SECURITY ESCORT
Operations Manual

Please enter your Security Escort 32 password

OK   **Cancel**

SECURITY ESCORT

ds detection systems

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About This Manual

The Security Escort Operations Manual is a reference for security personnel and for service and maintenance personnel responsible for the system. The manual contains a discussion of the system components and software. Personnel responsible for dispatching in response to Security Escort alarms will need to be familiar with chapters 1 and 2 at a minimum. This material should be used to complement the dispatchers hands-on training. Chapters 3 through 5 provide information needed by those security personnel responsible for the administration of the system.

Microsoft Windows®

The Security Escort system software operates in the Microsoft Windows® operating system. This manual assumes basic familiarity with the Microsoft graphical user interface. If you unfamiliar with Microsoft Windows® you may wish to look over the Microsoft Windows® manual.

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Chapter 1: The Components

This section will provide a basic understanding of each of the Security Escort system components and how they interact. The system is comprised of five basic components: Transmitters, Receivers, Transponders, Alert Units, and the Central Console.

Transmitter

The Transmitter is a miniature radio transmitter. Refer to its User Guide for its operation. Each Transmitter contains a unique code that identifies the subscriber. When an alarm signal has been sent, the Central Console will display the alarm in approximately two seconds and the sounders in any nearby receivers may be activated as well as the strobes and sirens on nearby Alert Units.

The Transmitters have a second feature, the "Test" mode. When indoors, in sight of an interior receiver or outdoors, in sight of an Alert Unit, a test can be performed (refer to the transmitter's User Guide). If the test is successful, a small green light will flash on the interior receiver, or the strobe on an Alert Unit will flash briefly. There will be no response at all if the test fails. If the test fails, the user should try again; if there is still no response, he or she should contact the Security Office as soon as possible. (See Chapter 5: Troubleshooting.)

Special Transmitters

In addition to the standard Transmitters, there is other special purpose transmitters (Security and Maintenance Transmitters).

The Transmitters provided to security personnel are unique in the way that both "Tests" and "Alarms" are processed. Outwardly, Security Transmitters performs in the same manner as normal Transmitters during testing. That is, the strobes flash on Alert Units and green lights flash on receivers to confirm a successful test. However, when a Security Transmitter is tested near a receiver, the Central Console can record the location of the officer and the time of the test. This can be used to generate a "Guard Tour" report.

The Security Transmitters also differ in the way that alarms are managed. Unlike regular Transmitters, no sound is emitted from the transmitter itself, no sounders are activated on receivers, and no strobes or sirens are activated. The console in the security office displays the alarm as usual except for a yellow background and a text warning that the event is a "Silent Alarm". This allows security personnel to call for assistance without attracting unwanted attention.

Another form of special transmitter, the Maintenance Transmitter, is for use by the installing and service company's employees. It provides special test capabilities for diagnosing system performance. The use of this form of transmitter is outlined in the System Installation and Service Manual.

Another form of special transmitter, the Point Transmitter, is to protect assets and buildings, not people. The use of this form of transmitter is outlined in the System Installation and Service Manual.

Receiver

The receivers are located throughout the grounds and buildings. These devices contain radio receivers to detect alarm and test transmissions from Transmitters. They also contain sounders that may be activated if the receiver has detected an alarm transmission and if the Central Console has verified that it is a valid alarm. Outdoor receivers, contained in small gray weatherproof boxes, are typically mounted on the sides of buildings and on light posts. Indoor receivers are typically mounted on interior walls and are in small beige rectangular units bearing the Security Escort logo.

The indoor devices have one red and one green light. The green light is used to indicate a successful test of a transmitter. The red light will only be on during certain system tests or during an alarm. Outdoor receivers do not have these visible lights. Outdoors, the strobe units on the Alert Units (see below) flash for successful tests.

Alert Unit

These devices, mounted outdoors on the sides of buildings and on light poles contains a siren and strobe light controlled in response to commands from the Central Console. Its primary purpose is to provide visual and audible signals to create an awareness that an emergency may exist in the area. Its secondary purpose is to provide a means for subscribers to test Transmitters while outdoors. It does not receive test or alarm signals itself.

Transponder

The Transponder continuously monitors the operation of a group of Receivers and Alert Units to detect system faults (such as tampering) and to query the Receivers for data in the event of an alarm or test from a Transmitter. It collects and summarizes alarm and test data and relays that data to the Central Console. The Transponder also commands the Receivers and Alert Units, activating lights, sounders and sirens as appropriate. The Transponder has a battery backup to maintain protection during local power outages.

The Transponder is contained in a steel box approximately 12 in. (30.5 cm) wide and 18 in. (45.7 cm) high. It is usually mounted on a wall in the basement or in a utility closet.

Central Console

The Central Console is the control center for the Security Escort system. It consists of one to eight IBM-compatible personal computers, one of which is an instantly available back up (the slave computer). The System software is designed to run on the Microsoft Windows$^{®}$ operating system and requires little or no computer literacy on the part of the dispatcher. The Central Console is usually located in the Security dispatch center.

The Central Console is responsible for receiving "Alarm" and "Test" data from the Transponders and calculating the location of the Transmitter that produces the alarm or test. It also identifies the individual to whom the Transmitter has been issued and for alarms, presents the location and identity information on the computer screen. The Central Console contains the Subscriber and Operator Databases used to check subscriber identity and operator passwords and authority levels.

The Central Console also monitors all Transponders and reports component or system faults by displaying alert messages on the screen. The messages provide instructions for the dispatcher or key operator. All alarms and trouble messages are logged in memory and may be printed on a paper record.

Chapter 2: Daily Operations

Normal (No Alarm) Operations

Figure 1 above shows the screen of the Security Escort Central Console during normal operations, when there are no active alarms. The map is displayed, and a menu bar allows access to all system functions. Note: Special passwords are required to access some of the functions. At the top of the screen, the current time and date is shown, and the words, "No alarms".

The map may be scrolled to show any region of the protected area. Placing the cursor anywhere on the map display and clicking the left mouse button causes that point on the map to become centered on the screen.
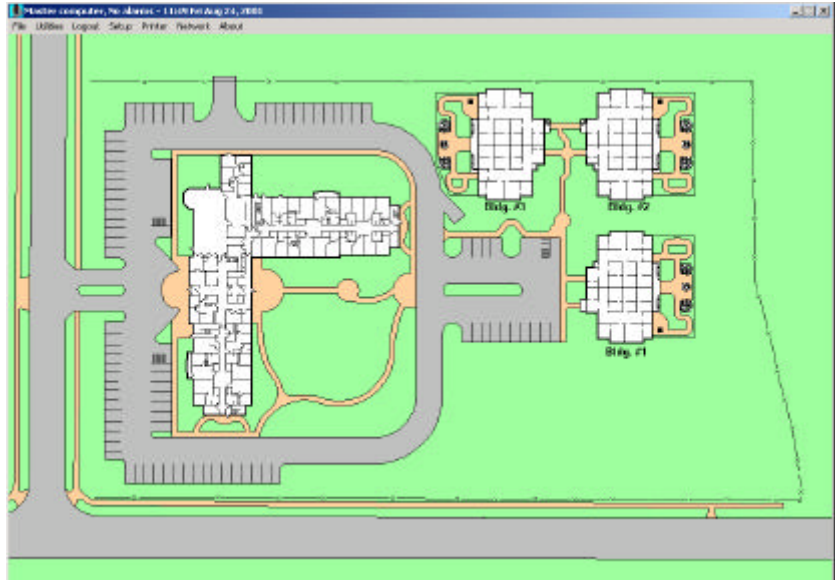
Figure 1: Security Escort Central Console (Normal Operations)

"Test" Icons

When a subscriber tests his or her Transmitter, optionally "Test" icons are displayed on the map, indicating the location of the receivers that detected the test transmission. If the test was successful, green "OK" icons are displayed, as shown in the figure to the left; if the test failed, purple "fail" icons are shown, as in the figure to the right. The "fail" icons appear when the transmission was produced by a Transmitter that is either not in the Subscriber Database or has been disabled (Figure 2) (usually because it has been lost or stolen).Each new test removes the testing icons of the previous test from the map. No operator action is required.
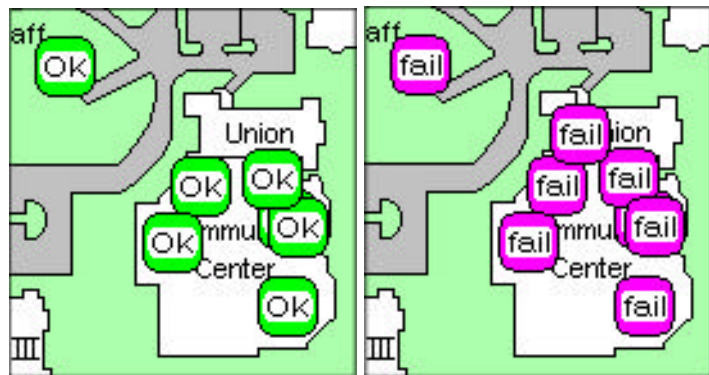
Figure 2: Test Icons

Answering an Alarm

Whenever a subscriber within the protected area activates an alarm (see the transmitter's user guide) with his or her Transmitter, the Security Escort Central Console:

(1) Sounds the console alarm tone to alert the dispatcher.

(2) Replaces the "normal operations" screen with the red alarm screen.

(3)   Optionally prints identity and text location information on hard copy.

This section of the manual explains in detail how an alarm situation should be handled at the Central Console.

Interpreting the Alarm Screen
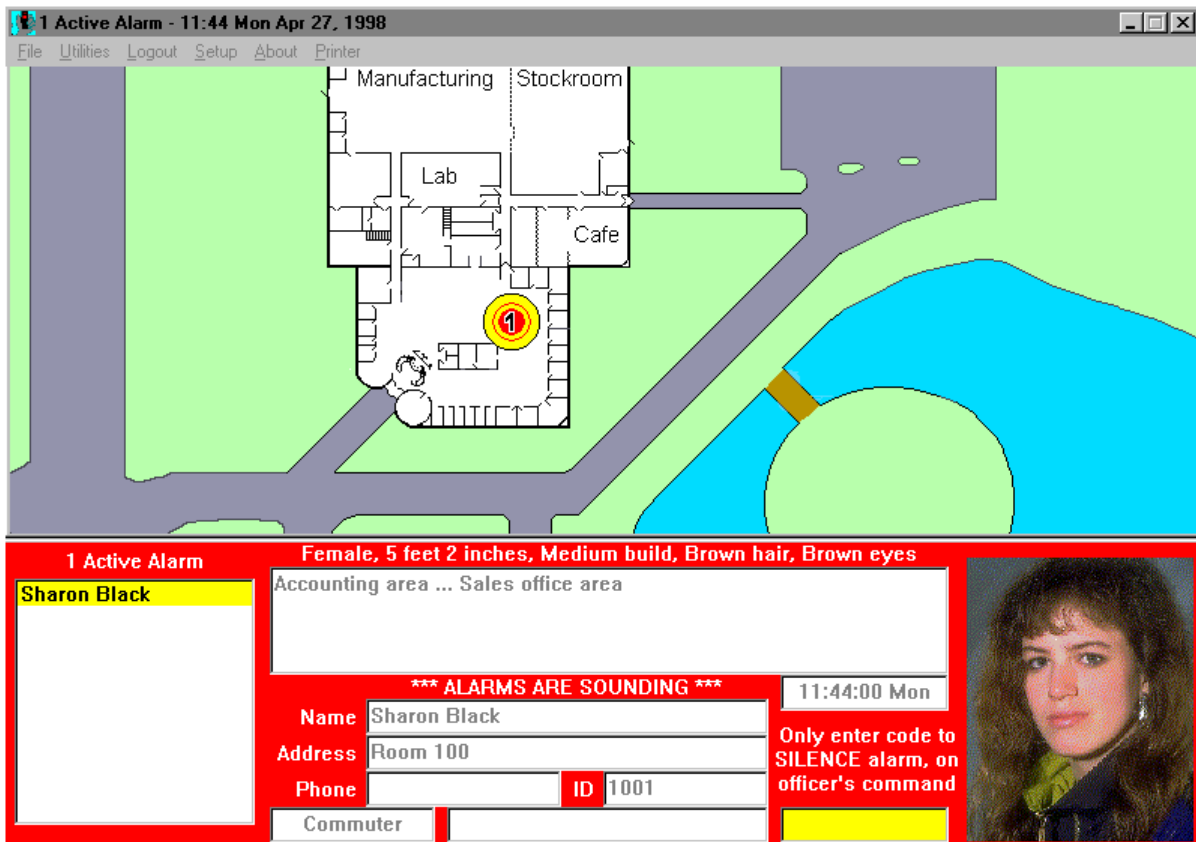
Figure 3: Active Alarm

Figure 3 shows how the screen appears immediately after the Security Escort System detects an alarm transmission. Across the top of the screen, the words "No alarm" are replaced with the words "Active Alarm". A new map is displayed, centered on the computed location of the alarm.

In the example represented by the figure above, the computed location on the first floor of the building (indicated by the numeral "1" within the icon).

Figure 4 shows some of the types of receiver icons that may be displayed. A bull's-eye indicates an outdoor location and indoor locations contain a number signifying the floor. "G", "T" and "B" icons are used to represent ground floor, tunnel and basement locations, respectively.

Figure 4: Receiver Icons

The yellow circle on the map signifies the subscriber's most likely location.

In the red panel beneath the map, subscriber and location information is presented. The subscriber's name, local address, phone number, identification number and classification (e.g. resident, commuter, staff, etc.) are displayed. Above the subscriber information is a box containing text description of the location of the alarm. Note that the subscriber's location is updated automatically due to the transmitter's alarm follower transmissions.

In the lower left corner of the screen, the "Active Alarm Box" lists all active alarms. In most cases this box will contain only one name, but in the case of multiple alarms, the name of each subscriber will appear in this box. In the example given, there is only one name, since only one alarm has been sounded.

Just above the Subscriber information block, the words "ALARMS ARE SOUNDING" appear anytime that the (optional) sirens and strobes are active. When the alarm is canceled by the dispatcher, or the alarm is automatically silenced this message is replaced with the words, "Sounders have been silenced".

Acknowledging an Alarm
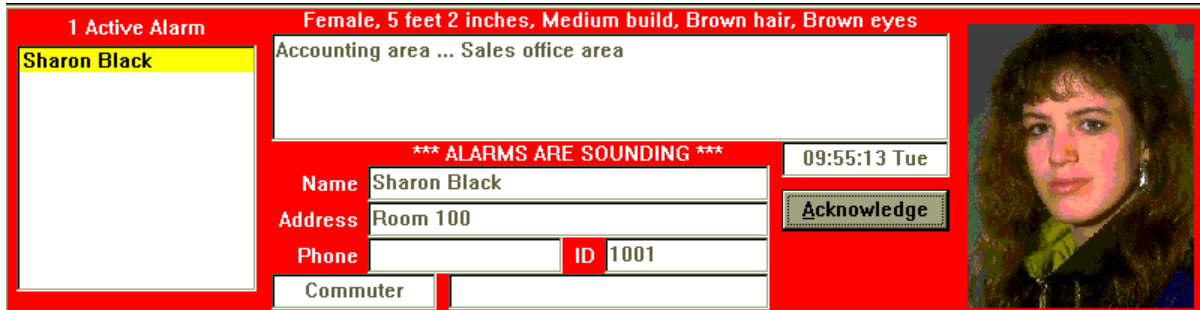
Figure 5: Acknowledging an Alarm

The Central Console will continue to sound alert tones on its speakers until the dispatcher has acknowledged the alarm. To silence the alert tones, the cursor is placed on the "Acknowledge" button in the lower right corner of the alarm screen and the left mouse button is clicked (or the "A" key can be pressed). Note that this will silence **only** the Central Console speakers; the (optional) sirens and strobes of the Alert Units and the sounders in the receivers will continue to be active.

Silencing an Alarm
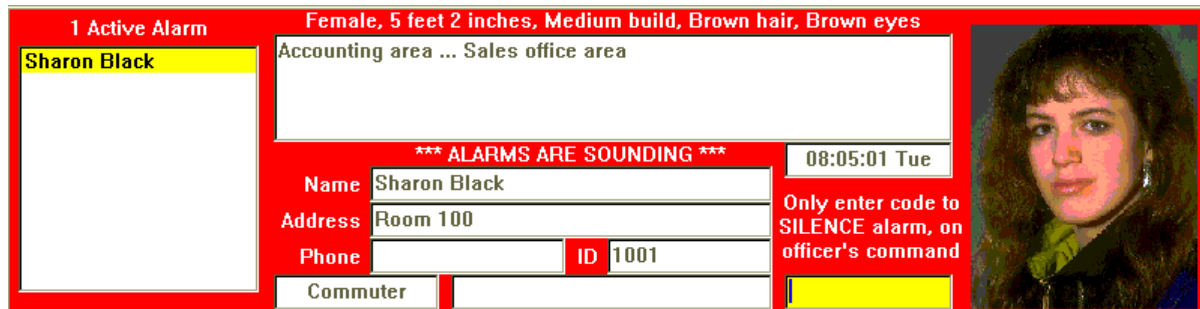
Figure 6: Silencing an Alarm

To cancel the alarm and thereby silence the sounders and strobes, the operator enters his or her password (the cursor will already be blinking in the small yellow text box in the lower right corner of the screen), and pushes the "RETURN" key.   The words "ALARMS ARE SOUNDING" are replaced with the message, "Sounders have been silenced", and the yellow password box is replaced with a button labeled "Reset".

> ⚠ **CAUTION** *In most installations, department policy prohibits a dispatcher from silencing an alarm until instructed to do so by a Security Officer who has visited the scene.*

Resetting the System
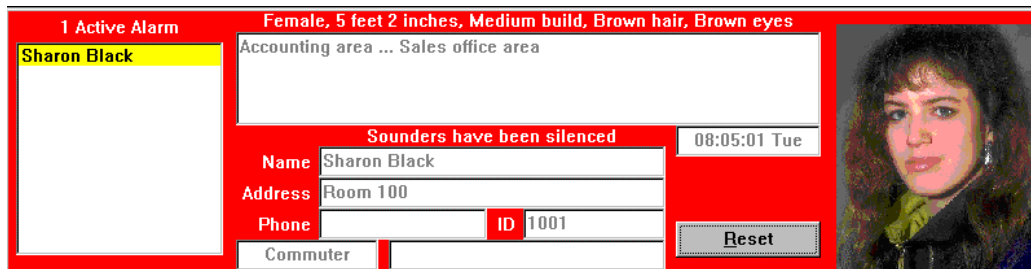
Figure 7: Resetting the System

Even when the alarm has been silenced, the alarm screen remains on the display until the system is "Reset". To reset the system, the cursor is placed on the "Reset" button and the left mouse button is clicked (or the "R" key is pressed).   This will replace the alarm screen with the normal operation screen.

Handling Multiple Alarms

Figure 8: Multiple Alarms

When two or more alarms are active, each alarm is handled as a separate event by the system and each can be viewed individually. The name of each subscriber who transmitted an alarm is listed in the "Active Alarm Box". One name can be selected at a time by clicking on the name in the "Active Alarm Box" to highlight it. The information displayed in the alarm screen then applies only to the highlighted subscriber. To display the alarm information of another subscriber with an active alarm, click on that subscriber's name in the "Active Alarm Box", or use the up and down arrow keys on the keyboard to select the desired subscriber. Each alarm must be acknowledged and silenced separately.

Filing an Alarm Report

If the optional alarm report has been selected during the setup of the Security Escort System, an officer is prompted to enter an alarm report after the alarm has been reset. The Central Console software displays the above dialog for the officer to fill in with the details of his or her response to the alarm. All of the subscriber identity and location information will have automatically been entered into the report, along with the date and time information. The responding officer need only enter information on the type of problem, a description of the problem specifics, and the action taken. A click on the "Cancel" button completes the report.
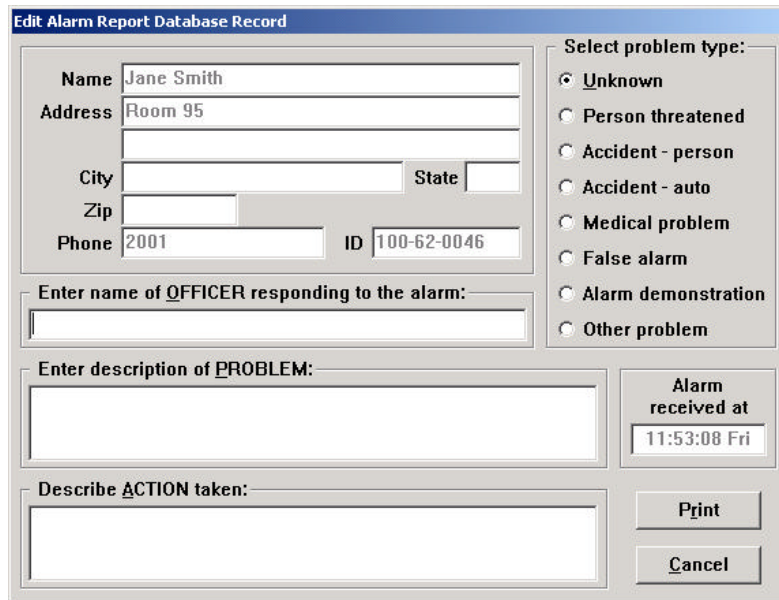
Figure 9: Example

If there is a need to modify data in the report after it has been saved, the report can be recalled from the Report Database found under the File Menu. A description of how to edit a report already on file is explained in Chapter 3: Database Management. If it is not convenient to fill out the Alarm Report immediately after the alarm is reset, it can be deferred to a later time. Near the end of the work shift the Central Console can produce a prompt anytime that an alarm has been received and no report has been entered into the computer.

Chapter 3: Database Management

The Databases

The Security Escort software contains several distinct databases:

(1)   The Subscriber Database contains name, address, identification number and other information about the users of the system.

(2)   The Operator Database contains information on the Security Officers, including the passwords assigned and the authority level granted.

(3)   The Reports Database contains all of the alarm reports created by the system and completed by the officers.

(4)   The Transponder Database contain information on the system hardware configuration and on testing data taken by Security Escort service personnel. Access to these databases is only available to installing and service company employees.

These databases are accessed under the File menu. The three databases that are used by Security personnel operate very similarly. Each subscriber, operator and report entry contained in its respective database is called a record. The common commands of the databases are described first, before focusing on each specific database.

The records in the Subscriber and Operator Databases can be sorted by "Name", "Identification Number", "Transmitter Identification Number", "Time of Last Test", or "Time of Low Battery Report", by using the "Key Select" or "Locate Key" buttons to select the method of sorting and searching. Additionally, the records in the Reports Database can be sorted by Alarm time, problem type, and Subscriber Classification.

Common Commands

Most of the commands are common to the various databases. The Subscriber Database screen, which follows, is typical. Note: any individual operator's access to the databases is controlled by authority level settings in the Operator Database. The manager of the Security Department usually controls these access settings through a high level password.

Subscriber Database Screen

The four buttons across the bottom of the database dialog allow the operator to step through the individual records of the database.

Beginning / End Of File

"Beginning" and "End Of File" buttons call up the first or last record in the database.

Previous / Next

These two buttons allow you to scroll through the records in the database one record at a time. These can be useful when searching for a name without knowing the exact spelling, or reviewing a sequence of alarm events.

Figure 10: Find Subscriber's Database Record

The right side buttons in Figure 10 are explained below.

Statistics   This button calls up a dialog to show the breakdown of different classes of subscribers in the database.

Data Merge   This button is used to load a new database with data from another system. It will only be available to the installing company and should be used with caution. A database backup must be performed before using this option. The database must be verified before putting the new database in service.

Insert New   This button is used to create a new record in a database. An "Edit Subscriber Database Record" dialog opens, for entry of the appropriate information into the database. The "Tab" key may be used to step through the data fields in order, or the operator may click the mouse on any field to place the cursor for data entry. The specific "Edit Subscriber Database Record" options are discussed in more detail in sections that follow.

Edit Data   This button allows the operator to edit the information in the currently displayed record. When it is clicked the appropriate "Edit Subscriber Database Record" dialog opens and the data can be modified. Clicking on the "Save" button replaces the old information with the new. Clicking on the "Cancel" button presents the opportunity to maintain the changes or revert to the old information.

Delete   This button will cause the currently displayed record to be deleted from the database. The operator must confirm a delete decision before the record is actually deleted.

Figure 11: Locate Key Dialog

Locate Key   Scrolling through the database using the "Previous" and "Next" buttons may not be the
most efficient way of locating a specific Subscriber or Operator. Pressing the "Locate
Key" button from any Operator Data record produces the display shown above. An
entry in one of the blank fields, followed by a click of the left mouse on the Find button
will search all records for the closest match. For instance, if an operator identification
number is entered, the operators are sorted by their operator identification numbers,
then the operator whose number most closely matches the one entered will be
displayed. If a last name is entered, the operators are sorted in alphabetical order by
last name, then the operator whose last name is closest in alphabetical order is
displayed. Therefore, if "P" is entered as the last name, the operators will be sorted in
alphabetical order by name, then the first operator whose last name began with "P"
will be displayed. Clicking on the "Next" button then steps through the records in
alphabetical order.

When this dialog is displayed in the subscriber's database, testing a transmitter will fill
in the Transmitter ID field with the ID of the transmitter tested. Press "Find" to locate
that transmitter's record.

Key Select   This command allows the operator to choose the
default setting for the order in which the data records
are sorted. In the case of the Operator Database, the
records can be ordered by last name, by authority
level in ascending order, or by operator identification
number in ascending order. The choice is made by
placing the cursor on the small diamond to the left of
the text and clicking with the left mouse button and
then clicking on the "Select" option.

The specific choices in the Subscriber and Reports
Databases are different but the techniques for
searching are the same.
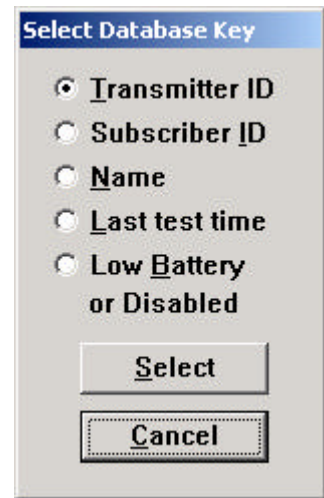
Print   When this button is pressed, the printer will produce a
hard copy (paper printout) of the record currently
displayed.

Figure 12: Example

Cancel   This button allows the operator to exit the current dialog. If changes have been made,
the operator is presented with an option to save the changes to memory or to restore
the data to what it was before the changes were made.

The Operator Database

Figure 13: Find Operator Database Record

Figure 13 is a typical screen from the Operator Database. The term "Operator" is used to refer to a person who has the authority to use the various features of the Security Escort System software. The term includes the Security Department's dispatchers who initiate responses to alarms, Security Officers who may be required to produce incident reports, and other employees of the Security Department who may be responsible for maintaining the Subscriber and Operator Databases.

The information in an "Operator Database" record includes his or her password, full name, a unique operator identification number, an authority level, local address and phone number, and notes. All fields but the password field are displayed; even when a specific operator's file is edited (via the Edit Data command), the password is represented by a number of asterisks for security.

Edit Operator Database Record

When adding a new Operator or editing the data for an existing Operator, the "Edit Operator Record" dialog is displayed, as shown above. Certain information fields must be completed to produce a valid record: the password, the authority level and the name must be entered. All the other information in the operator's file is optional, including the local address, local phone number and notes.

NOTE: There are two boxes for passwords in the "Edit Operator Record" dialog, "Password" and "Password Verify".

Figure 14: Edit Operator Database Record

Since the operator cannot see what is being entered while typing in the password field, it must be entered twice to safeguard against errors; password modifications will not be accepted if the entries in the "Password" and "Password Verify" boxes are not identical.

The Operator ID field will be automatically filled in with the next available ID number, there is no need to change the number selected.

Authority Levels

An important consideration when creating a new operator file is the authority level to be assigned. The authority level determines which functions an operator can perform on the system. Installing company representatives need access to almost every command in the Security Escort software; the key operator for the Security Department usually requires access to alter the Subscriber, Operator, and Reports Databases, while a dispatcher may only need access to view these databases.

Figure 15: Authority Levels

As a rule, any operator should be assigned the minimum authority necessary to carry out their task. The authority levels shown in the dialog above are in order with the highest authority shown on the bottom. Each authority level will have the ability to perform all of the functions of the authorities shown above it.

Subscriber Database

A subscriber is anyone who has been issued a Security Escort Transmitter. This database includes all transmitters assigned in the system, whether they are protecting people or things. The Subscriber Database is very similar to the Operator Database; the method by which the names and other information are stored is virtually identical.
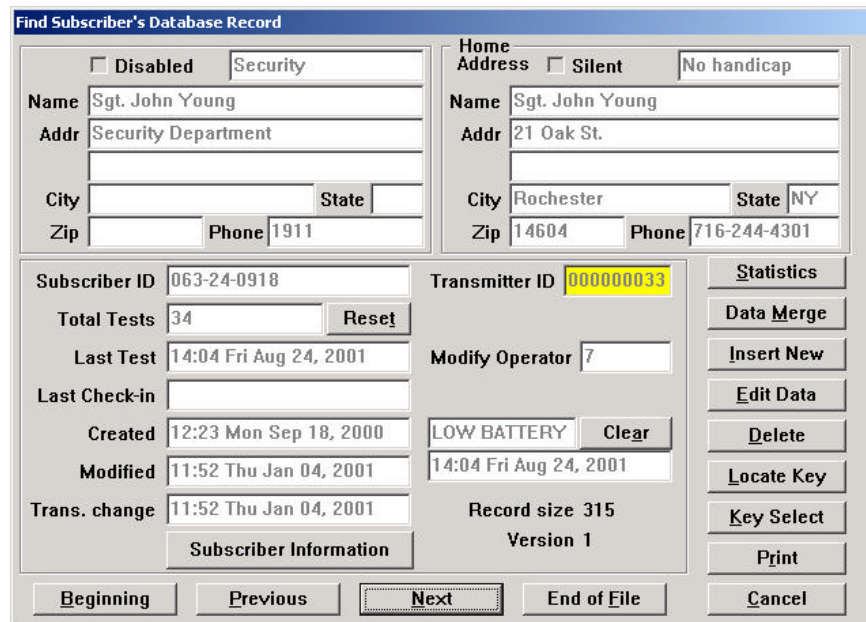
Figure 16: Find Subscriber's Database Record

The information stored in a subscriber's file includes the person's name, local address and phone number, permanent address and phone number, subscriber identification number (typically the individuals Social Security number), the Transmitter Identification Code (each transmitter has its own unique code which identifies the subscriber during tests and alarms), and the subscriber's classification (commuter, resident, faculty, staff, etc.).

|	
Reset	Clicking Reset with the left mouse button, will clear the number of Total Tests only.
Clear	Clicking Clear with the left mouse button, will only remove the Low Battery indication. This should only be done after the transmitter battery has been replaced or a new transmitter has been issued.
Print	Clicking Print with the left mouse button, display the Subscriber Print Dialog (see Figure 17). You may select one of the indicated sort orders and the data fields that you desire in the report.
Write EXCEL import file	Clicking Write EXCEL import file with the left mouse button will cause all fields of all records to be output to the "subscrib.txt" file into the folder in which Escort was installed. This file may be directly imported into Microsoft Excel or any other application that will accept tab delimited text.
Print	Clicking Print with the left mouse button will cause the selected data fields to be printed on the report printer in the indicated sort order.
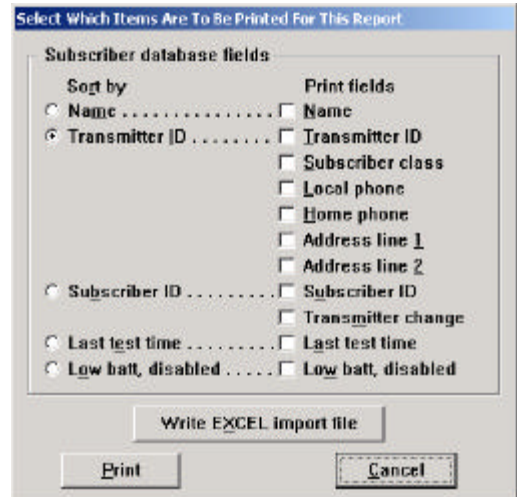
Figure 17: Subscriber Database Fields
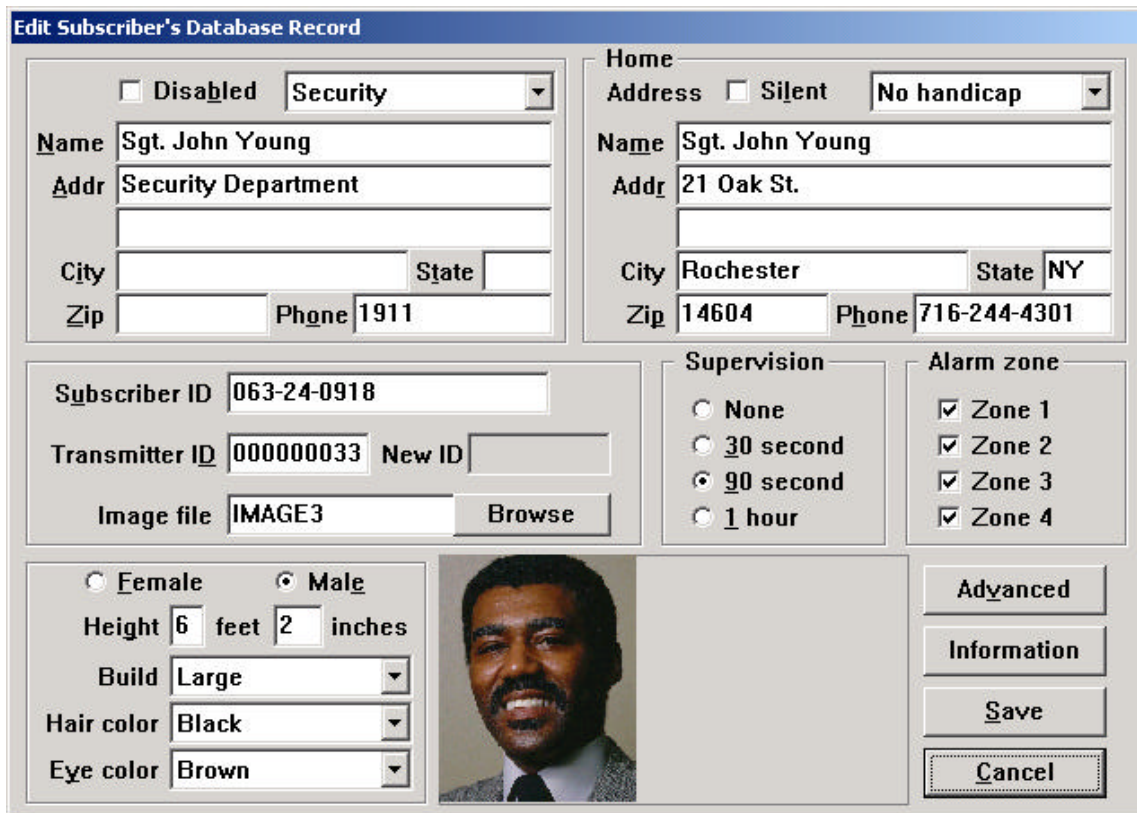
Edit Subscriber Database Record

Figure 18: Edit Subscriber's Database Record

When editing a subscriber's file or creating a new file, the following information <u>must</u> be entered to complete the file: subscriber name, subscriber identification number, and transmitter identification code. The computer will not allow the edit screen to be closed until all of the mandatory fields have been completed. The accuracy of information in the Subscriber Database is very important: in the event that a subscriber transmits an alarm, the information displayed in the Alarm Screen is taken from this database. A faulty address could hinder Security's response to an alarm.

Disabled	There is an option to disable an individual subscriber's Transmitter in such a way that it will not produce an alarm message on the Central Console. This can be used to halt a subscriber's misuse of the system. Disabling or enabling a subscriber is accomplished by locating the subscriber in the Subscriber Database, clicking on the "Edit Data" button, and clicking on the box next to the word "Disabled" in the upper-left corner of the dialog. (This box is called a *"checkbox."*) If the box has a check mark, the subscriber's transmitter will be ignored by the system; if it does not, the transmitter will be recognized and alarms will be displayed.

Subscriber Class   From the dropdown list (see Figure 19) select the appropriate class for this subscriber or asset.

Figure 19: Subscriber Class dropdown list

Selecting the Acknowledge subscriber class will allow the alarm signal to be used to remotely acknowledge alarms. It will not create an alarm. When this transmitter transmits an alarm the alarms currently present on the alarm screen will be acknowledged in the order they were received, which should be the same order the alarms would be received on a pager for a roving officer.

Name	The individual or item assigned to this transmitter. This is a required field.
Address	The address of this individual or item within the protected area. The first address line on the left side is shown on the alarm screen.
Phone Number	The phone number to access this individual within the protected area. The phone number on the left side is shown on the alarm screen.
Subscriber ID	The Subscriber ID (typically the Social Security Number) must be typed into its field. This is a required field, it must be filled in with a unique ID.
Transmitter ID / New ID	The Transmitter Identification Code can be typed into its field, but a much faster and error free method is to delete any existing entry in the Transmitter Identification Code field and then perform a "Test" with the Transmitter to be assigned to this Subscriber. The new Transmitter ID will be displayed in the New ID field. That new Transmitter ID must be manually entered into the Transmitter ID field or using the mouse highlight the existing Transmitter ID and press and hold the SHIFT key and tap the INSERT key (this will transfer the new Transmitter ID to the correct field). This is a required field; it must be filled in with a unique ID. Complete the change to the Subscriber information by clicking on the "Save" button.
Browse Image File	Enter the filename for the image of this individual or item to be shown on the alarm screen. Click the Browse button to open a dialog box to select the filename from a list of available files.
Male/Female **Height** **Build** **Hair Color** **Eye Color**	These characteristics are shown on the alarm screen.

Silent	If checked, a system that would normally sound alarms will be silent for all alarms generated by this transmitter.
Handicap	If this individual is handicapped, select an item from this drop down list. The condition will be displayed on the alarm screen. If a handicap is selected the Notes field will not show on the alarm screen.
Supervision	Specific transmitter types periodically transmit "Supervisory" messages so the system can monitor their function and location. The supervisory feature must be enabled in the transmitter. Only for transmitters that have the supervisory feature enabled, select the interval of these "Supervisory" messages. The supervision period that is specific to the assigned transmitter must be selected if this feature is used. You can't change the supervision period of a transmitter.
Alarm Zone	Specific Alarm Zones are assigned to the different computer workstations of the Security Escort system. Each transmitter entered in the Subscriber Database can be assigned to one or more of the Alarm Zones. Therefore you may control which computer workstations alarms from this transmitter will appear on.
Advanced	The "Advanced" button is used to set up special transmitters that monitor fixed locations, these features are not used for personal transmitters. This button is available only to the maintenance and installing personnel (see the Technical Reference Manual)

Information

The "Information" button is used to enter specific information about the holder of this transmitter. Car type, parking sticker number, license number, and medical information are examples of the types of information typically entered.

Each of the fields would typically hold different information. The installer can change the field labels to labels that would define your intended usage.

Figure 20: Information Entry Screen

Save	Clicking the Save button saves all changes to the database.

Transmitter Change

The "Transmitter Change" command under the File Menu, is used when it is necessary to change a subscriber's Transmitter.

Selecting "Transmitter Change" causes the "Locate Subscriber" screen to appear. The subscriber's record in the Subscriber Database can be quickly found by entering the Subscriber Name, Subscriber Identification Number, or current Transmitter ID. This method of locating a particular subscriber's record is identical to using the "Locate Key" command in the Subscriber Database: the first record, which fits the entered data, is shown. It may be necessary to scroll using the "Previous" and "Next" buttons to find the appropriate record.

Figure 21: Locate Subscriber's Database Record – Transmitter Change

Perform a "Test" using the old transmitter if possible, this should fill in the Transmitter ID field. Then press "Find".

> *Be absolutely certain that the correct record is displayed before entering the new Transmitter ID (Identification Code). Changing the wrong subscriber's record makes two records ineffective: the correct subscriber will be misidentified and the subscriber whose record was incorrectly altered will be disabled. If possible, perform a test with the subscriber's old transmitter after the change has been made: the test should fail.*

When the correct subscriber's record is displayed, click on the "Change" button and perform a "Test" using the new transmitter. The new Transmitter Identification Code will be automatically entered into the "New transmitter ID" field.

Figure 22: Transmitter Change

Manually enter the new transmitter ID into the "Transmitter ID" field or using the mouse highlight the old "Transmitter ID" value and press and hold the "Shift" key and tap the "Insert" key. Then click the "Save" button. A prompt will appear, asking for a second "Test" to confirm the change. Test the new transmitter again.

Figure 23: New Transmitter

A green light should be shown on a nearby receiver and this dialog should automatically be removed from the screen, confirming the change was successful.

The Reports Database

The Security Escort software contains a report-generating feature that encourages prompt, uniform reporting of incidents. A sample of the alarm report dialog is shown above. The system software automatically captures the alarm data displayed on the Alarm Screen and enters it into a report form. The form also contains fields that describe the nature of the incident and the action taken. These fields are to be filled in by the responding officer.

Figure 24: Reports Database

The system software can be configured to require that a report be completed prior to the end of the shift in which the incident occurred. If the "Require Alarm Report" option is chosen in the "Edit Security Preferences" dialog (see Chapter 4), the report can be filled out immediately after the alarm is reset. However, if the report is not completed a reminder prompt will appear on the screen every 5 minutes for 30 minutes before the end of the shift. The time at which the prompt is to be displayed is also set in the "Edit Security Preferences" dialog.

All of the common database commands are available in the Reports Database, with the following additional commands:

Map

The act of resetting an alarm causes a report to be saved into the Reports Database. A part of the alarm report record is a copy of the Alarm Screen that was displayed at the time of the incident. Clicking on the "Map" button allows a reconstruction of the screen as it appeared to the dispatcher.
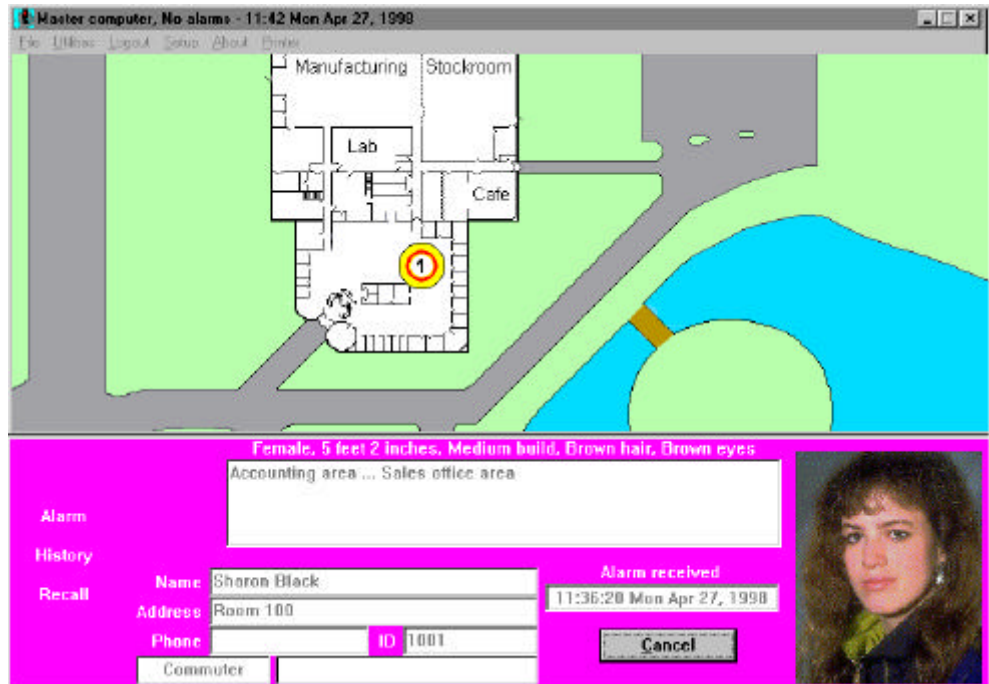

Figure 25: Alarm Reconstruction displayed on Map

Edit Data

See Figure 26. Select the appropriate problem type, then enter the name of the officer that responded to the alarm. Finish with the description of the problem and the action taken. Save the updated record by clicking the Save button.

Delete

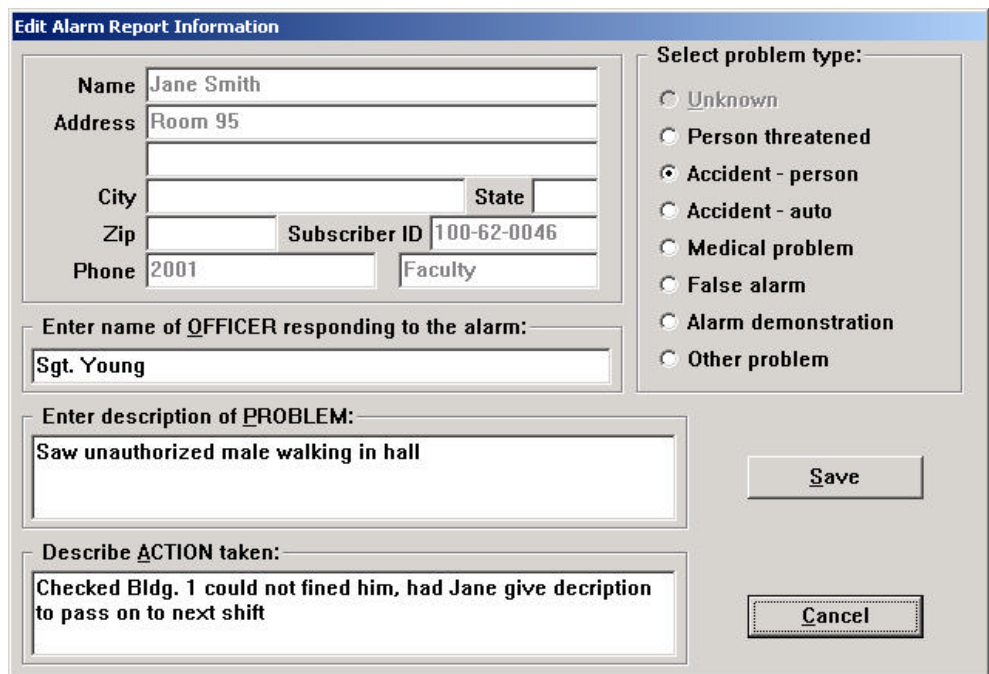This button will delete the alarm report from the database. If the report is deleted the data can not be recovered.

Figure 26: Edit Alarm Report Information

Locate Key

This button works similarly to the "Locate Key" button in the Operator and Subscriber Databases. Entering the Subscriber Name, Transmitter ID, Subscriber ID, Subscriber Classification, problem type, or a specific time and date can locate a specific report (see Figure 27).

Figure 27: Locate Alarm Database Record

As in the Operator and Subscriber Databases, the subscriber records are temporarily ordered according to the field entered in the "Locate Key" dialog.

Key Select

This button also works similarly to its counterparts in the Operator and Subscriber Databases. Using it, the Reports can be ordered by Subscriber Name, Transmitter Identification Code, Subscriber Identification Number, alarm time, problem type or Subscriber Classification (see Figure 28).

Incomplete

When this button is clicked, the most recent incident report file that has not been completed will be displayed. The reports are not reordered when this command is used.

Figure 28: Database Key Selection

Chapter 4: The Online Tools

This section of the manual contains a description of the on-line tools available in the system software. Access to these tools varies according to the authority level of the user, as assigned in the Operator Database for each operator. When an operator enters his or her password in the "Password" dialog box, the system software provides access to the authorized menu functions for that individual. Any activities subsequently performed on the system are then associated with that operator in the system history files, until the operator logs out by selecting "Logout" from the main menu.

The "File" Menu

This pull-down menu, shown in Figure 29, leads to the main databases for the system. The Operator, Reports, and Subscriber Databases and Transmitter Change have been described already. The "Locate Transmitters, "Maintenance Alarm Database" and "Transponder Database" are solely for use by installation and maintenance personnel and are described in the Technical Reference Manual. Key operators with the appropriate authority levels can view and modify the operator, alarm report and subscriber databases.
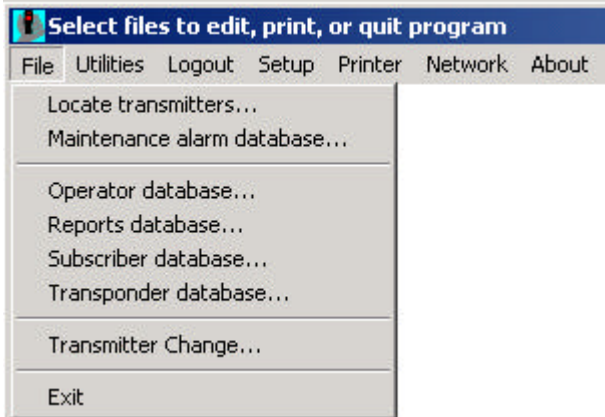

Figure 29: File Menu

The "Utilities" Menu

From this menu (Figure 30), key operators can backup or restore the databases for the system, set the options for the operation of the system, and clear the map screen.
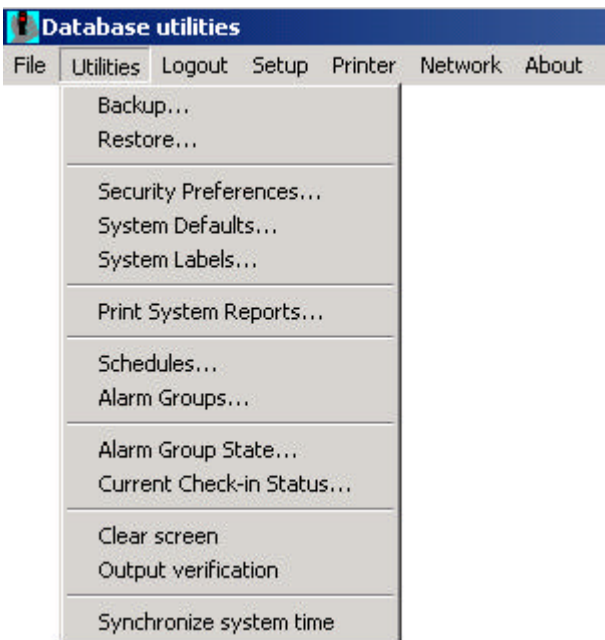

Figure 30: Utilities Menu

Backup Databases

To prevent the accidental loss, the databases should be backed up at least once a week to multiple backups. At least one of these backup copies should be kept in a different location from the Central Console's location.

This feature provides a convenient process for saving the information in the databases to backup files. Weekly backups are recommended to permit data recovery if the computer memory should become corrupted. If this unlikely event occurs, an operator can quickly restore the databases in question with the "Restore" command, described below. Backups should be made any time significant changes have been made to any database.

When the "Backup" menu item is chosen, options are presented (see Figure 31) to save the databases to the master or slave computer's hard drive, a cartridge drive, or to a floppy drive of this computer. When saving to a floppy disk or cartridge drive, it is necessary to verify that the appropriate disk or cartridge is inserted into the drive before clicking the "Backup" button. To abort the process, click on the "Cancel" button in the dialog.

Figure 31: Backup Databases

This dialog allows backups to be made of all of the databases. Only the databases with a check mark will be backed up. Typically all databases should be backed up at once. Only when they do not fit on one floppy disk should you save individual databases to one floppy, then switch floppy disks and repeat the procedure to save the rest of the files.

Restore Databases

Should one or more database files become corrupted or erased, due to a hard drive failure, power surges or other unpredictable event, it will be necessary to restore the databases from backup files. The "Restore" feature allows you to do this. The "Restore" function allows loading of selected databases from backup files. It is not necessary to perform the "Restore" function on all databases in order to restore any one. All changes that have occurred since the last backup will be lost when a database is restored, therefore Restore only those databases that have a problem. Backups should be made any time significant changes have been made to any database.

It is possible to rebuild a database by backing it up and immediately restoring it. If you are having trouble with a database this may correct it.
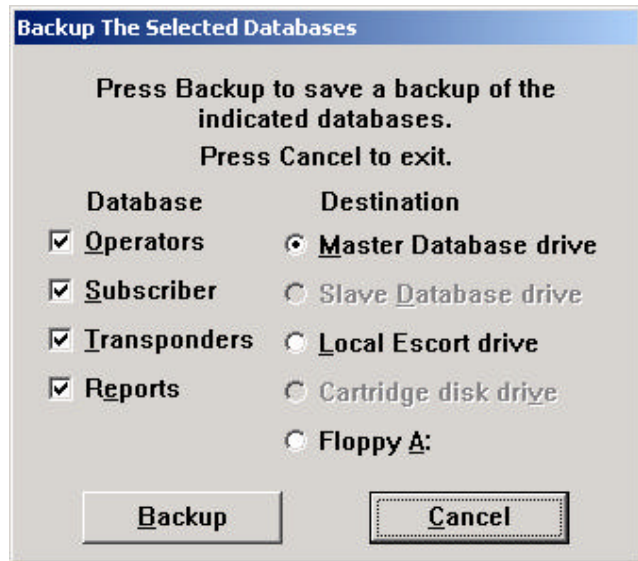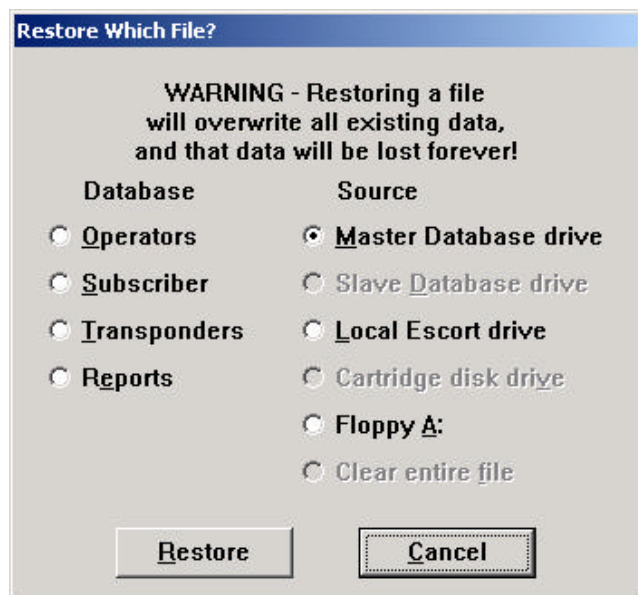
Figure 32: Restoring Databases

The Restore dialog is used to select the Database to be restored as well as the source of the backup file. As a precautionary measure, "Restore" only allows restoration of one database at a time, unlike the

"Backup" command, which backs up all databases at once. When the appropriate backup disk has been loaded and the appropriate database selected a click on the "Restore" button initiates the restoration. To abort the restore process, click on the "Cancel" button.

Figure 33 is a reminder that if changes to the system databases have been made since the backup was made, the changes will be lost. Therefore those changes must be redone to the restored database or they will be lost.
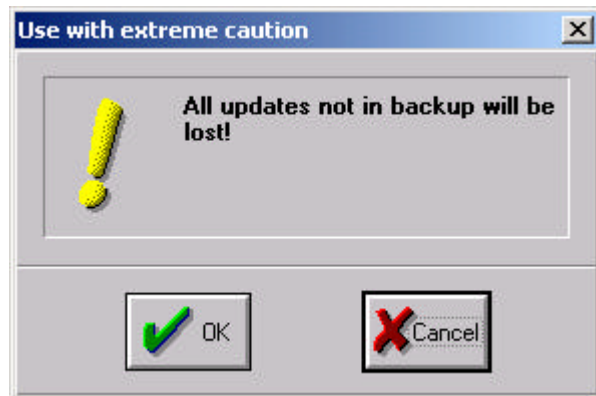

Figure 33: Backup Updates loss reminder

Security Preferences

The "Security Preferences" dialog (see Figure 34) is used to make important settings that govern the way in which the Security Escort System reacts in the event of "Alarm" and "Test" transmissions from the subscribers' Transmitters. This dialog is available only to the Security Director or his or her key operator.

Most of the options given are simple checkboxes. To activate or deactivate the option given, click on the box adjacent to the text.
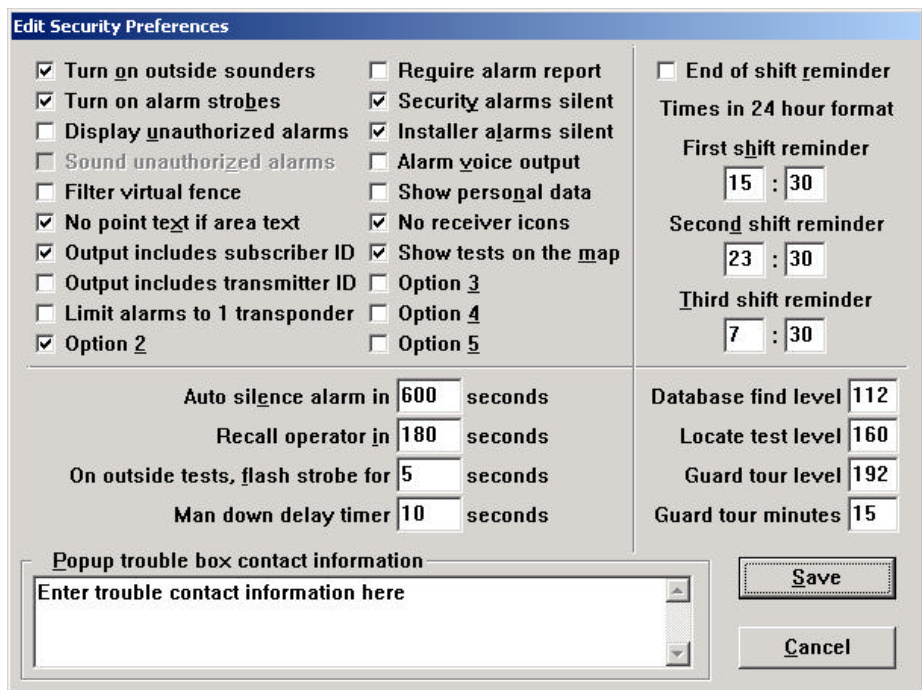

Figure 34: Edit Security Preferences

A check mark appears in boxes adjacent to activated options, empty boxes signify deactivated options. Some options in the "Security Preferences" dialog require numerical values. To change the current values, click on the white box containing the values, then type in a new value.

Clicking on the "Save" button saves the modifications and exits the "Security Preferences" dialog. Clicking on the "Cancel" button presents the option to save the changes made so far, to discard the changes, or to remain in the "Security Preferences" dialog.

Turn On Outside Sounders

This checkbox is used to activate or deactivate the sirens on Alert Units and transponders. Some security directors prefer that all alarms be silent, others choose to employ sirens. Checking this option causes the sirens on the Alert Units, to sound in the event of an alarm.

Turn On Alarm Strobes	Checking this option causes the strobe lights on the Alert Units and transponders, to flash in the event of an alarm.
Display Unauthorized Alarms	This checkbox determines if "Unauthorized" alarms are to be displayed on the Central Console. Unauthorized alarms are those triggered by Transmitters not currently registered in the Subscriber Database. These could be Transmitters that have been removed from the database because they were lost or stolen, they could be transmitters not yet issued, or they could be transmitters issued to subscribers at another Security Escort System. Typically this checkbox should not be checked.
Sound Unauthorized Alarms	This checkbox determines if "Unauthorized" alarms are to be sounded on the Sounders of the Receivers and the sirens of the Alert Units and transponders. The option is not available unless the "Display Unauthorized Alarms" option is selected. Typically this checkbox should not be checked.
Filter virtual fence	If the virtual fence option is be used, this box may be checked if some false alarms are generated to reduce the number of the false alarms. If it is checked then the actual alarms will be delayed by the supervision period of the transmitter.
No Point Text If Area Text	This checkbox effects the location text shown on the alarm screen. If this checkbox is checked and the alarm is determined to be within a predefined area then only the area text will be displayed (any receiver location text will be suppressed). Typically this checkbox should be checked.
Output includes Subscriber ID	If this checkbox is checked then anytime the systems prints or displays text for an alarm or test the subscriber's ID number will also be displayed. Otherwise the subscriber's ID will not be shown.
Output includes Transmitter ID	If this checkbox is checked then anytime the systems prints or displays text for an alarm or test the transmitter ID number will also be displayed. Otherwise the transmitter ID will not be shown. Typically this checkbox would not be checked.
Limit Alarms to 1 Transponder	This box should not be checked. It was used only in a system where all transponders operate on areas that are separate from each other. It would prevent all interactions between receivers on different transponders. Typically this would be very undesirable.
Option 2	This checkbox is for a future option. At this time it has no function. Leave this checkbox unchecked.
Require Alarm Report	If this checkbox is checked then the operator will be prompted to complete an alarm report when the alarm is reset from the screen. If the responding officer is required to complete the report, or if no system report is desired, this box should not be checked. If the operator should complete the report then check this box.
Security Alarms Silent	If this checkbox is checked then alarms transmitted by "Security" or "Watchman" Transmitters are to be "silent", alerting the dispatcher at the Central Console, but not sounding the sirens of the Alert Units or the Sounders in the Receivers.
Installer Alarms Silent	If this checkbox is checked then alarms transmitted by transmitters issued to installing company representatives and visitors are to be "silent", alerting the dispatcher at the Central Console, but not sounding the sirens of the Alert Units or the Sounders in the Receivers.
Alarm Voice Output	If this checkbox is checked then predefined sound (.WAV) files can be played at the alarm console for specific alarm types. Typically this checkbox would not be checked.

Show Personal Data	If this checkbox is checked then personal height, build, hair and eye color data will be displayed on the alarm screen.
No Receiver Icons	If this checkbox is checked then individual receiver icons will not be shown on the alarm map display. Typically this checkbox would be checked.
Show Tests On The Map	If this checkbox is checked then "Tests" from subscriber's Transmitter will be displayed on the normal map screen as "OK" or "FAIL" icons, signifying a successful test by a valid subscriber or an attempted test transmission from a Transmitter not in the Subscriber Database. This option doesn't effect the display the subscriber receives from a receiver or Alert Unit's strobe. Typically this checkbox would be checked.
Option 3	This checkbox is for a future option. At this time it has no function. Leave this checkbox unchecked.
Option 4	This checkbox is for a future option. At this time it has no function. Leave this checkbox unchecked.
Option 5	This checkbox is for a future option. At this time it has no function. Leave this checkbox unchecked.
Auto Silence Alarm In 'X' Seconds	This box determines the length of time that the sirens and sounders will sound before being automatically silenced by the Central Console. When the sounders are automatically silenced in this way, the Central Console remains in its "Alarm" mode. The numerical value is in seconds, and it can be set up to 9999. This value would be set to prevent violating local noise ordinances Typically this value would be set to 240 seconds or greater (default 600 seconds).
Recall Operator In 'X' Seconds	This box determines the length of time before a "Recall" alert is issued to the dispatcher at the Central Console when an alarm is being displayed. If neither the mouse nor any key has been actuated for the specified length of time, the Console will resound the "Alarm" sound once each programmed period. This feature prevents inadvertently ignoring an active alarm event. The numerical value is in seconds, and it can be set up to 240 seconds. Typically this value would be set to 60 seconds or greater (default 180 seconds).
On Outside Tests Flash Strobe For 'X' Seconds	The entry in this box controls the approximate length of time the strobe on an Alert Unit will flash to signify a successful Transmitter test. The value is in seconds, and can be set between 0 and 15. Typically it is set to 5 seconds (default 5 seconds).
Man Down Delay Timer 'X' Seconds	This value controls the time that a transmitter must be in a man down condition before a man down alarm is displayed. Typically it would be set to 10 seconds (default 10 seconds). Setting this value too short will cause inadvertent man down alarms to be generated.
End Of Shift Reminder	A check in this box causes a prompt to appear on the Central Console screen every five minutes for 30 minutes prior to the end of each shift if there are incident reports that have not yet been completed. It is intended to responding officers to complete alarm reports before the end of their shift.
First, Second, Third Shift Reminder	The entries in these fields are the times (24-hour clock) at which the Central Console will prompt the dispatcher that there are one or more incident reports that have not yet been completed. Typically the times would be set to 30 minutes before the end of shift. Prompts will be given only if the "End of Shift Reminder" option is selected.

Database Find Level	This is the minimum receive level (1-255) that must be heard before the system will automatically enter the transmitter in the Subscriber Locate dialog (default 112). It determines the distance the subscriber's transmitter must be within the specified ID capture receiver (set in the System Preferences dialog) before the system will recognize the test.
Locate Test Level	This is the minimum receive level (1-255) that must be heard before the system will accept a test generated by a transmitter other than a guard, to be printed with a location (default 160). It determines the distance the transmitter must be within from a receiver before the system will recognize the test and print the location. If the transmitter is too far away from the receiver, that receiver's green light will not be displayed, so the individual knows that they must move closer to the receiver for the test to register.
Guard Tour Level	This is the minimum receive level (1-255) that must be heard before the system will accept a test generated by the guard's transmitter to be entered as a location in the guard tour report (default 192). It determines the distance the guard's transmitter must be within from a receiver before the system will recognize the test and create the guard tour entry. If the guard is too far away from the receiver, that receiver's green light will not be displayed, so the guard knows that they must move closer to the receiver for the test to register.
Guard Tour Minutes	This setting controls the time spacing, in minutes, for entries of the guard's current location in the automatically generated guard tour report. Therefore if set to 15 minutes, an entry will be generated each 15 minutes that the guard's transmitter is within range of the system (default 15 minutes).
Popup Trouble Box Contact Information	Each yellow, pop-up trouble box that is displayed on the Central Console to advise of system problems contains specific instructions for the dispatcher. Entries in this text box will be displayed in the pop-up trouble boxes whenever a system problem occurs that requires attention. This information usually includes the name and telephone number of the designated Security Escort maintenance technicians.

System Defaults

The options contained in the " System Defaults" dialog are accessible only to Security Escort service and maintenance personnel. These options affect the system operating parameters and are to be setup by installing personnel. The Technical Reference Manual describes the functions accessible under this dialog.

System Labels

The options contained in the " System Labels" dialog are accessible only to Security Escort service and maintenance personnel. These options affect the system operating parameters and are to be setup by installing personnel. The Technical Reference Manual describes the functions accessible under this dialog.

Print System Reports Dialog

This dialog allows the system reports to be printed now, scheduled for printing each night at midnight or weekly on Sunday at midnight. To print a report or reports now check the left-hand box for each report desired and click "Print". Check the "Midnight Report" or the "Sunday Only" checkbox to automatically schedule that report at those times.

Daily Test Report

Report of testing by classes of subscriber for the last 24 hours broken down by hour.

Low Battery Report

Report of all subscriber transmitters currently reporting low battery.

"Not Testing Report"

Report of all subscriber transmitters that have not tested their transmitters within the last 28 days.

Receivers Not Heard From Report

Report of all receivers that have not heard transmissions recently.

Figure 35: Print System Reports Dialog

Could indicate a problem with that receiver's ability to hear alarm and test transmissions.

Daily Trouble Report	Report of all the troubles currently being reported by transponders, receivers and alert units.
Guard Tour Report	This selection does not generate a printed report. However the Midnight and Sunday checkboxes must be checked to write a file of the guard tour information so another application like Microsoft Excel and sort and print the desired reports.
Guard Tour Exception Report	The guard tour exception reports collected within the last day. Not currently implemented.
New Alarm Reports	Alarm reports for all of the new alarms that have been received by the system.
Fail To Test Letters	Notices to all of the subscribers that have not tested within the last 28 days. Not currently implemented.
Weekly Subscriber Test Report	Report of subscriber testing for the last 7 days broken down by hour.
Weekly Security Test Report	Report of security personnel testing for the last 7 days broken down by hour.
Weekly Watchman Test Report	Report of watchman personnel testing for the last 7 days broken down by hour.
Weekly Maintenance Test Report	Report of maintenance testing for the last 7 days broken down by hour.
Subscriber Check-in Report	Report of the subscribers that failed to check-in during the last scheduled check-in period.
Print Button	Clicking this button will print all of the reports that are checked in the left hand Print report now check boxes.

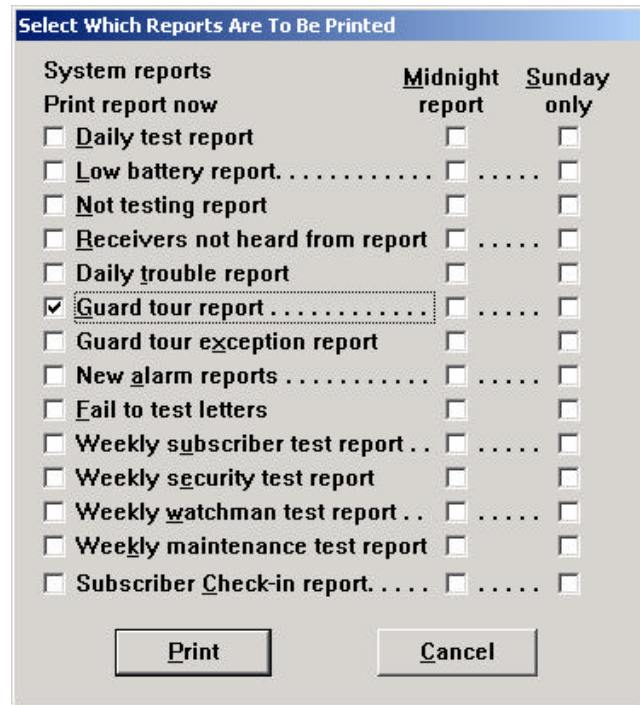|	
Midnight Report	Reports will be automatically generated at midnight for all of the check boxes that are checked in the Midnight Report check boxes.
Sunday Report	Reports will be automatically generated each Sunday at midnight for all of the check boxes that are checked in the Sunday Report check boxes.

Schedules

This selection allows management of the time of day/day of week schedules and holidays. The operation of the schedules is covered in the Security Escort Technical Manual.

Alarm Groups

This selection allows setup and arm/disarm control of the alarm groups. The operation of the alarm groups is covered in the Security Escort Technical Manual.

Alarm Group State

This selection will display a list of the alarm groups that are currently armed and have one or more transmitters faulted.

Current Check-in Status

This selection will display a list of the subscribers that are required to check-in and failed to do so during the last check-in period.

Clear Screen

To clear the screen of any outdated or unwanted data, choose this feature in the Utilities menu. The screen in automatically reset to its normal operations mode.

Output Verification

When selected, the system is scanned to verify that all alarm outputs are in the correct state. Any output found in the wrong state is corrected.

Synchronize System Time

Selecting this option on the master computer will cause the time on the slave and all of the workstation computers to be updated to the master computer's time.

The "Logout" Menu

This menu has only one command: "Logout" the current operator. When the "Logout" option is selected, the operator currently logged in is logged out and the password

Figure 36: Logout Menu

dialog appears on the screen, allowing another operator to login. All login and logout activity is recorded in the system history file and on the hard copy printout.

When the Central Console receives an "Alarm" transmission, the system behaves the same whether or not an operator is logged in. The alarm screen is displayed, allowing any operator to "Acknowledge" the alarm. When the operator's password is entered to silence the alarm, that operator is automatically logged in.

The "Setup" Menu

The options contained in the "Setup" menu are accessible only to Security Escort service and maintenance personnel. These options affect the system operating parameters and are used for diagnostic and maintenance purposes. The Technical Reference Manual describes the functions accessible under this menu.

The "Printer" Menu

The "Printer" option in the command line indicates printer status, such as "out of paper", printer "not selected", "printer off", etc. The printer can be turned "on" or "off" only by installing company personnel. The Technical Reference Manual describes the functions accessible under this menu.
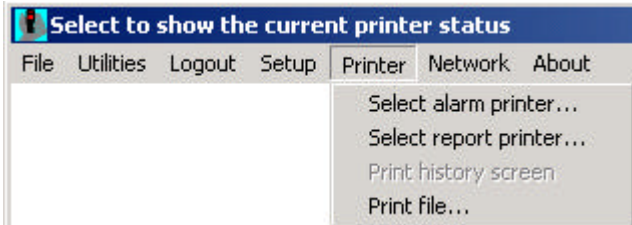
Figure 38: Printer menu
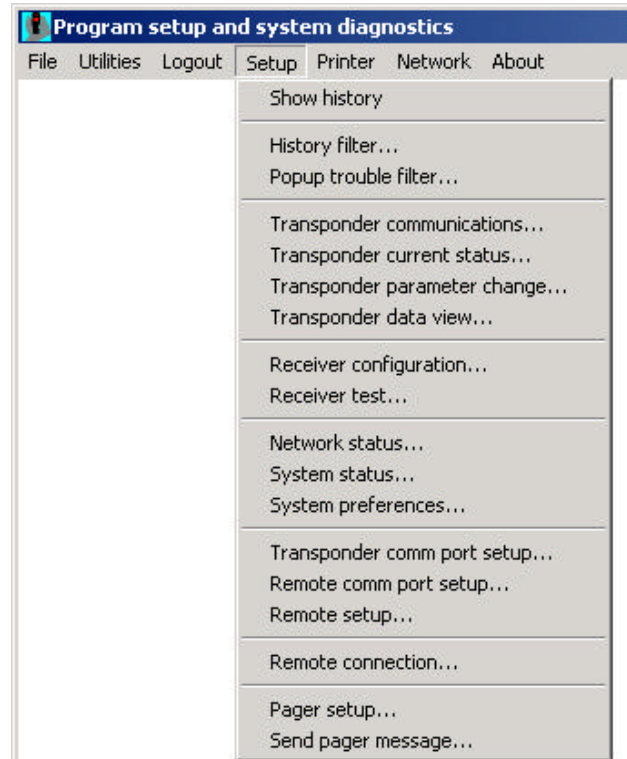
Figure 37: Setup Menu

The "Network" Menu

The "Network" menu allows an installer to setup and monitor the computer network connections. The Technical Reference Manual describes the functions accessible under this menu.
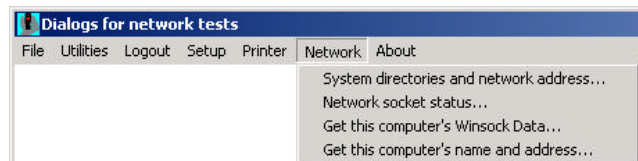
Figure 39: Network Menu

The "About" Menu

Choosing the "About..." option will open a dialog which displays information about the Central Console computer and the version of the Security Escort software currently installed.

There also are demo selections that will all be disabled (grayed out) in a live system.
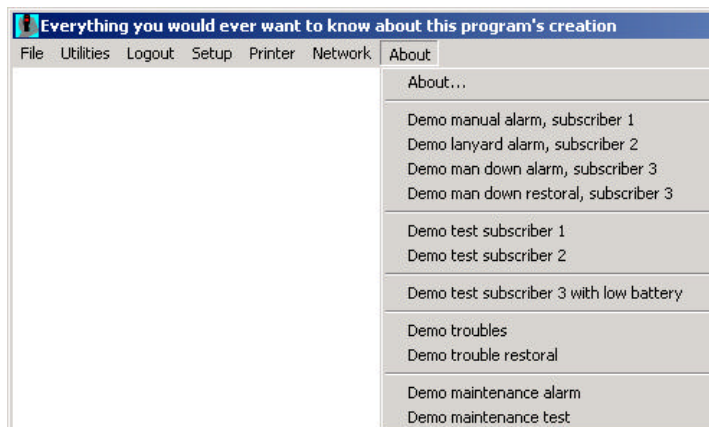
Figure 40: About menu

Chapter 5: Troubleshooting

The Security Escort system has many built in diagnostic features to detect system malfunctions. The Central Console computer to identify potential problems continuously monitors each Transponder, Receiver and Alert Unit. Whenever a problem is detected, "Trouble" alerts are presented on the display of the Central Console. These alerts provide problem descriptions, emergency phone numbers, and other instructions for resolving the problem.

This section describes the significance of system "Trouble" alerts and the action Security personnel should take in response to the problems. Examples of the "Trouble" pop-up dialog are given in each section. Note that some system "Trouble" alerts involve aspects of the system which Security Department personnel will be unable to correct themselves; when these troubles occur, the installing company service representative should be contacted as soon as possible, using the phone number that appears in the pop-up dialog.

Figure 41: Example of System Trouble

Be sure to inform the service representative of the words in the pop-up "Trouble" dialog, which describe the problem. Clicking on the "Cancel" button should clear the pop-up dialog, after the problem has been corrected or the installing company service representative has been contacted.

Note that, after a problem has been corrected, the system will confirm the correction with a "Restored" pop-up dialog. This "Restored" message should appear within 30 seconds after the trouble is corrected. Therefore, when attempting to correct a problem, clear the "Trouble" pop-up dialog and wait for 30 seconds for the "Restored" message to be certain the problem has been corrected.

Transmitters with Low Batteries

The Transmitter will sense that its battery is low well before the point at which it will no longer be able to transmit an "Alarm" message. It then inserts a "Low Battery" indication in every "Test" (or "Alarm") message sent by the Transmitter, advising the Central Console of the "Low Battery" condition. The "Low Battery" "Trouble" dialog appears anytime that a subscriber attempts to test his or her Transmitter, and the battery in that transmitter is low. Security Department personnel should promptly advise the subscriber to bring the transmitter to the Security Office for an exchange. It should be exchanged for a new one, using the "Change Transmitter" command in the File Menu as described earlier.

Broken or Lost Transmitters

When a damaged Transmitter is returned to the Security Office, it should be clearly marked as faulty and given to the installing company service representative so that a replacement can be made to the inventory of spare transmitters. The damaged transmitter should be exchanged for a new one, using the "Change Transmitter" command in the File Menu.

Lost Transmitters should be replaced promptly and the old Transmitter ID should be removed from the subscriber database.

Receiver and Alert Unit Problems

AC Loss   Each Alert Unit requires its own AC power source for long term operation, however, each unit contains a backup battery which provides power to the strobe and siren in the event of loss of AC power. The "AC Loss" Trouble dialog appears whenever the power supply of an Alert Unit has been interrupted. A security officer should check to see if the wiring to the Alert Unit has been disturbed or if one of the building's circuit breakers has been tripped. If the trouble cannot be resolved, the installing company service representative should be contacted promptly*.*   The Alert Unit's internal batteries will keep it operational for several hours.

Low Battery   This trouble dialog signifies that an Alert Unit's internal batteries, and they are beginning to run low. A security officer should be sent to check the device's power source (see AC Loss, above). When the AC power is restored, the batteries will recharge automatically. If power can not be restored the installing company service representative should be informed the next business day.

Tamper   This pop-up "Trouble" dialog signifies that a Receiver or Alert Unit has been tampered with. The location of the device is shown in the pop-up dialog. A security officer should be sent to inspect the device. If the cover is loose, or missing, tightening or replacing the cover may fix the problem. If the cover is secure and there is no visible reason for the tamper warning, the installing company service representative should be contacted as soon as possible.

No Response   This pop-up trouble dialog appears to indicate that a receiver or alert unit is no longer responding to the system. The installing company service representative should be informed the next business day if a single receiver or alert unit is affected. However if many receivers or alert units are reporting then the installing company should be contacted as soon as possible.

Jamming   This pop-up trouble dialog appears to indicate that a receiver is experiencing radio interference that may effect its ability to hear alarm signals. The installing company service representative should be informed the next business day.

Output Device Error   This trouble dialog appears when there is no response to a signal sent by a Transponder to an Alert Unit or receiver. It means that a single output did not operate correctly when commanded by the system. The installing company service representative should be informed the next business day.

Bad Checksum   When this pop-up dialog appears, there has been an error in the communications between a Transponder and its Receivers or Alert Units. The installing company service representative should be informed the next business day.

Transponder Problems

Communications Failure

This "Trouble" alert indicates that the Central Console is having problems communicating with one of the Transponders. This could mean that a significant portion of the protected area might not be able to report alarms to the central console. The installing company service representative should be contacted ***immediately.***

AC Loss

This "Trouble" alert indicates that the power supply of a Transponder has been interrupted. A security officer should check if the Transponder's input power line has been disturbed. If that is not the problem, one of the building's circuit breakers may have tripped. If the trouble cannot be resolved, the installing

company service representative should be informed as soon as possible*.* The Transponder's internal batteries will keep it operational for several hours, which should be sufficient time for the problem to be resolved.

Low Battery

This trouble dialog signifies that a Transponder's internal batteries are beginning to run low. If not already done, the source of AC power to the Transponder should be checked (see AC Loss, above). When the AC power is restored, the batteries will recharge automatically. If the power cannot be restored the installing company service representative should be informed as soon as possible.

Tamper

This pop-up "Trouble" alert signifies that a Transponder has been disturbed. A security officer should be sent to inspect it. If the door is ajar, it should be closed and secured. If the problem cannot be identified and corrected, the installing company service representative should be informed as soon as possible.

Bus Faults

This "Trouble" alert indicates that a Transponder can not communicate with one or more of its Receivers or Alert Units. The installing company service representative should be contacted ***immediately.***

Other Troubles

Other "Trouble" alerts that are site specific may be displayed at the Central Console. For these trouble warnings follow the directions on the screen. The installing company service representative should be informed as soon as possible*.*

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