VOICE STORE AND FORWARD INTERFACE

FEATURE DOCUMENT

"DIMENSION®" PBX

INTRODUCTION

1. GENERAL INFORMATION

1.01 This section describes the Voice Store and Forward (VSF) Interface feature as provided in the DIMENSION PBX. This feature is optional and initially provided in Feature Package (FP) 11, Issue 2.0. Refer to Section 554-191-100 for the availability of this feature in other feature packages.

1.02 When this section is reissued, the reasons for reissue are given in this paragraph.

1.03 Additional information about the VSF system and its user operation is found in American Bell Incorporated Section 999-200-232AB.

2. DEFINITION

2.01 *VSF Interface:* This feature provides a voice interface and a data interface between the DIMENSION PBX and a VSF system. The voice interface allows users to record and retrieve voice messages. The VSF data interface permits a VSF system to control the message waiting indication for DIMENSION PBX stations.

DESCRIPTION

3. USER OPERATION

APPLICATIONS

3.01 The VSF Interface feature increases productivity by effectively increasing the productive

sages can replay a message, pause, or alter the playback speed. Also, a user can append a response to a message and return it to the originator or redirect it to another user.

3.05 Neon lamps provide message waiting indication on basic station sets. Light-emitting diodes (LEDs) indicate messages waiting for Electronic Custom Telephone Service (ECTS) sets. Each line appearance on an ECTS set can have one message waiting indicator.

3.06 Ringing may indicate messages waiting at station sets without visual indicators, or it may accompany visual indication. The number of ring cycles for message waiting indication and the interval between the calls are administered at the VSF system console.

USER OPERATING PROCEDURES

3.07 Users record and retrieve voice messages on the VSF system using a TOUCH-TONE* telephone and the procedures given below.

A. Accessing the VSF System

3.08 A VSF system user can record a message for another user by performing the following procedures:

(1) Go off-hook.

- Dial tone returned.

- Message waiting lamp on basic station set extinguishes if lighted; or,

- Ringing ceases if present. Go to Step (4).

(2) Dial the VSF system telephone number.

- The VSF system voice prompt asks for user name.

(3) Enter name via TOUCH-TONE dialing buttons.

- Voice prompt asks for user password if name entered is correct; otherwise,

* Trademark of AT&T

- Voice prompt informs user that name entered is invalid and the user must reenter name. After three voice prompts about invalid name, the system disconnects from the user.

(4) Enter password via TOUCH-TONE dialing buttons.

- Voice prompt repeats user name, informs user that usage aids (dial "#" and dial "9") are available, and informs user of message(s) if necessary.

B. Listening to a Message

3.09 Once a user accesses the VSF system and the system recognizes the user, messages are retrieved using the following procedures:

(1) Dial "*L" to listen (the same as dialing "*5").

- User receives message.

- Message waiting indicator extinguishes if user retrieves all new messages.

(2) Dial "1" to erase message or "2" to save message.

- Voice prompt confirms command.

(3) Retrieve and/or record other messages, or dial "*D" to disconnect from VSF system.

C. Sending a Message

3.10 A user who accesses the VSF system can record and send a message using the following procedures:

(1) Dial "*R" to record (the same as dialing "*7").

- Voice prompt tells user to begin message.

(2) Speak message.

(3) Dial "*T" to transmit (the same as dialing "*8").

- Voice prompt requests message recipient's name, time and date of transmission (optional).

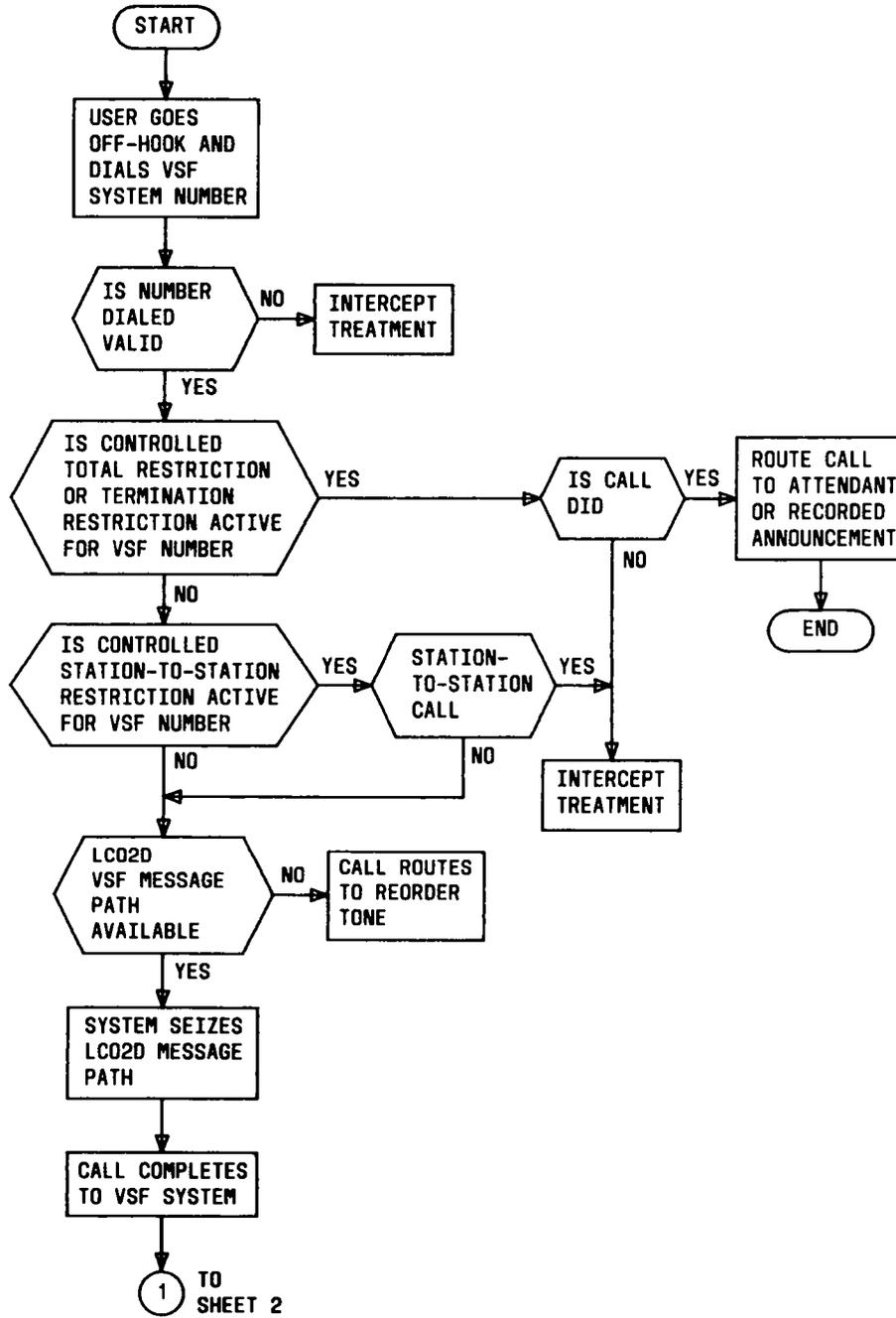(4) If requested, user enters recipients name and the time and date of transmission via the station button pad.

```
                    ┌──────────┐
                    │  START   │
                    └────┬─────┘
                         │
                         ▼
                  ┌──────────────┐
                  │ USER GOES    │
                  │ OFF-HOOK AND │
                  │ DIALS VSF    │
                  │ SYSTEM NUMBER│
                  └──────┬───────┘
                         │
                         ▼
                  ╱────────────╲        NO    ┌────────────┐
                 ╱ IS NUMBER    ╲───────────▶ │ INTERCEPT  │
                 ╲ DIALED       ╱             │ TREATMENT  │
                  ╲ VALID      ╱              └────────────┘
                   ╲──────────╱
                        │ YES
                        ▼
          ╱────────────────────╲                    ╱────────╲   YES  ┌──────────────┐
         ╱ IS CONTROLLED        ╲      YES          ╱ IS CALL ╲──────▶ │ ROUTE CALL   │
        ╱  TOTAL RESTRICTION     ╲─────────────────╲ DID      ╱        │ TO ATTENDANT │
        ╲  OR TERMINATION        ╱                  ╲────────╱         │ OR RECORDED  │
         ╲ RESTRICTION ACTIVE   ╱                       │ NO          │ ANNOUNCEMENT │
          ╲ FOR VSF NUMBER     ╱                        │             └──────┬───────┘
           ╲──────────────────╱                         │                    │
                   │ NO                                  │                    ▼
                   ▼                                     │               ┌─────────┐
          ╱────────────────────╲                        │               │   END   │
         ╱ IS CONTROLLED        ╲  YES  ╱──────────╲ YES │               └─────────┘
        ╱ STATION-TO-STATION     ╲─────╱ STATION-   ╲────┤
        ╲ RESTRICTION ACTIVE     ╱     ╲ TO-STATION ╱    │
         ╲ FOR VSF NUMBER       ╱      ╲ CALL      ╱     │
          ╲────────────────────╱        ╲────────╱      ▼
                   │ NO                      │ NO   ┌────────────┐
                   │◀───────────────────────┘      │ INTERCEPT  │
                   ▼                                │ TREATMENT  │
          ╱────────────────╲    NO   ┌────────────┐└────────────┘
         ╱ LCO2D            ╲───────▶│ CALL ROUTES│
        ╱  VSF MESSAGE       ╲       │ TO REORDER │
        ╲  PATH             ╱        │ TONE       │
         ╲ AVAILABLE       ╱         └────────────┘
          ╲───────────────╱
                   │ YES
                   ▼
          ┌──────────────┐
          │ SYSTEM SEIZES│
          │ LCO2D MESSAGE│
          │ PATH         │
          └──────┬───────┘
                 │
                 ▼
          ┌──────────────┐
          │ CALL COMPLETES│
          │ TO VSF SYSTEM │
          └──────┬───────┘
                 │
                 ▼
               ╭───╮  TO
               │ 1 │  SHEET 2
               ╰───╯
```

Fig. 2—Flowchart for VSF Interface Feature (Sheet 1 of 2)

6.05 The buttons associated with the VSF message waiting indicators on an ECTS set are disabled when the indicators are administered.

6.06 The message waiting button on the attendant console is unassigned so it will not interfere with the VSF system operation.

6.07 Only TOUCH-TONE dialing stations can use the VSF system.

7. INTERACTIONS

7.01 A neon message waiting lamp may flash when the associated station receives an incoming call.

7.02 In the hospitality environment, a message waiting at a station at the time of checkout is indicated on the attendant console during the checkout procedure.

7.03 *Attendant Console:* The attendant message waiting function, where available, causes VSF message waiting indication to malfunction. Therefore, the attendant console MSG WAIT button is not assigned.

7.04 *Energy Communications Service:* In the hospitality environment, message waiting indication has precedence over the energy communications signaling unit (ECSU) when both use the same station line that has occupied status. The ECSU has precedence over message waiting indication on a station line that has vacant status. Administrative station lines shared with an ECSU do not receive message waiting indication. The ECSU has precedence until the station user goes off-hook.

7.05 *Customer Interface for Property Management System (CIPMS):* The status inquiry function for the PMS data interface has a 6-minute time-out for communication between the PBX and the VSF interface. This time-out replaces the normal 10-second time-out for status inquiry between the PBX and the PMS.

8. RESTRICTION CAPABILITY

8.01 The VSF voice interface lines used to record and retrieve messages can be restricted via the attendant console using the following:

(a) *Controlled Total Restriction:* The attendant restricts all incoming (and outgoing) calls to the VSF system number. In effect, this restriction disconnects the message lines for the VSF system.

(b) *Controlled Termination Restriction:* The attendant restricts calls to the VSF system.

(c) *Controlled Station-to-Station Restriction:* The attendant restricts station-to-station calls to and from the VSF system.

INCORPORATION INTO SYSTEM

9. INSTALLATION/ADDITION/DELETION

9.01 The VSF Interface feature is administered in the DIMENSION PBX using the administration procedures listed in Table A.

10. HARDWARE REQUIREMENTS

10.01 The VSF Interface feature uses the following DIMENSION PBX hardware:

(a) Message waiting line circuits LC03C and ECTS controllers LC55.

(b) A PIC to provide RS232 asynchronous, full duplex data interface.

(c) Low-speed data channel, LC34B/LC366, for PIC communication with DIMENSION PBX.

(d) Station sets with message waiting lamp (2500Y type) and ECTS sets with message waiting LEDs.