

FEDERAL RESERVE BANK OF DALLAS

DALLAS, TEXAS 75222

Circular No. 82-7
January 25, 1982

TO ALL DEPOSITORY INSTITUTIONS IN THE ELEVENTH FEDERAL RESERVE DISTRICT:

The Federal Reserve Bank of Dallas (FRB) is offering a new alternative for online access to its services. Terminals using dial-connect facilities can be leased for use in each depository institution.

The dial-connect terminals will be useful immediately in sending and receiving funds transfers and in obtaining reserve statement information. The enclosed operational scenario provides a general explanation of the use of the terminal in accessing these services. The provision of access to other services is being planned for future availability, i.e., Transfer of Securities, Currency/Coin Services, Treasury Tax and Loan Advices, etc.

These terminals will be most useful for institutions which have insufficient volume transactions for use of other online access alternatives. These are:

1. CPU-to-CPU interface where a depository institution's CPU is directly linked via a communications line to the FRB CPU.
2. A configuration of cathode ray tubes and keyboards (CRT's) and printers at a depository institution directly linked via a communications line to the FRB CPU.
3. A printer keyboard terminal at a depository institution directly linked via a communications line to the FRB CPU.

As with these alternatives for access to the Bank's online services, the costs of the dial-connect terminal and telephone equipment to connect to the network are paid by the depository institution. Arrangements have been made for lease of an IBM Personal Computer (terminal) from the Federal Reserve Bank of Dallas at a monthly cost of \$97.84. The telephone equipment needed may be obtained from the telephone company for approximately \$73.00 per month.

Banks and others are encouraged to use the following incoming WATS numbers in contacting this Bank: 1-800-442-7140 (intrastate) and 1-800-527-9200 (interstate). For calls placed locally, please use 651 plus the extension referred to above.

The IBM Personal Computer provides programmable computing capability in a small package with data entry via a keyboard and/or diskette, and output via a printer and/or video display. Application software is available which depository institutions may individually procure and operate on the Personal Computer when it is not in use for access to Federal Reserve Bank services; i.e., Accounts Receivable, Accounts Payable, General Ledger, Word Processing, etc. Additionally, programming languages and facilities are likewise available for the depository institution to develop unique applications software. The configuration of the IBM Personal Computer will consist of the following:

- . System Unit/Keyboard
- . 64KB of user memory
- . two 160KB Diskette Drives
- . Monochrome Display
- . 80 character per second Matrix Printer

Implementation of the new access capability will begin in March 1982; however, orders will be accepted immediately. Please submit written orders to one of the following individuals: Thomas H. Rust at the Head Office, (214) 651-6333; William L. Wilson, El Paso Branch, (915) 544-4730; Tony Valencia, San Antonio Branch, (512) 224-2141; and C. O. Holt, Jr., Houston Branch, (713) 659-4433. These individuals may also be contacted for additional information.

Additional copies of this circular will be furnished upon request to the Department of Communications, Financial and Community Affairs, Ext. 6289.

Sincerely yours,



William H. Wallace
First Vice President

Enclosure

Dial-Connect Terminal Operational Scenario

The following scenario describes on a conceptual level the procedures to be used with the IBM personal computer (5150) in its role as a remote dial-connect terminal for low volume depository institutions within the Eleventh Federal Reserve District. Computer programs will be provided by the Federal Reserve Bank of Dallas (FRB) to enable the IBM personal computer to be used as a remote funds transfer terminal and as an inquiry terminal to receive reserve account statement information. Additional functions for the personal computer will be added in the future, and all necessary programs for these functions will be developed by the FRB and will be distributed on a diskette.

All communications between a depository institution (user) and the FRB involving the personal computer will be initiated by the user at the remote terminal site. No provision will be made for the FRB to dial the user. This arrangement will allow a depository institution to use the personal computer to perform other functions.

Since the personal computers will operate in a dial-up environment, security considerations are very important. Several layers of security controls will be employed, as described in the following paragraphs.

Whenever a depository institution wants to use the personal computer to send funds transfer information to the FRB, the appropriate program is "called up" on the video screen, which places the terminal in an entry mode. In this mode, the program prompts the terminal operator to obtain security and batch total information for the batch of transfers to be subsequently entered. From this data a batch header, including security control information, will automatically be prepared. (There may be from one to ten transfers in a batch.) The security information will include the operator's personal identity code and a codeword from the list supplied by the FRB. Once the security and batch total information has been entered, the terminal's program will prompt the operator to enter the funds transfers to be included in the batch. During this entry process, communication with the FRB has not been established; the information entered is stored on the terminal's diskette. The operator can edit the information and correct any entry errors.

Once the batch has been entered, edited, and is ready to be transmitted to the FRB, the operator picks up the telephone handset connected to the terminal and dials a toll-free number at the FRB where the call is answered automatically. When the operator hears a tone, the exclusion key on the telephone handset is activated, which effects a data connection to the FRB computer. At this time, the operator "signs on" to the CASE security system at the FRB by responding to the prompt messages which are displayed on the video monitor. Once the "sign on" is complete, the operator activates the transmission of all batches of transfers by depressing a pre-programmed terminal function key.

The funds transfer information is transmitted to the FRB central computer, edited, and an acknowledgment is formatted for transmission to the

remote terminal, where it is automatically printed. If errors are discovered during the edit, the funds transfer information will be rejected and the operator will be notified of the cause of the rejection. Funds transfer messages that contain errors must then be reentered correctly on the terminal. After the FRB acknowledgment has been transmitted to the remote terminal, any other messages that need to be routed to the remote terminal will automatically be transmitted. At the conclusion of the FRB outgoing transmission, the remote terminal will terminate the call automatically.

Whenever the FRB receives a funds transfer request addressed to a depository institution which has a dial-connect terminal, it will be held in a message routing system (queue) for that user. These messages will remain in the output queue for that user until the remote terminal operator contacts the FRB to request any messages in the queue or to transmit a transfer batch which has been entered onto a diskette. At that time, any messages present in the FRB's output queue will be transmitted to the remote terminal and stored on a diskette. When the transmission is completed, the remote terminal will display the status of the traffic received and the FRB computer will disconnect. It is important to note that all messages from any supported application that have been placed in the output queue by the FRB will be delivered whenever a connection has been made; however, the remote terminal operator has complete control over the printing and disposition of the information after it has been stored on a diskette.

The reserve statement reports from the FRB will be placed on the output queue during nightly processing and will be transmitted to the remote terminal during the first connection between the user and the FRB on the following day. This connection may be to enter funds transfers or to request messages in the output queue. The reserve statement reports will be stored separately from other messages on the remote terminal's diskette for ease of access by the user. Therefore, once the reports have been received at the remote terminal, they will be available to the user at any time. The operator may use FRB programs to print the reports, or portions thereof, on the terminal's printer, or may display reports on the video screen.