

# COE Bar Code Equipment Movement Tracking Procedures

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# 1. General

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- 1.1  
**Purpose**
- This practice provides standard procedural guidelines for Central Office Equipment (COE) bar coding.
- 1.2  
**Filing Instructions and Supersedures**
- Discard all previous issues and associated addenda of this practice and file this issue numerically in your GTE Telephone Operations practices set.
- This practice supersedes and cancels:
- All policies, procedures, general instructions, letters, and memoranda which address this subject.
  - Any document which provides information contrary to the information contained in this practice.
- 1.3  
**Reason for Reissuing**
- This practice has been reissued to incorporate multiple changes in the content. Read this entire practice to ensure your familiarity with the new information.
- 1.4  
**Responsibility**
- This practice was written by the Infrastructure Provisioning Systems Support Staff in GTE Network Services and published by the GTE Network Services Enterprise Services Department. For more information about this practice, contact the Headquarters Infrastructure Provisioning Systems Support Department.
- 1.5  
**Disclaimer**
- This practice was prepared solely for the use of GTE Network Services. It must be used only by its employees, customers, and end users when installing, operating, maintaining, and repairing GTE Network Services equipment, facilities, and services. Any other use of this practice is forbidden. The information contained in this practice may not be applicable in all circumstances and is subject to change without notice. By using this practice, the user agrees that GTE Network Services will have no liability (to the extent permitted by applicable law) for any consequential, incidental, special, or punitive damages that may result.

## 2. Overview

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### 2.1 Use

The bar coding procedures contained in this practice are used in, but not limited to, managing the following projects:

- New Central Offices (COs).
- Equipment retirements.
- Equipment additions.
- Transmission projects, including pair gain.
- Lightwave networks.
- Switching system rearrangements.
- Equipment transfers.
- Equipment movement within a CO.

### 2.2 Objectives

A thorough understanding in the use of the bar code equipment and programs is required to effectively execute the CO bar code application. The integrity of the Central Office Equipment Property (COEP)/Central Office Equipment Model (COEMOD) database for inventory control depends largely upon the quality and thoroughness of bar coding.

### 2.3 Definitions

The following chart defines the acronyms and terms used in this practice.

Acronym or Term	Definition
ADJ	Adjust
ASAP	As Soon As Possible
Batt	Battery
BCKLIGHT	Backlight
BkUp	Back Up
BSN	Bar Code Serial Number
Cap	Capacity
Char	Character
CMPY	Company
CNAS	Circuit Network Administration System (See TBS)
c o	Central Office
COE	Central Office Equipment
COEC	Central Office Equipment Construction
COEM	Central Office Equipment Maintenance
COEMOD	Central Office Equipment Model

(continued)

## 2. Overview, continued

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### 2.3 Definitions, continued

Acronym or Term	Definition
COEP	Central Office Equipment Property
COMM	Communications
CONFIG	Configuration
CZT	Customer Zone Technician
DLC	Digital Loop Carrier
DN	Down
ERO	Equipment Repair Order
ERS	Electronic Repair Service
HI	High
#	issue Number
ICP	Inventory Control Point
ID	Identification
Info	Information
Mux	Multiplexer
NiCad	Nickel Cadmium
OPER	Operator
P#	Part Number
Pit	Plant
PWC	Printed Wiring Card
RAM	Random Access Memory
RCV	Receive
ROM	Read Only Memory
Rqd	Required
RSU	Remote Switching Unit
RTMNTS	Retirements
Shlf	Shelf
Sit	Slot

(continued)

## 2. Overview, continued

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### 2.3 Definitions, continued

Acronym or Term	Definition
SPlt	Su bPlant
SVR	System Version Release
TBS	Telephone Business Solutions (Formerly CNAS)
TRANSFR	Transfer
TRNSFRS	Transfers
VOL	Volume
WO	Work Order

### 2.4 References

The following chart provides sources of supplementary information relating to this practice. The documents could be required for performing certain tasks.

See...	For Information About...
Practice 007-005-C 15	Handling Static-Sensitive Materials
Practice 007-220-001	COE Bar Code Methods and Procedures
Practice 007-220-003	COE Bar Code Laptop Program Procedures (DOS)
Practice 122-205-001	Battery Removal And Disposal
Course 50001	COE Bar Coding Ongoing Self Paced Training
Version 1 .0	Spare Card remote User's Manual, ICELAND

### 2.5 Contact List

The following chart provides the telephone numbers for the Bar Code Help Desks.

Region...	Telephone Number...
California Region	760-245-0625
Florida Region	813-483-2494
Hawaii Region	808-546-3579
Midwest Region	614-383-0666
North Region	614-383-0666
Northeast Region	614-383-0666

(continued)

## 2. Overview, continued

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### 2.5 Contact List, continued

Region...	Telephone Number...
Northwest Region	4252616367
South Region	919-317-5884
Texas/New Mexico Region	972-7 17-2296
Virginia Region	919-317-5884

**NOTE:** The Help Desk contact number can be displayed by pressing <H> then <enter> on any menu.

## 3. Safety

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### 3.1 Personnal Safety

**WARNING: DO NOT STARE DIRECTLY INTO THE LASER BEAM. PROLONGED EXPOSURE COULD CAUSE EYE DAMAGE.**

The lasers used to scan the bar codes do not cause damage to equipment. However, do not aim the laser beam toward the eye.

### 3.2 Equipment Safety

Wear an antistatic wrist strap when placing bar code labels on PWCs, equipment shelves, or frames. Refer to GTE Telephone Operations Practice 007-005-015 for additional information on handling static-sensitive materials.

Do not drop or handle roughly any reader or scanner equipment. The reader, in its carrying case, can withstand a 4-foot drop. Out of its carrying case it can withstand only a 1-foot drop. The optical elements of the 9445 Trakker@ (Item ID 318588) and the 1518BA Laser Gun@ (Item ID 464542) are fragile; do not drop the unit from any level.

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## 4. Laser Scanner Operation

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### 4.1 Successful Scanning

There are two types of laser scanners available. The 9445 Trakker has a built-in laser scanner. The 1518BA gun-type laser scanner is attached via a coiled cable to the M402 Trakker® (Item ID 464539 or 464540) or to the 9445 Trakker.

To perform a scan, follow these guidelines:

- Keep the distance from the 9445 Trakker to the bar code within approximately 3 inches and within approximately 4 inches for the 1518BA gun laser.
- Hold the Trakker/scanner at angles to the plane of the bar code both vertically and horizontally. Generally, a 25 to 35 degree angle with respect to both the horizontal (skew) and vertical (pitch) works well.
- Press the buttons on the side of the 9445 or pull the trigger on the 1518BA to activate the laser beam.
- Position the beam so that it crosses every bar and space in the bar code.
- The Trakker signals a successful read by a single beep.

**NOTE: Failure to achieve a successful read results in a laser beam time-out.**

**A successful read, but of an inappropriate bar code for the data expected, results in three louder beeps. Check the Trakker screen for the current cursor position (what bar code should be scanned).**

- Move the beam slowly toward the label, if the laser beam is not on the label, stopping when the center of the label is reached.

Exhibit 1 shows the acceptable angles at which the laser scanners should be held and the appropriate position(s) of the beam with respect to the bar code label.

**NOTE: If the 9445 Trakker is held horizontally (flat, not on its side), the laser beam projects a vertical light beam. Turn the Trakker sideways to project a horizontal beam.**

**The 1518BA gun projects a horizontal beam when held in the normal position. Turn it sideways to project a vertical beam.**

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## 5. Program Information

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### 5.1 Checking Program Version

A Trakker must have the correct software version. The current release level is 6.1 .x. To determine the version of the program resident on a Trakker:

- At the *Main Menu*, press <Q> and <enter>.

If the version number displayed on the screen is lower than 5.00, or if the screen does not provide a version number, contact the appropriate Regional Bar Code Help Desk as soon as possible for information about hardware/software compatibility.

### 5.2 Downloading A New Program

If a Trakker does not currently have a program in memory, or the version of the program is older than 5.00, perform a **raw** download. This is accomplished by properly setting up the Trakker to dial up the host computer (PC Bar Code machine) to download the current Trakker program. After downloading, the program automatically compiles and is ready for data collection use. Refer to Section 11 for more information on this process. Exhibit 2 contains required Trakker setup bar codes. If difficulty is experienced with this process, contact the appropriate Regional Bar Code Help Desk for assistance.

If a Trakker contains a program version 5.00 or newer (higher) but not the current release, follow the program download instructions in Section 11 or on the Trakker screen when connected to the host computer.

### 5.3 Program Version Numbering Scheme

Trakker program versions observe the following numbering scheme:

- Whole digit version changes (e.g., 4 to 5) are associated with major enhancements made to the program and Trakker screens. Major enhancements require a change to the bar code practices and documentation.
- Tenths digit version changes (e.g., 5.0 to 5.1) are made when enhancements, other than those deemed major, are made to the program or Trakker screens and require a change to the Bar Code practices.
- Hundredths digit version changes (e.g., 5.01 to 5.02) are associated with maintenance fixes and minor enhancements to the program or Trakker screens and do not require a change to the Bar Code practices.

## 6. Program Overview

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### 6.1 Program Overview

The Equipment Movement Tracking program provides the user with the tools necessary to gather and store the information required by COEP/COEMOD whenever equipment is received, moved, retired, or audited.

**NOTE: The menu system and collection screens are designed primarily from a transaction (equipment movement or activity) perspective.**

A pathway from the *Main Menu* to the data collection screen(s) exists for each specific transaction type. Navigation through the menu system is based solely upon the type of transaction to be collected or reviewed.

This section discusses transaction types and data collection scenarios. Program flow charts (which show each pathway) are discussed in Section 7. These flow charts are intended to provide an overview of the program design and flow.

Section 8 describes the Trakker setup before and during use of the data collection screens.

Section 9 provides general keyboard usage and screen navigation techniques that are common to all the collection screens.

Section 10 provides screen information specific to the various transaction types.

Section 11 describes communications between the Trakker and the host platform.

### 6.2 Transaction Types

The following chart lists the transaction types that might be created with this program. The single digit transaction code is used by COEP/COEMOD during processing to determine how to apply the information in the transaction to the appropriate record in the COEP database.

Transaction Code	Description of Transaction
A	Whole office Audit
B	Whole Bay Audit
C	Change bar code serial number
c	change part number and/or issue
E	End work order
G	Gross work order addition
I	Swap In
M	<b>Move</b> (internal)
O	Swap Out
R	Back from Repair
S	Spot Audit

(continued)

## 6. Program Overview, continued

### 6.2

#### Transaction Types, continued

Transaction Code	Description of Transaction
T	Transfer
X	Retirement
Z	To Repair

### 6.3

#### Data Collection Scenarios

The following charts list the appropriate Transaction Types for various WO and non-WO related activities. The corresponding practice section numbers are also shown in the charts.

### 6.3.1

#### Work Order (WO) Related

WO Related Activity	Transaction Type	Practice Section #
Install (Establish) equipment with a w o	G	10.4.1
Retire equipment with a WO	X	10.4.3
End WO (Notify COEP that all bar coding for Work Order is completed)	E	10.4.4
Transfer equipment between plant codes - Receiving Office (C-To-C Work Order)	T	10.4.2
Move equipment with a WO - Receiving Office (Transfers between subplants within same plant code)	M	10.2.2
Internal Moves with a WO - Receiving Office (Move Equipment Within Same Office)	M	10.2.2

(continued)

## 6. Program Overview, continued

### 6.3.1

#### Work Order (WQ) Related, continued

WO Related Activity	Transaction Type	Practice Section #
Modify existing equipment with a SVR-type WO (Upgrade Involves a Part # or an Issue # Change)	c	10.3.1
Replace (Change) equipment with a SVR-type WO (Replacement Involves a One-For-One Swap of cards - Replacement card is in hand)	C	10.3.2
Replace (Swap) equipment with a SVR-type WO (Replacement Does Not Involve a One-For-One Swap of Cards)		
● Swap Outs	0	10.6.1
● SwapIns		10.6.2

### 6.3.2

#### Non-WO Related

Non-WO Related Activity	Transaction Type	Practice Section #
Move equipment without a WO - Receiving Office	M	10.2.2
Move equipment between SubPlant Codes - Receiving Office	M	10.2.2
Internal Move within the Same Office	M	10.2.2
Loan of Equipment between Plant Codes - Receiving Office	T	10.4.2
Transfer equipment without a WO - Receiving Office	T	10.4.2
Add equipment missed (not bar coded) on Initial Inventory	G	10.4.1
Add equipment missed (not bar coded) since Initial Inventory	G	10.4.1

(continued)

## 6. Program Overview, continued

**6.3.2  
Non-WO  
Related  
continued**

<b>Non-WO Related Activity</b>	<b>Transaction Type</b>	<b>Practice Section #</b>
Send equipment to the Equipment Repair Center	Z	10.51
Receive equipment from the Equipment Repair Center	R	10.5.2
Send equipment to the Equipment Repair Center (from a customer premise site without its own SubPlant - enter 777 for SubPlant)	Z	10.5.1
Receive equipment from the Equipment Repair Center (for a customer premise site without its own SubPlant - enter 777 for SubPlant)	R	10.52
Verify equipment suspected of having been moved	M	10.2.2
Spot Audit - Sample Inventory	S	10.7.1
Whole Bay Audit - Audit an entire bay (SITES Routines)	B	10.7.2
Whole Office Audit - Audit an entire office	A	10.7.3
Replacing a damaged bar code serial number label (If old serial number label is no longer scannable, record the transaction and place new bar code serial number label over old one.)	C	10.3.2
Move equipment to a customer premise site (for a customer premise site without its own SubPlant - enter 777 for SubPlant)	M	10.2.2

(continued)

## 6. Program OWWkw, continued

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### 6.3.2 Non-WO Related, continued

Non-WO Related Activity	Transaction Type	Practice Section #
Receive equipment from Central Stock (for Special Services Order, use the blanket WO number listed in Exhibit 14.)	G	10.4.1
Send equipment to Central Stock - Special Service Disconnect (for Special Services Disconnect Order, use the blanket WO number listed in Exhibit 14.)	X	10.4.3
Send equipment to Central Stock - surplus cards (for incorrect or surplus cards that have been received and bar coded into the office, send them to GTE Supply via the appropriate blanket WO number listed in Exhibit 14.)	X	10.4.3
Send equipment to Central Stock (for incorrect or surplus cards that have been received but not installed or bar coded into the office, return them to GTE Supply for credit via the placing blanket WO with a note on the Transfer Form that says: NOTE: Cards never installed, returned for credit.		(Not a Trakker Function)

## 7. Program Flow Charts

---

### 7.1 General Information

Several pages of flowcharts are included as Exhibits 3 through 13. They are intended to furnish an overview of the Trakker program and should be viewed as the primary source of information with respect to understanding how the program flows and how to navigate to the intended screen or activity. Information as to why a particular screen or series of screens is used is described in the previous sections. Screen level detail is described in Sections 9, 10, and 11.

# 8. Program Setup

---

## 8.1 Setup Overview

There are three types of setup functions available within the program:

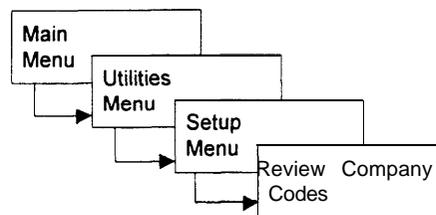
- Program level defaults.
  - Company code review.
  - Operator ID default.
- Trakker system settings.
  - Speaker volume adjustment.
  - Backlight time-out adjustment.
  - Configuration scan capability.
- Database clearing.
  - Erase user input bar code data.

This section provides guidance for the use of the screens involved in performing the functions listed above.

**NOTE: Moving between and within all screens follows the conventions described in Sections 9 and 10.**

## 8.2 Review Company Codes

When a new program is downloaded into the Trakker, a table of valid company codes is included automatically. Once the default region (state) has been selected, the valid company codes are reviewed through the Setup Menu.



```
COMPANY CODES
FOR REGION: XX
          9XX YY_
ENTER = Continue
```

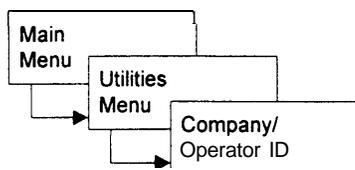
Press <enter> to scroll through the codes. The screen shows the current Region setting, with all valid company codes (with their respective states) for that Region. When all codes have been displayed, the Setup Menu reappears.

## 8. Program Setup, continued

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### 8.3 Company Code/Operator ID Setup

The Company Code/Operator ID screen can be accessed from the Utilities Menu.



Its purpose is the confirmation or update of the company code and/or operator ID defaults. The values shown or typed on these screens are placed into each daily transaction or audit record created. The screen is also presented when selecting a transaction type from a menu before allowing the creation of new records or the review of existing records. This provides an opportunity to ensure that the company code and operator ID are always current. The operator ID is three characters in length with the first character indicating the user's work group (i.e., C = COE installation - Construction) and the last two characters are the user's initials (first and last name). Note that the user's initials and work group identification are input on different screens and appended to form the three character operator ID.

```
Choose State: _  
Key 2 Char or  
Scroll F2 = UP F3 = DN  
ENTER = Accept F4 = BkUp
```

Enter a valid two character state code. If unknown, scroll through the list of all states in which GTE conducts business. After a state is selected, the following screen displays:

```
Company Code:  
Valid 'XX' Code &  
9YY 9ZZ  
F1 = New State F4 = BkUp
```

A list of all the company codes for the entered state is displayed.

Make a selection from the list and press center>. The following screen will display:

```
Region: XX Cmpy: 9YY  
Your Oper ID: __  
(First and Last Init)  
ENTER = Accept F4 = BkUp
```

## 8. Program Setup, continued

---

### 8.3 Company Code/Operator ID Setup. continued

Enter your initials (first and last name) and press <enter>. The following screen will display:

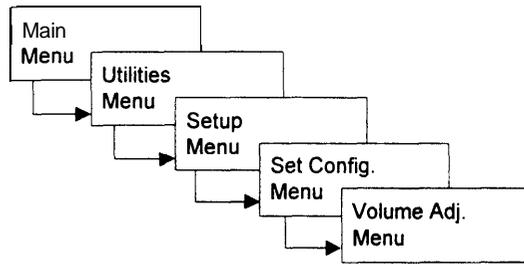
```
1. MAINTENANCE
2. CONSTRUCTION
3. VENDOR
Select:   F4 = BkUp
```

Make a number selection from the list and press <enter>. The first letter of the User's work group will be substituted for the number selected and appended to the beginning of the operator's initials. These three characters are placed into each record created by the Trakker.

Upon completion, the Utilities Menu reappears.

### 8.4 Volume Adjustment

The speaker on the Trakker can be adjusted to low, medium, or high levels. The Volume Adjust Menu is reached through the Set Configuration **Menu**.



```
1. LOW VOL
2. MED VOL
3. HIGH VOL
Select:   X = EXIT
```

Select a level to be applied. Press <center>.

### 8.5 Backlight Adjustment

The Trakker backlight is activated by pressing <a/t>,<0 (see Section 9.1 for the keystroke conventions used in this practice). By default, it stays on only 30 seconds. That default can be changed to a value between 01 and 59. If the numbers 60 through 99 are keyed, the default is set to the maximum (59). Thereafter, each time the backlight is activated, it remains on the specified amount of time.

The backlight time-out can be deactivated by choosing **Stay On**. Once activated, the backlight stays on as long as the Trakker is on.

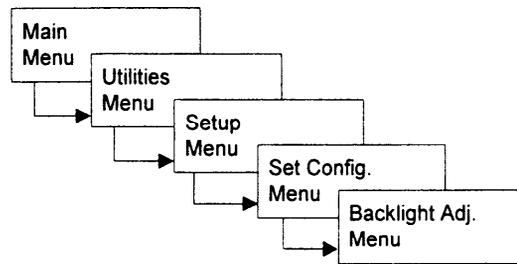
**NOTE:** This feature cannot be used to bypass the basic Trakker time-out feature. If the Trakker times out or is turned off, the backlight also goes off.

## 8. Program Setup, continued

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### 8.5 Backlight Adjustment, continued

Please note that the backlight must always be turned on by pressing <a/t>,<C>. It never comes on by itself, even if the time-out is set to **Stay On**. The *Backlight Adjustment Menu* is reached from the *Set Configuration Menu*.



```
(ALT C For Bcklight)
1. STAY ON
2. SET TIMEOUT
Select: _      X = EXIT
```

Make a selection from the list, then press <enter>. The following screen appears if the backlight timeout is being set.

```
(ALT C For Bcklight)
Enter Timeout: __
(S e c o n d s)
Press Enter to Exit
```

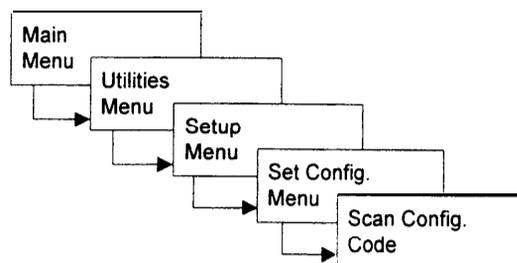
Input a number between 01 and 59 and press center>.

## 8. Program Setup, continued

---

### 8.6 Configuration Scans

In a troubleshooting situation, it might be necessary to feed configuration information directly to the Trakker system. Access to the system is provided through the following screen. Note that this is not a process users are normally required to do on their own; normally Bar Code Help Desk personnel are involved in assisting the user.

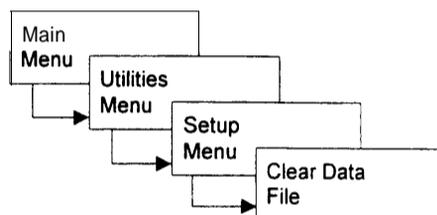


Scan Config Code  
Then/Or  
Press Enter to Exit \_

Scan the code as directed, press <enter> to activate.

### 8.7 Clear Database

If for some reason the data file is not cleared after a successful upload session, it must be cleared later. This option allows the file to be erased without uploading it again. Please ensure that the records have been uploaded before clearing (unless all records have been entered for training or demonstration purposes). Refer to Exhibit 3 for help in reaching this screen:



!! WARNING! !  
XXX Record(s)  
NOT Uploaded!  
Clear Data? (Y/N)

CAUTION: Use **extreme caution** when erasing data unless all records have been successfully uploaded to the Host.

# 9. Program Conventions

---

## 9.1 General

On the data collection screens, only two modes of operation are possible - data collection or data edit. Data collection means that new transactions are being created and stored, one at a time. Data edit means that previously stored transactions can be reviewed, edited, or deleted. Because the screens for each transaction type can differ significantly from one another (different data fields required), data edit mode is limited to viewing one type of transaction at a time.

The following chart provides the conventions used in this practice to indicate when a combination of keys are to be pressed.

Indication	Meaning
<b>Key1, Key2</b>	Press 1st key, <b>release</b> , press 2nd key
<b>Key1+KeyZ</b>	Press and <b>hold</b> 1st key, press 2nd key, release together

The <enter> key is used to move forward, field by field, through the data collection screens, both in data collection and data review modes.

Repetitious or constant data is scanned or entered once, and defaults thereafter for greater speed and accuracy.

If the program prompts for information which is not available, press <enter> to advance to the next prompt. If the Trakker responds with three beeps it means that this information is required. In some instances, <Space>, <enter> can be used to bypass a prompt for which information is not available. If that does not work, furnish the information.

**NOTE: When furnishing data to the Trakker, it is always more efficient and accurate to scan available bar codes than to enter data through use of the keyboard.**

**NOTE: When scanning data into a field prompt, the cursor automatically advances to the next prompt. It is not necessary to press <enter> after a successful scan, as it is when entering data from the keyboard.**

## 9.2 Field Information

Each field has specific data requirements with respect to minimum and maximum lengths. Some fields also have data **masks** which requires that the keyed or scanned data be in a certain format. An example is the *Work Order* field. Though different from one WO related transaction to another, the *Work Order* field only accepts data formatted in a particular way. This information for each screen is furnished in Section 10.

## 9. Program Conventions, continued

---

9.2  
**Field  
Information,  
continued**

The following chart contains lengths for each field. An **up to** designation might mean that the field is not required, or can have as few as one character required. The A/N column describes whether the field is alpha, numeric, or either (AN).

Field Name	Field Length	A/N *
Operator ID (Combined)	3	A
Company Code	3	AN
Plant Code	4	AN
SubPlant Code	3	AN
Work Order	7	AN**
Bay	up to 12	AN****
Shelf	up to 5	AN****
Slot	up to 4	AN
Part Number	up to 18	AN
Issue Number	up to 9	AN***
Bar Code Serial Number	8 or 12	AN**
Equip Repair Order	8	AN
Budget Center	4	AN
Swap ID Number	up to 8	AN

\* A = Alpha; N = Numeric; AN = both OK.

\*\* Means special requirements apply.

\*\*\* If there isn't an issue number, enter a 0 (zero) as the default value. Selected special keys also allowed.

\*\*\*\* Selected special keys are also allowed.

## 9. Program Conventions, continued

---

### 9.3 Function Keys

This section describes the use of the function keys on the Trakker keyboard. Note the following general features with regard to function keys:

- There are eight function keys available (<F7> through <F8>).
- <F5> through <F8> are actually a/t,<F1> through alf,<F#>.
- A function key can have different uses in different parts of the program.
- A function key can have different uses in data collection versus data edit modes.
- If data input to a field is to be F1, F2, F3, or F4, then it **must** be followed by a **space (e.g., F1\_)** so the program does not treat the entry as a function key. (The underscore following the F1 in the example represents the space key on the Trakker keyboard, not the underscore character).

The following chart shows the function key assignments in data collection mode and in edit mode:

Function Key	In Collection Mode	In Edit Mode
<F1>	Starts edit mode	Backs up one record
<F2>	Not Applicable	Moves forward one record
>F3>	Not Applicable	Exits edit mode
<F4>	Backs up one field*	Backs up one field
<F5>	Enables field edit**	Enables field edit**
<F6>	Not Applicable	Deletes displayed record
<F7>	Not Applicable	Not Applicable
<F8>	Back to last menu	Not Applicable

\* If at the first field of transaction, <F4> moves back to the appropriate menu **(collection mode only)**.

\*\* Field edit mode is a time saving method for changing data within a field without rekeying the entire field. This feature is available in both data collection and data edit modes. Pressing <F5> moves the cursor to the end of the field. Pressing <F2> moves the cursor to the left, <F3> moves the cursor to the right, in both cases non-destructively. Once the desired change is keyed, press <enter> to save the changes and move to the next field. <F4> can also be used to save the changes and move forward. Both <F4> and <enter> deactivate the field edit mode.

# 10. Data Collection Screens

---

## 10.1 Main Menu

The main application menu is shown below. All other activities result from this screen. In addition to the three options shown below, program version information can be viewed by pressing <Q> and <enter> (see Section 5).

```
1. DAILY TRACKING
2. AUDIT
3. UTILITIES
Select: _
```

Three subordinate menus are available from the Main Menu:

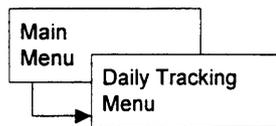
- Daily Tracking.
- Audit.
- Utilities.

The three main menu selections enable the creation of equipment movement transactions (Daily Tracking), audit transactions (*Audit*), facilitate setup and maintenance of the Trakker (Utilities), and provide the capability for communication with other platforms (Utilities). See Section 8 for direction on setup and maintenance, and Section 11 for direction on communications. This section describes equipment movement and auditing.

**NOTE: Pressing "0" (zero) on any menu in this program immediately returns you to the main application menu.**

## 10.2 Daily Tracking Menu

Fourteen transaction types can be created with this application (see Section 6.2). All but the three audit transaction types are created from the Daily Tracking Menu.



```
1. MOVES      4. REPAIR
2. CHANGES  5. SWAPS
3. WOs
Select: _      X = EXIT
```

There are two possible sets of screens for:

- Moves.
- Part number/issue changes.
- Transfers.
- Retirements.
- Swap outs.

## 10. Data Collection Screens, continued

---

### 10.2 Daily Tracking Menu, continued

The difference between the two sets has to do with the handling of *Part Number* and *Issue* fields. Which set is presented is determined by the Region's System Administrator. Both sets are shown in the following sections as Option 1 and Option 2.

**NOTE: Refer to Section 6 if it is not apparent which transaction type is applicable to a specific work activity.**

**NOTE: In all cases, the process of creating a transaction follows the general rules and conventions with respect to screen and keyboard use as detailed in Section 9.**

### 10.2.1 Company Code/ Operator ID

After making any of the selections on the *Daily Tracking Menu*, the user is prompted to enter a valid *Company Code* and *Operator ID*.

```
Company Code: __
Valid 'XX' Codes:
9YY 9ZZ
F1 = New State F4 = BkUp
```

A list of all the company codes for the currently active state is displayed.

Make a selection from the list and press <enter>. The following screen displays:

```
Region: XX Cmpy: 9YY
Your Oper ID: __
(First and Last Init)
ENTER = Accept F4 = BkUp
```

Enter your initials (first and last name) and press <enter>. The following screen will display:

```
1. MAINTENANCE
2. CONSTRUCTION
3. VENDOR
Select: _ F4 = BkUp
```

Make a number selection from the list and press <enter>. The first letter of the User's work group will be substituted for the number selected and appended to the beginning of the operator's initials.

# 10. Data Collection Screens, continued

## 10.2.1 Company Code/ Operator ID, continued

If there is data in the Trakker older than 24 hours the following screen displays:

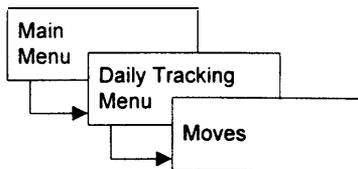
```
SOME DATA IS MORE  
THAN 24 HOURS OLD  
PLEASE UPLOAD ASAP  
Press Enter
```

Press <enter> to continue with data collection. Remember to upload the data at the earliest opportunity.

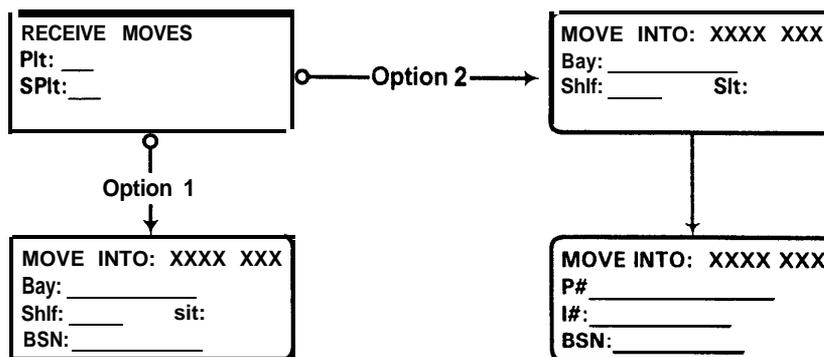
## 10.2.2 Moves

The Moves transaction is selected directly from the *&i/y* Tracking Menu. Input equipment that is moved into or within a CO building, remote building, hut, mux, cabinet, etc., without a WO using the moves screens. Scan moved equipment to the bay, shelf, and slot location levels.

In addition, if a few cards are suspected of having been moved in a shelf, the suspect cards may be scanned using the moves screens and then uploaded to COEP. This helps to ensure the integrity of the COEPICOEMOD database.



There are two possible sets of screens for moves. Which set is displayed is determined by the Region's System Administrator. Both sets of screens are shown in this section as Option 1 and Option 2.



Input the required information and press <enter> for each prompt.

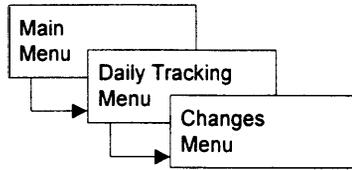
Shelf and slot information is required unless there isn't a shelf and slot (i.e., ICP cabinet). A slot cannot exist without a shelf.

After the transaction is completed, the cursor returns to the *S/t* field on the second screen.

# 10. Data Collection Screens, continued

## 10.3 Changes Menu

The Changes *Menu* is accessed from the Daily *Tracking Menu*.

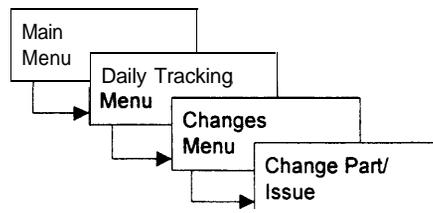


1. CHANGE PART/ISSUE 2. CHANGE BSN  Select:            X = EXIT
--

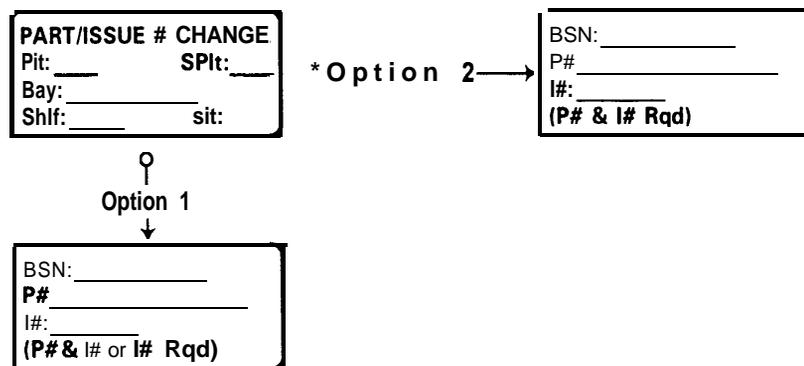
Make a selection and press <enter>.

## 10.3.1 Change Part or Issue Numbers

The *Change Part/Issue* transaction screens are accessed from the *Changes Menu*. On modification (SVR-type activity) WOs all equipment updated in the field (part number change and/or issue update) must be input using the *Change Part/Issue* screens. Changed equipment must be scanned to the bay, shelf, and slot location levels.



There are two possible sets of screens for *Change Part/Issue*. Which set is displayed is determined by the Region's System Administrator. Both sets of screens are shown in this section as Option 1 and Option 2.



## 10. Data Collection Screens, continued

---

### 10.3.1

#### Change Part or Issue Numbers, continued

Input the required information and press <enter> for each prompt.

Shelf and slot information is required unless there isn't a shelf and slot (i.e., ICP cabinet). A slot cannot exist without a shelf.

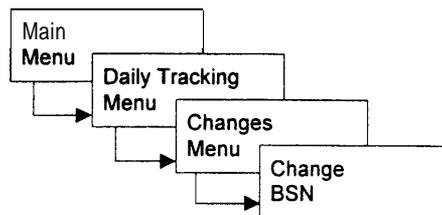
After the completed transaction is stored, the cursor returns to the *Slf* field on the first screen.

### 10.3.2

#### Change Bar Code Serial Number (BSN)

The Change BSN screen is accessed from the *Changes Menu*. Equipment changed out (replaced) on modification (SVR-type activity) WOs or Class A changes, where equipment is replaced by circuit card rotation, must be scanned to the bay, shelf, and slot level. If the change out involves a one-for-one swap of cards, where the replacement card is in hand, use the *Change BSN* screen.

If the change out does not involve a one-for-one swap of cards (i.e., 5 for 4, 2 for 4, etc.), use the Swaps menus (see Section 10.6).



<b>BSN CHANGE</b>	
Plt: _____	SPlt: _____
Bay: _____	
Shlf: _____	Slf: _____

P# _____
I#: _____
Old BSN: _____
New BSN: _____

Input the required information and press <enter> for each prompt.

Shelf and slot information is required unless there isn't a shelf and slot (i.e., ICP cabinet). A slot cannot exist without a shelf.

Old *BSN* is the Bar Code Serial Number from the card being replaced.

New *BSN* is the Bar Code Serial Number from the new card being installed.

**NOTE: The old serial number value and the new serial number value must be different.**

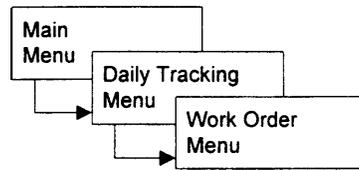
After the completed transaction is stored, the cursor returns to the *Slf* field on the first screen.

## 10. Data Collection Screens, continued

---

### 10.4 Work Order Menu

The Work Order *Menu* is accessed from the *Daily Tracking Menu*.

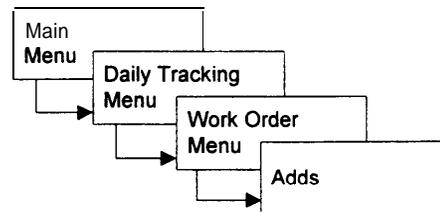


1. ADDS	4. END WO
2. TRNSFRS	
3. RTMNTS	
Select: _	X = EXIT

WO numbers are required for all transactions created from these menu selections.

### 10.4.1 Work Order Additions

The WO *Adds* transaction screens are accessed from the *Work Order Menu*. Equipment being installed on a gross addition WO must be input using the WO - *Adds* screens. Equipment additions require bar coding to the bay, shelf, and slot level.



WORK ORDER ADDS TO:	
Plt: _____	SPlt: _____
WO#: _____	
Bay: _____	

Shlf: _____	Slit: _____
P# _____	
I# _____	
BSN: _____	

Input the required information and press <enter> for each prompt.

Shelf and slot information is required unless there isn't a shelf and slot (i.e., ICP cabinet). A slot cannot exist without a shelf.

## 10. Data Collection Screens, continued

---

### 10.4.1 Work Order Additions, continued

Standard field requirements apply, with special requirements upon the Work Order field. For this transaction, the WO must fit one of the following patterns:

- NACNNAA where N = Numeric, A = Alpha, and C = Alpha or Numeric Character except the Letter 0;  
OR
- NFNNNNN where N = Numeric and F = Numeric digit 2 or 5 (Hawaii only);  
OR
- NNNN where N = Numeric (South only -Tracking number HI Caps);  
OR
- The words:
  - REDOINV  
OR
  - COMISS  
OR
  - RETMISS(See the following information for specific usage).

Always use the legitimate WO number when adding equipment on a WO.

When equipment is found in a bar coded office without a BSN label (either a GTE or an acceptable manufacturer's 12 character serial number label) applied, the COEP/OEMOD database must be updated to add the missed equipment. Refer to GTE Telephone Operations Practice 007-220-001 for information on the correct placement of BSN labels. The Work Order Additions transaction is used to input this equipment to the database. COEP is alerted to the missed equipment when one of the following is input in the Work Order field:

- REDOINV - Alerts COEP that this equipment was probably missed (not bar coded) on the initial inventory.
- COMISS -Alerts COEP that this equipment was probably missed on a job since the initial inventory.
- RETMISS - Used by the Audit Teams to notify COEP that this equipment was missed on/since the initial inventory and that it is being retired.

Any other type of input to the *Work Order* field (for this type of transaction) is rejected by the program.

When the transaction is completed, the cursor returns to the *S/t* position. There is a default value in place which might be accepted by pressing <enter>, or a new value might be keyed. This default value is furnished by the program through automatic incrementing.

For example, if every third slot is used on the shelf, the program recognizes the pattern after the first few entries. The default value automatically increments by three. It changes this increment whenever a slot value is entered that breaks the pattern. This feature saves considerable time. Of course, if there is no repeating pattern, it is necessary to key the correct slot value for each record.

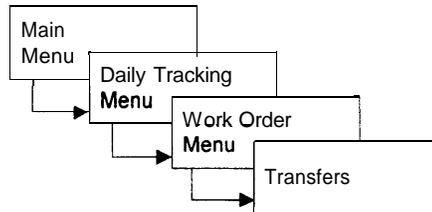
## 10. Data Collection Screens, continued

### 10.4.1 Work Order Additions, continued

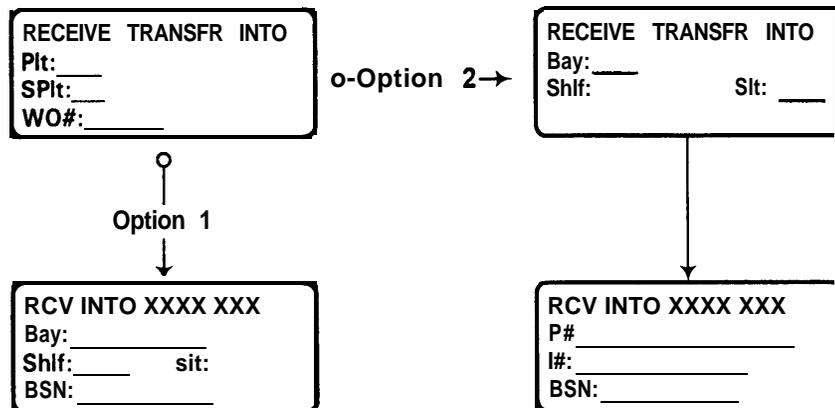
Additional transactions are added until finished, all bearing the same WO number. If transactions are created for different WOs, or if the placement of the equipment is to a different bay or shelf, back up to the appropriate field by pressing <F4> as directed in Section 9.3 (Function Keys).

### 10.4.2 Transfers

The *Transfers* transaction screen is accessed from the Work Order Menu. Equipment transferred into a CO building, remote building, hut, mux, cabinet, etc., from another plant code with a WO (C to C) is input using the Work Order Menu - Transfers screens. Scan transferred equipment to the bay, shelf, and slot location levels.



There are two possible sets of screens for Transfers. Which set is displayed is determined by the Region's System Administrator. Both sets of screens are shown in this section as Option 1 and Option 2.



Input the required information and press center> for each prompt.

Shelf and slot information is required unless there isn't a shelf and slot (i.e., ICP cabinet). A slot cannot exist without a shelf.

## 10. Data Collection Screens, continued

---

### 10.4.2 Transfers, continued

Standard field requirements apply, with special requirements upon the *Work Order* field. For this transaction, the WO must fit one of the following patterns:

- NACNAA where N = Numeric, A = Alpha, and C = Alpha or Numeric Character except the Letter 0;

OR

- The words:

- **LOAN**

OR

- **TRANSFER**

(See the following information for specific usage.)

Any other type of input to the *Work Order* field (for this type of transaction) is rejected by the program. Always use the legitimate WO number when transferring equipment on a WO.

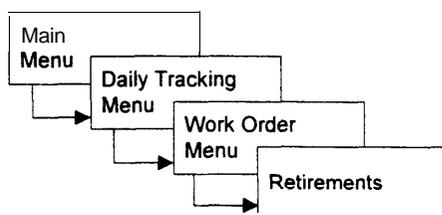
When equipment is transferred without a work order, input one of the following to the *Work Order* field:

- LOAN - Notifies COEP that the equipment has been transferred on a loan basis to this office without a WO.
- TRANSFER - Notifies COEP that the equipment has been transferred to this office without a WO.

When the transaction is completed, the cursor returns to the *Sl#* field.

### 10.4.3 Retirements

Equipment being retired (removed) with a WO is scanned out of the office using the *Work Order Menu - Retirements* screens. The *Retirements* screens are accessed from the *Work Order Menu*.



## 10. Data Collection Screens, continued

---

### 10.4.3 Retirements, continued

There are two possible sets of screens for Retirements. Which set is displayed is determined by the Region's System Administrator. Both sets of screens are shown in this section as Option 1 and Option 2.

#### Option 1

RETIREMENTS	
Pit: _____	WO#: _____
BSN: _____	
To Reuse?(Y/N) _	

#### Option 2

RETIREMENTS	
Pit: _____	WO#: _____
P# _____	
I#: _____	



RETIREMENTS	
BSN: _____	
To Reuse?(Y/N) _	

input the required information and press <enter> for each prompt.

Standard field requirements apply, with special requirements upon the *Work Order* field. For this transaction, the WO number must be legitimate and fit one of the following patterns:

- NACNAA where N = Numeric, A = Alpha, and C = Alpha or Numeric Character except the Letter 0;
- OR
- NFNNNN where N = Numeric and F = Numeric digit 2 or 5 (Hawaii only).

Any other type of input to the *Work Order* field (for this type of transaction) is rejected by the program.

**NOTE: If the To Reuse? prompt is answered N, the equipment is being junked.**

When the transaction is completed, the cursor returns to the BSN field for Option 1 and the P# field for Option 2.

## 10. Data Collection Screens, continued

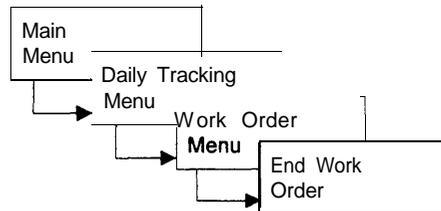
---

### 10.4.3 Retirements, continued

Because of reporting requirements, Property Operations records whole or entire office retirements at the new office's in-service date. Therefore, **ONLY** whole switch removals are NOT to be bar coded out. This applies to host switches and remotes down to the RSU level. However, the retired circuit equipment associated with the switch conversion must still be bar coded out.

### 10.4.4 End Work Order

The *End Work Order* transaction notifies COEP that all equipment on this particular WO has been bar coded. For additions, this transaction indicates all equipment has been scanned into the office. Similarly for retirements, all equipment has been scanned out of the office. The *End Work Order* screen is accessed from the *Work Order Menu*.



```
BAR CODING COMPLETE
For Work Order
Plt: _____ WO#: _____
```

Input the required information and press <enter> for each prompt.

For this transaction, the *Work Order* number must be legitimate and fit one of the following patterns:

- NACNNAA where N = Numeric, A = Alpha, and C = Alpha or Numeric Character except the Letter 0;
- OR
- NFNNNNN where N = Numeric and F = Numeric digit 2 or 5 (Hawaii only).

The program rejects any other type of input to the *Work Order* field (for this type of transaction).

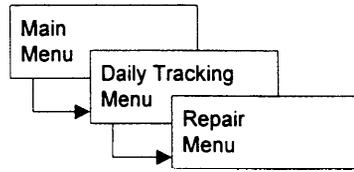
After the transaction is stored, the cursor returns to the *Plt* field.

# 10. Data Collection Screens, continued

---

## 10.5 Repair Menu

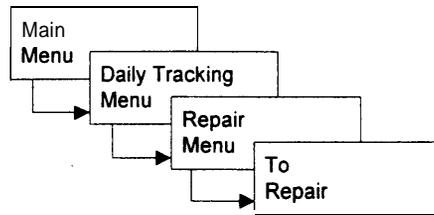
The *Repair Menu* is accessed from the *Daily Tracking Menu*.



<b>1. TO REPAIR</b>
<b>2. FROM REPAIR</b>
Select:            X = EXIT

## 10.51 To Repair

Scan equipment sent in for repair out of the office using the To Repairscreens. Upon upload to COEP/COEMOD, the data is sent to ERS where it is processed and a replacement card sent on its way back to the CO or ICP location without waiting for the defective card to arrive at the ERS Center. The To Repair transaction screens are accessed from the *Repair Menu*.



<b>TO REPAIR FROM:</b>
Plt: _____
SPlt: _____
Budget Center: _____

↓

P# _____
I# _____
BSN: _____
ERO#: _____

Input the required information and press <enter> for each prompt.

# 10. Data Collection Screens, continued

---

10.5.1

## To Repair, continued

Standard field requirements apply.

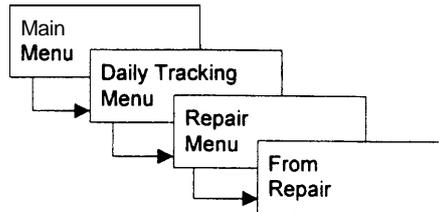
The Budget Center is the Budget Center code for the user's work group.

The Electronic Repair Order Number is an eight-character authorization number found on the ERO tag that ERS uses to track the card through the repair center. This is ERS's WO number.

When the transaction is completed, the cursor returns to the P# field on the second screen.

## 10.52 Return From Repair

All equipment returned from repair requires bar coding to the bay, shelf, and slot level using the *From Repair* screens. The *From Repair* screens are accessed from the *Repair Menu*.



<b>FROM REPAIR TO:</b>	
Pit: _____	SPit: _____
ERO#: _____	
Bay: _____	

↓

Shlf: _____	Slit: _____
P# _____	
I#: _____	
BSN: _____	

Input the required information and press <enter> for each prompt.

Standard field requirements apply. Shelf and slot information is required unless there isn't a shelf and slot (i.e., ICP cabinet). A slot cannot exist without a shelf.

## 10. Data collection Screens, continued

---

### 10.52 Return From Repair, continued

The Electronic Repair Order Number is the eight-character authorization number that corresponds to the ERO number for the card that was sent in for repair. This number is the same as Electronic Repair Services W/O # shown on their Packing List. The ERO number is also found on ERS's Ship Label which is affixed to each individual package beside the words: **WORK ORDER:**.

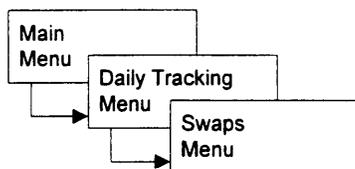
When the transaction is completed, the cursor returns to the ERO# field on the first screen.

### 10.6 Swaps Menu

Equipment replaced (swapped out) on modification (SVR-type activity) WOs or Class A changes, where the equipment is replaced by circuit pack rotation, requires bar coding. When the equipment being swapped does not involve a one-for-one swap of cards (i.e., 5 for 4, 2 for 4, etc.), use the *Swaps* screens (*Swap Outs* and *Swap Ins*) described in Sections 10.6.1 and 10.6.2.

If the change out involves a one-for-one swap of cards, where the replacement card is in hand, use the CHANGE BSN screens (see Section 10.3.2).

The *Swaps Menu* is accessed from the *Daily Tracking Menu*.

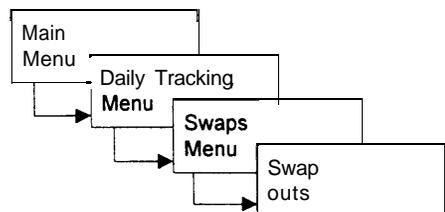


```
1. SWAP OUTS
2. SWAP INS

Select:          X = EXIT
```

### 10.6.1 Swap Outs

Equipment replaced (swapped out) requires bar coding using the *Swap Outs* screen. The *Swap Outs* screen is accessed from the *Swaps Menu*.

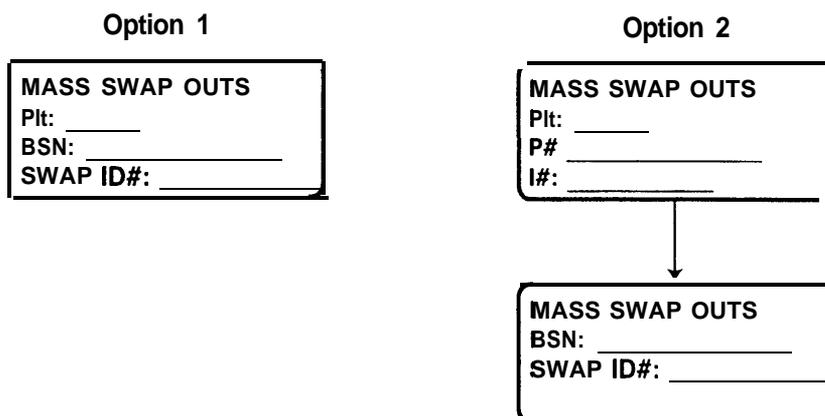


# 10. Data Collection Screens, continued

---

## 10.6.1 Swap Outs, continued

There are two possible sets of screens for Swap Outs. Which set is displayed is determined by the Region's System Administrator. Both sets of screens are shown in this section as Option 1 and Option 2.



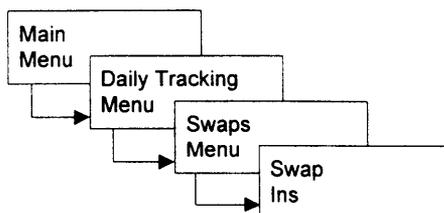
Input the required information and press **<enter>** for each prompt.

Standard field requirements apply. The Swap ID number is any unique number up to eight characters in length used to identify a group of Swap Outs and Swap Ins for a particular office. Do not duplicate Swap ID numbers within the Plant - SubPlant.

When the transaction is completed the cursor returns to the BSN field.

## 10.6.2 Swap Ins

Replacement equipment swapped in must be scanned to the bay, shelf, and slot location levels. The Swap *Ins* transaction screens are accessed from the *Swaps Menu*.



## 10. Data Collection Screens, continued

---

### 10.6.2 Swap Ins, continued

MASS SWAP INS	
Plt: _____	Splt: _____
Swap ID#: _____	
Bay: _____	

↓

Shlf: _____	Slit: _____
P# _____	
I# _____	
BSN: _____	

Input the required information and press <enter> for each prompt.

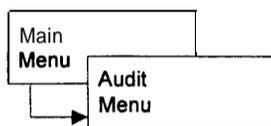
Standard field requirements apply. Shelf and slot information is required unless there isn't a shelf and slot (i.e., ICP cabinet). A slot cannot exist without a shelf.

The Swap ID number is a control number up to eight characters in length used to identify a group of Swap Outs and Swap Ins for a particular office. Do not duplicate Swap ID numbers within the Plant - SubPlant.

When the transaction is completed, the cursor returns to the *Slit* field

### 10.7 Audit Menu

The *Audit Menu* is accessed from the *Main Menu*.



1. SPOT
2. WHOLE BAY
3. WHOLE OFFICE
Select: _            X = EXIT

The purpose of equipment audits is threefold. First, an audit verifies bar coding compliance (customer operations, COEC, Network reliability, etc.). Second, an audit verifies the accuracy of the COEP/COEMOD database and third, but equally important, an audit updates the database with any changes that are found. Therefore, equipment audits are an important step in ensuring that the database is maintained at a high level of accuracy.

Because audit file processing requires manual COEP intervention, the COEP group should be contacted (see contact list in Section 2.5) prior to initiating any audits and advised of the location and date of the audit.

All three audit transaction types share the same basic input screens. Differences are explained in the following sections.

## 10. Data Collection Screens, continued

---

### 10.7 Audit Menu, continued

NOTE: The proper selection of audit type is critical because of the extreme differences in the way the three types are processed by COEP/COEMOD.

After making a selection from the *Audit Menu*, the user is prompted for the current *Company Code* and *Operator ID*.

```
Company Code: ___
Valid 'XX' Codes:
9YY 9ZZ
F1 = New State  F4 = BkUp
```

A list of all the company codes for the currently active state is displayed.

Make a selection from the list and press <enter>. The following screen displays:

```
Region: XX Cmpy: 9YY
Your Oper ID:
(First and Last%%)
ENTER = Accept F4 = BkUp
```

Enter your initials (first and last name) and press <enter>. The following screen will display:

```
1. MAINTENANCE
2. CONSTRUCTION
3. VENDOR
Select: _ F4 = BkUp
```

Make a number selection from the list and press <enter>. The first letter of the User's work group will be substituted for the number selected and appended to the beginning of the operator's initials.

NOTE: <F7> can be pressed at any prompt (while in the *Audit* transaction screens) to set that prompt as the one to which the cursor returns after storing a completed transaction. The *Slt* prompt is always the default when first entering the *Audit* transactions.

#### 10.7.1 Spot Audit

A Spot Audit consists of scanning a number of cards in an office and then uploading the data to COEP/OEMOD. A Spot Audit ranges from scanning a few cards that are suspected of having been moved, up to a random sampling of the entire office. The COEP program verifies the data and makes any changes in the database that are necessary.

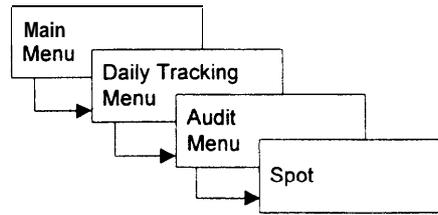
## 10. Data Collection Screens, continued

---

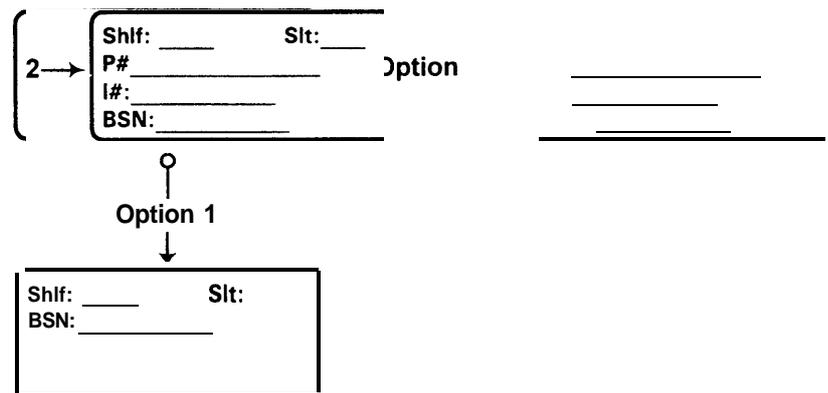
### 10.7.1 Spot Audit, continued

In addition, an audit report is generated that is forwarded to the Customer Operations Coach. Refer to GTE Telephone Operations Practice 007-220-001 for additional information on audits and operational reviews.

The Spot Audit transaction screens are accessed from the *Audit Menu*.



There are two possible sets of screens for Spot Audits. The difference between the two sets has to do with the use of Part Number and Issue fields. Which set is displayed is determined by the Region's System Administrator. Both sets are shown in this section as Option 1 and Option 2.



Input the required information and press <enter> for each prompt.

Standard field requirements apply. Shelf and slot information is required unless there isn't a shelf and slot (i.e., ICP cabinet). A slot cannot exist without a shelf.

When the transaction is completed, the cursor returns to the *Slit* field, unless another prompt has been chosen using the <F7> key as previously described.

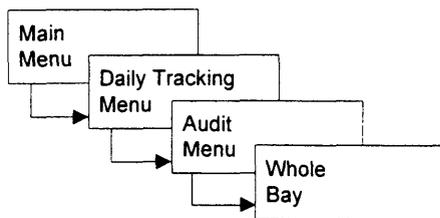
# 10. Data Collection Screens, continued

---

## 10.7.2 Whole Bay Audit

A Whole Bay *Audit* consists of auditing ALL equipment in a particular bay. This includes the bay itself, all shelves, and all cards. An example of Whole Bay Audits are the Customer Operations SITES Routine Audits. Upon upload, this data updates the COEP/OEMOD database with the changes. Equipment showing in the database for that bay, but not reported on the Whole Bay Audit, is flagged in the database for COEP query/disposition purposes. Refer to GTE Telephone Operations Practice 007-220-001 for additional information on audits and operational reviews.

The Whole Bay Audit transaction screens are accessed from the *Audit Menu*.



<b>WHOLE BAY AUDIT</b>	
Plt:	
SPlt: ___	
Bay: _____	

↓

Shlf: _____	Slf: _____
P# _____	
I# _____	
BSN: _____	

Input the required information and press <enter> for each prompt.

Standard field requirements apply. Shelf and slot information is required unless there isn't a shelf and slot (i.e., ICP cabinet). A slot cannot exist without a shelf.

When the transaction is completed, the cursor returns to the *Slf* field, unless another prompt has been chosen using the <F7> key as previously described.

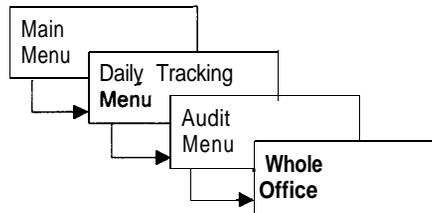
## 10. Data Collection Screens, continued

---

### 10.7.3 Whole Office Audit

A *Whole Office Audit* consists of auditing **ALL** equipment in the office. This includes all switching, transmission, power, etc. Upon upload, this data updates the COEP/COEMOD database with the changes. Equipment showing in the database for that office, but not reported on the Whole Office Audit, is flagged in the database for COEP query/disposition purposes.

The *Whole Office Audit* transaction screens are accessed from the *Audit Menu*.



<b>WHOLE OFFICE AUDIT</b>	
Pt:	_____
SPt:	_____
Bay:	_____

↓

Shlf:	_____	Slt:	_____
P#	_____		
I#:	_____		
BSN:	_____		

Input the required information and press <enter> for each prompt.

Standard field requirements apply. Shelf and slot information is required unless there isn't a shelf and slot (i.e., ICP cabinet). A slot cannot exist without a shelf.

When the transaction is completed, the cursor returns to the Slt field, unless another prompt has been chosen using the G7> key as previously described.

# 11. Communications

---

## 11.1 Overview

The Trakker application provides menus and screens to transmit data to COEP/COEMOD and to receive program updates and downloads. The Trakker is placed in the communications dock to provide a stable power source during remote communications sessions. The communications dock is connected to an external modem.

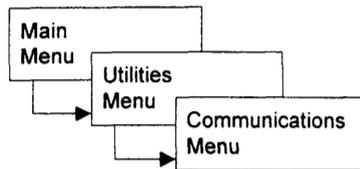
## 11.2 Guidelines

General guidelines for the upload process are as follows:

- Trakker data can be transmitted at any time, 24 hours a day.
- If the Trakker memory becomes full (360 record capacity), the program displays a warning notice. Transmit the data file as soon as possible since no further data can be collected.
- The implementation of the Spare Card Inventory Management Program requires normal routine activity to be uploaded at the end of each shift. Interfaces to CNAS, ERS, etc. also require more timely updates of the database.

## 11.3 Communications Menu

The upload/download process is accessed through the *Communications Menu*.



```
COMMUNICATIONS MODE
1. DIRECT (CABLE)
2. REMOTE (MODEM)
Select: _      X= EXIT
```

Choice number 1 (Direct) is used only to transmit data to a PC via a cable. It is the appropriate choice if the Laptop Audit or Ongoing Tracking Programs are being used (see Section 11.4).

Choice number 2 (Remote) is used when transmitting data directly to COEP/COEMOD or receiving a new program download via modem. This is the normal mode for uploading data or downloading a program update (see Section 11.5).

# 11. Communications continued

---

## 11.3 Communications Menu, continued

After selecting the appropriate communications mode from the *Communications Menu*, the screen displays the number of records in the database. This option can also be used to check the number of records in the database without actually starting an upload.

```
NUMBER OF RECORDS
IN DATABASE: XX

Press Enter
```

Press <enter> to proceed to the selected mode.

## 11.4 Direct Mode

**NOTE : Ensure that the appropriate cable (Item ID #: 316527) is used to connect the Trakker to the PC when using direct mode.**

If Direct mode was selected a confirmation prompt is presented.

```
READY TO
CONNECT? (Y/N) _
```

Enter <Y> to proceed, or <N> to return to the *Communications Mode* screen.

If <Y> was chosen, the Trakker screen indicates that data is being transmitted.

Upon completion the following screen displays:

```
Clear Data? (Y/N) _
```

Confirm that the data was received in the PC database before clearing (Refer to GTE Telephone Operations Practice 007-220-003). Enter <Y> to proceed, or cN> to return to the *Communications Mode* screen without clearing the data file.

## 11.5 Remote Mode

If Remote mode was chosen, select a modem speed that is equal to or less than the speed of the modem being connected.

```
MODEM SPEED
1. 1200    3.9600
2. 2400    4.19200
Select: _      X = EXIT
```

# 11. Communications continued

---

## 11.5.1 Remot eMode- Host Telephone Number

After selecting the modem speed, prompts are displayed that ask for the host computer telephone number and the plant code from which the Trakker is transmitting. The telephone number last used is always shown by default, unless the Company Code/Region has changed since the last upload. In that case, the default host telephone number appears as the default, and any applicable prefixes (9, 1, etc.) must be added.

```
ENTER TELEPHONE#  
XXXXXXXXXXXX  
TRANSMITTING FROM  
PLANT: _____
```

**NOTE :** The host computer telephone number is 972-719-7256.

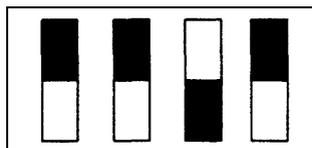
## 11.5.2 Remot eMode- Ready to Connect

A confirmation prompt is then presented. At this point the upload/download can be easily aborted by pressing <N> to return to the *Communications Mode Menu*.

```
READY TO  
CONNECT? (Y/N) _
```

Before responding <Y> to the *Ready To Connect* Prompt, ensure that:

- The Trakker is firmly in place in the Communications Dock (see the following diagram for proper dip switch settings on back of the Communications Dock)



Switch Block on back of Communications Dock (1,2 and 4 up, 3 down).

- Power is supplied to the Communications Dock and modem.
- The modem is connected to the Communications Dock.
- A dedicated telephone line, preferably without call waiting, is connected to the modem.
- The modem is switched on.

Once the intent to proceed is confirmed, the program initializes the modem and dials out.

**NOTE :** If problems are encountered during communications when using an alkaline battery pack, replace all five batteries. The communications dock will not supply additional power as it does when using aN Nickel Cadmium (NiCad) battery pack.

# 11. Communications continued

---

## 11.5.3 Remote Mode- Host/Trakker Interchange

The program then connects to the host and establishes a user session. During this session the following might occur:

- Trakker clock reset (always).
- Data file transfer (if records exist).
- Transfer count verification (if records transferred).
- User file updates (if updates exist).
- New program download (if new program required).
- Receipt of user messages (if messages exist).

The Trakker screen displays progress messages for each of the listed steps (as applicable). See Exhibit 13 for examples.

## 11.5.4 Remote Mode- File Transfer/ Clearing

If a data file transfer is completed successfully, the following screen displays:

```
Upload Successful.  
Record Count: XXX  
Verified.  
Press Enter
```

Press <enter> and the following screen displays:

```
Upload Successful.  
Record Count: XXX  
Verified.  
Clear Data? (Y/N)
```

If a data file transfer or record count verification is unsuccessful, a screen appears informing the user of the failure. If this occurs, initiate a new communications session.

If there is any question at all about a transfer session, call the Regional Bar Code Help Desk before erasing the file.

**NOTE: The data cannot be recovered once erased!**

**NOTE: The Help Desk contact number can be displayed by pressing <H> then <enter > on any menu.**

# 11. Communications, continued

---

## 11.5.5 Remote Mode- Program Downloading

Perform a new program download as part of the communications session (after the data file is transferred, if applicable). The Trakker and the host programs work in unison to determine if a new program is required. If a new program is required, the following screen appears:

```
New Program Required
Clear Data And
Download Now? (Y/N) _
```

Enter <N> to bypass the download process and proceed with the remainder of the communications session.

Enter <Y> to proceed with the download process. Any data in the Trakker is cleared along with the existing program. The new program is downloaded and compiled. Do not disturb this process until the Main Menu appears.

Exhibit 13 details the screens that are displayed during the communications process. The sequence of events can change depending upon whether the onboard program is current, or if communications difficulties are encountered.

Should difficulty be experienced in the communications process, contact the Regional Bar Code Help Desk for assistance. At times, conditions exist that make error free communications difficult, such as adverse weather conditions or problems on the host computer.

Should a program download via this method fail, the **Ready** prompt might display and the raw download process must be used to renew the program (see Section 11.6).

## 11.6 Raw Download

For a new Trakker, one whose program is not functioning, or where an upgrade from some older Trakker versions (i.e., Version 3.0) are required, perform a raw download using the process described in this section. If the Barcoding Program is still active (displayed), it must be exited and the Trakker returned to the Operating System and a **Ready** prompt displayed before the raw download can be accomplished. Press and hold <ctrl/>+<enter>, release both, then press <E> to exit the Barcoding Program.

Perform a Raw download using the steps listed in the following chart.

# 11. Communications, continued

## 11.6 Raw Download, continued

Step	Action																						
1	Turn the Trakker on and follow scanning steps #1 thru #4 in Exhibit 2. This sets up the Trakker and modem to dial in to the host system and download the program. Please note that you must make a choice after scan #2 of either a 2400 or 9600 baud (or greater) modem.																						
2	Immediately place the Trakker in the Communications Dock and press the <enter> key. If the Trakker times out before completing this step, start over at step 1.																						
3	Key ATDT1 9727197256 and press <enter>. Be sure to include any additional digits (9, etc.) as required by the local facility.																						
4	At this point the Trakker directs the modem to dial out and establish a connection on the host computer. Once the connection is made the Trakker screen displays a <b>CONNECT</b> message. Press <enter>. If the cursor drops down and the download process doesn't initialize, press the <enter> key again.																						
5	When the host computer login prompt (login:) appears on the Trakker display, press the <caps> key at the top of the key pad (changes to lower case) and key in your LOGIN ID and press <enter>. Select the login for your Region from the following list: <table border="1"><thead><tr><th>Region</th><th>LOGIN ID</th></tr></thead><tbody><tr><td>California</td><td>dlca</td></tr><tr><td>Florida</td><td>dflf</td></tr><tr><td>Hawaii</td><td>dlhi</td></tr><tr><td>Midwest</td><td>dlmw</td></tr><tr><td>North</td><td>dlno</td></tr><tr><td>Northeast</td><td>dlne</td></tr><tr><td>Northwest</td><td>dlnw</td></tr><tr><td>South</td><td>dlso</td></tr><tr><td>Texas/NM</td><td>dltx</td></tr><tr><td>Virginia</td><td>dlva</td></tr></tbody></table>	Region	LOGIN ID	California	dlca	Florida	dflf	Hawaii	dlhi	Midwest	dlmw	North	dlno	Northeast	dlne	Northwest	dlnw	South	dlso	Texas/NM	dltx	Virginia	dlva
Region	LOGIN ID																						
California	dlca																						
Florida	dflf																						
Hawaii	dlhi																						
Midwest	dlmw																						
North	dlno																						
Northeast	dlne																						
Northwest	dlnw																						
South	dlso																						
Texas/NM	dltx																						
Virginia	dlva																						
6	You will then be prompted to enter a <b>Password</b> : Key in <abcde?> and press <enter>. This lower case password is valid for all login ID's.																						

continued

# 11. Communications, continued

---

11.6

## Raw Download, continued

---

Step	Action
7	Login information will scroll on the screen, and the download process should begin. There will be a series of three beeps followed by the words: Downloading... and then Compiling... Do not remove the Trakker until the program Main Menu appears. If this download and compile process fails (due to timeout, data corruption, bad communications lines, etc.), start the download process again beginning with step 1.
8	Remove the Trakker from the Communications Dock and press the <caps> key. The Trakker is now ready for use.

---

If you experience any difficulties, contact the Regional Bar Code Help Desk. See contact list in Section 2.5.

## 12. Edit Mode

---

### 12.1 Overview

During the data collection process it is occasionally necessary to review and edit the data collected previously. All stored transaction data can be edited using the same screens with which it was collected. The data may be viewed, edited, or deleted. The following limitations apply:

- Deleted records cannot be edited or recovered.
- Only one transaction type can be edited at a time (just as in data collection).
- The same field requirements apply as in data collection.

### 12.2 Entering Edit Mode

While in a data collection screen, press <F1> to signal the program to enter edit mode. A screen message confirms that edit mode has been entered, or if no data of the record type being collected is available, an error message displays.

### 12.3 While In Edit Mode

**The following key assignments are available in edit mode (see also Section 9.3):**

- Press <F1> to **back up one record** at a time.
- Press <F2> to go **forward one record** at a time.
- Press <F3> to **exit edit mode**, back to data entry.
- Press <F4> within a record to **back up one field** at a time.
- Press <enter> within a record to **move forward one field** at a time.
- Press <F5> to enter **field edit mode\***.

**Once in field edit mode, the following assignments apply:**

- Press <F2> to move **cursor left** non-destructively.
- Press <F3> to move **cursor right** non-destructively.
- Press <F4> to **exit field edit mode** and move to the next field.
- Press <enter> to **exit field edit mode** and move to the next field.
- Press <F6> to **delete the displayed record** (this applies only in edit mode).

### 12.4 Edit Mode Alerts

Several messages or indicators are operable while using edit mode.

**Warnings are displayed and/or sounded when:**

- Edit mode has been entered.
- Edit mode has been exited.
- No records are available for edit (at least of the current transaction type).
- The beginning of the file has been reached.
- Exit to menu is attempted (edit mode must be exited first).

**An asterisk (\*) is always displayed in the upper left corner of the display when in edit mode.**

\* Field edit mode is also available in data collection mode.

# 13. Troubleshooting

---

## 13.1 General

If difficulty in operating the Trakker is experienced, contact the Regional Bar Code Help Desk. Do not struggle with an intracetable problem unaided. Many problems can be solved quickly through assistance. See the contact list in Section 2.5.

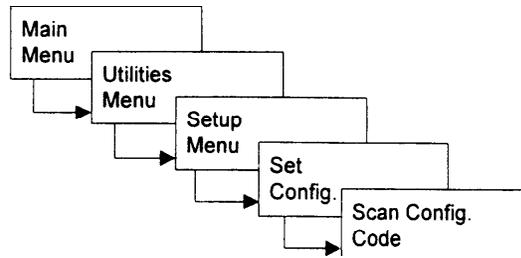
## 13.2 Clear Accumulate Mode

If the Trakker should accidentally be triggered into **Accumulate Mode**, the following symptoms are visible:

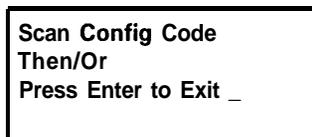
- Successful scans display their data, but it is necessary to press <enter> to move to the next prompt.
- 22L and/or 23L is displayed in the bay and shelf fields after a successful scan.

Clear this condition by following these steps:

Press <ctrl>+<V> This should clear the condition. If not, proceed to the *Set Configuration Menu* as shown:



At the *Set Configuration Menu*, choose *Scan Config Code*:



At this prompt, scan the following bar code label:



The problem should be eliminated.

Press <enter> to exit.

## 13. Troubleshooting, continued

---

### 13.3 Stuck Program

If the Trakker doesn't accept entries and won't go forward or back on a screen, proceed according to the following chart.

---

Step	How to Clear a Stuck Program
1	Turn the Trakker on.
2	Press and hold <ctrl>+<enter>, release both, then press <E>
3	This exits the program back to the Trakker's Operating System while preserving the data.
4	Press and hold <ctrl>+<enter>, release both, then press <B>.

---

This reboots the program. The problem should be eliminated. The collected data **should** be preserved, although some other default data might need re-entering (operator IDS, phone numbers, etc.).

**NOTE: When the Trakker is back at its operating system (pressing <ctrl>+<enter>, <E>), performing any other operation (i.e., scanning barcodes for a raw download) before reactivating the program (pressing <ctrl>+<enter>, <B>) results in lost data.**

If the program is still stuck, an alternative process is also available. Proceed according to the following chart,

---

Step	How to Clear a Stuck Program
1	Turn the Trakker off.
2	Remove the battery pack.
3	Locate the small hole in the plastic "floor" of the battery compartment, to the right of the part number/serial number sticker.
4	Using a pencil or pen, press the black button accessed through the hole.
5	Replace the battery.
6	Turn the Trakker on.
7	Press and hold <ctrl>+<enter>, release both, then press <E>.
8	This exits the program back to the Trakker's Operating System while preserving the data.
9	Press and hold <ctrl>+<enter>, release both, then press <b>43&gt;</b>

---

Once again, the collected data should be preserved, with some default data requiring reentry.

If the program is still stuck, contact the Regional Bar Code Help Desk for further instruction. Refer to the contact list in Section 2.5.

# 14. Battery Maintenance

---

## 14.1 General

The Trakker is powered by a rechargeable NiCad battery pack (see Section 14.5) or an alkaline battery pack (see Section 14.8). A lithium cell is utilized internally to provide backup power (see Section 14.4).

## 14.2 Low Battery Indications

As the battery is used, it discharges down to the minimum operating limits (low battery) designed into the Trakker. Three types of low battery warnings are evident:

- When scanning codes, a double beep (the normal beep followed by a low beep) is furnished.
- When pressing keys, a double click (the normal click followed by a low click) is furnished.
- A blinking, block type cursor.

With these audible and visible warnings, it should always be evident when the battery is low and in need of recharging (or renewing if the pack is alkaline). Replace it with the charged spare and place the low battery on the charger promptly. Since rechargeable batteries will eventually lose the ability to hold a charge, proper maintenance ensures that they last as long as possible and provide dependable service during that time.

Keep a log of when the battery packs are discharged and recharged to ensure that each pack is deep cycled periodically (NiCads only).

**CAUTION: Never leave the Trakker without a good battery pack in place. When the battery pack is removed (or allowed to go totally dead), the program and data are saved by an internal lithium cell. Leaving a Trakker without a good main battery greatly diminishes the life of the lithium cell, increasing the possibility of lost data in the future.**

## 14.3 Battery Testing

When a low battery condition is indicated (as described in Section 14.2) the battery conditions can be tested. Press <ctrl>+<enter>, <E> to exit the program. At the Ready prompt, press <alt>,<B> on the keypad to display one of the following messages:

- Low Batt.
- Low Backup.
- Low Batt Low Backup.

These messages indicate which battery or batteries is low. Take appropriate action as detailed in Sections 14.5 and 14.8. Press <ctrl>+center>, <B> to reboot the system.

## 14.4 Lithium Cell

The lithium cell is not user replaceable. The Trakker must be sent in for service to replace it. Keeping a charged main battery in place at all times ensures that:

- Data is not lost through loss of power.
- The use of the Trakker is not lost to repair.
- The cost of maintaining the Trakker is minimized.

## 14. Battery Maintenance, continued

---

### 14.5

#### Nickel Cadmium (NiCad) Recharging

Follow the procedures shown:

- Do not leave the Trakker in the Communications Dock when not in use. The trickle charger in the unit might overcharge the battery, thus reducing its useful life.
- The spare battery can be charged in the supplied charger/discharger unit. When the battery reaches a state of full charge, the charger steps down to a trickle level and the ready light glows. Remove the battery and store it in a safe place. If the battery remains in the charger/discharger for an extended period, it will likely develop a reduction in capacity and eventually fail. Therefore, never leave a battery in the charger for very long (more than a few hours) **after** it has been fully charged.
- Exchange batteries weekly so that the spare does not sit on the shelf indefinitely (where it slowly discharges) and the battery currently in use receives a full charge.
- Each month, put each battery through the complete discharge-recharge cycle. This minimizes any temporary **memory** conditions that the NiCad battery might have, such as a capacity reduction due to overcharging.
- A total discharge-recharge cycle might take up to 14 hours. A regular charge from a dead or near-dead state takes about 6 hours.

**CAUTION: Never place an alkaline battery pack in the NiCad Battery Charger. The alkaline pack will become stuck.**

### 14.6

#### NiCad Battery Disposal

Ensure that NiCad batteries are disposed of properly. Contact your local GTE Supply point for packaging and shipping procedures. Refer to GTE Telephone Operations Practice 122-205-001.

### 14.7

#### NiCad Battery Replacement

Replacement NiCad batteries, part number 060572 (Item ID 316524) can be purchased through the local GTE Supply point.

### 14.8

#### Alkaline Battery Pack

The alkaline battery pack is renewed with off-the-shelf AA alkaline batteries. Additional spare alkaline packs with batteries, Part number 060573 (Item ID **472093**) can be purchased through the local GTE Supply Point.

**NOTE: Alkaline battery packs may not be used in the 9445 Trakker.**

**NOTE: If problems are encountered during communications when using an alkaline battery pack, replace all five batteries. The communications dock will not supply additional power as it does when using a NiCad battery pack.**

## 15. Trakker Diagnostics

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### 15.1 Self Test

Upon power up, the Trakker unit performs a self test. Although this test is not visible to the user, warning messages are displayed if problems are found in the battery, RAM, ROM, or other system components.

If any warning messages are observed during power up, do not hesitate to contact the Regional Bar Code Help Desk (see Section 2.5). The Trakker might be in need of service.

## 16. Equipment Repair

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### 16.1 General

Follow the procedures in this section when bar code tracking equipment requires service or repair. If it is not clear whether equipment requires repair or just needs adjustment, contact the Regional Bar Code Help Desk (see Section 2.5).

### 16.2 Equipment Preparation

The Trakkers (the 9445 and M402) must be sent to repair with good batteries installed and protective cover removed.

Scanners must be sent to Repair with the Scanner to Trakker interface cable removed.

### 16.3 Repair Centers

All bar code equipment requiring repair must be sent to the local GTE Electronic Repair Center for processing.

# Exhibits

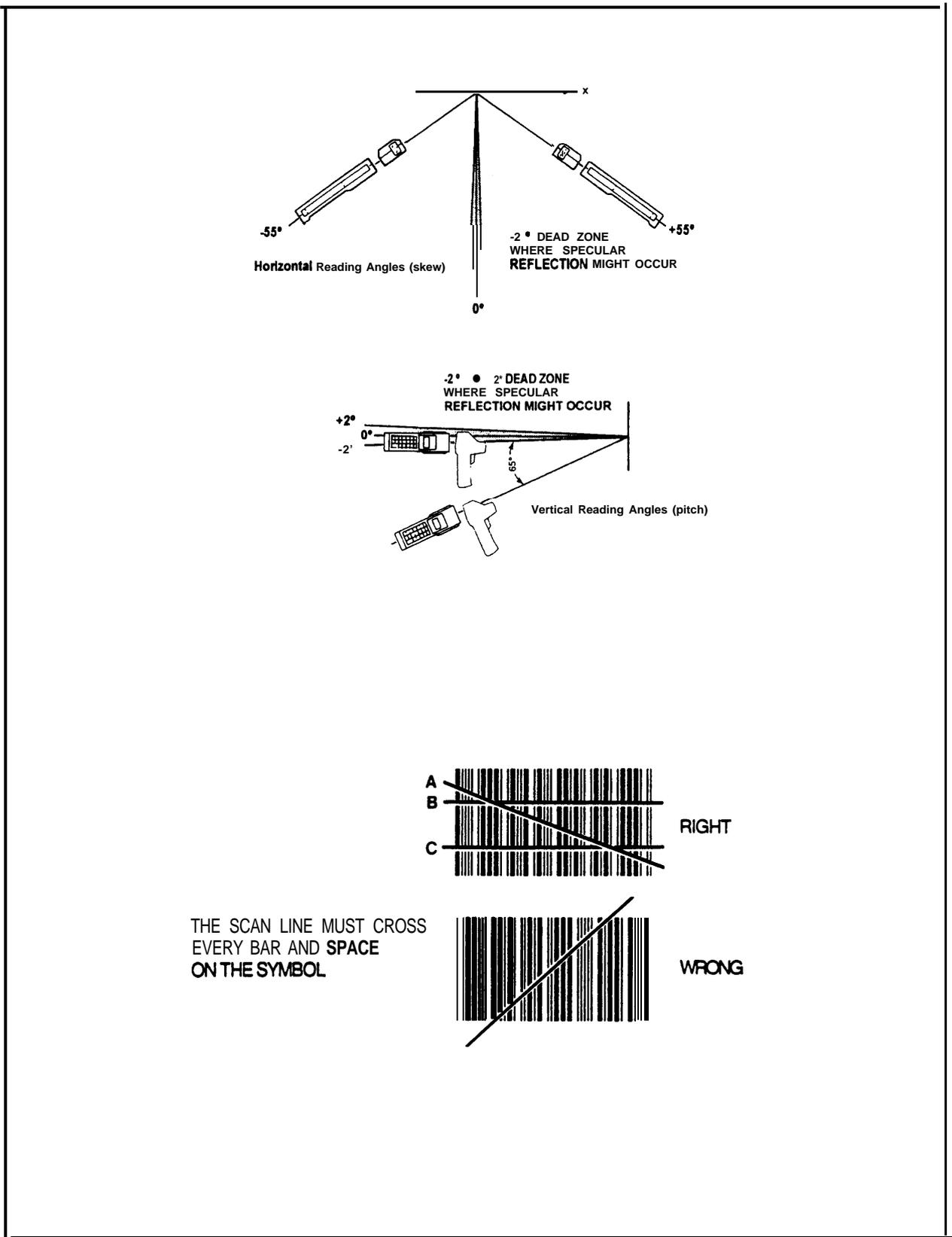


Exhibit 1 - Proper Scanning Angles Drawing

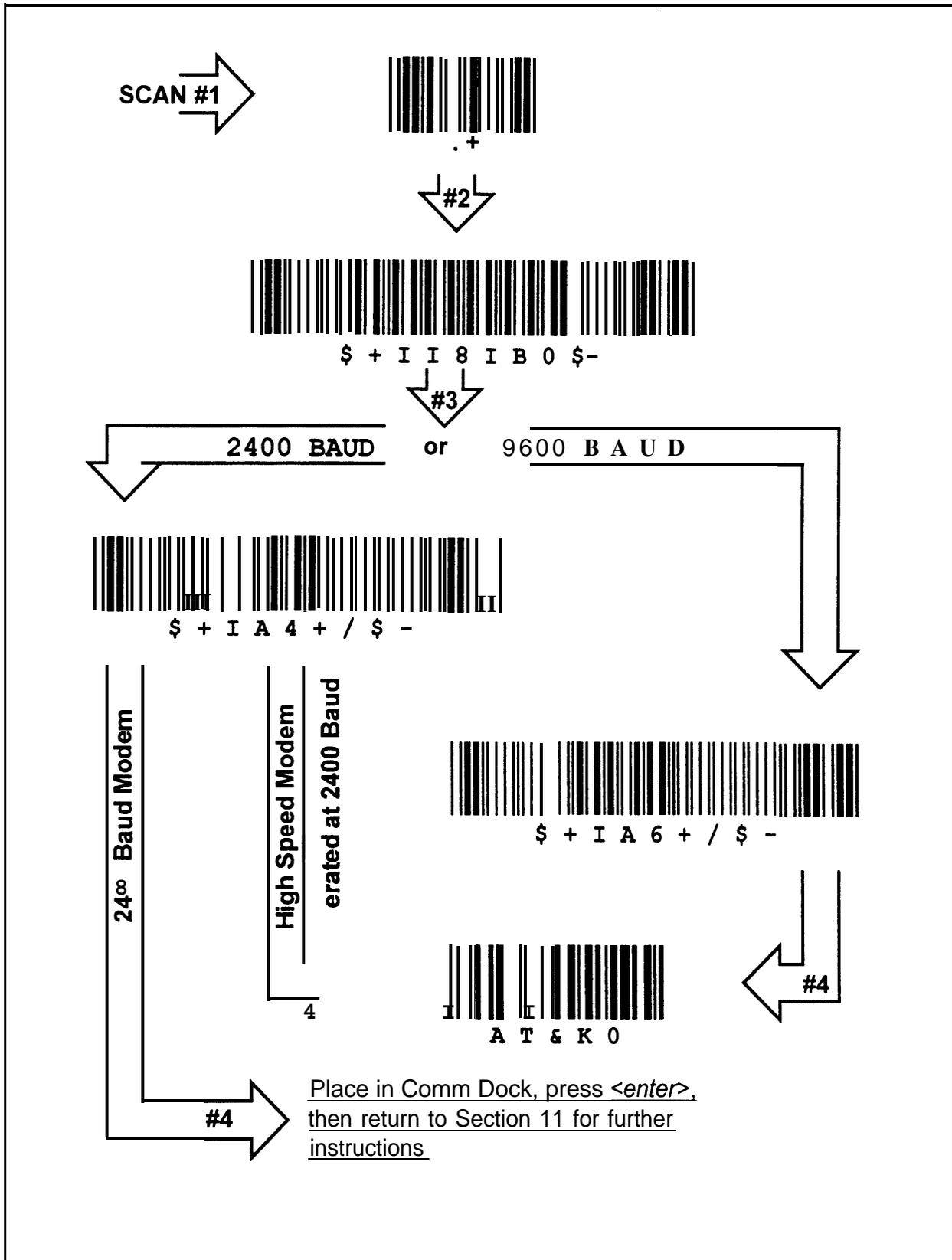


Exhibit 2 - Trakker Configuration Bar Codes For RAW Download

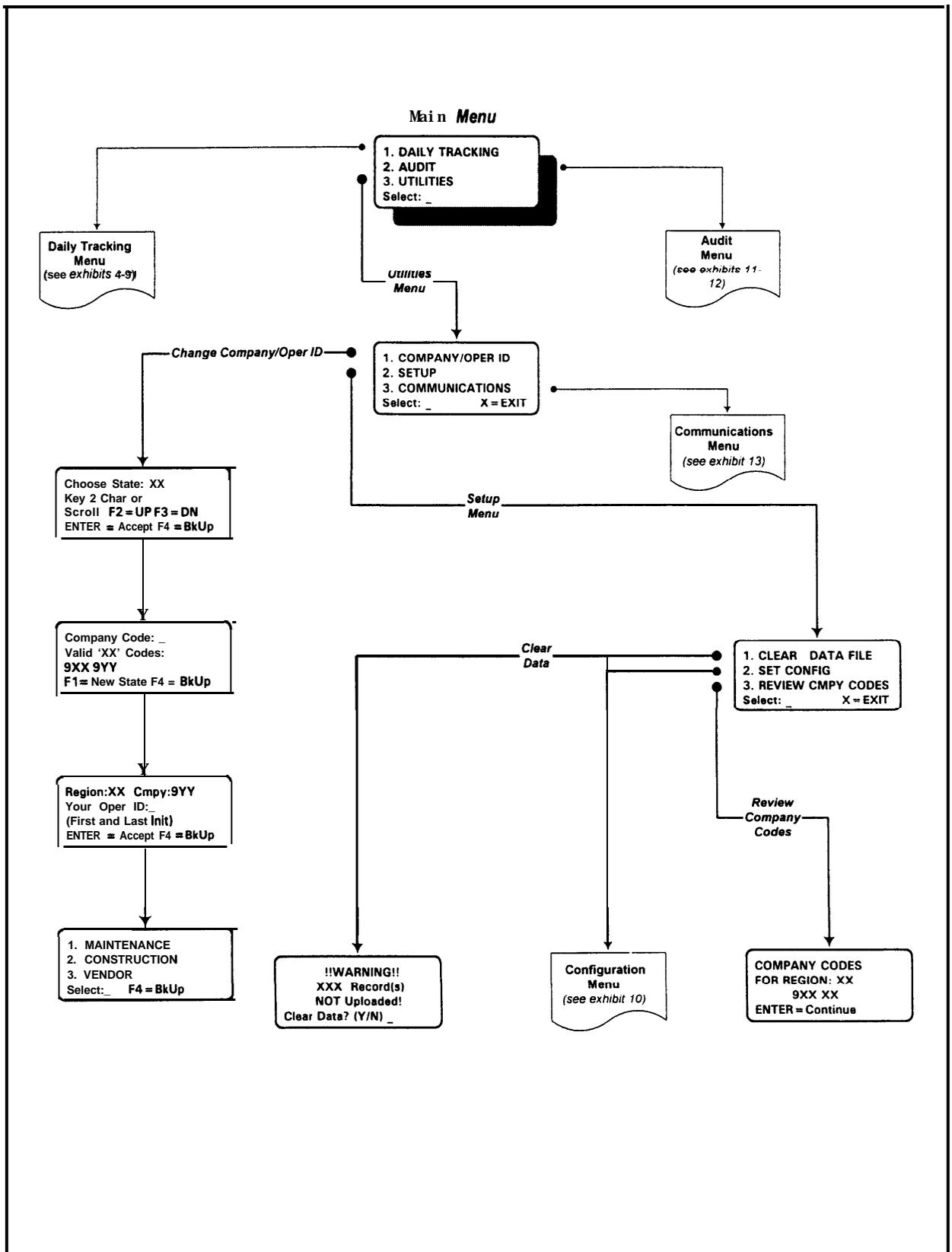


Exhibit 3 - Flow Chart: Main Menu and Utilities

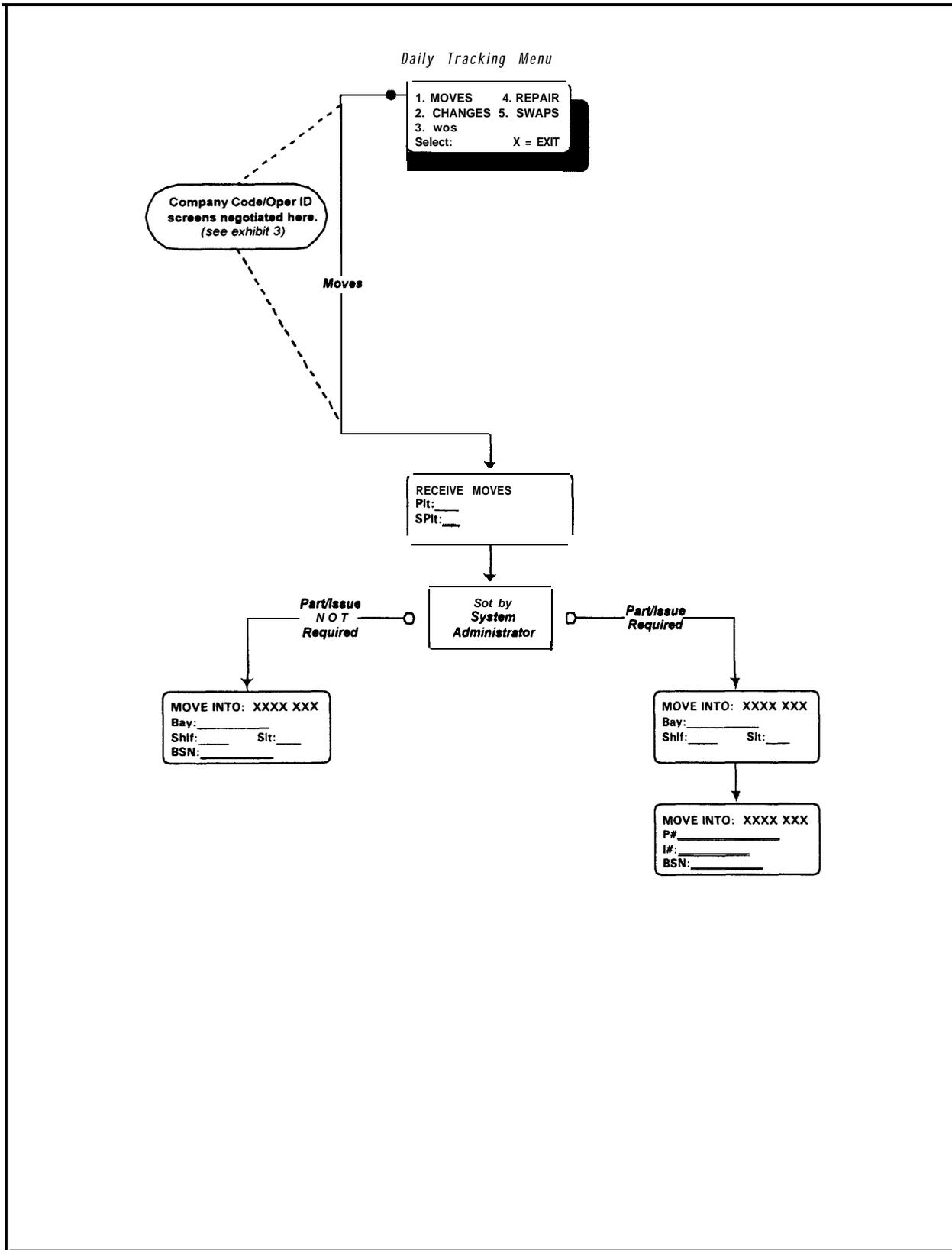


Exhibit 4 - Flow Chart: Daily *Tracking Menu*, Moves

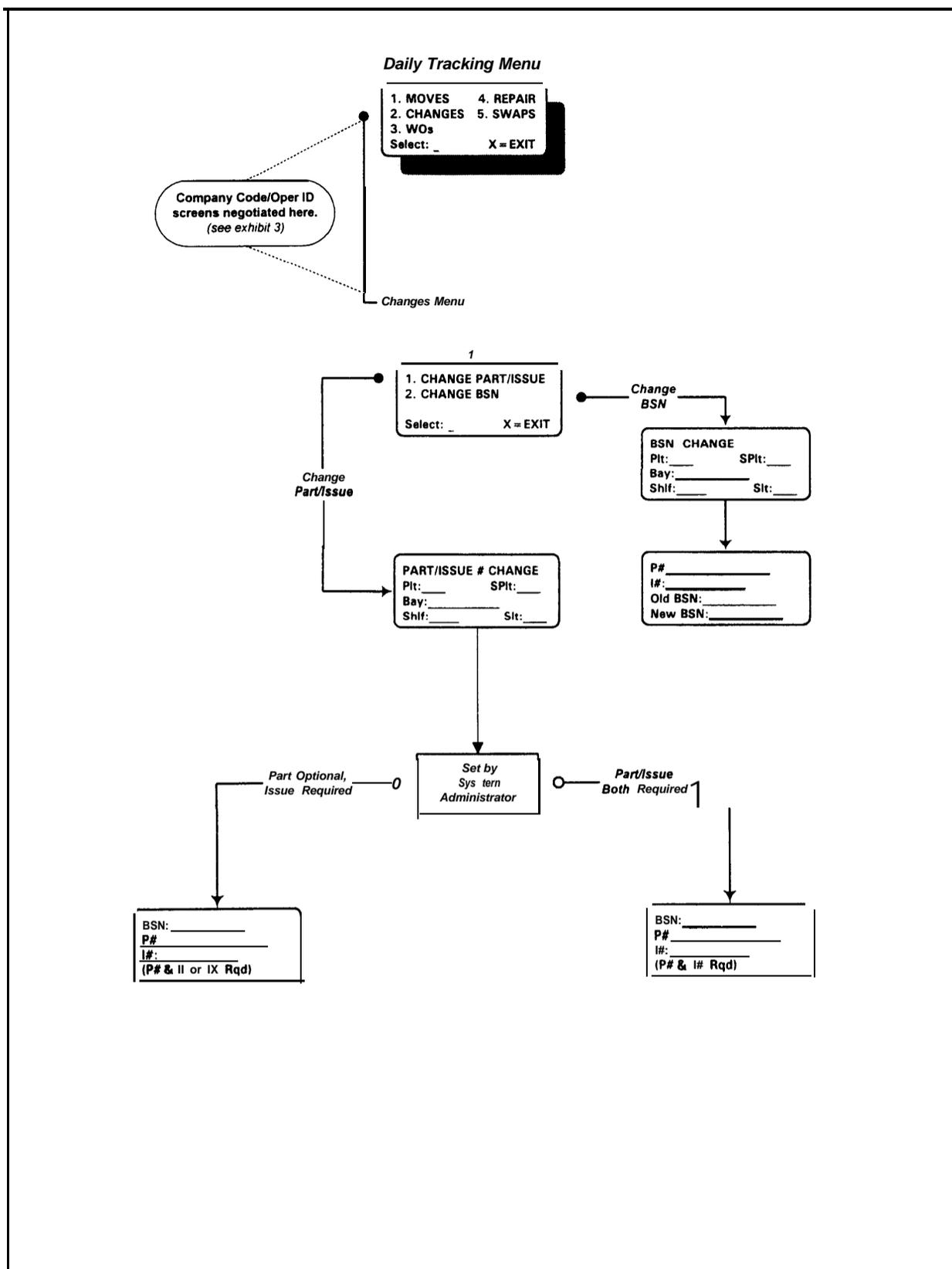


Exhibit 5 - Flow Chart: *Daily Tracking Menu, Changes*

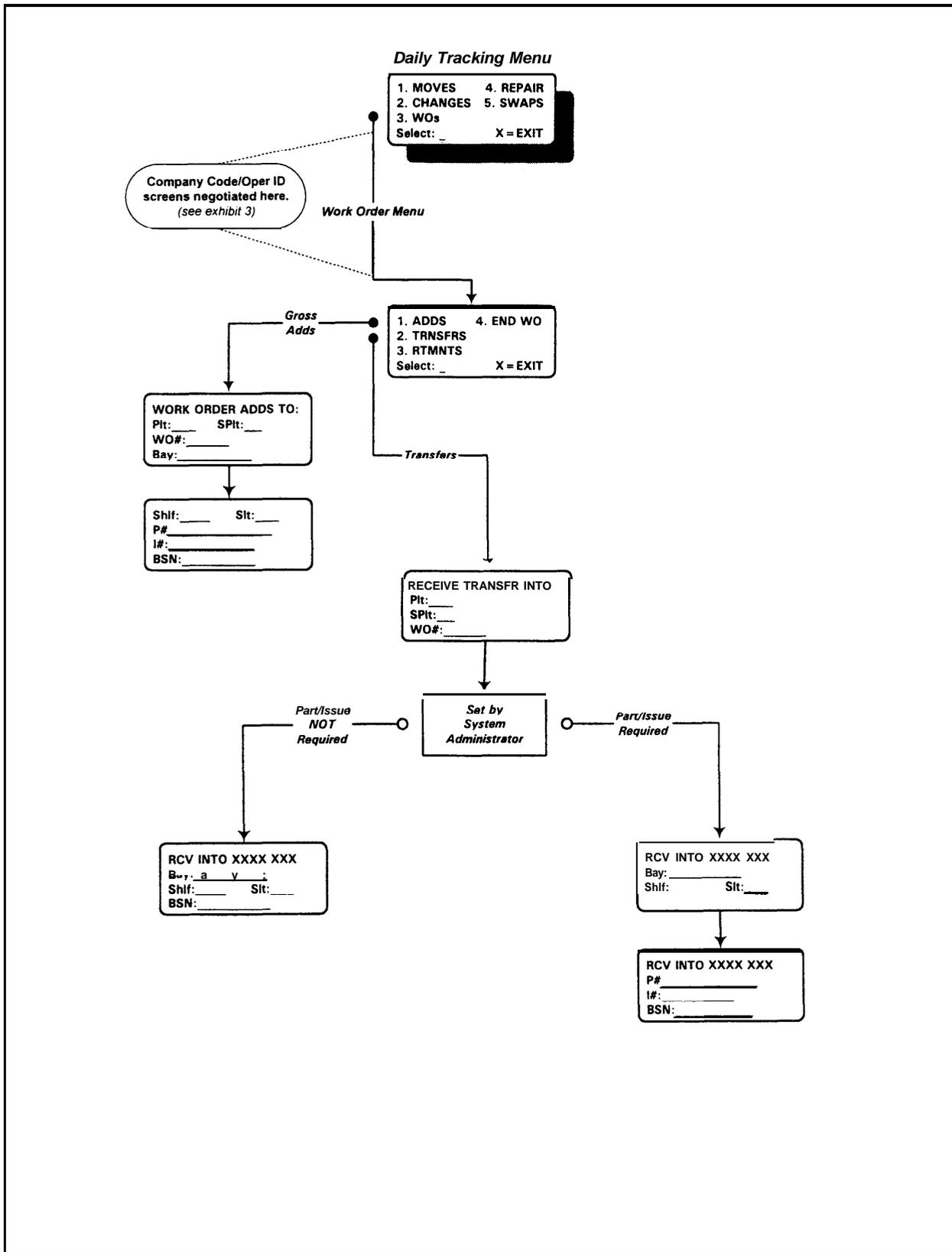


Exhibit 6 - Flow Chart: Work Order Menu, Adds & Transfers

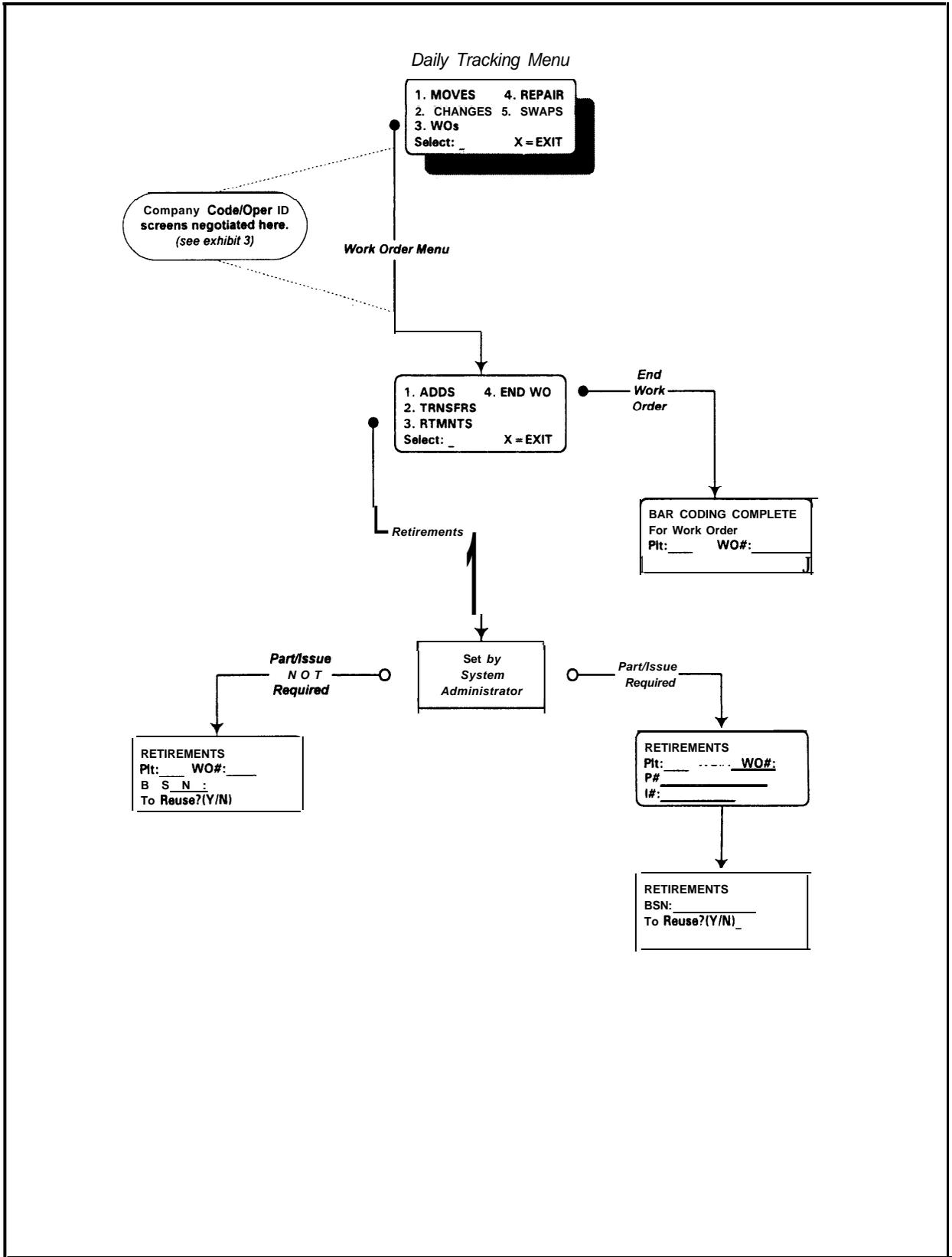


Exhibit 7 • Flow Chart: *Work Order Menu, Retirements & End WO*

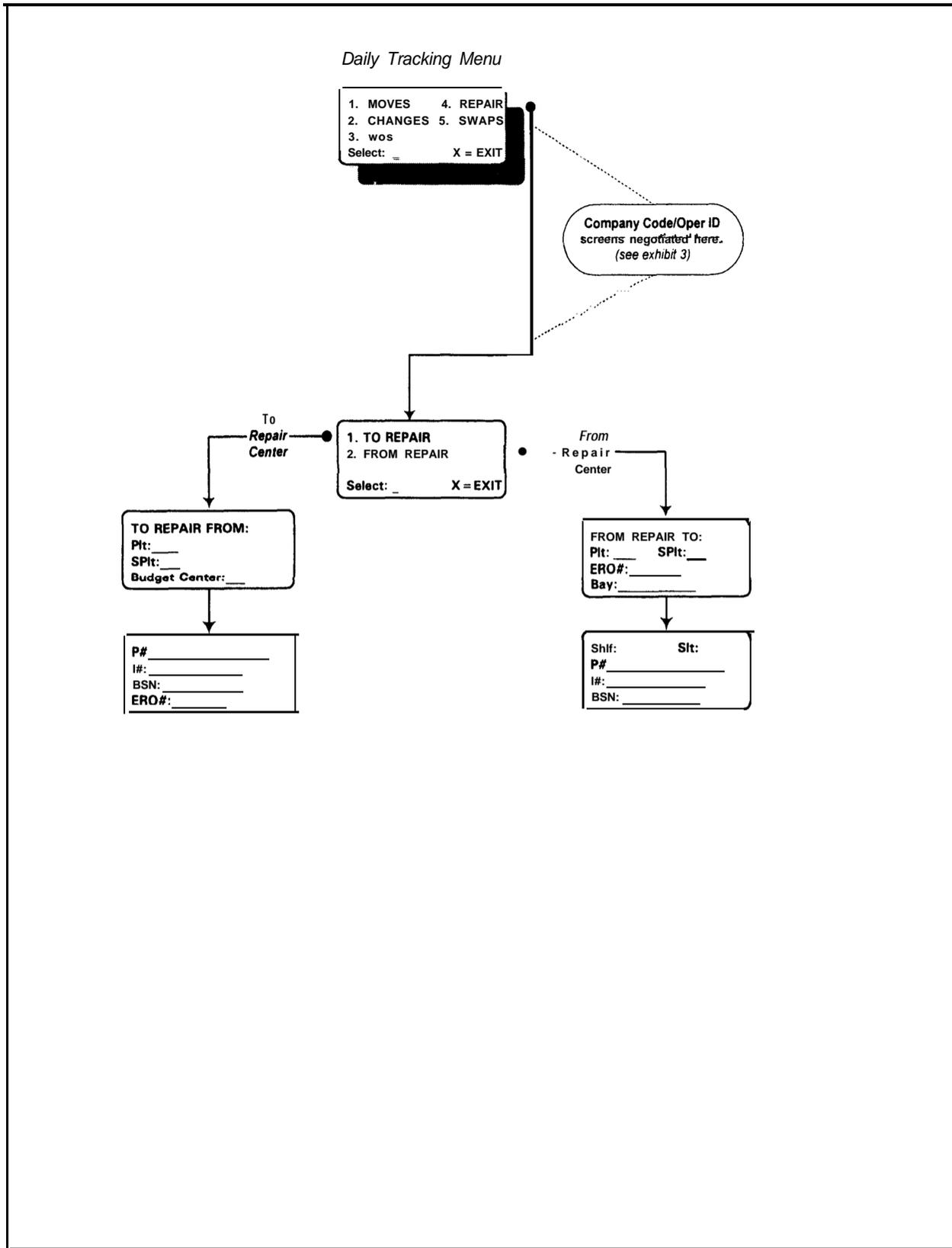


Exhibit 8 • Flow Chart: Repair Menu

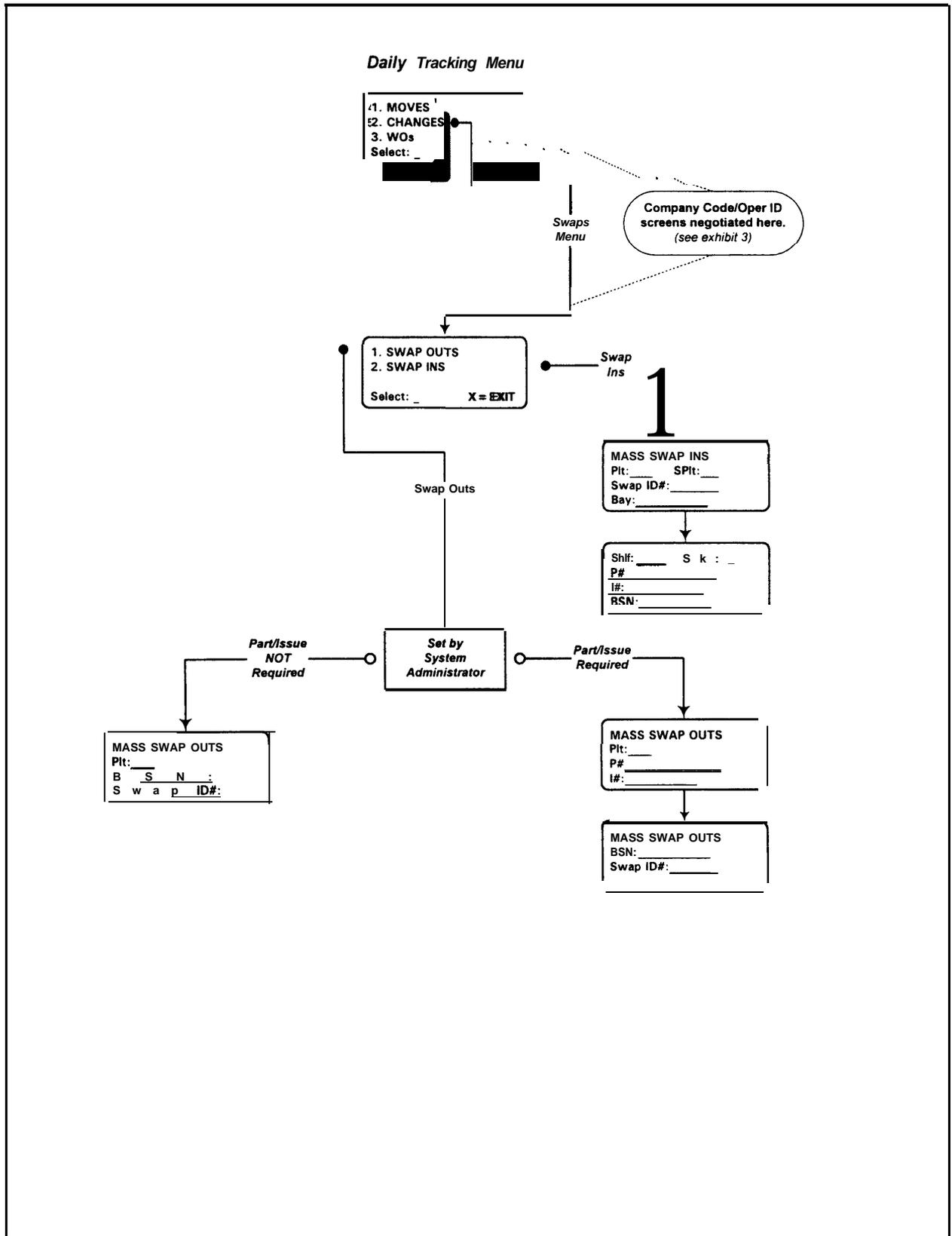


Exhibit 9 - Flow Chart: Swaps Menu

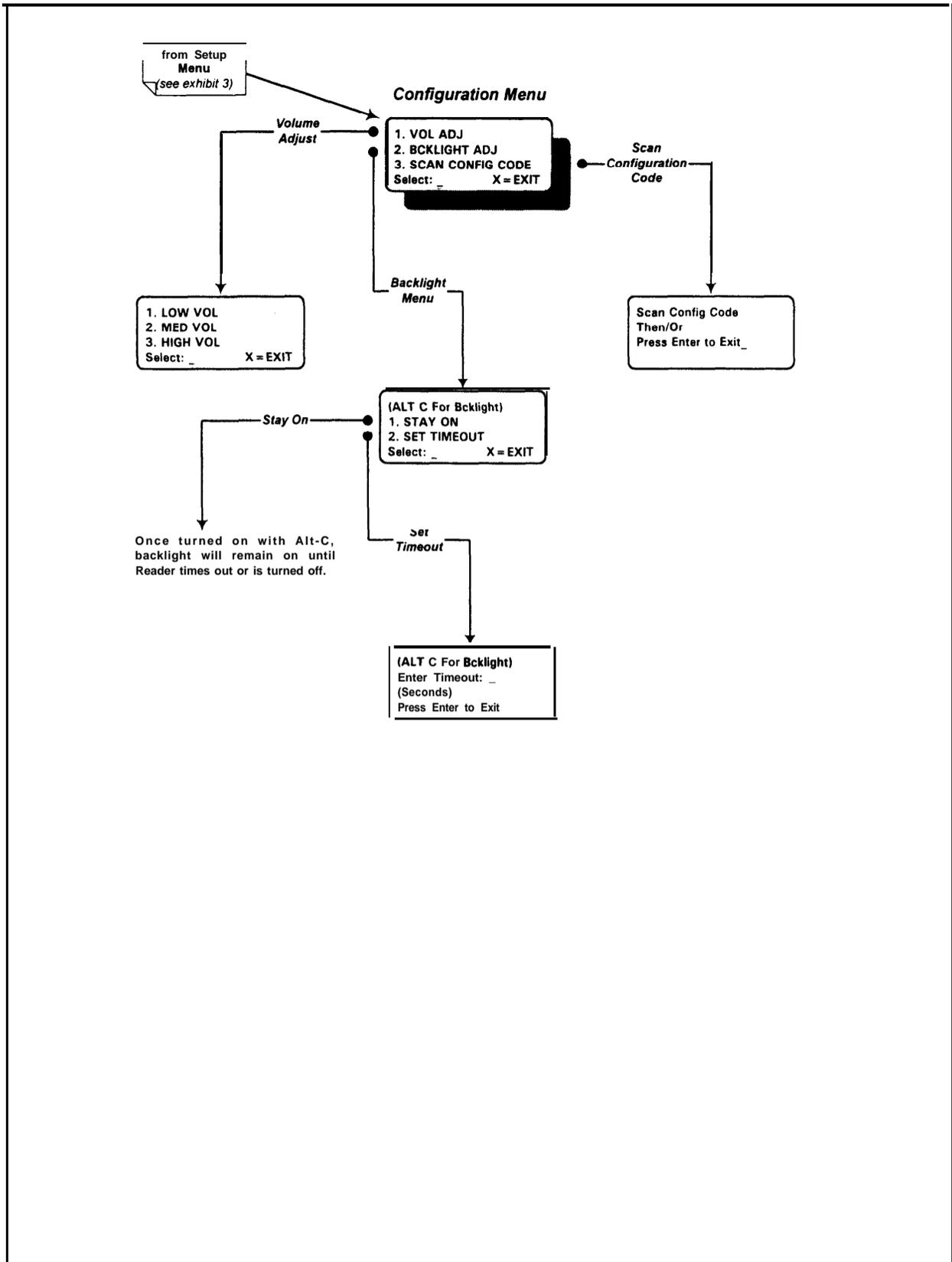


Exhibit 10 - Flow Chart: Configuration Menu

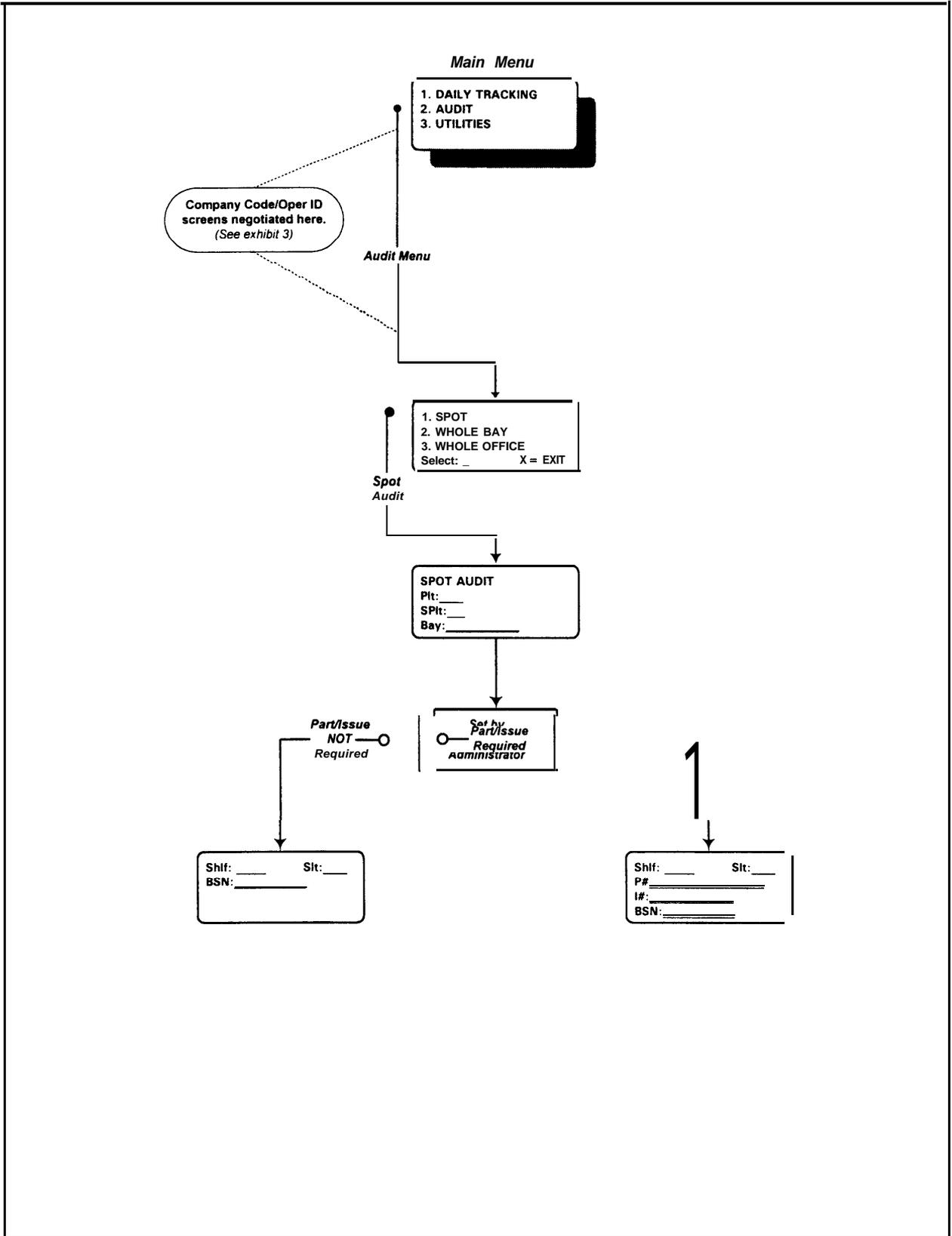


Exhibit 11 - Flow Chart: Audit Menu, Spot

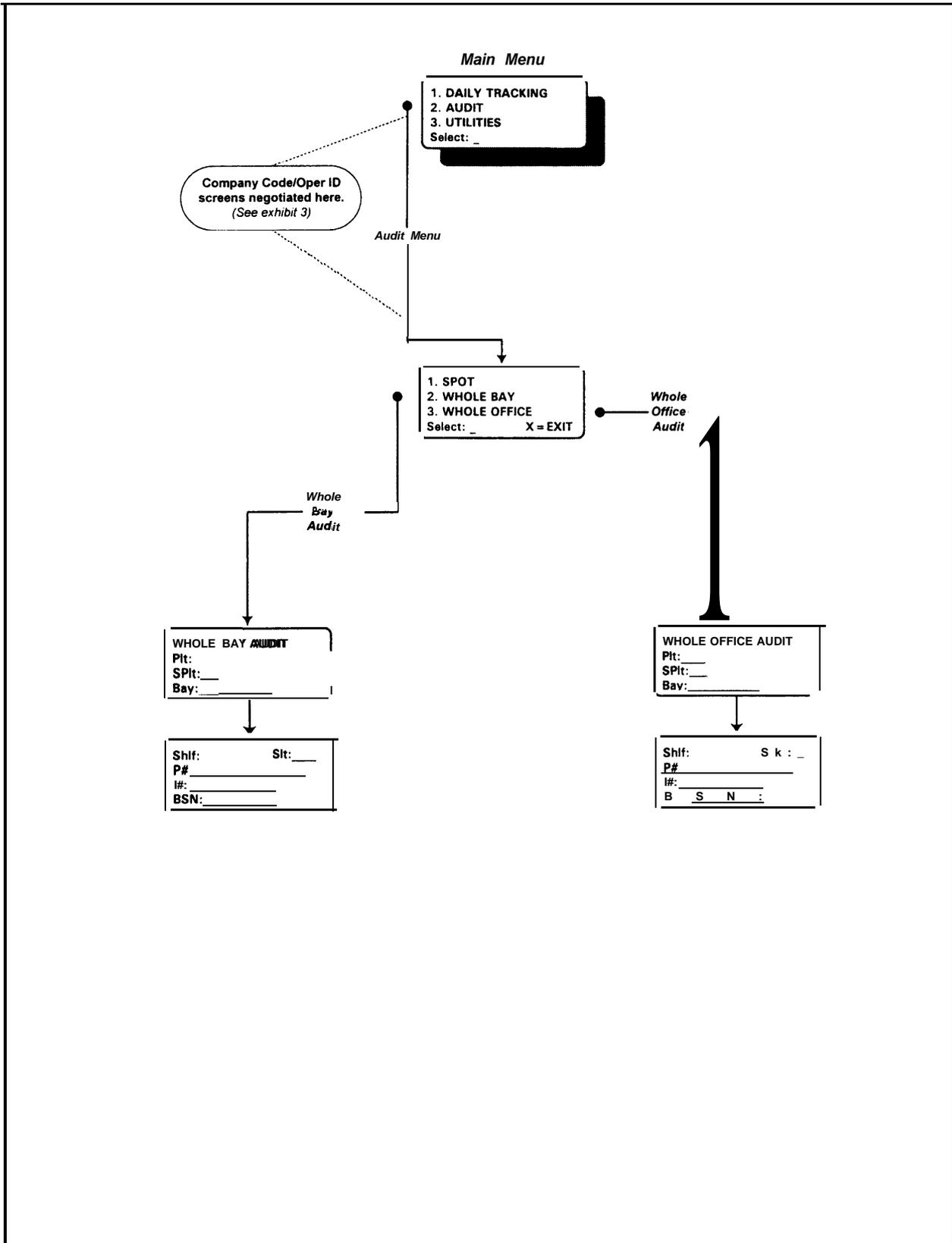


Exhibit 12 - Flow Chart: Audit Menu, Whole Bay & Whole Office

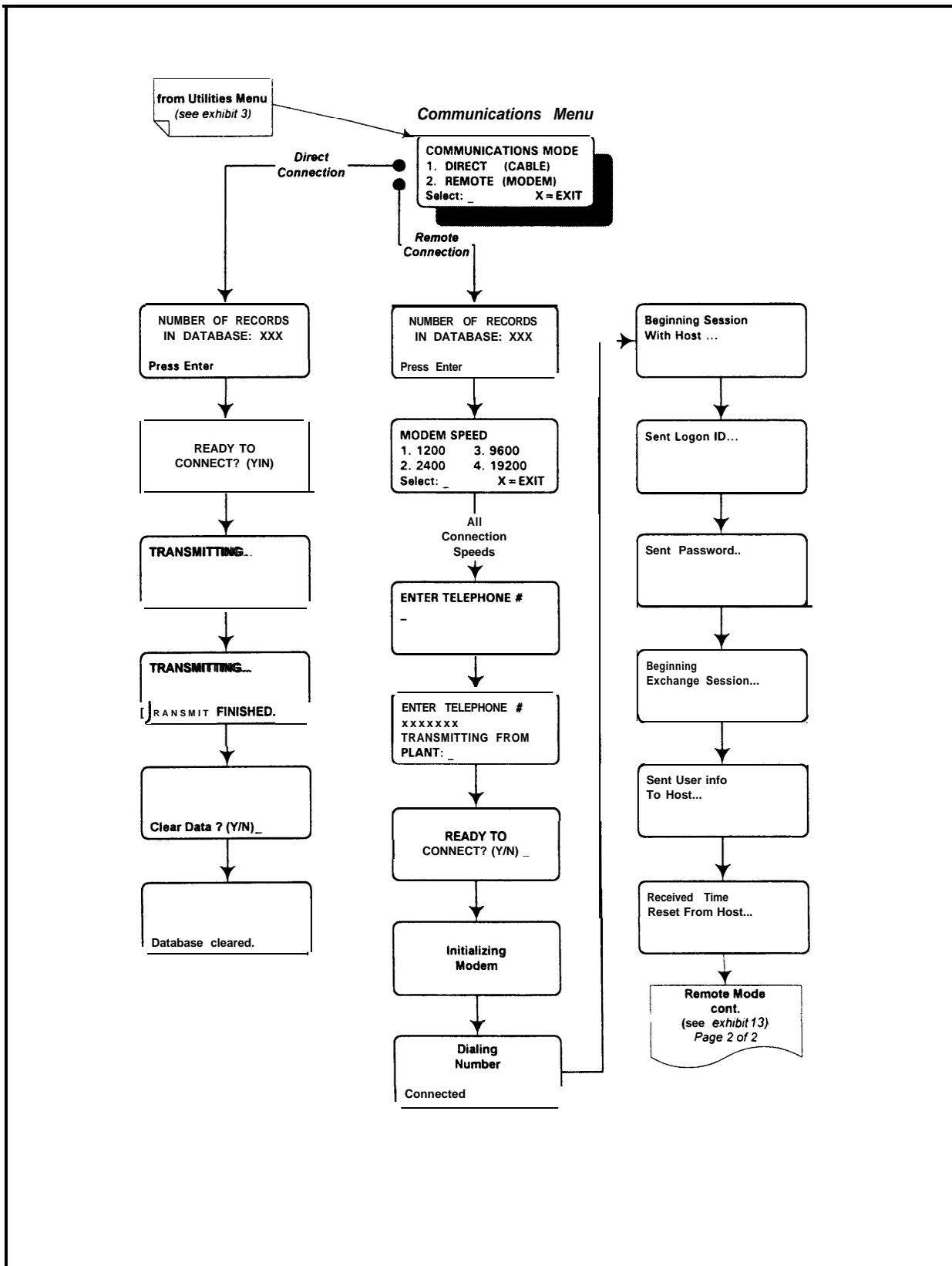


Exhibit 13 - Flow Chart: *Communications Menu*, Direct and Remote Mode (Page 1 of 2)

# Exhibits, continued

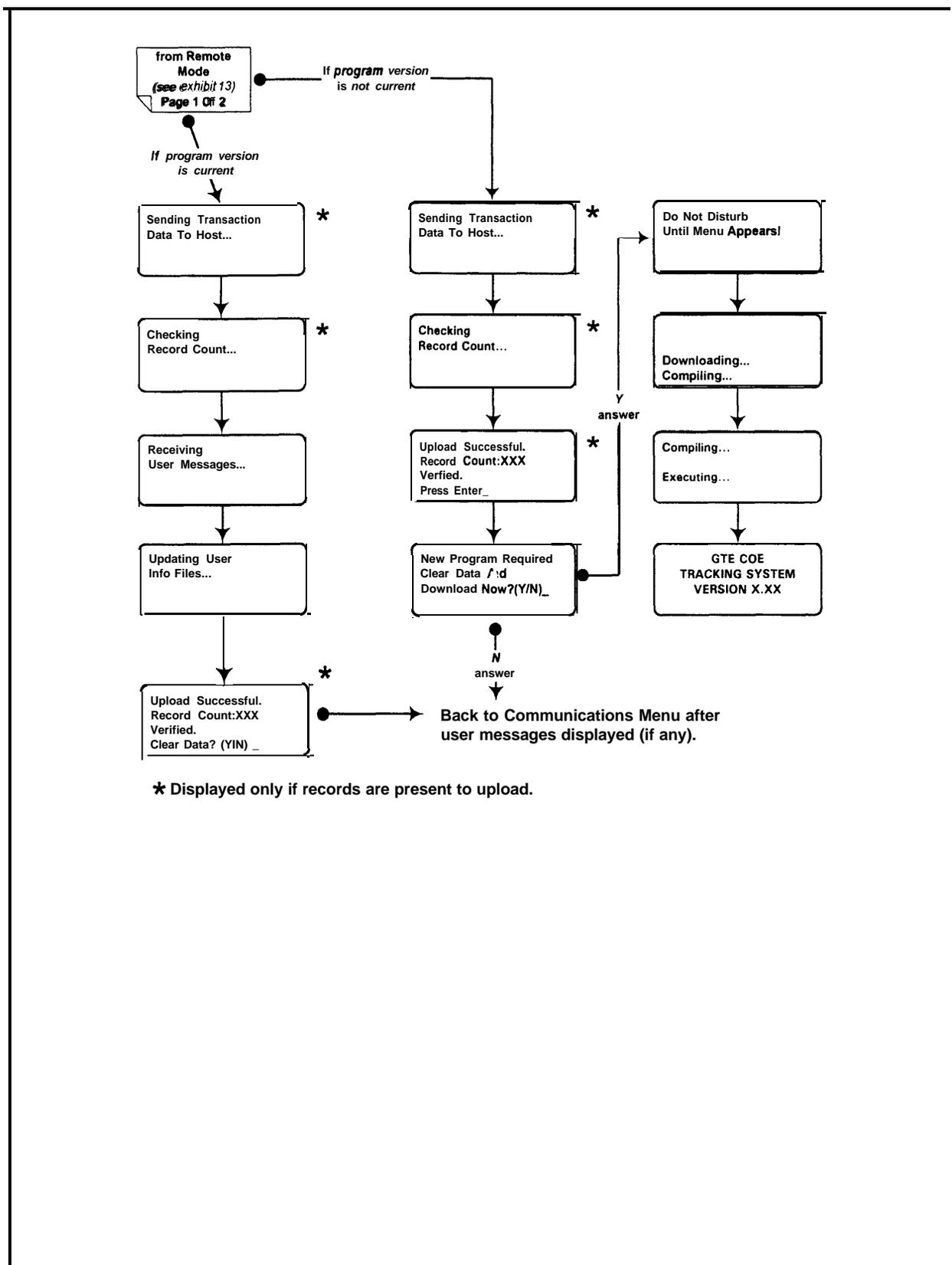


Exhibit 13 - Flow Chart: Communications Menu, Direct and Remote Mode (Page 2 of 2)

## Exhibits, continued

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<b>Region</b>	<b>Special Service WO#</b>	<b>Hi Cap WO#</b>	<b>DLC Battery Replacement WO#</b>
California (Thousand Oaks)	9S398PL	9U398HC	9U398BR
California (Victorville)	9S498PL	<b>9U498HC</b>	<b>9U498BR</b>
Hawaii	9S098BR	9G098HC	
Midwest	9S098PL	9U008HC	_____
North	9S098PL	_____	_____
Northeast	9S098PL	_____	_____
Northwest	9S098PL	_____	_____
Texas/New Mexico	9S098PL	_____	_____

**NOTE: If your Region or the Blanket WO# for your Region is not shown, or if you do not know the correct WO#, contact your local Help Desk (see Section 2.5) for assistance.**

### Exhibit 14 - Blanket Work Order Numbers

