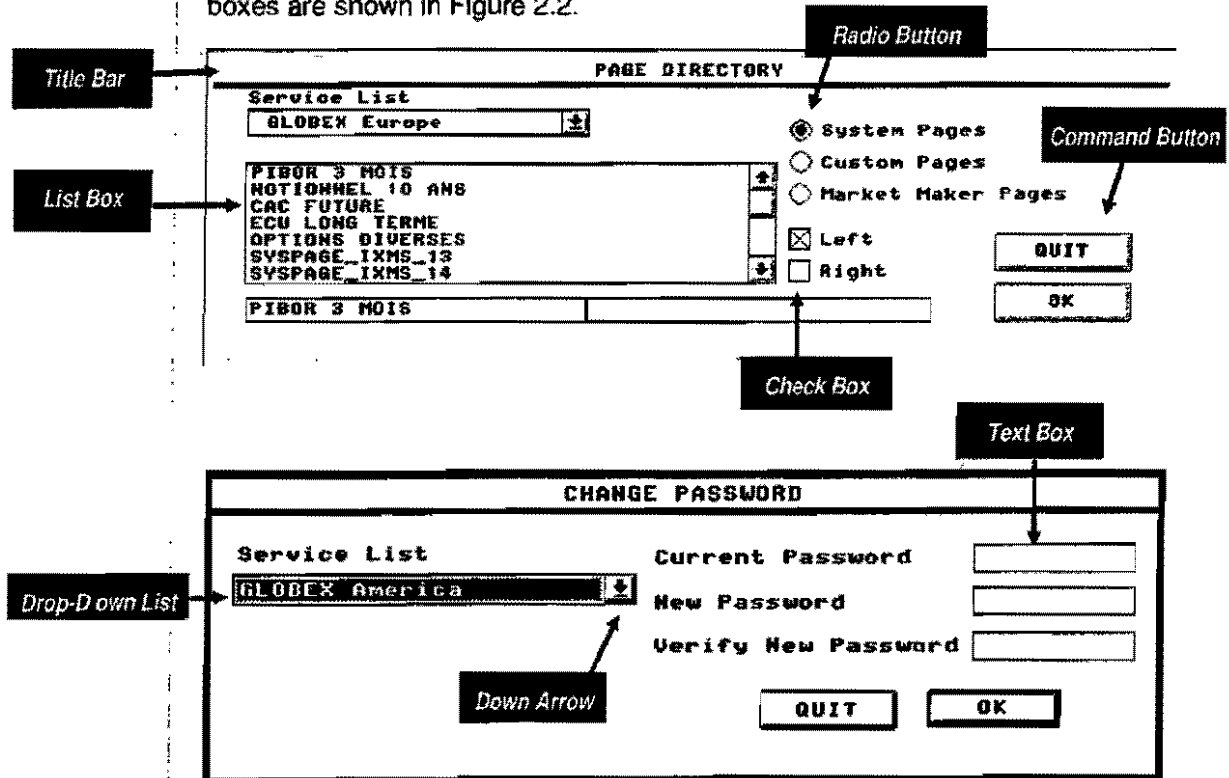


Figure 2.2 Example Dialog Boxes

2.4.1. Areas in a Dialog Box

A dialog box contains various areas (labeled in Figure 2.2). Not all areas appear in every dialog box.

- The **title bar** identifies the function the dialog box supports.
- A **text box** is where you type information.

- A **list box** displays lists of items. Some lists are of available choices such as instrument names; other lists are for display of information only.
- **Drop-down lists** are indicated with the Down Arrow shown in Figure 2.2. Open the list to display its choices. When you make a selection, the list closes and only your choice displays.
- **Command buttons** carry out an action. Labels — **OK, Quit, Save, Reset**— indicate the action that occurs when you click the button.
- Square **check boxes** let you choose from a set of choices. You may choose more than one check box.
- Round **radio buttons** present mutually exclusive choices. You may choose only one button at a time.

Refer to Section 1 for basics on the keyboard and mouse.

Market Maker and Working Order functions use specialized dialog boxes in which you can use many of the techniques described in this section. Details on using those dialog boxes appear in Sections 8.4 and 8.5-6.



Identifying the Exchange

A dialog box can display choices for a single Service or multiple Services. In a single-Service dialog box, such as one used to enter trades, the one-character Exchange identifier (**m** for the CME and **f** for MATIF) precedes the instrument name in the dialog box title bar. In a multi-Service dialog box, which can display a mix of instruments from different Services and Exchanges, each instrument name includes the Exchange identifier.

2.4.2. Moving in a Dialog Box

Moving to an area of a dialog box selects that area, highlighting it or marking it with a dotted outline; this becomes the active area. The next action you take will affect this active area.



Press  to move from area to area.  moves through the dialog box in the opposite direction. As you press the key, the highlight or dotted line moves from area to area.

2.4. Using Dialog Boxes

A dialog box is a window on the screen that displays options and allows you to enter information and choose commands. Dialog boxes display for all the functions on the Trading Panel and for other Keystation functions. Two sample dialog boxes are shown in Figure 2.2.

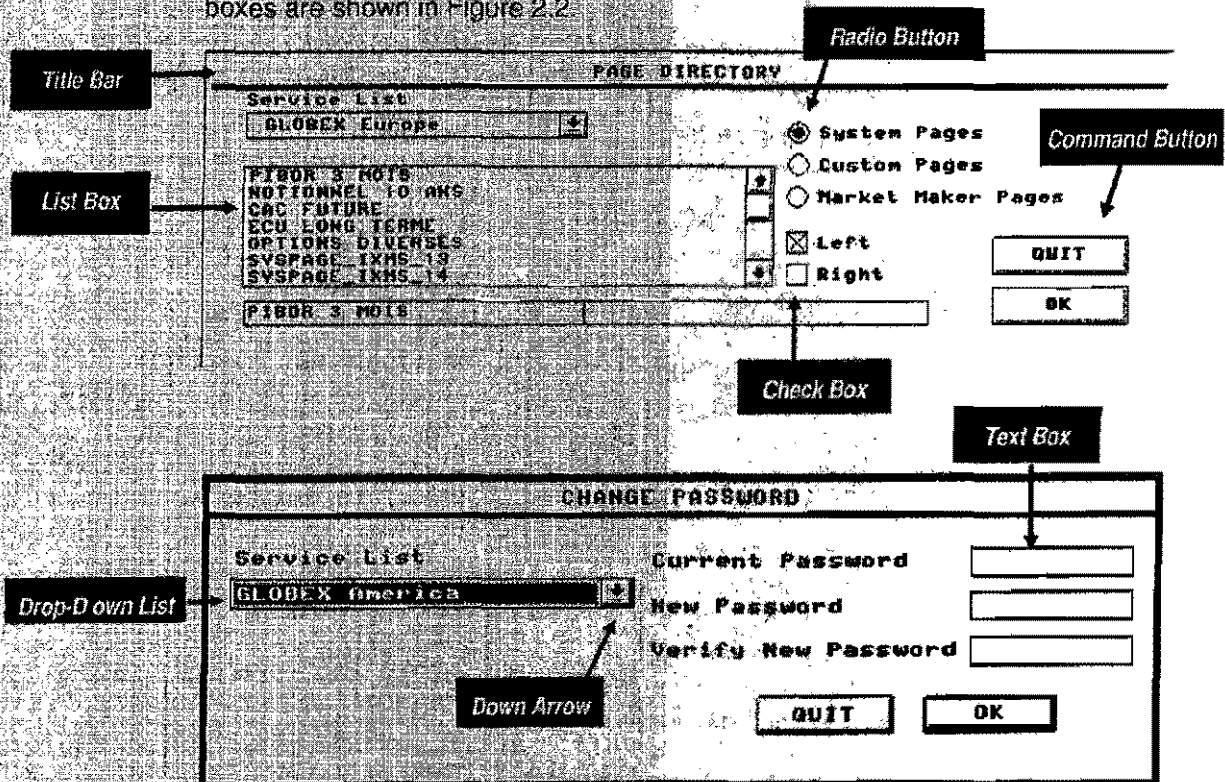


Figure 2.2 Example Dialog Boxes

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A dialog box contains various areas (labeled in Figure 2.2). Not all areas appear in every dialog box.

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- **Command buttons** carry out an action. Labels — **OK, Quit, Save, Reset**— indicate the action that occurs when you click the button.
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- Round **radio buttons** present mutually exclusive choices. You may choose only one button at a time.

Refer to Section 1 for basics on the keyboard and mouse.

Market Maker and Working Order functions use specialized dialog boxes in which you can use many of the techniques described in this section. Details on using those dialog boxes appear in Sections 8.4 and 8.5-6.



Identifying the Exchange

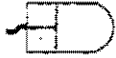
A dialog box can display choices for a single Service or multiple Services. In a single-Service dialog box, such as one used to enter trades, the one-character Exchange identifier (**m** for the CME and **f** for MATIF) precedes the instrument name in the dialog box title bar. In a multi-Service dialog box, which can display a mix of instruments from different Services and Exchanges, each instrument name includes the Exchange identifier.

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Moving to an area of a dialog box selects that area, highlighting it or marking it with a dotted outline; this becomes the active area. The next action you take will affect this active area.



Press  to move from area to area.  moves through the dialog box in the opposite direction. As you press the key, the highlight or dotted line moves from area to area.



Click on an area to select it.

2.4.3. Keying and Editing Text



When you tab to an empty text box, the **insertion point** is at the far left side of the box. You key text at this point. If the box already contains text when you move to it, all the text is selected (highlighted); any text you key replaces selected text. When some dialog boxes are first displayed, a text box is already selected. Text you key will replace the selected text unless you first move the insertion point.



Moves the insertion point right or left through the text so you can insert or delete characters.



+



Selects text so you can replace it, by keying over it, or delete it.



Erases the character to the left of the cursor.
Or
Deletes selected text .



Erases the character to the right of the cursor.
Or
Erases selected text.



Click in a text box to place the insertion point anywhere within text in the box. Click at another place to move the insertion point. When some dialog boxes are first displayed, a text box is already selected (highlighted). Text you key will replace the selected text unless you first move the insertion point.

To select text so you can replace it or delete it, drag the mouse through the text or double-click a word.

2 Using the Keystation

In market maker and working orders, these keys have other functions. See Section 8.



In market maker and working orders, these keys have other functions. See Section 8.

Tip: Use the keyboard arrow keys to move within the text box.



2.4.4. Using Lists

List Boxes

A list box is a fixed size. When a list is longer than the display area, scroll bars display at the right side of the box.

To scroll:



or

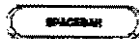


Scroll the list up or down; this does not move the highlight. You can scroll the mailbox messages, as well as lists in dialog boxes, using these keys. *In market maker orders, these keys have other functions. See Section 8.*

To select an item:



Moves to the list box. A dotted outline frames the first item in the list.



Select the first item in the list when it has the dotted outline.

or



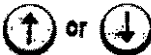
Scroll the list, moving the selection to another item in the list.

When you move to another area in the dialog box, the selected item remains selected.

To highlight or select multiple orders for **Cancel** functions:




+



or



Move only the dotted outline to another line; the first item remains selected. Press  to select or deselect an order.

To scroll through a list:

- Click the Up or Down Scroll Arrow to advance the list one item at a time.
- Click and hold a scroll arrow to move continuously through the list.




- Drag the scroll box to move to another section of a long list.

To select:

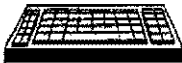
- Click on an item in a list to select or deselect it.

When you move to another area in the dialog box, the item you selected in the list stays selected.

To select multiple orders for **Cancel**:

- Press  and click on an order; repeat to select another.
- Press  and drag the mouse through the list to select adjacent orders.
- To deselect one of several selected orders, press  and click on the order.
- To deselect all selected orders except one, click this order.

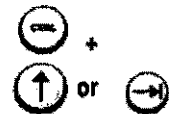
Drop-Down Lists



To open or close the drop-down list:





Reveals the rest of the drop-down list.

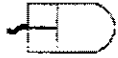


Closes the drop-down list.

2 Using the Keystation

To select in a drop-down list:

-   Scroll through the list, moving the selection from item to item. (You can also scroll without opening the list.)



To open or close:

- Click on the Down Arrow at the right of the box to open the list.

To select:

- Click on an item in a list to select it and close the list.

2.4.5. Using Check Boxes



Moves the dotted outline to the first check box and then from one check box to another.



Checks selected box.



Point and click to check a box.

2.4.6. Using Radio Buttons



Moves the selection to the first radio button. Dotted lines appear around the choice.



Cycle from one radio button to another. Tab to the next field when the correct button is selected.



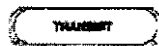
Point and click to select a radio button.

2.4.7. Choosing Command Buttons

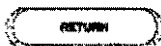


When a dialog box is first displayed, one command button has a darker border

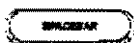
than the others. This is the default, executed when you press



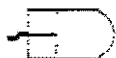
or



Moves from one command button to the next.



Executes the command.



Point and click to choose a command button.

2.5. Executing Trades

Functions on the Trade menu, which are also shown in the Trading Panel, are the most frequently used keystation functions. These functions allow you to enter Bids and Offers and to Sell (Hit) or Buy (Take) as well as to change or cancel open orders. The dialog boxes used for these functions (see Section 2.2 and 2.3 on selecting instruments and functions) have a similar basic design. Figure 2.3 shows the Bid dialog box.

Color cues are used in trade dialog boxes. Bid and Take boxes have blue borders; Offer and Hit boxes have red borders. The Bid/Ask box has blue in the Bid area and red in the Ask area.

2.5.1. Moving Dialog Boxes

Trading dialog boxes can be moved.

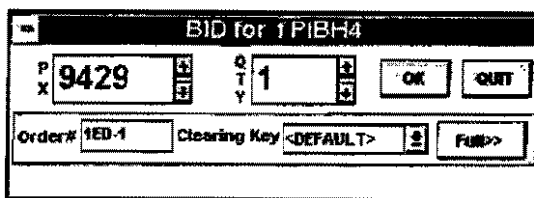



Figure 2.3 Bid Dialog Box




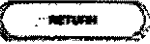

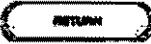


Using the mouse:

1. Click anywhere in the title bar of the dialog box. The mouse pointer changes to .
2. Move the mouse pointer anywhere on the screen.
3. When the tip of the arrow is where you want the upper-left corner of the window to be, click again.



Using the keyboard:

- SYS MENU
1. Press  to display the System menu. Use the  and  to highlight Move. Press . The mouse pointer changes to .
 2. Use the arrow keys to move the pointer.
 3. When the tip of the arrow is where you want the upper-left corner of the window to be, press .

The window will display as close as possible to the selected location. Windows will not overlap the Command Line, date and time, or the Alerts window.

All new dialog boxes will open in this position.

2.5.2 Entering Data in Trading Dialog Boxes

When a trading dialog box first displays, the price field is selected. Keying numbers changes the data in the selected field. Move to and change data in any other field and then use command buttons to complete or exit the transaction. See Sections 4 and 7 for additional information on these functions.

Clearing Data

When a dialog box initially displays, full clearing data displays as shown in Figure 2.4.

1. Enter or edit the order number in the Order # text box (see Section 4.4.2).
2. Clearing Key is a drop-down list. Select the appropriate key or type the clearing information (see Section 4.4.2).

Figure 2.4 Expanded Bid Dialog Box

3. Complete the additional fields. Choose **Brief** to display just the clearing key and order number. (The command button changes to **Full** as in Figure 2.3.)

When the dialog box is displayed later in the session, it will display in the mode you chose the last time—full or brief.

Price and Quantity



Key the price and quantity information or use the keyboard shortcuts described in the section on equivalent keys below.



Click the Up and Down Arrow command buttons in the price and quantity text boxes.



Each time you click an arrow, you increase or decrease the amount shown in the text box. (The amount of the increase or decrease in quantity can be changed in the Instrument Parameters dialog box.)

Completing the Transaction



Choose a command button to complete the transaction. Different command buttons display in different dialog boxes. Command buttons include:

OK Executes the transaction. The command button may have a label such as **Bid OK** or **Ask OK**.




Quit Exits from the dialog box without performing the transaction.

Command Buttons and Equivalent Keys


In dialog boxes such as the one for entering a Bid shown in Figure 2.3, command buttons have equivalent hard keys. For the Price and Quantity fields, hard keys work only if the cursor is in the text box.

Dialog Box Button	Key	Effects
↑ or 		Increases Price by the minimum price movement or Quantity by the order increment.
↓ or 		Decreases Price by the minimum price movement or Quantity by the order increment.

Other command button/hard key equivalents are:

Dialog Box Button	Key
OK	=  = 
QUIT	= 

2.6. On-Screen Help

To request help, click on **Help** in the menu bar or press . The GLOBEX Help Main Index shown in Figure 2.5 displays. Choices on the Main Index include indexes, which list further choices for a subject, and subject titles such as Passing the Book.

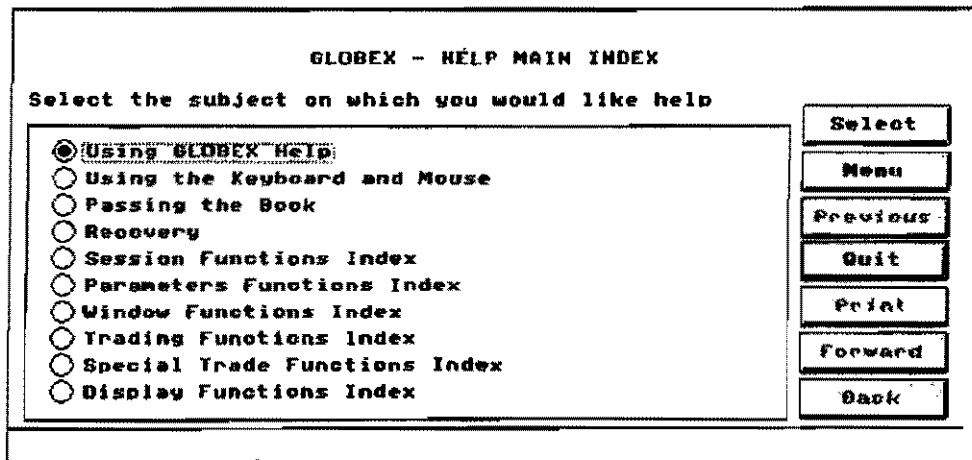


Figure 2.5 Help Main Index

2 Using the Keystation

Use the command buttons to operate the help displays.

- **SELECT** - Displays the choice highlighted in the index.
- **MENU** - Displays a menu that lets you choose between the main index and help on the alert interface. (See Figure 2.6 below.)
- **PREVIOUS** - Lets you look at the help display you viewed prior to the current display. Use this button to return to the Help Main Index after viewing a topic.
- **QUIT** - Exits help.
- **PRINT** - Printing is not yet available.
- **FORWARD** - Pages forward within a multi-page help topic. When you reach the last page of a topic, this button is disabled.
- **BACK** - Pages backward within a multi-page help topic. When you reach the first page of a topic, this button is disabled.

You cannot display help information while any dialog box is on the screen.

Using a Help Index

Use the following procedures for the Help Main Index or a topic index. Buttons that do not operate for an index are disabled.



To choose from an index:



Double-click on an index item.


Or

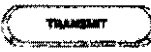
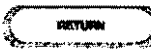
1. Click on an index item.
2. Click on **SELECT**.



To choose from an index:

1. Use   to move highlight to an index item.

2. Press  to highlight **SELECT**.

3. Press  or .

Using a Help Text

The **SELECT** button is disabled because it does not operate for a text.





To display consecutive help text pages:

Click on **FORWARD** and **BACK**. Click on **QUIT** to remove the text.



To display consecutive help text pages:

1. Press  or  to activate the **FORWARD** command button (it is the default) until you have finished reading.

2. If you want to back up a page, press  to highlight **Back** and then press .

3. Press  to highlight **Quit** and then press  to exit the system.

Help During Failure

Although the  key and **Help** menu item do not operate during keystation, site, or Host failure, you can display the Recovery help text:

1. Double-click on the **REUTERS** logo.
2. Click on the **Help** button in the Alerts window.
3. Click on the **Menu** button in the Alert help text window. The index shown in Figure 2.6 displays.

4. Choose GLOBEX – Main Index. The index shown above in Figure 2.5 displays.
5. Choose Recovery (or another topic) in the GLOBEX Help Main Index.

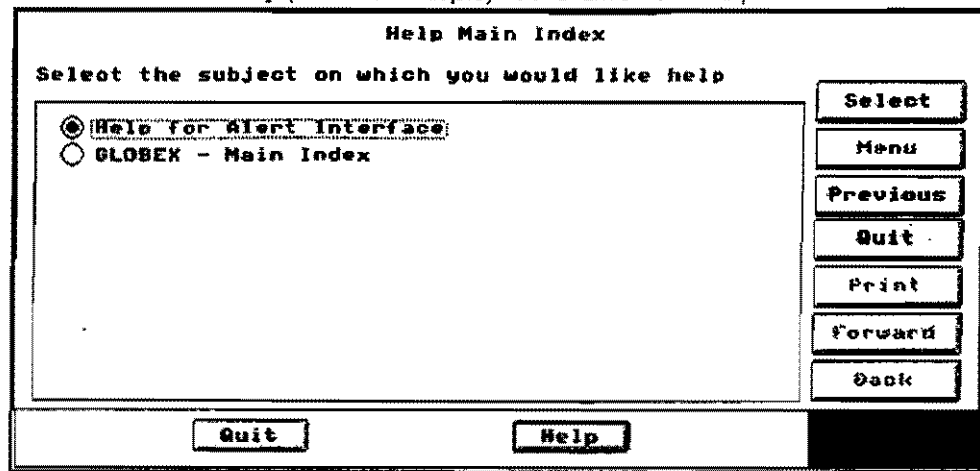


Figure 2.6 Index for Alert Interface/GLOBEX Help

2.7. Loss and Recovery of Service

2.7.1. Loss of Live Connection and Recovery

Keystations have live and standby connections to each Service. In most cases, if the live connection is lost to a Service, the keystation changes its standby connection to that Service to a live connection and recovers any lost messages, **while maintaining your open orders.**

2.7.2. Failure to Recover

The GCC Emergency Procedures in the section of colored pages at the back of this book detail what happens if a GLOBEX Service Host, Service connection, a single keystation, an entire site, or individual keystation component fails, and specifies how you should respond in order to preserve/recover your open orders. In all such emergency circumstances, you must follow these procedures.

If there is no live or standby connection, communication with that Service is lost. The following events occur at the keystation:

- A message in the Alerts window announces that a Service was lost. Trading on other Service(s) continues normally.
- The keystation creates a file of open orders from the keystation database of open orders. The open orders are written to this file in their original entry sequence.
- **Writing Orders xx**, where **xx** is the Service code, is displayed in the Alerts window while the open order file is created; **MSG: Writing Open Order File <filename>xx** is a timestamped message added to the audit trail and tradelog when file creation begins.
- **MSG: Open Order File <filename> xx** is a timestamped message added to the audit trail and tradelog when the file is completed.

If no other Service is logged in, the display clears and the Login dialog box is displayed with the **Exit Session** button enabled. In the Service list, the name of the lost Service is grayed. When communication is re-established, the system determines which proportion of the data has changed since the interruption. Data for the complete set of instruments does *not* need to be sent to your keystation, only changed data. You will see the message **Quick Download** in the Alerts window, followed by messages indicating what percentage of instrument data has been downloaded to your keystation. For example, if the download is of only a few instruments (fewer than 25% of the total), you will immediately see the message **Download 100%**. If most instrument data needs to be updated, you will see the messages **Download 25%**, **Download 50%**, **Download 75%**. When the download is complete, you will see the message **Download 100%**; the Service name and **Start Session** command button will be enabled. You can login again and begin trading. (See Section 5.1 for information on login.)

If the system determines that a complete download of instrument data is needed, you will see the message **Downloading**, followed by messages indicating progress. (See Section 5.1.)

After login, you may need to recover open orders. Section 7.14 describes the procedures needed to recover orders using the open orders file. When you use the open order file to recover orders, check the date on the file to be sure that you are using the correct one. If there are no open orders at the time that communication is lost, an open order file will not be created. In that situation, when

communication is restored, you will not find a file with that date and time, and you will not need to use the order recovery procedures.

Any other Services that have already been downloaded but not logged in are available for login.

Trading Window

If a page from the failed Service is in the display, it is replaced by the default system page from another logged-in Service. If there was a two-up view in the display and the new display would result in the same page on both sides, the display reverts to the one-up view.

Custom Page

If a displayed page contains instruments from a failed Service, lines containing instruments from that Service are left blank.

Single-Service Dialog Box

If you are logged into only one Service and the connection is lost to that Service while a single-Service dialog box is on display, the dialog box is automatically destroyed; a warning message in the Alerts window indicates failure.

If you are logged into more than one Service and the connection is lost to the Service represented by the dialog box, a warning in the dialog box indicates failure, the cursor is trapped in the QUIT command button, and you must close the dialog box.

Processing for instruments on another Service is unaffected.

Multi-Service Dialog Box

If communications are lost to a Service selected in a dialog box, the information in that dialog box is no longer valid. A warning message indicates failure. In general, after you acknowledge any outstanding message from another Service, the cursor is trapped in the QUIT command button and you must close the dialog box. If the lost Service is the only one logged in, the dialog box closes automatically. If the currently selected instrument belongs to an Exchange on a Service not interrupted, the dialog box remains, showing information only for those Services logged in.

On-Screen Book

Any on-screen book showing an instrument on a failed Service is removed.

3. Service/Emergency Procedures

If you have a problem, **decide your highest priority: technical service for your keystation or assistance with cancelling orders or determining order status.**

3.1 GLOBEX America and GLOBEX Europe Control Centers

The GLOBEX CONTROL CENTER is the first place to call to:

- Cancel orders while your GLOBEX keystation is down.
- Determine if your orders traded, or why they did not.
- Obtain assistance and information regarding backup and recovery procedures during a failure situation.

Section 4.7 provides information on specific functions performed by the GLOBEX Control Centers.

GLOBEX America (GA) = CME

GLOBEX Europe (GE) = MATIF

Please be aware the the GLOBEX CONTROL CENTERS give priority to cancellation calls over customer service calls and you may be put on hold.

GA GCC: All inquiries, including tech. assistance 312-456-2391

GE GCC: Order cancellation: 33-1-40-28-99-99

Market and all other inquiries: 33-1-40-28-83-38

HOST STATUS RECORDING:

GA: 312-715-6100

GE: 33-1-40-28-97-97

For assistance with technical problems, call local Reuters; see phone numbers on next page. In Chicago, you can call 312-GLOBEX 1 (312-456-2391) and press "2."

3.2 Technical Problems

Executed or unexecuted orders cannot be seen or cancelled by your local Reuters Customer Service Response Center. Reuters can respond locally to any technical problem you may experience, such as a local telephone line outage or equipment fault. Reuters will dispatch a technician to visit your site if that seems necessary.

- | | | | |
|------------------------------------|-------------------------------|--------------------------------------|------------------|
| <input type="checkbox"/> U.S.A. | 800-435-0101
312-408-8600 | <input type="checkbox"/> France | 33-1-40-28-08-08 |
| <input type="checkbox"/> U.K. | 0800-88-2000 | <input type="checkbox"/> Germany | 0180-3-237-237 |
| <input type="checkbox"/> Japan | 813-54-01-2483 (07:00-20:00)* | <input type="checkbox"/> Switzerland | 411-258-7555 |
| <input type="checkbox"/> Hong Kong | 852-2804-6804 (08:00-18:00)* | | |
| <input type="checkbox"/> Singapore | 65-776-8133 (08:00-18:00)* | | |

* Other times, call Chicago (312-456-2391, option "2").

More phone numbers will be published as the GLOBEX network expands. Reuters currently has local service centers in most countries around the world.

3.3 Emergency Procedures

One or both GCCs may halt trading in any or all instruments during the GLOBEX Session. If possible, this event will be announced on the system.

Failure of a Service Host (although this is unlikely) results in a total GLOBEX outage for approximately 180 seconds; after this time, the standby GLOBEX Host system takes over operations. All open orders are lost and must be re-submitted prior to market opening.

In the event of a Host failure, the keystation will automatically create a file of orders which were open at the time of the failure. Once the standby GLOBEX Host is up and running, you can upload these orders to re-establish your Standing Order Book (see Section 7.14). The GCC then initiates a market re-opening, similar to a market opening, at the start of the GLOBEX Session.

If a market halt is followed by a pre-opening sequence, you may enter, modify, or withdraw your orders until the non-cancel period begins. Whether or not an

instrument has a pre-opening sequence is determined by the individual Exchange listing the instrument.

The GCC or a GLOBEX partner Exchange may, at any time, request your firm to respond to inquiries from the Clearing, Compliance, Market Surveillance, and Audits departments. Reuters would not be a party to such a transaction. In your office, there should exist a list of staff, with escalation to senior management, capable of answering such requests and managing unexpected emergencies.

The GLOBEX system is designed to minimize the differences in time that it takes orders to reach the Host from keystations located throughout the world. If any Trans-Atlantic or Trans-Pacific cable on the Reuter Network fails, the network may switch to satellite backup. This will result in a delay of approximately one-half second in transmission time for keystations temporarily affected by the cable outage.

APPENDIX G (COLORED PAGES AT THE BACK OF THIS USER GUIDE) CONTAINS A SUMMARY OF GLOBEX AMERICA GCC EMERGENCY PROCEDURES. GLOBEX EUROPE EMERGENCY PROCEDURES ARE PART OF THE MATIF GLOBEX MANUAL.

4. The GLOBEX Session

This section discusses the GLOBEX Session: how the GLOBEX Session begins; how system and instrument activity states define use of GLOBEX; how you should approach the function descriptions in Sections 5 through 9 of this user guide; and what occurs as you perform functions. The role of the GLOBEX Control Center is also explained.

4.1 Market Opening

The Exchange listing the instrument defines which instruments will be traded during the GLOBEX trading session and how each instrument will open. Once you log in, the system states described below may occur as each instrument goes through its opening sequence, at the discretion of the Exchange listing the instrument. Selected trading functions are restricted at various times. The same opening sequence takes place for each instrument when the market reopens following a Host failure; however, in these circumstances, the order in which instruments open may differ from that used in a normal opening.

The Market Quote separator (see Figure 4.1) is a clear indicator of the current system and instrument states.

Closed State

A session begins with all instruments in the **Closed** state. All functions are disabled (see Figure 4.1).

Staging Period - Halted State

Before opening, a staging period is available during which you can enter and upload orders. Only **Hit** and **Take** are disabled and no orders are matched.

Staging Period - Opening State

You can continue to enter orders; only **Hit** and **Take** are still disabled. At predetermined intervals, the system starts to calculate an **Indicative Opening Price (IOP)** for each instrument. The IOP represents the price at which an instrument will trade, if a trade is possible, or what the opening price will be on the Bid or Offer side once the instrument is open, including intra-day closing and opening. Trading will eventually begin at an equilibrium price that falls within the overlap of Bid and Offer prices. The IOP is broadcast to all keystations and displayed in the Last column, highlighted, to assist you in entering orders; a suffix code for each instrument indicates whether the IOP is based on the previous

day's settlement price (S), Bid (B), Offer (A), no entries (blank), or single bid/offer (I). The IOP is also broadcast to an external ticker feed.

Note: GLOBEX supports an external ticker feed. The information reported and rebroadcast to participating quote vendors is determined by each participating Exchange.

Non-Trading Mode

In the event of a market emergency, the GCC can place all instruments into Non-Trading mode, terminating the opening sequence for all instruments. You cannot log in or enter any orders, although all entered orders remain in the system.

Staging Period — Non-Cancel Period

At a predetermined time soon before the Session opens, you can still enter orders, but **Cancel** (both types), **Hold**, and **Change**, as well as **Hlt** and **Take**, are disabled. One more indicative price will be calculated and broadcast.

Consult each Individual GLOBEX participating Exchange for market opening/staging period times and procedures.

Market Open

The system calculates the **opening price**; all orders that can trade at this price are executed; prices display in the trading window; normal trading begins. The opening view in the trading window is based on these trades and the orders left in the system.

4.2 Display States

The availability of every function on a menu or in the Trading Panel is based on the trader's own permissions, received during login, and the current state of the system and individual instruments. Trader permissions supersede instrument state. (Permissions are described in Section 5.1.) Figure 4.1 shows how the display changes according to system state.

The Market Quote separator (usually a green slash mark between bid and offer quotes in the market quote column) is a clear indicator of the current system and instrument states. Figure 4.1 indicates how the information for instruments in the

4 The GLOBEX Session

Market Quote Separator	System State	Instrument State	Trading Functions Enabled	Market Block	Statistics Block	Keystation Block	Alternate Keystation Block Views	
							Net Positions	Statistics
Green C	—	CLOSED	None					
		Volume=0	No	Intra-day Last or Settle-Last	No	No	If available	
		Volume>0		Last & net change	No	If available	If available	
Green H	—	HALTED	All except Hit, Take					
		Volume=0	No	Intra-day Last or Settle-Last	Yes	No	If available	
		Intra-day, volume>0**	No	Last & net change	Yes	Yes	If available	
Green P	—	OPENING	All except Hit, Take					
		Volume=0	No	IOP	Yes	No	If available	
		Intra-day, volume>0**	No	IOP, Last if no IOP	Yes	Yes	Yes	
Red P	—	NON-CANCEL	Bid/Ask, Bid, Offer, Market Maker/WO Single, Market Maker Page Release, RFQ, Book, Hold					
		Volume=0	No	IOP	Yes	No	If available	
		Intra-day, volume>0**	No	Last or IOP	Yes	Yes	If available	
Green /	Normal	OPEN	All					
		Volume=0	Yes	Last or Settle-Last	Yes	No	If available	
		Intra-day, volume>0**	Yes	Last and net change	Yes	Yes	If available	
White /	Drop Book	OPEN	All	Updates to window and ticker only when price or quantity of best Bid or Offer changes or when a trade occurs.				
White *	Snapshot	OPEN	All	Updates to window and ticker only for new best Bid or Offer quote or new Last. This Last must be caused by a Bid higher, or an Offer lower, than the previous Last, a trade higher or lower than the previous Last, or a trade equal to the previous Last if that Last was not caused by a trade. A message is sent to the external ticker when the system moves into or out of Snapshot mode.				

*The Statistics block includes Last and Net Change columns. The Last column shows the IOP in reverse video to assist you in entering orders during the staging period. Once the instrument is open, the IOP is no longer relevant. "Yes" in this table means that actual Last and Net Change information is displayed.

** The Last indicators for instruments in the intra-day state are B, A, UP ARROW, DOWN ARROW, and blank.

Figure 4.1 GLOBEX System Display States

trading display evolves during the opening sequence and as the result of system activity, and how functions are enabled/disabled according to system state. (Refer to Section 1.4.2 for information shown in display blocks.) The effect of system activity on system function is explained further in Section 4.3.

4.3 Host Broadcast Level

During the GLOBEX Session, the Host continually broadcasts information to keystations concerning order acceptance, trades, price updates, and other activity. During periods of peak activity for an individual instrument, selected updates to the display are withheld in order to maintain keystation response time and the flow of essential information. **Drop Book** and **Snapshot** system states are explained in Figure 4.1. Regardless of display mode, all updates appear in the audit trail. The effect of Drop Book and Snapshot modes on RFQs, Price Pages, and Instrument Download is described below.

Effect on RFQs

At a pre-determined level, no RFQs are broadcast. Note that while elevated system activity usually affects single instruments, RFQs are disabled for the entire Service. If you send an RFQ, a message, **(TIME) RFQ DISABLED (SERVICE)**, is displayed in the Alerts window of all keystations enabled for RFQs. An **Enabled** alert is displayed when normal keystation activity resumes.

Effect on Monitor Pages

Elevated system activity also interrupts updates to the Monitor pages in the Price Page window. Updates resume within one minute after normal activity resumes.

Effect on Instrument Download

During login, the Host downloads to the keystation the current database (instruments, system page definitions, subscriber list). This database is always consistent with the database already available at active keystations.

If the system is in Drop Book or Snapshot mode, downloaded information conforms to the same restrictions that affect updates to active keystations. For instance, if Snapshot mode is in effect and a trade has occurred that does not qualify under Snapshot regulations, the volume of that trade will not be included in either a download or keystation update.

4.4 How to Enter Orders

Entering an order into GLOBEX requires you to:

- Display the order's dialog box.
- Type order and clearing information into the box.
- Submit the order to the Host.
- Check the Trader Mailbox to see that the order was accepted.
- Watch the Trader Mailbox or audit trail printout for trades.

Sections 5 through 9 of this User Guide give complete descriptions of the GLOBEX functions. The paragraphs that follow offer helpful background information that is useful for most functions, yet not repeated in the function descriptions. Each description is presented as a three-step procedure, as follows:

Step 1: Initiate the Function (Section 4.4.1)

Step 2: Follow the Instructions (Section 4.4.2)

Step 3: Interpret the Results (Section 4.4.3)

4.4.1 Initiate the Function

STEP 1 shows you how to display the dialog box. Choose the method you prefer. Refer to Section 2 if you need help, or use the system **Help** function. Remember that in order to access functions you must be signed-in (see Section 5.3) and have a valid, non-expired password (see Section 5.5).

The resulting dialog box is then shown, with labels identifying the items in the box. Labels for text boxes identify the source of the values shown when the dialog box is first displayed. In many cases, this original value will have been altered to show a typical order.

Initial Values

To determine the initial price in a trading dialog box, the keystation chooses the first available price from the following, in order:

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For Bid

- Trader's best open Bid
- Best Market Bid
- Last or IOP (depending on instrument state; see chart in section 4.2)
- Settle price
 - If Offer < Settle:
Market offer or Trader's Offer if instrument is open
 - Settle
 - If no Bid Market, Last, or Settle:
Market Offer or Trader's Offer if instrument is open;
Trader's Offer if instrument is not open
- Blank

For Offer

- Trader's best open Offer
- Best Market Offer
- Last or IOP (depending on instrument state; see chart in Section 4.2)
- Settle price
 - Settle
 - If no Offer Market, Last, or Settle: Market Bid or Trader's Bid if instrument is open; Trader's Bid if instrument is not open
- Blank

For Bid/Ask

Partially determined from Bid/Ask spread and precedence (see **Instrument Parameters**, Section 6.4.1).

For Sell (Hit) and Buy (Take)

Current best price.

4.4.2 Follow the Instructions

STEP 2 itemizes the actions you must take to complete your order or function. It includes what you should do, what you should avoid doing, and provides an explanation of the available options offered by the function.

Rules for Entering Prices

When you send a trade request to the Host, the keystation issues a warning if your order violates any of the following price guidelines:

- Use only the minus sign and numbers 0 through 9.
- Do not enter a minus sign with blanks or leave the price box blank.
- Start typing at the far left of the text box.
- Make sure the price is a multiple of the instrument's tick increment; be aware that the system has a built-in high/low range within which the price must fall.
- Enter the correct type of price: whole or fractional display. Derive price type from the instrument name. (See additional information in Appendix C.) Use the **arrow** command buttons to avoid making typing errors when changing prices.

After you select **OK** to send an order request to the Host, if the price is invalid, it will be highlighted. Correct the price and resubmit.

- Try to enter a price within 10 ticks (the keystation default) of the Last (see Section 6.4.1 to modify this price check value). You will receive a price check warning (see "Last Sale Price Check Warning") if you exceed this value.

Last Sale Price Check Warning

If the price you enter for a Bid or Offer differs from the Last by more than a set value (see Section 6.4.1), you will receive a price check warning. The dialog box shown in Figure 4.2 will display. The dialog box contains a bar graph depicting the relationship between the Last, High, Low, Best Bid, Best Offer, and trader's prices, as well as a message telling how far your price differs from the Last.

- To submit the order at this price level, click on **Submit Order**. The order is submitted and the dialog boxes clear from the screen.

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- If you decide not to submit the order at this price level, click on **Do Not Submit Order** (the default). The price check dialog box will clear, and you will be able to change the price in the order dialog box and resubmit the order. (Each time you submit the order, it goes through the price check.)

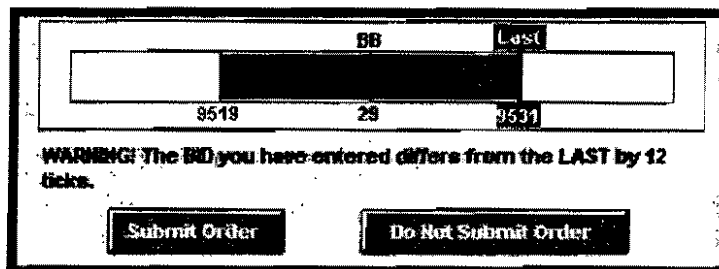


Figure 4.2 Last Sale Price Check Warning Dialog Box

If there is no Last the graph displays the previous day's settle price.

Values on the graph display in ascending order from left to right. Your Bid or Offer and the Last price are shown on the graph. (Your price is blue for a bid, red for an offer; Last is white on black.) The bar between your price and Last is colored blue for a bid and red for an offer. The Best Bid and Best Offer values (if they exist) are shown on the graph; just the last two digits display.

For a Bid/Ask order, it is possible for both your Bid and Ask prices to exceed the price check limit. In this case, the dialog box shown in Figure 4.3 displays, showing two bars, one for the bid and one for the offer. (If only one of the prices in a Bid/Ask order fails the price check, the box shown in Figure 4.2 displays.)

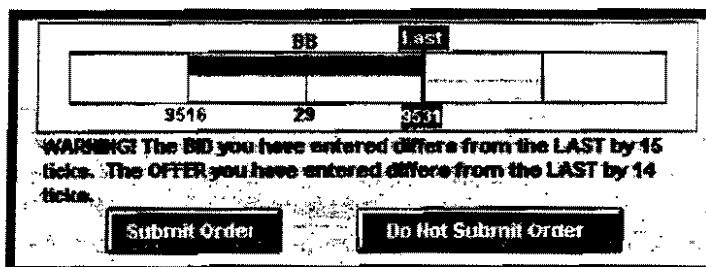


Figure 4.3 Last Sale Price Check Warning for a Bid/Ask

- If you choose **Submit Order**, both the Bid and Offer are submitted. The Bid/Ask dialog box will remain on the screen so you can submit additional orders.
- If you choose **Do Not Submit Order** (the default), your order will not be submitted, the Price Check Warning dialog box will clear, and the Bid/Ask dialog box will continue to display. You can change and resubmit your order.

Rules for Entering Quantities

- Use only numbers 0 through 9.
- Start typing at the far left of the text box.
- Increment size must be a whole-integer multiple of the system minimum. See Section 6.4 to establish a default order size and default increment size other than the system-set minimums.
- Observe order size limitations (see Section 6.4).
- Be aware of the quantity threshold (Section 6.4).
- Quantity fields cannot be blank.

After you select **OK** to send an order request to the Host, an invalid quantity is highlighted for you to correct according to the warning instructions. You can select **OK** again to override most order size and quantity threshold warnings.

Completing the Procedure

Once all the information in the dialog box is acceptable to you, select **OK**. GLOBEX performs a validation check to verify that each item is within an acceptable range. If there is invalid data, a message is displayed in red in the dialog box and the cursor moves to the invalid field; you will need to correct the error or provide information you may have omitted.

In addition to warnings concerning invalid price or quantity, GLOBEX will also display a warning if there is no Last or settlement price for the instrument. The warning, **No data to check - please verify**, is only for your information; select **OK** to remove it.

Clearing Information

Order dialog boxes require you to supply certain clearing information (see Figure 4.4 and Sections 2.4 and 2.5 for additional information on dialog boxes). When a dialog box initially displays, it is in **Full** mode, as shown in Figure 4.4. When you choose **Brief**, text boxes are removed, as shown in Figure 4.5. When a dialog box is displayed later in a session, it is in the mode used last during the session.

Figure 4.4 Dialog Box in Full Mode

Figure 4.5 Dialog Box in Brief Mode

A set of clearing data is associated with a "Clearing Key." You can select clearing data by selecting a Clearing Key from those in the dialog box drop-down list. If you wish to change the clearing information, click on **Full** and input the data in the text boxes. Each Service determines which fields it requires.

- **Order #** - Required information. You can leave the field blank, letting the keystation supply the next sequential number (according to the order sequence number, Section 6.3.3), or type an order number. An order number consists of the first 3 digits of the trader identifier, plus a 4-digit order sequence number from 1 to 9999.
- **Acct #** - Required information. You can define a default account number using **Set Service Parameters** (Section 6.4.2).

- **Type** - This field is filled in automatically when GLOBEX accepts an order. The default for a Bid or Offer is **LMT**; for a Hit or Take the field is blank. **LMM** identifies market maker orders; **LMW** identifies a working order.
- **Qualifier** - Leaving this field blank indicates that the order is good for this GLOBEX Session only, and will cancel at the end of the session. Other options are:
 - D** day order, good till the end of RTH;
 - G** Good Till Cancelled (GTC) order;
 - S** GTC, but executable during the GLOBEX Session only, not RTH;
 - 1-9** multiplied by 10 (seconds) is the life span of the order before automatic cancellation by the Host (see additional information below).
- **CTI** - Required (grayed for MATIF). This field is either blank or defaults to the previous entry. See Appendix B.
- **Origin** - Required. This field is either blank or defaults to the previous entry. See Appendix B.
- **Fee** - This field defaults to blank (grayed for MATIF). See Appendix B.
- **Orig. Entry Date** (Original Entry Date) - Required. The field initially displays the current date. Enter another date in form: month (01-12) /day (01-31) /year (<=current year).
- **F-EX** (Foreign Exchange) - This field defaults to blank. See Appendix B.
- **F-Firm** (Foreign Firm) - This field defaults to blank. See Appendix B.
- **Action** - See Appendix B (active only for MATIF).
- **Memo** - See Appendix B (active only for MATIF).

Appendix B explains clearing information that is specific to individual Exchanges.

Timed Order Expiration

In any trading dialog box, you can specify a lifespan in the clearing information order qualifier box from 1 to 9. This number, multiplied by 10 (in seconds, for a maximum of 90 seconds), is the amount of time the order remains in the Host before it is cancelled. Note: You can also enter timed orders for market maker

orders and working orders. A maximum of 500 orders is allowed at one time per keystation.

Note: The Host cancels a timed order when it expires and sends an entry removed message, with a status indicating a timed order cancel, to the keystation.

You can change, hold, release, and cancel timed orders. When you change a timed order, the Host cancels the original order (if it has not expired or been traded away). If the new order is a timed order, it expires after the specified time. When you place a timed order on hold, it is still cancelled once the time expires.

If a keystation loses its connection from a Host or you log out but maintain your open orders, timed orders continue to expire on schedule. Since the keystation is disconnected, it does not receive timed order cancel messages.

When you use **Pass the Book** (Section 7.14), the keystation rejects any timed order it encounters.

If the instrument is not open when you enter a timed order, the order is rejected. If an instrument with timed orders is halted during trading hours (an intra-day halt), the orders continue to expire. The keystation cancels any timed orders it receives in a trader download.

4.4.3 Interpret the Results - GLOBEX Response

STEP 3 describes the result of a successfully completed function: on-screen messages and changes in the display. First, the dialog box disappears. A message confirming your action may be displayed in the Trader Mailbox.

In the case of a Bid or Offer, the message tells you whether your order was successfully positioned in the book or refused, and indicates when a match is found and a trade occurs; for Hit and Take, it indicates whether the order resulted in a trade. Other messages confirm that orders have been placed on hold, released, or cancelled. All such messages are also printed as part of the audit trail and stored in the tradelog. Remember that your keystation will not receive match notification messages in the Trader Mailbox, audit trail, and tradelog if it has failed or you have logged out.

If a new order is the "best" for an instrument in the entire market, the market block of the Trading window is updated to reflect new market information: the quote and size appear on the instrument line in red for five seconds. If a new order is the "best" for the user, the quote and quantity fields of the keystation block are updated in red for five seconds. Only the best Bid and best Offer in the market for the user are displayed.

Following a match, price and quantity fields in all parts of the Trading window are updated. When an order is fully traded, the next "best" order in the book is revealed. If a match results in a new **Last** value, fields in both statistics blocks are updated. Throughout the GLOBEX Session, the statistics and net trade areas in the Trading window summarize your activity in each instrument.

The Ticker window displays messages as the result of any action that betters or equals an instrument's **Last** value in the Trading window.

See Section 11 for more information about on-screen messages and keystation records.

GLOBEX Credit Controls

If a GLOBEX Credit System is implemented, the messages described in this section may appear at your keystation, under certain circumstances.

If you are clearing through a firm that has imposed credit limitations on you (you will be notified) or if you are making give-ups to a clearing member through GLOBEX, messages in your Mailbox, tradelog, and audit trail (for a particular credit account and instrument class) include a credit status item. These messages are also sent to the appropriate Exchange and your clearing member firm.

Limits can be placed on overall credit or, for specific commodity classes, for total order quantity, worst long position, and worst short position. For entry positioned messages, credit status is either **OK** or **NG** followed by a brief explanation. For a rejected order, the message identifies which limit was exceeded and by what quantity or amount.

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When a **Hit** or **Take** is successful and results in a trade, messages include an **OK** credit status item. Credit limits can also cause a **Hit** or **Take** entry to be unsuccessful; in such events, the status item consists of **NG** plus an explanation that identifies the exceeded limit.

In all messages, the credit status item follows the "action" or "status" field, as explained in Section 11. The possible status items are listed below; **X** is the amount (in currency units associated with a particular credit account, in US dollars or French francs) by which the order has exceeded the limit. Overages up to and including 99,999 units are shown in whole numbers; units above 99,999 are shown in "K" units (150,000 = 150K).

Credit approved for non-giveup order **OK- CREDIT: OK**

Credit approved for giveup order **OK- CREDIT: GU-OK**

Credit approved for giveup order, matched to wildcard account **OK- CREDIT: GU-OK***

Limit for long position exceeded by overage amount for class **NG-EX LONG BY:X**

Limit for short position exceeded by overage amount for class **NG-EX SHORT BY:X**

Limit for total trade quantity exceeded by overage amount for class **NG-EX TRADE BY:X**

Credit limit exceeded by overage amount **NG-EX CREDIT:X**

General credit rejected **NG-CREDIT REQUIRED**

For give-up orders, the Foreign Firm field will be validated at the Host against a list of allowable values provided by the Exchange. If this field contains a value that is not on the list, the order will be rejected. Contact the Exchange or the GCC for a list of allowable values.

4.5 Transaction Confirmation

When GLOBEX matches orders, it does the following:

- Advises each party to the trade in the Trader Mailbox.
- Advises each party's administrative keystation of the trade by printing an order execution confirmation ticket and providing clearing information.
- Advises (in real-time) the appropriate Exchange Clearing House of the transaction, price, quantity, and all parties to a trade.

In addition, the respective entities' Exchange Clearing House periodically sends details of all trades to clearing firms.

GLOBEX transaction clearing remains **outside** the GLOBEX system. It is performed by an Exchange Clearing House. All GLOBEX trades are cleared under the Exchange Clearing House's rules, and Reuters is in no way a party to the clearing process.

4.6 Order Execution Confirmation Tickets

Order execution confirmation tickets (trade tickets) for the executed orders of all users within a subscriber group are received and printed at administrative keystations. Firms are responsible for ordering and maintaining a supply of tickets.

Figure 4.6 shows the standard order confirmation ticket, which may also show the firm's name and number and any additional information needed by that firm.

The fields in the ticket are labeled; descriptions follow below:

- A. Organization** - The unique 8-character code (alphanumeric) specifically assigned to each administrative group by GCC.
- B. Entry No.** - The unique number assigned to the transaction upon acceptance of the order by GLOBEX. Hit and Take orders are not assigned entry numbers.
- C. Entry Time** - The exact time (GMT) assigned to the order upon acceptance by GLOBEX.

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GLOBEX ORDER EXECUTION CONFIRMATION										
ORGANIZATION	ENTRY NO	ENTRY TIME	OPERATOR ID	ORDER TYPE	ORDER QUAL	USER ID	ORDER NO	ACCOUNT NO	FOREIGN EXCH	FOREIGN FIRM
ORIGINAL ENTRY DATE						ORDER TYPE				
BUY						SELL				
QUANTITY	CONTRACT	PRICE	FX	FEE	CHG	QUANTITY	CONTRACT	PRICE	FX	FEE/CHG
SHOWS MORE						SHOWS MORE				
EXECUTION TIME	MATCH NO	DEPOSITE ORGANIZATION	OPPOSITE USER ID	EXECUTION TIME	MATCH NO	DEPOSITE ORGANIZATION	OPPOSITE USER ID			

Figure 4.6 Order Confirmation Ticket

- D. Operator I.D.** - The unique identifier (alphanumeric) assigned by GCC to the operator entering the order into GLOBEX.
- E. Order Type** - The following valid order type: **LMT** (limit order), **LMW** (working order), **LMM** (market maker order).
- F. Order Qual (Order Qualifier)** - One of the following valid order qualifiers:
- Blank** Order expires at the end of the ETH session.
 - S** Order is good until cancelled for ETH sessions only.
 - G** Order is good until explicitly cancelled.
 - D** Order is carried over to the subsequent RTH session.
- G. User ID** - Unique sign-on identifier assigned by the GCC.
- H. Order No.** - The 8-position order number assigned to the order.
- I. Account No.** - The 10-position customer account number.
- J. Foreign Exch.** - Consult Appendix B for valid codes.
- K. Foreign Firm** - Consult Appendix B for valid codes.
- L. Original Entry Date** - The date the order was originally entered in GLOBEX.

M. Order Type - A description of the order as follows: Limit. (This field will be expanded when new order types are added.)

Buy/Sell Areas The following descriptions apply to both the Buy and Sell fields of the ticket.

N. Quantity Shown - The portion of the shown order quantity which was actually matched by GLOBEX.

O. Quantity More - Not applicable.

P. Contract - The contract, month, year, Put or Call indicator, strike price. **A maximum of 10 positions will print.**

Q. Price - The price at which the trade was matched in GLOBEX. A maximum of 6 positions will print (no decimals).

R. PFI (Partial Fill Indicator) - This field will indicate if the transaction was only partially filled (for future use).

S. Fee - Clearing Fee indicator which was entered on the GLOBEX trade record. Consult Appendix B for valid codes.

T. CTI (Customer Type Indicator) - Consult Appendix B for valid codes.

U. ORG (Origin) - Consult Appendix B for valid codes.

V. Execution Time - The actual time the trade was matched by GLOBEX.

W. Match No. - The unique number assigned to the matched trade by GLOBEX.

X. Opposite Organization - The opposite firm to the trade.

Y. Opposite User I.D. - Reserved for future use.

Action and Memo (GE only) may be printed on the ticket.

Trade tickets are sent to all administrative keystations that are logged in **at the time a ticket is sent**. If **no** administrative keystations are logged in, the tickets are held until one or more administrative keystations are active. Pending tickets are then sent at 6-second intervals, in chronological order, to be printed. Once a ticket is sent, you **cannot** recreate it (except using the Offline Utilities) or request it to be retransmitted by the GCC.

If the Host fails, tickets may be duplicated. The Host recovers all tickets from the 10 minutes before the last trade before the Host failed or was shut down.

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Administrative operators who do not receive tickets can obtain trade details from another administrative operator who received the ticket or from the Matched Trade data transmitted by the Exchanges.

Example: Subscriber ABC is part of an administrative group with three administrative keystations (1AD, 2AD, and 3AD). At 12:03 p.m., a trade is executed for a user within the ABC subscriber group against three counterparties. 1AD is the only administrative keystation logged in at 12:03. The tickets are queued for transmission at 6-second intervals after the 45-second delay period. Therefore, one ticket is sent at 12:03:45, one at 12:03:51, and one at 12:03:57. At 12:03:49, administrative keystation 2AD logs in. At 12:03:58, administrative keystation 3AD logs in. The tickets are received by the following:

<i>User</i>	<i>Ticket 1</i>	<i>Ticket 2</i>	<i>Ticket 3</i>
1AD	Yes	Yes	Yes
2AD	No	Yes	Yes
3AD	No	No	No

If a printer jam occurs, trade tickets may be illegible and cannot be reprinted. However, the data for those tickets is recorded in the keystation tradelog; at the end of a GLOBEX session, you can reprint trade ticket data using the Offline Utilities (see Section 12.7.2). The tradelog will include both trade ticket data and audit trail data.

The GLOBEX system is refreshed before each session, and any tickets not sent by the system before then will be lost.

Trade tickets are not acknowledged by the keystation; therefore, it is possible that a ticket can be lost if a keystation becomes disconnected (due to failure or powering down) during the time that the ticket is sent and received by the keystation.

An administrative keystation operator who tries to log out while tickets are printing will see a message announcing that items remain in the print queue; logout will complete automatically once the current batch of tickets is printed. No other ticket data will be sent from the Host until another administrative keystation operator logs in.

Because trade tickets are not sent to trading keystations, a trading keystation operator can log out even if tickets for executed orders have not been printed.

4.7 GLOBEX Control Center

The GLOBEX Control Centers (GCC) are responsible for controlling access and use of the GLOBEX system for the Exchanges under their control (e.g., the GLOBEX America GCC performs these functions for the CME, and the GLOBEX Europe GCC performs these functions for MATIF), including:

- **User Definition** - creates and deletes subscriber and user records; adds, deletes, and modifies information relative to individual subscribers and users.
- **Instrument Database Definition** - creates, deletes, and modifies portions of the database related to instruments, system pages, and the IOP pages that drive the market opening sequence.
- **User Permissions** - establishes permissions for users, which take effect as soon as you log in; releases a keystation previously disabled due to multiple failed login attempts; disconnects a user during a session to enforce a change in permissions status; can change password online.
- **User Monitoring** - monitors all traders and administrative keystation operators currently logged in, can cancel orders for a disconnected keystation, and can terminate any user's session.
- **System Alerts** - broadcasts textual alerts to all connected keystations.
- **Halt Trading** - places an instrument, class of instruments, or all instruments into the **Halted** state, during which orders can be posted in the Standing Order Book but no trades take place.
- **Open Trading** - places halted instruments (see above) back into the **Matching** state.
- **Close Trading** - places halted instruments into a **Closed** state, during which no orders can be posted and no matching can take place. All open orders will be cancelled.

The GLOBEX Control Centers also respond to reports of equipment and system malfunction. For questions on why the system responds (or fails to respond) in the areas defined above, contact the applicable GLOBEX Control Center. (Questions on system response are usually answered by on-screen messages or study of the audit trail printout.)

4 The GLOBEX Session

A GCC may request a copy of a keystation's tradelog file on a diskette. Please refer to the Offline Utilities, Section 12, for instructions on how to copy the tradelog file to a diskette.

The colored pages at the back of this User Guide show GLOBEX America GCC Emergency Procedures. GLOBEX Europe emergency procedures are in the MATIF GLOBEX manual.

5 Session Functions

The functions in the Session menu all concern access to the GLOBEX keystation, GLOBEX Services, and keystation open order files.

- **Login** - To login and simultaneously sign in to a single Service.
- **Sign-In/Out** - To sign in or out of the keystation following login.
- **Lock/Unlock** - To lock the keystation against access; only an operator who knows the password can unlock and use the keystation.
- **Change Password** - To change the password used for **Login** and **Lock/Unlock**.
- **Logout** - To log out from a single Service. Use again to log out from another Service.
- **Copy File** - To copy a selected open order file to a diskette.

5.1 Initial Login

It is the firm's responsibility to keep your GLOBEX processor turned on, although you may turn off the screen to save wear. When the processor is on, you will be able to start entering orders immediately upon download.

On a multi-Service keystation, you login to each Service individually. At the start of the Session, the **Login** dialog box (see Figure 5.1) is already displayed. The Service list is blank and all items are grayed except the **Exit Session** button. You cannot login until the keystation connects to a Service for which it is permitted and receives the instrument download for that Service. This takes place automatically when the network starts up for the Session. While this occurs, you will notice messages in the Alerts window such as

- **Connecting (Service)**
- **Connected (Service)**
- **Wait download (Service)**
- **Downloading (Service)**
- **Download 25% (50%, 75%, 100%) (Service)**

RDTs / GLOBEX® SYSTEM	
PLEASE COMPLETE THE FORM BELOW TO START THE SESSION.	
SERVICE LIST	SUBSCRIBER NAME <input type="text"/>
GLOBEX America	TRADER ID <input type="text"/>
GLOBEX Europe	PASSWORD <input type="text"/>
	OPERATOR ID <input type="text"/>
EXIT SESSION	START SESSION
	QUIT

Figure 5.1 Login Dialog Box





Note: If download does not occur automatically, the system might not be operational (for instance, if it is outside operating hours), your keystation may have been disconnected from the networks, or you may not be permitted for that Service. If none of these conditions is true, call the appropriate GLOBEX Control Center for the applicable Service. See Section 3 for phone numbers.

During the download, Service names appear grayed in the list. If you are not permitted for a Service, its name will not appear in the Service list. Once the download completes and a Service name and the Start Session button are enabled (black), you can login to that Service (Figure 5.1). After download, if no Service has been logged in or all Services have been logged out, the Login dialog box remains on the screen.

Once you login to any Service, the **Exit Session** button is grayed; you must log out of all Services in order to run Offline Utilities. (See Section 5.6.) (Logout is not advisable at the beginning of or during the Session; it is equivalent to turning off the system. When you login again, you have to wait for the quick download before you can trade again.)

Note: Choosing **Exit Session** displays the GLOBEX Main Menu, the link between the GLOBEX Session display and Offline Utilities (see Section 12). The Utilities are used during recovery procedures and to generate reports concerning keystation activity.

The **QUIT** button is grayed until you login to one Service. Selecting **QUIT** will return you to the GLOBEX display.

1. Select (highlight) a Service; press . The insertion point moves to the **Subscriber Name** box.
2. Type the subscriber name as assigned by the Exchange; press . The insertion point moves to the **Trader ID** box.
3. Type your trader identifier (your Exchange-assigned user identification); press . The insertion point moves to the **Password** box. (See **Notes on Trader Identifiers**, below.)
4. Type your password. The characters appear as asterisks (**); press . The insertion point moves to the **Operator Identifier** box.
5. Type your assigned operator ID. Check for errors, then press



or click on **START SESSION**. If your login is accepted, the normal GLOBEX display fills the screen. Acceptance messages in the Alerts window are **Waiting for Login xx**, **Download Orders xx**, and **Logged/Signed in xx** (xx is the Service code).

If any login field is unacceptable, **Login Info N/G**, with the time and Service code, is displayed. The field containing the error is not identified. Repeat steps 1 through 5, using correct data.

If you are already logged into another keystation with the same operator ID, **LOGGED IN-DIFF KS xx** is displayed. You cannot login to the same Service at another keystation unless you log out from the other keystation. (See Section 5.6.)

Take care to type your login information correctly. If you submit incorrect information three times, your keystation will be barred from connection to the Service on your fourth attempt, even if all information is correct. You will see this message in the Alerts window, **Disabled by GCC (Service)**. Notify your firm's Emergency Contact or the appropriate GLOBEX Control Center.

5 Session Functions

If your login is successful, the keystation requests a trader download (indicated by the message **Download Orders (Service)**) of any open orders you have in the market on that Service; this download includes trader permissions and password expiration information. A message is written to the tradelog and audit trail as each open order is received. A message in the Alerts window indicates when the trader download is complete; the message **Logged/Signed In (Service)** announces the successful login and automatic sign-in. No messages are displayed in the Trader Mailbox. The dialog box clears from the screen, and the Trading window is displayed, showing the first system page the keystation received in the earlier instrument download for this Service.

If your password is due to expire within the next five days, a message (**Passwd exp x days (Service)**) displays. If your password for a Service has already expired, a warning displays. After login, the Change Password dialog box displays. You cannot use any function for that Service (except **Change Password, Logout, Copy File, Print File, Lock/Unlock, Alert History, Help, and About**) until you successfully change your password. (See Section 5.5.)

All functions for which you are permissioned are now available. If you are using a mouse, you will not be able to choose any grayed item in a menu or Trading Panel.

Important: If the trader download increases the total number of orders at the keystation (for all Services) past the maximum of 500, you are automatically logged out of the Service and **FORCED Logout xx** is displayed in the Alerts window. No orders are uploaded, and orders already in the keystation are unaffected.

Determine the number of orders already at the keystation by displaying the open order list. (See Section 9.2.) Print the tradelog from your last login session (Section 7.15), and determine the number of orders in the potential download. Add these two totals to find the total potential open orders.

Cancel sufficient orders (or request the GCC to cancel orders on the Service to which you want to login), then login again.

Notes on Trader Identifiers

Your trader identifier (ID) is confidential; do not make a note of it on your desk and, above all, do not assign your login sequence to a programmable soft key.

The trader identifiers used to login at administrative and trading keystations are distinctly different:

- When you login at an administrative keystation, you use a trader ID beginning with a number (0-9).
- When you login at a trading keystation, you use a trader identifier beginning with a letter (A-Z).

You **must not** login at a trading keystation using an administrative keystation ID because trade confirmation tickets will not print (ticket printers are not connected to trading keystations). This will also impact on the overall performance of the keystation.

You **can** login to an administrative keystation using a trading keystation ID as long as one administrative keystation in the group is logged in to receive trade confirmation tickets.

Trading Permissions

The Exchanges have imposed strict guidelines on granting and revoking access to the GLOBEX System. Please refer to the GLOBEX Operations Manual and applicable Exchange rules.

Each GLOBEX Service supports one or more Exchanges; you log into each Service separately. Each instrument can belong to only one Exchange, identified by the last character in the line of instrument information in the Trading window (e.g., **m** for CME, **f** for MATIF).

GLOBEX permissions are linked to your trader identifier, which you receive through your Registration Contact. Access to Exchanges on a Service is based on the fifth character of your trader ID. You cannot trade on any instrument for which you are not permitted by your Exchange. If you are permitted to trade on more than one Exchange on a Service, your permissions are the same for all Exchanges on that Service.

The Host sends your permissions to the keystation in the login response message. Permission levels exist for:

- Bid, Modify Bid (includes Cancel, Hold, Release)
- Offer, Modify Offer (includes Cancel, Hold, Release)
- Hit

- Take
- Receipt of trade tickets for a Service (administrative keystation identifier only)

Functions for which you are **not** permitted are grayed on their respective menus and in the Trading Panel. If you are not permitted for an instrument on a market maker page, the trader line is blank except for High/Low/Volume data; the **Clear** command button is hidden.

If a function is suddenly unavailable to you or you are unable to login, notify your firm's Emergency Contact.

If you are not permitted to trade on an Exchange, you can perform only nontrading operations on its instruments.

Login at Incorrect Keystation

If an administrative keystation operator inadvertently logs in at a trading keystation, the message **Check Ticket Printer** will be displayed in the Alerts window when a ticket is received at the keystation. This message will be displayed because there is no ticket printer connected.

To resolve the problem, follow the instructions below. Keystations will not be available during database download.

1. Log out. Because trade tickets cannot print at the trading keystation, the message **Caution – entries exist in the print queue**, appears in the login dialog box (displayed when you try to login to another Service or when you log out of the last Service). **Check Ticket Printer** will continue to be displayed in the Alerts window every 5 minutes.
2. To remove the print queue message, connect a ticket printer to the keystation or restart the system. (To restart, wait until the audit trail printer stops printing, power down the keystation, wait 30 seconds, then turn the keystation back on.) You cannot access the Offline Utilities until you remove the print queue message.
3. Login at a properly configured administrative keystation using your administrative ID; you need to resume your session as quickly as possible.

4. At a convenient time, return to the trader keystation to reprint your missing trade tickets using the Offline Utilities (see Section 12.7.2).

Login Outside of Terminal Group

If your keystation fails and you intend to use another keystation outside of your terminal group, you must first call the GCC for authorization. You will **not** be able to use your login information outside your terminal group without first obtaining authorization from the GCC. You should be aware that after you obtain this authorization from the GCC, **anyone with access to your login information can login to GLOBEX from any keystation worldwide and obtain access to all of your trading privileges. This can occur between the time that the GCC gives you authorization and the point at which you successfully login.**

5.2 Login to Another Service

You can login to any Service which is enabled in the Service list. A Service to which you are already logged in is grayed and preceded by an asterisk (*).

Step 1 To display the dialog box, choose **ONE** of these methods:

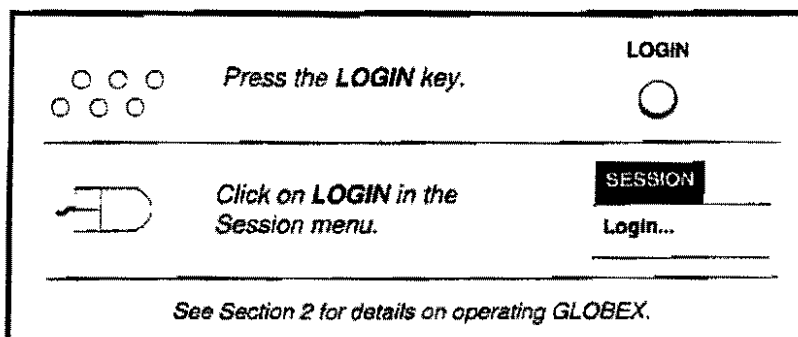


Figure 5.2 Login to Another Service.

Step 2 The procedure:

1. Select a Service if necessary; press
2. Type the subscriber name; press
3. Type your trader identifier; press
4. Type your password; press
5. The operator identifier box shows the operator ID used in the previous login or sign-in. You can leave it as is or change it.

6. Press or or click on **START SESSION**.

Step 3 The result:

The login box closes as soon as your correct login is acknowledged, allowing you to resume trading immediately on the currently available Service(s). Login and download messages are displayed in the Alerts window. The response to incorrect login is the same as for initial login.

When download is complete, pages on the Service are available for display from the Page Directory function (see Section 9.3). If a custom page that includes instruments from this new Service is already in the display, they now become visible.

5.3 Entry Operator Sign-In/Out

Sign-In

When you login to a Service, you automatically sign in to the keystation using the entry operator ID assigned by the GCC. The entry operator ID is used to tie each transaction on a Service to the person who submitted it. Only one entry operator may be signed in at a time; whoever signs in "inherits" the permissions, restrictions, and orders associated with the current login. A new entry operator may not sign in until the current operator signs out.

Multiple entry operators may use a keystation between login and logout by signing in to and out of each Service individually. If you have not signed in, the dialog box is automatically displayed when you initiate a GLOBEX function or select an instrument.

(If the login password has expired, the Change Password dialog box is displayed instead.)

Step 1 To display the dialog box, choose **ONE** of these methods:

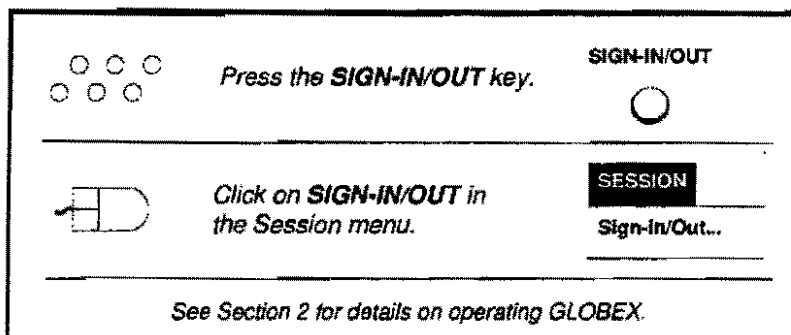


Figure 5.3 Sign-In Dialog Box

Sign-Out

You are responsible for preventing unauthorized access to your keystation. Any order made from your keystation while you are signed in will bear your entry operator ID in the audit trail. When you leave the office, be sure to log out of all Services; this automatically signs you out. If you must briefly leave the room, lock your keystation (see Section 5.4); do not leave open orders unattended.

You leave open orders in the market when you sign out.

To sign-in/out...

Sign-In

Step 2 The procedure:

1. Select the Service to which you want to sign in. The **Entry Operator ID** box is either blank or shows the current operator ID for that Service.

If the current operator ID displays, the current operator must sign out before you can sign in.

2. Type your ID.

3. Choose **OK** or press



Step 3 The result:



The dialog box clears from the screen. GLOBEX does not validate your identifier. It is your responsibility to verify this information before you choose **OK**.

Sign-Out

Step 2 The procedure:

Display the dialog box, which shows the identifier of the current entry operator.

1. Select the Service from which you want to sign out. Your ID displays in the Entry Operator ID box.
2. Click on **Clear ID** or tab to **Clear ID** and

press  or .

Step 3 The result:

Please wait... is displayed until the Host acknowledges the request. You cannot perform any other function until the Host acknowledges the request. The dialog box will clear from the screen.

5.4 Lock/Unlock Keystation

You can disable keyboard and mouse input. No one can unlock the keystation without entering the password. Locking the keystation does not affect existing orders.

Step 1 To display the dialog box, choose **ONE** of these methods:

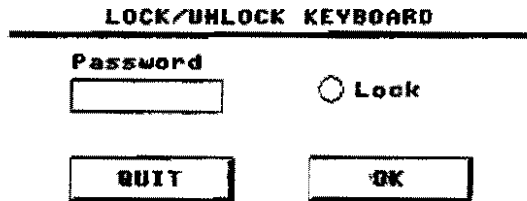
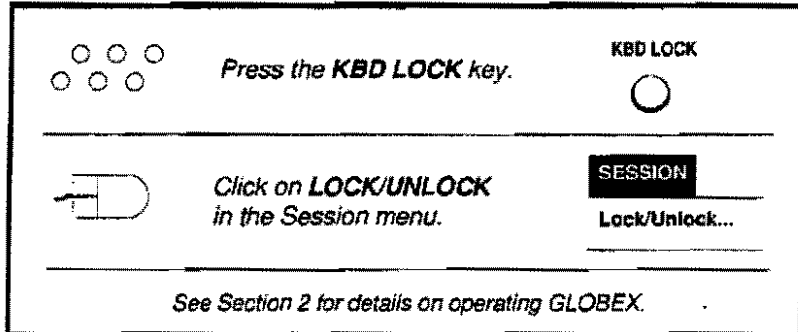


Figure 5.4 Lock/Unlock Dialog Box

To lock the keystation:

Type the password used for this Session's login to any Service (it displays as asterisks as you type) and choose **OK**. The **Password** box is blanked and the **Lock** radio button is highlighted. The dialog box remains on-screen. The only acceptable input is the password.

QUIT cancels this operation.

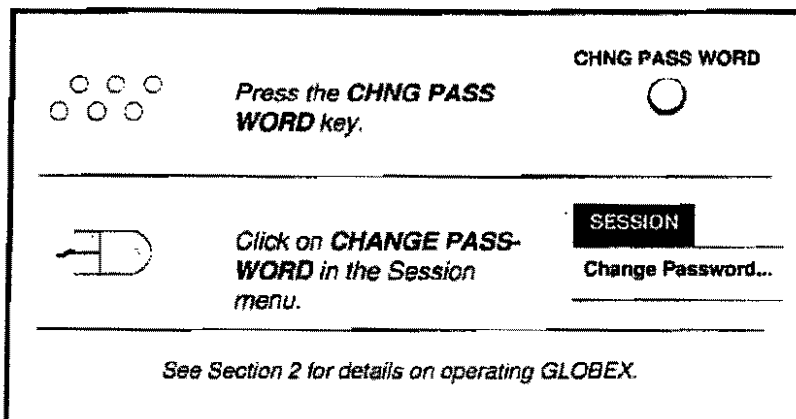
To unlock:

Type the login password and choose **OK**. The dialog box clears from the screen, and the keyboard and mouse become available again.

5.5 Change Password

Use this function to change your login password for a Service. You may do this voluntarily or you may be required to do so if the password has expired or been reset by the GLOBEX Control Center. For security reasons, you should change your password regularly.

Step 1 To display the dialog box, choose **ONE** of these methods:



During login, the system displays a warning message in the Alerts window for five days before your password expires and if it has expired.


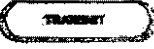
If your password expires, the dialog box is displayed automatically at login and when you select a function. (You can choose **QUIT** to exit without changing your password, but the box will be displayed again if you choose a function.)

The first Service in the list is highlighted when the dialog box is displayed.

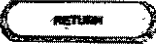
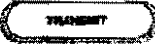
Figure 5.5 Change Password Dialog Box

Change Password ...

Step 2 The Procedure

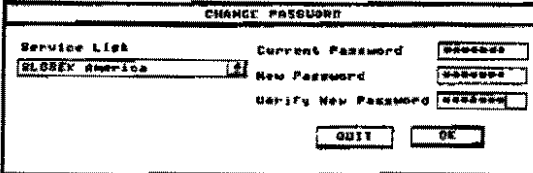
1. Select a Service.
2. Type your current password; asterisks display in the **Current Password** box. Press  or  (do not click on OK). The system verifies that this is the password you used during login. (If the passwords do not match, the password is erased and an error message is displayed in the dialog box. Type your current password again.) The insertion point moves to the **New Password** field.
3. Carefully type your new password; asterisks display in the **New Password** box. The password must follow these guidelines:
 - It must include between six and eight characters.
 - It may contain no more than three numbers.
 - It may include only digits 0...9 and letters A...Z.
 - You may not use any character more than twice in a row (i.e., B1B1B1 and AABB are permissible, but ABBB11 is not).
 - It must be different from the password you are changing in at least three character positions.

The system will not accept a password that does not follow these guidelines. The box will clear, and you can enter another password.

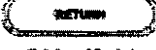
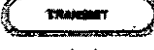
Press  OR  (do not click on OK). If you violated any format requirement, a message is displayed. Correct your error, then press

 or  again.

4. Verify the new password by typing it again. The completed dialog box should look like the dialog box below:



CHANGE PASSWORD	
Service List	Current Password *****
GLOBEX America	New Password *****
	Verify New Password *****
<input type="button" value="GUIT"/> <input type="button" value="OK"/>	

Press  or  or click on OK. If this password does not match the new password, both passwords are erased. You must type the new password the same way in both text boxes, then select OK again.

Step 3 The Result:

When the password is accepted, the dialog box clears from the screen, and **Password changed (Service)** is displayed in the Alerts window. You must use the new password the next time you login.

5.6 Logout

Logout lets you exit from a single Service. To log out from another Service, you must perform this function for the other Service.

Before you log out:

Check the Alerts window for printer error messages; correct any problems. A printer problem during logout could lock your keystation until the problem is resolved and delayed printing is completed.

After you log out:

If you are still logged into another Service, the Logout dialog box closes and printing associated with the logged-out Service continues in the background until print queues are empty. If you were displaying a system page from the logged-out Service, it is replaced by the default system page from the remaining Service. If you are still logged in to more than one Service, the displayed page is determined from the Service display priority. If you were displaying a custom page that included instruments from the logged-out Service, those lines are blanked.

Step 1 To display the dialog box, choose **ONE** of these methods:

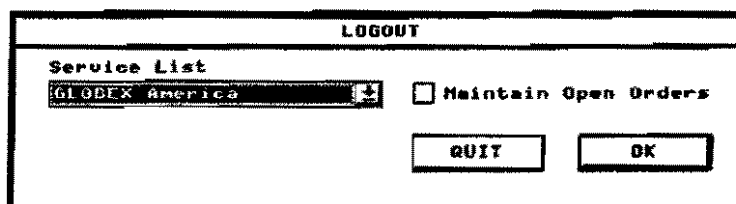
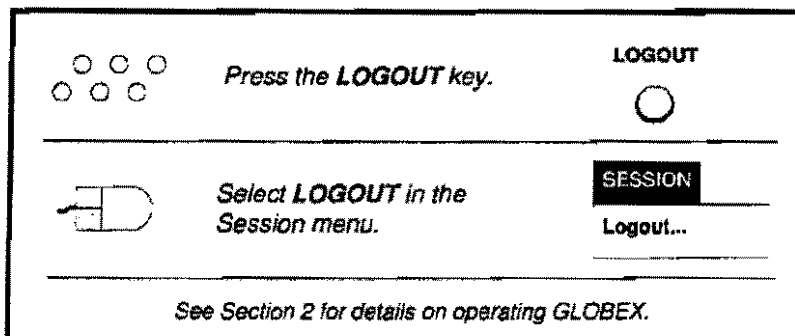


Figure 5.6 Logout Dialog Box


If you have logged out of the last Service, printing associated with that Service continues and the normal trading display is replaced by the Login dialog box. Any Service that has received a successful instrument download is now available for login and the **Start Session** button is enabled. The **Exit Session** button is disabled and a warning displayed until printing is complete.

If you do not have open orders...

Step 2 The procedure:

When the logout dialog box displays, the **Maintain Open Orders** check box is grayed until you select a **Service**. After you select a **Service**, the check box is enabled if you have open orders on that **Service**.

Select the **Service** from which you want to log out. If you have no open orders, choose **OK** or press

 or . (OK is not enabled until you select a **Service**.)

QUIT cancels logout.

Step 3 The result:

As long as you have no open orders, the session ends. **LOGGED OUT (Service)** is displayed in the Alerts window.

If you are logging out at an administrative keystation and trade tickets have not completed printing, you will see a message, **Caution - Entries Exist** in the

Print Queue in the dialog box; logout will complete automatically once the tickets are printed.

Because trade tickets are not sent to trading keystations, a trading keystation operator can log out even if tickets for executed orders have not been printed.

Stop Logout Message

If you see the message box below after you select **OK**, you must deal with your open orders in some way before you can log out. Choose **OK** to remove this message, then take one of the actions described in the table on the next page.

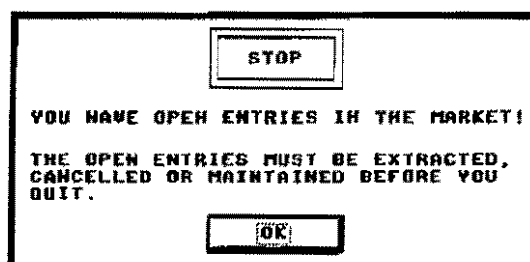


Figure 5.7 Stop Logout Message

If you have open orders...

Step 2 *The procedure:*

Step 3 *The result:*

<i>Cancel Open Orders</i>	Instead of Logout , use Extract Open Orders In Pass the Book (Section 7.14), which cancels all open orders, logs you out from the selected Service, and creates an open order file. Using this file is optional, as described below.	Order cancellation messages are printed in the audit trail. You should use Extract Open Orders whenever you need to cancel orders before logging out.
<i>Maintain Open Orders</i>	In the Logout dialog box, select the Maintain Open Orders check box and choose OK .	Orders remain in the system to be matched. Trade tickets are printed at logged-in administrative keystations, but no messages are displayed. If this logout is from an administrative keystation, logout completes once the current batch of tickets is printed. No other ticket data will be sent from the Host until another administrative keystation operator logs in to that Service.
<i>Move Open Orders to another keystation</i>	Maintain your orders as described above. Then you or another operator authorized to use the same login identifier and password should login at another keystation. Important: You must reset the order number at another keystation. Before login, use the audit trail printout to identify the last order number assigned at the original keystation. Use Set Sequence Number in GLOBEX Parameters (Section 6.3.3) to define the next order number to be used at the new keystation.	The operator at the new keystation can now trade.

5.7 Copy Open Order File

At any point during the GLOBEX session, you can copy a selected open order file to a diskette. Open order files may not include the current open orders.

Step 1 To display the list of open order files, choose **ONE** of these methods:

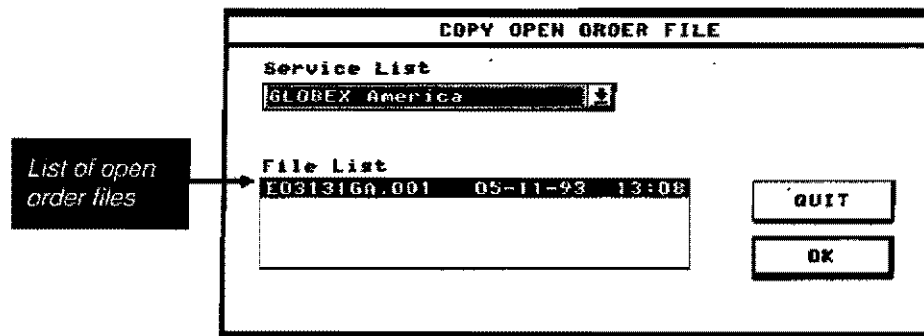
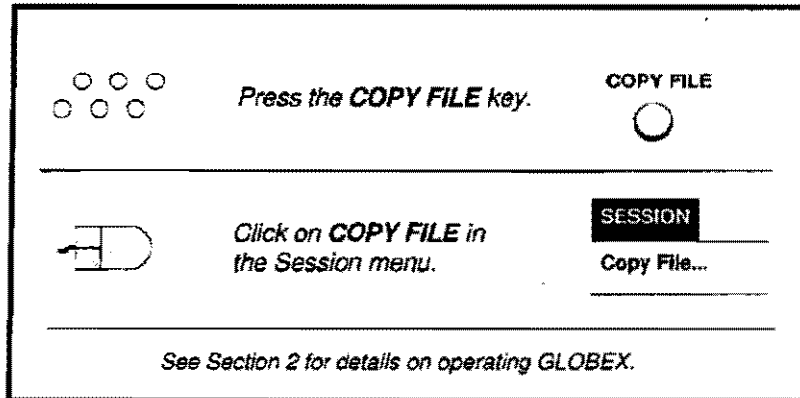
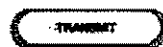


Figure 5.8 Copy Open Order File Dialog Box

Step 2 The procedure:

1. The first Service in the list is highlighted when the dialog box appears. Select the Service to which the open order file belongs. The file list shows the names of open order files for that Service, each followed by the date and time the file was created. Filenames are listed in order by date and time, most recent first, highlighted. (See Section 7.14, *Passing the Book*, for an explanation of open order filenames.)
2. Load a blank, formatted diskette into drive A of the keystation.
3. Select the file you want to copy.

4. Click on OK or press **RETURN** or



QUIT cancels this operation.

Step 3 The result:

The OK and QUIT command buttons are disabled, and a message, **Copying**, is displayed in the dialog box. **A:\<filename> Done** is displayed in the Alerts window when the file has been copied; the dialog box clears from the screen.

The procedure is recorded in the audit trail, trade-log, and event log as **MSG: Open Order File <filename> Complete <Service>**.

6 Parameters Functions

Parameters functions are optional. Use them to customize the display and a variety of order characteristics. The Parameters menu includes two functions (**GLOBEX Parameters** and **Instrument/Service Parameters**); each function displays function dialog boxes. The parameters are described in general in this introduction, while the function descriptions begin in Section 6.3.

6.1 Introduction to GLOBEX Parameters

The Parameters Functions enable up to five GLOBEX parameter files to be defined and stored at the keystation.

Each GLOBEX parameter file can include:

- **Clearing Account Records** - Up to 125 clearing account records. (Create/Modify Market Maker Page and Create/Modify Clearing Data functions are explained in Section 8, Special Trade Functions.)
- **Market Maker Pages** - Up to 5 market maker page definitions. Each instrument on a market maker page can have an associated clearing account record.
- **Custom Pages** - Up to 25 custom page definitions. You should create custom pages only while you are logged into all Services for which the keystation is permissioned, otherwise you will not have access to instruments from all Services.
- **Service Display Priority** - The preferred order of Services in the drop-down list found in many dialog boxes.

During a Session, you can select "set" one of these parameter files. The file will control available custom pages, market maker pages, clearing keys, and Service list order during the Session. If the current file does not include Service display priority, the System default of alphabetical order applies. There are no default custom pages.

The last four digits of the order number form the **sequence number**, which is the default starting number for the current Session only. All subsequent order numbers are sequential unless you change the sequence number or type a different order number in the dialog box. The sequence number is not stored in a GLOBEX parameter file; you set it in a separate procedure from the Modify GLOBEX Parameters dialog box.

To prevent the system from assigning duplicate order numbers, set the sequence number at the beginning of the Session or when service resumes after failure.

6.2 Introduction to Instrument/Service Parameters

These trader parameters, commonly referred to as defaults, are linked to the trader identifier and saved at the keystation. They are automatically loaded for each Service when you log in. You can set these parameters for each instrument within a Service.

Instrument Parameters

To set instrument parameters, you first select a Service, then select a system page and an instrument on that page in the secondary dialog box. Instrument parameters include:

- **Order size** - The trading dialog boxes initially show this quantity.
- **Increment size** - This defines the action of the arrow command buttons for the **quantity** text boxes and the **UP** and **DOWN** keys on the number keypad.
- **Price check** - The System checks the price entered for a **Bid/Of-fer/Hit/Take** order by comparing it to the Last (or Settle if there is no Last). The entered price must be within the defined tick increment of the Last. The Price Check Warning dialog box displays if the price is greater or less than the Last by more than the price check value multiplied by the instrument's increment size. The default is 10 ticks.
- **Bid/Ask spread and precedence** - In the Bid/Ask dialog box, this parameter specifies the default spread between the Bid and Ask, centered around the Last. Precedence determines which side of the order is closer to the Last if the spread is an odd number.
- **High/low price limits** - An alert is displayed when a current price or Last equals or betters defined price limits. You can also clear high or low limits for all instruments on the selected Service.

- **RFQ display and printing** - You can indicate whether or not you wish to see requests for quotes received at your keystation. You can also enable or disable RFQs and RFQ printing in the audit trail for all instruments on the selected Service.

Service Parameters

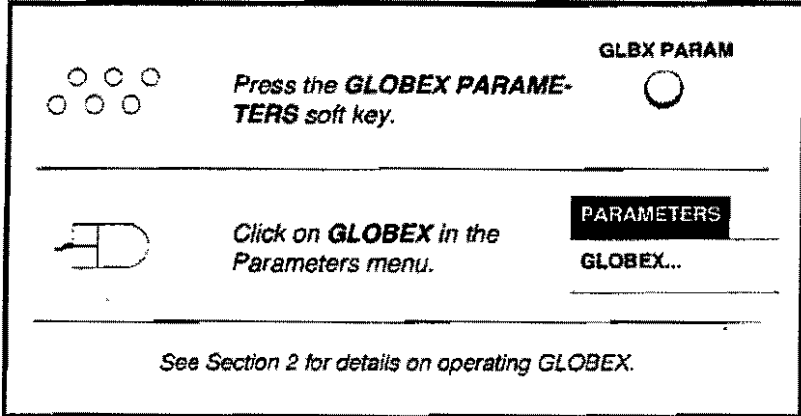
These parameters are set for a single Service.

- **Account number** - If you set a default account number, it will appear in all dialog boxes. If you enter orders for multiple accounts, do not use this option.
- **Order size limit** - The system uses this default to calculate a quantity threshold and displays a warning if you enter an order whose quantity exceeds this threshold.

6.3 Modify GLOBEX Parameters

GLOBEX parameter files (up to five) control certain user defaults. Each file can include definitions for up to 25 custom pages and Service display priorities; for special trade functions, up to 5 market maker pages and 125 sets of clearing information. You can choose (or "set") a parameter file for the current session.

Step 1 To display the dialog box, choose **ONE** of these methods:



Once you "set" a file to be the current Session parameter file, the definitions for custom pages, market maker pages, clearing data, and Service display priority from that file are in effect until you replace that file with another. The Modify GLOBEX Parameters dialog box includes command buttons for the parameter file operations that load the Session parameter file, save or delete a file, and copy one file's contents to another. While you can display the dialog box whenever you are logged into one or more Services, you should log into all available Services to ensure access to the full selection of instruments for page definitions. From the top-level dialog box, you display dialog boxes for **Create/Modify Custom Page**, **Modify Service Display Priority**, **Set Sequence Number**, **Create/Modify Market Maker Page** (see Section 8.4.1) and **Create/Modify Clearing Data** (see Section 8.3.1).

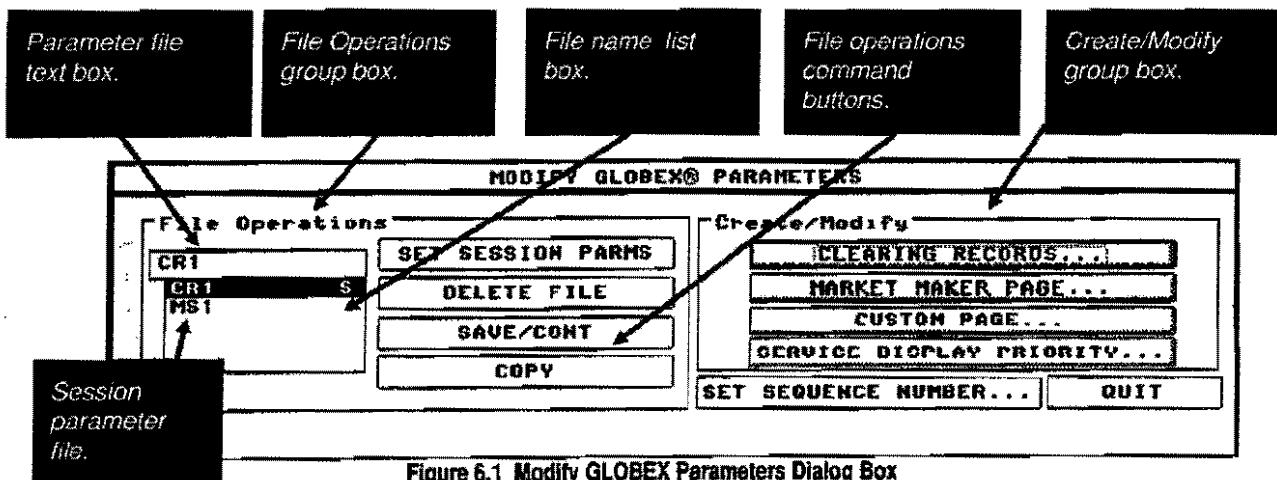


Figure 6.1 Modify GLOBEX Parameters Dialog Box

To use parameter files ...

When you display the dialog box, the parameter file text box shows the name of a Session parameter file. If a Session parameter file is not defined, the text box is blank. The list box shows a list of parameter files, with the current Session parameter file name highlighted and followed by an "S." Command buttons are enabled or disabled depending on the presence or absence of parameter and Session files. If no file name is followed by an "S," no current Session parameters have been set, and System defaults are in effect.

If you attempt to quit the dialog box without designating a Session parameter file and there is no default file, the message **Warning! Session parameters have not been set** is displayed. You can continue by choosing **OK**.

Step 2 The procedure:

Step 3 The result:

Create a parameter file

1. Type a file name into the parameter file text box. Acceptable characters are A-Z 0-9 - ^ \$ ~ ! # % & - { } () @ ' and ' . A message, **Invalid file name, please re-enter**, is displayed for an unacceptable name.
2. Choose **Clearing Records** (Section 8.3.1), **Market Maker Page** (Section 8.4.1), **Custom Page** (Section 6.3.1), or **Service Display Priority** (Section 6.3.2). Perform the function as described in those sections. When you select **SAVE/OK** in any dialog box, you return to the Modify GLOBEX Parameters dialog box.
3. Set other parameters listed in step 2.
4. When all parameters are set, choose **SAVE/CONT** in the Modify GLOBEX Parameters dialog box. The dialog box remains in the display to let you create, modify, or delete another file. Select **QUIT** when you are done.

Note: If five parameter files already exist, command buttons in the File Operations and Create/Modify group boxes are disabled and you cannot save a new file.

The new file name is added at the end of the list. If a parameter file does not contain either Service display priority or custom page definitions and the file is set as the Session parameter file, the System defaults of alphabetical order (list) and no custom pages apply.

Note: If communications with a Service fail while you are in any GLOBEX parameters dialog box, a message in the Alerts window reports the Service failure and the cursor is trapped in the **QUIT** command button - you must quit the dialog box. You cannot return to the Modify GLOBEX Parameters dialog box to save file changes unless instruments are downloaded from the Service. If you modified a file and did not save it, the keystation automatically saves any changes. The next time you display the Modify GLOBEX Parameters dialog box (and the Service is again available), the file name is shown in the text box and a red warning message, **Press Save/ Cont to save file editing when lost service** is displayed. Choose **SAVE/CONT**. If you take any other action, the changes will be lost. For instance, if you were creating a new parameter file when a Service went down and did not save the file when you saw the warning message, the keystation would discard not only the changes, but also remove the file name from the list.

To use parameter files ...

Step 2 The procedure:

Set Session Parameters

When you **Set Session Parameters**, you designate one of the possible five GLOBEX parameter files to be the current Session parameter file. Custom page directory, Service list order, available clearing keys, and available market maker pages are set by this file. The GLOBEX parameter file you select replaces the current Session parameter file.

1. Select the file (or type its name in the text box) whose parameters you want to use as the defaults for the current Session.
2. Choose **Set Session Parm.** A message, **Warning! Press Set Session Parameters again to save active parameters**, is displayed.
3. Choose **Set Session Parm.** again. (Choose **QUIT** to cancel without selecting the file.)

Copy a parameter file

This option copies the contents of a file to another file name.

1. Select an existing file name (or type its name in the text box).
2. Choose **COPY**. The **QUIT** command button changes to **ABORT COPY** and the message **Enter destination name in edit text box, then press Copy again** displays.
3. Type a file name (either a new name or that of another existing file) into the text box and select **COPY** again. When the copy is complete, **ABORT COPY** changes back to **QUIT**.

Note: **ABORT COPY** cancels the copy operation.

Step 3 The result:

"S" is added after the file name in the list. The Page Directory now lists the custom pages defined in this file; the keystation uses the Service display priority, if specified, whenever it must determine how to order Services. Unless the file includes these parameters, the System defaults of alphabetical order (for the list) and no custom pages apply.

If the new destination file name is valid, the parameters in the existing file are copied to the new file.

If the new destination file name is valid but would bring the number of parameter files to more than five, you cannot create a new file and a red warning message is displayed. You can then select an existing file name and choose **COPY** again. Doing anything else after selecting another file name aborts the procedure.

If the destination file name already exists and is not the current Session file, the message **File exists, press Copy again to overwrite** is displayed. Select Copy again to overwrite the contents of the existing destination file.

If the destination file is the current Session file, the message **This file cannot be overwritten, please select another** is displayed.

To use parameter files ...

Step 2 The procedure:

Step 3 The result:

Delete a parameter file

1. Select the file you wish to delete. If you want to delete the current Session parameter file, you must first set another parameter file. You cannot delete a file if a custom page is in the display (the custom page definition is part of the file you wish to delete).
2. Select **Delete File**. A red warning message, **Press Delete again if you are sure you want to delete**, is displayed.
3. Select **Delete File** again.

The file is deleted and its name is removed from the list box and text box.

Modify a parameter file

1. Select the file in which you want to change parameters.
2. Choose **Custom Page**, **Market Maker Page**, or **Clearing Records** (to modify pages or records contained in the file) and/or **Service Display Priority** (to change the Service list order specified in the file) and perform the function(s) as described. When you complete each function, the System returns you to the Modify GLOBEX Parameters dialog box.
3. Choose **SAVE/CONT**. The dialog box remains in the display to let you create, modify, or delete another file. If you select another file name without choosing **SAVE/CONT**, a warning, **Selecting any file again aborts edit, losing changes**, explains that you will lose modifications if you do not save them. Choose **SAVE/CONT** before taking other actions to save your changes.
4. Select **QUIT** when you are done.

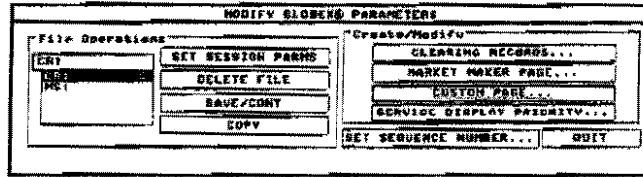
The parameter file is overwritten with your changes. If you select **QUIT** without saving your changes, a red warning message, **Press SAVE/CONT to save file, any other action loses changes**, is displayed. If you select **QUIT** again without saving your changes, the dialog boxes will be removed and your changes lost.

6.3.1 Create/Modify Custom Page

The GLOBEX System includes a number of Exchange-defined system pages, but you may want to design a page to suit your own requirements. To do this, you choose instruments from any system pages on a Service and include them on a single custom page. You can include 20 items, including blank lines, on a page. Each custom page definition becomes part of a GLOBEX parameter file; each file can include up to 25 custom page definitions. The Create/Modify Custom Page function allows you to create or modify a custom page, whether that page is part of a new or existing GLOBEX parameter file.

Step 1 To display the Create/Modify Custom Page dialog box:

1. In the Modify GLOBEX Parameters dialog box, select a parameter file (or type its name in the text box).
2. Select Custom Page.



See Section 2 for details on operating GLOBEX.

When you complete this function or quit its dialog box, you return to the Modify GLOBEX Parameters dialog box, where you save the new or modified parameter file.

Section 6.3, **Modify GLOBEX Parameters**, explains how to display the initial dialog box and create/modify a parameter file. You cannot create or modify a custom page without first selecting (or entering a name for) a GLOBEX parameter file.

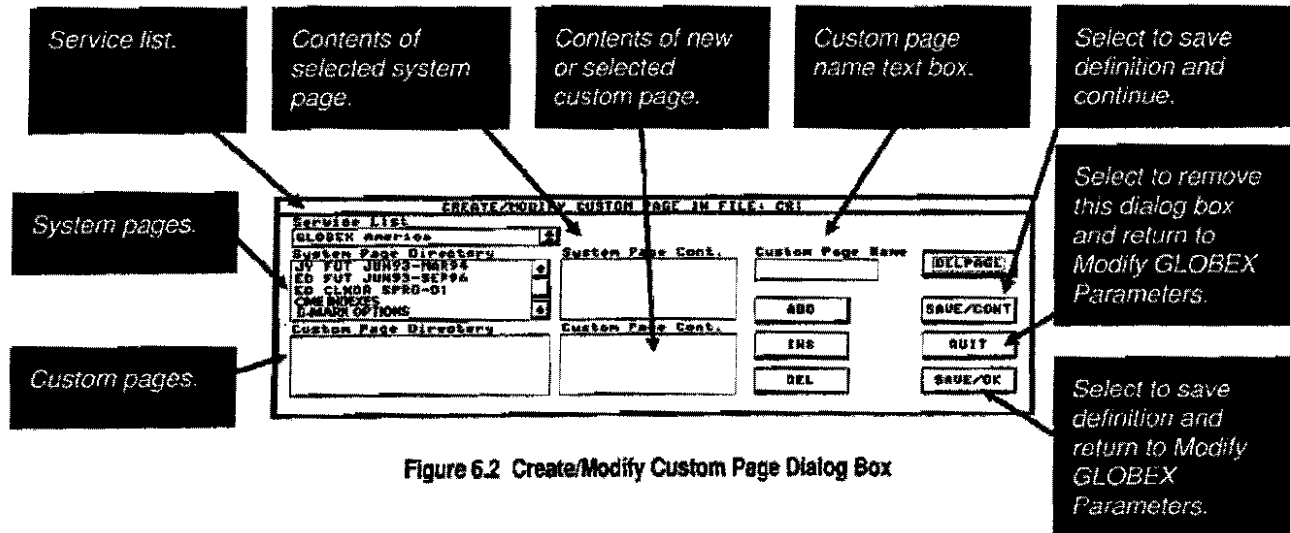


Figure 6.2 Create/Modify Custom Page Dialog Box

To create a custom page...

When you display the dialog box, the first Service in the list is highlighted and the **System Page Directory** lists the system pages from that Service. The **Custom Page Directory** either lists the custom pages in the parameter file you selected in the Modify GLOBEX Parameters dialog box, or is blank if you typed a new file name or picked a parameter file without custom pages. (**Note:** You cannot alter the order of instruments on a system page.)

Briefly, creating a custom page consists of the following steps:

1. Select a Service - the **System Page Directory** lists the system pages on that Service.
2. Select a system page - the **System Page Contents** lists the instruments on that page, preceding the instrument name

with the Exchange identifier.

3. Select instruments and add them to the custom page; select and add instruments from other system pages. You can also add blank lines to your page.
4. Name the custom page.
5. Save the custom page.
6. Save the parameter file.

Warning: While you work on a custom page, be careful not to select another custom page in the directory. This will erase any modifications to the original custom page and display the instruments on the page you accidentally selected.

The detailed procedure follows. Since it is easier to use the mouse than the keyboard in creating a custom page, that method appears

Step 2 Creating a custom page using the mouse:

1. Click on a system page name; the **System Page Contents** lists the instruments on that page (Exchange identifier followed by instrument name) as well as the entry **Blank Line** (see Figure 6.3).

Figure 6.3 Step 1

2. Double-click on an instrument you want to include on the custom page; the instrument appears in the **Custom Page Contents** list. (This is equivalent to clicking on an instrument and clicking on the **ADD** command button.)

To create a custom page ...

CREATE/MODIFY CUSTOM PAGE IN FILE: CRI

Service List GLOBEX America	System Page Directory JY FUT JUN93-MAR94 ED FUT JUN93-SEP96 ED CLNDR SPRD-01 CME INDEXES D-MARK OPTIONS	System Page Cont. BLANK LINE mJYU3 mJY23 mJYH4	Custom Page Name <input type="text"/>	DELPAGE
Custom Page Directory <input type="text"/>	Custom Page Cont. mJYH3	ADD	INS	DEL
				SAVE/CONT
				QUIT
				SAVE/OK

Figure 6.4 Step 2

3. Repeat step 2 to add more instruments from the selected system page. Each instrument appears at the end of the **Custom Page Contents** list; you cannot add the same instrument twice. A blank line is added as **Blank Line X**, identifying its position on the page.
4. Repeat steps 1-2 if you want to add instruments from another system page.
5. Repeat step 2 until the custom page is complete.

CREATE/MODIFY CUSTOM PAGE IN FILE: CRI

Service List GLOBEX America	System Page Directory JY FUT JUN93-MAR94 ED FUT JUN93-SEP96 ED CLNDR SPRD-01 CME INDEXES D-MARK OPTIONS	System Page Cont. BLANK LINE MEDU3-EDZ3 MEDM3-EDH4 MEDM3-EDM4 MEDU3-EDH4	Custom Page Name <input type="text"/>	DELPAGE
Custom Page Directory <input type="text"/>	Custom Page Cont. MEDU3 mEOZ3 mJYH3	ADD	INS	DEL
				SAVE/CONT
				QUIT
				SAVE/OK

Figure 6.5 Step 6

CREATE/MODIFY CUSTOM PAGE IN FILE: CRI

Service List GLOBEX America	System Page Directory JY FUT JUN93-MAR94 ED FUT JUN93-SEP96 ED CLNDR SPRD-01 CME INDEXES D-MARK OPTIONS	System Page Cont. BLANK LINE MEDU3-EDZ3 MEDM3-EDH4 MEDM3-EDM4 MEDU3-EDH4	Custom Page Name <input type="text"/>	DELPAGE
Custom Page Directory <input type="text"/>	Custom Page Cont. MEDU3 MEDZ3 MEDU3-EDZ3 mJYH3	ADD	INS	DEL
				SAVE/CONT
				QUIT
				SAVE/OK

Figure 6.6 Step 6 completed

To create a custom page ...

- To add a new instrument in a specific position on the custom page, first click on the system page instrument (step 2), then click on the custom page instrument **before which** you want to insert the new instrument. In Figure 6.5, an instrument will be added before JYM3. Select the instrument. When you click on **INS**, the new instrument is added in the correct position as in Figure 6.6.
- To delete an instrument from the custom page in progress (if you added it in error or in the wrong position), double-click on it. (This is equivalent to clicking on the instrument **and** clicking on the **DEL** command button.)

Figure 6.7 Step 8

Figure 6.8 After SAVE/CONT.

- If you have not already done so, name the page. Click on the **Custom Page Name** text box and type the name, which must be unique and cannot include more than 12 characters (see Figure 6.7).
- Click on **SAVE/OK** to temporarily save the custom page definition and return to the Modify GLOBEX Parameters dialog box. Click on **SAVE/CONT** to temporarily save the definition and remain in the Create/Modify Custom Page dialog box; the new page name appears in the **Custom Page Directory** and instrument names are cleared from the **Custom Page Contents**. (See Figure 6.8.) You can create or modify other pages. If you choose **SAVE/CONT**, choose **QUIT** to return to the Modify GLOBEX Parameters dialog box.
- When you choose **QUIT** or **SAVE/OK**, the Modify GLOBEX Parameters dialog box redisplay. The **SAVE/CONT** command button is highlighted and a message reminds you to save changes to the parameter file. You will need to choose the button twice to save the changes. See Section 6.3, "Modify GLOBEX Parameters".

To modify an existing custom page ...

(Mouse and keyboard instructions are combined.)

1. Refer to step 1 to display the Modify GLOBEX Parameters dialog box. Select the parameter file that includes the custom page definition you want to alter. Choose **Custom Page**.
2. Select the page name in the **Custom Page Directory**. Its contents appear in the **Custom Page Contents** list and its name in the **Custom Page Name** text box.
3. Modify the page using **ADD**, **DEL**, and **INS** as in steps 2 - 7 above.
4. When you select **SAVE/CONT** or **SAVE/OK**, a small dialog box with a message, **Page already exists. Modify this page?** is displayed. Choose **YES** to overwrite the existing custom page definition. Choose **NO** if you do not want to save the page.
5. In the Modify GLOBEX Parameters dialog box, save the changed parameter file by choosing **SAVE/CONT**.

To delete a custom page:

1. Select the page in the **Custom Page Directory** list (you cannot delete a custom page while it is displayed).
2. Select the **DELPAGE** command button. A small dialog box with a message, **Are You Sure?** is displayed. Choose **YES** to remove the page name from the **Custom Page Directory** list and **Contents**. Choose **NO** not to delete the page.

3. You can also delete a page by double-clicking on the page name in the Custom Page Directory list.

General Notes:

If a displayed custom page includes instruments from a Service that is not currently downloaded, those instrument lines are blank. If you display the custom page definition in this function, those instrument lines are occupied by "n/a". If you remove the "n/a" line, you remove the instrument. If an instrument included on a custom page is removed from the Host, it is also removed from the custom page when you save the parameter file.

If you modified the custom page on display, it will be updated when you quit the Modify GLOBEX Parameters dialog box.



If communications with a Service fail while you are in this dialog box, a warning appears in the Alerts window; the cursor is trapped in the **QUIT** command button; any changes you made since you last selected **SAVE/CONT** in the Modify GLOBEX Parameters dialog box are saved to a temporary file; and you must quit the dialog box. In this case, the Modify GLOBEX Parameters dialog box is not re-displayed automatically.

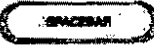
To create a custom page using the keyboard...

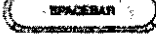
When you press **TAB** to move around the Create/Modify Custom Page Dialog Box, the path is as follows:


1. **Service Drop-Down** list
2. **System Page Directory (SPD)** list
3. **System Page Contents (SPC)** list
4. **ADD** button
5. **INSERT** button
6. **DELETE** button
7. **Custom Page Directory (CPD)** list
8. **Custom Page Contents (CPC)** list
9. **Custom Page Name** text button
10. **DELPAGE** button
11. **SAVE/CONT** button
12. **QUIT** button
13. **SAVE/OK** button

Creating a custom page using the keyboard requires you to move back and forth between

items numerous times. Press  or .

1. When you first display the dialog box, the first Service in the Service list is highlighted and the SPD lists its system pages. If you need system pages for a Service farther down the list, use arrow keys to highlight that Service; the SPD lists those system pages.
2. Tab to the SPD list. Use arrow keys to highlight a page name. Press ; the page contents appear in the SPC list.
3. Tab to the SPC list. Use arrow keys to highlight an instrument.

4. Tab to **ADD**, press . The instrument you highlighted in step 3 appears in the CPC list.
5. Repeat steps 3 and 4 to add more instruments from the selected system page.
6. Repeat steps 2 through 4 to include instruments from another system page.
7. Repeat steps 3 and 4 until the custom page is complete.
8. To insert a new instrument in a specific position on the custom page, tab to the SPC list and highlight an instrument, then tab to the CPC list and highlight the custom page instrument **before which** you want to insert the new instrument. When you tab to **INS** and press

, the new instrument will appear in the correct position.

9. To delete an instrument from the custom page in progress (because you added it in error or in the wrong position), first tab to the CPC and highlight it, then tab to

DEL and press .

10. To name the page, tab to the **Custom Page Name** box and type the name.

11. Tab to **SAVE/CONT** or **SAVE/OK** and

press  to save the page and add its name to the CPD list.

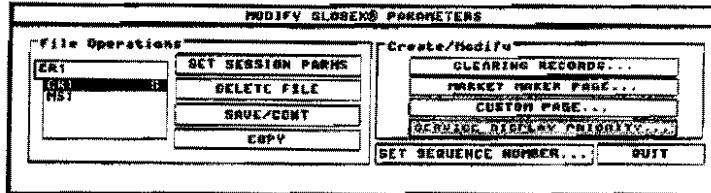
6.3.2 Modify Service Display Priority

The Service display priority in a Session parameter file controls Service order whenever a dialog box includes a Service list; only the highest priority Service name is visible unless you open the drop-down list. The Service whose instruments you trade most frequently should be at the top of the list.

If the Session parameter file does not include this parameter, the keystation displays Services in alphabetical order.

Step 1 To display the *Modify Service Display Priority* dialog box:

1. In the *Modify GLOBEX Parameters* dialog box, select a parameter file (or type its name in the text box).
2. Select **Service Display Priority**.



See Section 2 for details on operating GLOBEX.

Section 6.3, "Modify GLOBEX Parameters," explains how to display the initial dialog box and create/modify a parameter file. You cannot modify Service display priority without first selecting a GLOBEX parameter file.

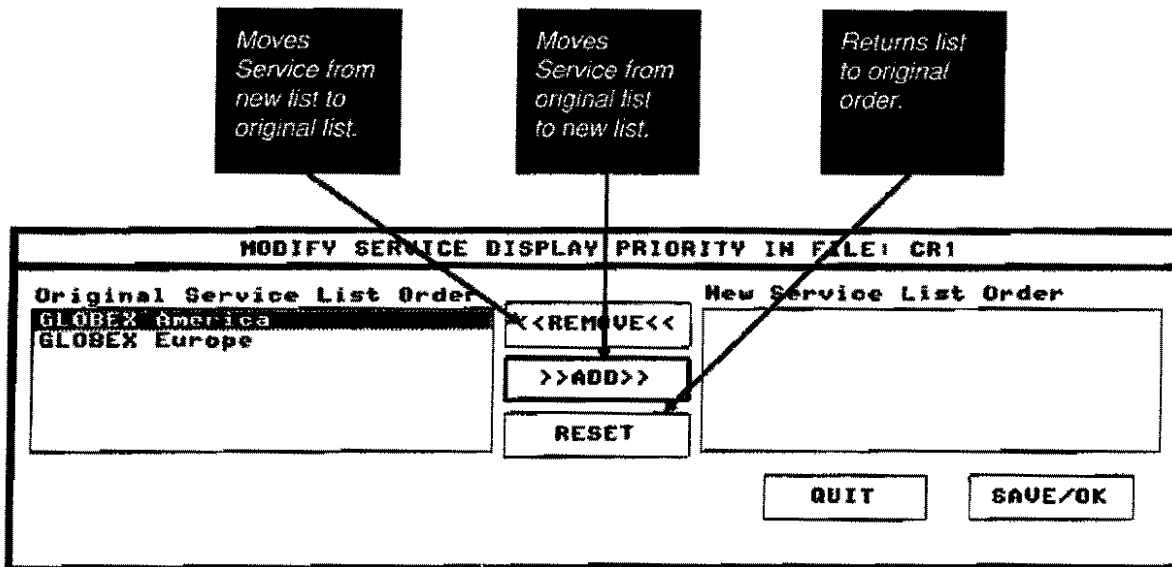


Figure 6.9 Modify Service Display Priority Dialog Box

To modify service display priority ...

Step 2 The procedure:

When you display the dialog box, the current Service list order displays in the list box, with the first Service name highlighted. The default command button is **ADD**. Arrows on the command buttons indicate the direction in which they move Service names. **ADD** and **REMOVE** are enabled one at a time, depending on which list is active. It is easiest to use the mouse for this function.

Using the mouse:

1. Select Service names in the order you want them to display in the new list. To add a name to the new Service list, double-click on the name in the original list; the Service name is removed from the original list and placed in the new list.
2. To remove a name from the new Service list, double-click on the name; the Service name is removed from the new list and returned to the original list.

Using the keyboard:

1. To add a name to the new list, select the first name you wish to appear in the list, then choose **ADD**.
2. To remove a name from the new list, select the name, then choose **REMOVE**.

Saving Service priority:

SAVE/OK is grayed until you complete the new list (the original list is empty).

1. Select **SAVE/OK** to save the Service display priority and return you to the Modify GLOBEX Parameters dialog box.
2. The Modify GLOBEX Parameters dialog box is still open; the **SAVE/CONT** command button is highlighted, and a message reminds you to save changes to the parameter file. This message remains un-

til you save the changes. Refer to Section 6.3, "Create a Parameter File."

Quitting the dialog box:

To quit the Modify Service Display Priority dialog box without making or saving changes, select **QUIT**. A message, **Service Display Priority has changed, changes are lost if you quit**, is displayed if you have made changes. Select **QUIT** again to ignore your changes and return to the Modify GLOBEX Parameters dialog box. If you have not made any changes, you do not have to save the GLOBEX parameter file.

Step 3 The result:

When you set a Session parameter file, the Service display priority for that parameter file determines Service list order in all dialog boxes. When the keystation must decide which system page to display, it shows the first system page it receives from the highest priority Service to which you have logged in.

If a Service is not in the display priority but is permitted for this keystation, the new Service name is added to the end of the list. (You can change the display priority parameter at any time.)

If a Service in the display priority is no longer permitted for this keystation, Services are listed in alphabetical order.

Note: If communications with a Service fail while you are in this dialog box, a warning appears in the Alerts window; the cursor is trapped in the **QUIT** command button; any changes you made since you last selected **SAVE/CONT** in the Modify GLOBEX Parameters dialog box are saved to a temporary file; you must quit the dialog box. In this case, the Modify GLOBEX Parameters dialog box is not re-displayed automatically.

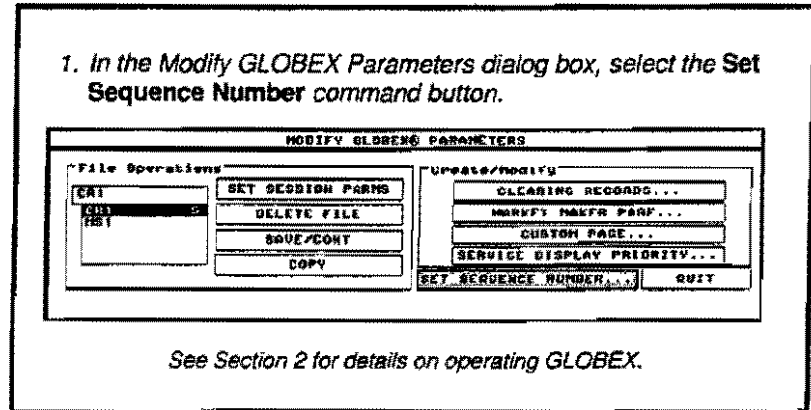
6.3.3 Set Sequence Number

Every trade request sent from the keystation contains an order number in the form **XXX-YYYY**, where **XXX** is the first 3 characters of the trader identifier and **YYYY**, the order sequence number, is a sequential number from 1 to 9999, wrapping around to 1 when the maximum number is reached. You can type an order number into an order dialog box or let the keystation automatically assign one according to the order sequence number. The keystation resets this number to 1 when you log out of the last Service or if the keystation or Host fails. The first order number sent following login would therefore be **XXX-1**.

Use **Set Sequence Number** to specify the order number at the start of the GLOBEX Session and when service resumes after keystation or Host failure; this prevents the

Step 1 To display the *Set Sequence Number* dialog box:

1. In the *Modify GLOBEX Parameters* dialog box, select the **Set Sequence Number** command button.



keystation from assigning duplicate order numbers, which is especially important if you have uploaded orders. You can set only one order sequence number for all logged-in Services.

Section 6.3, **Modify GLOBEX Parameters**, explains how to display the initial dialog box. You cannot alter the order sequence number without first displaying the **Modify GLOBEX Parameters** dialog box.

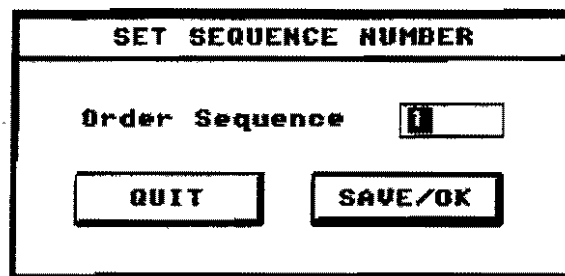


Figure 6.10 Set Sequence Number Dialog box

To set the sequence number ...

Step 2 *The procedure:*

The **Order Sequence** text box shows the next order number the keystation will send to the Host. Refer to the audit trail printout (or printed open order list if you uploaded orders) to identify the last assigned order number; the new order sequence number must be higher than this.

1. Type the new order sequence number in the text box.
2. Choose **SAVE/OK**.

Step 3 *The result:*

The Modify GLOBEX Parameters dialog box is displayed again. Since the order sequence number is not part of a parameter file, you

can quit the dialog box if you have finished setting parameters.

The keystation will resume automatic numbering by assigning the new order sequence number to the next trade request sent from the keystation (unless you type a different order number into the Order text box).

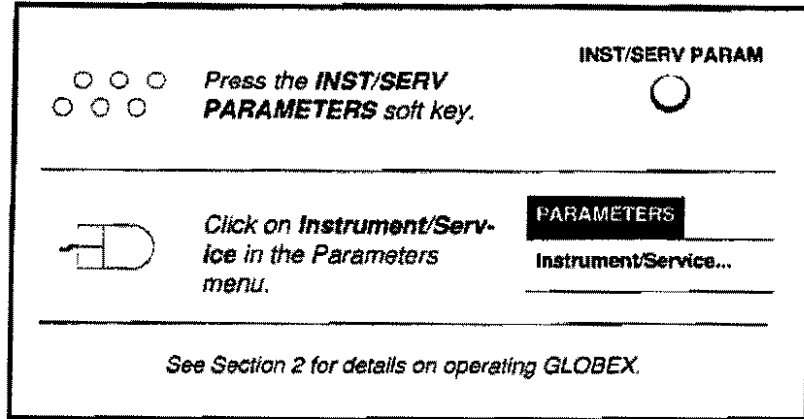
Note: If communications with a Service fail while you are in this dialog box, a warning appears in the Alerts window; the cursor is trapped in the **QUIT** command button; any changes you made since you last selected **SAVE/CONT** in the Modify GLOBEX Parameters dialog box are saved to a temporary file; you must quit the dialog box. In this case, the Modify GLOBEX Parameters dialog box is not re-displayed automatically.

6.4 Modify Instrument/Service Parameters

The instrument and Service parameters are commonly referred to as defaults. You can define or modify these parameters only when you are logged into the Service involved. They are linked to the identifier of the trader logged-in when the parameters were set, and are saved at the keystation when you log out. The keystation loads these parameters for a Service when you login with that trader identifier.

These functions are optional. System defaults apply unless you create these parameters.

Step 1 To display the dialog box, choose **ONE** of these methods:



Note: Instrument and Service parameters are independent from the GLOBEX parameter files described in section 6.3.

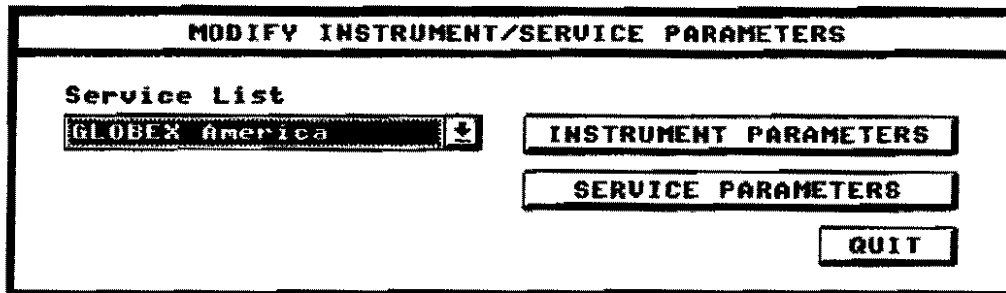


Figure 6.11 Modify Instrument/Service Parameters Dialog Box

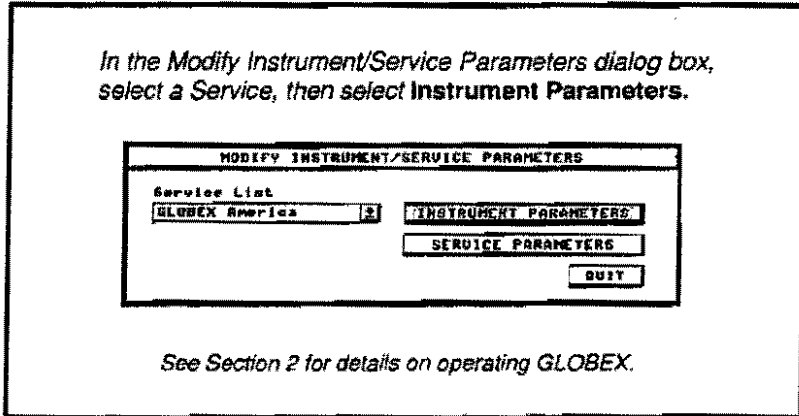
When you first display the dialog box, the first Service in the Service List is highlighted. In order to display either of the secondary dialog boxes - Instrument Parameters for Service and Service Parameters for Service - you must select a Service.

6.4.1 Instrument Parameters

Instrument parameters are set for one instrument at a time on a single Service and establish the following defaults:

- High and low price limits
 - Bid/Ask spread and precedence
 - RFQ display
 - Order size
 - Increment size
- Price check value

Step 1 To display the Instrument Parameters dialog box:



When you display the dialog box, the Service you selected is shown in the title bar. The Service's system pages are shown in a list box; focus is in the System Pages list.

System Pages list. (points to the System Pages list box)

Clear price limits buttons for Service. (points to CLEAR HI and CLEAR LO buttons)

Current instrument list. (points to the empty list box)

Instrument settings group box. (points to the High Limit, Low Limit, Spread, RFD Disp, Order Size, Order Insr, Price Check fields)

Reset current instrument settings to System defaults. (points to the RESET button)

RFQ command buttons for Service. (points to ENABLE and DISABLE buttons)

Reset all instruments on Service to system defaults (points to the RESET ALL button)

Save/Cont to save instrument settings and remain in dialog box. (points to the SAVE/CONT button)

Save/OK to save all instrument parameters and return to initial dialog box. (points to the SAVE/OK button)

Print RFD Alerts (points to the checked checkbox)

Figure 6.12 Instrument Parameters Dialog Box

To set instrument parameters ...

Step 2: The procedure

1. Select a system page name.

The instrument list shows instruments on the page. Each instrument includes the Exchange identifier.

2. Select an instrument. The current settings for this instrument display in the dialog box.

3. Set your parameters as described below.

High and low price limits

Type a high or low limit price into the text box. Use numbers from 0 to 9; the minus sign (-) is allowed.

The high limit must be above the Last. The low limit must be below the Last. The price must be a multiple of the tick increment for the instrument.

To remove high or low limits for all instruments on every page on the Service, select either **Clear HI** or **Clear LO**. A message directs you to select the command button again to complete the command. (The System default is no limits.)

The keystation displays an alert (with optional audible "beep") the **first time** the instrument's Bid or Last equals or occurs above the high limit or its Offer or Last equals or occurs below the low limit. A limit break alert appears in the Alerts window, once only, even if the value crosses back over the limit and breaks it again. You can reset the limit at any time.

The format for a limit break alert message is

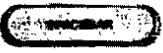
HH:MM <Instrument ID> HI <Exchange ID>
or
HH:MM <Instrument ID> LO <Exchange ID>

Before the market opens, limit breaks occur only if the indicative price breaks the limit. Limit breaks cannot occur when an instrument is in the halted state.

Bid/Ask Spread and precedence

The **Spread** text box is divided into two sections. The right side shows the spread and the left side shows the precedence (**B** for Bid or **A** for Ask).

Click on the button in the left side of the box or, with the cursor in the left side of the box, press

 to switch between **B** and **A** for precedence. Type the spread value into the right side of the box. A negative spread is not permitted. (The System default is no spread, Bid preference.)

Bid/Ask spreads are based on the Last price; if there is no last, then the Settle price is used; if there is no Settle, the Bid/Ask prices are blank.

If your spread is an even number, the Bid and Offer prices are evenly spaced around the Last. If your spread is an odd number, the side you have given precedence is closer to the Last.

If the spread calculation places your default Bid and/or Offer price over the high and/or under the low price limit, the keystation displays blank prices and a warning.

To set instrument parameters ...

Step 2 *The procedure:*

RFQ

You can enable or disable RFQ receipt for all or individual instruments. Select **Enable** or **Disable** under All RFQ Alerts to see all or no RFQ alerts for all instruments on every page on the Service. A message directs you to select the command button again to complete the command.

To disable or enable RFQ alerts for *individual instruments*, select the instrument: the **RFQ Disp** toggle box displays **Yes** or **No** to show the current RFQ state. Press SPACEBAR with the cursor in the toggle box to change the RFQ state between **Yes** and **No**. (The System default is all instruments enabled for RFQ alerts.)

To include RFQs in the audit trail printout, select the **Print RFQ Alerts** check box; it shows an X. To disable RFQ printing, select the box or make it blank.

When any trader sends a Request for Quote for any instrument on which RFQs are enabled at your keystation, you see an RFQ message in the Alerts window. In addition, if that instrument is on the current displayed page, the instrument line is shown in reverse video for 30 seconds.

The System defaults all new instruments to the RFQ-enabled state; you must explicitly disable RFQs for that instrument if you do not wish to receive RFQ alerts.

Your last choice on printing during a session is the default for the next session. The system default is to enable printing.

Order Size

Type a value. (The System default is the smallest quantity allowed for this instrument.)

All trading dialog boxes for this instrument initially use this default quantity.

Order Increment

Type a value. (The System default is 1.)

This value defines the action of the **Up** and **Down** arrows in the **quantity** text box and for the **UP** and **DOWN** keys in the number keypad. The command buttons and keys alter **quantity** values by this amount.

Price Check

You can set this value between 1 and 99 ticks. Type a tick value between 1 and 99. (The System default is 10 ticks.)

The keystation checks the price you enter for a **Bid/Offer/Hit/Take** order by comparing it to the Last (or Settle if there is no Last). A valid range is within a defined number of ticks of the Last. A price outside of this range (price check value multiplied by the tick increment size) generates a warning, which you can override.

To set instrument parameters ...

When you have entered all parameters for the instrument, save the parameters. Select **SAVE/CONT** to save defaults for the current instrument and remain in the dialog box to select another instrument and continue. If you select another instrument before **SAVE/CONT**, you will lose the parameters for the previous instrument. **SAVE/CONT** and **RESET** apply only to the values in that area of the dialog box. The keystation evaluates all options for errors. Messages describe your error(s). Correct and save again.

Select **SAVE/OK** to save all the parameters set anywhere in this dialog box. This includes any changes made since you last selected **SAVE/CONT** and any **CLEAR** or **ENABLE/DISABLE** commands. **SAVE/OK** also returns you to the Modify Instrument/Service Parameters dialog box, from which you can either quit or select the Service Parameters dialog box.

If you used **ENABLE/DISABLE ALL** or **CLEAR HI/LO** buttons, you do not need to use **SAVE/CONT** or **SAVE/OK** to confirm the commands.

RESET returns parameters on the current instrument to their system defaults. **RESET ALL** returns all instrument parameters on the Service to their System defaults.

Step 3 *The result:*

The Modify Instrument/Service Parameters dialog box redisplay. Choose **QUIT** to clear the dialog box from the screen.

Note: If communications with the selected Service fail while you are in this dialog box, a warning appears in the Alerts window; the cursor is trapped in the **QUIT** command button; any changes are lost and you must quit the dialog box. In this case, the Modify Instrument/Service Parameters dialog box is not re-displayed automatically.

If the non-selected Service fails, a warning appears in the Alerts window, but you can continue.

6.4.2 Service Parameters

Service parameters apply to a specific Service and not to individual instruments. The default **account number** appears in the Clearing Information section of all dialog boxes when no clearing key is selected. (The default account number is established differently for instruments on market maker pages. See Section 8.4.1.) The **order limit**, if set, establishes a quantity limit for all orders on the Service.

Step 1 To display the Service Parameters dialog box:

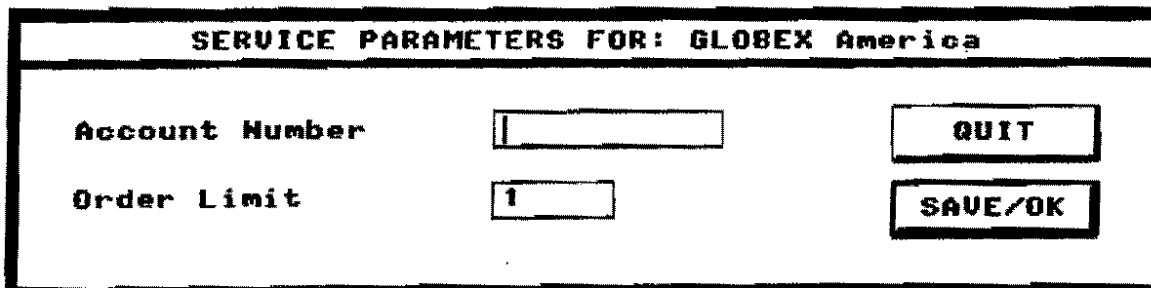
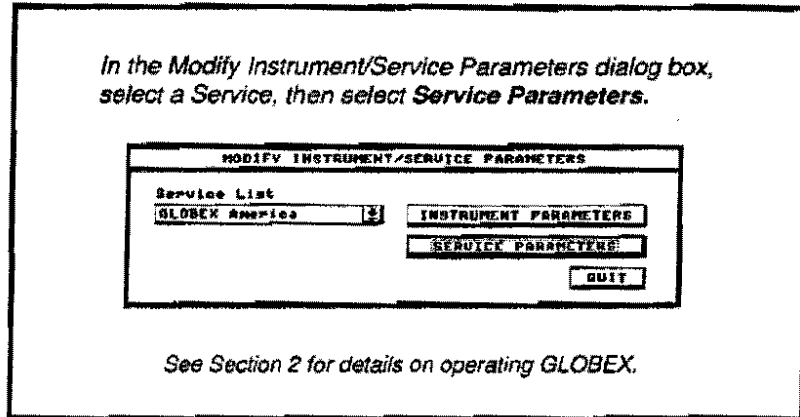


Figure 6.13 Service Parameters Dialog Box

To set Service parameters ...

When you display the dialog box, the **Account Number** text box contains either a previously set account number or is blank. **Order Limit** is either a previously set size or 1.

Step 2 *The procedure:*

Account number

Type the account number you want included in all order dialog boxes. If you enter orders for multiple accounts, do not set this parameter.

Order limit

Type a number to serve as the order limit.

The default **order limit**, when multiplied by the default **order size** (set for an individual instrument in **Instrument Parameters**, Section 6.4.1) determines the **quantity limit** for an instrument.

Select **SAVE/OK** to save parameters and return to the Modify Instrument/Service Parameters dialog box. New parameters are activated immediately. You can select another Service and set additional parameters.

Step 3 *The result:*

Order limit - The keystation displays a warning if an order's quantity exceeds this limit. Verify your order by selecting **OK**. If you keep the order limit at the system default of 1, the warning is triggered if an entered order quantity exceeds the default size. For example, order limit (1) x default order size (5) = threshold of 5; entering an order with a quantity above 5 will generate the warning. With an order limit of 2, there is no warning unless an order quantity exceeds twice the default order size; with an order limit of 3, the

threshold is three times the default order size, etc.

Note: If communications with the selected Service fail while you are in this dialog box, a warning appears in the Alerts window; the cursor is trapped in the **QUIT** command button; any changes are lost and you must quit the dialog box. In this case, the Modify Instrument/Service Parameters dialog box is not re-displayed automatically.

If the non-selected Service fails, a warning appears in the logo/alerts window but you can continue.

7. Trading Functions

7.1. Overview

Trading Functions are found on the Trade, Modify, and Cancel menus. Menu choices are described below. See Section 2 for general information on selecting instruments and functions and on using dialog boxes. See Section 4 for additional information on trading during the GLOBEX session.

Trade Menu

Choices on the Trade Menu include:

- **Bid/Ask** - Submit a buy and a sell price-limit-or-better order against a single instrument, for the same account.
- **Bid** - Submit a price-limit-or-better buy order against a specific instrument.
- **Offer** - Submit a price-limit-or-better sell order against a specific instrument.
- **Hit** - Submit an order to sell immediately at the current Bid price or better; any unfilled quantity is cancelled.
- **Take** - Submit an order to buy immediately at the current Offer price or better; any unfilled quantity is cancelled.
- **Change** - Modify the terms of existing Bids or Offers; this results in a hold/cancel/replace/release action.
- **Cancel Instrument** - Cancel all or selected Bids/Offer for a *single instrument*.
- **RFQ (Request for Quote)** - Request a quotation for an instrument.
- **View RFQs (Request for Quote)** - Display the most recent RFQs and display the page with the instrument, along with the Bid/Ask dialog box.
- **Book** - Display the "top of the book" for a selected instrument, showing accumulated Bids/Offer for up to 5 levels for a market; descending order for Bids, ascending order for Offers.
- **Pass the Book** - Upload orders from a disk file into a GLOBEX keystation, or cancel all of your orders and log out (**Extract Open Orders**).

Trading Functions

- **Print File** - Print either an open order file or the current day's tradelog at the audit trail printer.

Modify Menu

- **Hold** - Place a selected order on hold.
- **Release** - Release a selected held order.

Cancel Menu

- **Cancel** - Cancel all or selected open orders – bids and/or offers.






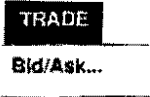
These functions are described in the sections that follow.

7.2 Bid/Ask

Bid/Ask lets you enter successive Bids, Offers, or combined Bid/Ask orders, without removing the dialog box between orders.

A Bid/Ask enters two separate orders for the same account. When a Bid or Ask order is matched by the system, any unfilled quantity remains in the system.

Step 1 To display the dialog box, choose **ONE** of these methods:

	Press the instrument number. Press the BID/ASK key.	
	Click on the instrument name. Click on BID/ASK in the trading panel.	
	Press the instrument number. Click on BID/ASK in the Trade menu.	

See Section 2 for information on selecting instruments and functions.

Default prices unless altered by Bid/Ask spread and precedence.

Order size parameter or system's minimum quantity.

BID/ASK for FPIBH5

Bid Px 9531	Bid Qty 1	Ask Px 9531	Ask Qty 1	Ext. Clearing Information	
<input type="checkbox"/> Bid OK	<input type="checkbox"/> Bid/Ask OK	<input type="checkbox"/> Ask OK	<input type="checkbox"/> QUIT	Acct # 1123123	Type LMT Qualifier <input type="checkbox"/>
Order# 1ED-1	Clearing Key TEST	<input type="checkbox"/> <<Brief		CTI Origin <input type="checkbox"/> Fee <input type="checkbox"/> F-EX <input type="checkbox"/> F-Firm <input type="checkbox"/> Orig Entry Date 04/17/95	Action <input type="checkbox"/> Memo <input type="text"/>

Submits Bid order.

Submits Bid/Ask order.

Submits Ask order.

Typical Bid/Ask Order

Label is Full if additional clearing data is not displayed.

To enter a bid/ask ...

Step 2 The procedure:

If you establish the spread and precedence for a Bid/Ask order (**Instrument Parameters**), the initial price values are affected.

1. The **Bid Price** is highlighted when the dialog box appears. You can accept the default data or:
 - Bid - Enter Bid price and quantity;
 - Ask - Enter Ask price and quantity;
 - Bid/Ask - Enter Bid and Ask prices and quantities. Both orders will have the same order number.

For any order, you must also enter appropriate clearing information (see Section 4.4.2 and Appendix B).

2. To complete a Bid, select **BID OK**; to complete an Ask, select **ASK OK**; to complete a Bid/Ask, select **BID/ASK OK**. If you are using the keyboard, tab to the appropriate OK button, then

press  or .

BID/ASK OK is the initial default command button. The default changes to the last-used **OK**; the current default is shown in red with a dark border.

Do not click on OK or press TRANSMIT or RETURN more than once, especially when response time seems slow; you risk entering **duplicate** orders.

Step 3 The result:

Your Bid and/or Offer are logged into the system but continue to display. If you submitted a Bid or Bid/Ask, the **Bid Price** field is selected; if you submitted an Ask, the **Ask Price** is selected. All fields contain the values they had when you selected **OK**; they are now the current defaults.

Messages acknowledging the logged orders appear in the Trader Mailbox (both have the same order number). Trading window fields are updated (in red for five seconds) if this is a new best Bid or Offer in the market or at your keystation.

If you entered unacceptable data, a message in the dialog box identifies the item in error; correct the error and select **OK** again. When you have entered all orders, select **QUIT** to remove the dialog box.

If the price entered fails the last sale price check, a warning box displays. You should verify the price of the intended order. If the price is incorrect, choose the default button—**Do Not Submit Order**. You will be returned to the Bid/Ask box to make necessary corrections. If the price is correct, choose **Submit Order**.

The messages shown below are displayed in the Trader Mailbox; they identify a successfully positioned Bid/Ask order.

```





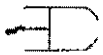

1CC-43 BUY      10    EDU3      9647    13:44:14
OK-              12345     m

1CC-43 SELL     10    EDU3      9649    13:44:14
OK-              12345     m
    
```

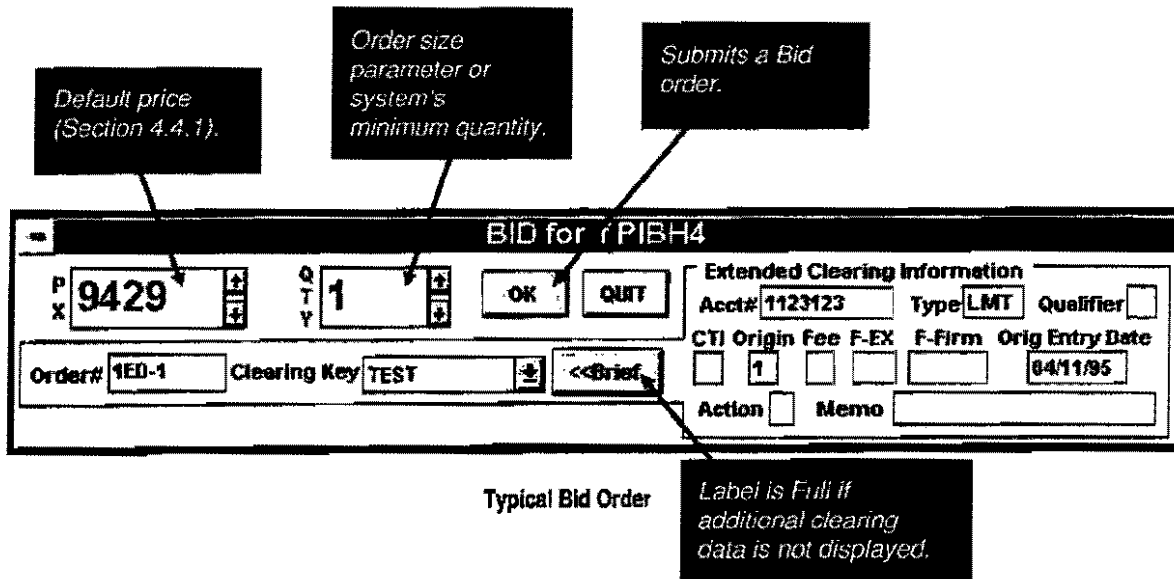
7.3 Bid

Bid places a Bid order for the selected instrument into the market. When a Bid is matched, any unfilled quantity remains in the system.

Step 1 To display the dialog box, choose **ONE** of these methods:

	Press the instrument number. Press the BID key.	
	Click on the instrument name. Click on BID in the Trading Panel.	
	Press the Instrument number. Click on BID in the Trade menu.	

See Section 2 for information on selecting instruments and functions.



BID for PIBH4

Default price (Section 4.4.1): **PX 9429**

Order size parameter or system's minimum quantity: **QTY 1**

Submits a Bid order: **OK**

Label is Full if additional clearing data is not displayed: **<<Brief**

Extended Clearing Information:

Acct#	1123123	Type	LMT	Qualifier	<input type="checkbox"/>
CTI Origin Fee	1	F-EX	<input type="checkbox"/>	F-Firm	<input type="checkbox"/>
Orig Entry Date	04/11/95				

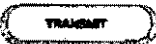

Order# 1ED-1 Clearing Key TEST Action Memo

Typical Bid Order

To enter a bid ...

Step 2 The procedure:

1. The **Bid Price** is highlighted when the dialog box appears. Enter **Price** and **Quantity**, and clearing Information (see Section 4.4.2 and Appendix B).

2. Click on **OK** or press  or  when you are done.

Step 3 The result:

Your Bid is logged into the system if all values are acceptable. The dialog box closes and the full screen view is restored. A message-acknowledging the logged order appears in the Trader Mailbox. Trading window fields are updated. If you entered a new best Bid in the market or at your keystation, the Trading window fields will be updated, displaying in red for 5 seconds.

If you enter more than one order at the same price, the keystation block shows the best price and accu-

mulated quantity, while in the market block (if this is the best order in the market), the quantity is increased. The Standing Order Book shows the market view and accumulated quantity, while your individual orders are visible only at your keystation in the Open Orders list.

If you entered unacceptable data, a message in the dialog box identifies the item in error; correct the error and select **OK** again.

If the price entered fails the last sale price check, a warning box displays. You should verify the price of the intended order. If the price is incorrect, choose the default button—**Do Not Submit Order**. You will be returned to the Bid box to make necessary corrections. If the price is correct, choose **Submit Order**.

If the system finds a match and a trade occurs, a message appears at the keystations of both parties to the trade. All display data affected by the trade are updated.

The message below is displayed in the Trader Mailbox; it identifies a successfully positioned Bid.





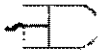
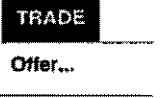
```

3FM-43 BUY      100      NNNU3      11749      13:56:45
OK-              12345      f
    
```

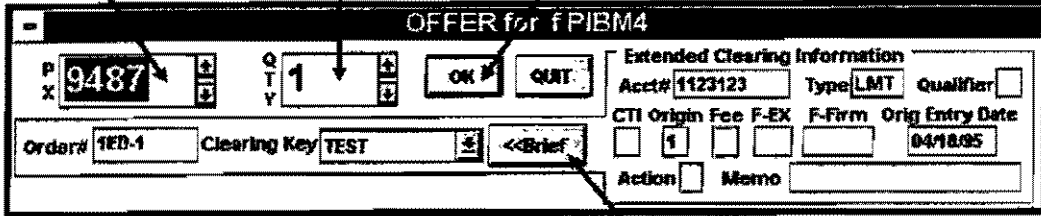
7.4 Offer

Offer places an Offer order for the selected instrument into the market. When an Offer is matched, any unfilled quantity remains in the system.

Step 1 To display the dialog box, choose **ONE** of these methods:

	Press the instrument number. Press the OFFER key.	
	Click on the instrument name. Click on OFFER in the Trading Panel.	
	Press the instrument number. Click on OFFER in the Trade menu.	

See Section 2 for information on selecting instruments and functions.



Initial display shows Default Price (Section 4.4.1).

Order size parameter or system's minimum quantity.

Submits an Offer.

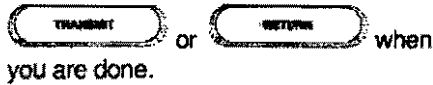
Label is Full if additional clearing data is not displayed.

Typical Offer Order

To enter an offer ...

Step 2 The procedure:

1. The Offer Price value is highlighted when the dialog box displays. Enter your Price and Quantity values, and clearing information (see Section 4.4.2 and Appendix B).
2. Click on OK or press



Step 3 The result:

Your Offer is logged into the system if all values are acceptable. The dialog box closes and the full screen view is restored. A message acknowledging the logged order appears in the Trader Mailbox. Trading window fields are updated (in red for five seconds) if this is a new best Offer in the market or at your keystation.

If you enter more than one order at the same price, the keystation block shows only the best price and accumulated quantity, while in the market block (if this is the best order in the market), the quantity is increased. The Standing Order Book shows the mar-

ket view and accumulated quantity, while your individual orders are visible only at your keystation in the Open Orders list.

If you entered unacceptable data, a message in the dialog box identifies the item in error; correct the error and select OK again.

If the price entered fails the last sale price check, a warning box displays. You should verify the price of the intended order. If the price is incorrect, choose the default button—**Do Not Submit Order**. You will be returned to the Offer box to make necessary corrections. If the price is correct, choose **Submit Order**.

If the system finds a match and a trade occurs, a message appears at the keystations of both parties to the trade. All display data affected by the trade are updated.

The message below is displayed in the Trader Mailbox; it identifies a successfully positioned Offer.

```



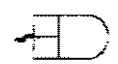

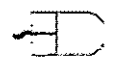

3FM-44  SELL      30      PIBZ3      9316      13:58:32
                                OK-      12345      f
    
```


7.5 Hit-Sell

Hit-Sell lets you "hit" a Bid positioned in the system. In this way, you can enter a sell order at the current best Bid price or sell down to a price.

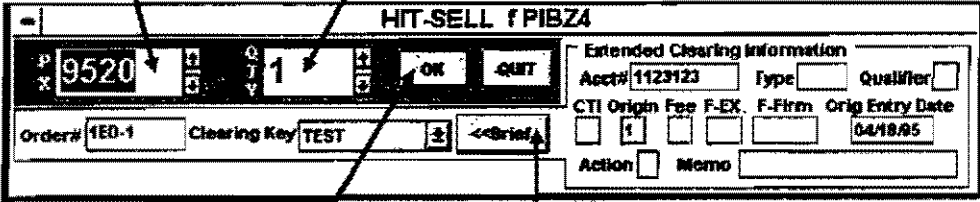
The hit function will execute an order on a fill and kill basis. There will be no resting order created. If you wish to allow all your quantity to trade, enter an Offer instead.

Step 1 To display the dialog box, choose **ONE** of these methods:

	Press the instrument number. Press the HIT key.	
	Click on the instrument name. Click on HIT in the Trading Panel.	
	Press the instrument number. Click on HIT in the Trade menu.	

See Section 2 for information on selecting instruments and functions.

Note: A message, **No Bid Market, please QUIT**, is displayed in red in the dialog box if there is no Bid for this instrument. An NG message is displayed in the Trader Mailbox if the market is no longer available when you enter your order. Choose **QUIT** to cancel the function.



The best market Bid.

Order size parameter or system's minimum quantity.

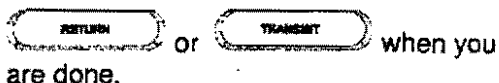
Submits the Order.

Label is Full if additional clearing data is not displayed.

To enter a sell order ...

Step 2 The procedure:

1. **Quantity** is highlighted when the dialog box appears. Alter the **Quantity** and enter clearing information (see Section 4.4.2 and Appendix B).
You can lower the value in the **Price** text box to sell down to a price. This order will then be filled for as much of your specified quantity as possible down to this price.
2. Click on **OK** or press



Step 3 The result:

Your order is logged into the system if all values are acceptable. The dialog box closes and the full screen view is restored. A message acknowledging the logged order appears in the Trader Mailbox.

If you entered unacceptable data, a message in the dialog box identifies the item in error; correct the error and select **OK** again.

If the price entered fails the last sale price check, a warning box displays. You should verify the price of the intended order. If the price is incorrect, choose the default button—**Do Not Submit Order**. You will be returned to the Hit box to make necessary corrections. If the price is correct, choose **Submit Order**.

If the Sell is successful, a message appears at the keystations of both parties to the transaction (in the Mailbox and Ticker windows). All Trading window fields affected by the transaction are updated.

The messages below are displayed in the Trader Mailbox; they identify a successful Sell request (**SELL***) message and a successful matched Sell (**SOLD***) message.

```

1CC-45 SOLD*      5      DMM3      WP: 6190      14:02:59
#RCP#             CX-0             12345 m







1CC-45 SELL*     5      DMM3      6190      14:02:58
ENTERED          12345      m
    
```

7.6 Take-Buy

Take-Buy lets you “take” an Offer positioned in the system. In this way, you can enter a buy order at the current best Offer price or buy up to a price.

The Take function will execute an order on a fill and kill basis. There will be no resting order created. If you wish to allow all your quantity to trade, enter a Bid instead.

Step 1 To display the dialog box, choose **ONE** of these methods:

	Press the instrument number. Press the TAKE key.	
	Click on the instrument name. Click on TAKE in the Trading Panel.	
	Press the instrument number. Click on TAKE in the Trade menu.	

See Section 2 for information on selecting instruments and functions.

Note: A message, **No Offers Market, please QUIT**, is displayed in red in the dialog box if there is no Offer for this instrument. An **NG** message is displayed in the Trader Mailbox if the market is no longer available when you enter your order.

The current best market Offer.

Order size parameter or system's minimum quantity.

Submits the Order.

Label is Full if additional clearing data is not displayed.

To enter a buy order ...

Step 2 *The procedure:*

1. **Quantity** is highlighted when the dialog box appears. Alter the **Quantity** and enter Clearing Information (see Section 4.4.2 and Appendix B).

You can raise the value in the **Price** text box to buy up to a price. This order will then be filled for as much of your specified quantity as possible up to this price.

2. Click on **OK** or press



Step 3 *The result:*

Your order is logged into the system if all values are acceptable. The dialog box closes and the full screen view is restored. A message acknowledging the logged order appears in the Trader Mailbox.

If you entered unacceptable data, a message in the dialog box identifies the item in error; correct the error and select **OK** again.

If the price entered fails the last sale price check, a warning box displays. You should verify the price of the intended order. If the price is incorrect, choose the default button—**Do Not Submit Order**. You will be returned to the Take box to make necessary corrections. If the price is correct, choose **Submit Order**.

If the Buy is successful, a message appears at the keystations of both parties to the transaction (in the Mailbox and Ticker windows). All Trading window fields affected by the transaction are updated.

The messages below are displayed in the Trader Mailbox; they identify a successful Buy request (**BUY*** message) and a successful matched Buy (**BOT*** message).

```

1CC-46 BOT*      30    JYZ6      WP: 10631    14:04:20
#RCP#           CX-0                    12345        m

1CC-46 BUY*      30    JYZ6      10631        14:04:19
ENTERED        12345        m
    
```

7.7 Change Bid or Offer


Change lets you replace an existing order, in effect cancelling an open Bid or Offer AND submitting a replacement.

The Trading window shows your current best Bid and Offer and accumulated quantities. You first have to select the order you want to change.


Any method shown in Step 1 displays the Hold and Change Open Order dialog box, showing all orders for the selected instrument by order number.

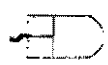
PAGE FWD and PAGE BACK display additional orders. Select an order and choose OK to display the Change dialog box. Its initial values are those of the original order. The title bar shows Change Bid or Change Offer followed by the Instrument Name. The order is automatically put on hold and a message is sent to your Trader Mailbox with the message **B-HLD** (for a bid) and the instrument name.

Step 1 To display the dialog box, choose **ONE** of these methods:

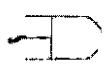


Press the instrument number.
Press the **CHANGE** key.






Click in the instrument's trader quote or quantity column in the trading window (only in a one-up view).



Click on the instrument name. Click on **CHANGE** in the Trading Panel.

CHANGE



Press the instrument number. Click on **CHANGE** in the Trade menu.

TRADE
Change...

See Section 2 for information on selecting instruments and functions.

HOLD & CHANGE OPEN ORDER									
Order #	B/O	Instrument	Price	Qty	Mkt	Type	Account		
018-B	BID	WEDM-EDU4	22			LMT	1123123	PAGE BACK	
018-B	ASK	WEDM-EDU4	23			LMT	1123123	PAGE FWD	
018-B	BID	WEDM-EDU4	22			LMT	1123123	QUIT	
018-B	ASK	WEDM-EDU4	23			LMT	1123123	OK	
018-B	BID	WEDM-EDU4	22			LMT	1123123		
018-B	ASK	WEDM-EDU4	23			LMT	1123123		
018-B	BID	WEDM-EDU4	22			LMT	1123123		
018-B	ASK	WEDM-EDU4	23			LMT	1123123		
018-B	BID	WEDM-EDU4	22			LMT	1123123		
018-B	ASK	WEDM-EDU4	23			LMT	1123123		

Note: An error message, **No Open Orders**, is displayed if there are none. Select **OK** to acknowledge and remove the message.

CHANGE BID for FPIB45

P: 9529	QTY: 1	OK	QUIT	Extended Clearing Information	
Clearing Key: TEST	Order#: 1ED-4			Acct#: 1123123	Type: LMT
				CTI Origin Fee: F-EX	F-Firm
				Orig Entry Date: 04/18/95	Qualifier:
				Action: Memo	

Changed Order

To change a bid or offer ...

Step 2 The procedure:

1. Price is highlighted when the Change dialog box appears. Alter values or clearing information (see Section 4.4.2 and Appendix B) as needed. You cannot change order type.
2. Click on **OK** or press



when done.

Step 3 The result:

The original order is cancelled, and the new order is created and released into the system. Three more messages appear in your Trader Mailbox. The first message announces the cancellation of the original order. The second message confirms the creation of the new order. Finally, the third message announces the release of this order into the system. (See the first set of messages below.)

Changing an Order on Hold

If your order was on Hold prior to your initiating a Change, the system will not release it after the change has taken place. Your Trader Mailbox will not receive a release message, but will look like the second set of messages below. To release the order into the system, you must use the Release function. (See Section 7.11.)

If You Are Disconnected

Once you have selected the order to Change, it is put on Hold. If you are disconnected before submitting your changed order, the order will remain unchanged and on Hold. (See the third message set below.) When your keystation comes back up, you will need to make the changes, and then use the Release function to release the order. (See Section 7.11.)

1DD-1	B-REL	5	NNNH5	1196	14:00:52	←	Release Bid
			OK-	12345	f		
1DD-1	BUY	5	NNNH5	1196	14:00:52	←	New Bid
			OK-BID ON HOLD	12345	f		
1DD-1	CX-B	10	NNNH5	1196	14:00:52	←	Cancel Bid
			OK-ENTRY MODIFIED	12345	f		

(Reading from the bottom up: The original bid with a quantity of 10 is cancelled; new bid of 5 is created, and the order is released.)

1DD-1	BUY	5	NNNH5	1196	14:00:52	←	New Bid
			OK-BID ON HOLD	12345	f		
1DD-1	CX-B	10	NNNH5	1196	14:00:52	←	Cancel Bid
			OK-ENTRY MODIFIED	12345	f		

(The original bid of 10 is cancelled; new bid of 5 is created and kept on Hold.)

1DD-1	B-HLD	10	NNNH5	1196	14:00:52	←	Bid on Hold
			OK-	12345	f		

(If you see this message after a disconnect, your bid is on Hold; use Release to release it into the system.)



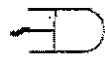



7.8 Request for Quote

If there is little or no activity for an instrument, **RFQ** lets you broadcast a message to all users, requesting a quotation for that instrument.

You will automatically receive RFQ messages unless you disable specific instruments for RFQ alerts.

During periods of elevated system activity, RFQs are disabled (see section 4.3).

Step1 Choose ONE of these methods to issue an RFQ:

	Press the instrument number. Press the RFQ key.	
	Click on the instrument name. Click on RFQ in the trading panel.	
	Press the instrument number. Click on RFQ in the Trade menu.	

See Section 2 for details on operating GLOBEX.

In the Alerts window:

13:06 RFQ:PIBM3 f

If You Send a Request for Quote

1. The alert, **RFQ: Instrument Name/Service** is displayed in the Alerts window for 30 seconds before being replaced by the logo.
2. If the instrument's page is in the trading window at the time you send the RFQ (and you have not disabled the instrument for RFQ alerts), the instrument name is displayed in the Trading Window in red for 30 seconds or until a new Bid or Offer is received, whichever comes first.

If Another User Sends a Request for Quote

If you have not disabled the instrument for RFQ alerts, the alert is automatically displayed in the Alerts window for 30 seconds and, if the instrument's page is in the Trading window at the time the RFQ is received at your keystation, the instrument name is displayed in the Trading window red for 30 seconds or until a new Bid or Offer is received, whichever comes first.

Section 6.4.1, **Instrument Parameters**, describes how to enable/disable instruments for RFQ alerts.

View RFQs

View RFQs lets you take action on an RFQ received at your keystation.

The View RFQs window lists up to 50 of the most recent RFQs received since you logged in and shows the 9 most recent. When you select an RFQ from the list, you display the custom or system page that contains the instrument, as well as the Bid/Ask dialog box for the instrument. The window is available as long as at least one Service is logged in.

Step 1 To show the View RFQs window, choose ONE of these methods:

Press the **VIEW RFQs** key.

Click on **VIEW RFQs** in the Trade menu.

See Section 2 for details on operating GLOBEX.

VIEW RFQs - AUTO		
13:06	PIBMS	f
13:06	TYZ3	m
13:06	EDU3VP9600	m
13:05	JYM3	m
13:05	TYZ3	m
13:05	KWNU3	f
13:05	PIBMS	f
13:05	EDU3VP9600	m
13:04	EDU3	m

Step 2 The procedure:

The View RFQs window shows the most recent RFQs in descending time order. The most recent appears in the command button (found under the title bar) and is highlighted at the top of the list. When you select another RFQ, it displays on the command button. When there are more RFQs than can display, scroll bars appear.

Acting on an RFQ

Using the mouse:

Select an RFQ, then select the command button

OR

Double-click on the RFQ.

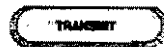
Using the keyboard:

Select an RFQ, press to activate the command button, press

OR

OR

Select an RFQ, press or



Step 3 The result:

1. The custom or system page containing the instrument is displayed in the trading window with the instrument selected.
2. The Bid/Ask dialog box for the selected RFQ instrument is displayed. Enter your order(s). When you exit from the dialog box, the Trading window reverts to the original page(s) with the original instrument selected. The RFQ window remains visible.

How the RFQ List Works

RFQs are first displayed in the Alerts window and then in the View RFQs window. The time stamp corresponds to the alert's posting. When you first log in, the View RFQs window is hidden. You can choose to view or hide it.

To use the View RFQs window ...

Whether hidden or visible, the window collects RFQs for instruments that are

- enabled to receive RFQs (Section 6.4)

AND

- on a logged-in Service.

The window is blank if your keystation has not received any RFQs. When RFQs in the list exceed 50, the oldest RFQ (at the bottom of the list) is removed.

Activating the View RFQs Window


- Use the keyboard or mouse to display the window.

OR

- Click in the RFQ list when it is displayed

OR

TRADE TILE

- Press  to activate the various windows and Command Line, in rotation, until the View RFQs window is activated.

Hiding the View RFQs Window

To hide the RFQ window, click the System Menu Box in the upper-left corner of the window. Choose Close in the System menu. With the


SYS MENU

keyboard, press  with focus in the View RFQs window to display the System menu.

Selection Modes

While the RFQ window is visible, two selection modes are possible:


Automatic


Whenever you first show the RFQ window or activate it by pressing ,

TRADE TILE

"Auto" in the title bar indicates that the window is in automatic selection mode. In this mode, when the keystation receives a new RFQ, it displays it in the command

button. The list scrolls in order to display the new RFQ at the top of the list. The advantage to automatic mode is that the most recent RFQ is always visible for you to immediately act upon.

When you deactivate the RFQ window by clicking  TRADE TILE

in the trading window, pressing , or acting on an RFQ, the window always returns to automatic selection mode.

Manual

In manual mode, a new RFQ is still added at the top of the list, but automatic selection and display are disabled. Any RFQ you have selected remains selected and shown in the command button; if the selected RFQ is at the end of the list, it may scroll out of the display. The advantage to manual mode is that it maintains your current selection; you can either take action on the selected RFQ or select another in the list.

Switching between the two modes

There are three ways to switch, using the mouse:

- Select an RFQ (left mouse button) to switch to **manual** selection mode.
- Click in the list with the right mouse button to switch between **automatic** and **manual** modes.
- Click in the control box in the upper left corner of the RFQ window and select **Mode** in the window menu. This toggles between the two selection modes.


Using the keyboard:

1. While focus is in the RFQ window, press any

 arrow key or  to switch to manual selection mode.

To use the View RFQs window ...

SYS MENU

2. Press  to show the RFQ window menu; select **Mode**. This toggles between the two selection modes.

Selecting an RFQ



Using the mouse:

Use the scroll bar to move through the list; click on an RFQ.

Using the keyboard:

Use arrow keys to move the selection through the list.

OR

Use  and  to scroll the list without moving the selection. Once you page to the part of the list showing the RFQ you want to select, use arrow keys to move the selection to the RFQ.

Automatic selection

When the window is in automatic selection mode, the most recent RFQ is selected.

Moving the RFQ Window

Using the mouse


- Click anywhere in the title bar of the window.

The mouse pointer changes to .

- Move the mouse pointer anywhere on the screen. Then click the mouse button again to place the window.

Using the keyboard:

SYS MENU

- Press the  with focus in the window to display the System menu. Highlight Move and

press .

- Use the arrow keys to move the pointer and

press .

Effects on the Display of Acting on RFQ

- The keystation searches for the RFQ instrument in the current display, then custom pages, then system pages. The page containing the instrument replaces the current display.
- If the page containing the RFQ instrument is in the current one-up or two-up display, the instrument is selected.
- If the page containing the RFQ instrument is not in the current display, the correct page replaces either a one-up or two-up display.
- Whether the current display shows the normal, net positions, or statistics view, the replacement page containing the RFQ instrument retains that view.
- When you log out from the last Service, the View RFQs window is cleared and hidden.

To use the View RFQs window ...

Warnings

The keystation displays a message box for these reasons:

- You are not permissioned to act on an RFQ.
 - The instrument you are acting on is closed.
 - The Service is not available to act on an RFQ.
 - The Service is waiting for a response from the Host.
- If your password has expired, the Change Password dialog box is displayed.
 - You are moving the window and it will cover instruments in the Trading window (see Section 10.7).
 - If you are currently signed out of a Service, the Sign-In/Out dialog box is displayed.

7.9 Display Book

For each instrument, you can display, in a pop-up window, the best price levels and quantities for open Bids and Offers. You can display one to five levels of prices. The book's title bar includes the Exchange identifier, instrument name, last trade price or Settle-Last, and time of last trade.

Book information is available only after trading opens for an instrument.

You can display up to 10 books simultaneously.

To make use of the book, you need to know:

To display the book, choose **ONE** of these methods:

Method 1: Press the instrument number. Press the **BOOK** key.

Method 2: Click on the instrument name; click on **BOOK** in the trading panel.

Method 3: Press the instrument number; click on **BOOK** in the Trade menu.

See Section 2 for information on selecting instruments and functions.

- How to switch between the book and the trading window.
- How to move the book window.
- How to size the book window.
- How to update the book.
- How to close the book.

Note: If communication is lost or you log out of the Service owning the instrument whose book is displayed, the book is removed from the screen. The length of the list is based on the policies of each GLOBEX Partner Exchange.

FPIBH4 9431B @ 14:54					
Bid	Px	Qty	Offer	Px	Qty
9431		1			
9430		1			
9429		1			
9427		1			

To display the book (cont'd)...


Initially, the system places the book in the upper-right corner of the trading window. Blank positions in the book indicate that the system contains orders at fewer than five price levels. Keyboard input is still directed at the Trading window.

The time of last trade in the book's title bar is only accurate if the Service is downloaded at the time the trade occurs. The time of trades that occur before you log in will not be displayed in the title bar. If you perform a normal logout and then log in, the time of last trade is maintained and displayed accurately.


Selecting a Book Window

If you have more than one book in the display, the windows overlap.

NEXT BOOK

Press  to activate another book window. The shaded title bar indicates it is active.

NEXT BOOK

Repeatedly pressing  activates one book at a time, in the order in which you displayed them.


Using the mouse, you can click on the column heading line to activate any book.

TRADE TILE

To return to other activities, press  or click in the Trading window.

Displaying the Book Menu

SYS MENU

After activating the book, press  or click on the System Control box in the upper left corner of the book. The menu allows you to move, update, close, grow, shrink, or exit. To execute an option and redisplay the book, either move the highlight


to an option and press  or

, or click on the option.

Select **Exit Menu** to return to the book.



Moving the Book

1. Click anywhere in the title bar of a book. The mouse pointer changes to .
2. Move the mouse pointer anywhere on the screen. Then click the mouse button again to place the book.

Using the keyboard

SYS MENU

1. Press  to display the System menu.

Highlight Move and press .

2. Use the arrow keys to move the pointer and




press .

Sizing the Book

- Click the plus and minus buttons in a title bar until the window is the desired size.
- Or
- Click the System Menu box in the title bar. The popup System menu displays. Click Grow or Shrink in the System menu to increase or decrease the window size. Repeat until the window is the desired size.

Or

SYS MENU

- With the keyboard, press  when focus is in the Book window to display the System menu. Use the  or  to highlight

Grow or Shrink. Press . Repeat until the window is the desired size.

To display the book (cont'd)...

Changing the Number of Levels

Changing the vertical size also changes the number of levels of entries displayed.

Updating the Book

The system updates the Bid and Ask markets and the Last price/time in each displayed book, every 10 seconds. You can request an immediate update.

Select **Update** in the book System menu or click on the Bid line in the book window. If a book is ac-

tive, you can press . The book is redisplayed with any available updates.

Closing the Book

Select **Close** in the System menu or double-click in the System Control Box. The book disappears.

Drop Book Mode

When Host Broadcast activity for an instrument becomes high, the Host modifies the frequency and type of instrument update to Drop Book or


Snapshot mode, and maintaining the Book data at the keystation is discontinued. The best Bid and Offer and the Last are always updated but not always the quantity (see Section 4.3). Since the book display is updated every 10 seconds, you may not notice the lack of updates immediately. When Host activity returns to normal, book updates resume. (When the market quote separator returns to green from white, click on the Update Menu selector for immediate update.)

Note: The depth of the book display is controlled by the policies of each GLOBEX Partner Exchange.


7.10 Hold Open Orders


Hold is used to place a selected open order on hold, leaving it in GLOBEX but temporarily removing it from the market. Placing an order on hold will result in a loss of position in the Standing Order Book, and therefore, the market.

Step 1 To display the dialog box, choose **ONE** of these methods:




Press the **HOLD** key.





Click on **HOLD** in the Modify menu.



See Section 2 for information on selecting instruments and functions.

Open orders list.

HOLD OPEN ORDERS							
Service List							
GLOBEX America							
Order	B/S	Instrument	Price	Qty	Qual	Type	Account
018-4	ASK	MINSTRO002	9442	1		LMT	1123123
018-5	BID	mEDM4-EDM4	24	1		LMT	1123123
018-6	BID	mEDM4-EDU4	22	1		LMT	1123123
018-7	BID	mEDM4	9425	1		LMT	1123123
018-8	ASK	mEDU3	9440	1		LMT	1123123
018-9	ASK	mJVN4	8840	1		LMT	1123123
018-10	BID	mJVZ3	8811	1		LMT	1123123
018-12	ASK	mJVU3	8790	1		LMT	1123123
018-14	BID	mBCN4	36960	1		LMT	1123123
018-15	BID	mDM23 P0630	0	1		LMT	1123123

Number of entries: 11

PAGE BACK

PAGE FWD

QUIT

OK

Number of open orders.

To hold open orders ...

Step 2 *The procedure:*

When the dialog box appears, all open orders for the highlighted Service are listed by order number, identified as Bid or Ask, along with the price, quantity, order type, account number, and clearing information qualifier. (The list includes market maker and working orders.)

1. If necessary, select another Service to display your open orders on that Service.
2. Highlight the order you wish to place on hold.
3. Select **OK**. The dialog box is removed.

Step 3 *The result:*

If you place an order on hold, an "H" appears in place of the "x" in the trader quantity col-

umn. Remember that only the best Bid or Offer is shown.

In all cases, the display is updated to reflect the new market, now that your order(s) have been removed. For each held order, a message is displayed in the Trader Mailbox and included in the trade log and audit trail.

If an order has been **completely** matched before completion of a hold, you will receive a warning message that your order no longer exists; this means that the order was executed and it is too late to place it on hold.

It is possible for an order to **partially** match before completion of a hold. Check the Trader Mailbox for the quantity that was held.

The message below is displayed in the Trader Mailbox; it identifies the order placed on hold.

```

1CC-8      B-HLD   15  JYM3      8778      14:09:58
              OK-                12345      m

```


7.11 Release Held Orders

Release returns to the market an order previously placed on hold. GLOBEX repositions a released order in the market as if it were a new order in the system.

Step 1 To display the dialog box, choose **ONE** of these methods:

Press the **RELEASE** key.

Click on **RELEASE** in the Modify menu.

MODIFY
Release...

See Section 2 for information on selecting instruments and functions.

Held Orders list.

RELEASE HELD ORDERS

Service List
GLOBEX America

Order #	B/S	Instrument	Price	Qty	Qual	Type	Account
1CC-8	ASK	MJVM3	8778	5		LMJ	1234

Number of entries: 1

Number of held orders.

Note: If you have no open orders on hold: No Open Orders on Hold for Selected Service is displayed in the dialog box.

To release open orders...

Step 2 *The procedure:*

When the dialog box appears, all held orders for the highlighted Service are listed by order number and identified as Bid or Ask, along with the price, quantity, order type, account number, and clearing information qualifier.

1. If necessary, select another Service to display your held orders on that Service.
2. Highlight the order you wish to release.
3. Select **OK**. The dialog box is removed.

Step 3 *The result:*

If a single order was on hold, the "H" disappears from the trader quantity column. Released orders are repositioned in the market, and the display is updated to reflect the new market. For each released order, a message is displayed in the Trader Mailbox and included in the tradelog and audit trail.


The message displayed in the Trader Mailbox is shown below.

```
1CC-8      B-REL  15  JYM3      8778      14:10:52
              OK-                12345      m
```


7.12 Cancel Open Orders

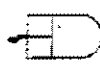
When you need to remove orders from the market, you can quickly cancel your choice of all orders, all Bids, all Offers, or selected Bids/Offer, for one Service at a time.

Step 1 To display the dialog box, choose **ONE** of these methods:



Press the **CANCEL ORDERS** key.






Double-click with the right mouse button anywhere in the trading window **except** the trader quote and quantity columns.

OR

Click on **CANCEL** in the menu bar.



See Section 2 for information on selecting instruments and functions.

Orders list.

Order selection check boxes.

CANCEL OPEN ORDERS

Service List

PAGE BACK

PAGE FWD

QUIT

OK

Order #	B/S	Instrument	Price	Qty	Qual	Type	Account
018-4	ASK	MINSTR002	9442	1		LMT	1123123
018-5	BID	MEDM4-EDM4	24	1		LMT	1123123
018-6	BID	MEDM4-EDU4	22	1		LMT	1123123
018-7	BID	MEDM4	9425	1		LMT	1123123
018-8	ASK	MEDU3	9440	1		LMT	1123123
018-9	ASK	MJVH4	8840	1		LMT	1123123
018-10	BID	MJVZ3	8811	1		LMT	1123123
018-12	ASK	MJVU3	8790	1		LMT	1123123
018-14	BID	MBCX4	36960	1		LMT	1123123
018-15	BID	MDMZ3 PD630	0	1		LMT	1123123

Number of entries selected: 0

All
 Bids
 Offers
 Selected

Notes: If you have no open orders on the highlighted Service or no open orders at all, a message box is displayed: **No Open Orders**. Select **OK** to acknowledge and remove message box.

The title of this dialog box, depending on the function from which you activated it, may also be **CANCEL MARKET MAKER OPEN ORDERS**.

To cancel open orders...

Step 2 The procedure:

When the dialog box opens, all orders (open and held) at the keystation on the highlighted Service are listed by order number and identified as Bid or Ask, along with the price, quantity, order type, account number, and clearing information qualifier. (The list includes market maker and working orders.) Cancel orders by category using the check boxes (when you choose a check box, it shows an X).

To cancel all orders:

1. Select the **All** check box; all orders in the list are highlighted.
2. Choose **OK**. After the Host acknowledges the cancel request, the remaining Service name is automatically selected. Select orders to cancel or quit the dialog box.

To cancel selected orders:

This is the default state of the dialog box.

1. Highlight the individual orders you wish to cancel. Using either the mouse or keyboard, you can highlight as many orders in the list as you want, before selecting **OK**. (Section 2.4.4 describes how to make multiple selections in a list.)
2. Select **OK**.

To cancel all Bids or all Offers:

1. Select either the **Bids** or **Offers** check box; all Bids (Offers) in the list are highlighted.
2. Select **OK**.

After the Host acknowledges the cancel request, the dialog box closes.

Step 3 The result:

In all cases, the display is updated to reflect the new market if the cancel affects the top of the book. If you cancelled selected orders or only one order, the Trader Mailbox shows a message for each order cancelled. If you cancelled all orders or all Bids/Offer, the mailbox displays **Cancelling Entries**, followed by **Cancel Entries Complete**. A message for each order cancelled is included in the tradelog and audit trail.

If an order **completely** matches before the cancel completes, you will receive a warning message that your order no longer exists; the order was executed and it is too late to cancel.

It is possible for an order to **partially** match before the cancel completes. If you cancelled one order, check the Trader Mailbox for the quantity cancelled; if you cancelled multiple orders, check your audit trail.

A sample cancel message is shown below.

```

100-19      CX-S   70  JYZ6      10632      14:44:38
              OK-                12345      b
  
```

7.13 Cancel Orders for Instrument

While **Cancel Orders** lets you cancel orders from the list of all orders in the keystation on a Service, **Cancel Orders for Instrument** lets you narrow the field by listing all orders for a **single** instrument.

Note: If there are no orders, a message box is displayed: **No Open Orders**; the **OK** button is already selected. Press **SPACEBAR**, or click on **OK** to remove the message box.

Step 1 To display the dialog box, choose **ONE** of these methods:

Press the instrument number. Press the **INSTRUMENT CANCEL** key. **INST CXL**

Right click in the instrument's trader quote or quantity column (in one-up view only) **OR** Click on the instrument name; click on **CANCEL** in the trading panel. **CANCEL**

Press the instrument number. Click on **CANCEL INSTRUMENT** in the Trade menu. **TRADE** Cancel Instrument...

See Section 2 for information on selecting instruments and functions.

CANCEL OPEN ORDERS for mWH0002

PAGE BACK PAGE FWD QUIT OK

Order #	B/S	Instrument	Price	Qty	Qual	Type	Account
1CC-21	BID	MDHHS	6190	50		LMI	1234
1CC-21	ASK	MDHHS	6192	50		LMI	1234
1CC-22	BID	MDHHS	6189	50		LMI	1234
1CC-22	ASK	MDHHS	6192	20			

Number of entries selected: 0

All
 Bids
 Offers
 Selected

Note: The title of this dialog box may also be **CANCEL BUY (SELL) WORKING ORDERS for XXX** or **CANCEL MARKET MAKER OPEN ORDERS for XXX**, depending on the function from which you activated it.

To cancel orders for an instrument...

The Procedure and Result steps are the same as for **Cancel Orders**, with the exception that in all cases, the dialog box closes after the keystation receives Host acknowledgement of the cancel request.

If an order **completely** matches before the cancel completes, you will receive a warning message that your order no longer exists; the order was executed and it is too late to cancel.

It is possible for an order to **partially** match before the cancel completes. If you cancelled one order, check the Trader Mailbox for the quantity cancelled; if you cancelled multiple orders, check your audit trail.

Additional information for mouse users:

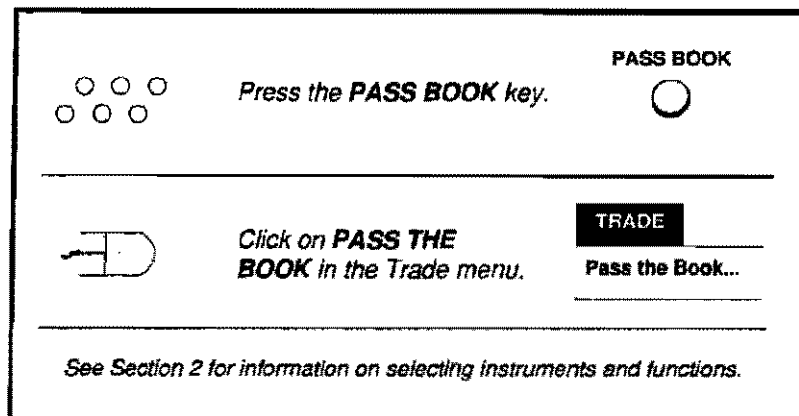
If the Trading window shows the statistics view (showing high and low values instead of the trader quote column), the right or left click still works.

However, if you have a two-up display, which shows only the market block of data for two pages, you cannot use the right click (there is no trader quote area on the screen). You can still use the mouse in the Trading Panel or Trade menu.

7.14 Passing the Book

There are two choices in this function. **Upload Orders** is used in three situations: to pass a GLOBEX open order file from one keystation to another, to recover open orders following a Host failure, and to upload orders from the RTH session into GLOBEX before the start of the ETH session.

Step 1 To display the dialog box, choose **ONE** of these methods:



You must have appropriate permissioning for the individual Service and instruments to complete this option successfully.

Extract Open Orders is normally performed at the end of the GLOBEX Session. This choice identifies open orders on a Service and creates an open order file on drive C of the keystation. You can transfer this file to the next Session or to another keystation. When you log out from each Service, it is recommended that you use **Extract Open Orders**. This creates the open order file, cancels all orders on the Service, and completes the logout. Order cancellation messages are printed in the audit trail. **Because Extract Open Orders cancels all orders, you should use it only at the end of the GLOBEX Session.**

PASSING THE BOOK			
Service List	Drive	<input checked="" type="radio"/> Upload Orders	
GLOBEX America	C:	<input type="radio"/> Extract Open Orders (Includes Create Open Order File, Cancel Open Orders and Logoff)	
File List			
E031310A.001	05-11-93 19:08		
		<input type="button" value="QUIT"/>	<input type="button" value="OK"/>

Upload Orders...

Step 2 *The procedure*

When the dialog box is displayed, the first Service in the list is highlighted and the **Upload Orders** radio button is selected. To upload an open order file from drive **C:** or from a diskette in drive **A:**

1. Select the Service on which you want to upload the open order file.
2. Select **A:** or **C:** in the drive list. The list of open order files on the selected drive for the selected Service are displayed in the file list. Filenames are listed in order by date/time the file was created. (Filenames are explained later in this section.)
3. Select the file you want to upload.
4. Select **OK**.

Step 3 *The result*

The keystation indicates whether each order has passed initial edit and validation by displaying a message that includes the order sequence number (**Entry record #(nnn) ACCEPTED**). Each order is then sent to the Host.

An order is rejected during the upload if it does not belong to the selected Service or it involves an instrument for which you are not permitted; a warning is displayed (**ORDER # xxx Rejected: Unauthorized Exchange Id**) and a "rejected" message is added to the audit trail. Timed orders and orders with a More quantity greater than zero are also rejected. "Accepted" messages do **not** indicate the orders have been successfully sent to the appropriate Service's Host and/or positioned in the Service's Standing Order Book. Order positioning messages are displayed as usual, in the mailbox.

During the upload, the **QUIT** button is relabeled **ABORT**; selecting this will halt the upload process. The keystation does not send any more orders to the Host. Any orders already accepted and positioned may match as usual, unless you cancel them individually. A message **Aborted after entry record #x** is displayed. If you abort, be sure to cancel all uploaded orders before restarting the upload, to prevent creating duplicate orders.

When you upload orders, the number of orders in the upload file is added to the number of orders already in the keystation. If this total is greater than 500, the upload will be aborted (no orders will be uploaded). You will then need to cancel some of the orders at the keystation or remove orders from the upload file before trying the upload again.

Extract Open Orders...

Step 2 *The procedure*

Select **Extract Open Orders** in the dialog box. Select the **Service** from which you want to log out. Create an open order file and choose **OK**.

Follow this procedure in all cases except an unannounced shutdown; in such a case, refer to the emergency procedures in the yellow pages of this manual.

Step 3 *The result*

The dialog box is removed. **Writing Orders (Service code)** is displayed in the Alerts window. Once all orders have been cancelled and all open order records written, you are logged out.

If you are still logged in to another **Service**, you can continue trading. Any multi-**Service** dialog box will not contain this **Service** name until the open order file is complete.

The open order file includes all open Bid and Offer orders for only one **Service**. The file-name identifies the origin of the file, Julian date, **Service** code, and file number:

xOy <Julian Date><Service code>.<nnn>, where **x** is

- R** if the file was automatically created during Recovery following loss of service;
- E** if the file was created by Extract Open Orders;
- O** if the file was created through the Offline Utilities;

O is a fixed character

y is the last digit of the year the file was created;

Service code is 'GA' or 'GE';

nnn is the file number.

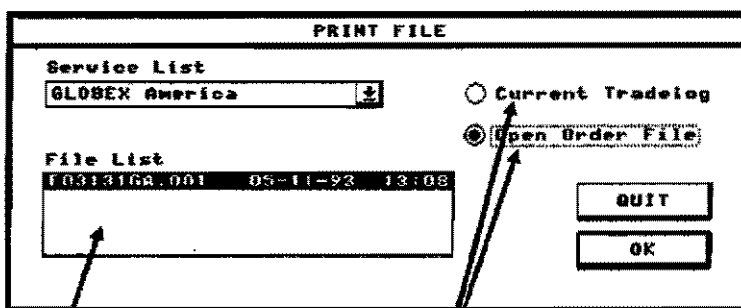
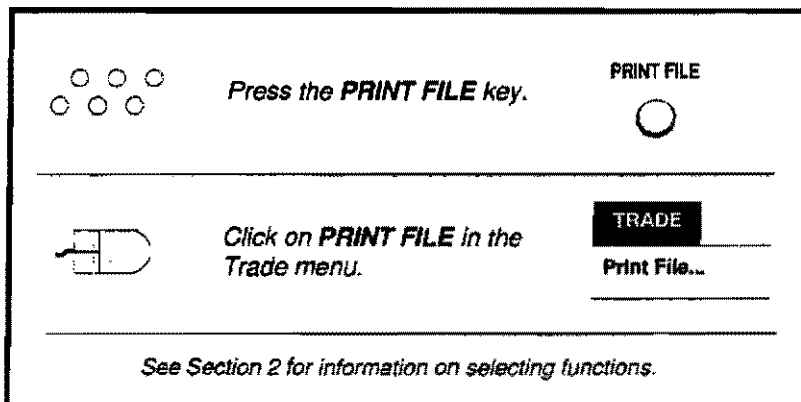
At any time, the keystation hard disk may contain up to five open order files per **Service**. The oldest of the five files is deleted before a new file is created.

7.15 Print File

At any time during a trading session, you can print an open order file or the current day's tradelog at the audit trail printer. Since this is done as a background task, trading continues without interruption; however, audit trail printing is delayed.

It is useful to print the current day's tradelog before logging out, since information sent to a printer is backlogged if the printer is off-line or out of paper, you can recover information lost due to a printer problem that was not perceived by the keystation.

Step 1 To display the list of files, choose ONE of these methods:



File list for orders

File type list selector

Step 2 The procedure:

1. The first Service in the list is highlighted when the dialog box appears. Select the Service whose tradelog or open order file you want to print.
2. To print the current tradelog, select the **Current Tradelog** selector button, then select **OK**.
3. To print an open order file, select the **Open Order File** selector button, then select a filename from the displayed list (see section 7.14, Passing the Book, for an explanation of filename structure). Select **OK**.

Step 3 The result:

The dialog box remains on view while the system prepares to print. The keystation delays audit trail printing until this function completes.

8 Special Trade Functions

8.1. Overview

The section covers keystation functions that make order entry quicker and easier.

- A **clearing key** represents account and other clearing information that will be used for an order. Selecting a clearing key in an order entry dialog box is a quick way of entering clearing information.
- The **market maker** order entry format lets you enter Bids and Offers with minimal keystrokes. Market maker orders can be entered for a single instrument or for one of a number of instruments displayed on a market maker page. The instruments on a market maker page are chosen and stored in a definition of the page.
- **Buy and sell working orders** allow you to specify a total quantity and enter price and quantity with minimal keystrokes.

8.2 Using these Functions at the Keystation

8.2.1 Menus

The Special Trade menu includes a number of the functions described in this section. The menu includes choices for Market Maker and Working Order functions. This section describes these functions, and, in addition, describes functions on the Display and Parameters menus.

Special Trade Menu

- **Market Maker** - Display a single instrument in the Market Maker dialog box format.
- **Buy Working Order** - Enter a buy Working Order, specifying a total quantity and entering price and quantity with minimal keystrokes.
- **Sell Working Order** - Enter a sell Working Order, specifying a total quantity and entering price and quantity with minimal keystrokes.

Display Menu

- **Market Maker Page** - Display the first market maker page, showing up to five instruments in the special market maker order entry format.

Parameters Menu

- **Clearing Records (under GLOBEX Parameters)** - Create, modify, or delete clearing key information for order entry, working orders, and market maker orders.
- **Market Maker Page (under GLOBEX Parameters)** - Create, modify, or delete instruments to be displayed on a market maker page. Up to five market maker pages can be stored in a parameters file.

8.2.2 Trading Panel

Command buttons in the Trading Panel allow you to enter market maker orders, buy working orders, or sell working orders for a single selected instrument.

8.2.3 Keyboard

Hard keys on the keyboard for these functions include the **REFRESH** key, which allows you to maintain your active position in the market by renewing an order quantity.

Soft keys used for these functions include:

<p>MKT MKR ○</p>	Enters Market Maker orders for a single selected instrument.
<p>FIRST MKT MKR ○</p>	Displays the first Market Maker page.
<p>BUY WO ○</p>	Enters a Buy Working Order.
<p>SELL WO ○</p>	Enters a Sell Working Order

8.2.4 Permissions

Instrument Permissions When you select an instrument for which you are not permitted, the single **Market Maker**, **Buy Working Order**, and **Sell Working Order** functions are grayed on the Special Trade menu. If you are not permitted for an instrument on a market maker page, the instrument's market columns are displayed, but the trader portions are blank.

Function Permissions If you are not permitted for both **Bid** and **Offer**, **Market Maker** is grayed on the Special Trade menu; if not permitted for **Bid**, **Buy Working Order** is grayed; if not permitted for **Offer**, **Sell Working Order** is grayed. If you are not permitted for either **Bid** and **Offer** on the Market Maker page, you can still enter orders, but they will be rejected.

8.2.5 Keystation Display

For both market maker and working orders, when you have orders whose price is the best on either side of the market ("on market"), the corresponding Market Quote price is highlighted in a distinct color. The prices of your orders are compared to the best market prices and this "onmarket" status indicator is turned on and off accordingly.

The Market Maker (single instrument) and Working Order dialog boxes show market information in the "one-up" statistics view (see Figure 1.13), replacing any two-up view in the trading window with a one-up statistics view. The dialog box is displayed over the selected instrument's line and also covers the next instrument line. Quitting a dialog box restores the original Trading window display.

The Market Maker page, which can include up to five instruments, is a single dialog box that replaces the Trading window display. You can enter orders for various instruments without closing the dialog box. Quitting the Market Maker page restores the original Trading window display.

8.3 Clearing Information for Special Trade Functions

8.3.1 Create/Modify Clearing Data (Defaults)

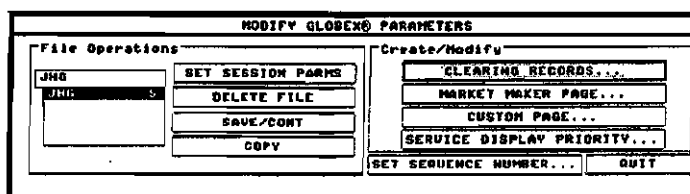
Each GLOBEX parameter file can include a database of up to 125 sets of clearing information to be used for order entry, market maker, and/or working orders. Each clearing information record is referenced by a clearing "key" for easy access without the need to memorize or enter an entire account number. The names of clearing keys are listed in the **clearing key** list box in the various order entry dialog boxes.

Create or Modify clearing key data in the Create/Modify Clearing Data Dialog Box shown in Figure 8.1.

Section 6.3, **Modify GLOBEX Parameters**, explains how to display the initial dialog box and create/modify a parameter file. You cannot modify clearing records without first selecting a GLOBEX parameter file.

Step 1 To display the Create/Modify Clearing Data dialog box:

1. Choose GLOBEX on the Parameters menu. In the Modify GLOBEX Parameters dialog box, select a parameter file (or type its name in the text box).
2. Select **Clearing Records**.



See Sections 2 and 6 for more information.

When you complete the clearing key function or quit the dialog box, you return to the Modify GLOBEX Parameters dialog box, where you save the new or modified parameter file.

Figure 8.1 Create/Modify Clearing Data Dialog Box

To create/modify clearing data...

Step 2 *The procedure:*

Adding account/clearing data

When you display the dialog box, the cursor is in the **clearing key** combo box.

1. Type a new clearing key name to identify a new account; the key can be from 1 to 10 characters, letters and/or numbers, and can contain spaces within the key name itself. A blank clearing key, **Unassigned**, or **<Default>**, are invalid.
2. Move to each field and enter the account number and clearing data. (See Section 4.4.2 for information on this data.)

Viewing account/clearing data

Select the desired clearing key in the Clearing Key list or type it into the combo box. If you type the name, the data associated with that key is displayed only when you move to another item in the dialog box.

Modifying account/clearing data

Select the clearing key in the Clearing Key list. Use the mouse or the **TAB** key to move to the fields you wish to change. Type the new information.

Saving new or modified account/clearing data

1. Select **SAVE/CONT** to save the displayed account/clearing information and continue to add or change data for clearing keys in the same parameter file.
2. Select **SAVE/OK** to save the displayed account/clearing information and return to the Modify GLOBEX Parameters dialog box.

Selecting either **SAVE** command button causes the keystation to validate the currently displayed clearing information for the clearing key you typed into the combo box.

- If the clearing key name matches an existing key, **SAVE** will update the clearing key. A message displays, allowing you to quit without saving new data.
 - If you typed a new key name, a status message, **Add Clearing Key XXX**, lets you know that **SAVE** will add a new clearing key to the database.
3. The Modify GLOBEX Parameters dialog box is still open; the **SAVE/CONT** button is highlighted, and a message reminds you to save changes to the parameter file. The message remains until you save the changes. Refer to Section 6.3.

Step 3 *The result:*

When you select either **SAVE/CONT** or **SAVE/OK**, the keystation validates each data item against both GE and GA Services. If the validation is **successful for both Services**, the clearing information is accepted and will be available to instruments owned by either Service.

If the clearing key already exists, a small message box is displayed to confirm: **Clearing Key XXX already exists. Modify this Clearing Key?** Select **NO** to return to the Create/Modify dialog box without updating any clearing record. Select **YES** to overwrite any existing clearing key data with the new data. (If the message box was displayed after you selected **SAVE/CONT**, you return to the Create/Modify dialog box; if you selected **SAVE/OK**, you return to the Modify GLOBEX Parameters dialog box.)

To create/modify clearing data...

If validation of new account data is **successful for only one Service**, a warning message is displayed: **Validation error for Service xxx – Save?** and the cursor is placed in the invalid area. If modified clearing data is invalid for either Service, the system determines whether the clearing key is currently used on a market maker page. If it is and the key is associated with an instrument owned by the Service which doesn't have a "successful" validation with the new data, the change is rejected and an error message is displayed. Otherwise, a warning

message tells you that the data can be used for only one Service.

If the warning is displayed, selecting **SAVE** again accepts the clearing information as is; it will only be available to instruments owned by the Service with the successful validation.

If the validation **fails for both Services**, an error message is displayed and the cursor automatically returns to the **account** box; you must correct the clearing data to allow use by any Service for which you are permitted.

Deleting an account...

Step 2 *The procedure:*

Deleting an account

1. Select the desired clearing key or type its name in the clearing key field.
2. Select **DELETE**.

Step 3 *The result:*

If the clearing key **does not exist**, a warning message is displayed.

If the clearing key has been **assigned to an instrument** currently on a market maker page, a message is displayed in red: **Key found on Market Maker page – Delete anyway?** Select **DELETE** to remove all clearing key references. Select **QUIT** if you choose not to delete. When you select

DELETE again, the highlighted clearing key is deleted from the parameter file and any instrument residing on a market maker page that was associated with the clearing key information will now use the default account number set in Service Parameters (Section 6.4.2). The clearing data fields currently on-screen are blanked.

If the clearing key exists but is **not used on a market maker page**, a message is displayed in red: **Press Delete again if you are sure you want to delete.** When you select **DELETE** again, the clearing key is removed from the list box and the clearing data fields currently on-screen are blanked.

Since you have now altered your parameter file, select **SAVE/OK** and save changes to the file as described in Section 6.3.

8.3.2 Clearing Data

This procedure lets you select predefined account/clearing data or enter new data for working or market maker orders. Whether or not this dialog box is displayed depends on circumstances as described below:

Situation 1

When you select **Buy Working Order**, **Sell Working Order**, or **Market Maker** on the Special Trade menu, in the Trading Panel, or by pressing a soft key, the Clearing Data dialog box (Figure 8.2) displays. The cursor is in the **Clearing Key** drop-down list box, which shows the <DEFAULT> key designation; fields contain any default information (origin and CTI, if entered previously; account number if set in Service parameters). The **Clearing Key** list includes only valid clearing keys for the selected instrument's Service. You enter clearing information **before** you enter order information.

Situation 2

If you select an instrument on a market maker page and that instrument **does not have** a valid pre-assigned clearing key, the Clearing Data dialog box is displayed as described above.

In all cases, individual fields are enabled/disabled based on the Service to which the instrument belongs.

Situation 3

If the instrument you select on a market maker page **has** a valid pre-assigned clearing key (see Section 8.4.1), the Clearing Data dialog box is **not** displayed unless you select the **CLR** command button at the end of the instrument line, or the assigned clearing key is invalid.

Using a Clearing Key

Selecting a clearing key displays the account number and clearing information associated with that key.

1. Enter or modify the clearing information. You may not be able to alter clearing fields that are dependent on others and/or the Service that owns the instrument.
2. When you are done, select **OK**.

The keystation validates each item. The cursor returns to the field with an error. When all information is correct, the clearing key and associated clearing information remain in effect for all orders in the selected instrument until you quit the dialog box.

When you quit any dialog box, the assigned clearing key is removed. When you quit the market maker page or display another page by pressing **PAGE FWD** or **PAGE BACK**, all overridden clearing data is restored.

Figure 8.2 Clearing Data Dialog Box

8.4 Market Maker Orders

Market maker orders are entered from the Market Maker dialog box, which displays an instrument line in a special format that lets you enter **bids** and **offers** with minimal keystrokes. You can display a single instrument in this format (Market Maker dialog box) or arrange five instruments at a time in this format (market maker page) in the Trading window.

The single Market Maker dialog box is a white rectangle outlining two lines in the Trading window. The first line is the statistics view of the market portion of the instrument line (See Figure 1.13), which is updated as it would be in the standard Trading window.

The second line displays only trader information: the bid and offer sides of the active market maker spread and your current position for the instrument. If you do not have active market maker orders, this line shows the default values defined below. To display the Market Maker Dialog Box, the instrument spacing in the Trading window must be 1 1/2 lines (see Section 10.6). The system will automatically change the spacing when necessary.

Step 1 To display the dialog box, choose **ONE** of these methods:

Method 1: Press the instrument number. Press the **MARKET MAKER** key. **MKT MKR**

Method 2: Click on the instrument name. Click on **MARKET MAKER** in the trading panel. **MARKET MAKER**

Method 3: Press the instrument number. Click on **MARKET MAKER** in the Special Trade menu. **SpTRADE** **MARKET MAKER...**

See Section 2 for more information.

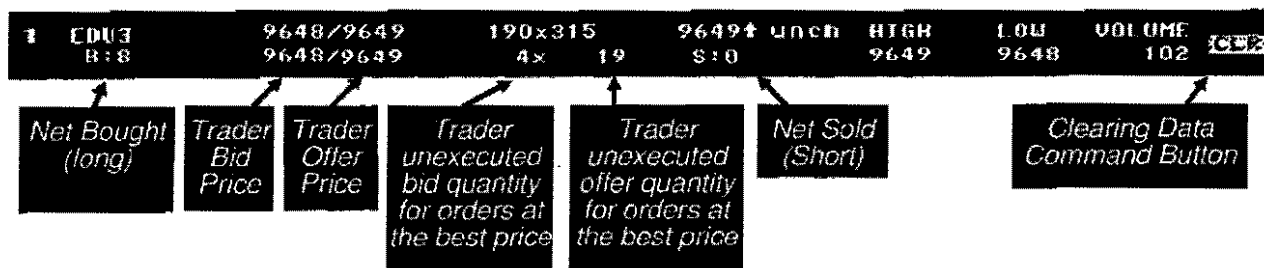


Figure 8.3 Market Maker Dialog Box

To enter a market maker order...

The keystation indicates the current state of areas in the market maker dialog box using a variety of foreground/background colors that depend on the ongoing activity. These areas and colors are specified in the table below. The text that follows often refers to this table.

Price and Quantity Colors—Market Maker Orders					
Order State	Screen Area	Bid Price	Bid Qty	Offer Price	Offer Qty
Market line - not "On-Market"	<i>foreground</i>	GREEN	GREEN	GREEN	GREEN
	<i>background</i>	BLACK	BLACK	BLACK	BLACK
Market Line - "On-Market"	<i>foreground</i>	WHITE	GREEN	WHITE	GREEN
	<i>background</i>	BLUE	BLACK	RED	BLACK
Order entry line - active (open market maker orders)	<i>foreground</i>	WHITE	WHITE	WHITE	WHITE
	<i>background</i>	BLUE	BLUE	RED	RED
Order entry line - not active (no market maker open orders)	<i>foreground</i>	CYAN	CYAN	RED	RED
	<i>background</i>	BLACK	BLACK	BLACK	BLACK
Cancelling/Wait	<i>foreground</i>	YELLOW	YELLOW	YELLOW	YELLOW
	<i>background</i>	BLACK	BLACK	BLACK	BLACK
Field being changed or entire field highlighted - cursor in price or quantity field	<i>foreground</i>	WHITE	WHITE	WHITE	WHITE
	<i>background</i>	BLACK	BLACK	BLACK	BLACK
Active (open market maker orders) with adjusted qty amount - QTY FIELD ONLY.	<i>foreground</i>		BLACK		BLACK
	<i>background</i>		WHITE		WHITE

Note: Cyan is blue-green or aqua.

Step 2 The procedure:

Note on default values: You can establish default **order quantity**, **increment size**, and **bid/ask spread** and **precedence** using the Instrument Parameters function (Section 6.4.1) and **account number** using Service Parameters (Section 6.4.2). The Clearing Data dialog box shows default values for **CTI** and **origin** only if you entered this information for a previous order.

Initial Bid/Offer Prices

Initial prices are determined according to the availability of the following values, considered in this order:

- If you have active Bid and Offer market maker orders, your best Bid and Offer prices.
- If you have active market maker orders for only one side of the market, your best price for that side. The **offer** side would be the **best active bid price - bid/ask spread**. The **bid** side would be the **best active offer price - bid/ask spread**. (The spread is established using the Instrument Parameters function, Section 6.4.1.)

To enter a market maker order...

- If you have no active market maker orders, the keystation calculates the default bid/ask spread based on (in this order) the Last, the settlement price, the best bid, the best offer, or else the fields are blank. The first available value in this list is used as the midpoint between the bid and offer, which are separated by the default spread value.
- If you have multiple orders for an instrument, an asterisk (*) is displayed left of the bid or right of the offer price. Market maker orders on hold are excluded from this processing.

Examples:

If the instrument has a default spread of 4 and there is a Last of 9204, the **bid** is 9202 and the **offer** is 9206.

If the spread is 5 and there is a Last of 9204, a bid precedence causes the bid to be closer to the Last, or an offer precedence causes the offer to be closer to the Last. In this example, with an offer precedence, the **bid** is 9201 and the **offer** is 9206. (If you did not specify precedence, bid is the default.)

If the default prices are 0, the price fields are blank.

The on-market indicator in a Market Maker dialog box is displayed when you have a market maker order that has the best price among all orders in the market. (See the price and quantity colors table.)

Initial Bid/Offer Quantities

Initial quantities are determined according to the availability of the following values, considered in this order:

- If you have active bid and offer market maker orders, the active quantities from your best orders.

- If you have active market maker orders for only one side of the market, the quantity from the best order on that side; the keystation displays the instrument's default order quantity for the other side.
- If you have no active market maker orders, the keystation displays the instrument's default order quantities for both sides of the market.
- The minimum system quantity for the instrument.

1. Enter clearing information

The Clearing Data dialog box (Figure 8.2) displays first. See Section 8.3.2.

This clearing data will apply to all market maker orders you enter for the selected instrument. If you select another instrument or a market maker page, the clearing data will no longer be in effect.

2. Enter order information

When the selected instrument is displayed in Market Maker dialog box format, all menu items, hard keys, and soft keys are disabled, except for **QUIT**, **REFRESH**, and custom soft keys. Use the mouse or TAB to move from field to field. TAB moves the insertion point in this order: **Trader Bid Price**, **Trader Offer Price**, **Trader Bid Quantity**, **Trader Offer Quantity**, **CLR**, then back to **Trader Bid Price**.

Bid and offer prices

It is possible to upload market maker orders at multiple prices, and this is indicated by asterisks in the initial display. However, the keystation allows you to maintain only a single bid and single offer price. If you submit a price change to the keystation, the keystation first validates the price, then cancels any active or held market maker orders on that side of the market that are not at the

To enter a market maker order...

new price; orders on the other side are unchanged. If you submit price changes for both sides of the market, the keystation cancels all existing orders that are not at the new price. (See table for display colors.)

Important background:

- When you alter a price or quantity using the arrow keys as described below, it is automatically submitted to the keystation for validation.
- When you alter a price or quantity by typing a new value into the selected price or quantity field, you have the option of cancelling the change by pressing **QUIT** to restore the pre-change value before you move out of the field. To submit the typed price or quantity to the keystation for validation, you can **TAB** to another field, click on another field, or press **TRANSMIT** or **RETURN**.

If you have submitted both price and quantity values to the keystation, press **RETURN** or **TRANSMIT**, regardless of cursor position, to enter the order into the system.

There are three ways to change prices:

- If you cannot see the insertion point in the dialog box or if **CLR** is highlighted, pressing **UP/DOWN ARROW** alters both prices at once by the minimum tick size. Arrow keys have no effect if the price field is blank or if the price is in an incorrect format. You can also select a single price and press **UP/DOWN ARROW** to change it.
- Press **RIGHT/LEFT ARROW** without selecting a price; this expands/narrows the spread by the minimum tick size using existing default rules for the spread, altering the side that is closer to the Last, depending on precedence.

- Select the price and type a new price.

To select a price:

- **TAB** to it (the bid price moves to the left margin of the price field, the offer price remains in position; for either, the insertion point is located at the right edge of the field) OR
- Click on it with the left mouse button; the insertion point is positioned by the mouse pointer.

Bid and offer quantities

There are two ways to change quantities:

- Select the quantity and press **UP/DOWN ARROW**; the quantity increases/decreases by the default increment for the instrument. (The new quantity is automatically submitted to the keystation for validation.)
- Select the quantity and type a new quantity.

To select a quantity:

- **TAB** to it (the bid quantity moves to the left margin of the quantity field, the offer quantity remains in position; for either, the vertical cursor is located at the right edge of the field) OR
- Click on it with the left mouse button; the cursor is positioned by the mouse pointer.

To trade a one-sided market, set the quantity on the other side to 0. If you have active orders, a quantity adjustment is displayed as described later in this section. In these circumstances, the **RIGHT/LEFT ARROW** keys for changing prices are disabled.

To enter a market maker order...

3. Alter initial clearing information if needed

Before entering price and quantity information, you entered clearing information in the Clearing Data dialog box. You can alter that information by selecting CLR, at the far right of the Market Maker dialog box, to display the Clearing Data dialog box.

Once you select a new clearing key or otherwise change the clearing data, that information remains in effect for all subsequent orders you enter for the selected instrument.

4. Enter the order into the system

Press **RETURN** or **TRANSMIT**, regardless of the position of the cursor, to submit the market maker order(s) to the keystation. The insertion point disappears after you submit an order.

(This completes the general procedure for entering a market maker order. Details are presented below.)

Quantity adjustment display

As explained earlier, you can change a quantity in two ways:

- Select the quantity and press **UP/DOWN ARROW**;
- Select the quantity, type the new quantity, then either select another field or press **RETURN**.

When you change either or both quantities and already have active market maker orders on that side of the market, the keystation treats the change as an **adjustment** (see table for display colors). The quantity adjustment is the difference between the new quantity and the original active quantity.

Example of an increase: You have active market maker orders on both sides of the

market and your current quantities are **7 x 15**. If you increase the bid quantity to **15**, the keystation validates the new quantity and briefly displays an adjustment of **+8 x 15**, and automatically enters an order for the adjustment quantity. This increases the active quantity. **Order priority is retained for the original order.**

Example of a decrease: Using the active quantities of **7 x 15**, if you decrease the offer quantity to **12**, the keystation validates the new quantity, briefly displays an adjustment of **7 x -3**, and automatically cancels orders sufficient to reduce the active offer quantity to 12. Cancellation begins with the most recent order; if it is necessary to cancel only part of an order's quantity, the keystation modifies that order, submitting a cancel of the original order and then a replacement for the original quantity minus the adjustment. **This order loses its original priority.**

If you change a quantity and have no active market maker orders, the new quantity is displayed without adjustment and the order state (as shown by display color) is unchanged until you submit the order to the system by pressing **RETURN**.

Active Quote and Size View

Whenever you have active orders and either quantity is hidden by an adjustment as described above, the rightmost portion of the dialog box is replaced by the Active Quote and Size view (shown below), which shows your current bid and offer prices and the unexecuted active bid and offer quantities. The adjustment and this view remain

```

**ACTIVE QUOTE & SIZE**
10630/10631      20x   20
  
```

To enter a market maker order...

In the display until the keystation receives all responses from the Host.

Refreshing your quantities

Press the **REFRESH** hard key to maintain your active position in the market by renewing your order quantities. Pressing **REFRESH** when you have active market maker orders replaces both unexecuted quantities with the default order quantity (based on instrument parameters); the keystation displays the quantity adjustment and Active Quote and Size view until it receives all expected messages from the Host, and then displays the renewed quantities.

If you have no active orders on either or both sides, the keystation displays the default order quantity in either/both quantity field(s).

Quitting the dialog box

- Press **QUIT** if you cannot see the cursor in the dialog box, or double-click the mouse anywhere in the dialog box except in a value field. The Cancel Market Maker Open Orders by Instrument dialog box is displayed, showing all active market maker orders for the instrument. (See Figure 8.4.)
- Cancel selected orders, bids, offers, or all orders. To leave all orders in the market, select **QUIT** in the Cancel dialog box. The Market Maker dialog box closes.
- If you have no open market maker orders, the Cancel Market Maker Open Orders dialog box does not display.

After the dialog box closes, the instrument remains selected in the original page shown in the Trading window.

Step 3 *The result:*

When you submit an order to the keystation, a third line is temporarily added to the dialog box to display the status message, **PLEASE WAIT**. Prices and quantities are validated in the same way as for standard bids and offers. Until your keystation receives Host acknowledgment of all requests, the mouse is trapped and the keyboard is locked.

In the same way as for other order types, the keystation identifies any value fields containing errors. You correct errors and press **RETURN**, or select **OK** in the message box to override warnings where appropriate.

If the entered price(s) differs from the Last by more than the Price Check amount, a message will display in the dialog box. Press **RETURN** to enter the order, or change the price.

If your entry results in an entry positioned or order cancelled message sent by the Host and received at your keystation, any items you selected are deselected and the cursor disappears; value fields are displayed in the appropriate colors. The cursor is removed from view and the normal active/inactive colors reflect order status.

The standard messages appear in the Mailbox, tradelog, and audit trail. You will see the following types of messages in the Mailbox:

BUY and/or **SELL** with status

BOT and/or **SOLD** with recap (if you are the aggressor and the bid or offer results in an immediate match)

BOT and/or **SOLD** if the bid or offer trades at a later time (if another trader is the aggressor through an bid, offer, hit, or take).

To enter a market maker order...

See Section 7.12 for examples of cancel messages.

The market maker order(s) are added to the open order list of all orders entered at the keystation, with an order type of LMM. The Market Maker dialog box does not close. Information on your orders is displayed in the areas described below.

Net Bought/Sold Quantities

These values are maintained from the start of the current market maker session and include market maker positions only. If the to-

tal bought and sold is positive (net long), the total appears next to the **B** indicator, in blue on a black background. If the total is negative, it appears next to the **S** indicator, in red on a black background. If the total is zero, **0** is displayed in both areas.

Statistics View

Similar to the statistics view that you can display at the right end of the instrument line in the normal trading window, the market maker statistics view shows the **daily high**, **daily low**, and **total system volume bought and sold** for instrument.

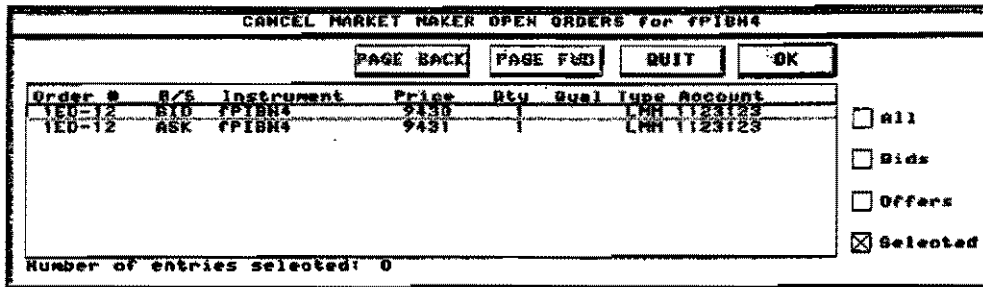


Figure 8.4 Cancel Market Maker Open Orders Dialog Box

USING A MARKET MAKER PAGE...

A market maker page (Figure 8.5) is actually a dialog box containing up to five instruments, each of which is displayed in the market maker format already described above for the Market Maker dialog box. You can enter orders for any of these instruments without quitting the dialog box. Order processing is identical for both single-instrument and multiple-instrument display formats. The status line appears at the bottom of the page.

When you display a market maker page (see Section 8.4.2), the first instrument on the page is selected. All menu items, hard keys, and soft keys are disabled, except for **QUIT**, **PAGE FWD/PAGE BACK**, **REFRESH**, and custom soft keys.

Selecting an Instrument

When you select an instrument on a market maker page, it is marked with a white rectangular box (see OPIH4P9420 in Figure 8.5).

Using Default Clearing Data

When you define a market maker page (see

Section 8.4.1), you have the option of assigning a default clearing key to each instrument as you add it to the page. If you select an instrument on the market maker page that does not have a default clearing key or whose assigned clearing key is invalid, the Clearing Data dialog box is displayed immediately.

When you replace one market maker page with another, the default clearing key is restored for any instrument whose clearing information you changed, and all open market maker orders are maintained.

Quitting the Market Maker Page

Refer to the information for single Market Maker dialog boxes, above, except for the following: if you have active market maker orders when you attempt to quit, the Cancel Market Maker Open Orders dialog box is displayed, listing all market maker orders for all instruments. Cancel orders if necessary, or, to leave them in the market, select **QUIT**.

GLOBEX® CME-MATIF									
Menu	Trade	SpTrade	Modify	Display	Param	Window	Cancel	Session	Help
PAGE:	MARKET QUOTE	MARKET QUOTE	MARKET QUOTE	LAST	NET CHG	TENDER QUOTE	TENDER QUOTE		
1	OPIH4P9420	/	x	08		HIGH	LOW	VOLUME	QUIT
	B:	0/0	1x	S:					
2	OPIH4P9440	/	x	08		HIGH	LOW	VOLUME	QUIT
	B:	0/0	1x	S:					
3	HHM23	/	x	123608		HIGH	LOW	VOLUME	QUIT
	B:	12380/12380	1x	S:					
4	PIBM9	/	x	9486↓	1-	HIGH	LOW	VOLUME	QUIT
	B:	9486/9486	1x	S:		9486	9486	1	
5	PIBZ3	9363/	4x	9363B	11+	HIGH	LOW	VOLUME	QUIT
	B:	* 9363/9363	4x	S:		9363B	9354	12	

Figure 8.5 Market Maker Page

8.4.1 Create/Modify Market Maker Page

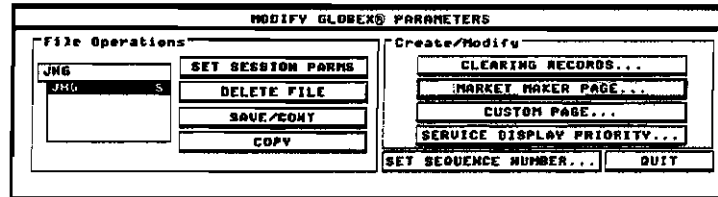
The procedures for creating or modifying a market maker page are almost identical to those already described for custom pages (Section 6.3.1). You can include up to five instruments on a market maker page; you can create a maximum of five such pages in each GLOBEX parameter file. Like custom pages, market maker pages do not exist unless you create them.

For each instrument you add to a page, you can assign default clearing information via an associated clearing key.

When you complete this function or quit its dialog box, you return to the Modify GLOBEX Parameters dialog box, where you save the new or modified parameter file.

Step 1 To display the Create/Modify Market Maker Page dialog box:

1. In the Modify GLOBEX Parameters dialog box, select a parameter file (or type its name in the text box).



2. Select **Market Maker Page**.

See Section 2 for information on operating GLOBEX.

Section 6.3, "Modify GLOBEX Parameters," explains how to display the initial dialog box and create/modify a parameter file. You cannot create or modify a market maker page without first selecting (or entering a name for) a GLOBEX parameter file.

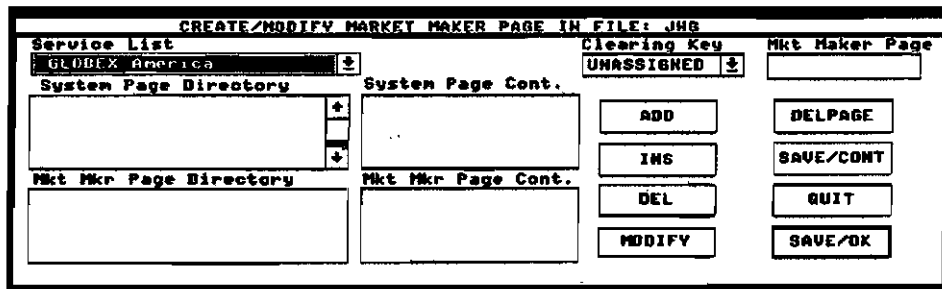


Figure 8.6 Create/Modify Market Maker Page Dialog Box

Completing a market maker page...

Follow the procedure in Section 6.3.1. Additional features are described here.

Note: You cannot substitute a blank line for an instrument when you define a market maker page.

Step 2 The procedure:

Adding a clearing key

This is an optional step. After you select an instrument in the **System Page Contents** list that you want to appear in the market maker page, choose a **Clearing Key** from the drop-down list. (If you are using **TAB** keys to move from one dialog box field to another, the cursor moves from the **Market Maker Page** name field to **DELPAGE** to **Clearing Key**.)

1. Scroll through the list of clearing keys and select the key representing the clearing information you wish to serve as the default for this instrument.
2. Use **ADD** or **INS** to position the instrument on the market maker page.

When you enter an order from the market maker page (see Section 8.4) for an instrument with a pre-assigned clearing key, that information is the default. If you do not assign a clearing key, the Clearing Data dialog box is automatically displayed when you select the instrument. You can assign a clearing key to an instrument on a market maker page by modifying the key assignment (described below).

Additional information on clearing keys

If you include an instrument on more than one market maker page, you must use the same clearing key in all locations. When

you select **ADD**, **INS**, **MODIFY**, or double-click on an instrument, the keystation checks for other clearing key assignments. If you attempt to assign a different key, a message asks: **Modify all Clearing Keys?** Select **yes** to change all clearing keys for that instrument to the new key; select **no** to close the message box.

Note: Use the **MODIFY** command button only when changing the clearing key assignment.

Removing a clearing key

1. The first item in the **Clearing Key** list is **Unassigned**. To remove an assigned clearing key, first select the instrument in the **Market Maker Page Contents** list box. The assigned key is selected in the Clearing Key list.
2. Change the key to **Unassigned** and select **MODIFY**.
3. The keystation checks for clearing key conflicts as described above and if possible, removes the clearing key.

Modifying a clearing key

1. Select the instrument from the **Market Maker Page Contents** list box. Its current clearing key is selected in the **Clearing Key** list.
2. Change the clearing key, then select **Modify**. Any clearing key conflict is checked as described above, and the change is made if there is no conflict.

Saving the Market Maker page

Continue as in Section 6.3.1.

Completing a market maker page...



Step 3 *The result:*

Market maker pages are listed in the market maker page directory list box in the order in which you created them. When you press

FRST MKT MKR

or select **Market Maker Page** in the

Display menu, the first page displayed is the first page you created.

Press  and  to display subsequent/preceding market maker pages. See Section 8.4.2 for complete information on displaying market maker pages.



8.4.2 Display Market Maker Page

To display market maker pages, use either this function or **Page Directory** (see Section 9.3).

To display the first predefined Market Maker

FRST MKT MKR

page, press or click on **Market Maker Page** in the Display menu. ("First" refers to the first page you defined. The page is displayed in a one-up view only, with the first instrument selected on the page.)

Once the page is displayed, use  and  to display the next or previous predefined market maker page.

When you replace one market maker page with another, the following events occur for the replaced page:

- The default clearing key is restored for any instrument whose clearing information you changed.
- All open market maker orders are maintained in the market.

8.5 Buy Working Order

The Buy Working Order dialog box lets you specify a total quantity that you wish to buy, then lets you manipulate the price and quantity to enter orders with minimal keystrokes.

The Buy Working Order dialog box is a white rectangle outlining two lines in the Trading window. The first line is the statistics view of the market portion of the instrument line (see Figure 1.13), and is updated as it would be in the standard Trading window. The second line displays trader information that reflects working order information only. A third line is added when needed to display status messages.

Step 1 To display the dialog box, choose **ONE** of these methods:

Method 1: Press the instrument number. Press the **BUY WO** key.

Method 2: Click on the instrument name. Click on **BUY WO** in the trading panel.

Method 3: Press the instrument number. Click on **BUY WO** in the Special Trade menu.

See Section 2 for information on operating GLOBEX.

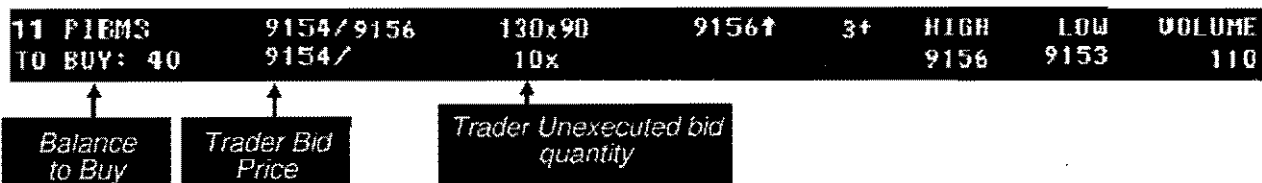


Figure 8.7 Buy Working Order Dialog Box

To enter a Buy working order...

Step 2 *The procedure:*

Note: To set default order quantity and increment size, see Section 6.4.1, Instrument Parameters. For account number, see section 6.4.2, Service Parameters. The Clearing Data dialog box (Figure 8.2) shows

default values for CTI and origin only if you entered this information for a previous order.

The keystation indicates the state of the working order by displaying specific areas in a variety of foreground/background colors, depending on ongoing activity. These areas and colors are specified in the table below.

Price and Quantity Colors—Buy Working Orders			
Order State	Screen Area	Bid Price	Bid Qty
Market line - not "On-Market"	<i>foreground</i>	GREEN	GREEN
	<i>background</i>	BLACK	BLACK
Market Line - "On-Market"	<i>foreground</i>	WHITE	GREEN
	<i>background</i>	BLUE	BLACK
Order entry line - active (open working orders)	<i>foreground</i>	WHITE	WHITE
	<i>background</i>	BLUE	BLUE
Order entry line - not active (no working open orders)	<i>foreground</i>	CYAN	CYAN
	<i>background</i>	BLACK	BLACK
Cancelling/Wait	<i>foreground</i>	YELLOW	YELLOW
	<i>background</i>	BLACK	BLACK
Field being changed or entire field highlighted - cursor in price or quantity field	<i>foreground</i>	WHITE	WHITE
	<i>background</i>	BLACK	BLACK
Active (open working orders) with adjusted Qty amount - QTY FIELD ONLY.	<i>foreground</i>		BLACK
	<i>background</i>		WHITE

Note: Cyan is blue-green or aqua.

1. The **Clearing Data** dialog box (Figure 8.2) displays first. Section 8.3.2 describes how to enter clearing information correctly for all orders entered from the Working Order dialog box. Enter the data and select **OK**.

The Clearing Data dialog box is removed; all menu items, hard keys, and soft keys are now disabled, except for **QUIT**, the **REFRESH** hard key, and custom soft

keys. When necessary, the Working Order dialog box expands to add a status line for message display. Initially, the cursor is in the **Balance to Buy** area and moves via the **TAB** key to **Trader Bid Price**, **Trader Bid Quantity**, then back to **Trader Bid Price**.

Important background:

- When you alter a price or quantity using the arrow keys as described below, it is

To enter a Buy working order...

automatically submitted to the keystation for validation.

- When you alter a price or quantity by typing a new value into the selected price or quantity field, you have the option of cancelling the change by pressing **QUIT** to restore the pre-change value before you move out of the field. To submit the typed price or quantity to the keystation for validation, you can **TAB** to another field, click on another field, or press **TRANSMIT** or **RETURN**.
 - If you have submitted both price and quantity values to the keystation, press **RETURN** or **TRANSMIT**, regardless of cursor position, to enter the order into the system.
2. **Balance to Buy** - The initial value is zero. You must enter a value in order to move to any other area, after which you cannot change the **balance to buy** until the entire quantity is executed or you exit the dialog box. As the order trades, the **balance to buy** displays the remaining balance, not the original value. Each executed buy contract decreases this value, which is displayed in cyan on a black background, by one. Once the entire quantity is traded, a warning message is displayed to alert you that the quantity is zero and the entire order has been filled. You can process another order for the same instrument or quit the dialog box.

There are two ways to enter this value (already highlighted on initial display):

- Press **UP/DOWN ARROW** to increase/decrease the balance by 1
- OR
- Type a quantity.

Because price and quantity fields show default values, you will submit an order if you press **RETURN** at this time. To move to the next field, press **TAB** or use the mouse.

3. **Trader Bid Price** - The initial value is the current same-side best market price. If there is no bid market, the default is based on your best price currently in the system. If your working order has the best price among all orders in the market, the **market price** in line 1 shows the on-market indicator (see table for display colors).

There are two ways to change the price:

- Select the price and press **UP/DOWN ARROW**; the price increases/decreases by the minimum tick size. (If you cannot see the cursor in the dialog box, pressing **UP/DOWN ARROW** changes the price.)
- Select the price and type a new price.

To select the price:

- **TAB** to it (the price moves to the left margin of the price field; the insertion point is located at the right edge of the field) OR
- Click on it with the left mouse button; the insertion point is positioned by the mouse pointer.

Important: If you submit a price change to the keystation before the **balance to buy** quantity is filled, the keystation first validates the price, then cancels any active working orders.

4. **Trader Bid Quantity** - The initial value (referred to in this section as the **quantity default** is either the **balance to buy** or the default order size (based on instrument parameters), whichever is less. If you have not set a default order size, the initial value is the minimum system quantity for the in-

To enter a Buy working order...

strument. The maximum quantity cannot exceed the **original balance to buy**.

There are two ways to change the quantity:

- Select the quantity and press **UP/DOWN ARROW**; the quantity increases/decreases by the default increment for the instrument. (The new quantity is automatically submitted to the keystation for validation.)

- Select the quantity and type a new quantity.

To select the quantity:

- **TAB** to it (the quantity moves to the left margin of the quantity field; the vertical cursor is located at the right edge of the field) **OR**
 - Click on it with the left mouse button; the cursor is positioned by the mouse pointer.
5. Press **RETURN** or **TRANSMIT**, regardless of cursor position, to submit the working order to the keystation after you change price and quantity. The cursor disappears after you submit an order. (This completes the general procedure for entering a working order. Details are presented below.)

Quantity adjustment display

As explained earlier, you can change a quantity in two ways:

- Select the quantity and press **UP/DOWN ARROW**;
- Select the quantity, type the new quantity, then either select another field or press **RETURN**.

The active quantity can never be greater than the **balance to buy**.

When you change the quantity and already have active working orders in the market,

the keystation treats the change as an **adjustment** (see table for display colors). The quantity adjustment is the difference between the new quantity and the original active quantity.

Example of an increase: You have active working orders and your current active position is 7. If you increase the quantity to 15, the keystation validates the new quantity, briefly displays an adjustment of +8, and automatically enters an order for the adjustment quantity. This increases the active quantity. **Order priority is retained for the original order.**

Example of a decrease: If you have an active quantity of 15 and decrease it to 12, the keystation validates the new quantity, briefly displays an adjustment of -3, and automatically cancels orders sufficient to reduce the active quantity to 12. Cancellation begins with the most recent order; if it is necessary to cancel only part of an order's quantity, the keystation modifies that order, submitting a cancel of the original order and then a replacement for the original quantity minus the adjustment. **This order loses its original priority.**

If you change a quantity and have no active working orders, the new quantity is displayed without adjustment and the order state (as shown by display color) is unchanged until you submit the order to the system by pressing **RETURN**.

Refreshing your quantity

The **REFRESH** hard key allows you to maintain your active position in the market by renewing your order quantity. Pressing **REFRESH** when you have active working orders replaces the unexecuted quantity with the default order size (based on instrument parameters); the keystation briefly displays the quantity adjustment until it receives

To enter a Buy working order...

all expected messages from the Host, and then displays the renewed quantity. If you have no active working orders, the keystation displays the default order size.

Multiple orders

You can have multiple working orders; they must all be at the same price, but can be for different quantities. The displayed quantity reflects the total quantity of all orders. The order number remains the same on all entries until the entire working order is traded or you quit the Working Order dialog box. You can change working order numbers only in the Change Order dialog box. An asterisk (*) left of the bid price indicates that you have more than one active working order on that side of the market.

Quitting the dialog box

If the balance to buy is zero and you cannot see the cursor in the dialog box, press **QUIT** or double-click the left mouse button anywhere in the dialog box except in a value field.

Quitting the dialog box before the balance to buy is filled

- Press **QUIT** or double-click the left mouse button anywhere in the dialog box except in a value field. The Cancel Buy Working Orders for Instrument dialog box is displayed, showing the orders entered during the working order session. (This dialog box looks like the one shown in Figure 8.4 for market maker orders.)

- Cancel orders if necessary or, to leave these orders in the market, select **QUIT** to close the Cancel dialog box. The Working Order dialog box closes, but the instrument remains selected in the original page shown in the Trading window.

Step 3 The result:

When you submit an order to the keystation, a third line is temporarily added to the dialog box to display a status message, **PLEASE WAIT**. Price and quantity are validated in the same way as for standard buy orders. Until your keystation receives Host acknowledgment of your request, the mouse is trapped and the keyboard is locked.

In the same way as for other order types, the keystation identifies any value fields containing errors. Correct errors and then press **RETURN**, or select **OK** in the message box to override warnings where appropriate.

If you entered a price that differs from the Last by more than the Price Check amount, a message displays in the dialog box. Press **RETURN** to enter the order, or change the price.

If your entry results in an entry positioned or order cancelled message sent by the Host and received at your keystation, any items you selected are deselected and the cursor disappears; value fields are displayed in the appropriate colors. At this time, you cannot see the cursor, although it automatically returns to the price field.

To enter a Buy working order...

Result Messages

You will see the following types of messages in the Mailbox:

BUY with status

BOT with recap (if you are the aggressor and the bid or offer results in an immediate match)

BOT if the bid trades at a later time (if another trader is the aggressor through an offer or hit).

See Section 7.12 for examples of cancel messages.

The working order is added to the open order list of all orders entered at the keystation, with an order type of LMW. The Working Order dialog box does not close.



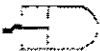




8.6 Sell Working Order

The Sell Working Order dialog box lets you specify a total quantity that you wish to sell, then lets you manipulate the price and quantity to enter orders with minimal keystrokes.

The Sell Working Order dialog box is a white rectangle outlining two lines in the Trading window.

The first line is the statistics view of the market portion of the instrument line (see Figure 1.13), and is updated as it would be in the standard Trading window. The second line displays trader information that reflects working order information only. A third line is added when needed to display status messages.

Step 1 To display the dialog box, choose **ONE** of these methods:

	Press the instrument number. Press the SELL WO key.	
	Click on the instrument name. Click on SELL WO in the trading panel	
	Press the instrument number. Click on SELL WO in the Special Trade menu.	 

See Section 2 for information on operating GLOBEX.

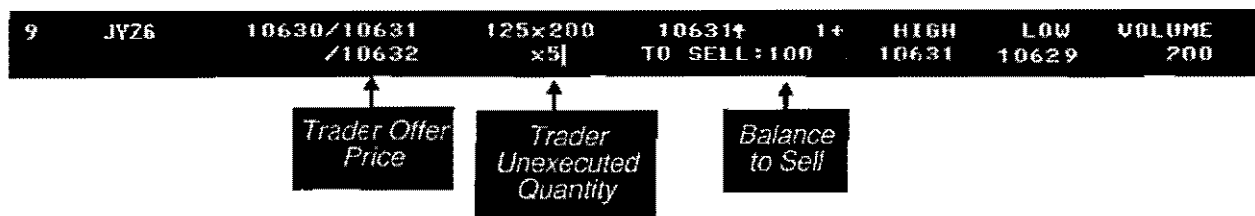


Figure 8.8 Sell Working Order Dialog Box

To enter a Sell working order...

Step 2 The procedure:

Note: To set default order quantity and increment size, see Section 6.4.1, Instrument Parameters. For account number, see Section 6.4.2, Service Parameters. The Clearing Data dialog box (Figure 8.2) shows default values for CTI and origin if you entered this information for a previous order.

The keystation indicates the state of the working order by displaying specific areas in a variety of foreground/background colors, depending on ongoing activity. These areas and colors are specified in the table below.

Order State	Screen Area	Offer Price	Offer Qty
Market line - not "On-Market"	<i>foreground</i>	GREEN	GREEN
	<i>background</i>	BLACK	BLACK
Market line - "On-Market"	<i>foreground</i>	WHITE	GREEN
	<i>background</i>	BLUE	BLACK
Order entry line - active (open working orders)	<i>foreground</i>	WHITE	WHITE
	<i>background</i>	BLUE	BLUE
Order entry line - not active (no working open orders)	<i>foreground</i>	RED	RED
	<i>background</i>	BLACK	BLACK
Cancelling/Wait	<i>foreground</i>	YELLOW	YELLOW
	<i>background</i>	BLACK	BLACK
Field being changed or entire field highlighted - cursor in price or quantity field	<i>foreground</i>	WHITE	WHITE
	<i>background</i>	BLACK	BLACK
Active (open working orders) with adjusted Qty amount - QTY FIELD ONLY.	<i>foreground</i>		BLACK
	<i>background</i>		WHITE

Price and Quantity Colors—Sell Working Orders

1. The **Clearing Data** dialog box (Figure 8.2) displays first. Section 8.3.2 describes how to enter clearing information correctly for all orders entered from the Working Order dialog box. Enter the data and select **OK**.

The Clearing Data dialog box is removed; all menu items, hard keys, and soft keys are now disabled, except for **QUIT**, the **REFRESH** hard key, and custom soft keys. When necessary, the Working

Order dialog box expands to add a status line for message display. Initially, the cursor is in the **Balance to Sell** area and moves via the **TAB** key to **Trader Offer Price**, **Trader Offer Quantity**, then back to **Trader Offer Price**.

Important background:

- When you alter a price or quantity using the arrow keys as described below, it is

To Enter A Sell Working Order

automatically submitted to the keystation for validation.

- When you alter a price or quantity by typing a new value into the selected price or quantity field, you have the option of cancelling the change by pressing **QUIT** to restore the pre-change value before you move out of the field. To submit the typed price or quantity to the keystation for validation, you can **TAB** to another field, click on another field, or press **TRANSMIT** or **RETURN**.

If you have submitted both price and quantity values to the keystation, press **RETURN** or **TRANSMIT**, regardless of cursor position, to enter the order into the system.

2. **Balance to Sell** - The initial value is zero. You must enter a value in order to move to any other area, after which you cannot change the **balance to sell** until the entire quantity is executed or you exit the dialog box. As the order trades, the **balance to sell** displays the remaining balance, not the original value. Each executed sell contract decreases this value, which is displayed in red on a black background, by one. Once the entire quantity is traded, a warning message is displayed to alert you that the quantity is zero and the entire order has been filled. You can process another order for the same instrument or quit the dialog box.

There are two ways to enter this value (already highlighted on initial display):

- Press **UP/DOWN ARROW** to increase/decrease the balance by 1 OR
- Type a quantity.

Because price and quantity fields show default values, you will submit an order if you

press **RETURN** at this time. To move to the next field, press **TAB** or use the mouse.

3. **Trader Offer Price** - The initial value is the current same-side best market price. If there is no offer market, the default is based on your best price currently in the system. If your working order has the best price among all orders in the market, the **market price** in line 1 shows the on-market indicator (see table for display colors).

There are two ways to change the price:

- Select the price and press **UP/DOWN ARROW**; the price increases/decreases by the minimum tick size. If you cannot see the cursor in the dialog box, pressing **UP/DOWN ARROW** changes the price.
- Select the price and type a new price.

To select the price:

- **TAB** to it (the price moves to the left margin of the price field; the insertion point is located at the right edge of the field) OR
- Click on it with the left mouse button; the insertion point is positioned by the mouse pointer.

Important: If you submit a price change to the keystation before the **balance to sell** quantity is filled, the keystation first validates the price, then cancels any active working orders.

4. **Trader Offer Quantity** - The initial value (referred to in this section as the **quantity default** is either the **balance to sell** or the default order size (based on instrument parameters), whichever is less. If you have not set a default order size, the initial value is the minimum system quantity for the instrument. The maximum quantity

To enter a Sell working order...

cannot exceed the original **balance to sell**.

There are two ways to change the quantity:

- Select the quantity and press **UP/DOWN ARROW**; the quantity increases/decreases by the default increment for the instrument. (The new quantity is automatically submitted to the keystation for validation.)
- Select the quantity and type a new quantity.

To select the quantity:

- **TAB** to it (the quantity moves to the left margin of the quantity field; the vertical cursor is located at the right edge of the field) OR
 - Click on it with the left mouse button; the cursor is positioned by the mouse pointer.
5. Press **RETURN** or **TRANSMIT**, regardless of cursor position, to submit the working order to the keystation after you change price and quantity. The cursor disappears after you submit an order. (This completes the general procedure for entering a working order. Details are presented below.)

Quantity adjustment display

As explained earlier, you can change a quantity in two ways:

- Select the quantity and press **UP/DOWN ARROW**;
- Select the quantity, type the new quantity, then either select another field or press **RETURN**.

The active quantity can never be greater than the **balance to sell**.

When you change the quantity and already have active working orders in the market,

the keystation treats the change as an **adjustment** (see table for display colors). The quantity adjustment is the difference between the new quantity and the original active quantity.

Example of an increase: You have active working orders and your current active position is 7. If you increase the quantity to 15, the keystation validates the new quantity, briefly displays an adjustment of +8, and automatically enters an order for the adjustment quantity. This increases the active quantity. **Order priority is retained for the original order.**

Example of a decrease: If you have an active quantity of 15 and decrease it to 12, the keystation validates the new quantity, briefly displays an adjustment of -3, and automatically cancels orders sufficient to reduce the active quantity to 12. Cancellation begins with the most recent order; if it is necessary to cancel only part of an order's quantity, the keystation modifies that order, submitting a cancel of the original order and then a replacement for the original quantity minus the adjustment. **This order loses its original priority.**

If you change a quantity and have no active working orders, the new quantity is displayed without adjustment and the order state (as shown by display color) is unchanged until you submit the order to the system by pressing **RETURN**.

Refreshing your quantity

The **REFRESH** hard key allows you to maintain your active position in the market by renewing your order quantity. Pressing **REFRESH** when you have active working orders replaces the unexecuted quantity with the default order size (based on instrument parameters); the keystation briefly displays the quantity adjustment until it

To enter a Sell working order...

receives all expected messages from the Host, and then displays the renewed quantity. If you have no active working orders, the keystation displays the default order size.

Multiple orders

You can have multiple working orders; they must all be at the same price, but can be for different quantities. The displayed quantity reflects the total quantity of all orders. The order number remains the same on all entries until the entire working order is traded or you quit the Working Order dialog box. You can change working order numbers only via the Change Order dialog box. An asterisk (*) right of the offer price indicates that you have more than one active working order on that side of the market.

Quitting the dialog box

If the **balance to sell** is zero and you cannot see the cursor in the dialog box, press **QUIT** or double-click the left mouse button anywhere in the dialog box except in a value field.

Quitting the dialog box before the balance to sell is filled

- Press **QUIT** or double-click the left mouse button anywhere in the dialog box except in a value field. The Cancel Sell Working Orders for Instrument dialog box is displayed, showing the orders entered during the working order session. This dialog box looks like the one shown in Figure 8.4 for market maker orders.

- Cancel orders if necessary or, to leave these orders in the market, select **QUIT** to close the Cancel dialog box. The Working Order dialog box closes, but the instrument remains selected in the original page shown in the Trading window.

Step 3 The result:

When you submit an order to the keystation, a third line is temporarily added to the dialog box to display a status message, **PLEASE WAIT**. Price and quantity are validated in the same way as for standard sell orders. Until your keystation receives Host acknowledgment of your request, the mouse is trapped and the keyboard is locked.

In the same way as for other order types, the keystation identifies any value fields containing errors. Correct errors and then press **RETURN**, or select **OK** in the message box to override warnings where appropriate.

If you entered a price that differs from the Last by more than the Price Check amount, a message displays in the dialog box. Press **RETURN** to enter the order, or change the price.

If your entry results in an entry positioned or order canceled message sent by the Host and received at your keystation, any items you selected are deselected and the cursor disappears; value fields are displayed in the appropriate colors. At this time, you cannot see the cursor, although it automatically returns to the price field.

To enter a Sell working order...

Result Messages

You will see the following types of messages in the Mailbox:

SELL with status

SOLD with recap (if you are the aggressor and the offer results in an immediate match).

SOLD if the bid trades at a later time (if another trader is the aggressor through a bid or take)

See Section 7.12 for examples of cancel messages.

The working order is added to the open order list of all orders entered at the keystation, with an order type of LMW. The Working Order dialog box does not close.

9. Display Functions

9.1 Overview

Display functions include:

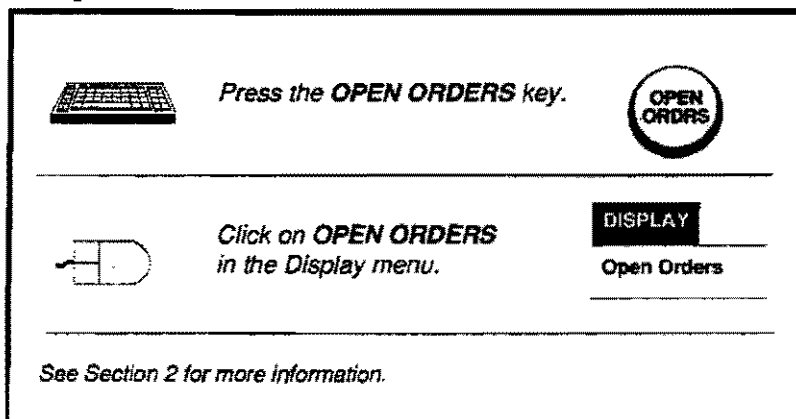
- **Open Orders** - To display a list of all open orders for the keystation.
- **Page Directory** - To display the list of system, custom, or market maker pages and design a Trading window that shows one or two of these pages.
- **Organizations** - To display the names of all organizations that subscribe to GLOBEX.
- **Market Maker Page** - To display the first pre-defined market maker page (see Section 8.4.2).
- **Active Markets** - To display current quotes for all active instruments on one or both services and enter Bid, Ask, Hit, or Take orders for one of the instruments.
- **Custom Page Select** - To select and display a custom page.
- **Quick Page Retrieval** - To display and select a page from a list of system or custom pages.
- **Page Scrolling in the Trading Window** - To cycle through system or custom pages, displaying each page in the Trading window, until the page you wish to view is displayed.

9.2 Open Orders

You can view the details of all open orders for all instruments at your workstation, including the Standing Order Book.

You can list orders for only one Service at a time.

Step 1 To display the list of open orders, choose **ONE** of these methods:



Note: If you have no open orders on the selected Service, a message is displayed: **No Open Orders.** Select **OK** to acknowledge and remove the message.

LISTING OF OPEN ORDERS							
Service List							
GLOBEX Options							
Order #	B/S	Instrument	Price	Qty	Qual	Type	Account
IED-1	BID	FP18H4	9429	1		LMT	1123123
IED-2	ASK	FP18H4	9432	1		LMT	1123123
IED-3	ASK	FP18H4	9432	1		LMT	1123123
IED-6	BID	FP18U4	9513	1		LPM	1123123
IED-7	BID	FP18Z4	9547	1		LPM	1123123
IED-11	BID	FP18Z3	9363	1		LPM	1123123
IED-14	ASK	FP18H5	9525	1		LPM	1123123

Number of Open Orders: 7

Buttons: PAGE BACK, PAGE FWD, QUIT, VIEW

Figure 9.1 Listing of Open Orders

Figure 9.1 shows the open orders list as it displays on the screen. The list is organized by order number and shows order number, type of order (buy or sell), instrument name, order price, order quantity, clearing information qualifier and ordertype (LMT, etc.), and account number. The list is scrollable, using **PAGE FWD** and **PAGE BACK** command buttons.

To view details about any open order.

1. Select the order in the list.
2. Choose **VIEW**.

The order displays in the order entry dialog box as shown in Section 7.4 where you can view, but not edit, the data. Choose **QUIT** to return to the list.

Note: The mouse will be trapped on the **QUIT** button, but you will be able to tab through the fields. Any changes you make will not be saved at the host.

You cannot act on any order or take any other actions in the open orders list. Choose **QUIT** to remove the list and return to the Trading window.

9.3 Page Directory

The instruments in the GLOBEX database are arranged in a set of system pages for each Service. You can design custom pages and market maker pages, arranging instruments on pages according to your needs. The names of all pages currently available are listed in the page directory. Using this procedure, you can choose one or two pages to display. For a two-up view, you can direct each page to the left or right side of the display.

Step 1 To display the list of system pages, choose **ONE** of these methods:

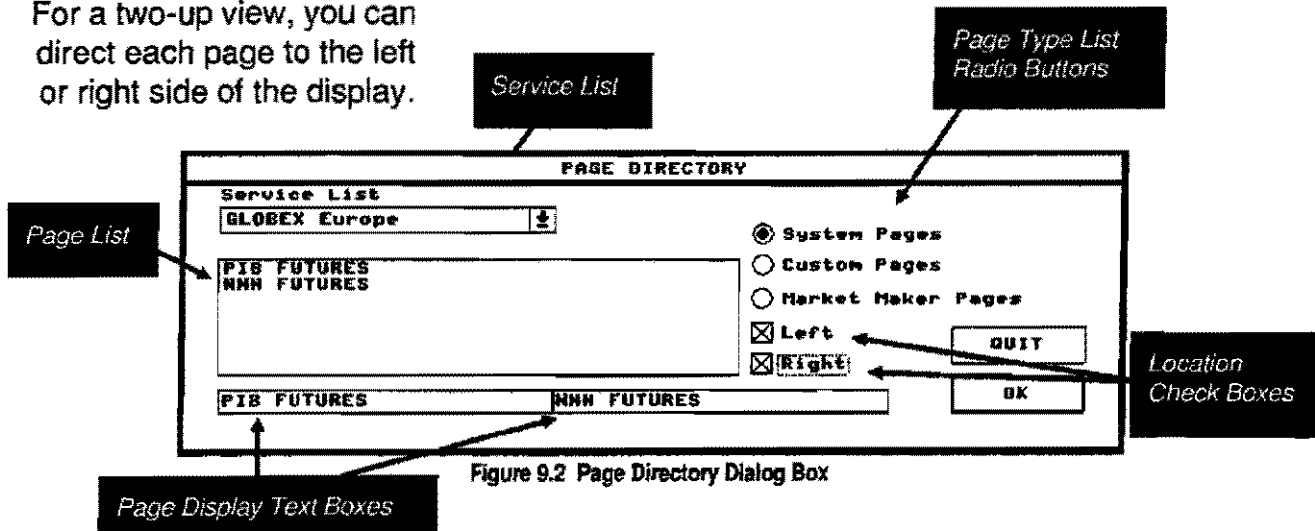
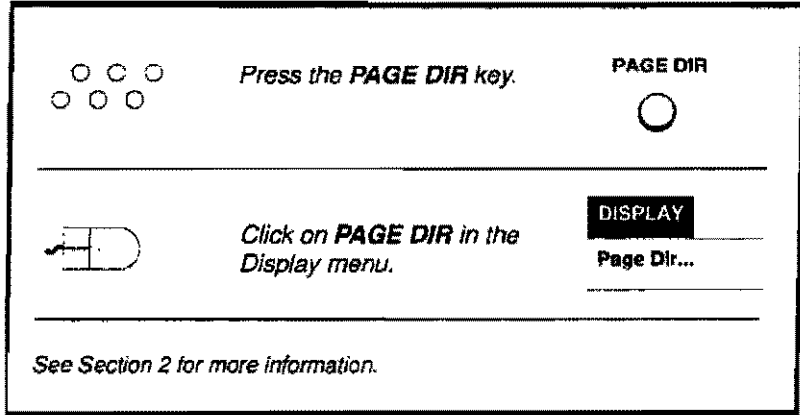


Figure 9.2 Page Directory Dialog Box

The dialog box includes the Service list and a list showing the names of system, custom or market maker pages, depending on which list you choose. When the dialog box is first displayed, the first Service name is highlighted and the directory contains system page names on that Service. The

System Pages radio button is highlighted and the **Page Display** text boxes show the pages currently displayed in the Trading window. With a one-up view, the page name appears in the left text box; with a two-up view, the page names are shown left and right as they are in the display.

To set up your display ...

Step 2 The procedure:

Select a Service in the Service List box. If you wish to display custom pages, you do not have to first select a Service. The custom pages currently loaded are those in the active trader parameter file.

One-up View...

1. The page list shows **System Pages**. Choose the Custom or Market Maker Pages radio button to display other lists.
2. Highlight a page name.
3. Select the Left location check box; the page name appears in the appropriate **Page Display** box, replacing any existing name; the highlight disappears from the selected page name in the list.

As long as a market maker page name is in the left **Page Display** text box, the right side is unavailable. Market maker pages are one-up views.

4. Select **OK** to remove the dialog box and view the changed display.
- If only one page display box is filled in (left or right), selecting **OK** creates a one-up view of

that page; the next time you display the Page Directory, the page name will be in the left display box.

- If both page display boxes are blank, selecting **OK** will not remove the dialog box. At least one page display box must be filled in.

Two-Up View...

Note: You cannot display a market maker page in a two-up view.

- Two-up views (as shown in Figure 9.3) are designed by filling in both page display boxes.
 - Two-up views may include one custom page and one system page, or two pages of the same type.
1. For the first page in the display, highlight the **System** or **Custom Pages** radio button; the dotted outline identifies the active page type.
 2. Highlight a page name.
 3. Select either the **Left** or **Right** location check box; the page name appears in the appropriate **Page Display** box, replacing any existing name; the highlight disappears from the selected page name in the list.

Menu	Trade	SpTrade	Modify	Display	Param	Window	Cancel	Session	Help
PAGE	QUOTE	MARKET	PT	EQU LONG TERM	MARKET	QUOTE	MARKET	PT	
1	PIBZ3	9352 /	1 x	1	5	ECUZ3	/	1 x	1
2	PIB4	9432 /	1 x	1	6	ECU4	/	x	1
3	PIB4	/	x	1					
4	PIB4	9502 / 9513	1 x	1					

Figure 9.3 Two-Up View

To set up your display ...

4. Repeat step 1 if the second page of your proposed display is on the other page list.
5. Repeat steps 2 and 3, choosing the other location check box. The page name appears in the other **Page Display** box.
6. Select **OK** to remove the dialog box and view the changed display.

To eliminate one side of a two-up view...

In the Trading window, click on the page heading of the side you want to keep. This establishes that page in a one-up, Normal view.

OR

1. Display the Page Directory.
2. Without first highlighting a page name, select a location check box; the page display box for that side is cleared.

3. Select **OK**.

To replace both pages of a two-up view with a different single page...

1. When you display the dialog box, the names of both pages appear in the corresponding **Page Display** boxes.

To clear a **Page Display** box and the corresponding side of the display, choose a check box without selecting a page from the list.

2. Select a replacement page. Select the other check box (the one that still contains a page name.)
3. Choose **OK**.

Step 3 *The result:*


In all cases, the page(s) you selected are displayed on the side of the Trading window you designated.


9.3.1 Quick Page Retrieval


The Quick Page Retrieval function allows you to choose a system or custom page to display in the Trading window. The function displays the Quick Page Retrieval List shown in Figure 9.4. You can choose a page to display in the Trading window, replacing either the page displayed in a one-up view or one of the two pages in a two-up view.

Step 1 To display the list of pages, choose **ONE** of these methods:

QUICK PAGE

Press the **QUICK PAGE** key. 

 Click the right mouse button anywhere in the Trading window except the keystation block. (Displays the list of pages of the same type as the page in the Trading window.)

 Press **SHIFT** and click the right mouse button anywhere in the Trading window except the keystation block. (Displays the list of pages of the opposite type.)

See Section 2 for more information.

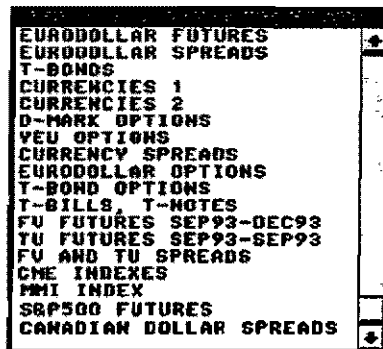






Figure 9.4 Quick Page Retrieval List - System Pages

If you use the QUICK PAGE key, the Quick Page Retrieval List displays in the center of the screen. When you use the mouse to display the list, the upper-left corner is placed where the mouse was when it was clicked. The Page List shows either all system page or all custom page names. If more pages

are available than will fit in the list, scroll bars display.

Or use   or   to scroll through the list.

To select a page ...

Page Type

If the Trading window currently displays a system page, the list will be of system pages; if it displays a custom page, the list will be of custom pages. (If **SHIFT** - right mouse button was used, the page type will be the opposite of that displayed.)

In a two-up view, the type of page listed depends on what page type(s) are currently displayed, and on where the mouse was clicked or what instrument was selected.

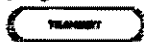
- When the mouse is used to display the Page List, the list will be of the page type in the side of the Trading window where the mouse was clicked. So, for example, if a custom page is displayed on the right, and the mouse is clicked in the right half of the Trading window, the custom page list will display.
- When **SHIFT** - right mouse button is used, the list will be of the type opposite that of the side where the mouse was clicked.
- With the keyboard, the page type will be that of the window opposite the selected instrument. So, for example, if an instrument is selected on a custom page in the right half of the Trading window, and the left half shows a system page, the list will be of system pages.
- If the keyboard is used and no instrument is selected, the page type will be that of the page in the left half of the screen.

When the Quick Page Retrieval List displays, the page currently displayed will be highlighted. In a two-up view, the page will be that from the side where the mouse was clicked. If the keyboard was used, the page will be the page opposite the selected instrument.

Step 2 The procedure:

To choose a page to display:

Use the arrow keys to highlight the desired page name and press  or



Or

Click on the page name.

To close the list without changing the displayed page, click anywhere outside the box or press **QUIT**.

Step 3 The result:

The Quick Page Retrieval List clears from the screen. In a one-up view, the display changes to the selected page. In a two-up view, the location of the new page depends on where the mouse was clicked or on the selected instrument.

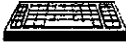
- If the mouse was used, the new page displays in the half of the Trading window where the mouse was clicked.
- If **SHIFT** - right mouse button was used, the new page will display in the side of the Trading window opposite where the mouse was clicked.
- If the keyboard was used, the new page displays on the side opposite the selected instrument.
- If the keyboard was used, and there is no selected instrument, the new page displays on the left side.



If the connection is lost to any Service when the Quick Page Retrieval List is on display, a warning message is displayed in the Alerts window, and the box clears from the screen.

9.3.2 Page Scrolling

Page Scrolling allows you to cycle through either system or custom pages, displaying each page in the Trading window, until the page you wish to view is displayed.

Step 1 To scroll:



Set focus in the Trading Window
and press  or .

See Section 1 for more information on the keyboard.

Step 2 The procedure:

With focus in the Trading window, press **PAGE FWD** or **PAGE BACK** to display the next or previous page. Each time you press the key, the next page or previous page displays until you reach the end or beginning of the list of pages.

The order of the system pages is defined by the GCC.

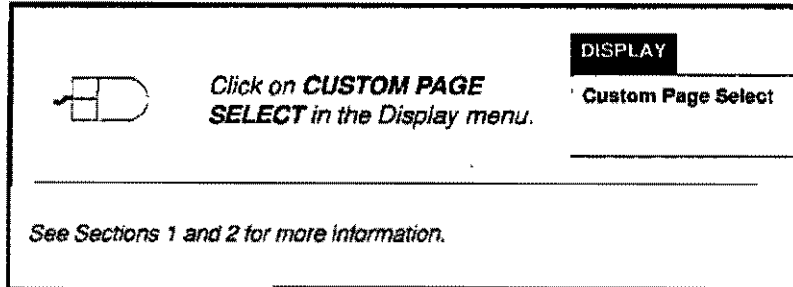
Step 3 The result:

- In a one-up view, the pages that display are of the same type as the displayed page. If a custom page is in the Trading window, the system scrolls through custom pages; if a system page is displayed, system pages scroll.
- In a two-up display with an instrument selected, the system scrolls pages of the type in the window half *opposite* the selected instrument. So, for example, if a custom page is on the left and a system page on the right, with a custom page instrument selected, system pages scroll in the right half of the Trading window.
- In a two-up display with no instrument selected, pages scroll in the left half of the window. So, for example, if a custom page is on the left and a system page on the right, with no instrument selected, custom pages scroll in the left half of the Trading window.

9.4 Custom Page Select

You can select a page by name from the list of up to 10 custom page names that displays on a drop-down menu.

Step 1 To display the list of custom pages:



Step 2 The procedure:

Choose the custom page from the list in the drop-down menu.

If more than 10 custom pages are available, the item **More Custom Pages** appears at the end of the list in the drop-down menu. Choose this item to display the Custom Page Select Dialog Box shown in Figure 9.5, which shows the rest of the custom pages in alphanumeric order. You can also use the **PAGE BACK** and **PAGE FWD** command buttons to see the entire list, including the

first 10 page names. (Note: Market Maker pages do not appear on this list.)

Select the page you want to display, then choose **OK**, or double click the page name.

Step 3 The result:

If you use this procedure, the selected custom page is always displayed in a one-up view.

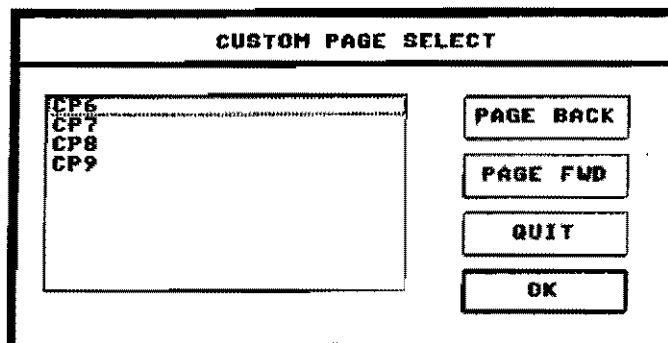


Figure 9.5 Custom Page Select Dialog Box

9.5 Active Markets



The Active Markets function allows you to view a list of all instruments that have an open bid and/or offer.

The function displays the Active Markets Snapshot Dialog Box shown in Figure 9.6. You can select an instrument in the active markets list and display the page with that instrument, or enter a Bid/Ask, Hit, or Take order.

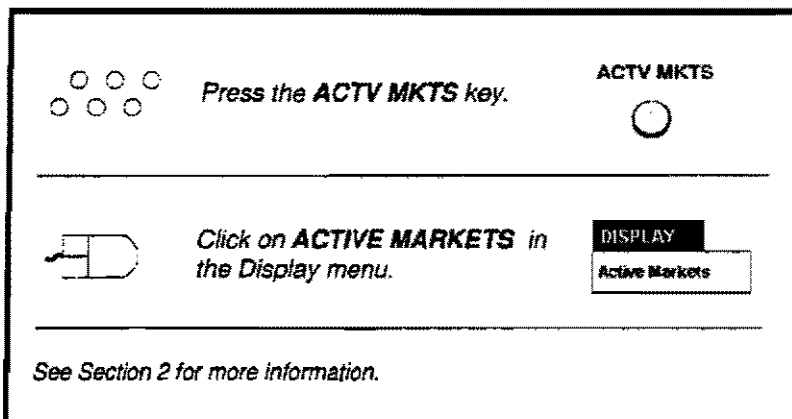
The Active Markets Dialog Box can remain on the screen while you do other activities. You can move the dialog box or remove it from the display, using the same techniques as for order entry dialog boxes. (See Section 2.5.)

The Active Markets Dialog Box shows each active instrument on the Service with the highest priority (see Section 6.3.2). Select another Service in the Service List box to display active markets on another Service. If there are more active markets than can fit in the dialog box, scroll bars display.

PAGE UP PAGE DN

Or use   to scroll through the list. (2000 active markets can be displayed for GLOBEX America, and 800 for GLOBEX Europe.)

Step 1 To display the Active Markets dialog box, choose **ONE** of these methods:



Instrument	Quote	Qty	Ex Id	Service List
DMZ3 C8620	/B	x1	m	GLOBEX America
DMZ3 C8638	7/	1x	m	
DMZ3 P8830	8/	1x	m	
EDM4-EDM4	24/	1x	m	
EDM4	9425/	1x	m	
EDM4-EDU4	22/	1x	m	
EDU3	/B440	x1	m	
EDU6	9255 /	1x	m	

Buttons: Bid/Ask, BNR, Take, Goto Page, Refresh, Quit

Last refresh: 98:33:19 GMT

WARNING: Prices May Not Be Current. Verify Price Before Trading.

Figure 9.6 Active Markets Dialog Box

The dialog box shows instrument names, best Bid/Ask prices, best Bid/Ask quantity, and Exchange ID. Instruments are displayed in alphabetical order. The Last refresh time tells when the display was updated.

Fields in the dialog box are not updated automatically when new bids/offers occur. Choose REFRESH to display updated data.

To Use Active Markets...

Step 2 *The procedure:*

To Display an Instrument on a Page

You can display a page with any of the instruments shown in the dialog box.

1. Select the instrument, using the arrow keys.
2. Choose **GOTO PAGE**.

OR

Double click the instrument in the dialog box.

- If the instrument is on the page already on display in the Trading window, the page remains in the display, and the instrument is selected.
- If the instrument is not in the Trading window, the system displays the first custom page with the instrument. The instrument will be selected.
- If the instrument is not on a custom page, the first system page containing the instrument will display, with the instrument selected.

To Enter an Order

You can enter an order for an instrument in the Active Markets Dialog Box.

1. Select the instrument, using the arrow keys or clicking the mouse. (Do not double-click.)
2. Choose a command button – **BID/ASK**, **HIT**, or **TAKE**.
3. The page with the instrument displays, along with the appropriate order entry dialog box. (See Section 7.) Enter and submit an order. Choose **QUIT** in the order entry dialog box if you decide not to enter an order at this time. The Trading window returns to the previous page display.

To Refresh the Data

To view the latest best prices and quantities and see new instruments that have become active, choose the **REFRESH** command button. (Either click on it or **TAB** to it and press **RETURN**. **REFRESH** is the active command button when the dialog box displays.)

After **REFRESH** is chosen, the selected instrument remains selected if it still has a market.

To Close the Dialog Box

To close the dialog box, choose **QUIT**. Or display the System Menu of the dialog box, and choose **CLOSE** from the menu.

Step 3 *The result:*

- If you have displayed a page, the Active Markets Dialog Box does not clear from the screen. Move it if necessary to see the instruments in the Trading window.
- If you have entered an order, the order entry dialog box clears from the screen and focus returns to the Active Markets Dialog Box.
- If you have refreshed the display, the latest data displays in the dialog box, and the Last refresh time is updated.

If the connection is lost to the selected Service when the dialog box is displayed, a warning message displays in the Alerts window. All command buttons except **QUIT** are disabled.

If the connection to a non-selected Service is lost, a warning message displays in the Alerts window, and the Service List box is updated to remove the name of the lost service.

9.6 Organizations

This procedure displays a list of all organizations subscribing to each GLOBEX Service logged in.

Step 1 To display the list of organizations, choose **ONE** of these methods:

The diagram illustrates two methods to display organizations:

- Method 1:** Press the **ORGANIZATIONS** key. This is represented by a cluster of five small circles and a larger circle labeled **ORGS**.
- Method 2:** Click on **ORGANIZATIONS** in the Display menu. This is represented by a cursor icon pointing to a button labeled **DISPLAY** with **Organizations** listed below it.

See Section 2 for more information.

The screenshot shows a dialog box titled "Organizations Subscribing To GLOBEX". It features a "Service List" dropdown menu currently set to "Globex America". Below the dropdown is a scrollable list of services:

- FCM1-CHI
- FCM1-LDN
- FCM1-NYC
- FCM2-NYC
- FCM3-CHI
- FCM3-NYC
- FCM4-CHI
- FCM5-CHI
- FCM6-CHI
- FCM6-NYC

On the right side of the dialog box, there are three buttons: "PAGE BACK", "PAGE FWD", and "QUIT".

Figure 9.7 Organizations Subscribing to GLOBEX

The display is a scrollable list. If a list of organizations was not received from the selected Service, a message, **No subscribers**, is displayed in the dialog box. To see the list of organizations on any other Service, select that Service in the drop-down list. Select **QUIT** to remove the dialog box.

10 Window Functions



Figure 10.2 Example of Freeform Display Style

The Window drop-down menu is shown in Figure 10.3. Each of the menu choices is explained in the sections that follow in this user guide. All choices on this menu are not available in each display style. For example, instrument overlap warning is not available in freeform display style; Trader Mailbox is not available in fixed display style. The availability of various choices is detailed at the start of each section.

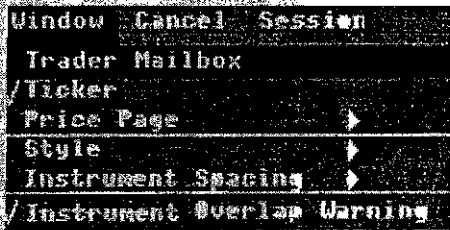


Figure 10.3 Window Drop-Down Menu

10. Window Functions

10.1. Overview

Choices on the Window menu allow the trader to customize the keystation display. You can:

- Choose between two different window zone arrangements – a fixed display format in which Trader Mailbox and Ticker display at the bottom of the screen, and a freeform display format in which you determine the placement of these elements.
- Select whether or not to display the Trader Mailbox or Ticker window in freeform display style.
- Select whether or not to display the Price Page window, and choose the Monitor page to display in the window.
- Select the spacing between instruments in the Trading window.
- Decide whether or not to receive warning messages in fixed display style when the Trader Mailbox and Ticker window become large enough to cover instruments in the Trading window.

Figures 10.1 and 10.2 show the two possible display styles.



Figure 10.1 Fixed Display Style

10.2. Trader Mailbox

This menu choice is available only in freeform display style. It's automatically displayed in fixed display style.

The Trader Mailbox, shown in Figure 10.4, shows responses from the Service's GLOBEX Host computer concerning your most recent entries. In freeform display, you can decide whether to display the Trader Mailbox. When the Trader Mailbox is not displayed, it is "iconized"—displayed as a small rectangle to the left of the Alerts window at the bottom of the screen. A count of messages displays in the iconized Mailbox, incrementing each time a new message is received until there are approximately 100 messages in the Mailbox. At that point, the number turns red and stops incrementing; however, no messages will be lost. The oldest messages will be deleted from the Trader Mailbox, but, they will be maintained in the tradelog. Each time the Trader Mailbox is iconized, the icon message counter is zeroed.

TRADER MAILBOX						
018-5	BUY	1	EDM6	9268	14:17:10	
	BAL:	0			1123123	m
018-6	SOLD*	1	EDM6	UP: 9268	14:17:10	
	HRCPH	EX-0			1123123	m
018-6	SELL*	1	EDM6	9268	14:17:10	
			OK		1123123	m
018-6	SELL*	1	EDM6	9268	14:17:10	
			ENTERED		1123123	m
018-5	BUY	1	EDM6	9268	14:16:56	
			OK-		1123123	m
018-4	SELL	1	ED23	9448	14:16:41	
			OK-		1123123	m

Figure 10.4 Trader Mailbox

To display or iconize the Trader Mailbox:

1. Choose Window in the menu bar. If the Trader Mailbox is currently displayed, it will be checked in the drop-down menu. If it is not currently displayed (as in Figure 10.3), it will not be checked.
2. Choose Trader Mailbox the menu.
 - If the Trader Mailbox is iconized, it will immediately display in the position used when last displayed.
 - If the Trader Mailbox window is currently displayed, it will immediately be hidden.

You can double click the icon to display the Trader Mailbox.

See Section 1 for more information on the Trader Mailbox and for additional information on moving, sizing, and displaying windows.

10.3. Ticker Window

This menu choice is available only in freeform display style. It's automatically displayed in fixed style.

The Ticker window, shown in Figure 10.5, displays last price data. In freeform display, you can decide whether to display the Ticker or hide it.



TICKER	
PIBM4	9486Af
PIBU4	9513Af
TBU3	9499 m
TBU3	9499Am
SPZ4	45265Am

Figure 10.5 Ticker Window

To display or hide the Ticker window:

1. Choose Window in the menu bar. If the Ticker is currently displayed (as in Figure 10.3), it will be checked in the drop-down menu. If it is not currently displayed, it will not be checked.
2. Choose Ticker in the menu.
 - If the Ticker window is hidden, it will immediately display in the position used when last displayed.
 - If the Ticker window is currently displayed, it will immediately be hidden.

See Section 1 for more information on the Ticker and for additional information on moving, sizing, and displaying windows.

10.4. Price Page

This menu choice is available in both fixed and freeform display styles.

The Price Page, shown in Figure 10.6, shows current cash market and statistics information. The Price Page displays automatically each time you login. After login, you can decide whether to continue to display the page, and choose between two pages of information from Reuters Monitor. If you login to a different Service, the Price Page for that Service will display automatically.

PRICE PAGE? GLB1			
INDICATIVE	CASH	QUOTES	GLB1
1417	1.4440/50-14:10	INDICATIVE	
DM	86.81/86-14:13	BP SMO	1.31/27
JY	1.2020/30-14:13	DM SMO	4.56/6
SF	1.5690/08-14:16	PIB SMO	8 07.210
BP	1.3532/37-14:16	SP 500	525.43
CD	0.7413/18-14:14	NK225	16420.76
AD	5.0565/95-14:03	FTSE	3310.3
FF		DAX	2102.
ED3MD	5.87-12-09:25	CAC40	1843.97
		UK T8	07 02.02
		BUND	
		NDT'L JUN FUT	115.48
		USBOND 3DVR	107.24-25
		GOLD	383.10/3.60-14:16
		SILVER	5.22/24-14:17
		8RENT-H/J	+0.58 8.

Figure 10.6 Price Page

To display, hide, or choose a Price Page, choose Price Page in the Window menu to display the secondary Price Page menu. An example of the menu is shown in Figure 10.7.

Window	Cancel	Session	Help
/Trader Mailbox			
Ticker			
Price Page		√GLB1	
Style			
Instrument Spacing		GLB2	
/Instrument Overlap Warning			

Figure 10.7 Example Price Page Menu

A price page can be in three different states:

- Available to the trader (received from the Service to which the trader is logged in).
- Unavailable because the trader is not logged onto that Service.
- Unavailable because data has not been received from the Service.

Choices on the Price Page menu will reflect these states.

- A grayed Price Page Name (GLB2 in Figure 10.7) indicates that the page is unavailable because the trader is not logged into the Service.
- A Price Page name (GLB1 in Figure 10.7) indicates that the page is available to the trader. A check indicates the page is currently displayed.
- "Enable" indicates that the Price Page is not currently displayed, and that no data has been received from the Service.
- "Disable" indicates that the Price Page is currently displayed without data; data has not been received from the Service.

To choose or hide an available Price Page:

1. Choose Window on the menu bar. Choose Price Page.
2. Choose a page name – GLB1 or GLB2 – in the secondary menu to display that page.
 - If a page is currently displayed, choosing the other page name will switch the display to that page.
 - If the page is currently displayed, its name will be checked in the menu. Choosing that page name will hide the Price Page.

If a blank page is displayed and data becomes available, the data displays immediately.


To choose or hide the blank Price Page:

1. Choose Window on the menu bar. Choose Price Page.
2. Choose Enable to display the blank page.

Or

Choose Disable to hide the blank page.

PRICE PAGE

Press  to display the Price Page if it is currently hidden. If the page is displayed, pressing the key will move focus to the Price Page window.

See Section 1 for more information on the Price Page and for additional information on moving, sizing, and displaying windows.

10.5. Style Choice

The Style choice on the Window menu allows the trader to pick from two display styles:

- *Fixed*— where the Trading window, Trader Mailbox, and Ticker window appear in fixed positions on the screen. Trader Mailbox and Ticker window can be increased or decreased in size using + or - buttons on the screen title bar. (See Figure 10.1.)
- *Freeform*— where the trader can move or overlap the various windows, and choose whether to display the Trader Mailbox and Ticker windows. (See Figure 10.2.) Note that the Trading window cannot be moved.

To choose a display style:

1. Choose Window on the menu bar. Choose Style. The secondary Style menu shown in Figure 10.8 displays.
2. Choose the top icon for fixed display style.

Or

Choose the bottom icon for freeform display style.

The screen display changes to the selected display style. If the Trader Mailbox or Ticker window were not displayed in freeform style and you change to fixed style, they will display. If you change to freeform style again, the screen will re-display with the previous choices for displayed windows, positioning, and sizing.

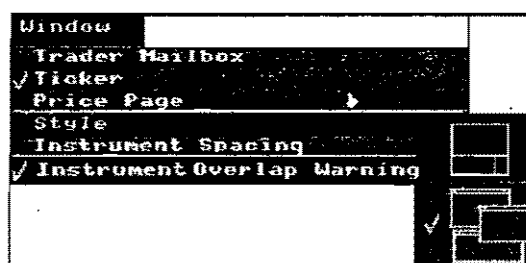


Figure 10.8 Style Choices on Window Menu

See Section 1 for more information on the display styles and for additional information on moving, sizing, and displaying windows.

10.6. Instrument Spacing

This menu choice is available in either display style.

The Instrument Spacing choice lets you choose how far apart to space instruments in the Trading window. You can choose to display instruments on:

- 1 line each (no space between instrument lines).
- 1 1/4 lines each (1/4 line space between instrument lines).
- 1 1/2 lines each (1/2 line space between instrument lines).
- 2 lines each (1 line space between instrument lines).

Experiment with these choices to determine the spacing you feel most comfortable with.

To choose instrument spacing:

1. Choose Window on the menu bar. Choose Instrument Spacing. The secondary Instrument Spacing menu displays.
2. Choose from the menu.

The screen display changes to the selected spacing. In the fixed display style, if you choose spacing that will cause an instrument(s) in the Trading window to be covered by the Trader Mailbox and Ticker window, a message warning you of this condition will display. (See Section 10.7.)

To display a Market Maker or Working Order dialog box, the Trading window must be in 1 1/2 line spacing. If it is not, the system will automatically change the instrument spacing.

10.7. Instrument Overlap Warning

This menu choice applies only to fixed display style.

You have the option of receiving a warning if instruments in the Trading window are about to be obscured. The Trading Window may be obscured when you:

- Change the size of the Trader Mailbox or Ticker window.
- Change the spacing of instrument lines in the Trading window.
- Log in to a new Service and bring in new instruments to the displayed page.
- Change the displayed page.

The Overlap Warning choice on the Window menu allows you to determine whether a warning should display.

To determine whether or not to receive a warning message:

1. Choose Window on the menu bar.
2. If a check displays next to Instrument Overlap Warning, the warning is active.
 - If Instrument Overlap Warning is not checked, choosing it activates the warning.
 - If Instrument Overlap Warning is checked, choosing it deactivates the warning.

Warning messages will display in one of two ways:

Trading Window Instruments are about to be covered. Do you still want to proceed?

Generally, this warning message will display as a popup window.

- Choose OK to continue. Instruments will be covered up.
- Choose Cancel to quit the procedure so that the instruments will not be covered up.

Or

Instruments covered

In some situations, when the displayed page changes, a message will display in the Alerts window. This tells you that instruments in the Trading window have been covered by the Trader Mailbox and Ticker. Resize the windows to view these instruments.

11. Messages and Keystation Records

Every event that occurs during use of GLOBEX – every trader action, every trade, and every communication – is reported and recorded somewhere in the system. At the keystation, messages are displayed in the Trader Mailbox, the Alerts window, and dialog boxes. These messages become part of the printed audit trail and the stored tradelogs (one tradelog for each connected Service).

This section helps you understand and interpret these displayed messages - their cause, their location, their meaning – and the keystation records they support.

11.1 Messages

Types of messages include:

Trading Request Messages, displayed in the Trader Mailbox, are records of Bids/Offer or Hit/Take orders, or requests to hold, release, cancel, or change orders.

Host Response Messages, also displayed in the Trader Mailbox, immediately confirm your requests and announce trades and order refusals.

Alert Messages, displayed in the Alerts window for about 30 seconds, are announced by a beep if the audible alarm is set to "Yes." (See Appendix F.) They include RFQ, price limit and GCC alerts, and all system errors, such as disruption of communication between the keystation and other system components. Alert messages are added to the displayable Alerts History (see Section 1.5.2).

Always check the Alerts window for printer error messages and correct any printer problems before you log out. **Failure to do so will lock the keystation and prevent you from logging back in until the problem is resolved and printing completes.**

System error messages always include an error number and status. Report **all** system error messages to the GCC, **exactly** as they are displayed. Call the GCC **before** you clear the message.

Error Messages, resulting from your actions, are displayed in two forms:

- Red status messages in the dialog box tell about incorrect or incomplete information. Correct errors and continue.
- Message boxes tell that you cannot perform the current action at this time, for example, **No Bid Market**. Select **OK** to remove the message.

11.2 Trader Mailbox

The Trader Mailbox displays messages from the Host. A new message is added at the top of the list, and the others scroll downward. You can scroll through up to 300 lines. Descriptions of functions in this user guide include examples of relevant messages.

Messages are displayed in color as follows:

Yellow	Events occurring during non-trading mode Order rejections (NG messages) Errors in timing or status
Red	Single order cancelled Entry removed
White	Match notifications
Green	Order entry Hold Release

Transaction codes identify the type of entry:

BUY*	Notification of a successfully ENTERED Take.
SELL*	Notification of a successfully ENTERED Hit.
BUY	Response to entry of a Bid (order to buy).
SELL	Response to entry of an Offer (order to sell).
BUY*	Response to entry of a Take order (Take an Offer).
SELL*	Response to entry of a Hit order (Hit a Bid).
BOT	Confirmation that a Bid (BUY) was matched.
SOLD	Confirmation that an Offer (SELL) was matched.
BOT*	Confirmation that a Take (BUY*) was matched.
SOLD*	Confirmation that a Hit (SELL*) was matched.
CX-B	Confirmation that a Bid was cancelled.

- CX-S** Confirmation that an Offer was cancelled.
- B-HLD** Confirmation that a Bid (**BUY**) was held.
- S-HLD** Confirmation that an Offer (**SELL**) was held.
- B-REL** Confirmation that a Bid (**BUY**) was released.
- S-REL** Confirmation that an Offer (**SELL**) was released.

Trader Mailbox messages may also include credit status, as explained in Section 4.3.

There are four message formats, shown in Table 11.1. Examples follow. In all examples, "x" stands for the Exchange identifier.

Table 11.1 Mailbox Message Formats

	Format 1	Format 2	Format 3	Format 4
<i>Line 1 Fields</i>	Order number Transaction code Order quantity Instrument name Price Timestamp	Order number Transaction code Quantity remaining Instrument name Price Timestamp	Order number Transaction code Order quantity Instrument name Price* Timestamp	Message Service code Timestamp
<i>Line 2 Fields</i>	Status code Account number Exchange ID	"BAL:" Quantity remaining Account number Exchange ID	"#RCP#" "BAL:***" Quantity remaining Account number Exchange ID	

Format 1 - Entry positioned messages; messages for entry **removed, held, released**; single entry **cancelled**; and all **rejected (NG)** messages.

**In recap message, the price in line 1 is the worst price at which the order traded.
"BAL:" is not displayed in a **BOT or **SOLD*** message.

11 Messages and Keystation Records

Order Status is shown in each message. For Hit and Take entry messages status is **ENTERED**. For all other messages, successful status is indicated by **OK**; unsuccessful status is indicated by **NG**.

Examples:**OFFER successfully positioned**

LW1-1234	SELL	100	NNZ2 P9225	101	16:39:14	(GREEN)
			OK-		123A x	

TAKE successfully entered

LW1-4284	BUY*	100	BPM3	15280	16:54:37	(GREEN)
			ENTERED		123A x	

BID successfully held

AX3-4500	B-HLD	100	EDZ2	9168	17:11:16	(GREEN)
			OK-		123A x	

BID successfully released

AX3-4500	B-REL	100	EDZ3	9168	17:21:16	(GREEN)
			OK-		123A x	

BID successfully cancelled

AX3-4500	CX-B	100	EDZ3	9168	17:36:10	(RED)
			OK-		123A x	

HIT successfully entered

AX3-4508	SELL*	25	NNZ2 C7700	250	17:43:37	(GREEN)
			ENTERED		123A x	

HIT rejected

LW1-4508	SELL*	25	NNZ2 C7700	250	17:49:12	(YELLOW)
			NG-NO BID AT PRICE		123A x	

Format 2 - Entry matched messages, received by non-aggressors, indicating that a standing order has matched due to another trader's Bid/Offer or Hit/Take.

This type of message is also received when the market opens, to show matches that resulted from orders submitted during the staging period. This message can include a list of entries, because more than one of the recipient's standing orders can be filled by the aggressor's entry.

Example:**OFFER traded**

```
LW1-1234   SOLD   50  EDH2 P9225   100   16:51:41   (WHITE)
           BAL:    0                               123A    x
```

Format 3 - Multiple entries matched (Recap).

The recap message is received by the aggressor in the trade and indicates that a Bid, Offer, Hit, or Take entered at that keystation was filled. It is highly probable that multiple fills will result from a single order entry. The recap message relays this initial trade activity and lists the quantity bought or sold, the balance remaining (or cancelled because of a Hit/Take) and the worst actual price of the transaction.

Note: The aggressor always shows a WP Indicator (preceding the price) regardless of whether the fill is at one or multiple price levels.

Examples (with Recap):**OFFER traded**

```
LW1-1234   SOLD   67  EDH3 P9225   WP:101 16:39:17   (WHITE)
           #RCP#  BAL:   33                               123A    x
```

TAKE traded

```
LW1-4284   BOT*   83  BPM3           WP:1528016:54:40 (WHITE)
           #RCP#                               123A    x
```

Format 4 - Multiple cancel message indicates the request for cancellation of multiple orders, any invalid statuses on the cancel, and completion of the cancel request. **CANCELLING...** is displayed when you make the request. **WARNING...** is displayed when the Host indicates that an order was not found.

...COMPLETED is displayed when the final Entry Cancelled message is received from the Host.

A timestamp is included in a format 4 message only when the Host responds, not on the entry message.

Examples:

```
Request   CANCELLING ENTRIES
Response  CANCEL ENTRIES COMPLETE      xx 16:14:37
          WARN CXL: ORDER NOT FOUND-E#1234567890 xx
          (xx indicates Service Code)
```

11.3 Tradelog

The tradelog is an internal record, maintained at the keystation, of all communications between the keystation and each Host, timestamped in Greenwich Mean Time (GMT). There is a separate tradelog for each Service logged into for each day. Each tradelog tracks a 24-hour period that begins with the first login attempt.

The tradelog name is **C:\GX\TRADELOG\TLOGyxxx.ZZ**, where:

y is the last digit of the current year,

xxx is the Julian date,

ZZ is the Service code of the Service the tradelog represents.

The tradelog records information from the following events:

- Login/Logout - The subscriber, trader, and date.
- Sign-in/Sign-out - The operator identifier.
- Change Password - The Change Password response.
- Lock/Unlock
- All trader actions that request an entry into the market or affect already-positioned entries; i.e., Bid, Offer, Hit, Take, Hold, Release, Modify, Cancel, Market Maker, Buy/Sell Working Order.
- RFQs
- All directed messages from the Host to the trader (also displayed on the screen) concerning a requested entry or entries already in the market; i.e., refusals, result of trader functions, entry positioning, entry removal, match and trade notifications, and credit status. Messages for failed price checks also appear in the tradelog.
- At administrative keystations, trade ticket and clearing information.

Note: Your keystation will not receive match notification messages in the tradelog if it has failed or you have logged out.

11.3.1 Using the Tradelog

The **Print File** function (Section 7.15) lets you print the current day's tradelog; do this before you log out from each Service. Because printing the tradelog is time-consuming and delays the printing of audit trail messages related to trading, you should not print the tradelog during a GLOBEX Session.

A tradelog remains on your keystation hard disk for seven GLOBEX trading days. If your hard disk fails, these tradelogs will be lost, so print tradelogs or copy tradelog files to diskette (see Section 12) on a daily basis. Exit GLOBEX to use the Offline Utilities to print or copy only when trading is completed.

Because tradelog at administrative keystations includes trade ticket information, you can use the printed tradelog to recover information that would otherwise be lost due to ticket printer malfunction. You can create a ticket manually as long as you can refer to a printed tradelog. You can also reprint lost trade tickets, using the Offline Utilities.

The GCC Emergency Procedures (colored pages) and Section 12 describe when and how to use the tradelog.

Because a number of emergency situations already described in this user guide require you to refer to the tradelog, it is important to understand how to interpret tradelog records. Tradelog information appears in a number of different formats which are explained below; examples are included.

11.3.2 First Line of Tradelog

The first line of the tradelog shows the Julian date and Service code, for example: **105 yearday:GA**.

11.3.3 Description of System Event

System events are not directly related to trading. They include network control events, system errors, login/logout and sign-in/sign-out information, alerts, lock/unlock, and system errors that relate to message data received from a Service. A system event message includes the following fields:

11 Messages and Keystation Records

Logging Sequence Number - A numeric field, always 5 digits, that restarts at 00001 at the beginning of each trading session and runs from 00001 to 65535 before returning to 00001.

Logging Timestamp - The time, in Greenwich Mean Time, the entry is logged, in the format **HH:MM:SS.hh** and always 11 characters long.

Message Start - "MSG" marks the start of the system event message.

Message Text - Event description no longer than 60 characters.

Examples:**System Control Events and Errors**

```

00017 23:34:35.26 MSG: SUBSCRIBER:CRGL-CB ATTEMPTING LOGIN
00018 23:34:35.26 MSG: TRADER: CL4 ATTEMPTING LOGIN
00020 23:34:35.60 MSG: SUBSCRIBER:CRGL-CB LOGGED IN
00021 23:34:36.69 MSG: TRADER: CL4 LOGGED IN

00025 23:34:40.20 MSG: PASSWORD MODIFIED
00028 23:48:00.96 MSG: OPERATOR SALLY SIGNED IN
00029 23:48:00.96 MSG: OPERATOR SALLY SIGNED OUT
00029 23:48:00.96 MSG: KEYBOARD LOCKED
00029 23:48:00.96 MSG: KEYBOARD UNLOCKED

00698 10:11:14.90 MSG: TRADER: US1 ATTEMPTING LOGOUT
00700 10:11:38.46 MSG: TRADER: US1 LOGGED OUT

00002 10:15:14.32 MSG: CHECK AUDIT PRINTER
00660 10:40:02.91 MSG: CHECK TICKET PRINTER

00578 09:23:07.81 MSG: MARK FOR EXTRACTION

```

00016 17:59:23.25 MSG: MAIN SYSTEM ERROR Error: 1000 Status: 200
 00016 15:59:23.25 MSG: DATABASE ERROR Error: 7402 Status: 1002
 00016 17:59:23.25 MSG: AUDIT PRINTER ERROR Error: F0001 Status: 21
 00016 17:59:23.25 MSG: CANNOT RECOVER Error: 1022 Status: 200

00419 19:45:37.79 MSG: NOT PERMISSIONED Error: 1042 Status: 2

Parameter File Maintenance

00011 09:54:12.00 MSG: INSTRUMENT PARAMETER INVALID QTY: SPOT
 00012 09:54:12.00 MSG: INSTRUMENT PARAMETER INVALID INSTRUMENT: NOT STORED

Price Alerts

00862 11:02:13.54 BPZ3 x HIGH
 00865 11:02:17.54 BPZ3 x LOW

11.3.4 Trade Ticket Information

For each matched trade, the Service Host generates a Buy trade confirmation and a Sell confirmation. The ticket printed at the buyer's administrative keystation only prints the **buy** side of the ticket; the ticket at the seller's end only prints the **sell** side information. Tradelog information is directed accordingly, and is identifiable chiefly by order number.

Trade Ticket Header - "GLOBEX ORDER EXECUTION CONFIRMATION", plus keystation timestamp (HH:MM:SS.hh) indicates the start of trade ticket information in the Tradelog.

Trade Ticket Information - A series of lines of specific information.

Trade Ticket Footer - A line of 78 asterisks indicates the end of trade ticket information.

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Examples:

```
**050123 UID:00054
ORD #:ON012345 TYPE: LMT QUAL:G ACCT #:ACT0012345 FE:GU FFIRM:LINDW
```

```
BUY-
M IXM:BPZ3 QTY:0005 MQTY:0000 AT PRICE:025010 PFI:x CTI:1 FEE:M ORIGIN:2
TIME:12:34:55 DATE:02/14/93 MATCH #:000000123 OP ORG:LINDW OP UID:00054
*****
```

```
**05:12:30:14***** GLOBEX ORDER EXECUTION CONFIRMATION *****
ORG:LINDW E #:0000002130 ETIME:17:55:18 DATE 12/16/92 OID:00123 SID:00054
ORD #:ON012345 TYPE: LMT QUAL:G ACCT #:ACT0012345 FE:GU FFIRM:LINDW
```

```
SELL-
M IXM:NNZ3 QTY:0005 MQTY:0000 AT PRICE:025010 PFI:x CTI:1 FEE:M ORIGIN:2
TIME:12:34:55 DATE:02/15/93 MATCH #:000000123 OP ORG:MLPFSCHI OP UID:00036
ACTION:0 MEMO:XXXXXXXXXXXXXX
```

```
*****
```

11.3.5 Directed Messages

Directed trading messages are recorded in the tradelog, printed on the audit trail, and displayed on the screen (in an edited version) in the Alerts window or Trader Mailbox.

There are two types of directed messages: **trading request messages** from the keystation to a Service Host and **Host response messages** from a Service Host to a keystation. Trading request messages have a single timestamp, in the second field, showing the time the message was added to the tradelog. Host response messages have **two** timestamps: the tradelog timestamp in the second field and a Host timestamp, the time the message was sent from the Host, in the fifth field.

Trading Request Messages

Table 11.2 identifies all possible fields in a trading request message; the number of fields in an actual message can vary. Table 11.3 shows the fields included in each request message according to the function identified in field #4.

Table 11.2 Trading Request Format

Field	Field Name	Format
1	Logging sequence number	(5-digit number)
2	Logging timestamp	HH:MM:SS.hh
3	Keystation transaction number	"X#(10-digit number)"
4	Function	See table 11.3
5	Exchange identifier	"M" or "F"
6	Instrument	"IXM:(10-character instrument name):
7	Entry token	"E#(10-digit number)"
8	(line break)	
9	Quantity	"QTY:(5-digit number)"
10	"AT"	
11	Price	(6-digit number)
12	More quantity	"MQTY:(4-digit number)"
13	Credit status	"OK" OR "NG" plus explanation
14	(line break)	
15	"CLEARING"	See Section 4.4.2 & Appendix B
16	Account number	See Section 4.4.2 & Appendix B
17	Order number	See Section 4.4.2 & Appendix B
18	Order type	See Section 4.4.2 & Appendix B
19	Order qualifier	See Section 4.4.2 & Appendix B
20	Origin	See Section 4.4.2 & Appendix B
21	CTI	See Section 4.4.2 & Appendix B (blank for GE)
22	Fee	See Section 4.4.2 & Appendix B (blank for GE)
23	Original entry date	See Section 4.4.2 & Appendix B
24	Foreign exchange	See Section 4.4.2 & Appendix B
25	Foreign firm	See Section 4.4.2 & Appendix B
26	Action	MATIF only
27	Memo	MATIF only
28	(line break)	

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Table 11.3 Trading Request Message Field Combinations
(X - Field always present)

If Function Field is	Message Includes These Field Numbers:							
	1-4	5-6	7	8	9-13	14	15-27	28
ENTER BID	X	X		X	X	X	X	X
ENTER OFR	X	X		X	X	X	X	X
ENTER BUY	X	X		X	X	X	X	X
ENTER SELL	X	X		X	X	X	X	X
CXL SEL	X			X		X		X
CXL ALL ENTS	X			X				
CXL ALL BIDS	X			X				
CXL ALL OFRS	X			X				
MODIFY BID	X	X	X	X	X	X	X	X
MODIFY OFR	X	X	X	X	X	X	X	X
HOLD SEL	X			X				
RELEASE SEL	X			X				
ENTER RFQ	X	X		X				
MATCH NTC ACK	X			X				

Examples:

00010 09:54:12.00 X#0000000010 ENTER BID F IXM:NNZ3
 QTY:00010 AT 016690 MQTY:0000
 CLEARING: 01107423 15746578 LMT G 1 1 M 09/30/89 GU LINDW 0 xxxxxxxxxxxxxxxxxxx

00011 09:54:12.00 X#0000000011 ENTER OFR M IXM:BPM3-BPZ3
 QTY:00005 AT 010200 MQTY:0000
 CLEARING: 01107423 15746578 LMT G 1 1 M 09/30/93 GU LINDW

00012 09:54:12.00 X#0000000012 ENTER SELL M IXM:BPZ3
 QTY:00010 AT 016690 MQTY:0000
 CLEARING: 01107423 15746578 LMT G 1 1 N 09/30/93 GU LINDW

00015 09:54:12.02 X#0000000055 MODIFY BID F IXM:SFZ3 E#0001408278
 QTY:00130 AT 006950 MQTY:0000
 CLEARING: ACCOUNT BA2-31 LMT G 1 1 M 03/20/93 GU LINDW 0 xxxxxxxxxxxxxxxxxxx

00019 09:54:12.00 X#0000000019 CXL ALL ENTS

00066 23:56:48.47 X#0000000017 CXL SEL

00014 09:54:16.00 X#0000000054 MATCH NTC ACK

Host Response Messages

Table 11.4 identifies all possible fields in a Host response message; the number of fields in an actual message can vary. Table 11.5 shows the fields included in each response message according to the function identified in field #4.

The status "TRADED" in field 15 is included in all messages indicating successful trades. In all other messages, successful status is indicated by "OK". All messages indicating unsuccessful status include "NG".

11 Messages and Keystation Records

Table 11.4 Host Response Message Format

Field	Field Name	Format
1	Logging sequence number	(5-digit number)
2	Logging timestamp	HH:MM:SS.hh
3	Keystation or Host transaction number	"X#(10-digit number)"
4	Function	See table 11.5
5	Host timestamp	HH:MM:SS
6	Exchange identifier	"M" or "F"
7	Instrument	"IXM:(10-character instrument name)"
8	Entry token	"E#(10-digit number)"
9	(line break)	
10	Quantity	"QTY:(5-digit number)"
11	"AT"	
12	Price	(6-digit number)
13	More quantity	"MQTY:(4-digit number)"
14	Completion status/Credit status	20-character text
15	"TRADED"	
16	Match number	"M#(10-digit number)"
17	(line break)	
18	"CLEARING"	See Section 4.4.2 & Appendix B
19	Account number	See Section 4.4.2 & Appendix B
20	Order number	See Section 4.4.2 & Appendix B
21	Order type	See Section 4.4.2 & Appendix B
22	Order qualifier	See Section 4.4.2 & Appendix B
23	Origin	See Section 4.4.2 & Appendix B
24	CTI	See Section 4.4.2 & Appendix B (blank for GE)
25	Fee	See Section 4.4.2 & Appendix B (blank for GE)
26	Original entry date	See Section 4.4.2 & Appendix B (blank for GE)
27	Foreign exchange	See Section 4.4.2 & Appendix B (blank for GE)
28	Foreign firm	See Section 4.4.2 & Appendix B (blank for GE)
29	Action	MATIF only
30	Memo	MATIF only
31	(line break)	

Table 11.5 Host Response Message Field Combinations
 (X=Field always present; S=Field sometimes present; K=Keystation; H=Host)

If Function Field is	Message Includes These Field Numbers:											
	1-2	3	4	5	6-7	8	9	10-13	14	15-16	17	18-20
BID	X	K/H	X	X	X	S	X	X	S	S	X	X
OFR	X	K/H	X	X	X	S	X	X	S	S	X	X
BUY	X	K	X	X	X		X	X	S	S	X	X
SELL	X	K	X	X	X		X	X	S	S	X	X
CXL BID	X	K	X	S	X	X	X	X	S		X	
CXL OFR	X	K	X	S	X	X	X	X	S		X	
COMMAND ACK	X	K	X	X					X		X	
ENTRY REMVD	X	H	X	X	X	X	X	X	X		X	
BID RELEASED	X	K	X	X	X	X	X		X		X	
OFR RELEASED	X	K	X	X	X	X	X		X		X	
BID HELD	X	K	X	X	X	X	X		X		X	
OFR HELD	X	K	X	X	X	X	X		X		X	
RFQ	X	H	X		X	X	X				X	
RELEASE BID	X	K	X		X	X	X	X	X		X	
RELEASE OFR	X	K	X		X	X	X	X	X		X	
HOLD BID	X	K	X			X	X		X		X	
HOLD OFR	X	K	X			X	X		X		X	
BID ON HOLD	X	K	X	X	X	X	X	X	X		X	X
OFR ON HOLD	X	K	X	X	X	X	X	X	X		X	X

Examples:**Successfully positioned trading requests**

00010 09:54:00.12 X#000000010 BID 09:54:10 F IXM:NNZ3 E#0000000123
 QTY:00010 AT 016690 MQTY:0000 OK-
 CLEARING: 01107423 15746578 LMT G 1 1 M 09/30/92 GU LINDW O xxxxxxxxxxxxxxxxx

00011 09:54:00.12 X#000000011 BID 09:54:10 M IXM:BPM3-BPZ3 E#0000000154
 QTY:00005 AT 010200 MQTY:0000 OK-
 CLEARING: 01107423 15746578 LMT G 1 1 M 09/30/92 GU LINDW O xxxxxxxxxxxxxxxxx

11 Messages and Keystation Records

00038 11:47:45.04 X#0000000009 OFR ON HOLD 11:47:44 M IXM:BPM3-BPZ3 E#0000000236
 QTY:00005 AT 000100 MQTY:0000 OK-
 CLEARING: 1 BT9-1 LMT 1 1 09/30/82

00015 09:54:00.12 X#0000000012 COMMAND ACK 09:54:12 OK-

Refusal messages for Bid, Offer, Sell, and Buy

00010 09:54:00.12 X#0000000010 BID 09:54:10 F IXM:NNZ3
 QTY:00010 AT 016690 MQTY:0000 NG-
 CLEARING: 01107423 15746578 LMT G 1 1 M 09/30/92 GU LINDW O xxxxxxxxxxxxxxxx

00011 09:54:00.12 X#0000000011 OFR 09:54:10 M IXM:BPM3-BPZ3
 QTY:00005 AT 010200 MQTY:0000 NG-
 CLEARING: 01107423 15746578 LMT G 1 1 M 09/30/92 GU LINDW O

00012 09:54:00.12 X#0000000012 SELL 09:54:10 M IXM:BPZ3
 QTY:00010 AT 016690 MQTY:0000 NG-
 CLEARING: 01107423 15746578 LMT G 1 1 M 09/30/92 GU LINDW

00013 09:54:00.12 X#0000000013 BUY 09:54:10 M IXM:BPZ3
 QTY:00010 AT 016690 MQTY:0000 NG-
 CLEARING: 01107423 15746578 LMT G 1 1 M 09/30/92 GU LINDW

Match notifications for Bid, Offer, Sell, and Buy

00013 09:54:00.12 X#0000000013 BID 09:54:10 M IXM:BPZ3 E#0000000149
 QTY:00010 AT 016690 MQTY:0000 TRADED: M#0000000101
 CLEARING: 01107423 15746578 LMT G 1 1 M 09/30/92 GU LINDW

00014 09:54:00.12 X#0000000013 OFR 09:54:10 M IXM:BPZ3 E#0000000150
 QTY:00010 AT 016690 MQTY:0000 TRADED: M#0000000101
 CLEARING: 01107423 15746578 LMT G 1 1 M 09/30/92 GU LINDW

00015 09:54:00.12 X#0000000012 SELL 09:54:10 M IXM:BPZ3 E#0000000123
 QTY:00010 AT 016690 MQTY:0000 TRADED: M#0000000100
 CLEARING: 01107423 15746578 LMT G 1 1 M 09/30/92 GU LINDW

00016 09:54:00.12 X#0000000013 BUY 09:54:10 F IXM:NNZ3 E#0000000124
 QTY:00010 AT 016690 MQTY:0000 TRADED: M#0000000101
 CLEARING: 01107423 15746578 LMT G 1 1 M 09/30/92 GU LINDW O xxxxxxxxxxxxxxxx

Responses to Hold, Release, and Cancel requests

00011 09:54:00.12 X#0000000011 BID HELD 09:54:10 M IXM:BPM3-BPZ3 E#0000000123
 OK-

00012 09:54:00.12 X#0000000011 HOLD OFR 09:54:10 m IXM:BPM3-BPZ3 E#0000000148
 NG-ALREADY HELD

00013 09:54:00.12 X#0000000011 HOLD BID 09:54:10 m IXM:BPM3-BPZ3 E#0000000148
 NG-ALREADY HELD

00013 09:54:00.12 X#0000000011 OFR HELD 09:54:10 M IXM:BPM3-BPZ3 E#0000000241
OK-

00015 09:54:00.12 X#0000000011 BID RELEASED 09:54:10 M IXM:BPM3-BPZ3
OK-

00016 09:54:00.12 X#0000000011 RELEASE BID 09:54:10 M IXM:BPM3-BPZ3
NG-ALREADY ACTIVE

00016 09:54:00.12 X#0000000011 RELEASE OFR 09:54:10 M IXM:BPM3-BPZ3
NG-ALREADY ACTIVE

Other response messages

00330 10:06:54.44 X#0000195313 RFQ IXM:INSTR0011

00699 10:11:15.23 X#0000000230 COMMAND ACK 10:11:15 OK-

11.4 Audit Trail

The GLOBEX audit trail is a printed record that includes all the Host messages and alerts that appear in the Trader Mailbox. The audit trail contains all the details necessary to trace your activity during the GLOBEX session, for example:

- **Login/Logout - trader name and operator identifier are recorded.**
MSG: TRADER: MJK-M LOGGED IN GA11:23:15
- **Sign-in/Sign-out - keystation operator identifier is recorded.**
MSG: OPERATOR GEZ SIGNED IN GA 11:24:15
RFQs
RFQ: m TNU2 10:18:41
- **System messages - high/low limits and other system messages.**
MSG: TERMINATING SESSION - SUBSCRIBER: SB101-XX TRADER: USG GE 11:39:15
(xx = Service code)
MSG: yBPZ8 HIGH
(y = Exchange ID)

- **All messages directed to your keystation concerning your requested entries or entries already in the market; refusal messages, result of trading functions, entry positioning, all match and trade notifications.**
- **Error messages for order upload rejections based on Exchange permissioning.**

The audit trail is printed at each keystation, with each message printed immediately upon receipt. Printing the tradelog may delay audit trail printing, but the complete audit trail will print as soon as system conditions allow. You cannot log out until any backlogged audit trail printing is completed. **Do not turn off the printer while the keystation is logged into any Service.**

An audit trail of all orders must be maintained when you trade on the GLOBEX system. For this reason, if you see an alert message stating that your audit trail printer has stopped functioning, it is strongly recommended that you use another keystation with a working audit trail printer.

Note: Your keystation will not receive match notification messages in the audit trail if the keystation has failed or you have logged out.

There are three audit trail formats, described below:

Format 1 - Entry positioned/entry list, entry removed, hold (single entry), release (single entry), cancel (single entry), entry Hit/Taken (successful, rejected) messages.

Status (line 4) on Hit and Take entry messages is **ENTERED**. For all other messages, successful status is indicated by **OK**, unsuccessful status is indicated by **NG**.

Examples:

```

ENTRY
LW1-1234 SELL      100 + 50 NNZ3 P9325101  GU LINDW      A#1234567890  16:39:14
LIND-CH /LW1 /JRK 1 1 M LMT/D 01/29/92  X#1234567890      m
OK-                XXXXXXXXXXXXXXXXXXXX  E#1234567890 O

ENTRY
AX3-4500 BUY*     100    EDZ2           9169          A#5555        17:36:12
LIND-CH /LW1 /JRK 4 1 LMT/G 01/29/92  X#1111        m
ENTERED

HOLD
AX3-4500 B-HLD   100    EDZ2           9168          A#5555        17:11:16
LIND-CH /LW1 /JRK 4 1 LMT/G 01/29/92  X#1111        m
OK-      E#2222

RELEASE
AX3-4500 B-REL   100    EDZ2           9168          A#5555        17:21:32
LIND-CH /LW1 /JRK 4 1 LMT/G 01/29/92  X#1111        m
OK-      E#2222

CANCEL
AX3-4500 CX-B    100    EDZ2           9168          A#5555        17:36:10
LIND-CH /LW1 /JRK 4 1 LMT/G 01/29/92  X#1111        m
OK-                E#152775

```

Format 2 - Entry hit, entry taken, Bid traded, Offer traded (multiple fills on a single entry).

The recap message is received by the aggressor in the trade and indicates that a Bid, Offer, Hit, or Take entered at that keystation was filled. The message also identifies the counterparty(ies). It is highly probable that multiple fills will result from a single order entry. The Recap message relays this initial trade activity and lists the quantity bought or sold, the balance remaining (or cancelled because of a Hit/Take), and the worst actual price of the transaction.

For Entry Hit or Entry Taken, the Quantity Remaining field in line 4 is "CX-" and the unfilled quantity automatically cancelled by the system.

Line 3 includes Action and Memo information for GLOBEX Europe trades. Line 3 is blank for GLOBEX America trades.

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Examples:

```

## TRADE RECAP ##
LW1-1234 SOLD      67  NNZ3      WP: 102  GU LINDW A#1234567890 17:21:32
O xxxxxxxxxxxxxxxx
  BAL: 33 + 50 /M                                     m

#### SOLD        25  NNZ3          104  E#1234567890  LW1-1234  * m
#### SOLD         5  NNZ3          103  E#1234567890  LW1-1234  * m
#### SOLD        10  NNZ3          102  E#1234567890  LW1-1234  * m

## TRADE RECAP ##
LW1-4284 BOT*     83  BPM2      WP: 15278 SX 001      A#0001 16:54:37
(blank line)
                                CX-17                                     m
#### BOT*        83  BPM0          15278 X#1234567890  LW1-4284  * m
    
```

Format 3 - Bid traded, Offer traded (single fill) messages, received by non-aggressors, indicating that a standing order has matched due to another trader's Bid/Offer or Hit/Take and identifies the counterparty.

If more than one standing order has matched, multiple format 3 messages are written to the audit trail. This type of message is also received when the market opens, to show matches that resulted from orders submitted during the staging period.

Example:

```

LW1-1234 SOLD      50  EDH2      P9325: 102  GU LINDW A#1234567890 16:51:41
O xxxxxxxxxxxxxxxx
  BAL:              0                                     E#1234567890
    
```

Table 11.6 Audit Trail Formats

	<i>Format 1</i>	<i>Format 2</i>	<i>Format 3</i>
<i>Line 1 Fields</i>	Transaction header (ENTRY, CANCEL, HOLD, RELEASE, CANCEL, ENTRY)	Transaction header ("##TRADE RECAP##")	Transaction header ("##TRADE")
<i>Line 2 Fields</i>	Order number Transaction code (BUY, SELL, BUY*, SELL*, CX-S, CX-B, B-HLD, S-HLD, B-REL, S-REL) Order quantity Contract ID Price Foreign exchange Foreign firm "A#" Account number Timestamp	Order number Transaction code (BOT* — successful TAKE SOLD* — successful HIT BOT — successful BID SOLD — successful OFFER) Order quantity Contract ID "WP:" Price Foreign exchange Foreign firm "A#" Account number Timestamp	Order number Transaction code (BOT or SOLD) Primary qty traded Contract ID Trade price Foreign exchange Foreign firm "A#" Account number Timestamp
<i>Line 3 Fields</i>	Subscriber "***" Trader ID " / " Operator ID Customer type Origin Fee Order type** Order qualifier** Orig. entry date "X#" K/S transaction # Exchange ID	Action / Credit Status Memo	"BAL:" Qty. remaining Action / Credit Status Memo "E#" Entry token Exchange ID
<i>Line 4 Fields</i>	Status / Credit status Memo "E#***" Entry token**	"BAL:***" Quantity remaining Exchange ID	Opposite subscriber
		<i>Line 5 blank</i>	
		<i>Lines 6 through n, individual fill details</i>	
		#### Transaction code (BOT*, SOLD*, BOT, SOLD) Quantity traded Contract ID Trade price Token ("E#" or "X#") Transaction number (Entry token for Buy/Sell, [Bid/Offer] keystation transaction number for BUY*/SELL* [Hit/Take]) Order number Opposite subscriber Exchange ID	

** Blank for Hit/Take

12. GLOBEX Offline Utilities

12.1 Overview

The GLOBEX Offline Utilities are tools for performing auxiliary functions related to the GLOBEX Session. Offline Utilities include:

- **Copy** - copy open order, tradelog, and eventlog files to a diskette.
- **Reports** - generate order reports based on tradelog information.
- **Print** - print open order, tradelog, or eventlog files or print a file from a diskette in Drive A.
- **Special** - extract working (open) orders from the tradelog and reprint trade tickets from the tradelog.

The Offline Utilities are available at each GLOBEX keystation. To use the utilities, log out of all GLOBEX Services. Use the utilities only at the end of a GLOBEX Session.

12.2 Starting the Offline Utilities

When trading is completed, log out from all Services and exit the Session. You will see the dialog box in Figure 12.1.

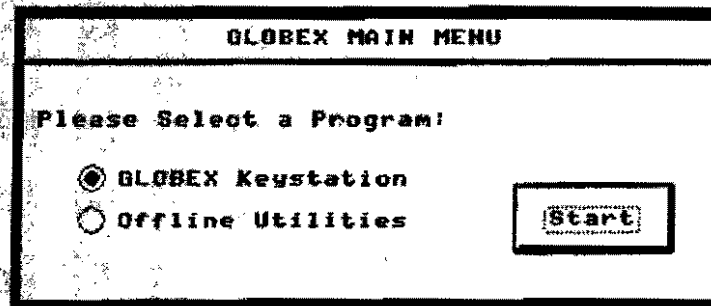


Figure 12.1 GLOBEX Main Menu

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Select **Offline Utilities** and choose **Start**. The GLOBEX Offline Utilities screen is displayed as shown in Figure 12.2.

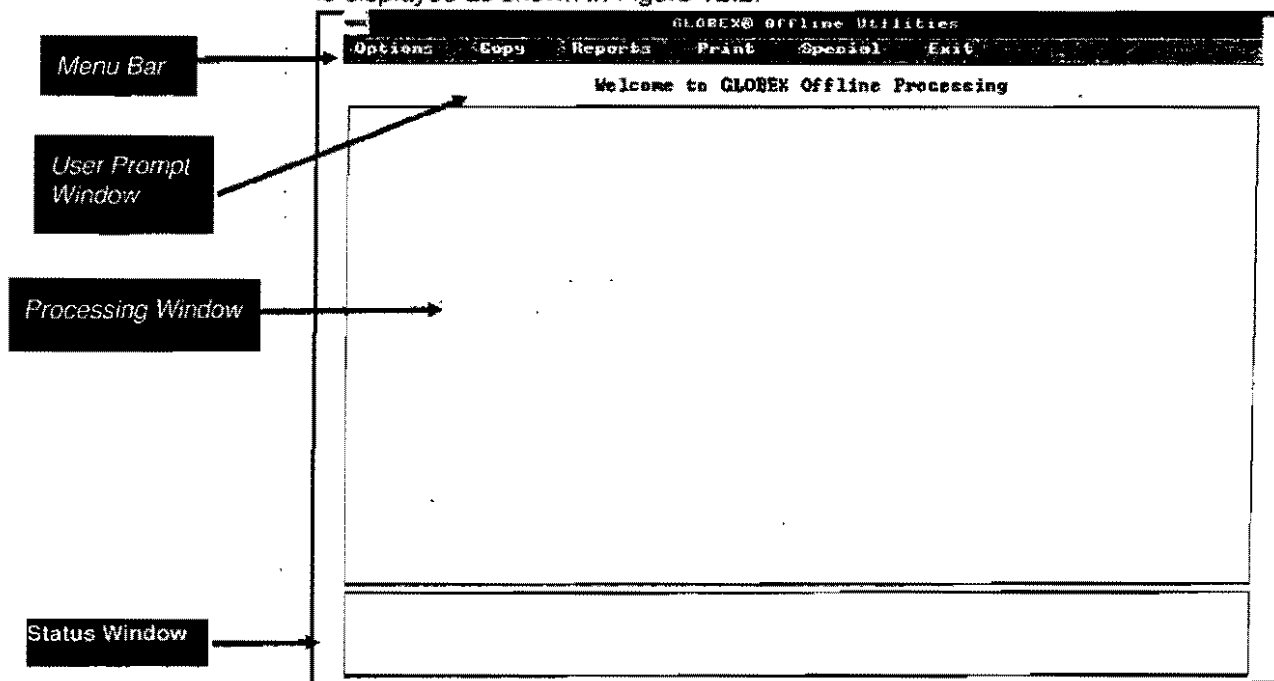


Figure 12.2 Offline Utilities Display

Menu Bar - The functions provided by GLOBEX Offline Utilities are shown in the menu bar. You can use the keyboard or mouse to display the drop-down menu for each function. Figure 12.3 shows all the drop-down menus.



Options	Copy	Reports	Print	Special	Exit
Set Processing Options	Open Orders Tradelog Eventlog	Order Status Matched Orders Exception Orders Canceled Orders Open Extracted Orders Open Working Orders All Reports	Open Orders Tradelog Eventlog Print from A:	Extract Working Orders Create Trade Tickets Separate Open Orders	

Figure 12.3 Offline Utilities Menus



Click on a function in the Menu Bar, then click on an item in the drop-down menu to display its dialog box. You can also click on the function, drag the pointer to highlight your choice, then release the mouse button.



Press  together with  to highlight the first function, Options.

Press  to display the drop-down menu. Use arrow keys to move from one function to another.

To select an item from the drop-down menu, either press the letter underlined in the item or use the up and down arrow keys to move to the item and press



User Prompt Window - A single display line provides instructions to help you execute a function.

Processing Window - The central area of the display shows information about current processing. The visible portion of the list is 33 lines deep; new messages are added at the bottom of the list. You can scroll to view over 70 previous messages.

Status Window - A 5-line display shows the results of utility use and creates a chronological list of all activity during the offline session. You can scroll to view up to 50 previous messages.

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Control Button - Click on this button at the far left of the title bar to display a drop-down menu with one active item: **About Wintrade**. Click on **About Wintrade** to display information about the Offline Utilities software, as shown in Figure 12.4. Click on **OK** to close the dialog box.

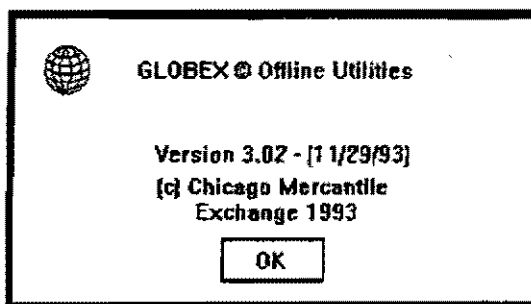


Figure 12.4 About Box

12.3 Options Utility

The Offline Utilities are preset to print reports at the audit trail printer, display any processing errors on the screen as they occur, and write the error log to a diskette in Drive A: when you exit the utilities. Use **Set Processing Options** to change these defaults for the current session.

1. Select **Set Processing Options** in the Options menu to display the dialog box shown in Figure 12.5. Current options are marked with an X in the check box. Deselect an option to turn it off; select an option to turn it on.

The dialog box contains the following options:

- Report Options**
 - Print Reports
 - Write Reports to Drive A:
- Error Log Options**
 - Display Error Log
 - Write Error Log to Drive A:

Buttons: OK, QUIT

Figure 12.5 Options Dialog Box

Select **OK** or **QUIT** to accept the current defaults.

2. To delay report printing or write reports to diskette, make selections in the Report Options area:
 - To print reports immediately at your audit trail printer, select **Print Reports**. To disable immediate report printing, remove the check.
 - To write reports to a diskette in Drive A at the keystation, select **Write Reports to Drive A:**.

(You can select both options:)
3. To control the error log file, make selections in the **Error Log Options** area. (An error log file is created automatically if an error condition occurs during

the processing of any Offline Utility. It lists individual errors as recorded in the tradelog.)

- To display errors on the screen as they occur, select **Display Error Log**.
- To write the error log to a diskette in Drive A: when you exit the utilities, select **Write Error Log to Drive A:**. The error log file name is **ERROR.L01**.

While you can deselect both options and eliminate the error log file, this is not recommended.

4. Choose **OK**.

12.4 Copy Utility

The multi-Service keystation maintains a number of internal records. These include one or more tradelogs for each Service, one or more open order files for each Service, and an event log of non-Service-related events. For record-keeping purposes and in case of keystation or component failure, you may need to copy selected files to diskettes. The copy utility lets you copy selected files from Drive C: to a diskette in Drive A:.

12.4.1 Open Orders

To copy an open orders file to a diskette:

1. Select **Open Orders** in the Copy menu to display the dialog box shown in Figure 12.6. The highest priority Service is selected. The most recent open order files are listed.

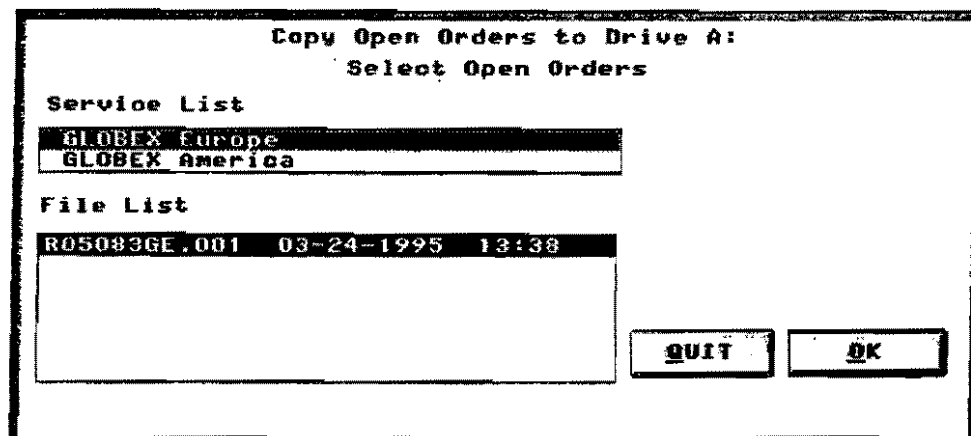


Figure 12.6 Copy Open Orders Dialog Box

Open order filenames appear in the format **XOyddss.zzz**, where:

- X** =
 - E** for extracted open orders.
 - R** for recovered open orders.
- O** = is a fixed character in open order filenames
- y** = the last digit of the year
- ddd** = the Julian date (the day of the year, numbered from 1-365)
- ss** = Service code
- zzz** = file extension number

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2. Select another Service if necessary, then select a single open order file. You cannot combine open orders from multiple Services.
3. Choose **OK**. You are prompted to load a formatted floppy diskette into Drive A:. An hourglass is displayed during processing along with the user prompt, **Copying Open Order file to Drive A:, Please Wait**.

If the file is too large to fit onto one diskette, the system will not copy the file.

When processing is complete, the status message is **Open order file <filename> copied to A: <filename>**. The open order filename is identical to the name on C:.

12.4.2 Tradelog

To copy a tradelog to a diskette:

1. Select **Tradelog** in the Copy menu to display the dialog box shown in Figure 12.7. The highest priority Service is selected, as is the most recent tradelog file.

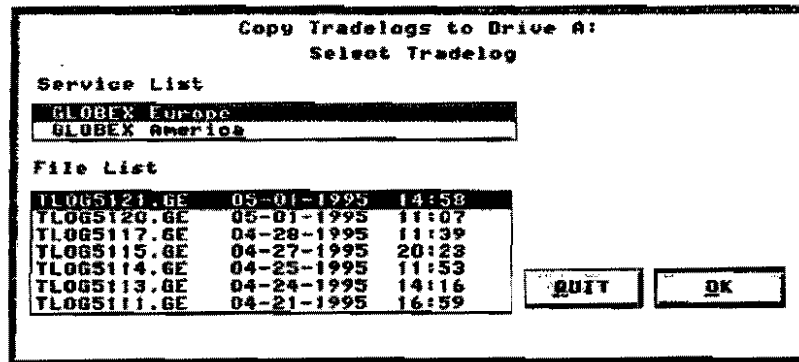


Figure 12.7 Copy Tradelog Dialog Box

Tradelog filenames appear in the format **TLOGydd.ss**, where:

- TLOG=** is a fixed string
 - y** = the last digit of the year
 - ddd** = the Julian date (the day of the year, numbered from 1-365)
 - ss** = Service code
2. Select another Service if necessary, then select a single tradelog file. You cannot combine tradelogs from multiple Services.
 3. Choose **OK**. You are prompted to load a formatted floppy diskette into Drive A:. An hourglass is displayed during processing along with the user prompt, **Copying Tradelog to Drive A:, Please Wait**.

If the file is too large to fit onto one diskette, the system will request another until the tradelog is copied completely.

When processing is complete, the status message is **Tradelog TLOGydd.ss copied to A:TLOGydd.ssn**. The filename on disk includes a final character, **n**, which is a file sequence number used for large files spanning multiple diskettes.

12.4.3 Eventlog

The eventlog lists all system events at the keystation, exclusive of Service-specific events.

1. Select **Eventlog** in the Copy menu to display the dialog box shown in Figure 12.8. The most recent of up to seven eventlog files displayed in the list is highlighted.

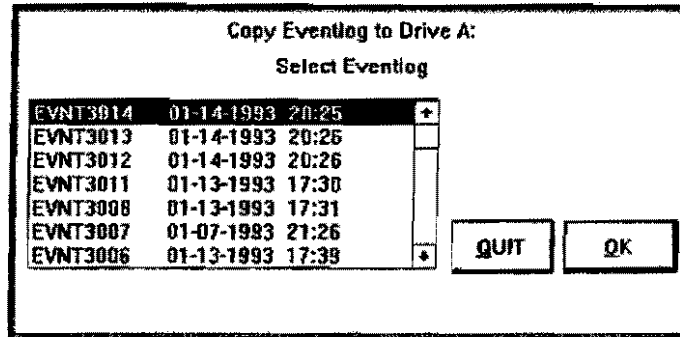


Figure 12.8 Copy Eventlog Dialog Box

Eventlog filenames appear in the format **EVNTyddd**, where:

EVNT = is a fixed string

y = the last digit of the year

ddd = the Julian date (the day of the year, numbered from 1-365)

2. Select a single eventlog file.
3. Choose **OK**. You are prompted to load a formatted floppy diskette into Drive A:. An hourglass is displayed during processing along with the user prompt, **Copying Eventlog to Drive A:, Please Wait**.

If the file is too large to fit onto one diskette, the system will request another until the eventlog is copied completely.

When processing is complete, the status message is **Eventlog EVNTydd** copied to **A:EVNTydd.nnn**. The filename on disk includes a file sequence number, **.nnn**, used for large files spanning multiple diskettes.

12.5 Reports Utility

Using this utility, you can break down the information in a single tradelog file into a number of reports.

- **Order Status** - The status of all orders entered at the keystation during the GLOBEX Session and acknowledged by the Host.
- **Matched Orders** - All orders matched during the GLOBEX Session.
- **Exception Orders** - All unresolved orders and orders entered at the keystation during the GLOBEX Session but not acknowledged by the Host due to a failure situation.
- **Canceled Orders** - All orders canceled during the GLOBEX Session.
- **Open Extracted Orders** - All open orders that were marked for extraction.
- **Open Working Orders** - All open orders that were left in the system after logging out from the Service or after a keystation failure has occurred. ("Working Orders" in this context does not refer to the **Working Orders** function on the Special Trade menu.)
- **All Reports** - Generates all the reports listed above.

12.5.1 Order Status

Orders entered at the keystation and acknowledged by the Host can fall into three groups: matched, canceled, and rejected/open (held orders are considered to be open). Any discrepancy (an order that does not fit into one of these groups) is noted in the report. The information is sorted according to subscriber, user, entry operator, origin, contract, entry date, and Host timestamp. Information for each subscriber/user begins on a new page. Figure 12.9 shows a sample Order Status Report.

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DATE: 03/30/93		GLOBEX ORDER STATUS SUMMARY REPORT						Page: 1			
TIME: 17:33		FOR SUBSCRIBER: SB101-XX						(TLOG2202.GA)			
										KEYSTATION ID: 12.202	
CONTRACT:	PRICE:	B	QTY:	MORE	ACCOUNT	ORDER	ORDER	O C F	FOREIGN		
SERVICE/	USER	ENTRY	ENTRY	AUDIT LOG	ENTRY	HOST	ORDER				
EXCHANGE:	CODE:	OPERATOR:	DATE:	NUMBER:	NUMBER:	TYP:	QUL:	R T E	EX	FIRM	STATUS:
ACTION/MEMO:											
EDM3		97 B	1	0	ME	US1-10	LMT	1	1		
GA	M	US1	---	07/21/92	100	159589	16:55:30.00	MATCHED			
EDM3		97 S	1	0	ME	US1-9	LMT	1	1		
GA	M	US1	---	07/21/92	102	159588	16:55:31.00	MATCHED			
EDM3		98 S	2	0	ME	US1-10	LMT	1	1		
GA	M	US1	---	07/21/92	113	159590	16:55:37.00	MATCHED			
EDM3		98 B	2	0	ME	US1-11	LMT	1	1		
GA	M	US1	---	07/21/92	111	159591	16:55:37.00	MATCHED			
EDM3		98 B	7	0	ME	US1-11	LMT	1	1		
GA	M	US1	ASDF	07/21/92	146	159591	17:16:05.00	EXTRACTED			
EDM3		97 B	7	0	ME	US1-10	LMT	1	1		
GA	M	US1	ASDF	07/21/92	145	159589	17:16:05.00	EXTRACTED			
EDM3		96 B	1	0	ME	US1-9	LMT	1	1		
GA	M	US1	ASDF	07/21/92	144	159587	17:16:05.00	EXTRACTED			

Figure 12.9 Order Status Report

1. Select **Order Status** in the Reports menu to display the dialog box shown in Figure 12.10. The highest priority Service is selected, as is the most recent of up to seven tradelog files displayed in the list. (Tradelog filenames are explained in Section 12.4.2.)

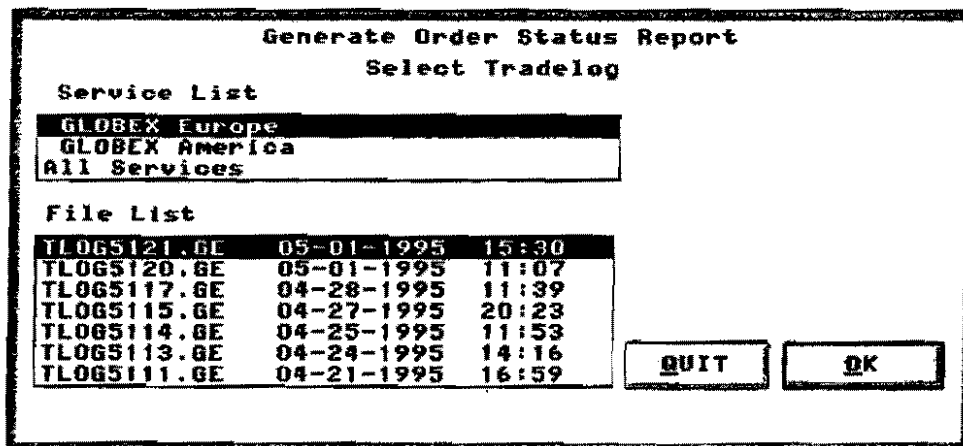


Figure 12.10 Generate Order Status Report Dialog Box

2. Select another Service if necessary, then select a tradelog file. The order status process lets you select more than one Service. If you select **All Services**, the system displays the seven most recent tradelogs associated with each Service, in descending order with the tradelog(s) for the most recent session highlighted. The orders for multiple Services will be combined in the report. Select one tradelog to select all tradelogs for that session. You cannot combine tradelogs created from different sessions.
3. Choose **OK**. An hourglass is displayed during processing along with the user prompt, **Creating Order Status Report for TLOGydd.ss**. Depending on your processing options (Section 12.3), the report is printed at the audit trail printer, written to Drive A: (you are prompted to load a formatted floppy diskette), or both.

If the file is too large to fit onto one diskette, the system will request another until the report is complete.

As the report is created, items in the processing window identify which subscriber/trader combinations are included in the report. A message in the status window indicates when the report is complete and, if the report was written to a diskette, displays the file name.

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The status message is **Report STyddss.RPT created - xxx canceled, matched, rejected and open orders.** The filename on disk is **STyddss.Rnn**, where:

ST = is the report type (Order Status)

y = the last digit of the year

ddd = the Julian date (the day of the year, numbered from 1-365)

ss = Service code

R = fixed character signifying a report

nn = file sequence number, used for large files spanning multiple diskettes.

If you selected multiple Services, the Service code is **CM**.

12.5.2 Matched Orders

This report lists all orders that resulted in trades (Bids, Offers, Hits, Takes), sorted by subscriber, user, entry operator, origin, contract, entry date, and Host timestamp. Information for each subscriber/user begins on a new page. Figure 12.11 shows a sample Matched Orders Report.

DATE: 03/30/93		GLOBEX MATCHED ORDER AUDIT REPORT						Page: 1	
TIME: 17:36		FOR SUBSCRIBER: SB101-XX						(TLOG2202.GA)	
								KEYSTATION ID: 12.202	
CONTRACT:	PRICE:	B	QTY:	MORE	ACCOUNT	ORDER	ORDER	O C F	FOREIGN
SERVICE/	USER	S	QTY:	QTY:	NUMBER:	NUMBER:	TYP: QUL:	R T E	EX FIRM
EXCHANGE:	CODE:		ENTRY	AUDIT LOG	ENTRY	HOST		MATCH	
			DATE:	NUMBER:	NUMBER:	TIMESTMP:		NUMBER:	
ACTION/MEMO:									
EDM3		97 B	1	0	ME	US1-10	LMT	1 1	
GA	M	US1	07/21/92		100	159589	16:55:30.00		62270
EDM3		97 S	1	0	ME	US1-9	LMT	1 1	
GA	M	US1	07/21/92		102	159588	16:55:31.00		62270
EDM3		98 B	2	0	ME	US1-11	LMT	1 1	
GA	M	US1	07/21/92		111	159591	16:55:37.00		62271
EDM3		98 S	2	0	ME	US1-10	LMT	1 1	
GA	M	US1	07/21/92		113	159590	16:55:37.00		62271
EDU2		109 S	2	0	ME	US1-5		1 1	
GA	M	US1	07/21/92		72	00000	16:53:54.00		62266
EDU2		108 S	10	0	ME	US1-6		1 1	
GA	M	US1	07/21/92		76	00000	16:54:04.00		62267

Figure 12.11 Matched Orders Report

1. Select **Matched Orders** in the Reports menu to display the dialog box shown in Figure 12.12. The highest priority Service is selected, as is the most recent of up to seven tradelog files displayed in the list. (Tradelog filenames are explained in Section 12.4.2.)

Generate Matched Orders Report
Select Tradelog

Service List

GLOBEX Europe
GLOBEX America
All Services

File List

TLOG5121.GE	05-01-1995	15:30
TLOG5120.GE	05-01-1995	11:07
TLOG5117.GE	04-28-1995	11:39
TLOG5115.GE	04-27-1995	20:23
TLOG5114.GE	04-25-1995	11:53
TLOG5113.GE	04-24-1995	14:16
TLOG5111.GE	04-21-1995	16:59

QUIT OK

Figure 12.12 Generate Matched Orders Report Dialog Box

2. Select another Service if necessary, then select a tradelog file. The matched orders process also lets you select more than one Service. If you select **All Services**, the system displays the seven most recent tradelogs associated with each Service, in descending order with the tradelog(s) for the most recent session highlighted. The orders for multiple Services will be combined in the report. Select one tradelog to highlight all tradelogs for that session. You cannot combine tradelogs created from different sessions.
3. Choose **OK**. An hourglass is displayed during processing along with the user prompt, **Creating Matched Order Report for TLOGydd.ss**. Depending on your processing options (Section 12.3), the report is printed at the audit trail printer, written to Drive A: (you are prompted to load a formatted floppy diskette), or both.

If the file is too large to fit onto one diskette, the system will request another until the report is completed.

As the report is created, items in the processing window identify the number of report orders and which subscriber/trader combinations have activity logged on the report. A message in the status window indicates when the report is complete and, if the report was written to a diskette, displays the file name.

The status message is **Report MTyddss.RPT created - xxx matched orders**. The filename on disk is **MTyddss.Rnn**, where:

MT = is the report type (Matched Trades)

y = the last digit of the year

ddd = the Julian date (the day of the year, numbered from 1-365)

ss = Service code

R = fixed character signifying a report

nn = file sequence number, used for large files spanning multiple diskettes.

If you selected multiple Services, the Service code is **CM**.

12.5.3 Exception Orders

This report lists all orders entered at the keystation but not acknowledged by the Host. These exceptions are caused primarily by a Host or keystation failure. "Unresolved" orders (open at the end of a session but not included in the download of a subsequent session) are also included. The information is sorted according to subscriber, user, entry operator, origin, contract, entry date, and Host timestamp. Information for each subscriber/user begins on a new page. Figure 12.13 shows a sample Exception Order Report.

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DATE: 03/30/93		GLOBEX ORDER EXCEPTION SUMMARY REPORT						Page: 1	
TIME: 17:42		FOR SUBSCRIBER: SB101-XX						(TLOG2202.GA)	
								KEYSTATION ID: 12.202	
CONTRACT:	PRICE:	B	MORE	ACCOUNT	ORDER	ORDER	O C F	FOREIGN	
	S	QTY:	QTY:	NUMBER:	NUMBER:	TYP:	QUL:	R T E	EX FIRM
SERVICE/	USER	ENTRY	ENTRY	AUDIT LOG	ENTRY	KEYSTATION	ORDER		
EXCHANGE:	CODE:	OPERATOR:	DATE:	NUMBER:	NUMBER:	TIMESTAMP:	STATUS:		
ACTION/MEMO:									
EDH3		81 B	2	0 ME		US1-74	LMT	1 1	
GA M	US1	LARRY	07/20/92	17	159308	15:19:57.59		UNRESOLVED	
EDU2		111 S	11	0 ME		US1-68	LMT	1 1	
GA M	US1	LARRY	07/21/92	109	159512	15:40:19.57		UNRESOLVED	
EDU2		110 B	16	0 ME		US1-68	LMT	1 1	
GA M	US1	LARRY	07/21/92	107	159511	15:40:19.30		UNRESOLVED	
EDU2		111 S	14	0 ME		US1-67	LMT	1 1	
GA M	US1	LARRY	07/21/92	103	159510	15:40:08.92		UNRESOLVED	
EDU2		109 B	14	0 ME		US1-67	LMT	1 1	
GA M	US1	LARRY	07/21/92	101	159509	15:40:08.59		UNRESOLVED	
EDU2		112 S	16	0 ME		US1-66	LMT	1 1	
GA M	US1	LARRY	07/21/92	97	159508	15:40:03.42		UNRESOLVED	
EDU2		107 B	10	0 ME		US1-60	LMT	1 1	
GA M	US1	LARRY	07/21/92	59	159495	15:39:29.70		UNRESOLVED	

Figure 12.13 Exception Orders Report

1. Select **Exception Orders** in the Reports menu to display the dialog box shown in Figure 12.14. The highest priority Service is selected, as is the most recent of seven tradelog files displayed in the list. (Tradelog file-names are explained in Section 12.4.2.)

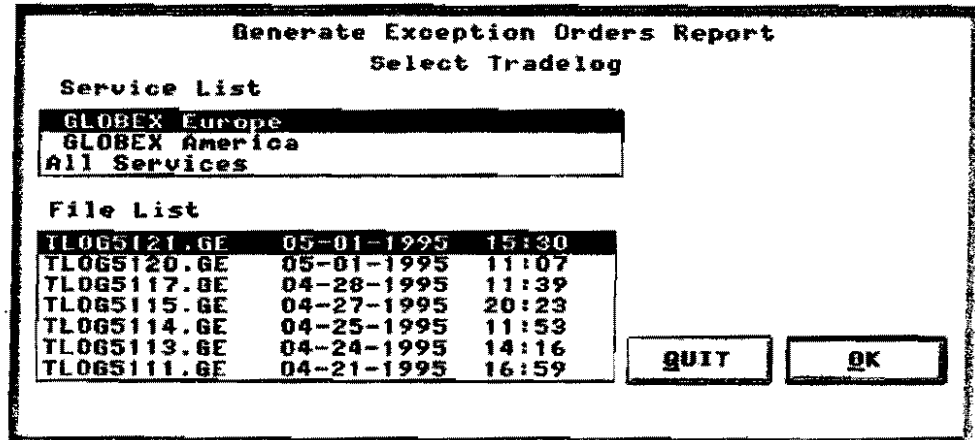


Figure 12.14 Generate Exception Orders Report Dialog Box

2. Select another Service if necessary, then select a tradelog file. The exception orders process also lets you select more than one Service. If you select **All Services**, the system displays the seven most recent tradelogs associated with each Service, in descending order with the tradelog(s) for the most recent session highlighted. The orders for multiple Services will be combined in the report. Select one tradelog to highlight all tradelogs for that session. You cannot combine tradelogs created from different sessions.
3. Choose **OK**. An hourglass is displayed during processing along with the user prompt, **Creating Exception Order Report for TLOGydd.ss**. Depending on your processing options (Section 12.3), the report is printed at the audit trail printer, written to Drive A: (you are prompted to load a formatted floppy diskette), or both.

If the file is too large to fit onto one diskette, the system will request another until the report is completed.

As the report is created, items in the processing window identify the number of report orders and which subscriber/trader combinations have activity logged on the report. A message in the status window indicates when the report is complete and, if the report was written to a diskette, displays the file name.

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The status message is **Report XTydddss.RPT created - xxx order discrepancies**. The filename on disk is **XTydddss.Rnn**, where:

XT = is the report type (Exception Orders)

y = the last digit of the year

ddd = the Julian date (the day of the year, numbered from 1-365)

ss = Service code

R = fixed character signifying a report

nn = file sequence number, used for large files spanning multiple diskettes.

If you selected multiple Services, the Service code is **CM**.

12.5.4 Canceled Orders

This report lists all orders that were canceled during the session (Bids and/or Offers). The information is sorted according to subscriber, user, entry operator, origin, contract, entry date, and Host timestamp. Information for each subscriber/user begins on a new page. Figure 12.15 shows a sample Canceled Orders Report.

DATE: 03/30/93		GLOBEX CANCELED ORDER SUMMARY REPORT					Page: 1			
TIME: 17:39		FOR SUBSCRIBER: SB101-XX					(TLOG2202.GA)			
							KEYSTATION ID: 12.202			
CONTRACT:	PRICE:	B S	QTY:	MORE QTY:	ACCOUNT NUMBER:	ORDER NUMBER:	ORDER TYP:	QUL:	O C F R T E	FOREIGN EX FIRM
SERVICE/ EXCHANGE:	USER CODE:	ENTRY OPERATOR:	ENTRY DATE:	AUDIT LOG NUMBER:	ENTRY NUMBER:	HOST TIMESTAMP:				
ACTION/MEMO:										
EDM3 GA M	96 B US1	1 CURLY	0	ME 07/20/92	US1-15 50	LMT 159247	1 1 15:34:36.00			
EDU2 GA M	112 B US1	5 CURLY	0	ME 07/21/92	US1-64 45	LMT 159465	2 2 15:34:36.00			
EDU2 GA M	108 B US1	69 CURLY	0	ME 07/21/92	US1-15 46	LMT 159410	2 2 15:34:36.00			
EDU2 GA M	103 B US1	10 CURLY	0	ME 07/21/92	US1-57 49	LMT 159451	2 2 15:34:36.00			
EDU2 GA M	110 B US1	70 CURLY	0	ME 07/21/92	US1-17 48	LMT 159413	2 2 15:34:36.00			
ED22 GA M	103 B US1	3 CURLY	0	ME 07/21/92	US1-37 47	LMT 159435	2 2 15:34:36.00			

Figure 12.15 Cancelled Orders Report

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1. Select **Cancelled Orders** in the Reports menu to display the dialog box shown in Figure 12.16. The highest priority Service is selected, as is the most recent of up to seven tradelog files displayed in the list. (Tradelog filenames are explained in Section 12.4.2.)

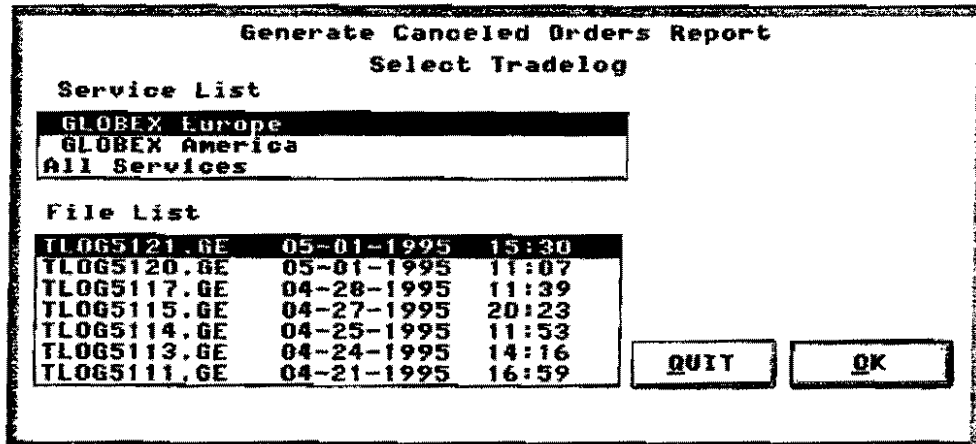


Figure 12.16 Generate Cancelled Orders Report Dialog Box

2. Select another Service if necessary, then select a tradelog file. The canceled orders process also lets you select more than one Service. If you select **All Services**, the system displays the seven most recent tradelogs associated with each Service, in descending order with the tradelog(s) for the most recent session highlighted. The orders for multiple Services will be combined in the report. Select one tradelog to highlight all tradelogs for that session. You cannot combine tradelogs created from different sessions.
3. Choose **OK**. An hourglass is displayed during processing along with the user prompt, **Creating Cancelled Order Report for TLOGydd.ss**. Depending on your processing options (Section 12.3), the report is printed at the audit trail printer, written to Drive A: (you are prompted to load a formatted floppy diskette), or both.

If the file is too large to fit onto one diskette, the system will request another until the report is completed.

As the report is created, items in the processing window identify the number of report orders and which subscriber/user combinations have activity logged on the report. A message in the status window indicates when the report is complete and, if the report was written to a diskette, displays the file name.

The status message is **Report CXyddss.RPT created - xxx canceled orders**. The filename on disk is **CXyddss.Rnn**, where:

- CX** = is the report type (Canceled Orders)
 - y** = the last digit of the year
 - ddd** = the Julian date (the day of the year, numbered from 1-365)
 - ss** = Service code
 - R** = fixed character signifying a report
 - nn** = file sequence number, used for large files spanning multiple diskettes.
- If you selected multiple Services, the Service code is **CM**.

12.5.5 Open Extracted Orders

This report lists all open orders that were marked for extraction from the trade-log. The information is sorted according to subscriber, user, entry operator, origin, contract, entry date, and Host timestamp. Information for each subscriber/trader begins on a new page. Figure 12.17 shows a sample Open Extracted Order Report.

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DATE: 03/30/93		GLOBEX OPEN EXTRACTED ORDER REPORT					Page: 1			
TIME: 17:41		FOR SUBSCRIBER: SB101-XX					(TLOG2202.GA)			
								KEYSTATION ID: 12.202		
CONTRACT:	PRICE:	B S	QTY:	MORE QTY:	ACCOUNT NUMBER:	ORDER NUMBER:	ORDER TYP:	QUL:	O C F R T E	FOREIGN EX FIRM
SERVICE/ EXCHANGE:	USER CODE:	ENTRY OPERATOR:	ENTRY DATE:	AUDIT LOG NUMBER:	ENTRY NUMBER:	HOST TIMESTMP:				
ACTION/MEMO:										
EDM3 GA M	99 S US1	1 ASDF	0	ME 07/21/92	US1-11 147	LMT 159592	1 1 17:16:05.00			
EDM3 GA M	96 B US1	1 ASDF	0	ME 07/21/92	US1-9 144	LMT 159587	1 1 17:16:05.00			
EDM3 GA M	98 B US1	7 ASDF	0	ME 07/21/92	US1-11 146	LMT 159591	1 1 17:16:05.00			
EDM3 GA M	97 B US1	7 ASDF	0	ME 07/21/92	US1-10 145	LMT 159589	1 1 17:16:05.00			
USU2 GA B	107 S US1	232 ASDF	0	PARRT2 07/21/92	US1-24 132	LMT 159545	1 1 17:16:05.00			
USU2 GA B	106 S US1	229 ASDF	0	PARRT2 07/21/92	US1-25 133	LMT 159547	1 1 17:16:05.00			

Figure 12.17 Open Extracted Orders Report

1. Select **Open Extracted Orders** in the Reports menu to display the dialog box shown in Figure 12.18. The highest priority Service is selected, as is the most recent of up to seven tradelog files displayed in the list. (Tradelog file-names are explained in Section 12.4.2.)

Generate Open Extracted Orders Report
Select Tradelog

Service List

GLOBEX Europe
GLOBEX America
All Services

File List

TLOG5121.GE	05-01-1995	15:30
TLOG5120.GE	05-01-1995	11:07
TLOG5117.GE	04-28-1995	11:39
TLOG5115.GE	04-27-1995	20:23
TLOG5114.GE	04-25-1995	11:59
TLOG5113.GE	04-24-1995	14:16
TLOG5111.GE	04-21-1995	16:59

QUIT **OK**

Figure 12.18 Generate Open Extracted Orders Report Dialog Box

2. Select another Service if necessary, then select a tradelog file. The open extracted orders process also lets you select more than one Service. If you select **All Services**, the system displays the seven most recent tradelogs associated with each Service, in descending order with the tradelog(s) for the most recent session highlighted. The orders for multiple Services will be combined in the report. Select one tradelog to highlight all tradelogs for that session. You cannot combine tradelogs created from different sessions.
3. Choose **OK**. An hourglass is displayed during processing along with the user prompt, **Creating Open Extracted Order Report for TLOGydd.ss**. Depending on your processing options (Section 12.3), the report is printed at the audit trail printer, written to Drive A: (you are prompted to load a formatted floppy diskette), or both.

If the file is too large to fit onto one diskette, the system will request another until the report is completed.

As the report is created, items in the processing window identify the number of report orders and which subscriber/user combinations have activity logged on the report. A message in the status window indicates when the report is complete and, if the report was written to a diskette, displays the file name.

The status message is **Report EXyddss.RPT created - xxx open extracted orders**. The filename on disk is **EXyddss.Rnn**, where:

EX = is the report type (Open Extracted Orders)

y = the last digit of the year

ddd = the Julian date (the day of the year, numbered from 1-365)

ss = Service code

R = fixed character signifying a report

nn = file sequence number, used for large files spanning multiple diskettes.

If you selected multiple Services, the Service code is **CM**.

12.5.6 Open Working Orders

This reports lists all open orders remaining in the system after you logged out from all Services or after a keystation failure. The information is sorted according to subscriber, user, entry operator, origin, contract, entry date, and Host timestamp. Information for each subscriber/trader begins on a new page. Figure 12.19 shows a sample Open Working Orders Report.

1. Select **Open Working Orders** in the Reports menu to display the dialog box shown in Figure 12.20. The highest priority Service is selected, as is the most recent of up to seven tradelog files displayed in the list. (Tradelog file-names are explained in Section 12.4.2.)
2. Choose another Service if necessary, then select a tradelog file. The open working orders process also lets you select more than one Service. If you select **All Services**, the system displays the seven most recent tradelogs associated with each Service, in descending order with the tradelog(s) for the most recent session highlighted. The orders for multiple Services will be combined in the report. Select one tradelog to highlight all tradelogs for that session. You cannot combine tradelogs created from different sessions.

DATE: 03/30/93		GLOBEX OPEN WORKING ORDER REPORT					Page: 1		
TIME: 17:46		FOR SUBSCRIBER: GA-004					(TLOG3200.GA)		
							KEYSTATION ID: 49.508		
CONTRACT:	PRICE:	B S	QTY:	MORE QTY:	ACCOUNT NUMBER:	ORDER NUMBER:	ORDER TYP:	O C F QUL: R T E	FOREIGN EX FIRM
SERVICE/ EXCHANGE:	USER CODE:	ENTRY OPERATOR:	ENTRY DATE:	AUDIT LOG NUMBER:	ENTRY NUMBER:	HOST TIMESTAMP:			
ACTION/MEMO:									
EDH2 M	9539 S ADMN	1 TT	0	TESTCNTR 09/22/92	ADM-10 41	LMT 284523	1 1 15:12:36.00		
EDH2 M	9540 S ADMN	1 TT	0	TESTCNTR 09/22/92	ADM-9 40	LMT 284522	1 1 15:12:36.00		
EDH2 M	9540 S ADMN	1 TT	0	TESTCNTR 09/22/92	ADM-8 39	LMT 284521	1 1 15:12:36.00		
EDH2 M	9540 S ADMN	1 TT	0	TESTCNTR 09/22/92	ADM-7 38	LMT 284520	1 1 15:12:36.00		
EDH2 M	9540 S ADMN	1 TT	0	TESTCNTR 09/22/92	ADM-6 37	LMT 284519	1 1 15:12:36.00		
EDH2 M	9536 B ADMN	1 TT	0	TESTCNTR 09/22/92	ADM-5 36	LMT 284518	1 1 15:12:36.00		
EDH2 M	9535 B ADMN	1 TT	0	TESTCNTR 09/22/92	ADM-4 35	LMT 284517	1 1 15:12:36.00		

Figure 12.19 Open Working Orders Report

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3. Choose **OK**. An hourglass is displayed during processing along with the user prompt, **Creating Open Working Order Report for TLOGydd.ss**. Depending on your processing options (Section 12.3), the report is printed at the audit trail printer, written to Drive A (you are prompted to load a formatted floppy diskette), or both.

If the file is too large to fit onto one diskette, the system will request another until the report is completed.

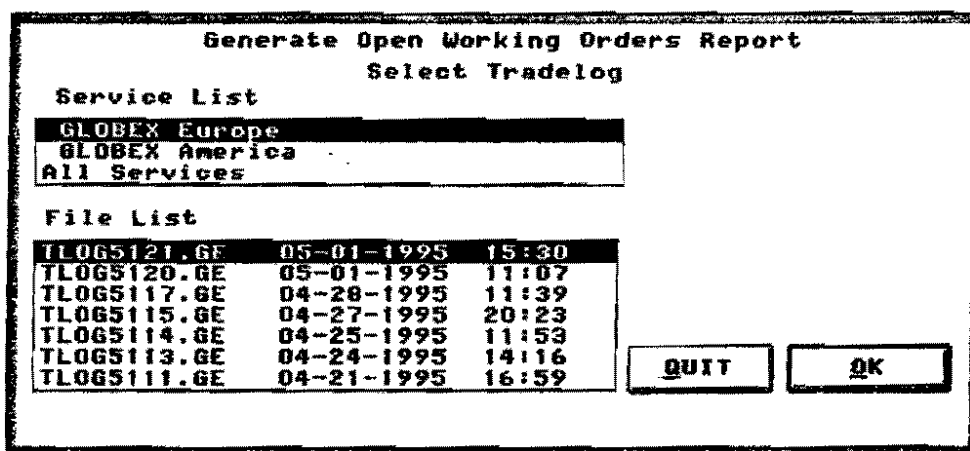


Figure 12.20 Generate Open Working Orders Report Dialog Box

As the report is created, items in the processing window identify the number of report orders and which subscriber/user combinations have activity logged on the report. A message in the status window indicates when the report is complete and, if the report was written to a diskette, displays the file name.

The status message is **Report WKyddss.RPT created - xxx open working orders**. The filename on disk is **WKyddss.Rnn**, where:

WK = is the report type (Open Working Orders)

y = the last digit of the year

ddd = the Julian date (the day of the year, numbered from 1-365)

ss = Service code

R = fixed character signifying a report

nn = file sequence number, used for large files spanning multiple diskettes.

If you selected multiple Services, the Service code is **CM**.

12.5.7 All Reports

Select this option to execute all available reports described above in Section 12.5. The system processes each report in succession. See instructions for each report.

12.6 Print Utility

The Print utility lets you print reports on the audit trail printer. You can print a report on open orders, tradelogs, eventlogs, or any file stored on diskette.

12.6.1 Open Orders

1. Select **Open Orders** in the Print menu to display the dialog box shown in Figure 12.21. The highest priority Service is selected, as is the most recent of up to seven open order files displayed in the list. (Open order filenames are explained in Section 12.4.1.)

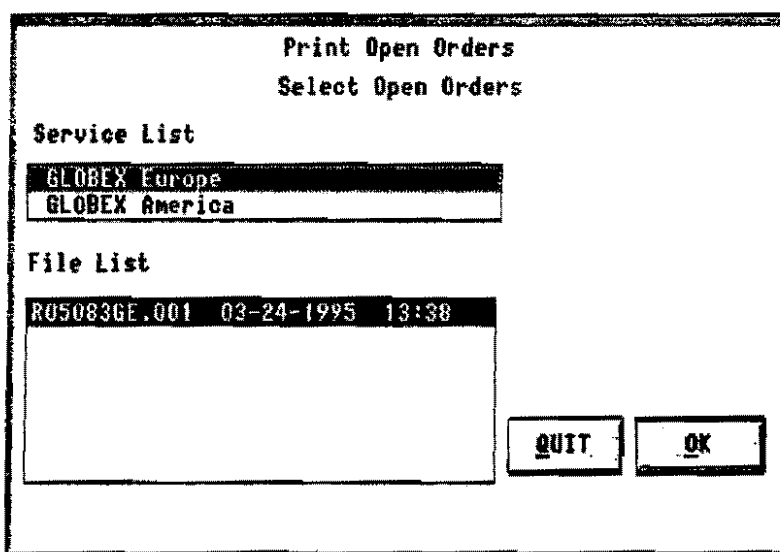


Figure 12.21 Print Open Orders Dialog Box

2. Select another Service if necessary, then select a single open order file. You cannot combine open orders from multiple Services.
3. Choose **OK**. An hourglass is displayed during processing along with the user prompt, **Printing Open Orders**.

12.6.2 Tradelog

1. Select **Tradelog** in the Print menu to display the dialog box shown in Figure 12.22. The highest priority Service is selected, as is the most recent of up to seven tradelog files displayed in the list. (Tradelog filenames are explained in Section 12.4.2.).

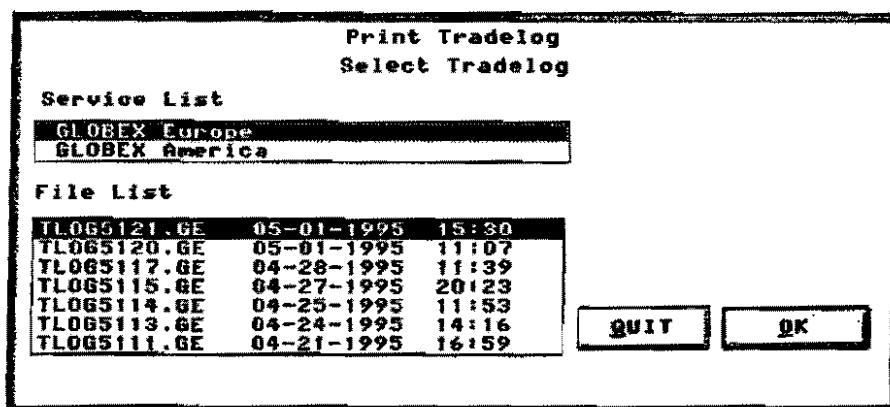


Figure 12.22 Print Tradelog Dialog Box

2. Select another Service if necessary, then select a single tradelog file. You cannot combine tradelogs from multiple Services.
3. Choose **OK**. An hourglass is displayed during processing along with the user prompt, **Printing Tradelog**.

12.6.3 Eventlog

1. Select **Eventlog** in the Print menu to display the dialog box shown in Figure 12.23. The highest priority Service is selected, as is the most recent of up to seven eventlog files displayed in the list.
2. Select another Service if necessary, then select a single eventlog file. You cannot combine eventlogs from multiple Services.
3. Choose **OK**. An hourglass is displayed during processing along with the user prompt, **Printing Eventlog**.

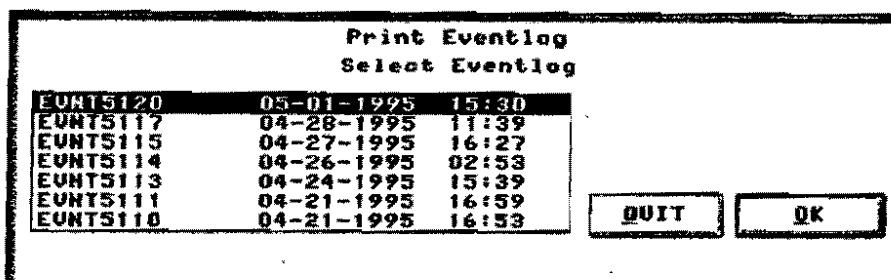


Figure 12.23 Print Eventlog Dialog Box

12.6.4 Print File (from A:)

This function prints reports or files generated by Offline Utilities.

1. Insert a diskette containing reports/files into Drive A:. Select **Print File (from A:)** in the Print menu to display the dialog box shown in Figure 12.24. The dialog box includes Options radio buttons and a file list. When the dialog box appears, **Reports** is the highlighted option. A list of reports (if any) on the diskette in Drive A: is shown with the first file highlighted.

Radio buttons are:

- Reports - files previously created using the Reports utility and written to a diskette in Drive A:.
- Files/Logs - open orders, tradelogs, and eventlogs previously copied to a diskette in Drive A: using the Copy utility.
- Trade Tickets - report files previously created using the Create Trade Tickets option (see Section 12.7.2) and stored on a diskette in Drive A:.

You can select only one file type at a time, but you can select multiple files within a file type.

2. Select the radio button for the type of file you wish to print. A status message, **No reports/log/trade ticket available for processing** is displayed if the diskette in Drive A: does not contain the selected file type.
3. Select a single or multiple files.

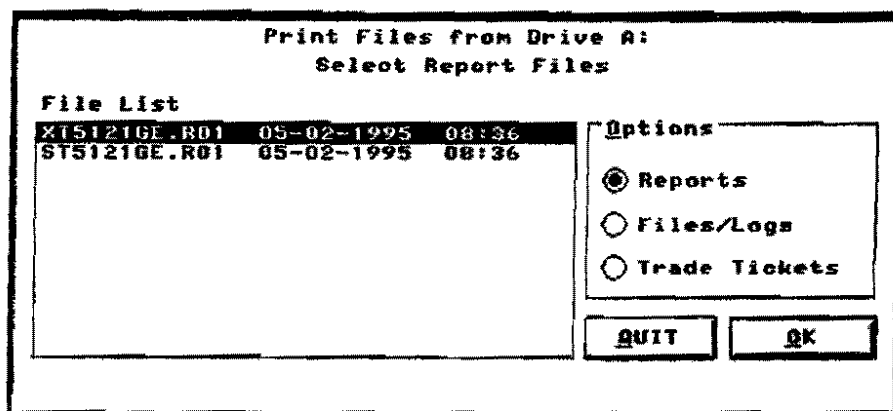


Figure 12.24 Print Files from Drive A: Dialog Box

4. Choose **OK**. An hourglass is displayed during processing along with the user prompt, **Printing Report**. If you are printing trade tickets, a warning message in the dialog box reminds you to load the printer with trade ticket forms, although you can also print them on standard paper. Choose **OK** to continue.

12.7 Special Utility

Special utilities allow you to store working orders on diskettes, reprint trade tickets, or create an open order file for one Exchange.

12.7.1 Extract Working Orders

Working orders (also known as open orders) are those that remain in the Standing Order Book to be matched. They are created through normal GLOBEX trading or by uploading orders from the RTH session or another keystation. If you select **Maintain Open Orders** when you log out of a Service, orders remain open. In the case of keystation failure, GLOBEX automatically creates a file of these orders that you can print using the Print File function (see Section 7.15). (Any More quantities are ignored during order extraction.)

1. Select **Extract Working Orders** in the Special menu to display the dialog box shown in Figure 12.25. The highest priority Service is selected, as is the most recent of up to seven tradelog files displayed in the list. (Tradelog file-names are explained in Section 12.4.2.)

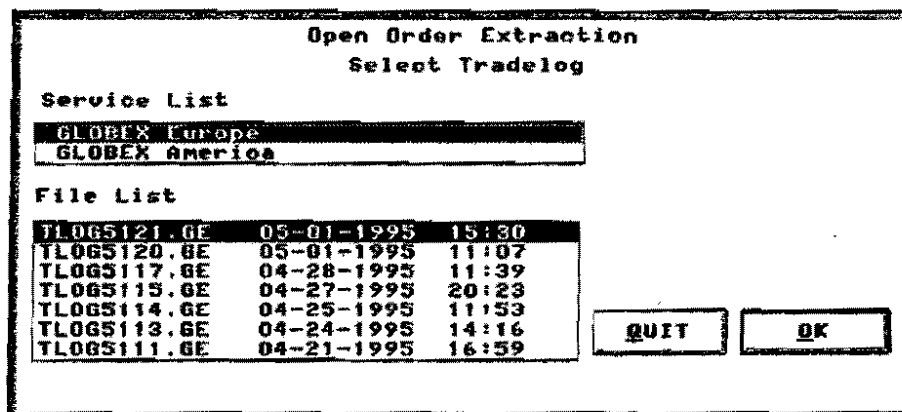


Figure 12.25 Extract Working Orders Dialog Box

2. Select another Service if necessary, then select a single tradelog. You cannot combine working orders from multiple Services.
3. Choose **OK**. The processing window displays messages relating to initial processing of subscriber/user records. If only one subscriber/user logged into the selected Service during the trading session, the tradelog is processed. (Continue with step 4.) If multiple subscriber/user combinations logged in, the Subscriber/User dialog box shown in Figure 12.26 is displayed.

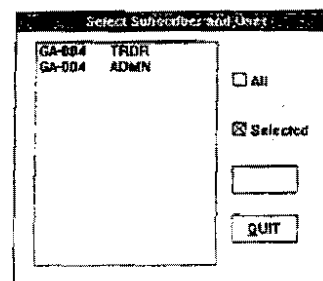


Figure 12.26 Subscriber/User Dialog Box

To select all subscriber/user combinations in the displayed list, select the **All** check box. Otherwise, choose the **Selected** check box and select item(s) from the list.

- Choose **OK**. You are prompted to load a formatted floppy diskette into Drive A:. The diskette must have enough space to hold the entire file; if the file is too large to fit onto one diskette, the system will not copy the file.

An hourglass is displayed during processing along with the user prompt, **Extracting Working Orders**. A status message, **Open order file A:OOyddss.nnn created with x orders** is displayed when processing is successful. The open order file begins with **O** to indicate that the file was created using the Offline Utilities.

12.7.2 Create Trade Tickets

For each GLOBEX trade, a GLOBEX Order Execution Confirmation ticket is printed for each party of the trade at all affiliated administrative keystations and added to the tradelogs at those keystations. This option lets you reprint trade tickets from a selected tradelog.

- Select **Create Trade Tickets** in the Special menu to display the dialog box shown in Figure 12.27. The highest priority Service is selected, as is the most recent of up to seven tradelog files displayed in the list. (Tradelog file-names are explained in Section 12.4.2.)

Generate Trade Tickets		
Select Tradelog		
Service List		
GLOBEX Europe		
GLOBEX America		
File List		
TLOG5121.GE	05-02-1995	08:48
TLOG5120.GE	05-01-1995	11:07
TLOG5117.GE	04-28-1995	11:39
TLOG5115.GE	04-27-1995	20:23
TLOG5114.GE	04-25-1995	11:53
TLOG5113.GE	04-24-1995	14:16
TLOG5111.GE	04-21-1995	16:52
		QUIT
		OK

Figure 12.27 Create Trade Tickets Dialog Box

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2. Select a different Service if necessary, then select a single tradelog file. You cannot combine trade tickets from multiple Services.
3. Choose **OK**. As the tradelog is processed, messages in the processing window indicate which subscriber/user combinations have trade ticket activity. If trade tickets exist on the tradelog, the Trade Ticket dialog box shown in Figure 12.28 is displayed. If no trade tickets exist, the status message **No Trade Tickets in selected tradelog** is displayed, the dialog box closes, and the utility screen is restored.

Select Trade Tickets						
Subscriber	User	IXM Name	Order#	EntryTime	Account#	
SB101-KX	US1	EDU2	US1-5	14:02:02	ME	<input type="checkbox"/>
SB101-KX	US1	EDU2	US1-4	14:09:09	ME	<input type="checkbox"/>
SB101-KX	US1	EDU2	US1-3	14:26:26	ME	<input type="checkbox"/>
SB101-KX	US1	EDU2	US1-1	14:26:26	ME	<input checked="" type="checkbox"/>
SB101-KX	US1	EDU2	US1-2	14:27:27	ME	<input type="checkbox"/>
SB101-KX	US1	EDU2	US1-3	14:29:29	ME	<input type="checkbox"/>
SB101-KX	US1	EDU2	US1-4	14:30:30	ME	<input type="checkbox"/>
SB101-KX	US1	EDU2	US1-3	14:29:29	ME	<input type="checkbox"/>
SB101-KX	US1	EDU2	US1-5	14:30:30	ME	<input type="checkbox"/>
SB101-KX	US1	EDU2	US1-6	14:32:32	ME	<input type="checkbox"/>

Load Trade Ticket Forms.

Figure 12.28 Select Trade Tickets Dialog Box

4. You can print all tickets or selected tickets. When the Trade Tickets dialog box is displayed, **Selected** is the initial file type choice and the cursor is on the first ticket name in the list. Each item in the list includes subscriber, user, instrument, order number, and execution time. Select **All** or select file(s).
5. Choose **OK**. An hourglass is displayed during processing along with the user prompt, **Extracting Trade Tickets**. Depending on your processing options (Section 12.3), the tickets, which are treated as a report, are printed at the audit trail printer, written to Drive A: (you are prompted to load a formatted floppy diskette), or both. You can print the tickets on the standard pre-printed forms or on regular paper. (See Appendix E for instructions on loading trade ticket forms into the printer.)

If the ticket information is too extensive to fit onto one diskette, the system will request another until processing is completed.

A message in the status window indicates when ticket processing is complete and, if the report was written to a diskette, displays the file name.

The status message is **Report TTydddss.R01 created - xxx Trade Tickets processed**. The filename on disk is **TTydddss.Rnn**, where:

- TT** = is the report type (Trade Tickets)
- y** = the last digit of the year
- ddd** = the Julian date (the day of the year, numbered from 1-365)
- ss** = Service code
- R** = fixed character signifying a report
- nn** = file sequence number, used for large files spanning multiple diskettes.

12.7.3 Separate Open Orders

This process sorts the orders in a single open order file according to their Exchange identifier and creates an open order file for a selected Exchange. The file is written to a diskette in Drive A.

1. Select **Separate Open Orders** in the Special menu to display the dialog box shown in Figure 12.29. The highest priority Service is selected, as is the

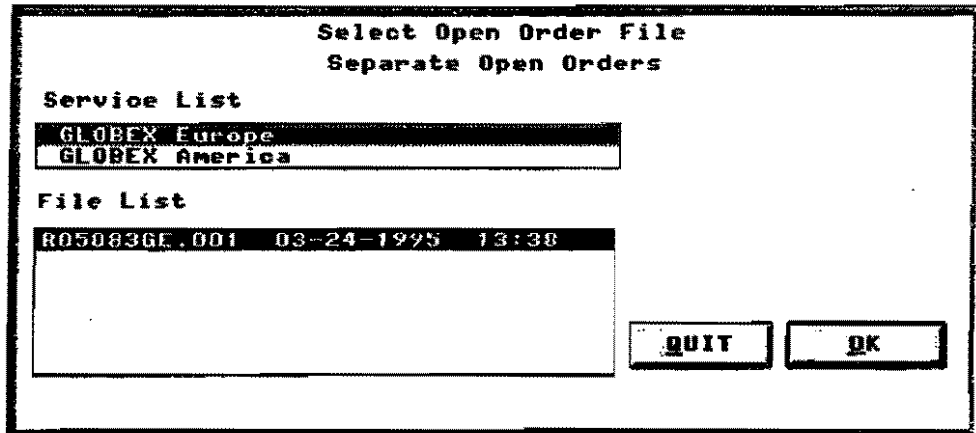


Figure 12.29 Separate Open Orders Dialog Box

most recent of up to seven open order files in the list. (Open order file names are explained in Section 12.4.1.)

2. Select another Service if necessary, then select a single open order file. You can select only one Service and one open order file.
3. Choose **OK**. The Select Exchange dialog box, shown in Figure 12.30, is displayed; the list consists only of the Exchanges that exist in the selected open order file. If there is more than one Exchange in the list, the item "All

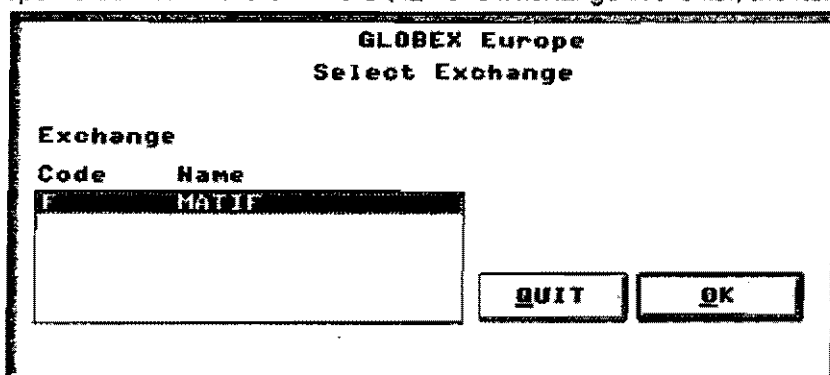


Figure 12.30 Select Exchange Dialog Box

Exchanges" is added to the end of the list. The first Exchange in the list is highlighted; a message directs you to select an Exchange.

4. Choose **OK**. You are prompted to load a formatted floppy diskette into Drive A:. The diskette must have enough space to hold the entire file; if the total space for all files is too large to fit onto one diskette, the system will not begin the copy process.

An hourglass is displayed during the copy process and a message, **Copying Open Order file to Drive A:, Please Wait...** is displayed in the user prompt area. After each Exchange open order file is successfully written to the diskette, a status message, **Exchange XXXX Open Order File A:xOyddss.zzz created with xx orders** is displayed. The filename on disk is **xyzdddss.zzz** where:

- x** = **E** for extracted open orders, **R** for recovery open orders
- z** = Exchange identifier: **M**=CME, **F**=MATIF
- y** = the last digit of the year

ddd = the Julian data (the day of the year, numbered from 1-365)
ss = Service code (**GA**=GLOBEX America, **GE**=GLOBEX Europe)
zzz = file extension number

If any of the Exchange open order files already exist on the diskette in Drive A, the Overwrite Existing Files dialog box (Figure 12.31) is displayed. You can

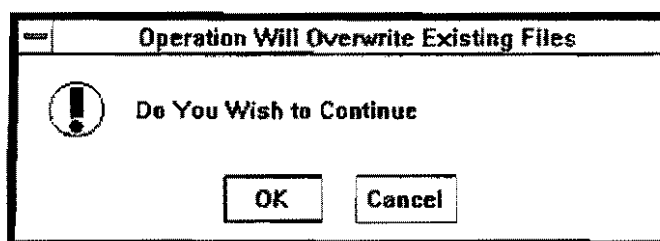


Figure 12.31 Overwrite Existing Files Dialog Box

choose to overwrite all files (choose **OK**) or cancel the entire copy process (choose **Cancel**).

12.8 Exiting the Offline Utilities

Select **Exit** in the menu bar to close the Offline Utilities and return to the GLOBEX Main Menu.

At this point, if errors occurred during your use of the Offline Utilities, the error log file is written to diskette under the file name **ERROR.L01**, unless you have changed the options.

12.9 Auxiliary Messages

Message boxes related to file processing/copying and printing may be displayed in the course of your use of the Offline Utilities.

12.9.1 Output Diskette

This message box is displayed if the keystation cannot write a file to Drive A: (see Figure 12.32).

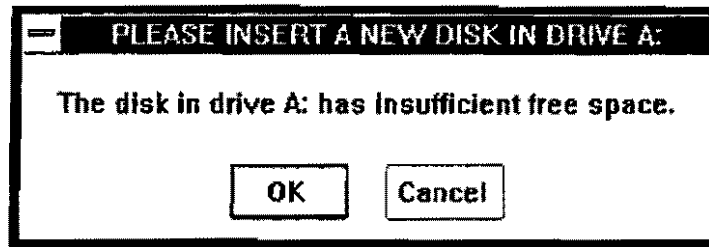


Figure 12.32 Output Diskette Dialog Box

The most common causes for this problem are:

- There is no diskette in the drive.
- The diskette is not formatted.
- The drive is malfunctioning.
- There is insufficient free space on the diskette for the file. In most cases you are prompted to insert additional diskettes until file processing is complete. However, if you want to copy an open order file, the diskette must have enough free space to hold the entire file. It is recommended that you use a blank, formatted diskette for this function.

If you can identify the cause of the problem and resolve it, select **OK** to indicate that the diskette is ready for processing. Otherwise, select **Cancel** to terminate the process and contact the GCC.

12.9.2 *Input Diskette*

This message box is displayed if the keystation cannot read a file in Drive A: (see Figure 12.33).

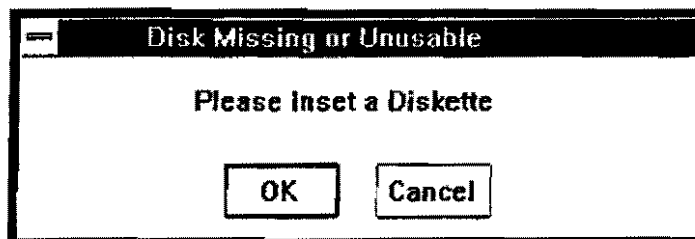


Figure 12.33 Input Diskette Dialog Box

The most common causes for this problem are:

- There is no diskette in the drive.
- The diskette is not formatted.
- The drive is malfunctioning.

If you can identify the cause of the problem and resolve it, select **OK** to indicate that the diskette is ready for processing. Otherwise, select **Cancel** to terminate the process and contact the GCC.

12.9.3 Print Spooler

The print spooler message (see Figure 12.34) is displayed whenever you perform a print operation. Select **Cancel** to cancel the job or do nothing to let printing continue. Once the print operation is finished, the dialog box closes.

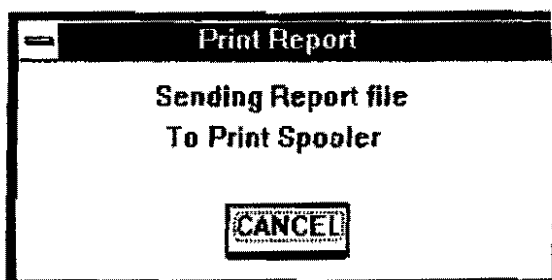


Figure 12.34 Print Spooler Dialog Box

12.9.4 Print Error

This error message box (see Figure 12.35) is displayed if the printer is offline or there is a printer communication problem. The file you are attempting to print is identified in the message. If you can resolve the problem, printing will continue with no further action. If you are unsuccessful, select **OK** to terminate the print process.

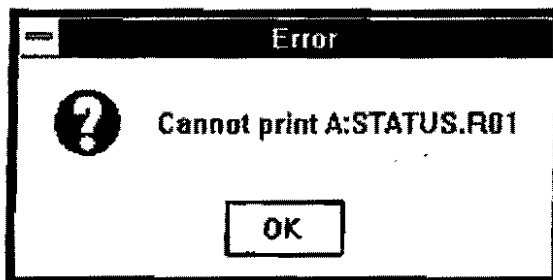


Figure 12.35 Print Error Dialog Box

13. GLOBEX Operating Principles

13.1 Order Definition

GLOBEX defines an order as a user's expression of willingness to buy or sell a specified quantity of a specified instrument at a specified price. The system supports four types of price limit orders and differentiates them according to price, time, and size constraints provided at the time you enter the order. Order types are:

Bid

- **Price** - Executes at the specified price or better.
- **Time** - Order remains in the session until you cancel it or it is matched.
- **Quantity** - An order quantity.

Offer

- **Price** - Executes at the specified price or better.
- **Time** - Order remains in the session until you cancel it or it is matched.
- **Quantity** - An order quantity.

Hit (Sell)

- **Price** - Executes at the specified price or better.
- **Time** - The order must be partially or fully filled when it is presented, and any unfilled quantity is then removed from the system.
- **Quantity** - An order quantity.

Take (Buy)

- **Price** - Executes at the specified price or better.
- **Time** - The order must be partially or fully filled when it is presented, and any unfilled quantity is then removed from the system.
- **Quantity** - An order quantity.

Note: Bid/Ask is a combination of Bid and Offer, and is not a separate order type.

13.2 Order Entry

The GLOBEX system processes orders according to strict rules. System protocols are designed to help ensure that no ambiguity can arise between the user and the Host concerning the state of any order.

Before an order may be transmitted to the Host, it is submitted to an authorization check to determine whether or not the originating subscriber/trader is authorized to submit orders of this type.

Every order submitted must then pass certain validation tests made on data in the dialog box.

As soon as possible after an order is received by the Host, it is logged to the Host audit trail, after which the originating keystation is sent an order acknowledgment message which means that the order **will be processed**. Receipt of this message results in removal of the dialog box (except Bid/Ask, Market Maker, and Working Order) from the screen. After this, the keystation receives a detailed response which confirms the processing of the new order, displayed in the mailbox. Both the order entry and the receipt of acknowledgment from the Host are entered into the printed audit trail.

The keystation can support a maximum of 500 open orders, regardless of the number of active Services. If you need to enter more than 500 orders, you must log in at another keystation using a different trader identifier.

Trading more than 254 different prices on a single instrument in a single trade will cause your keystation to fail.

The Exception Orders Report in the Offline Utilities itemizes the discrepancies between orders entered at your keystation and orders received at the Host from your keystation (see Section 12). Contact the GCC concerning **any** such discrepancies.

Order Access

Any operator who has signed-in to an existing session may manipulate any orders owned by that session. However, in an emergency such as keystation failure, the GLOBEX Control Center may remove individual orders when they are uniquely identified by authorized member firm personnel.

Multiple Entry

You may have multiple orders, possibly at the same price, on either or both sides of any system book (i.e., multiple Bids or Offers for the same instrument). GLOBEX also allows orders from the same trader to be matched with each other. See the appropriate Exchange rules for further restrictions.

13.3 Passing the Book

This is a special case of order entry. GLOBEX is a separate trading session from Regular Trading Hours (RTH). Since many futures and options orders are Good-Till-Cancelled (GTC), it is important that any GTC orders that are untraded at the end of either session continue to trade during the next session. Passing the Book is the process by which orders are transferred from one session to the next.

Passing the Book out of GLOBEX should only occur after the GLOBEX Session is closed, or in the case of failure (which effectively terminates the GLOBEX Session). GLOBEX maintains an on-disk tradelog at each keystation. The external system to which you want to Pass the Book must be able to read the open orders file; GLOBEX does not provide any utilities for uploading to external systems.

To Pass the Book Out of GLOBEX:

1. Use **Extract Open Orders** (see Section 7.14), which "marks" the tradelog, cancels your remaining open orders, logs you out, and creates an open order file.
2. Upload the open order file to an external system.

To Pass the Book to GLOBEX:

1. Create an open order file on the external system.
2. Use **Upload Orders** (see Section 7.14) to load the open orders into your GLOBEX keystation.

The book is passed into GLOBEX during the staging period prior to a Market Open (see Section 4.1). Uploaded orders are processed and posted as new orders. (Any orders with More quantities are ignored and not uploaded.)

Recovering from a Failure

When the Host experiences a failure from which it cannot recover, you can no longer trade. In such a situation, trading must be re-opened. Market Opening includes the staging period, during which you can recover your open orders.

To facilitate a quick and accurate reentry of all the orders that were open at the time of failure, upload the open order file created at your keystation (see Sections 7.14 and 4.1).

Reloaded orders are given a new GLOBEX entry time, based on the sequence in which the orders are received at the Host. The new time is the basis for order priority following Host recovery.

There is also a possibility that the Host might fail after a trade occurs but before it notifies the keystations of the trade; in this case the keystation will not receive the traded message and the audit trail and tradelog will record the just-traded order as still open. The GCC monitors all trades for this type of event, and will notify you of the trade.

NOTE: If an instrument is in an Open state when orders are uploaded, orders in that instrument are eligible for matching immediately.

13.4 Order Modification

There are three ways to modify the state or content of an existing order:

- **Change Order Function** - This is equivalent to a Cancel order followed by entry of the new (changed) order. This results in loss of priority, since the changed order is assigned a new timestamp. Orders are automatically placed on hold when you display the Change dialog box.
- **Hold Order Function** - This is used to change the state of existing orders. When an order is placed on hold, any untraded quantity (if present) is simultaneously placed into the hold state and removed from all market information displays.

- **Release Order Function** - This is used to return all orders from the held state to the active state. The effect of this function is precisely the opposite of the hold function.

When you change, hold, or release an order, it loses its time priority in the Standing Order Book.

NOTE: If the original order has been completely matched when you select it and choose the change or hold function, you will receive a warning message that your order no longer exists. This means your order has been executed and it is too late to change it or place it on hold.

It is possible for an order to partially match before it is changed or held. If you are changing or placing one order on hold, check the Trader Mailbox for the quantity. If multiple orders are being changed or placed on hold, check your audit trail printer.

Orders are automatically placed on hold when the trader chooses the order to modify. This prevents the order from being traded while it is being modified.

13.5 Order Deletion

There are several ways to remove orders from the Standing Order Book: Cancel All Orders, Cancel All Bids, Cancel All Offers, Cancel Orders by Instrument, Cancel Selected Orders, and Hold Open Orders (temporary deletion). Cancel functions are applied to held orders as well as active orders.

13.6 Automated Matching

Matching rules control the execution of transactions. There are six principles involved.

13.6.1 Order Processing

Each order proceeds through three stages within the system:

- **New Order Processing** - When you first enter an order, the system tries to find one or more standing orders (orders already in the Standing Order Book) that can partially or completely fill the new order. Any standing order matched to a new order is classed as a filling order.

At the end of this stage of processing, a Bid or Offer order will either be completely filled (and removed from the system), partially filled, or unfilled with the remaining quantity added to the Standing Order Book for the specified instrument. Any unfilled quantity of a Hit or Take order is always removed. A Hit or Take order never becomes a standing order.

The quantity is shown to the market; as an order trades, quantity diminishes and is updated in the summary market display on the screen.

- **Standing Order Processing** - When an order becomes a standing order, it is assigned a priority in relation to all other standing orders in the book. These rules of priority are based on order price and transaction timestamp.

The purpose of standing order processing is to try to trade any unfilled quantity in your original order that did not trade during new order processing. A standing order remains in the order book until its quantity is completely consumed or until it is explicitly cancelled.

- **Order Removal** - In this final phase, your order is removed from the system. Removal is implicit if the quantity is completely traded, or if the order is a Hit or Take and is removed directly after new order processing. Explicit removal occurs through a Cancel or Hold transaction; the selected order is removed from the order book.

However, since GLOBEX starts the trading day, GTC and DAY orders that are still open at the end of the GLOBEX session and are routed to the RTH session will continue to trade during regular trading hours. Unless the order is explicitly cancelled or totally consumed by trading, it exists and remains open as GLOBEX trading ends.

13.6.2 Order Eligibility

A new order is eligible to be matched with a standing order, and a trade will result, whenever all of the following conditions hold:

1. One order is a buy order and the other is a sell order.
2. The two orders are against the same instrument.
3. The price of the buy order is greater than or equal to the price of the sell order.

13.6.3 Standing Order Priority

GLOBEX processes orders based on price and time priority. Each GLOBEX order is given an order entry time and is processed based on that entry time. Therefore, even if the system response time is slow, "first-in-first-out" priority is maintained.

Price and time priority are maintained on an instrument-by-instrument basis. Therefore, an order for a less active instrument may be executed a few seconds before an order for a more active instrument.

The priority of a standing order, relative to other standing orders for the same instrument, is based on the following:

Price

A trade takes place at the price of the standing order. Normally, the prices of the matched new order and the standing order are the same. For buy orders, the higher price has higher priority; for sell orders, the lower price has higher priority.

Sometimes, however, the price of the sell order is less than the price of the buy order (crossed market condition). In this case, the trade takes place at the market-maker price (the older, standing price). This also guarantees that all new orders are filled at the best available opposite price.

Time

If there are multiple standing orders at the same price, they are evaluated for matching by time priority. Earlier orders have priority over later orders.

Maximum Possible Match

If multiple standing orders are eligible for matching against a new order, matches will be considered in priority sequence until one of the following conditions is fulfilled:

The new order is completely filled, **OR**

All eligible standing orders have been considered.

Two orders will always trade up to their maximum potential, by completely filling one order or the other. At the conclusion of matching, there will be no remaining trade potential in the Standing Order Book.

13.7 Standing Order Book

The Standing Order Book arranges orders by price and time; each side of the book market is made up of zero or more sub-books. Figure 13.1 shows a typical book market for a single instrument, with four sub-books on the offer side and three sub-books on the bid side. You'll notice that new orders are added at the far right and far left of each sub-book and that matched orders gradually meet along a central merge line. The best Bid and best Offer are physically closest in the model. Since there is currently a value spread (no price overlap) between the Bid side and the Offer side, no matching can take place at this time.

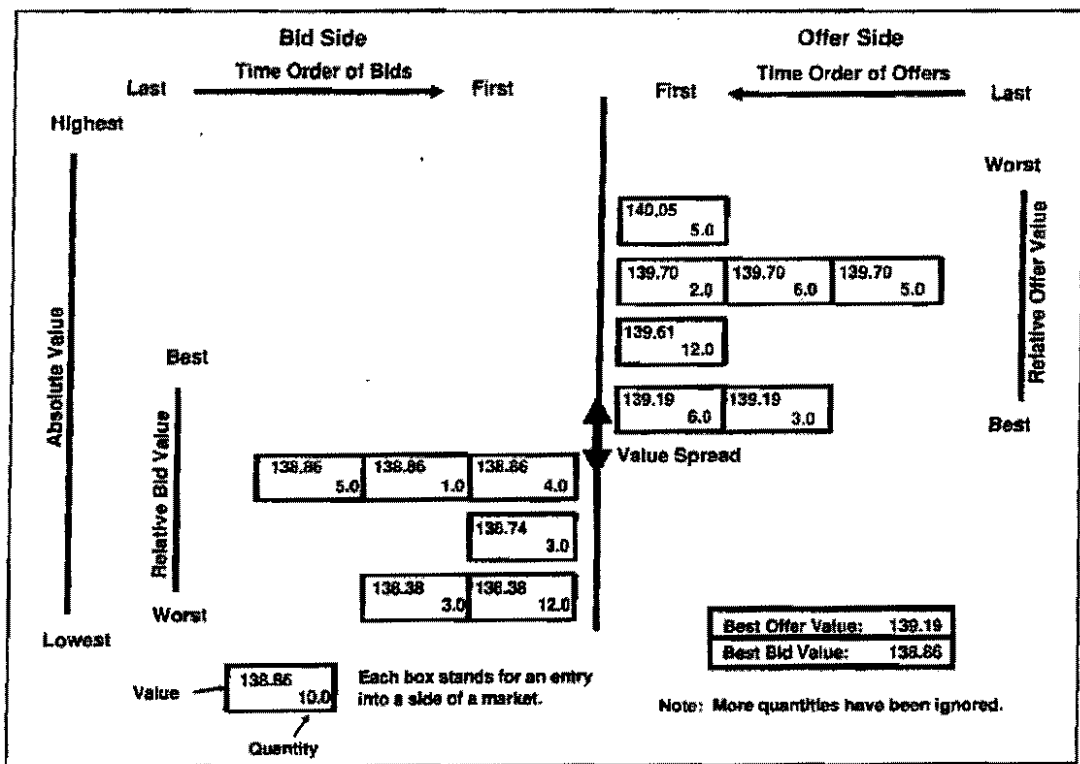


Figure 13.1 Standing Order Book

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There are two ways in which an entry can be positioned in a book market, both determined by the entry's value.

If there is already a sub-book with the same value as the new entry, the new entry is entered at the bottom of the sub-book (see Figure 13.2).

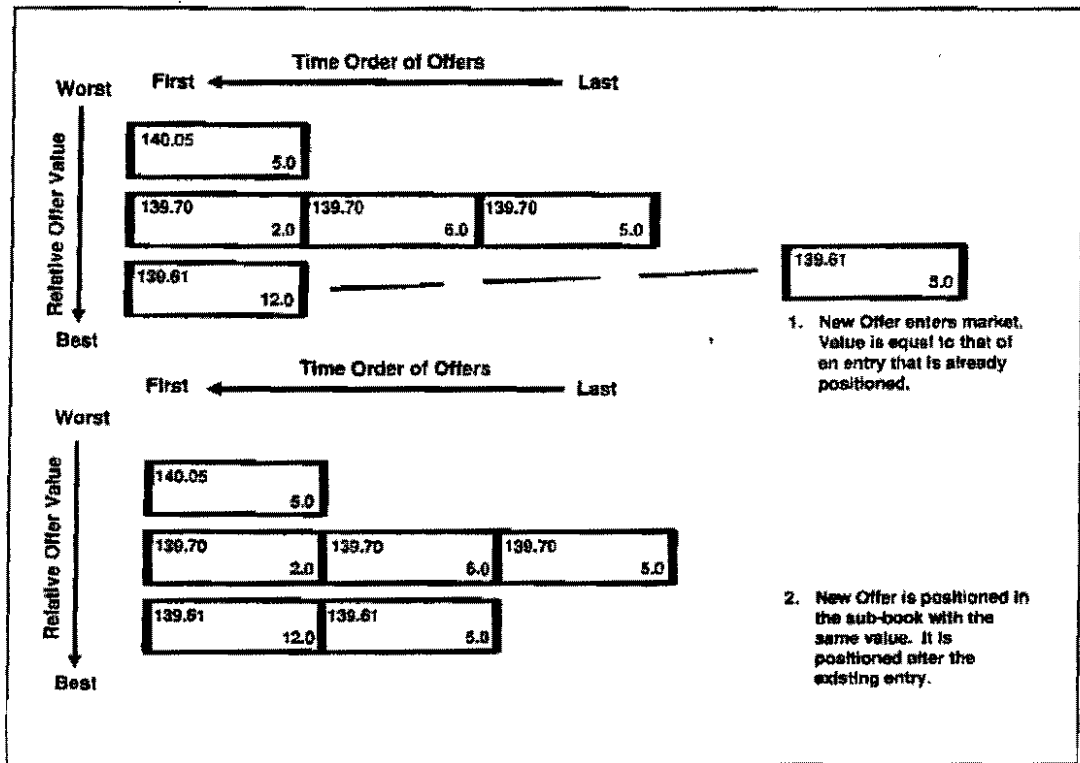


Figure 13.2 Book Market Entry Positioning, at Market

If a sub-book with the same value as the new entry does not exist, a new sub-book is created with the new entry placed at the top of the book, as in Figure 13.3. This sub-book is positioned between other sub-books to preserve the value ordering of sub-books. A new sub-book is automatically created when a new entry betters the current best price for that side of the market.

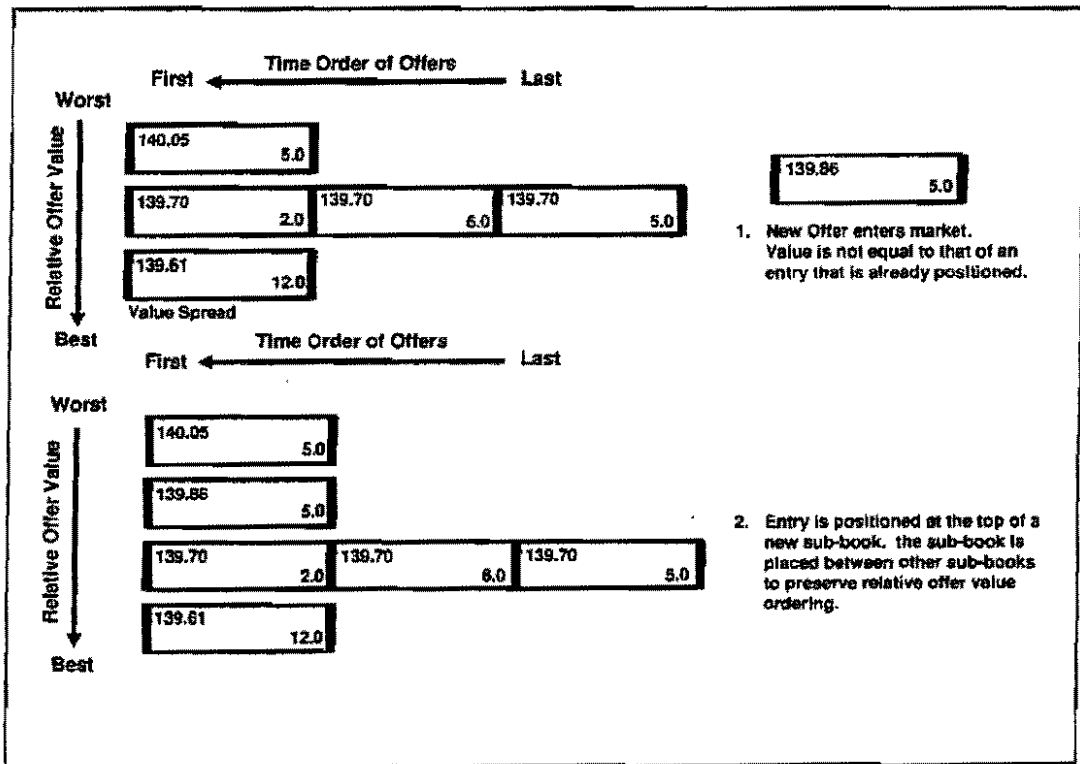


Figure 13.3 Book Market Entry Positioning, New Sub-Book Created

Sample Transaction

Figure 13.4 shows a Bid posted at a value of 139.19 (with a quantity of 10), a value that better the current best Bid. Since there is no sub-book at this price on the Bid side of the book, a new one is created. At this point, the best Bid value is equal to the best Offer, so the Bid and Offer sub-books with the value of

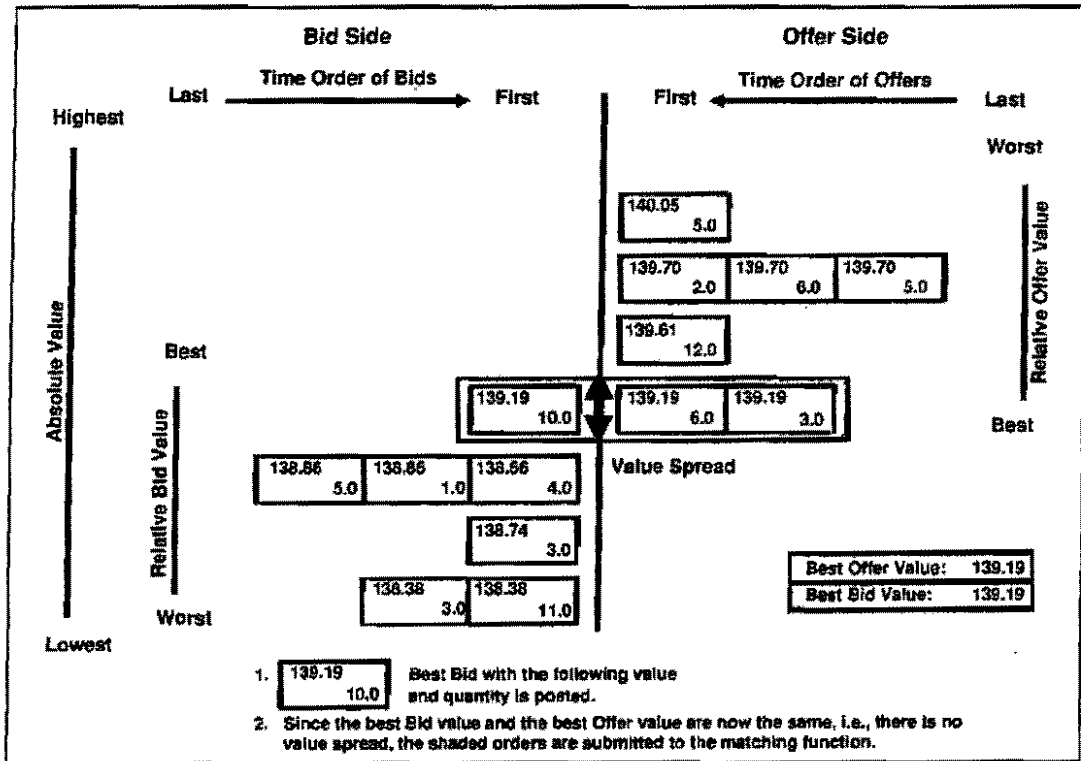


Figure 13.4 Book Market, After Posting

139.19 are submitted to the matching function.

Both of the Offer entries are fully traded for a total quantity of 9; the bid is only partially traded. A quantity of 1 remains. After the trade is over, a clean-up takes place. The Offer sub-book with a value of 139.19 has no more entries in it, so it is removed. A Bid remains for 1, so it remains in the sub-book. A new value spread exists in the book. Figure 13.5 shows the book at this stage following the trade.

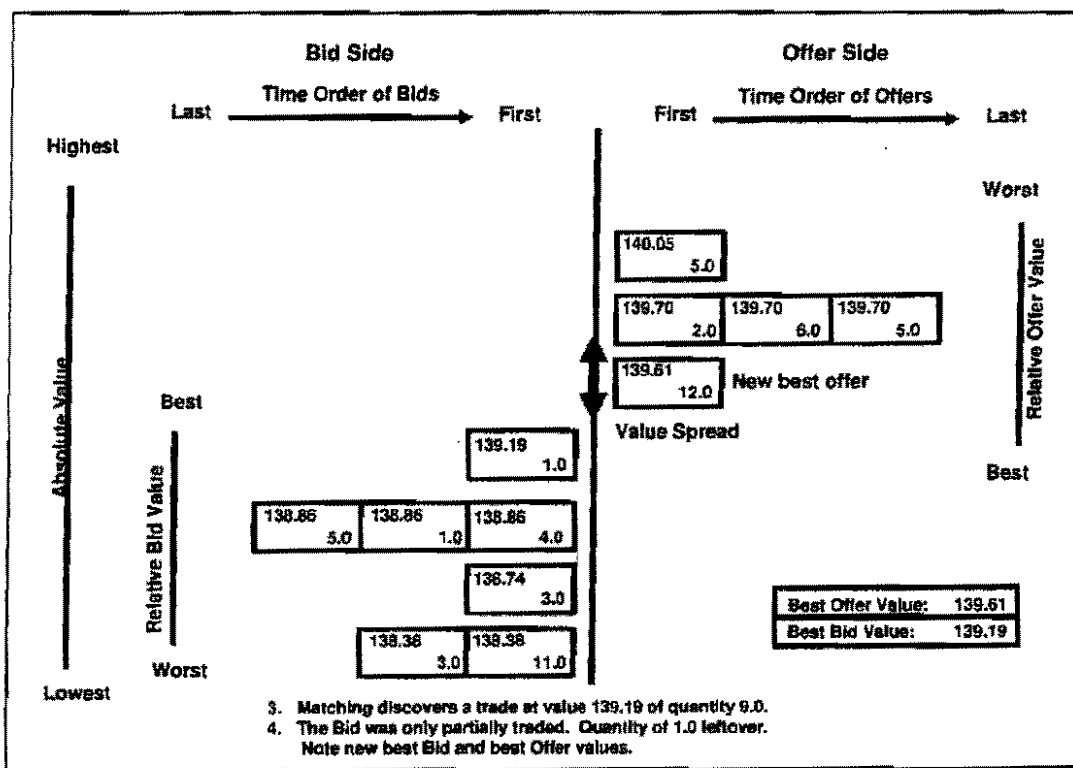


Figure 13.5 Book Market, After Trade

Appendix A: Futures and Options Symbols on GLOBEX

CME CONTRACTS			
	Codes		Codes
Australian Dollar Futures, Options, Spreads	AD	Mexican Peso Futures, Options, Spreads	MP
British Pound Futures, Options, Spreads	NB	Midcap Futures and Options	MD
Canadian Dollar Futures, Options, Spreads	CD	MMI Futures and Options	BC
Cross Currency - DM/JY Futures	DJ	Rolling D-Mark Futures and Options	RD
Deutsche Mark Futures, Options, Spreads	DM	Rolling Yen Futures and Spreads	RY
Eurodollar Futures, Options, Spreads	ED	Rolling Pound Futures and Options (weekly)	P_ (1-5)
Forward Deutsche Mark Futures and Spreads	FM	Russell 2000 Futures and Options	RL
Forward Yen Futures and Spreads	FE	S&P Futures and Options	SP
Goldman Sachs Index, Futures and Options	GI	Swiss Franc Futures, Options, Spreads	SF
Japanese Yen Futures, Options, Spreads	JY	Treasury Bill Futures, Options, Spreads	TB
LIBOR Futures, Options, Spreads	EM	1Year Treasury Bill Futures, Options, Spreads	YR

MATIF CONTRACTS		
Contract	Futures	Options
PIBOR	PIB	OPI
NOTIONNEL	NNN	ONN
CAC40	CAC	
ECU	ECU	OXU

Each symbol is to be followed by the standard month designator:

January	F	May	K	September	U
February	G	June	M	October	V
March	H	July	N	November	X
April	J	August	Q	December	Z

Each month designator is to be followed by the last digit of the year, e.g. 1995 = 5, 1996 = 6.

Example:	Eurodollar Future, December 1995	=	EDZ5
	Eurodollar Put 9200, June 1996	=	EDM6 P9200
	Swiss Franc Call 770, March 1996	=	SFH8 C0770
	TED Spread (T-Bill/Eurodollar Spread) March 1996	=	TBH6-EDH6
	Eurodollar Calendar Spread, March 1996 - Sept. 1996	=	EDH6-EDU6
	Eurodollar Strangle, June 1996	=	EDM6SG2227
	Notionnel Bond, December 1995	=	NNN25
	Notionnel Put, January 1996	=	ONNF6P1060
	CAC40 Future, November 1995	=	CACX5
	PIBOR Call, March 1996	=	OPIH6C9350
	ECU Future, June 1996	=	ECUM6
	ECU Put, March 1996	=	OXUH6P0760

The exchanges will update, daily, all Futures, Options, and Spreads to be traded in that day's GLOBEX Session. Your GLOBEX keystation will download the list automatically. We recommend that the main control unit be kept on at all times (although you may turn off your screen), so that new instruments will already be loaded in your keystation when you log in.

Appendix B: Clearing Information

This appendix defines clearing information to be used by each Exchange trading on GLOBEX. Fields that are not defined in this section require general information specified in Section 4.4.2.

CME Clearing Information

- **Acct #** - Account number for order. Ten positions in number. For a give-up order, use the customer number at carrying firm or executing firm suspense account number.
Options:
 - # In first position, indicates a bunched account trade (discretionary/APS). Positions 2-10 are actual customer number or series ID.
 - \$ In first position, indicates a bunched account trade (discretionary/APS). Positions 2-6 are series ID or customer account number, and 7-10 are CTA/APS Group ID.
 - * In first position, indicates a bunched account trade (discretionary/APS). Positions 2-10 are account number series identifier, followed by a dash and the firm's allocation rule ID.
- **Origin** - Origin of order. Defaults to previous entry.
Options:
 - 1 Customer order.
 - 2 House order.
- **CTI** - Customer Type Indicator. The prior entry is the default. Options:
 - 1 All orders placed by a keystation operator for his own account or an account in which he has a financial interest.
 - 2 All orders placed for the proprietary accounts of the clearing member firm having the GLOBEX keystation.
 - 3 All orders placed for the account of another keystation operator or an account in which said keystation operator has a financial interest.
 - 4 All other orders.

Appendix B: Clearing Information

The CTI and Origin fields of the Clearing Information area automatically default to the last entry. Keystation operators trading for different origins and CTI codes must routinely check these fields for accuracy.

- **Fee** - Clearing fee indicator initially blank. Enter fee, or leave blank.

Valid codes are:

- E = Equity Member/Clearing Member
- L = Lessee/106.F. Employee
- B = CBOE Member
- H = 106.H./J. Firm
- C = Customer

- **F-Ex** - Foreign exchange. Initially blank, indicating a regular trade. If the first character of the account number is * this field must be blank and is disabled.
- **F-Firm** - Initially blank. If the foreign exchange field is blank, leave this field blank.

- **Field Dependencies**

<i>Origin</i>	<i>CTI</i>	<i>F-ExF-Firm</i>
1	1, 3, 4	GUNon-blank SXNon-blank blankblank
2	1, 2, 3, 4	GUNon-blank SXNon-blank blankblank

MATIF Clearing Information

- **Qualifier** - This value is not used by MATIF SA's systems. At the end of the GLOBEX Session, all orders remaining in the system are automatically cancelled.
- **Origin** - Origin of order, required. Defaults to previous entry.
 - 1 Order entered for a customer.
 - 2 Order entered for the member's proprietary account.
- **F-Ex** - The other clearing member.
 - GU** Give-up (see additional information below)
 - Blank** Simple trade
- **F-Firm** - Used for a give-up.
 - GU** The three-character trading code identifying the transferee in MATIF format.
 - Blank** Leave blank for a simple trade.
- **Action** - The type of assignment. Initially **O** (Opening).
 - O** Opening
 - C** Closing
 - F** FIFO (first-in, first-out) closing
 - T** Turn around
 - X** Other
- **Memo** - A message of up to 15 characters, displayed in the **commentaire** field on SAND2 (MATIF Clearing System). Initially blank. All alphanumeric and special characters allowed except single and double quote, comma, reverse quote, and vertical bar.

(The **CTI** and **Fee** fields are disabled for MATIF.)

- **Field Dependencies**

<i>Origin</i>	<i>F-Ex</i>	<i>F-Firm</i>
1	GU	Non-blank
2	GU	Non-blank

How to Carry Out a Give-Up

It is possible to trade on the GLOBEX system with pre-allocation; the transaction is allocated as a give-up on the clearing system.

However, it is possible to enter the trade directly as a give-up; the transferer specifies the trading code of the transferee in the **F-Firm** field.

For an authorized give-up, the information concerning the allocation to an account, with an origin and an action, will not be transmitted to the transferee via the give-up message on SAND2's allocation functions. Only the **Memo** field from the clearing information is transmitted to the transferee in the **message allouant** (transferred message) field of the give-up operation on SAND2.

More information on this subject is included in the MATIF GLOBEX manual.

Appendix C: Additional Price Information for Partner Exchanges

This appendix describes GLOBEX requirements for prices entered on various exchange(s), and gives additional details concerning how GLOBEX evaluates those prices.

Price types are:

- Whole numbers.
- Fractional – 32nds.
- Fractional – 64ths.
- Fractional/Decimal – Fractional – Half-32nds.
- Fractional/Decimal – Fractional – Quarter-32nds.
- Decimal/Fractional – Halves.
- Decimal/Fractional – Fourths.

Requirements for Entering Prices in 32nds and 64ths

These requirements apply to prices entered for orders, bid/ask spreads, and price limits.

1. Use only the minus sign (-) and digits 0 through 9.
2. The price must be within the high and low price limits as specified for the given instrument.
3. A blank price field will not be accepted.
4. The rightmost two digits always reflect the fractional portion (i.e., 00 through 31 or 00 through 63).
5. If you type two digits or less, the system assumes you are typing a fractional portion. You must type at least three digits to represent an integer and no fraction. For example:
 - 500 is 5 and 0/32nds.
 - 5 is 5/32nds.
 - 50 is invalid for 32nds.
6. The fractional portion cannot be more than the fractional denominator; a fractional portion above 31 for 32nds or 63 for 64ths will not be accepted.

Appendix C: Additional Price Information for Partner Exchanges

7. The price for 32nds can range from -99931 through 999931; the price for 64ths can range from -99963 through 999963, depending upon limits defined by the Exchange.

Requirements for Entering Prices in Half- and Quarter-32nds

The following requirements apply to instruments whose prices are stated in half-32nds and quarter-32nds.

1. The rightmost three digits always reflect the fractional portion (i.e., 000 through 315 or 000 through 317).
2. The first two digits of the fractional portion cannot go above the fraction denominator (i.e., the keystation will not accept a price if the first two digits of the fractional portion are above 31).
3. The right-most digit of the fractional portion must be the following:
 - For half-32nds: 0, 5 (5 for 1½).
 - For quarter-32nds: 0, 2 (for 1¼), 5 (for 2 quarters), 7 (for 3 quarters).
4. Typing three digits or less implies a fractional portion only; you must type at least four digits if you want an integer and no fraction for half-32nds or quarter-32nds. For instance:
 - 5000 is 5, 0 32nds, and 0 half-32nds.
 - 5 is 1 half-32nd.
 - 505 is invalid for half- or quarter-32nds.
 - 313 is also invalid for half- or quarter-32nds.
5. The price for half-32nds can range (theoretically, for keystation validation purposes) from -99315 through 999315.
6. The price for quarter-32nds can range from -99317 through 999317.

Entering Prices in Halves and Fourths

The following requirements apply to instruments whose prices are stated in halves and fourths.

1. Only the rightmost digit reflects the fractional portion (0, 2, 5, or 7).
2. The fractional portion is represented in hundredths (1/100) with the ones place truncated off. For example, 0.25 is represented as 2; 0.75 is represented as 7.
3. The fractional portion can be the following:
 - For halves: 0, 5 (5 for 1 half).
 - For fourths: 0, 2 (for 1 fourth), 5 (for 2 fourths), 7 (for 3 fourths).
4. Typing one digit implies a fractional portion only; you must type at least two digits to specify whole numbers. For example:
 - 5000 is 500 and no halves.
 - 5 is 1 half.
 - 506 is invalid for halves and fourths.
5. The price must increment according to the minimum tick size for the instrument.
6. The price for halves can range (theoretically, for keystation validation purposes) from -99995 through 99995.
7. The price for fourths can range from -99997 through 99997.

Altering Prices

When you alter the price (**quote** box) using the **UP** and **DOWN** arrow buttons or **UP** and **DOWN** keys, GLOBEX validates the price after every change, not only when you choose **OK**.

Appendix C: Additional Price Information for Partner Exchanges

Price Check Value

This calculation is based on the price check value (between 1 and 10 ticks) that you establish using the **Instrument Parameters** function. GLOBEX checks that all entered order prices are within the established range of the market Last.

For example, you have established a price check value of 8 ticks. The price you entered is 9731 ($97 \frac{31}{32}$), which converts to 3135 32nds. Assume that the Last is 3138.

Your low price limit is therefore $(3138 - 8) \text{ 32nds} = 3130 \text{ 32nds} = 97 \frac{26}{32}$.

Your high price limit is therefore $(3138 + 8) \text{ 32nds} = 3146 \text{ 32nds} = 98 \frac{10}{32}$.

The warning would have been displayed if your price had been outside of this range.

It may be possible that when there is a very small Last, for example, 5 32nds, the price check value may display the warning on any change in price, since the "delta" of the calculation could be zero or a negative number.

Appendix D: Parallel Methods for Initiating Functions

Menus	Trading Panel (Mouse)	Hard Keys	Soft Keys
MENU GLOBEX Alerts About		Trade	TRADE TILE ALRT HIST
TRADE Bid/Ask Bid Offer Hit Take Change Cancel Instrument RFQ View RFQs Book Pass the Book Print File	Bid/Ask Bid Offer Hit Take Change Cancel Inst RFQ Book	BidAsk Bid Offer Hit Take Change	INST CXL RFQ VIEW RFQs BOOK NEXT BOOK PASS BOOK PRINT FILE
SPECIAL TRADE Market Maker Buy Working Order Sell Working Order	Market Maker Buy WO Sell WO		MKT MAKER BUY WO SELL WO
MODIFY Hold Release		Hold Release	
DISPLAY Open Orders Page Dir Organizations Market Maker Page Active Markets		Open Orders	PAGE DIR ORGS FIRST MKT MAKER ACTV MKTS
PARAMETERS GLOBEX -Create/Modify Cust. Page -Create/Modify Market Maker Page -Create/Modify Clearing Records -Modify Svc. Disp. Priority -Modify Order Sequence Instrument/Service -Instrument Limits, Spread, RFQ's, Order Size, Increment Size, Price Check -Service Account Number, Order Limit			GLBX PARAM INST/SERV PARAM
WINDOW Trader Mailbox Ticker Price Page Style Instrument Spacing Overlap Warning			PRICE PAGE

<i>Menus</i>	<i>Trading Panel (Mouse)</i>	<i>Hard Keys</i>	<i>Soft Keys</i>
CANCEL		CANCEL ORDERS	
SESSION Login Sign-In/Out Lock/Unlock Change Password Logout Copy File			LOGIN SIGN IN/OUT KBD LOCK CHNG PASSWORD LOGOUT COPY FILE
HELP			HELP
OTHER FUNCTIONS	Quit	Quit	PC UTILS

Appendix E: Printer Maintenance

The customer is responsible for maintaining a supply of continuous-form paper, trade confirmation tickets, and printer ribbons. Continuous form paper and printer ribbons are carried by most office product suppliers. In the **United States**, trade tickets made from 20% bond paper (this heavier paper may reduce paper jams) can be ordered from:

Chicago: Tony Floridan
Computer Supplies, Inc.
3800 N. Acorn
Franklin Park, IL 60131
Tel: 708-678-6780
Fax: 708-451-1275

New York: Mr. Stewart Ginsberg
Precision Computer Supplies
of New York
40-L Corbin Avenue
Bay Shore, New York 11706
Tel: 516-595-7038
Fax: 516-595-1302

Customers in **London** should contact: Colebrook Services, Tel 071-837-1188.

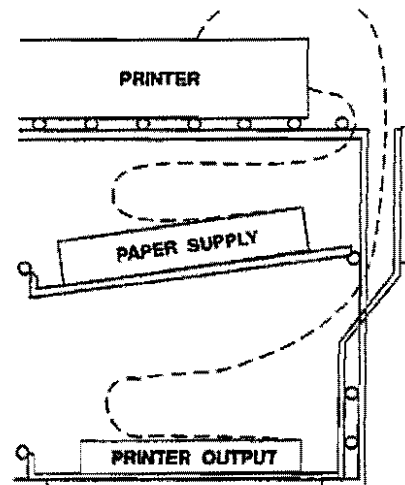
In **Paris**, Subscribers can either get the name of the local supplier from the Reuter GLOBEX Specialists, or order from the firms noted above.

Tickets from Precision Computer can be imprinted with your company name and logo. They come in boxes of 3,000; when ordering, use order number 2PT500.

Printer Stand

The available printer stand has been tested by Reuters and the GCC and considerably reduces the risk of paper jams. The diagram at right illustrates how to arrange incoming paper supply and printed output.

1. Place the printer on the top shelf of the stand. Secure printer cables to the printer frame with plastic ties to keep them from interfering with the paper supply.
2. Place the stack of incoming paper or ticket forms on the middle shelf of the stand, underneath the printer. Pass paper from the supply stack, around the outside of the top rear wire of the stand, and into the back of the printer (sections E.2, E.4). Make sure printer



Appendix E: Printer Maintenance

cables do not interfere with the paper supply.

3. When enough printout has accumulated, pass it down the rear of the printer and arrange the first few pages neatly on the bottom shelf of the stand. The printout will continue to fanfold neatly.

The following sections explain how to replace ribbons and load paper/trade tickets for three models of printers in current use: the Epson FX-850, FX-870, and Mannesmann Tally MT130/9. If you cannot solve a printer problem using these instructions, contact your local Customer Service Desk.

E.1 Epson FX-850**E.1.1 Replacing the Ribbon**

When your printing becomes faint, you need to replace the ribbon. Use only #8750 Epson replacement ribbon cartridges and follow this procedure:

1. Turn off the printer and remove the printer cover. **WARNING:** If the printer has been used recently, the print head may be hot. Let it cool before attempting to replace the ribbon.
2. Remove the old ribbon cartridge by grasping the black, fin-like handle in the center and lifting the cartridge straight up and out of the printer.
3. Slide the print head to the middle of the printer (Figure 1).
4. Unwrap the new ribbon and turn the ribbon-tightening knob (left end of cartridge) in the direction of the arrow to remove the excess slack (Figure 2).
5. Hold the new ribbon cartridge by the handle and firmly insert it into place, making sure that the plastic hooks fit into the slots as shown below (Figure 3).
6. Use a pointed object, such as the tip of a pencil, to guide the ribbon between the print head and ribbon guide. At the same time,

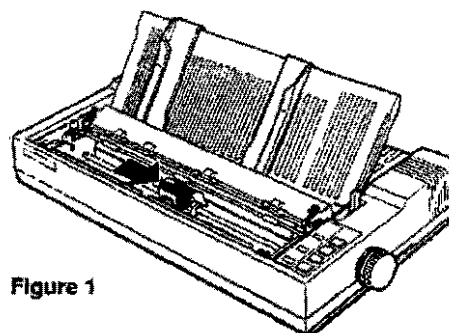


Figure 1

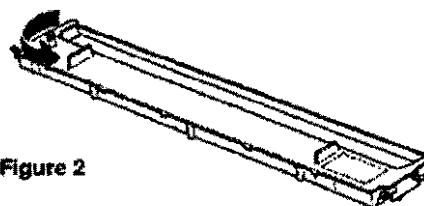


Figure 2

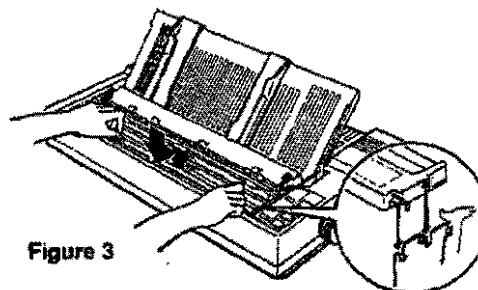


Figure 3

turn the ribbon-tightening knob in the direction of the arrow to help guide the ribbon into place (Figure 4).

7. Check to make sure that the ribbon is not twisted or creased. You can check the installation by sliding the print head from side to side along the carriage.
8. Reattach the printer cover by fitting the legs of the cover into the notches at the front of the printer (Figure 5). Turn the printer back on.

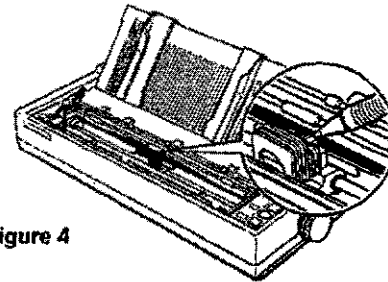


Figure 4

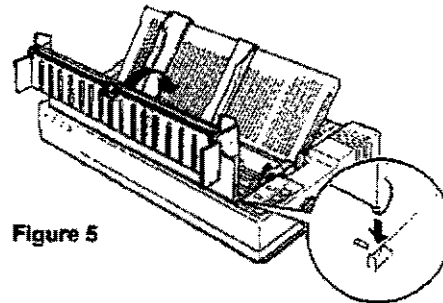


Figure 5

E.1.2 Loading Paper in the Audit Trail Printer

If a printer error message appears in the logo/alerts window, check the printer to determine if the paper supply has jammed or the printer is out of paper. To load or adjust continuous-form paper:

1. Turn off the printer and remove the printer cover and paper guide. Make sure the paper release lever is pulled forward (continuous paper position) to allow paper to feed smoothly (Figure 6).
2. Open both sprocket covers. Left sprocket unit position should be as far left as possible and locked in place. Right sprocket unit position should be adjusted only if necessary as described in step 4. Make sure the paper support is midway between sprocket units (Figure 7).

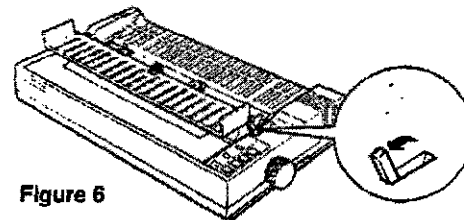


Figure 6

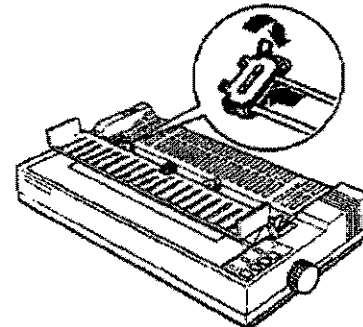


Figure 7

Appendix E: Printer Maintenance

3. Fit four holes on both edges of the paper over the pins of the sprocket units as shown in the printer diagram. Make sure you use the same range of holes on both paper edges. Make sure the paper is not crooked or wrinkled and then close the sprocket covers.
4. If the paper does not lie flat against the carriage, release the right sprocket lock lever (pull it forward) and slide the sprocket unit to a position where the paper is straight and has no wrinkles, then push the sprocket lock lever back into place (Figure 8).

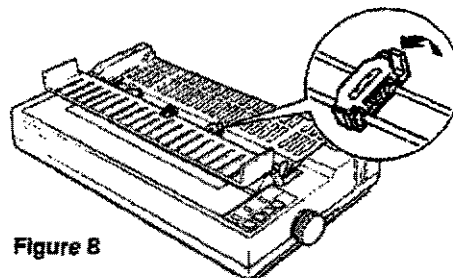


Figure 8

5. Replace the paper guide on top of the loaded paper, making sure that the edge guides on the paper guide are pushed to the middle of the paper guide (Figure 9).

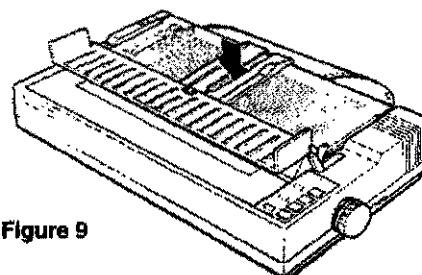


Figure 9

Important: Keep your paper supply aligned with the printer so that the paper feeds in smoothly. Position your printout so it runs straight back from the printer, without interfering with paper feeding in. It is helpful

to have paper feed in from below (as on a printer stand) and feed out to a stack directly behind the printer. The best way to position paper is to use a printer stand.

6. Replace the printer cover and turn on the printer.
7. Press the **LOAD/EJECT** button once (or twice if necessary) to feed the paper to the loading position. **DO NOT** use the platen knob (on the right side of the printer) to adjust the paper except when the printer is turned off.
8. Press the **ON LINE** button to put the printer on line so it can accept data. If possible, watch to be sure that your printout stacks neatly behind the printer. This can help prevent a paper jam.

E.1.3 Fixing a Paper Jam in the Audit Trail Printer

1. Check the position of the paper release lever. If it is not pulled forward, paper will not feed properly (see E.1.2, step 1).
2. Make sure paper is mounted on sprockets correctly. If the paper is not even from side to side or does not fit smoothly over sprockets, a paper jam will certainly result.

3. Check the position of the paper guide.
4. Check that the paper supply is not stacked too far from the printer or not aligned with the printer. Also, there may be some obstacle in the way of the paper or something on top of the paper supply.

If the printer still does not work, contact your local Customer Service Desk.

E.1.4 Loading Trade Tickets

Initial Loading

Initial loading of trade tickets is done **before the start of the GLOBEX Session**, with the printer OFF. It is **strongly recommended** that you load enough forms to last until the session ends; reloading forms during a session may cause problems with alignment of printed information.

1. Make sure the printer is off.
2. Remove the printer cover and paper guide. Make sure the paper release lever is pulled forward (continuous paper position) to allow forms to feed smoothly.
3. For 2-ply tickets, the paper thickness lever should be set to position 3 on the scale (position for regular paper is 2). To check the paper thickness setting, look at the lever and number settings on the printer case, to the left of the print head. You can change this setting only if the printer is OFF.
4. Open both sprocket covers. Make sure that paper support is midway between sprocket units.
5. Load ticket forms as described in E.1.2, steps 3 and 4. Use the top four holes on the form. Each sprocket unit should rest about one-half inch from the farthest right and left position, respectively. The "O" in "Organization" at the top left of the form will line up vertically with the beginning of the ruler marks on the paper bail (the metal bar that holds the paper in place against the platen). If you must realign the forms horizontally, first position the left sprocket unit, then the right.
6. Turn on the printer. Press the **LOAD/EJECT** button once to feed the paper to the loading position.
7. Align the tickets using the Micro-Adjustment feature: press the **ON-LINE** button; the **ONLINE** indicator flashes. Press the **FORM FEED** button until the bottom of the vertical line dividing the **BUY-SELL** sections of the ticket is at the top of the ribbon guide. (For micro-adjustment, **FORM FEED** moves the form up and **LINE FEED**

Appendix E: Printer Maintenance

moves the paper down.) This should align the tickets for proper placement of printed information. You only have to do this during initial loading - the printer will remember this top-of-form position.

Alignment for initial loading.

ORGANIZATION		GLOBEX ORDER EXECUTION CONFIRMATION								
ENTRY NO	ENTRY TIME	OPERATOR ID	ORDER TYPE	ORDER QVAL	USER ID	ORDER NO	ACCOUNT NO	FOREIGN EXCH	FOREIGN FIRM	

<p>ORIGINAL ENTRY DATE: _____</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="6" style="text-align: center;">BUY</th> </tr> <tr> <th style="width: 15%;">QUANTITY SHOWN/MORE</th> <th style="width: 15%;">CONTRACT</th> <th style="width: 15%;">PRICE</th> <th style="width: 15%;">PFI</th> <th style="width: 15%;">FEE CT</th> <th style="width: 15%;">ORG</th> </tr> <tr> <td> </td><td> </td><td> </td><td> </td><td> </td><td> </td> </tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 25%;">EXECUTION TIME</th> <th style="width: 25%;">MATCH NO</th> <th style="width: 25%;">OPPOSITE ORGANIZATION</th> <th style="width: 25%;">OPPOSITE USER ID</th> </tr> <tr> <td> </td><td> </td><td> </td><td> </td> </tr> </table>	BUY						QUANTITY SHOWN/MORE	CONTRACT	PRICE	PFI	FEE CT	ORG							EXECUTION TIME	MATCH NO	OPPOSITE ORGANIZATION	OPPOSITE USER ID					<p>ORDER TYPE: _____</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="6" style="text-align: center;">SELL</th> </tr> <tr> <th style="width: 15%;">QUANTITY SHOWN/MORE</th> <th style="width: 15%;">CONTRACT</th> <th style="width: 15%;">PRICE</th> <th style="width: 15%;">PFI</th> <th style="width: 15%;">FEE CT</th> <th style="width: 15%;">ORG</th> </tr> <tr> <td> </td><td> </td><td> </td><td> </td><td> </td><td> </td> </tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 25%;">EXECUTION TIME</th> <th style="width: 25%;">MATCH NO</th> <th style="width: 25%;">OPPOSITE ORGANIZATION</th> <th style="width: 25%;">OPPOSITE USER ID</th> </tr> <tr> <td> </td><td> </td><td> </td><td> </td> </tr> </table>	SELL						QUANTITY SHOWN/MORE	CONTRACT	PRICE	PFI	FEE CT	ORG							EXECUTION TIME	MATCH NO	OPPOSITE ORGANIZATION	OPPOSITE USER ID				
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8. Replace the paper guide on top of the loaded paper. Make sure that the edge guides are pushed to the middle of the paper guide.
9. Replace the printer cover. With tickets, it is crucial to position the forms so that the back of incoming forms does not rub against the back of outgoing forms; the perforations along the edges tend to catch on each other. You may find it helpful to raise the paper guide to an inclined position instead of flat.
10. The printer is now ready for printing.

Reloading

1. The printer automatically goes off-line when it runs out of forms or if it jams. A printer error message appears at the keystation.
2. If the printer has run out of tickets, you cannot reload tickets without disturbing the alignment of printed ticket information on the forms. You must reload tickets as described above, with the printer off, in order to correctly align the forms.

When you turn the printer off, you will lose any ticket information that was in the printer buffer when the printer went off line. However, you can reprint missing ticket information at the audit trail printer using the Create Trade Tickets Offline Utility (see section 12.7.2 in the GLOBEX User Guide). By comparing the printed tickets with the list displayed using the utility, you can identify the missing tickets.

E.1.5 Fixing a Paper Jam in the Ticket Printer

If tickets become jammed in the printer, it may not be possible to realign them without turning off the printer, which will erase any ticket information in the printer buffer.

1. Check the position of the paper release lever. If it is not pulled forward, the tickets will not feed properly.
2. If possible, adjust the paper feed and form position in the printer without altering the alignment of the forms. Press the ON-LINE button to resume printing, and watch to see whether subsequent tickets are printed properly. If ticket information is misaligned, you will have to turn off the printer, re-align the forms, and later reprint any missing ticket information as described in section E.1.4.
3. If tickets are crumpled or torn, you must turn off the printer and remove all crumpled tickets and/or torn fragments before reloading forms. You will also need to reprint any missing ticket information (section E.1.4).

E.1.6 Printer Control Settings

When you turn the printer back on after loading paper or changing the ribbon, check the control panel to make sure the indicator lights are lit for draft mode and 10 CPI, and that the printer is on line. These settings remain valid even after you turn off, reset, or initialize the printer.

The buttons on the control panel let you control many printer settings; the indicator lights show the current status of printer settings.

To change a setting, press the button located nearest the lights; each setting will light up in turn. Pressing a button that has a single light will turn that setting alternatively off, then on.

Appendix E: Printer Maintenance**E.2 Epson FX-870****E.2.1 Replacing the Ribbon**

When your printing becomes faint, you need to replace the ribbon. Use only #8750 Epson replacement ribbon cartridges and follow this procedure:

1. Turn off the printer and remove the printer cover by lifting it by its back edge straight up and off (Figure 10).
2. Grasp the tabs at the front of each side of the paper-tension unit as shown below. Press up firmly with your thumbs to lift the front of the unit; then pull the paper-tension unit up and off the printer (Figure 11).
3. Slide the print head to the middle of the printer. **CAUTION:** Moving the print head while the printer is on might damage the printer. Also, if the printer has been in use the print head may be hot; let it cool for a few minutes before touching it.
4. Remove the old ribbon cartridge by grasping the handle on the top of the cartridge and lifting it straight up and out of the printer.
5. On the new cartridge, turn the ribbon-tightening knob in the direction of the arrow to remove any slack in the ribbon. Next, hold the ribbon cartridge by its handle and push it firmly down into position, then press on both ends of the cartridge to fit the plastic hooks into the slots (Figure 12).
6. Use a pointed object, such as a ball point pen, to guide the ribbon between the print head and ribbon guide while you turn the ribbon-tightening knob to help feed the ribbon into place (Figure 13).

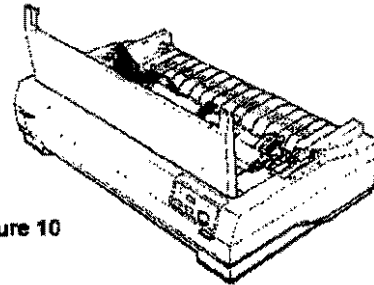


Figure 10

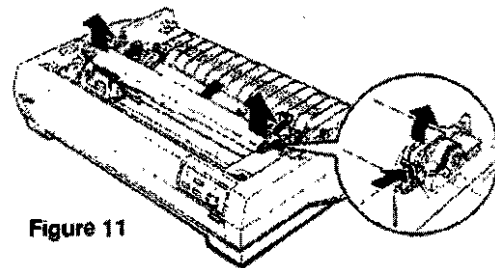


Figure 11

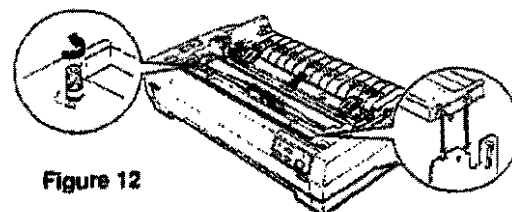


Figure 12

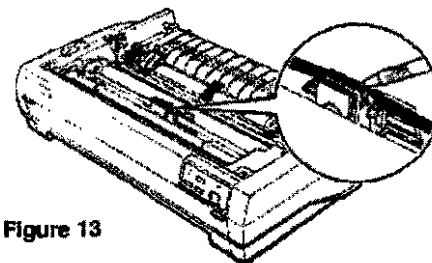


Figure 13

Appendix E: Printer Maintenance

7. Slide the print head from side to side to make sure it moves smoothly. Also check that the ribbon is not twisted or creased.
8. Replace the paper-tension unit by placing it on the printer's mounting pegs and lowering it into place. Press down on both ends of the unit until you feel it click into place (Figure 14).
9. Replace the printer cover by first inserting the front tabs into the slots on the printer and then lowering it into place. Finally, push it down until it clicks. Turn the printer back on (Figure 15).

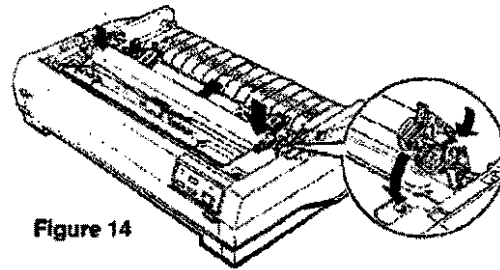


Figure 14

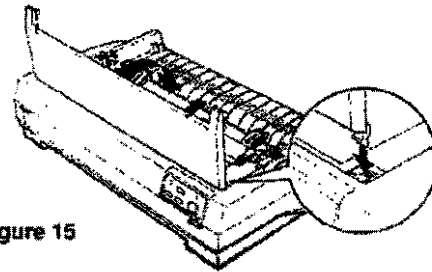


Figure 15

E.2.2 Loading Paper in the Audit Trail Printer

Note: The paper-release lever, located on the right side of the printer, has four positions. Make sure it remains set in the second position from the front, which shows the icon at right.



If a printer error message appears in the logo/alerts window, check the printer to determine if the paper supply has jammed or the printer is out of paper. To load or adjust continuous-form paper:

1. Press the **OPERATE** button turn off the printer, then remove the paper guide.
2. Open both sprocket covers. Left sprocket unit position should be as far left as possible and locked in place. Adjust the right sprocket unit position only if necessary, as described in step 4. Make sure the paper support is midway between sprocket units.
3. Fit three holes on both edges of the paper over the pins of the sprocket units as shown in the printer diagram. Make sure you use the same range of holes on both paper edges. Make sure the paper is not crooked or wrinkled and then close the sprocket covers (Figure 16).

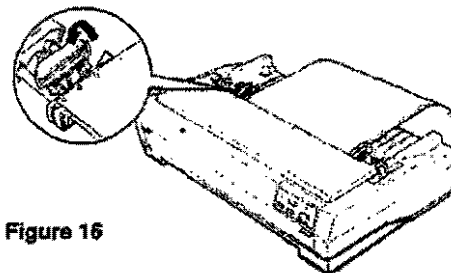


Figure 16

Appendix E: Printer Maintenance

4. If the paper does not lie flat against the carriage, release the right sprocket lock (pull it forward) and slide the sprocket unit to a position where the paper is straight and has no wrinkles, then push the sprocket lock lever back into place (Figure 17).

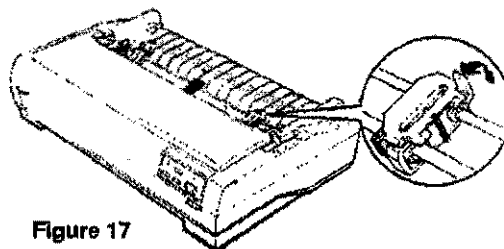


Figure 17

5. Replace the paper guide on top of the loaded paper and turn on the printer.

Important: Keep your paper supply aligned with the printer so that the paper feeds in smoothly. Position your printout so it runs straight back from the printer, without interfering with paper feeding in. It is helpful to have paper feed in from below (as on a printer stand) and feed out to a stack directly behind the printer. The best way to position paper is to use a printer stand.

6. Press the **PAPER FEED** button once (or twice if necessary) to feed the paper to the loading position. **DO NOT** adjust paper position using the knob on the left side of the printer unless you first turn the printer off.
7. Press **OPERATE** to turn the printer back on. If possible, watch to be sure that your printout stacks neatly behind the printer. This can help prevent a paper jam.

E.2.3 Fixing a Paper Jam in the Audit Trail Printer

1. Check the position of the paper release lever (see section E.2.2).
2. Make sure paper is mounted on sprockets evenly. If the paper is not even from side to side or does not fit smoothly over sprockets, a paper jam will certainly result.
3. Check the position of the paper guide.
4. Check that the paper supply is not stacked too far from the printer or not aligned with the printer. Also, there may be some obstacle in the way of the paper, or something on top of the paper supply.

E.2.4 Loading Trade Tickets

Initial Loading

Initial loading of trade tickets is done **before the start of the GLOBEX Session**, with the printer **OFF**. It is **strongly recommended** that you load enough forms to last until the session ends; reloading forms during a session may cause problems with alignment of printed information.

1. Press **OPERATE** to turn off the printer.
2. Remove the paper guide. Make sure the paper release lever is in the correct position (see section E.4.2).
3. For 2-ply tickets, set the paper-thickness lever at 1 on the scale (the position for regular continuous-form paper is 0).
4. Open both sprocket covers. Make sure the paper support is midway between sprocket units.
5. Load ticket forms as described in section E.2.2, steps 3 and 4. Use the top three holes on the form. Each sprocket unit should rest about one-half inch from the farthest left and right position, respectively. The holes on the left side of the form should line up with the number "5" on the scale behind the left sprocket unit. If you must realign the forms horizontally, first position the left sprocket unit, then the right.
6. Press **OPERATE** to turn on the printer. Press **PAPER FEED** once to feed the paper to the loaded position.
7. Press **OPERATE** to turn off the printer again. Align the tickets using the handle at the left side of the printer. **IMPORTANT:** Always turn off the printer before you use the knob on its left side. If the printer is on, you may damage it or lose the top-of-form position. Advance the forms until the top edge of the ribbon is just above the lower edge of the word "Organization."
8. Press **OPERATE** to turn the printer on again. The **READY** light is green, and the leds for **ROMAN** and **CONDENSED** are lit.
9. Replace the paper guide on top of the loaded forms. With tickets, it is crucial to position the forms so that the back of incoming forms does not rub against the back of outgoing forms; the perforations along the edges tend to catch on each other. You may find it helpful to raise the paper guide to an inclined position instead of flat.

Appendix E: Printer Maintenance

Reloading

1. The printer automatically goes off-line when it runs out of forms or jams. A printer error message appears at the keystation.
2. If the printer has run out of tickets, you cannot reload tickets without disturbing the alignment of printed ticket information on the forms. You must reload tickets as described above, with the printer off, in order to correctly align the forms.

When you turn the printer off, you will lose any ticket information that was in the printer buffer when the printer went off line. However, you can reprint missing ticket information at the audit trail printer using the Create Trade Tickets Offline Utility (see section 12.7.2 in the GLOBEX User Guide). By comparing the printed tickets with the list displayed using the utility, you can identify the missing tickets.

E.2.5 Fixing a Paper Jam in the Ticket Printer

If tickets become jammed in the printer, it may not be possible to realign them without turning off the printer, which will erase any ticket information in the printer buffer.

1. Check the position of the paper release lever. If it is not in the correct position (see section E.2.2), the tickets will not feed properly.
2. If possible, adjust the paper feed and form position in the printer without altering the alignment of the forms. Press the **OPERATE** button to resume printing, and watch to see whether subsequent tickets are printed properly. If ticket information is misaligned, you will have to turn off the printer, re-align the forms, and later reprint any missing ticket information as described in section E.2.4.
3. If tickets are crumpled or torn, you must turn off the printer and remove all crumpled tickets and/or torn fragments before reloading forms. You will also need to reprint any missing ticket information (see section E.2.4).

E.2.6 Printer Control Settings

OPERATE is a toggle switch, turning the printer on and off. When the printer is on, the **READY** light is green.

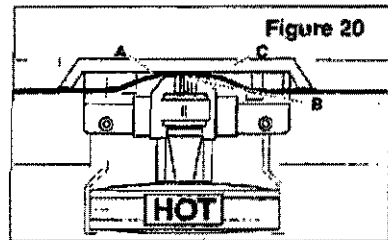
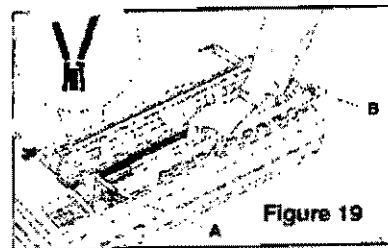
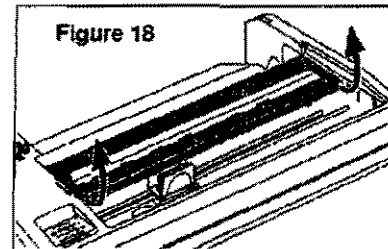
GLOBEX software determines the font used for printing, depending on whether the printer is being used to produce the audit trail or trade tickets.

E.3 Mannesmann Tally MT130/9

E.3.1 Replacing the Ribbon

When your printing becomes faint, you need to replace the ribbon. Use only Mannesmann Tally part no. 052 220 replacement ribbon cartridges and follow this procedure:

1. Turn off the printer and lift up the printer bar cover (Figure 18).
2. Lift out the cartridge.
3. Turn the knob at the right side of the replacement cartridge in the direction of the arrow to tighten the ribbon.
4. Carefully move the print head to the middle of the printer.
5. Snap sprocket A on the left end of the cartridge into the guide rail, followed by sprocket B into the right guide rail (Figure 19).
6. Turn the knob at the right side of the ribbon cartridge in the direction of the arrow to tighten the ribbon; ribbon A passes between print head B and window C (Figure 20).
7. Turn on the printer. Refer to section E.3.6 to verify the correct printer control settings.



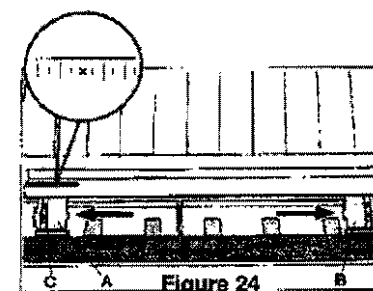
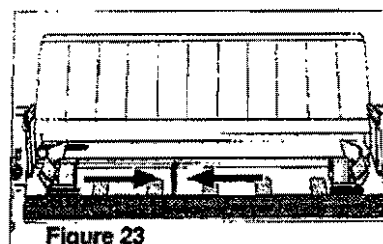
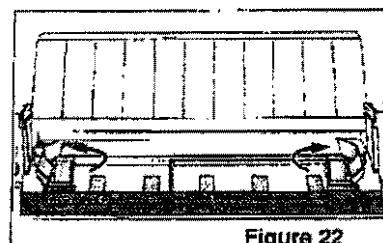
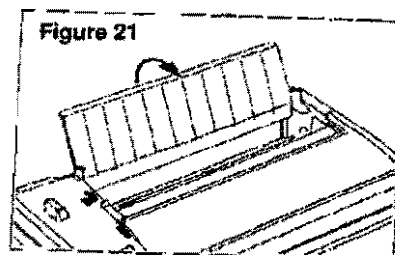
E.3.2 Loading Paper in the Audit Trail Printer

Note: The feed mode knob on the left side of the printer must always be in the fanfold paper position.

If a printer error message appears in the logo/alerts window, check the printer to determine if the paper supply has jammed or the printer is out of paper. To load or adjust continuous-form paper, do not turn off the printer:

Appendix E: Printer Maintenance

1. Lift up the fanfold paper guide (Figure 21).
2. Take the printer off-line by pressing button 4 until you select **LOCAL** (refer to section E.3.6).
3. Open both tractor flaps. The right tractor unit should be as far right as possible and locked in place. The left tractor unit should be approximately 1/2 inch in from the left-most position (Figure 22). Adjust tractor position only if necessary as described in step 7.
4. Make sure the sliding paper support is midway between the two tractor units (Figure 23).
5. Position paper onto two of the pins in the left tractor (A) and close the tractor flap. The left edge of the paper should line up between the fourth and fifth mark on the paper ruler (Figure 24).
6. Position paper onto two pins in the right-hand tractor (B in the above figure). Make sure the paper is not crooked or wrinkled and then close the flap.
7. If the paper does not lie flat against the carriage, release the right tractor lock (pull it toward you) and adjust the tractor position until the paper lies flat, then push the tractor lock away from you to lock the tractor in place (Figure 25).
8. Replace the paper guide on top of the loaded paper.

**Figure 25**

Important: Keep your paper supply aligned with the printer so that the paper feeds in smoothly. Position your printout so it runs straight back from the printer, without interfering with paper feeding in. It is helpful to have paper feed in from below (as on a printer stand) and feed out to a stack directly behind the printer. The best way to position paper is to use a printer stand.

9. With **LOCAL** still selected, press button 3 to load paper into position.
10. Press button 4 until you select **ON-LINE**. The printer is now ready to accept data. If possible, watch to be sure that your printout stacks neatly behind the printer; this can help prevent a paper jam.
11. The paper thickness lever controls print quality. Placing the lever in the middle of the scale will generally give a good printout. If the printout is too dark or smeared, move the lever further toward the front. If the printout is too light, move it toward the rear of the scale (Figure 26).

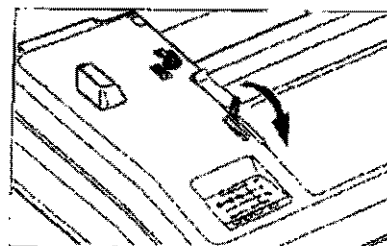


Figure 26

E.3.3 Fixing a Paper Jam in the Audit Trail Printer

1. Make sure paper is mounted on sprockets evenly. If the paper is not even from side to side or does not fit smoothly over sprockets, a paper jam will certainly result.
2. Check the position of the paper guide.
4. Check that the paper supply is not stacked too far from the printer or not aligned with the printer. Also, there may be some obstacle in the way of the paper, or something on top of the paper supply.

E.3.4 Loading Trade Tickets

Initial Loading

Initial loading of trade tickets is done **before the start of the GLOBEX Session**, with the printer **OFF**. It is **strongly recommended** that you load enough forms to last until the session ends; reloading forms during a session may cause problems with alignment of printed information.

Do not turn off the printer to load ticket forms.

1. Load ticket forms as described in section E.3.2, steps 1 through 9.
2. It is important to align ticket forms in the printer. With **LOCAL** still selected, press button 1 (see section E.3.6) to advance the forms until the top edge of the ribbon is precisely at the lower edge of the word "Organization."
3. Press button 4 until you select **ON-LINE**. The printer is now ready to accept data.

Appendix E: Printer Maintenance

Reloading

1. The printer automatically goes off-line when it jams or runs out of forms. A printer error message appears at the keystation.

If the printer has run out of tickets, you may be able to reload tickets without disturbing the alignment of printed ticket information on the forms: while the printer is off-line, it maintains a certain amount of information in a printer buffer; when you put the printer back on-line, the printer will continue from the point at which it went off-line.

2. To align ticket forms **without having to turn off the printer**, note the **last** line of information that was printed before forms ran out. Adjust forms (see step 2, above) to position the top edge of the ribbon **approximately 1/4" above** the position at which you want printed information to resume.
3. You can reprint missing ticket information at the audit trail printer using the Create Trade Tickets Offline Utility (see section 12.7.2 in the GLOBEX User Guide). By comparing the printed tickets with the list displayed using the utility, you can identify the missing tickets.

E.3.5 Fixing a Paper Jam in the Ticket Printer

If tickets become jammed in the printer, it may not be possible to realign them without turning off the printer, which will erase any tickets in the printer buffer.

1. If possible, correct the paper feed and form position in the printer without altering the alignment of the forms. Select **LOCAL** and adjust form position as described in section E.3.4. When you put the printer back **ON-LINE**, watch to see whether subsequent tickets are printed properly.
2. If ticket information is still misaligned, you will have to turn off the printer, turn it back on, adjust the control panel settings as described in section E.3.6, re-position the forms, and resume. When you turn the printer off, you will lose any ticket information that was in the printer buffer when the printer went off line. However, you can reprint missing ticket information at the audit trail printer using the Create Trade Tickets Offline Utility (see section 12.7.2 in the GLOBEX User Guide). By comparing the printed tickets with the list displayed using the utility, you can identify the missing tickets.
3. If tickets are crumpled or torn, you must turn off the printer and remove all crumpled tickets and/or torn fragments before restarting the printer and reloading forms. You will also need to reprint any missing ticket information.

E.3.6 Printer Control Settings

The illustration to the right shows the control panel as it should look when the printer is set correctly for printing (Figure 27).

These instructions refer to the control buttons as if they were numbered from left to right, 1 through 4.

To adjust paper position or to restore control panel settings that may have been disturbed, you need to take the printer off-line.

To take the printer off-line:

Press button 4; LEDs labeled **PQ** (paper quality), **PAPER** (paper type), **MENU**, and **LOCAL** light in rotation. When one of these is lit, you can press buttons 1, 2, and 3 to make selections in the line to the left of the LED.

To adjust print quality:

Select **PQ**. Press button 3 to select **DPQ** (draft print quality).

To select paper type:

Select **PAPER**. Press button 3 to select fanfold paper.

To adjust paper position:

Select **LOCAL**. Press button 3 to advance paper to the top of the next page. Press button 1 to micro-adjust paper forward; press button 2 to micro-adjust paper in reverse. If you press and hold either button 1 or 2, paper will continuously move in the applicable direction.

To bring the printer back on-line:

After you make any adjustments to the control panel, you must press button 4 until you select **ON-LINE**. Data can get to the printer only when the **ON-LINE** LED is lit.

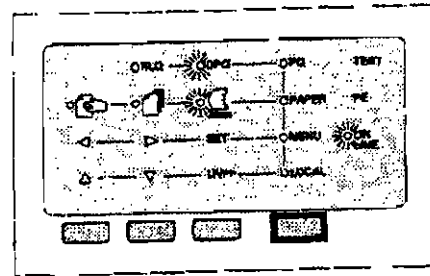




Figure 27




Appendix F: Programming Soft Keys

At any time the keystation is operating, you can program the unlabeled keyboard soft keys to perform "macros." A macro is an automated procedure that is executed when you press a soft key. Macros reduce the number of keystrokes required for an operation.


Tips:

- Keep a written record of each macro and the key to which you assign it.
- The first operation in any macro should be pressing  to close any open dialog box. If you intend a macro to operate within a dialog box, have the macro display that dialog box.


- Do not include any operation that executes an order ( ,

 , or  to OK and press ). When you use a macro, always wait to see that it has operated successfully by reviewing the display before executing the procedure.

- Do not assign the password and/or login procedure to a soft key.
- The number of keystrokes in a macro is limited. You can include up to 27


unshifted characters, 26 continuous shifted characters ( pressed at the start of the string and released at the end) or 13 individual

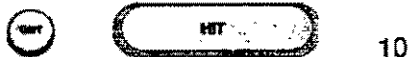
shifted characters ( pressed for each character key). If you see the **No More Allowed** message, program the macro again, us-

ing fewer key presses. (Press  to start programming again.) You may be able to break your macro into two sections, assign each section to a separate key, and press those two keys in succession to execute the macro.

Appendix F: Programming Soft Keys

The following steps create a macro and assign it to a soft key:

1. Press . The LCD window on the keyboard displays the following:
SOFT KEY ENTRY?
PRESS Y IF YES.
PRESS N IF NO
 These lines redisplay until you respond.
 Press Y.
2. The LCD displays:
PRESS SOFT KEY
 Press the soft key you want to program.
3. The LCD displays:
ENTER STRING
 Type the actions you want the key to execute; the characters are echoed in the LCD. (Be careful to type TABs in correct places.)
 Example:
 This macro will hit a bid for a selected instrument:



(When you press the soft key during a trading session, the **Hit-Sell** dialog box will be displayed, initialized with the current instrument and the quantity 10.)

If you make a mistake in programming the soft


key, press  again and start over at Step 1.

4. Press the same soft key you pressed in Step 2.
5. The LCD displays:

ANOTHER?

PRESS Y IF YES

PRESS N IF NO

- To end the procedure, press **N** and then press  again.
- To program another macro, press **Y** and program another macro, starting at Step 2.
- To set the click for the soft key or set the alarm for alerts press **N** and, see Steps 6 - 8.

6. If you do not press  after **N**, the LCD displays:

KEY CLICK?

PRESS Y IF YES

PRESS N IF NO

Press **Y** to indicate that the key press should be accompanied by a click.

Press **N** if you don't want a click.

7. The LCD displays:

AUDIBLE ALARM?

PRESS Y IF YES

PRESS N IF NO

Press **Y** to activate a beep for high or low alerts, System messages, and program events.

Press **N** for no beep.

8. The LCD displays:

SOFT KEY ENTRY?

PRESS Y IF YES

PRESS N IF NO



Press  to exit from this function, or press Y to program another macro, starting at Step 2.

You may wish to test a macro before you actually use it. Be sure to do so while the market is halted in case your macro inadvertently executes an order; you can then cancel the order without the risk of a possible trade.

IMPORTANT: You may have to reprogram macros when a new version of GLOBEX software is installed at your keystation or if the keyboard is replaced.

Appendix G: GLOBEX America GCC Emergency Procedures

Overview

The sections following explain, in detail, how to determine the nature of the failure. Once you determine this, you can implement the appropriate recovery procedure.

Emergency procedures in brief:

If your keystation has disconnected from at least one of the active Services, call the market status line for the disconnected Service(s).

- If the Host has failed, follow the procedures for **Host Failure** (page 327).
- If the Host is still "trading," follow the procedures for **Failure of a Single Keystation** (page 334 or **Site Failure** (page 332) if all keystations at your site have failed.

To cancel orders while a keystation session is being reestablished, see **Order Cancellations** (page 340).

The GCC

GCC responsibilities are determined by Service - GLOBEX Europe (GE) and GLOBEX America (GA). Currently MATIF (Exchange Identifier **f**) is traded on GE, and the CME (Exchange identifier **m**) on GA. All failure and error messages in the logo/alerts window include the Service code. Only the GCC for that Service may answer inquiries or cancel orders for that Service.

Detailed Emergency Procedures

In order to monitor the status of open orders, you must implement the appropriate emergency procedure immediately whenever there is a communication failure between a GLOBEX Host and one or more trading keystations.

You can experience the following types of communication failure at your site:

All of the trading keystations fail due to either:

- the failure of a concentrator or a communication line; or
- the failure of one of the GLOBEX Hosts.

A single trading keystation fails due to either:

- the failure of the keystation itself;
- the failure of a communication line; or
- the failure of a non-critical component (i.e., keyboard, mouse, or printer) of the keystation.

Because GLOBEX is designed with multiple backup systems to ensure uninterrupted trading, trades continue to be executed on a Service in all instances of communication failure **except failure of the GLOBEX Host for that Service.**

It is, therefore, critical that you immediately determine the type of communication failure that has occurred and immediately follow the appropriate emergency procedure to enter, cancel, or ascertain the status of open orders in the System.

The following Exchange identifiers and Service codes are active at the time of publication of this manual:

<i>Service code</i>	<i>Exchange Identifier</i>	<i>Exchange</i>
GA	m	CME
GE	f	MATIF

About the Keystation

Keystations (GLOBEX trading terminals) may be configured in a number of ways depending on the trading practices and permissions allowed to a user. Since recovery is handled differently on different keystations, it is important to note the software version number and permissions of a specific terminal.

In all cases, an alert message indicating failure of the Service and recovery of open orders is displayed in the Alerts window and printed at the audit trail printer. Open orders are recovered automatically by the keystation.

If the Login dialog box appears

Connection has been lost to both Services. This may be the result of a simultaneous dual Host failure (unlikely); a local communication line failure; or a failure in a keystation communication component (e.g., the modem).

If blank lines appear in the trading window

When a failure occurs while the trading window contains a custom page with instruments on that Service, the instrument lines are blanked out. Connections to the active Service(s) remain unaffected.

If a system page display changes to another page

When the trading window contains a system page from a Service that fails, the display changes to the default system page from the remaining active Service.

If the Service cannot be selected in a Service list

If a Service failure occurs while a page from another Service is in the Trading window, that Service name is grayed in all Service lists.

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Determine the Type of Communication Failure

Whenever a communication failure occurs, you must first determine the type of failure and the Service affected by following this procedure:

Step	Additional Information
<p>1. Look at the Alerts window in the lower right corner of the screen (or alerts history) under Menu on the menu bar for an error message indicating a communication/connection failure.</p> <ul style="list-style-type: none"> • If there is a failure message on the alert list, go to Step 2. • If there is no failure message on the alert list, go to Step 6. 	<p>A message appears on this screen when keystations have failed due to either failure at the site (faulty concentrator or communication line) or failure of a GLOBEX Host.</p>
<p>2. Write down the error code and status number displayed in the message.</p>	
<p>3. Determine the Service affected (GE, GA, or both).</p>	<p>Reuter Technical Service may need this information to determine failure type and expedite recovery.</p>
<p>4. Call the GCC Market Status Line for the affected Service prior to deleting the error message to determine whether the failure is at the site or GLOBEX Host.</p>	<p>A prerecorded message will alert you to the GLOBEX Host's status. Reuter pages GLB1 (GA) and GLB2 (GE) display, and Exchange tickers send, a Host failure message.</p>
<p>5. If the affected keystation is a multi-Service keystation and has lost its connection to only one of the GLOBEX Services (the other Service remains active) go immediately to Failure of a Multi-Service Keystation Connection to a Single Service (page 326).</p>	<p>If other keystations show the Service as active, the Host has not failed. Orders remain in the system for execution.</p>
<p>6. If only a single keystation is affected at the site (other terminals display the Service(s) that failed on this keystation), go immediately to Failure of a Single Keystation (page 330).</p> <ul style="list-style-type: none"> • If the keystation itself has failed, go immediately to Failure of a Single Keystation (page 330). 	<p>When a single keystation has lost the ability to communicate, you will not be able to input data into the screen. Market updates will not be displayed.</p>

GLOBEX America GCC Emergency Procedures

- If a non-critical component of the keystation has failed, go immediately to **Failure of a Keystation Component** (page 334).

The non-critical components of the keystation are the keyboard, the mouse, and the printer.

Host Failure

When the Host fails (GLOBEX America—GA, GLOBEX Europe—GE, or both), the ETH session for the Service stops, all orders are removed from the GLOBEX Service, and order priority is lost. The backup GLOBEX Host will be functional in approximately 180 seconds, when you will see the messages "**Connected xx**" and "**Wait Download**" in the Alerts window (**xx** is the Service code). Download will begin shortly after connection. When orders are reloaded after recovery, such orders will be given a new GLOBEX entry time, based on the sequence in which the orders are received at the Host. **The new time will be the basis for order priority following the Host recovery.** When a Service fails, the keystation automatically writes any open orders at the keystation to an open order file on Drive C:.

Immediately do the following:

Step	Additional Information
1. Orders are automatically written to a recovered open order file (RO filename prefix) whenever a keystation disconnects from the Host.	<p>Recovered order file ROy<date><Service code>.nnn:</p> <ul style="list-style-type: none"> • R is R to indicate recovery order file; • O is a fixed character in all order files; • y is the last digit of the year; • date is the day of the year (1-365); • Service code is GE or GA; • nnn is the sequential file number.
<p>2. Before you can log in, you must wait for a system download. Until this occurs, the Service name is grayed in the Login dialog box. Once the download is complete, log back into the Service. Select the Service, then type the following information:</p> <ul style="list-style-type: none"> • Subscriber name • Trader identifier • Password • Operator identifier 	<p>You should soon see alert messages concerning connection to the network (see Section 5.1).</p>

GLOBEX America GCC Emergency Procedures

3. Press **TRANSMIT** or **RETURN** (or click on **Start Session**).

If the login is successful, the message **Logged/Signed in xx** appears in the Alerts window and the Service name is available for selection in all Service lists. Instruments on the recovered Service do not display any open orders and price quotes, but do display the high, low, and volume figures. Check the Alerts window for the following messages:

HOST IS LIVE xx

UPLOAD ORDERS xx

where xx is the Service code of the recovered Service.

If the login is not successful and the system is functioning, **Login Info N/G** is displayed. Reenter your login information. Three unsuccessful login attempts will disable the keystation from login to that Service. An authorized person must then call the appropriate GCC to re-enable the keystation so login can proceed.

4. If connection to all Services was lost, reset the starting order number using **GLOBEX Parameters** (see Section 6.3.3).

If a keystation becomes disconnected from all Hosts (logged off, keystation failure, or failure of both Hosts), the automatic sequential numbering of orders is reset to begin at 1. Review the audit trail to verify the last sequential order number assigned by the system, then reset the next sequential number.

5. Upload recovered open orders to reestablish the Standing Order Book on the Backup Host by uploading open orders (instruments must first be in the Halted - **H**, Opening - **P**, or Open - / state):

- Bring up the Trade menu and select **Pass the Book** (see Section 7.14).
- Select the recovered Service from the Service list. Highlight the proper file in the file list; the correct file will have the same date and time as the printed audit trail message recording creation of the file.

- Highlight **Upload Orders**.
- Press **TRANSMIT** or **RETURN** (or click on **OK**).

Orders rejected during an upload are identified in your audit trail by sequence number only (no order data is displayed). To review the contents of the recovered order file, use **Print File** (see Section 7.15) on the Trade menu to print the file.

6. Compare the last few transactions on the audit trail with the last orders entered for the failed Service.

7. Check the Alerts window for the message announcing the reopen time of the ETH session:

REOPEN AT XX:XX GMT xx, where **xx** is the Service code (GA or GE).

You may have to input rejected orders manually.

You do this to ensure that the Host received the last orders entered by the keystation (i.e., receipt of an order-positioned message with an **OK** status). If a positioned message was not received by the keystation (i.e., Host failed during or just after the order was entered), the keystation will not record the last order entered as an open order.

The GCC will contact users concerning trades that may not have received notification to their keystations.

This window may contain other GLOBEX emergency messages or RFQs or alerts from other GLOBEX Services.

Failure of a Multi-Service Keystation Connection to a Single GLOBEX Service

(Loss of connection to one GLOBEX Service on one or more keystations.)

The ETH session continues. All open orders are subject to matching. The keystation cannot access orders on one Service but maintains an active session on another.

Immediately do the following:

Step	Additional Information
<p>1. Go to an off-site or on-site backup facility. Call the backup facility if it is in another location or city. You may not be permissioned at this site or may still be enabled for a failed keystation. In this case, it is necessary to first call the GCC to enable login at the backup facility.</p>	<p>If the KS failure is due to a Line or Modem failure, then the connection to the GLOBEX host should be restored in a matter of minutes. The Alert window will display a QUICK DOWNLOAD message. In this case, wait for the connection at this site. There is no need to go to backup site.</p> <p>If all keystations fail on-site, then reestablish your trading session at an off-site facility.</p> <p>If you require multi-Service access, be sure the backup keystation is permissioned to access the required Services. Permissioned Services will appear in the Service list in the Login dialog box.</p>
<p>2. Log In at an available GLOBEX keystation. Select the desired Service from the Service list in the Login dialog box and type the following information:</p> <ul style="list-style-type: none">• Subscriber name• Trader identifier• Password• Operator identifier	<p>If you do not have a backup keystation, the GCC for the failed Service will be able to cancel your open orders. See Order Cancellation (page 336).</p>
<p>3. Press TRANSMIT or RETURN (or click on Start Session).</p>	<p>If the login is successful, Logged/Signed In xx appears in the Alerts window.</p>

4. This will reestablish the failed session at the backup keystation. A session for the Service that did not fail will still be active at the original keystation. If the backup keystation is at a different location, you may wish to recombine the sessions at a single keystation. To do this:

- a) Manually record open orders at the original keystation.
- b) Log out.
- c) Log in at the backup facility.
- d) Verify that open orders match the final open orders at the original keystation.

5. Reset the starting order number using GLOBEX Parameters (see section 6.3.3).

6. Re-establish as many trading sessions as possible.

If the login is not successful, **Login failed xx** is displayed.

Re-enter login information. Three unsuccessful login attempts will disable the keystation from login to that Service. An authorized person must then call the appropriate GCC to re-enable the keystation so login can proceed.

You may finish the remainder of the session in this configuration or move the active session to the backup keystation by logging out at the primary site and logging in at the backup keystation. This will retain order priority while you move the session. Alternatively, you may extract open orders into a file instead of logging out from the original keystation. This will automatically cancel your orders and complete logout. This also prevents orders from matching before you log in at the backup facility and upload the open order file; however, order prices may be violated between the time you cancelled orders and then re-entered them at the new keystation.

Verify that no matches occurred during the period between logout from the original keystation and login at the backup keystation. If discrepancies exist, contact the GCC for that Service for order execution information.

If sessions at several keystations have failed, you can re-establish only one session at each available backup keystation. If three backup keystations are available, you can reestablish all three sessions.

Site Failure

(Loss of connection to all GLOBEX Services at all Keystations)

The ETH session continues. All open orders are subject to matching.
Immediately do the following:

Step	Additional Information
<p>1. Go to an off-site or on-site backup facility. Call the backup facility if it is in another location or city. You may not be permissioned at this site or may still be enabled for a failed keystation. In this case, it is necessary to first call the GCC to enable login at the backup facility.</p>	<p>If the site failure is due to a Line or Modem failure, then the connection to the GLOBEX host should be restored in a matter of minutes. The Alert window will display a QUICK DOWNLOAD message. In this case, wait for the connection at this site. There is no need to go to backup site.</p>
<p>2. Log in at an available GLOBEX keystation. Select the desired Service from the Service list in the Login dialog box and type the following information:</p> <ul style="list-style-type: none"> • Subscriber name • Trader identifier • Password • Operator identifier 	<p>If all keystations fail on-site, then reestablish your trading session at an off-site facility.</p> <p>If you require multi-Service access, be sure the backup keystation is permissioned to access the required Services. Permissioned Services will appear in the Service list in the Login dialog box.</p>
<p>3. Press TRANSMIT or RETURN (or click on Start Session).</p>	<p>If you do not have a backup keystation, the GCC for the failed Service will be able to cancel your open orders. See Order Cancellation (page 336).</p> <p>If the login is successful, Logged/Signed In xx appears in the Alerts window.</p> <p>If the login is not successful, Login failed xx is displayed.</p> <p>Re-enter login information. Three unsuccessful login attempts will disable the keystation from login to that Service. An authorized person must</p>

4. Reset the starting order number using **GLOBEX Parameters** (see section 6.3.3).

then call the appropriate GCC to re-enable the keystation so login can proceed.

When you continue a session at a different keystation, the automatic sequential numbering of orders does not carry over from the keystation at which the Service connection failed. Review the audit trail from the original session to verify the last sequential order number assigned by the system and then reset the next sequential number using **GLOBEX Parameters**.

5. Re-establish as many trading sessions as possible.

If three keystation sessions have failed, you can re-establish only one session at each available backup keystation. If three backup keystations are available, you can reestablish all three sessions.

Failure of a Single Keystation

(Loss of connection to ALL GLOBEX Services for a single keystation.)

The ETH session continues. All open orders are subject to matching.

Immediately do the following:

Step	Additional Information
<p>1. Go to an off-site or on-site backup facility. Call the backup facility if it is in another location or city.</p>	<p>If the site failure is due to a Line or Modem failure, then the connection to the GLOBEX host should be restored in a matter of minutes. The Alert window will display a QUICK DOWNLOAD message. In this case, wait for the connection at this site. There is no need to go to backup site.</p> <p>If you require multi-Service access, be sure the backup keystation is permissioned to access the required Services. Permissioned Services will appear in the Service list in the Login dialog box.</p>
<p>2. Log in at an available GLOBEX keystation. Select the desired Service(s) from the Service list in the Login dialog box and type the following information for each:</p> <ul style="list-style-type: none"> • Subscriber name • Trader identifier • Password • Operator Identifier (initial login only) 	<p>If you do not have a backup keystation, the GCC for the failed Service will be able to cancel your open orders. See Order Cancellations (page 336).</p>
<p>3. Press TRANSMIT or RETURN (or click on Start Session).</p>	<p>If the login is successful, Logged/Signed In xx appears in the Alerts window.</p> <p>If the login is not successful, Login failed xx is displayed.</p> <p>Re-enter login information. Three unsuccessful login attempts will disable the keystation from login to that Service. An authorized person must</p>

4. Reset the starting order number using **GLOBEX Parameters** (see section 6.3.3).

Administrative Keystations Only

1. Check for trade tickets queued at the keystation immediately before the failure.

then call the appropriate GCC to re-enable the keystation so login can proceed.

When you continue a session at a different keystation, the automatic sequential numbering of orders does not carry over from the keystation at which the Service connection failed. Review the audit trail from the original session to verify the last sequential order number assigned by the system and then reset the next sequential number using **GLOBEX Parameters**.

You do this to verify trade confirmation data.

If another administrative keystation was logged in, you must verify trade confirmations with the functioning administrative keystation.

If the administrative keystation that failed was the only administrative keystation logged in, have your clearing member firm check the Exchange's Matched Trade data to ensure all trade confirmations received were printed before the Host failure. Matched trade data is available based on the policies of the Exchange listing the instrument.

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Your keystation will **not** receive match notification messages in the Tradier Mailbox for any Host with which the keystation does not have an active session (if the keystation has failed or you have logged out). At the end of a GLOBEX trading session, **all** orders are automatically cancelled.

If your keystation was logged out or in a failed state at the end of a GLOBEX trading session, you should have your clearing member firm check the GLOBEX Matched Trade File for a list of all matched trades.

Each firm should have off-site backup keystations available in the event of keystation failure. If your firm does not have an off-site backup, it should have a pre-established give-up relationship with at least one firm. This would allow that firm to enter trades on behalf of your firm.

If your firm establishes a give-up relationship for the purpose of site failures, you should be aware of the following:

- Give-up relationships **cannot** be limited to times of site failures.
- Your firm can be involved in give-up trades at any time during any GLOBEX session.
- Exchanges participating in GLOBEX may handle give-ups differently. Refer to the GLOBEX Member Firm Operations Manual for further information on give-ups.

If your keystation fails or loses its connection to a Service, those orders that reached the Host prior to the failure will remain in the system, available for execution. You should be aware that after your keystation recovers, you will duplicate existing unexecuted orders if you upload orders that have been previously recorded by the Host. **To avoid duplication of orders, log in and check your open orders for a status of unexecuted orders immediately after recovery.** Upload only those orders which have not been recorded by the Host.

If your keystation fails, you can request to have orders cancelled by the GA GCC (for GA orders) or the GE GCC (for GE orders). You will **not** receive any notice of the cancellations in the audit trail or in your tradelog; however, the GCC will fax a notice of cancelled orders.

Trade tickets are sent to all administrative keystations that are logged into a Service **at the time a ticket is sent**. If **no** administrative keystations are logged into that Service from the subscriber group, the tickets are held until one or more administrative keystations are active. Pending tickets are then sent at 6-second intervals, in chronological order from a Service, to be printed. Once a ticket is sent, you **cannot** recreate it or request it to be retransmitted by the GCC.

Operators at administrative keystations that do not receive tickets can obtain trade details from another operator who received the ticket or from the Matched Trade data transmitted by the Exchanges. Matched trade data is available based on the policies of the Exchange listing the instrument.

Example: Subscriber ABC is part of an administrative group, on the GA Service, with three administrative keystations (1AD, 2AD, and 3AD). At 12:03 p.m., a trade is executed for a user within the ABC subscriber group against three counterparties. 1AD is the only administrative keystation logged in at 12:03. The tickets are queued for transmission at 6-second intervals after the 45-second delay period. Therefore, one ticket is sent at 12:03:45, one at 12:03:51, and one at 12:03:57. At 12:03:49, administrative keystation 2AD logs in. At 12:03:58, administrative keystation 3AD logs in. The tickets are received by the following:

<i>User</i>	<i>Ticket 1</i>	<i>Ticket 2</i>	<i>Ticket 3</i>
1AD	Yes	Yes	Yes
2AD	No	Yes	Yes
3AD	No	No	No

If a printer jam occurs, trade tickets may be illegible and cannot be reprinted. However, the data for those tickets is recorded in the keystation tradelog and can be reprinted at the end of a GLOBEX session through the Offline Utilities.

The GLOBEX system is refreshed before each session, and any tickets not sent by the system before then will be lost.

Trade tickets are not acknowledged by the keystation; therefore, it is possible that a ticket can be lost if a keystation becomes disconnected (due to failure or powering down) during the time that the ticket is sent and received by the keystation.

Failure of a Keystation Component

The GLOBEX session continues. All open orders are subject to matching.

If one of the components listed below fails, do the following immediately:

Step	Additional Information
<p>1. If the keyboard fails, you will be unable to input Clearing Information. GLOBEX does not accept orders without Clearing Information. Regulatory requirements are not relaxed when a keystation operator cannot input Clearing Information or any order because of a keyboard failure. You may want to access another keystation.</p>	<p>An operator entering orders where Clearing Information must be changed should access another keystation.</p> <p>An Operator entering order where Clearing Information must be changed can enter the information using pre-defined clearing keys.</p> <p>If no clearing keys have been defined and the operator needs to change the information, the operator should access another keystation.</p> <p>An operator who does not need to change Clearing Information can use the mouse to continue to input orders.</p> <p>In either case, the operator must contact Reuter Local Technical Service to repair or replace the keyboard for the next GLOBEX Session.</p>
<p>2. If the mouse fails, use the keyboard.</p>	
<p>3. If the audit trail printer fails, order confirmations print at the administrative keystation.</p>	<p>An audit trail of all orders must be maintained on the GLOBEX System. If your audit trail printer stops functioning (an alert message will be displayed), it is strongly recommended that you use another keystation with a working audit trail printer. Otherwise, you must manually prepare an order ticket for each transaction before you enter it into the system.</p>

GLOBEX America GCC Emergency Procedures

4. If the administrative printer fails, replace it with a spare printer or an additional audit trail printer.

You must do this **before** you log out or terminate the session so that queued confirmations are printed.

Call for replacement or servicing of any or all keystation components immediately.

See telephone number in Section 3.

5. If the hard disk on your GLOBEX keystation fails, the GLOBEX Offline Utilities and keystation order recovery will not be available to you.

You must **immediately** log in at a backup keystation to ensure the availability of the recovered order file and the trade log in the event of a Host failure.

6. If you get a **Hard Disk Warning** message in the Alerts window at your keystation, contact Reuter Customer Service immediately. If your hard disk becomes full it will not accept any new data until obsolete data files are removed; this will require a Reuter technician.

While rebooting the keystation may temporarily solve the problem, it can occur again shortly thereafter. Call Reuter Customer Service or the GCC immediately.

Order Cancellations

You have primary responsibility for implementing backup and recovery procedures and cancelling orders as necessary.

If you must cancel orders on multiple Services, you must call each GCC separately. You must decide which Service to call first. The GA GCC can cancel orders only on the GA Host; the GE GCC can cancel orders only on the GE Host.

If a keystation session cannot be re-established, authorized personnel (upon verification of identity) can contact the GA GCC at (312) GLOBEX1 and choose option "1" or call the GE GCC at 331-40-28-99-99 to cancel open orders. The following information is required for each order cancellation:

- Subscriber name
- Trader I.D.
- Operator I.D.
- Order number
- Contract
- Price
- Buy/Sell
- Entry token

NOTE: Entry token is E#xxxxxxxx on the audit trail printout.

Order cancellation requests through the GCC will be processed on a best-effort basis. The GCC is not liable if it cannot cancel an order before it is matched. The GCC will send cancellation confirmations to the user by facsimile machine for verification. You must sign the Cancellation Confirmation Form and mark the appropriate box indicating the cancelled orders are correct or incorrect. You must then facsimile or mail the form to the GCC. If you do not have access to a facsimile machine, confirmation will be accomplished by phone. You are required to immediately inform the GCC by phone of any errors.

Authorized personnel (upon verification of identity) can request open order status from the GCC; however, order cancellations are always processed before status requests, regardless of which request was received first.

The GCC must verify critical information prior to cancelling any order. This verification, which may take time, is for your safety and the safety of the GLOBEX community.

If your keystation fails, you can request to have orders cancelled by the GCC. You will **not** receive any notice of the cancellations in the audit trail or in your tradelog; however, the GCC will fax a notice of cancelled orders

If you are having extreme difficulty re-establishing your trading sessions on backup keystations, the GCC can force the system to permit a single login at a keystation in a different keystation group. Contact the GCC to explain your problem so that the GCC can provide assistance as needed.

If your keystation fails and you intend to use another keystation outside of your terminal group, you must **first** call the GCC for authorization. You will **not** be able to use your login information outside of your terminal group without first obtaining authorization from the GCC. You should be aware that upon authorization from the GCC, **any** one with access to your login information can log into GLOBEX from any keystation worldwide and obtain access to all of your trading privileges. This can occur from the time that the GCC gives you authorization until you successfully log in.

GLOBEX America (GA) Emergency Check List

<i>Problem</i>	<i>Cause</i>	<i>Action To Be Taken</i>	<input checked="" type="checkbox"/>
Failure of one or more keystations.	<ul style="list-style-type: none"> * GA, GE, or dual Host failure. * Site failure. 	<ul style="list-style-type: none"> * Determine type of failure. * Contact GCC for a recorded system status message. * Check Reuter page (GLB1 or GLB2). * Check Ticker window. * Check Alerts window. 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Failure of all keystations.	<ul style="list-style-type: none"> * Host failure. 	<ul style="list-style-type: none"> * Attempt login. * Upload open orders. * Wait for re-open time in Alerts window. 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Failure of one or more keystations and HOST is functioning.	<ul style="list-style-type: none"> * Concentrator or Site failure. 	<ul style="list-style-type: none"> * Re-establish each session at backup facility. * Wait for notification that failed keystations are functioning. * Re-establish session on primary keystations. * Contact GCC for additional assistance, if needed. 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Single keystation failure.	<ul style="list-style-type: none"> * Power source. * Keystation components. * Line failure. 	<ul style="list-style-type: none"> * Check power. * Check components. * Call local Reuters for equipment failure or phone line outage. * Establish session on backup terminal. * Contact GCC for trading queries or order cancellation. 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

For telephone numbers, see Section 3 and inside front and back covers.

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