

FEATURE DOCUMENT
LOCAL COIN OVERTIME CHARGING
3E3 GENERIC PROGRAM
NO. 3 ELECTRONIC SWITCHING SYSTEM

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NOTICE

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INTRODUCTION

1. GENERAL INFORMATION

1.01 This section describes Local Coin Overtime (LCOT) Charging as provided by the No. 3 Electronic Switching System (ESS). Local coin overtime charging is provided by all No. 3 ESS generic programs; however, the operations performed by the 3E3 generic program are slightly different than those provided by previous programs. This section describes only the local coin overtime charging as provided by the 3E3 generic program.

1.02 When this section is reissued, the reasons for reissue will be included in this paragraph.

AVAILABILITY

1.03 The Local Coin Overtime feature, as described in this section, is available in No. 3 ESS generic program 3E3 and later generics.

2. DEFINITION

2.01 The Local Coin Overtime Charging feature provides a completely automated method for the charging of initial and overtime periods for timed local calls originated from a coin-first or dial-tone-first coin telephone. This feature provides automatic coin collection and coin return operations; initial and overtime timing and charging; and automatic customer prompting for the overtime deposit through the use of a dedicated recorded announcement. An initial period is provided for the amount of the initial deposit and individual overtime periods are provided on a prepaid basis (5 cents each). Each initial and overtime period is from 1 to 7 minutes in length; however, all overtime periods associated with any given call must have the same duration.

DESCRIPTION

3. USER OPERATION

3.01 A coin station customer originates a timed local call by making the initial deposit and dialing the called number just like an untimed local call. Thirty seconds before the end of the initial time period, the customer is alerted (by the collection of the initial coin) that the initial period is about to expire and that an additional deposit is required for the forthcoming overtime period.

3.02 If, by the end of the initial period, no deposit (5 cents or greater) has been made for the forthcoming overtime period, both parties are informed by a recorded announcement that the overtime deposit must be made if the conversation is to continue.

3.03 If the overtime deposit has not been made within 30 seconds following the completion of the announcement, the call is terminated. If the customer using a dial-tone-first station remains off-hook, dial tone is returned; or if a coin-first station is used, the customer receives high and dry treatment. In either case, the customer must make another initial deposit and redial the call in order to reestablish the talking connection.

3.04 The customer is allowed to talk through unlimited overtime periods as long as the overtime deposits are made within the allotted time intervals.

4. SYSTEM OPERATION

GENERAL DESCRIPTION

4.01 Block diagrams showing the various network connections required for coin calls are shown in Figure 1. Figure 2 is a simplified block diagram of the modular software arrangements required to provide local coin overtime operations. Figure 3 provides a detailed flowchart of these operations.

4.02 The portions of the local charging (LCLCHG) program utilized for local timed coin calls have been arranged in a modular fashion. This simplifies the operations required to provide the necessary circuit selection, timing, and control functions. Entry codes and LCOT states are used within the LCOT control module to monitor the progress of the call and to specify that certain LCOT operations be performed. Each of the modules, shown in Figure 2, has specific functions. The following paragraphs briefly describe the functions of each module. A detailed description of the entire process is provided under DETAILED DESCRIPTION.

A. Timed Coin Call Origination

4.03 During the course of normal call processing, if a call is determined to be a local timed coin call which has timed out, the LCLCHG program is entered. This is done only after the initial

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time period has begun and the call has been made stable.

B. Entry

4.04 The Entry function is the point at which the LCLCHG program takes control of the call. This module examines the input report to determine if a supervisory change or time-out has occurred. If a supervisory change has occurred, control is passed to the DISCON program for disconnect processing. If a time-out has occurred, the charge index is examined to determine if the call is a message rate or timed coin call. Control of message rate calls is passed to the DLYTIM program for further processing. Control of timed coin calls is passed to the LCOT control module.

C. LCOT Control

4.05 The LCOT control module interacts with other modules to control the local coin overtime operations. This module examines the entry code (set by some other module) and initiates various operations based on its value. All entry codes and their meanings are shown in Figure 3C. An entry code of 7 indicates that the previous module has successfully completed its function and the next step in the process should be initiated. These steps are identified by the value of the LCOT states also shown in Figure 3C. Each time an entry code of 7 is received by the LCOT control module, the LCOT state is incremented to the next step of the process, and the control is passed to the module which performs the next step.

4.06 A typical LCOT control sequence is as follows:

- (1) Upon initial entry to LCOT control module, the coin function module is requested to collect the initial deposit.
- (2) Wait 30 seconds for customer to make the overtime deposit.
- (3) Request coin function module to make coin presence test.
- (4) If coin is present, pass control to Exit module to allow the call to proceed to the next overtime period.

- (5) If coin is not present, request announcement function to provide announcement.
- (6) Wait 30 seconds following the announcement for the customer to make an overtime deposit.
- (7) Request coin function module to perform second coin presence test.
- (8) If coin is present, pass control to Exit module to allow call to proceed to the next overtime period.
- (9) If coin is not present, request that the disconnect module perform a forced disconnect operation.

D. Exit

4.07 The exit module is entered each time a deposit is verified for an upcoming overtime period. This module obtains the overtime period length, adjusts it based on whether the announcement was given, begins timing of the resulting time period, and marks the call stable. Control is then returned for supervision until the overtime period expires. At that time, the entry function is again required. If an illegal LCOT state is identified by the LCOT control module, or in cases where resources (announcement circuit, conference circuit, or paths) are unavailable, the call is marked free and made stable.

E. Disconnect

4.08 When the LCOT control module has determined that a valid disconnect (coin line or called party) has occurred, that a forced disconnect is required (because no overtime deposit is present), or that a talk-path failure has occurred, the disconnect module is entered to perform the necessary disconnect operations. The Automatic Message Accounting (AMA) routines are notified of the disconnect, and, if necessary, the call waiting routines are notified. If a forced disconnect is required, coin cleanup operations are not performed but the line is returned to line supervision (DTF line gets dial tone and coin-first lines must make an initial deposit in order to receive dial tone). If a nonforced disconnect is required, control is passed to the COIN program where coin cleanup is performed. The deposit is then returned or collected based on whether the announcement was given.

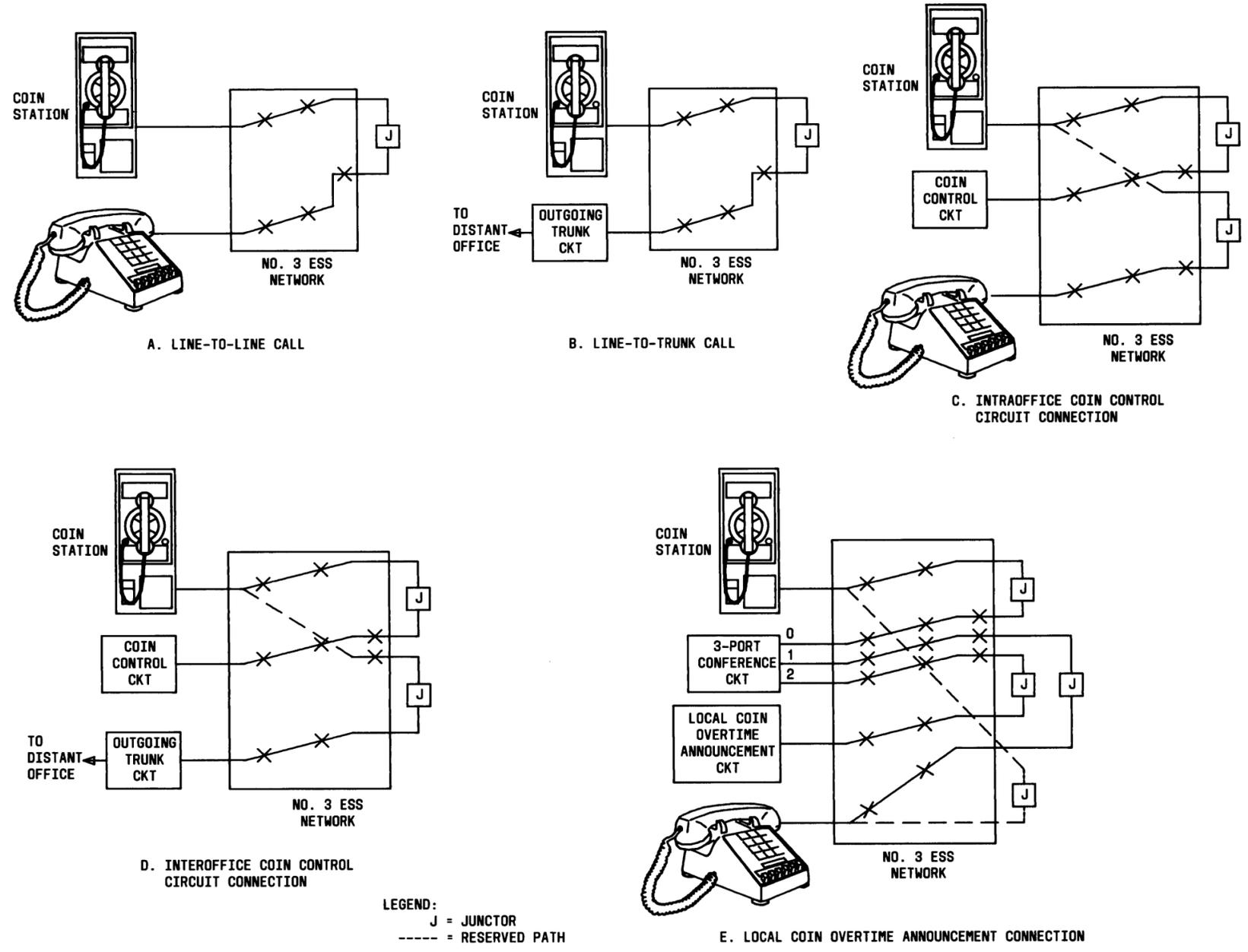


Fig. 1—Network Connections for Coin Calls

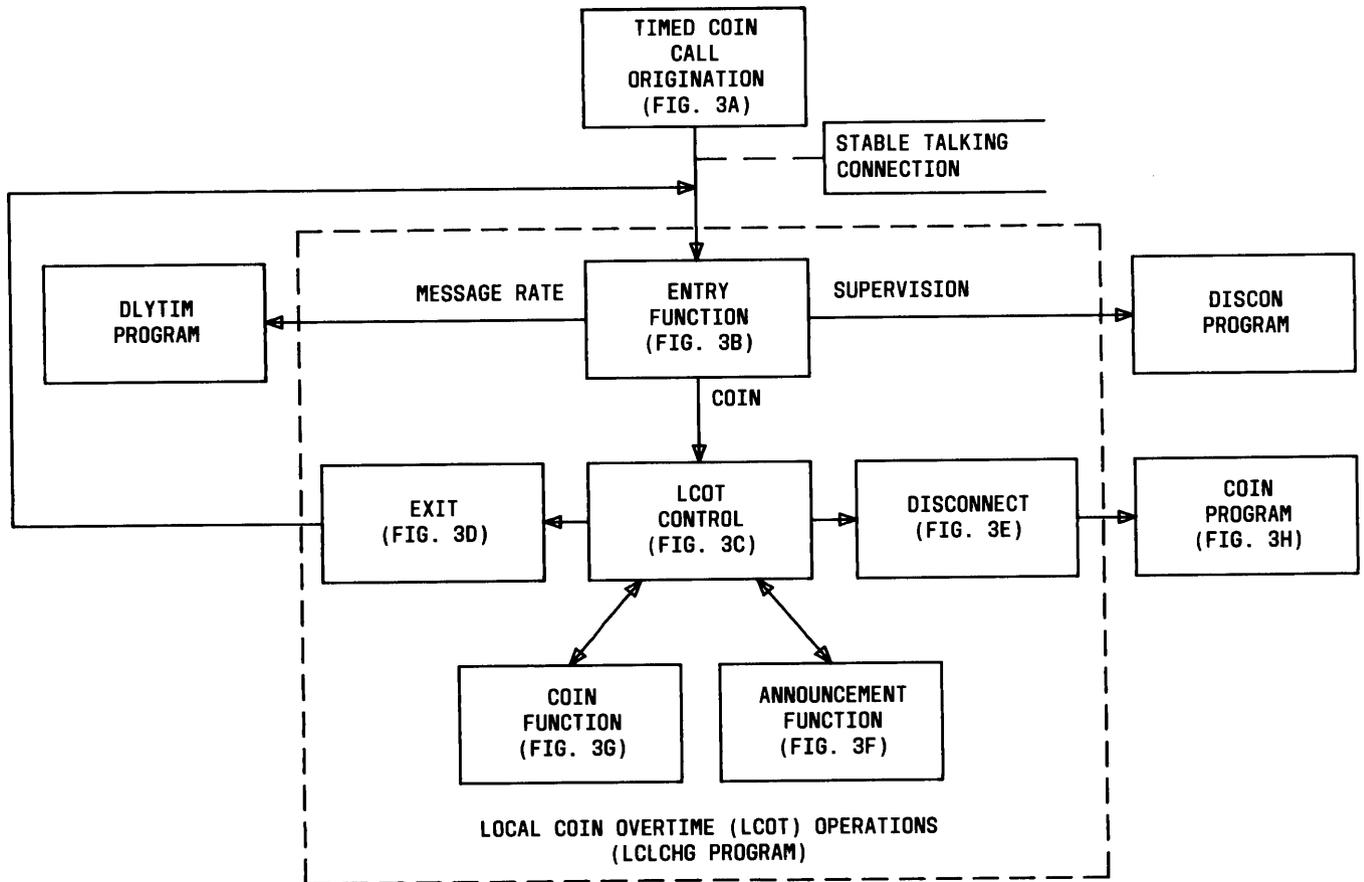


Fig. 2—Block Diagram of Software Arrangements for Local Coin Overtime Feature

F. Announcement Function

4.09 This module is responsible for giving the LCOT announcement. To complete this task, the module must select the announcement circuit, a conference circuit, and the interconnecting paths. If the announcement or conference circuits are all busy, control is returned to LCOT control (entry code = 1) where another attempt is initiated after 2 seconds. If the second attempt fails, a third attempt is made after 30 seconds. Upon successful selection of the announcement and conference circuits, the announcement function module attempts to select all the necessary paths. If any path cannot be selected, the announcement and conference circuits are idled and, if this was the first attempt, another selection process is initiated. If this was the second attempt, another selection process is initiated after a 30-second delay. This module is also responsible for disconnecting and idling the announcement and conference circuits and all paths

upon completion of the announcement. Usually, both parties are connected to the conference circuit to receive the announcement. However, if the called party is in a call waiting split condition (where the coin line is in the hold condition), only the coin line is connected to the conference circuit.

G. Coin Function

4.10 The coin function module is responsible for collecting deposits and performing coin presence tests as determined by LCOT control. This module selects a coin control circuit and associated paths in order to perform the requested function. If all the coin control circuits are busy, another selection attempt is made in 2 seconds. If a path cannot be selected on the first attempt, the coin control circuit is idled and another circuit selection is made. If the second attempt fails (for circuit or path selection), a third attempt is made after a 30-second delay. Upon successful selection

and connection of the coin control circuit, the presence test or coin collect operation is performed and control is returned to the LCOT module (entry code = 7).

H. Coin Cleanup Operations

4.11 When a coin line or called party disconnect has been detected, the disconnect module passes control to the COIN program for coin cleanup operations. These operations include selecting and connecting a coin control circuit to perform the final coin return or collect operation and to detect stuck coins. Finally, the coin control circuit and the coin line are disconnected and idled.

DETAILED DESCRIPTION

4.12 When the No. 3 ESS receives an off-hook indication from a coin station, a customer dial pulse receiver (CDPR) is selected and connected to the line to cause dial tone to be returned to the customer and to receive the customer's dialed digits. (A dial-tone-first station is given dial tone immediately without regard to the presence of the initial coin. The coin-first station does not provide an off-hook indication until the initial coin(s) has been deposited.) The customer's dialed digits are then collected and the first three digits are translated to determine the destination of the call. If the first three digits represent an area code, an additional translation may be required on the next three digits in order to determine the destination of the call.

4.13 When all the digits have been collected, the digit translation process may indicate that the called telephone number has been designated as a free telephone number (such as 0, 911, 411, or any number designated by the operating telephone company). In this case, a coin return operation is performed and the call is processed normally to locate and connect to the called line or trunk. When the connection is established, the call is allowed to continue, without charge, for as long as the customer desires.

4.14 If the called number has not been designated as a free call, a coin presence test is made to determine if the initial deposit has been made (for coin-first as well as DTF stations). If the initial deposit is not present (this identifies the line as DTF), the coin line is connected to a dial-tone-first recorded announcement to inform the customer

that an initial deposit must be made before the call can be completed and that the customer must go on-hook before the call can be redialed.

4.15 If the coin presence test indicates that the initial deposit has been made, a check is made to see if the call is an interoffice or intraoffice call (as indicated by the 3/6 digit translation). If the call is an interoffice call, an outgoing trunk is selected (based on the results of the 3/6 digit translation), the called telephone number is outpulsed to the distant office, and the coin line is connected to the outgoing trunk.

4.16 If the call is of the intraoffice type, a 4-digit translation is performed on the final four dialed digits in order to identify the called line. When this is completed, audible ringing is returned to the coin line, ringing current is applied to the called line, and a talk path between the two customers is reserved.

4.17 During the ringing period, the calling coin line is supervised for on-hook (indicating an abandoned call) and the called line (or outgoing trunk) is supervised for off-hook (indicating that the called party has answered). If the call is abandoned, the coin line and called line (or outgoing trunk) are idled, and the coin customer's initial deposit is returned. In the case of answer detection, the reserved talk path is activated, and a 2-second charge delay timing is employed to insure that the answer detection is valid.

4.18 If the coin line disconnects during the 2-second charge delay interval, or if two called-party disconnects are detected during the charge delay interval, both lines are idled and the initial deposit is returned. However, if the called line disconnects (the first disconnect detected) during this interval, the usual called party 10-second disconnect timing is performed. If the coin line disconnects before the end of the 10-second period, or if the called line is still on-hook at the end of the 10-second period, both lines are idled, the talk path is released, and the initial coin deposit is returned. If the called line goes off-hook before the end of the 10-second period, the talk path remains active and the 2-second charge delay interval is restarted.

4.19 If no disconnect is detected during the 2-second charge delay period, a charge timer is set to time the initial time period less 30 seconds. The duration of this initial period is determined

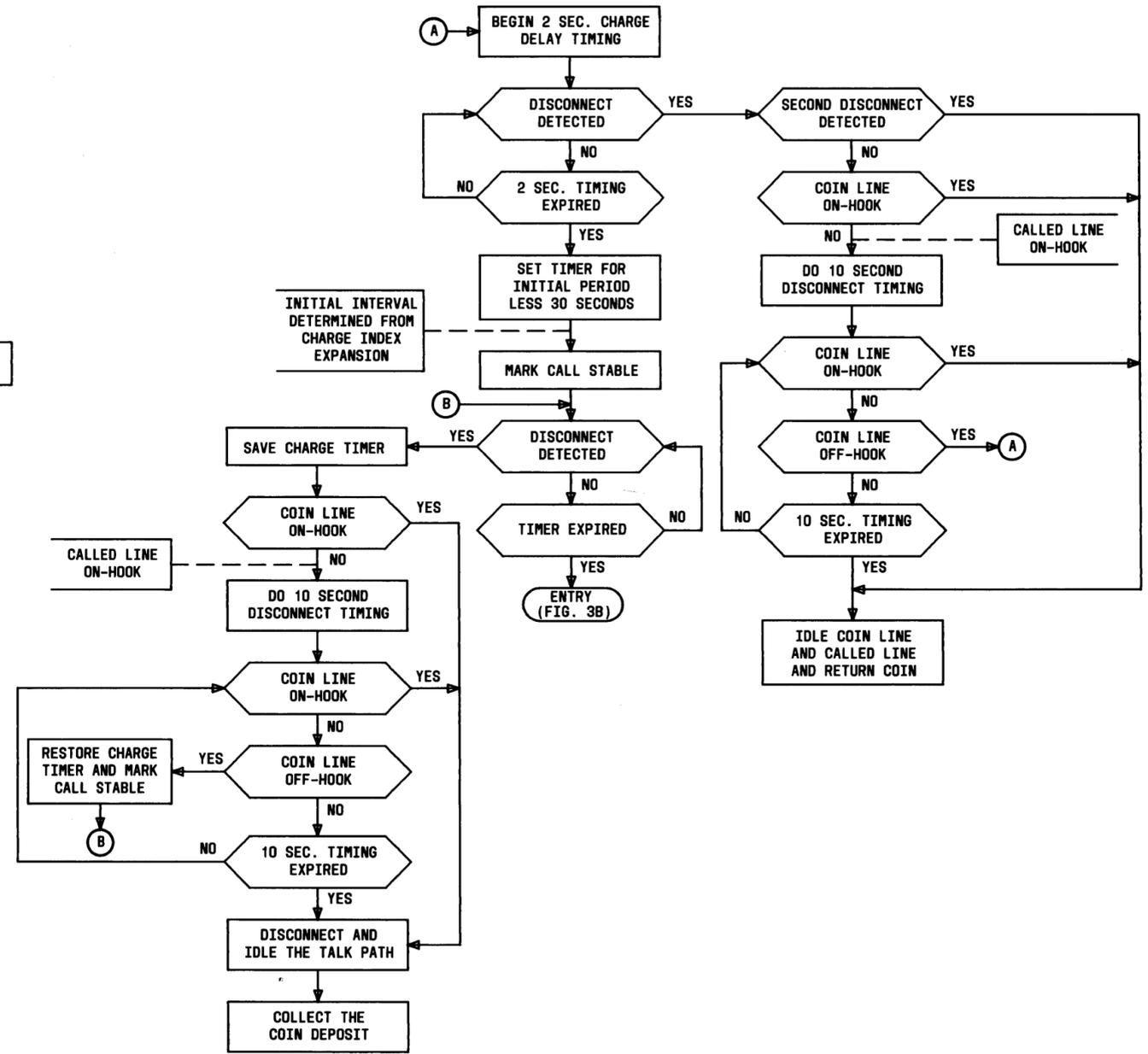
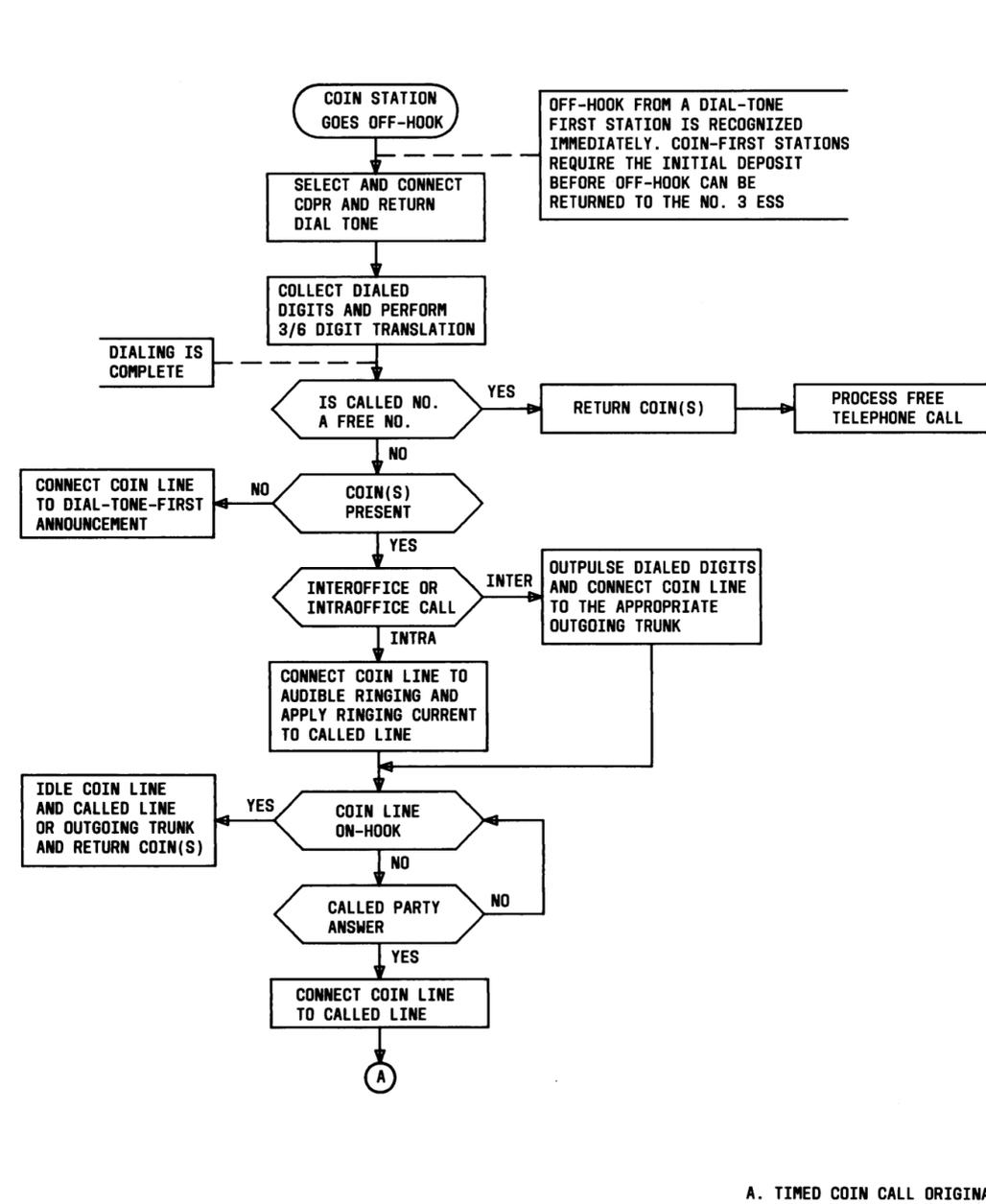
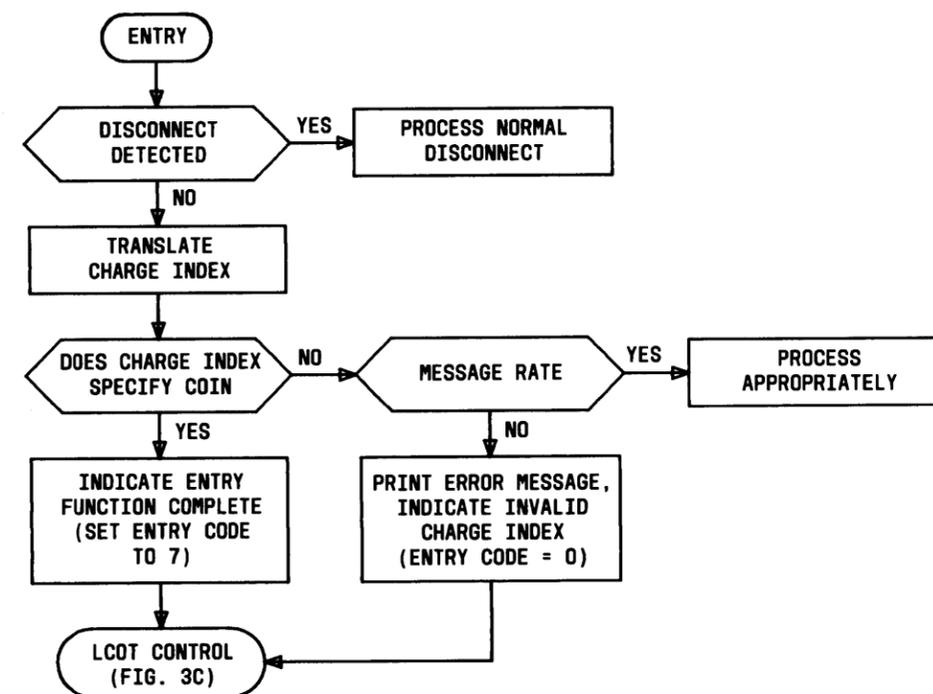
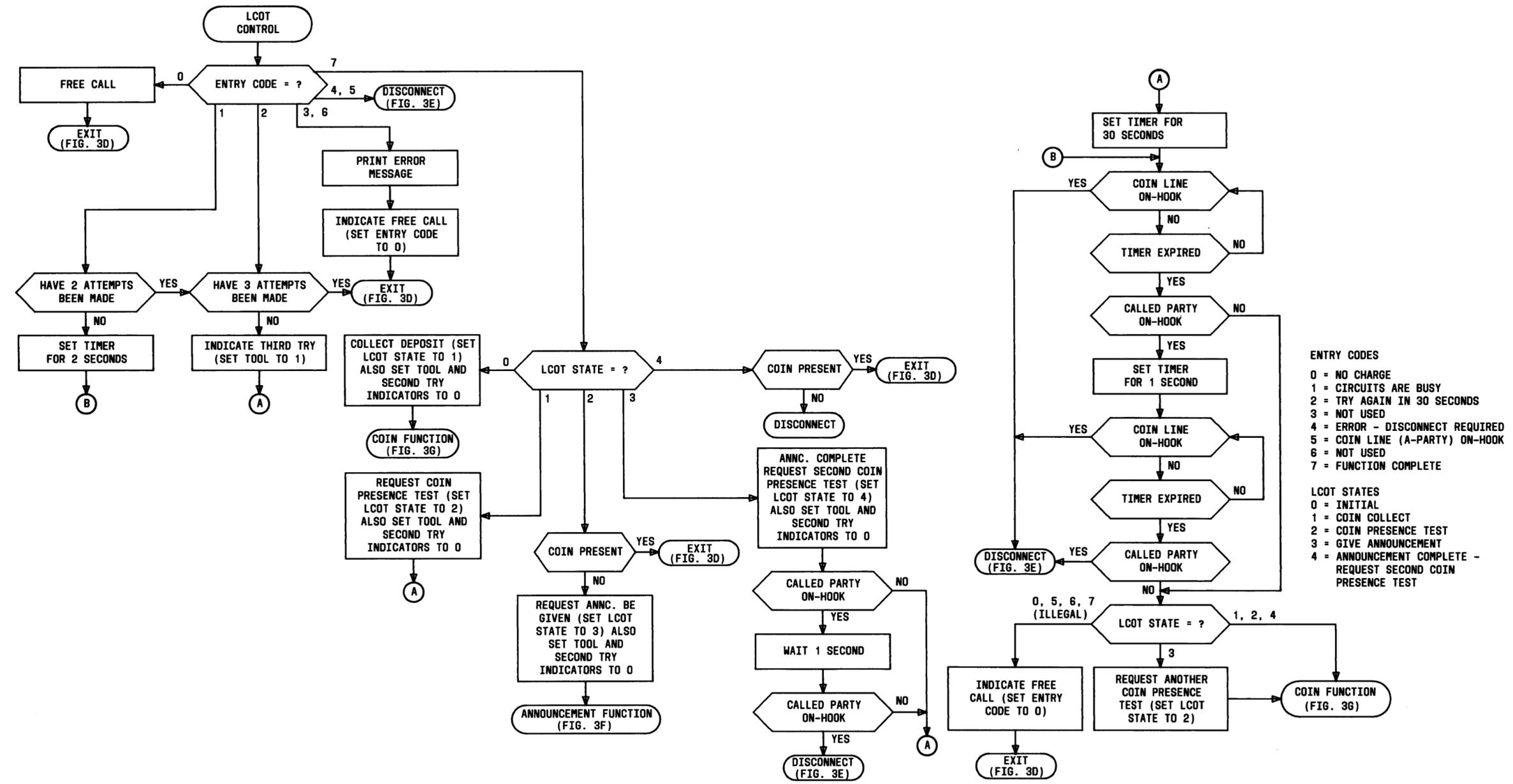


Fig. 3—Flowchart of Local Coin Overtime Operations (Sheet 1 of 8)



B. ENTRY FUNCTION

Fig. 3—Flowchart of Local Coin Overtime Operations
(Sheet 2 of 8)



C. LOCAL COIN OVERTIME CONTROL

Fig. 3—Flowchart of Local Coin Overtime Operations (Sheet 3 of 8)

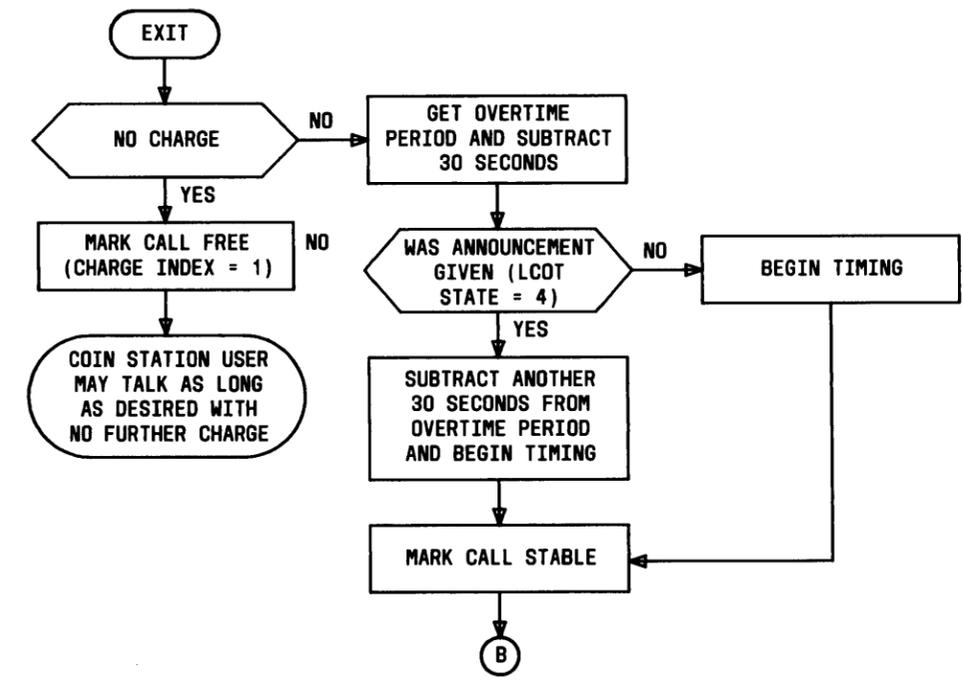
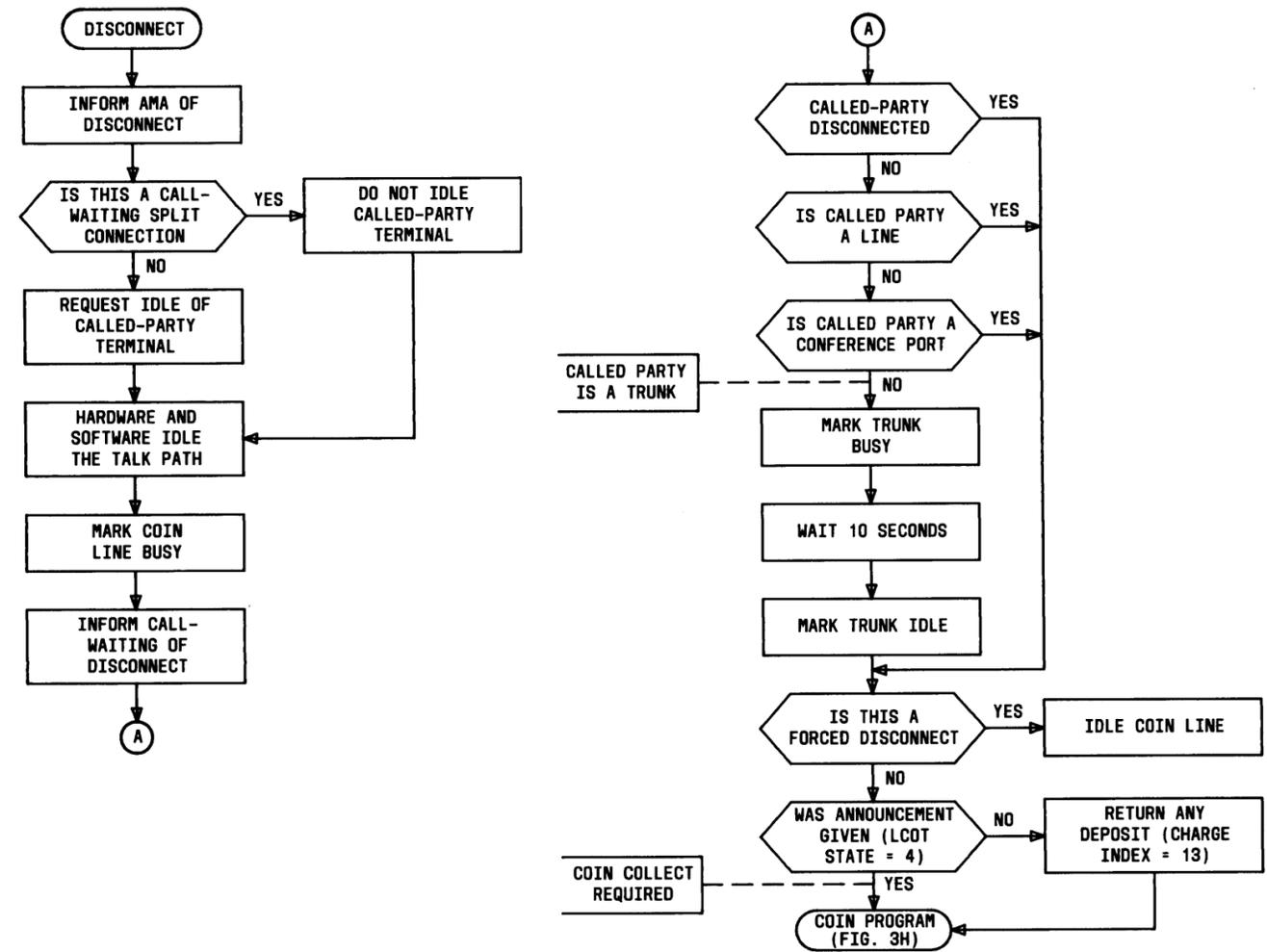


FIG. 3A

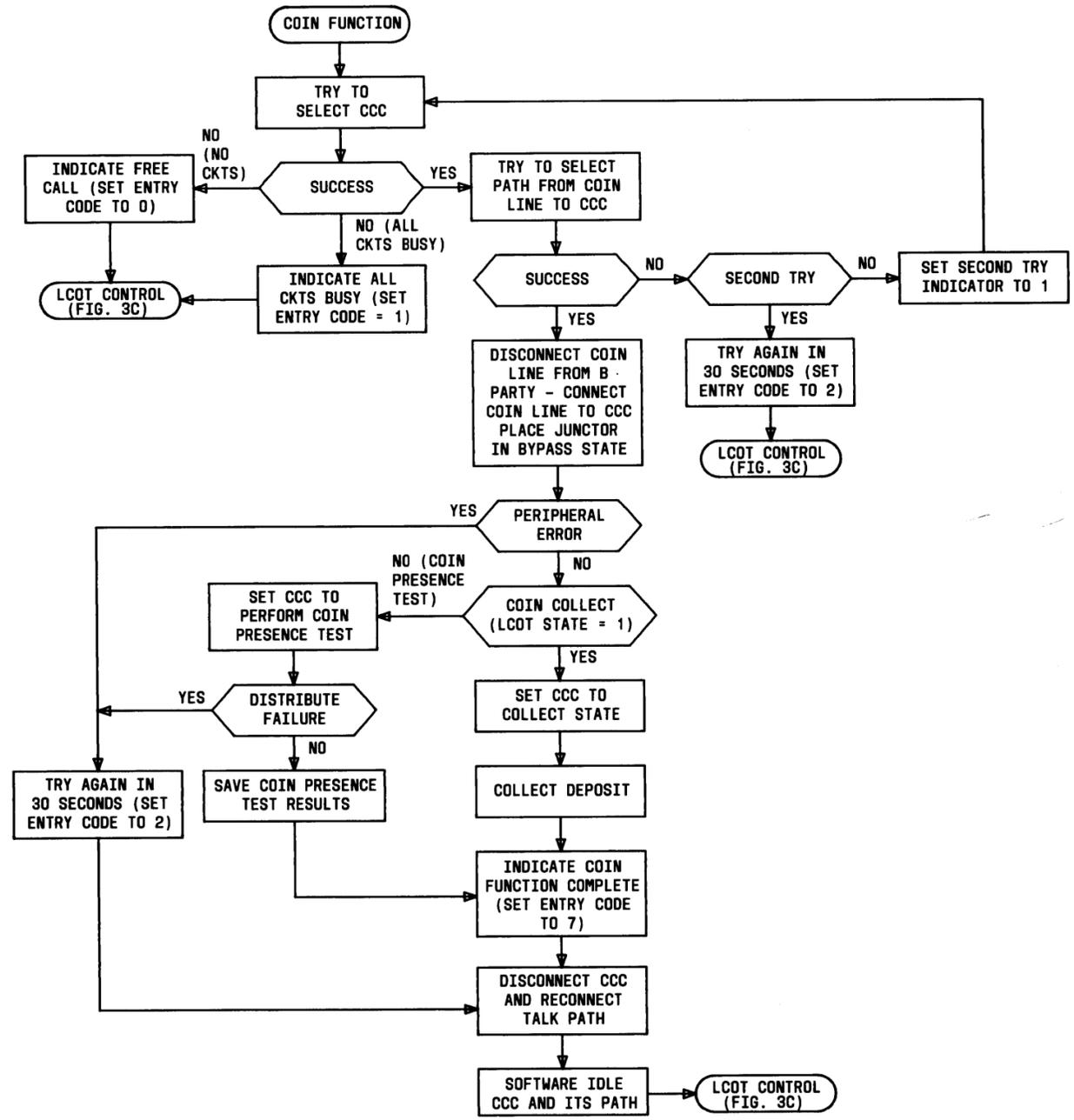
D. EXIT FUNCTION

Fig. 3—Flowchart of Local Coin Overtime Operations
(Sheet 4 of 8)



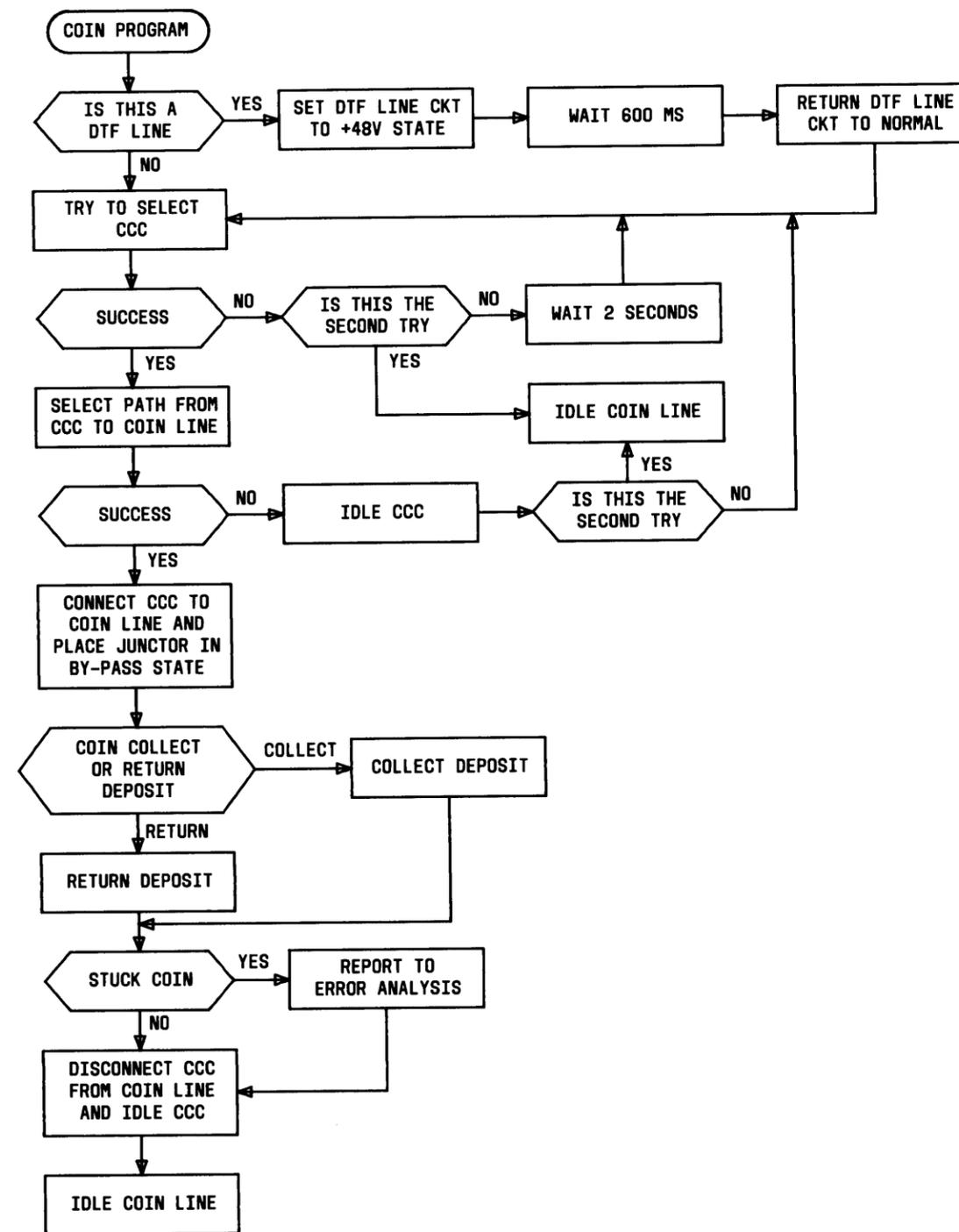
E. DISCONNECT FUNCTION

Fig. 3—Flowchart of Local Coin Overtime Operations (Sheet 5 of 8)



G. COIN FUNCTION

Fig. 3—Flowchart of Local Coin Overtime Operations (Sheet 7 of 8)



H. COIN OPERATIONS (PART OF COIN PROGRAM)

Fig. 3—Flowchart of Local Coin Overtime Operations (Sheet 8 of 8)

from the charge index expansion which is obtained through the translation process. At this time, the call is marked stable and supervision is maintained until the initial time expires. If the coin line disconnects before the timer expires, the present value of the charge time is saved. A coin control circuit is connected to the coin line and the initial deposit is collected, both lines are idled, and the normal disconnect process is performed. If the called line disconnects before the initial timer expires, the usual 10-second disconnect timing procedure is performed as previously described. If the called line goes off-hook before the end of the 10-second period, the talk path remains active and the charge timer is restored. If the initial timer expires, called party supervision is ignored and a coin control circuit is selected to collect the initial deposit. If no coin control circuit can be selected, another attempt is made after a 2-second delay. If this attempt fails, a third attempt is made following a 30-second delay. If the third attempt fails, the overtime period is allowed to begin just as if the initial deposit had been collected and the overtime deposit had been verified. When a coin control circuit has been selected and connected to the coin line, the initial coin is collected. This coin collection informs the customer that the initial period has nearly ended (actually, 30 seconds remain) and that an additional deposit is required for the forthcoming overtime period.

4.20 When the coin collection is completed, the coin control circuit is disconnected and the customers are allowed to talk for the remaining 30 seconds of the initial period. If the coin line disconnects before the end of the 30-second period, a coin operation is performed to return any overtime deposit which may have been made during the 30-second period.

4.21 If the final 30 seconds of the initial period expire before disconnect is detected, a coin control circuit is selected to determine if a deposit has been made for the forthcoming overtime period. If no coin control circuit can be selected, another attempt is made after a 2-second delay. If this attempt fails, a third attempt is made after a 30-second delay. If the third attempt fails, the overtime period is begun just as if the overtime deposit had been detected. When the coin control circuit has been selected and connected to the coin line, the coin presence test is performed. If the overtime deposit is present, the coin control circuit is disconnected, the talk path is reestablished, the

charge timer is set to time the overtime period less 30 seconds, the called party supervision is restored, and the call is marked stable. (The duration of overtime period is also determined from the charge index expansion.) The timing and supervision operations are then performed for the overtime period identically to those performed for the initial period.

4.22 When the first coin-presence test indicates that no deposit is present for the upcoming overtime period, the coin control circuit is disconnected and the talk path is reestablished. Next, an attempt is made to select an announcement circuit through which to provide a recorded local overtime announcement. If the first attempt to select an announcement circuit fails, another attempt is made after 2 seconds. If the announcement circuit still cannot be obtained, the customers are given an additional 30 seconds to talk without charge. If disconnect does not occur before the end of this 30-second period, a coin presence test is performed. A coin control circuit must be selected and connected to the coin line in order to perform the coin presence test. If no coin control circuit can be selected on the first attempt, another attempt is made following a 2-second delay. If this attempt fails, a third attempt is made after a 30-second delay. If the third attempt fails, the overtime period is begun just as if the overtime deposit had been detected. If the coin presence test indicates that no overtime deposit is present, another attempt is made to select an announcement circuit. This process continues until an announcement can be obtained or until the deposit is verified for the upcoming overtime period. However, the customer is allowed to talk without charge until the announcement is obtained.

4.23 If a local coin overtime announcement can be obtained, an attempt is made to select a 3-port conference circuit through which to provide the announcement to both the coin customer and the called customer. If no conference circuit can be selected, the announcement circuit is idled and the customers are given 30-seconds to talk free of charge after which a coin presence test is made and another attempt is made to select an announcement circuit and a conference circuit.

4.24 When a conference circuit and an announcement circuit have been obtained, a path selection process is performed to obtain a path between each customer and the conference circuit and

between the announcement circuit and the conference circuit (see Figure 1E). If any one of the three required paths cannot be selected, the announcement and conference circuits are idled, and another announcement circuit and another conference circuit are selected as previously described. If the paths cannot be obtained after the second announcement and conference circuit selection, the customers are given 30 seconds of free time after which the entire announcement, conference circuit, and path selection process must be repeated.

4.25 When the required paths have been selected, the existing talk path is hardware-idled (in order to reserve it), and both parties are connected to the announcement via the 3-port conference circuit. A 60-second timer is then activated and used to monitor the progress of the announcement. If this time should expire before the announcement has reached its starting point, an error is indicated which results in a failure message being printed by the maintenance TTY. At this point, the conference circuit is released and, if the called party has gone on-hook, a coin return operation and the usual disconnect process are performed. If the called party has not gone on-hook, the customers are allowed to talk free.

4.26 If the coin line disconnects before the announcement reaches the starting point, any overtime deposit which may have been made is returned. All paths and circuits are then released and idled and the usual disconnect process is performed.

4.27 When the beginning of the announcement is detected, the announcement is cut through and a 60-second timer is activated to detect the end of the announcement. If the timer expires before the end of the announcement is detected, a failure message is printed on the TTY and the call is marked free.

4.28 When the announcement is successfully completed, the second coin presence test is requested (to be completed after 30 seconds), the 3-port conference circuit is released and idled, the talk path is reestablished, and the announcement and path are idled. If the called party has not yet gone on-hook, the coin customer is allowed 30 seconds to talk and to make the overtime deposit. Even though the overtime deposit was not detected, the overtime period has begun. Therefore, if the coin customer disconnects during this 30-second

period after making a deposit, the deposit is collected. If the called party is on-hook at the completion of the announcement, a coin return operation and the usual disconnect process are performed. The second coin presence test is made at the end of this 30-second period and, if the overtime deposit is still not present, the call is disconnected; both lines are idled; and the coin line is returned to line supervision (the dial-tone-first line receives dial tone and the coin-first line receives high and dry treatment).

4.29 Whenever the coin presence test indicates that the overtime deposit has been made for the upcoming overtime period (at any point of the process previously described), the call is returned to the stable state and the overtime period is timed just like the previous overtime or initial period. If the local coin overtime announcement was given, the timer is set to time the overtime period minus 60 seconds. One of these 30-second periods represents the time between the announcement and the second coin presence test. The other 30-second period represents the last 30 seconds of the overtime period during which the overtime deposit should be made for the next overtime period. Figure 4 shows a timing diagram for the local coin overtime feature and indicates the actions taken based on the results of the coin presence tests.

CHARACTERISTICS

5. FEATURE ASSIGNMENT

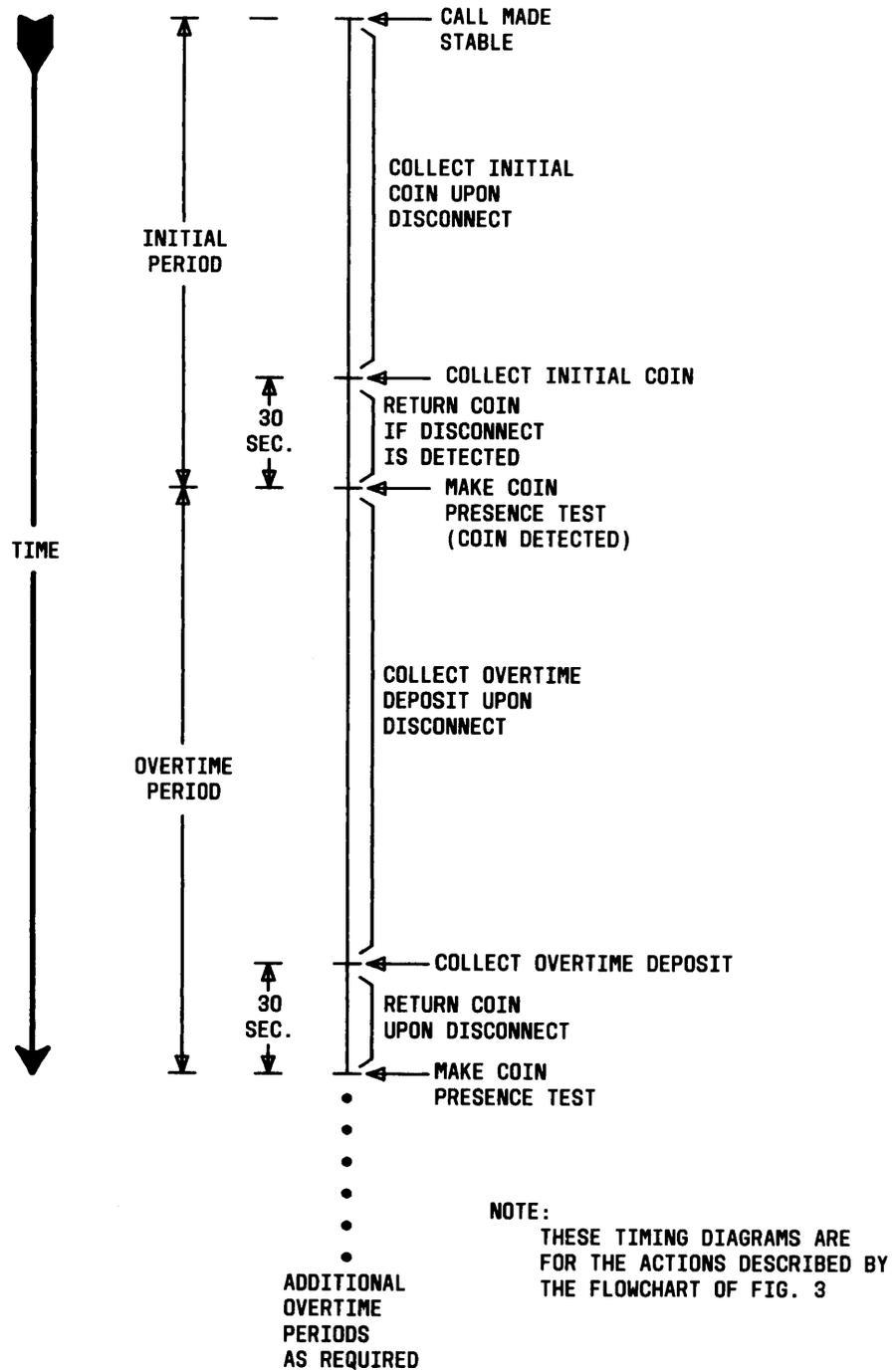
5.01 Local coin overtime charging is provided on a per-line basis for coin-first or dial-tone-first type coin stations.

6. LIMITATIONS

6.01 Initial and overtime periods are limited to a minimum duration of 1 minute and a maximum duration of 7 minutes each. All overtime periods associated with any call must have the same duration. No other limitations apply to local overtime charging. For more limitations concerning coin-first and dial-tone-first coin operation, refer to Sections 233-190-112 and 233-190-131, respectively.

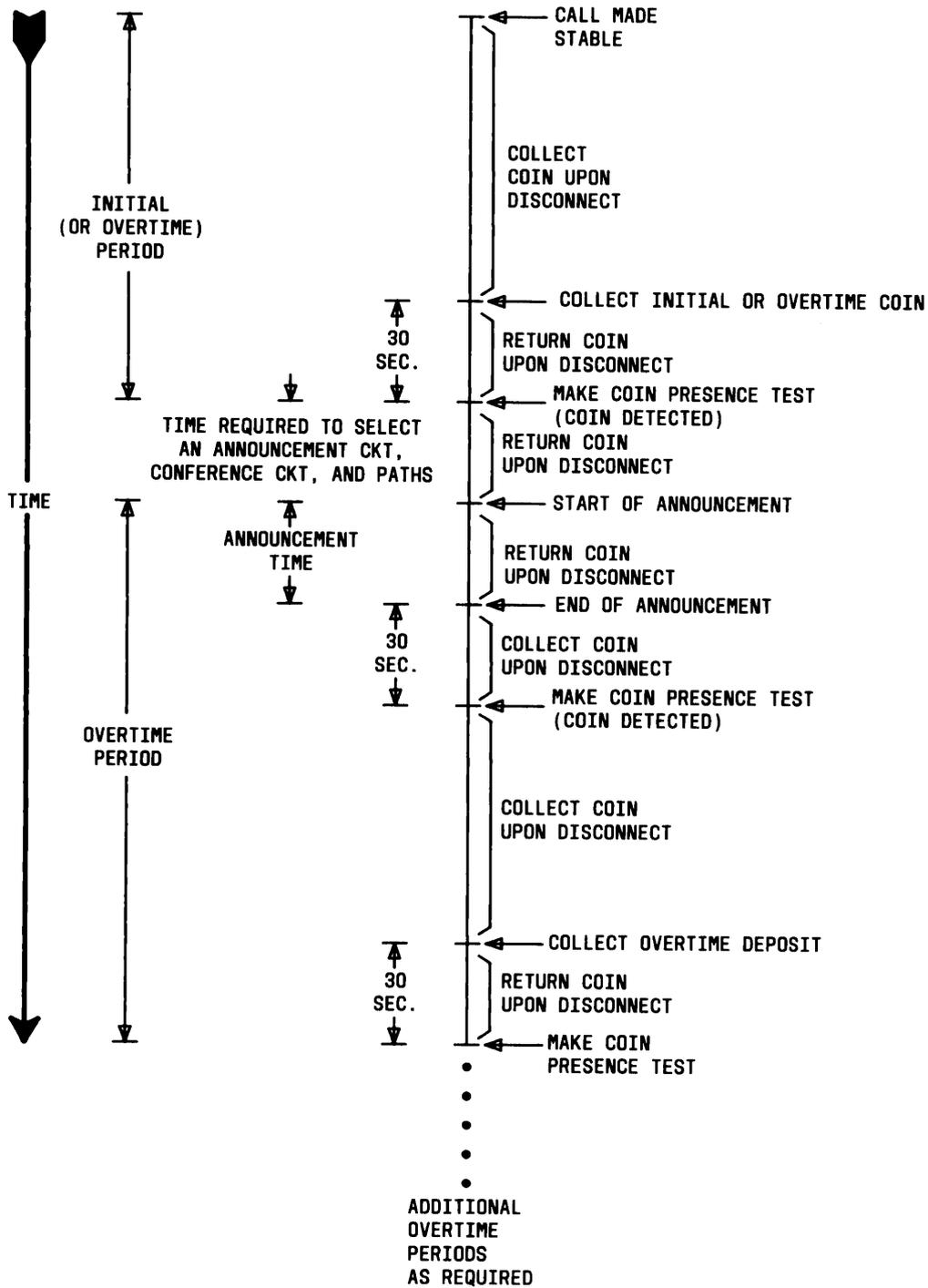
7. INTERACTIONS

7.01 The Local Coin Overtime feature operates independently of other features.



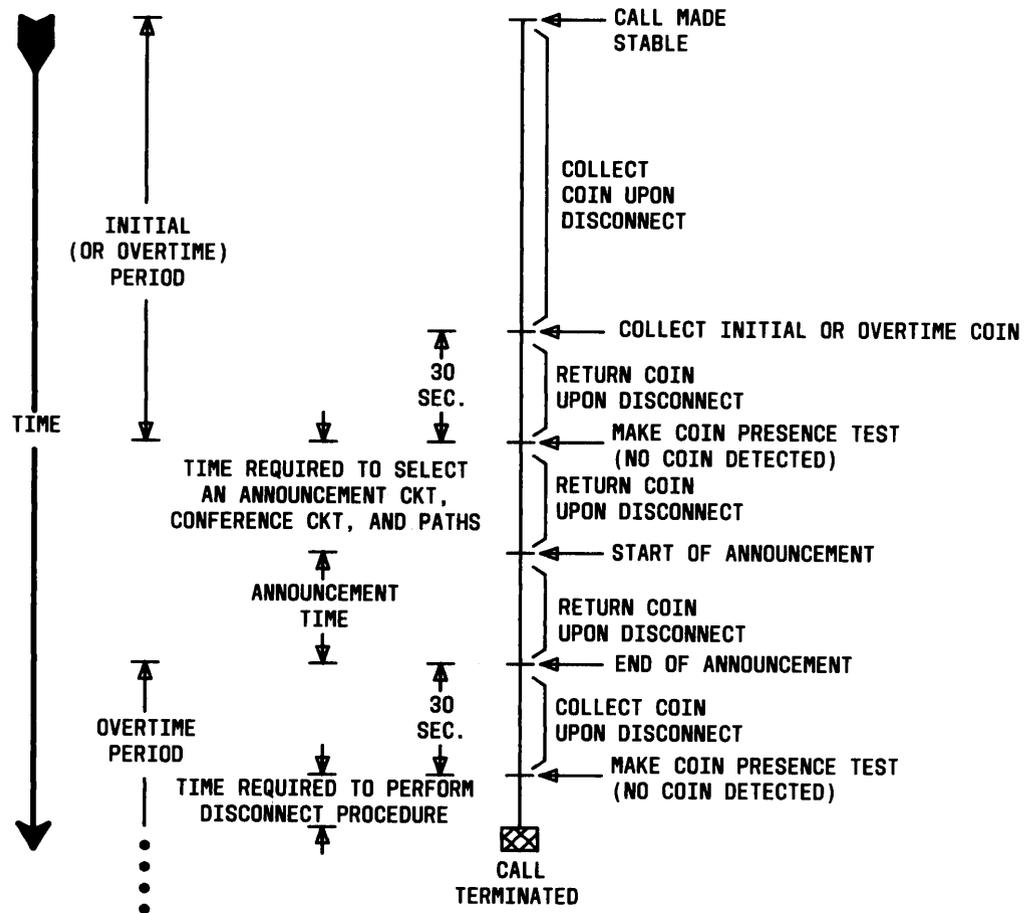
A. LOCAL COIN OVERTIME OPERATIONS FOR A CUSTOMER WHO DEPOSITS IMMEDIATELY

Fig. 4—Timing Diagram for Local Coin Overtime Feature (Sheet 1 of 3)



B. LOCAL COIN OVERTIME OPERATIONS FOR A CUSTOMER WHO DEPOSITS AFTER THE ANNOUNCEMENT

Fig. 4—Timing Diagram for Local Coin Overtime Feature (Sheet 2 of 3)



C. LOCAL COIN OVERTIME OPERATIONS FOR A NONPAYING CUSTOMER

Fig. 4—Timing Diagram for Local Coin Overtime Feature (Sheet 3 of 3)

8. RESTRICTION CAPABILITY

8.01 No restrictions apply to the Local Coin Overtime feature.

INCORPORATION INTO SYSTEM

9. INSTALLATION/ADDITION/DELETION

9.01 In order to incorporate the Local Coin Overtime feature, coin control circuits and the coin-first and/or dial-tone-first coin stations must be installed (refer to Sections 233-190-112 and 233-190-131 for further details regarding these coin stations). The local coin overtime announcement must be installed (refer to Section 233-190-023 for further details concerning announcement arrangements), and the 3-port conference circuits must be installed

(refer to Section 233-190-138 for further details concerning the 3-port conference circuits). The initial and overtime periods must also be defined either through the use of recent change (RC) messages or the office data administration (ODA) run.

10. HARDWARE REQUIREMENTS

10.01 The hardware associated with the Local Coin Overtime feature is listed in Table A. Refer to the Network Switching Practices 233-060-XXX and the other referenced sections to determine the necessary quantities of these items.

10.02 It should be noted that the usage of 3-port conference circuits for local coin overtime announcements is represented by an average of 0.5

TABLE A

HARDWARE REQUIREMENTS FOR LOCAL COIN OVERTIME CHARGING

| HARDWARE ITEM | J NUMBER | SD-NUMBER | CKTS PER UNIT | INSTALLATION LOCATION | SECTION REFERENCE | TRUNK ORDER CODE |
|---------------------------|------------|-------------------|---------------|---|---------------------------------|------------------|
| Announcement Machine | 7A | | SD-95283 | 1 | Miscellaneous Frame (J3H001C-1) | 233-190-023 |
| | 12A | J29362A-1 | SD-26453 | 1 | | 233-190-023 |
| | 13A | J1C121A-1 | SD-97753 | 8 | | 233-190-023 |
| Announcements Circuits | J3H001CH-1 | SD-3H411 FB383 | 2/CP | | 233-190-023 | 60910 |
| Coin Control Circuits | J3H001CH-1 | SD-3H411 FB423 | 4(4 CPs) | Control Frame (J3H001C-1) | 233-190-131 233-190-112 | 60911 |
| DTF Coin Line Circuit | J3H001EE-1 | SD-3H205 FB428 | 8 | Miscellaneous Frame (J3H001E-1) | 233-190-131 | 80000 |
| 3-Port Conference Circuit | J3H001CH-1 | SD-3H230 FB422 | 12 | Miscellaneous Frame (J3H001E-1) or Control Frame (J3H001C-1) | 233-190-138 | 60913 |

second per coin line during busy hour. Heavy usage calculations should include 1.5 seconds per coin line during busy hour. An estimated holding time of 15 seconds per announcement is expected.

11. SOFTWARE REQUIREMENTS

11.01 No additional program store words are required to provide the Local Coin Overtime feature; however, the translation area of program store requires one word for each charge index expansion associated with local timed coin calls. These translation words are required to define the initial and overtime periods. Other software requirements related to coin telephone service may be found in Sections 233-190-112 and 233-190-131.

12. DATA ASSIGNMENTS AND RECORDS

12.01 The only data assignments which may be directly related to the Local Coin Overtime feature consist of those required to construct the charge index expansion table shown in Figure 5. This expansion table may be constructed through the use of the following RC messages.

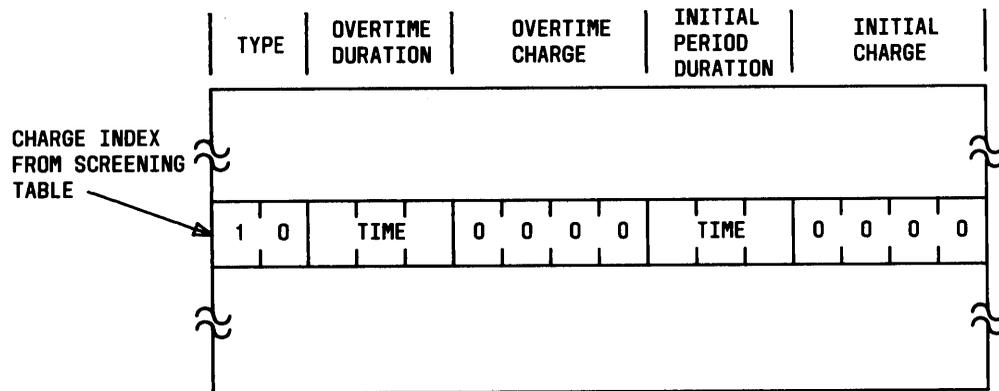
- RC:CHI - This message is used to define a charge index to be used for local timed coin calls. Keyword CHI is used to define the

charge index in the range of 16 through 31. Keyword ETYP is used to designate a coin call. Keywords ITM and OTM are used to define the initial and overtime durations, respectively.

- RC:SCR - This message is used with keyword CHI to associate the charge index (defined by the RC:CHI message) with the screening tables accessed for timed coin calls.
- DIST:SCRTBL - This message may be used, if necessary, to establish additional screening tables.

12.02 The following example shows how a charge index may be assigned using the RC:CHI message.

```
RC:CHI/
TYP NEW/
CHI xx/ (xx represents a vacant charge
        index between 16 and 31)
ETYP cn/ (coin type)
ITM 5/ (initial timing period is 5 minutes)
OTM 3/ (overtime period is 3 minutes)
END! (end of message).
```



TYPE = 10 - COIN ENTRY

INITIAL TIME = 0 - LOCAL UNTIMED COIN CALL
 = 1-7 MINUTES - LOCAL TIMED COIN CALL
 (INITIAL OR OVERTIME)

CHARGE = 0 - FIXED INITIAL CHARGE DETERMINED
 BY THE COIN STATION (5¢-45¢).
 OVERTIME CHARGE IS 5¢

Fig. 5—Charge Index Expansion for Local Coin Overtime Feature

12.03 If the Local Coin Overtime feature is to be implemented at the time of the initial installation, the following ESS input forms must be completed and submitted to the Western Electric Regional Data Center as a part of the ODA run.

- **ESS 3301-1 Rate and Route Table**—This table is used to associate charge indexes (to be used for local timed coin calls) with the appropriate screening tables.
- **ESS 3302 Charge Table**—This table is used to construct the charge index expansion entries. The initial and overtime durations must be associated with the charge indexes to be used for local timed coin calls.

12.04 For further data assignments related to dial-tone-first and coin-first coin stations, refer to Sections 233-190-131 and 233-190-112.

13. TESTING

13.01 The Local Coin Overtime feature may be tested by making a test call from a dial-tone-first and/or coin-first type coin station. The overtime deposit should be omitted to determine that the announcement is provided and that the coin line is returned to the proper state (dial-tone or high and dry). A test should also be made with the overtime deposit to determine that the overtime periods are properly provided.

14. OTHER PLANNING TOPICS

14.01 Care should be taken to insure that enough 3-port conference circuits are available to provide the local coin overtime announcement.

ADMINISTRATION

15. MEASUREMENTS

15.01 The standard peg, usage, overflow, and maintenance busy counts are provided for the 3-port, coin control, and announcement circuits associated with the Local Coin Overtime Charging feature. No other measurements are required for this feature.

16. CHARGING

16.01 All local coin overtime charging is provided on a per-call basis and all payments are

made via deposits into the coin station. The time and charges for the initial and overtime periods are determined from the charge index expansion shown in Figure 5. This expansion table is constructed, during the initial installation, through the completion of ESS form 3302. It may be changed (or constructed) after the initial installation through the use of the recent change message RC:CHI. Actually, for local timed coin calls, only the initial and overtime periods may be specified in the translations. The initial charge (5 cents to 45 cents) and the overtime charge (5 cents) are specified via the coin station hardware. The initial and overtime periods may be from 1 to 7 minutes each.

SUPPLEMENTARY INFORMATION

17. GLOSSARY

17.01 The following list identifies terms used in this document.

- **Customer Dial Pulse Receiver (CDPR)**—A circuit that provides dial tone to the customer and detects the dialed digits.
- **Coin Cleanup Routine**—A portion of the COIN program which collects and returns coins at coin stations and idles the coin line after coin disposal.
- **Coin-First Station**—A type of coin station which requires the presence of an initial deposit before an off-hook indication can be provided at the central office.
- **Dial-Tone-First Station**—A type of coin station which returns an off-hook indication to the central office without the presence of an initial deposit.
- **High and Dry**—The condition of a coin-first station when off-hook has occurred but no deposit is present. No office battery is applied to the coin station.
- **Message Rate**—A type of timed noncoin telephone service whereby charging is based on the duration of the individual calls.
- **Office Data Administration (ODA) Run**—Mechanism by which translation information may be assembled for the initial

installation of the No. 3 ESS office. Information from the ESS input forms is entered into the original ODA computer, assembled, and sent back to the No. 3 ESS.

18. REFERENCES

18.01 The following documents may be referred to for supplementary information related to the Local Coin Overtime feature.

- IM/OM-3H300—No. 3 ESS Input/Output Message Manual
- PA-3H3XX—No. 3 ESS Office Data Tables Layout Specification
- PR-3H161—Local Charging - Coin and Message Register (LCLCHG) Program
- CD, SD-3H411, FB423 - Coin Control Circuit
- CD, SD-3H205, FB428 - Dial-Tone-First Coin Line Circuit
- Translation Guide—TG-3
- Network Switching Practices 233-060-XXX
- Section 233-154-130—Recent Change Users Guide
- Section 233-190-023—Announcement Systems, No. 3 ESS
- Section 233-190-112—Basic Coin Services, No. 3 ESS
- Section 233-190-131—Dial-Tone-First Coin, No. 3 ESS
- Section 233-190-138—Threeway Calling, No. 3 ESS