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Section 1.
Introduction

The Access Control Administration Software (ACAS) enables you to manage the access control functions of your security system. Used in conjunction with the Silent Knight Census 4821 security system, you can use ACAS to manage a database of your users and system events. Establishing a communication function enables system operators to upload and store events from the control panel, from both on- and off-site locations. This information can then be used in generating reports, which can be displayed and printed based on event selection and sort criteria.

ACAS also enables you to manage user and site information such as access codes and security levels, user profiles, and time schedules. An fully-functional, online touchpad provides you with an operational link to your security access system.

The ACAS Windows-style design incorporates pull-down menus, dialog boxes, and an extensive online Help system.

About this Manual

This document is written for those persons installing and operating the ACAS software. While you can find most information online about specific fields and ACAS program screens, this manual provides additional explanation for most functions. Procedures are included for installation and general operation of the ACAS software, as well as instructions for filling in specific dialog boxes.

Refer to Section 3 for operating instructions.

The following conventions are used in this manual:

- *Dialog box* is a standard term used for Windows-style software screens. ACAS dialog boxes are sometimes referred to as program screens.

- *Operator* refers to the person running the ACAS software; *user* generally refers to the person whose activities are being monitored by the security system.

- *Disabled* is a term used to describe when a screen object cannot be selected. Buttons, system options, fields, menu items and so on appear dimmed when disabled.

  Enabled means that the item can be selected. For example, a system option is enabled when an [X] appears next to it.

- Touchpad buttons are shown enclosed in a box.
  For example, CLR.

Online Documentation

Most information that you need to operate ACAS can be found online. This document contains the information you need to run ACAS, but the following forms of online help are also available:

- On the bottom of the screen, a short description appears for each field.   As you tab through the fields, the description changes to reflect the currently highlighted item.

- Context-sensitive Help. When you press F1, a help screen displays details for the currently highlighted item. This information includes field definitions, valid input details, and additional explanation on how to fill in the ACAS program screens. Refer to Section 3 for more details.

- Press Alt + F1 to display general operation tips.

Section 2.
System Requirements and Installation

System Requirements

> **Important**
> **Protect your valuable data. Back up your data files on a regular basis to protect your changes. See page 2-6.**

Software

When operating ACAS on a computer dedicated only for the ACAS system, DOS 3.1 or higher is required (Windows is optional).

If you install ACAS on a computer that is used for word processing or other tasks (multi-task environment), Windows 3.1 or Windows '95 is required. DOS 3.1 or higher is also required.

Hardware

The following hardware is required:

- IBM compatible, protected mode capable 80386, 80486 PC

- Compatible color VGA monitor and adapter

- Hard disk and floppy drive

- 4 megabytes free disk space (used for program, not data)

- 4 megabytes RAM (2 megabytes must be extended free memory)

- Electronic hardware key (supplied)

Optional Hardware

Portable PCs
ACAS will run on a portable computer with a monochrome LCD screen.

Mouse
A Windows-compatible mouse is optional. (See the documentation that comes with your mouse for installation details.)

Modem
For communication through the telephone lines, the following modems have been tested by Silent Knight for compatibility with the ACAS system:

- US Robotics Sportster 14400 Fax Modem
- Hayes™ Accura
- Motorola V.3400 LCD RM16M 115V
- Motorola Lifestyle 28.8
- Multi-Tech 1200, 14.4, 19.2
- Practical Peripherals PM2400FX96SA and PM288MT II V.34

See Table 2-1 for more details.

Communication interface
For on-site communication, you can use a serial communication module, such as the Model 4824 Serial/Parallel Interface. See "Communication Hardware" later in this section for more details.

Installing the ACAS software

In the steps below, substitute the actual drive letter if it is not A.

1. Insert the ACAS diskette(s) into drive A.

2. Type `A:` and press ⌷Enter⌷ to change to the A directory, if necessary.

3. At the A:> prompt type `INSTALL` and press ⌷Enter⌷.

If reinstalling the ACAS software:

4. Copy your backup DATA directory into the new directory. See page 2-6 for more information.

Installing the Hardware Key

An electronic hardware key is supplied with the ACAS software. To use ACAS, you must install the hardware key as shown in Figure 2-1.
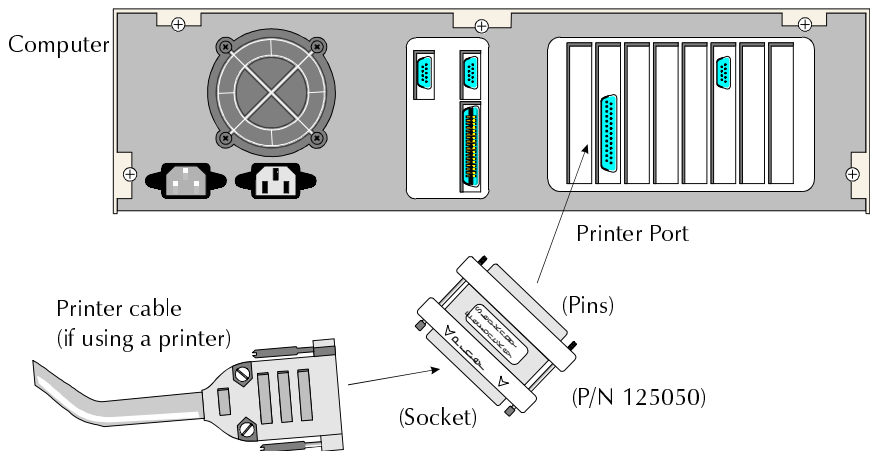
Figure 2-1. Installing the Electronic Key

Without this hardware key, ACAS displays the error `Hardware key not found` and logs you off the system. Periodic tasks will still run and communication from the panel is active, but you cannot use the ACAS menus.

Note: If your installing company uses the ACAS computer for downloading system changes, they will need to plug their hardware key into the ACAS hardware key.

Installation for Running ACAS in Windows

ACAS is supplied with a program information file (ACAS.PIF) and icons to make installation under Windows convenient. For continuous mode installation under multi-tasking, the .PIF file will have to be installed under the STARTUP group icon under Windows. This will cause the program to start executing every time Windows is started.

Refer to the Windows documentation for more information.

Running ACAS

1. **Using Windows:** From Program Manager, double-click on the ⬚ icon. (If this is the first time you have run Windows since ACAS was installed, accept the messages that tell you a program group has been created for ACAS.)

   Using DOS: At the C:\ prompt, type `CD|ACAS` and press Enter to go to the directory where the ACAS software is stored (typically c:\ACAS). Type `ACAS` and press Enter .

2. The ACAS software assumes that a hardware communication device is connected to your computer and is turned on. If not, the message `Could not Activate Communication` displays. If you do not need to communicate with the panel at this time, you can press Ok and continue. (See Section 8 of this manual for hardware communication problems.)

3. Enter your ACAS operator identifier (ID) and password. The factory-programmed operator ID and password are both ADMIN. See "Operator IDs and Passwords" in Section 4 if you need more information.

Backing Up the System

Protect your valuable data by frequently backing up files using the backup tool of your choice (for example, Windows File Manager, DOS).   Refer to the documentation that comes with the backup tool you use for instructions on how to back up files.

If your system ever experiences a hard disk failure, do NOT back up your files since they can become corrupted when the disk fails. Reinstall the ACAS software and copy the DATA directory from your latest backups into the new directories.

ACAS data is located in the ACAS\DATA directory. Files with extensions .DB, .PX, and .PIO contain your data. Back up these files *every time* you change account (site) information.

Communication Hardware

For communication between the panel and a computer, you can use a modem or a serial communication device, such as the Model 4824 Serial/Parallel Module. See page 2-2 for a list of compatible modems.

Setting System Configuration Options

To set options for your communication hardware, select the Functions menu by pressing ⎡Alt⎤ + F or click on it with the mouse. Press C or click on Configure to display the System Configuration screen (Figure 2-2).

Select if using a modem for communication. The panel can communicate using the Model 4824 Serial/Parallel module with a modem. You must use a serial cable to connect the 4824 to the modem.

Consult your modem manual for the appropriate Baud rate.

For direct communication, make sure the Baud rate you select is available to both the 4824 and the PC.

```
┌─[■]══════════════════ System Configuration ═══════════════┐
│                                                            │
│   Serial Number:   Demo. Ver.                              │
│                                                            │
│     Port:                          Baud Rate:              │
│     ( •) Com 1                      ( ) 300   ( ) 2400  ( •) 9600   │
│     ( ) Com 2                       ( ) 1200  ( ) 4800  ( ) 19200   │
│                                                            │
│       Hardware Type:        ( ) Modem   ( •) Direct        │
│         Modem Init String:                                 │
│         Pulse Dialing:      N                              │
│         Result Code Level:  1           Rings:  2          │
│                                                            │
│        Hangup Delay: 20              Redial Delay: 20      │
│                                      Auto Log Off Time: 30 │
│                                                            │
│              Ok                        Cancel              │
│                                                            │
└────────────────────────────────────────────────────────────┘
```

Select if the computer, the 4821 system, and the serial communication device (such as the Model 4824) are onsite. The computer and the 4824 module is directly connected via a null modem cable.

Figure 2-2. Hardware Configuration Screen

Table 2-1 describes the options that appear on the System Configuration screen. The choices you make will depend on whether you are communicating via a modem or with the direct connect method. For some of the options below, consult your modem and computer manuals for their requirements.

Table 2-1. Configuration Screen Options

Option	Description	Selection for Modem (Phone Lines)	Selection for Direct Connect (4824)
Port	Computer communication port. Select Com 1 or Com 2.	Per computer's requirements.	Per computer's requirements.
Baud Rate	Transmission speed; 300-19200.	Select 300-19200 per requirements of modem.	Select 300-19200 per requirements of serial communication device.
Modem Init String	Use this option to create a string of text that will be sent automatically whenever the modem dials out. Up to 33 ASCII characters.	Consult your modem manual.	Not applicable.
Pulse Dialing	Y = if phone uses pulse dialing, N = tone dialing.	Per telephone requirements.	Not applicable.
Result Code Level	The result code is a number that reflects the level of detail you will receive in error messages. Options are 1-4 where 4 is the highest level of detail.	Consult your modem manual.	Not applicable.
Rings	Number of rings (0-10) before computer answers an incoming call. Press 0 to disable.	Consult your modem manual.	Not applicable.
Hangup Delay	Number of seconds (4-20) before the computer hangs up in the call sequence for Answer Machine Bypass (see page 2-10).	See note below.	Not applicable.

Option	Description	Selection for Modem (Phone Lines)	Selection for Direct Connect (4824)
Redial Delay	Number of seconds (4-20) before the computer redials in the call sequence for Answer Machine Bypass (see page 2-10).	See note below.	Not applicable.
Note: If the panel has been programmed for the Answer Machine Bypass feature, the Hangup Delay and Redial Delay must be programmed to be compatible with your telephone/PBX system and the panel. See page 2-10 for more information.			
Auto Log Off Time	Number of minutes (1-99) of no system activity before the computer disconnects from the panel.	User preference.	User preference.

Null Modem Serial Cable Wiring

For a direct connection to the panel, use the following wiring information:

Serial Interface Port Signals and Connector Points

Signal	Name	DB9 pin	DB25 pin
DCD	Data Carrier Detect	1	8
RX	Receive Data	2	3
TX	Transmit Data	3	2
DTR	Data Terminal Ready	4	20
GND	Signal Ground	5	7
DSR	Data Set Ready	6	6
RTS	Request to Send	7	4
CTS	Clear to Send	8	5
RI	Ring Indicator	9	22

To 4824
9-pin Female

			To Computer COM Port	9-pin	25-pin
4	DTR		DTR	4	20
6	DSR		DSR	6	6
7	RTS		RTS	7	4
8	CTS		CTS	8	5
1	DCD		DCD	1	8
3	TXD		TXD	3	2
2	RXD		RXD	2	3
5	GND		GND	5	7

Figure 2-3. Null Modem Serial Cable Wiring

Answering Machine Bypass Requirements

Enabling the Answering Machine Bypass feature prevents the answering machine from picking up the call when the computer dials the panel to initiate communication. The call sequence that occurs is shown in Figure 2-4.
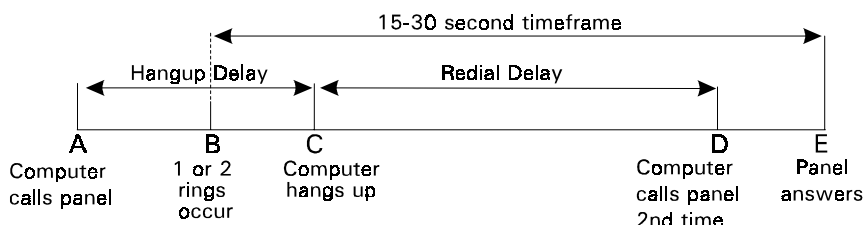
Figure 2-4. Answering Machine Bypass Sequence

If the Answering Machine Bypass feature is enabled for the panel, program the Hangup and Redial Delays on the System Configuration screen (see Figure 2-2) as shown in Table 2-2.

Table 2-2. Programming Hangup and Redial Delays

Call Sequence	Programming Requirement
1. Computer calls panel.	
2. Hangs up after one (or in some instances two) rings.	Program the Hangup Delay to accommodate 1-2 rings.
3. The panel answers if the first ring of the second call occurs within 15-30 seconds of the last ring of the first call.	Program the Redial Delay to accommodate the 15-30 second before call back requirement.
Note: You may not need to change the ACAS default settings for these options if your computer dials out directly, rather than through a PBX-type telephone system.	

Section 3.
General Operation

ACAS Menu System Overview

ACAS system functions are grouped into four main areas as menus on the main menu. When you select one of these areas, a drop-down list of functions for that menu appears. Table 3-1 summarizes the functions available from each menu.

Table 3-1. Menu Summary

Through this menu,	you can perform these tasks:
Site	Manage site and account information; edit the automatic events upload time schedule; add, delete, or change users, user profiles, areas/partitions, and time schedules.
Online	For direct interface to the panel. Perform account audits, connect to the panel, upload current or history site information, and use an online (Virtual) touchpad.
Functions	Edit, delete, and add operators (with appropriate operator level), set system configurations for hardware, establish communication either direct or through a modem, display real-time event information, customize user information.
Reports	Generate reports to a printer, file, or screen.
Exit	Exits the ACAS system.

A flowchart is shown at the beginning of Sections 4 through 7 showing the menu structure for the functions described in that section.

About the Main Menu

After starting the ACAS software (Section 2), the main menu displays. The four menus are shown in the top left corner of the program screen (Figure 3-1). Through these menus, you can perform all of the tasks available to your operator level.
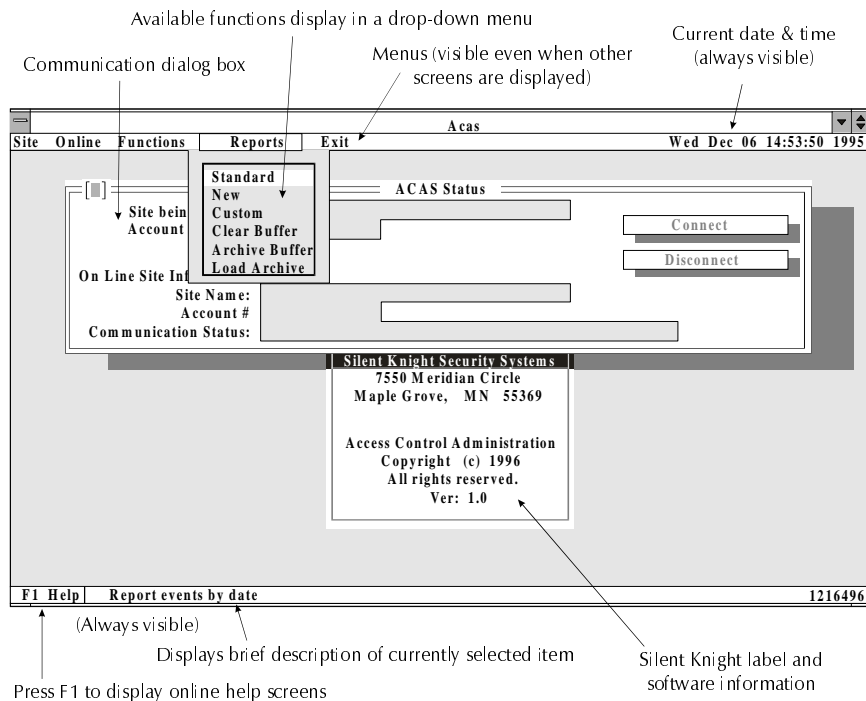
Figure 3-1. Main Menu

The main menu always displays in the background, but is not active when another screen is displayed. See page 3-7 for more information about program screens.

Mouse Versus Keyboard

The ACAS software was designed to be used with a mouse. ACAS does not require the use of a mouse, but it is often the fastest and easiest way to move through the program screens and make selections. You can also perform all functions from the keyboard. (This manual assumes you are familiar with using a mouse. See your mouse manual if you need more information.)

Table 3-2 shows the editing keys that you can use on the ACAS program screens.

Table 3-2. ACAS Editing Keys

Keys	Use
↑ ↓	Scroll through a list
ALT + a highlighted letter	Select the associated button or menu item.
Enter	Select the currently highlighted button.
Tab	Move through fields on a screen.
SHIFT Tab	Move backwards through a screen.
Home / End	Move to the beginning or end of a list or field.
PgUp PgDn	Move to the beginning or end of the screen (when listing items).
Ctrl PgUp / Ctrl PgDn	Move to the beginning or end of a list that displays over more than one screen.
Spacebar	Toggle on and off options.
Esc	Cancel and close the current dialog box.

Dialog Boxes

The interactive menu boxes that make up ACAS program screens are called dialog boxes. As you move through the software, new dialog boxes are opened on top of previous ones.

You can move a dialog box to change its position on your screen or to view the box that has been overlaid. You can view the underlying dialog box by dragging the top dialog box as shown in Figure 3-2.

The previous dialog box can only be viewed

Click on this line and drag the dialog box to move it anywhere on your screen

Acas					▼ ▲
Site Online Functions Reports Exit				Thurs Dec 07 11:41:29 1995

Select Site

Select	Add	Edit	Delete

12	ACCESS	BASELINE added 12
127	ACCESS	BASELINE Uploaded 127
13	ACCESS	BASELINE Uploaded 13
137	ACCESS	BASELINE Uploaded 137
149		
19		
19		

Account   127

Site Name Silent Knight Security Systems
Site Address 7550 Meridian Circle
City Maple Grove   State: Zip:

Voice Phone
Data Phone
Dial Suffix   Ans Machine Bypass:

F1 Help   Subscriber Name   1158128

Note: You cannot edit or move a dialog box until the dialog box on top is closed.

Figure 3-2. Moving Dialog Boxes

Throughout this document, we may refer to specific dialog boxes as program screens.

Online Help

ACAS provides online information to help you fill-in the program screens. In the bottom left corner of the dialog box, a one-line description briefly describes the currently highlighted field. You can also press ⌷F1⌷ to bring up a screen with more detailed information about the option.
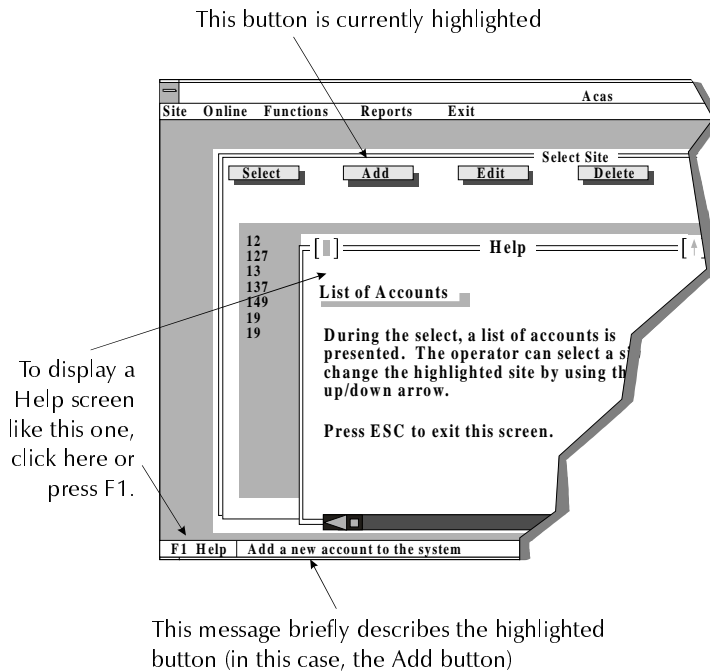
Figure 3-3. ACAS Help System

For online general operation tips, such as this section describes, press ⌷Alt⌷ + ⌷F1⌷.

Understanding Objects on a Screen

The menu boxes, fields, and so on that appear on ACAS program screens are called objects. Figure 3-4 is a sample program screen describing most of the objects that appear on an ACAS program screen.
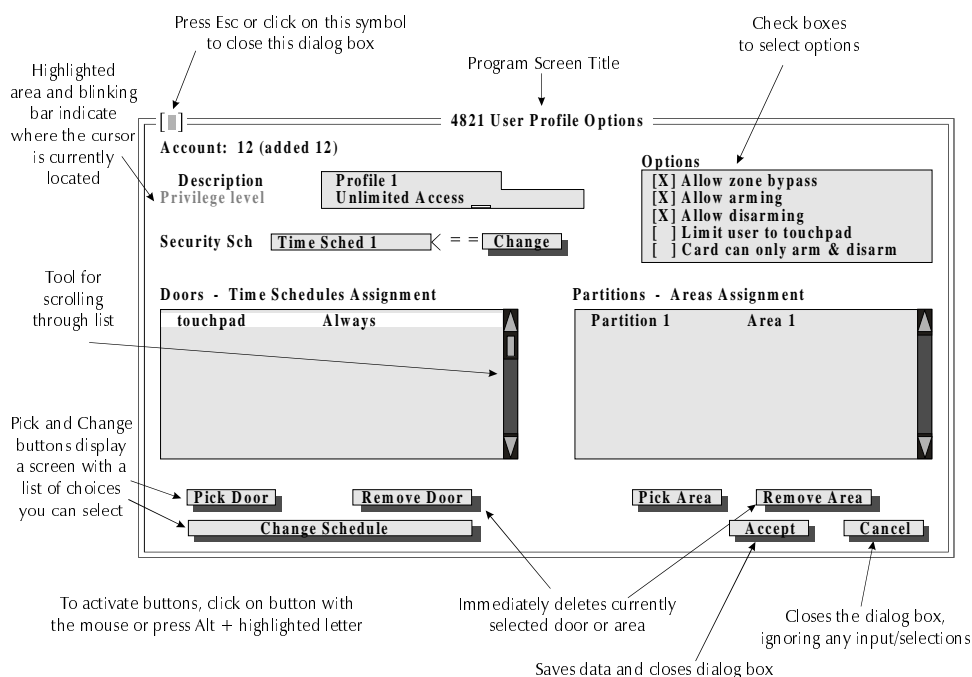
Figure 3-4. Descriptions of ACAS Screen Objects

Input Fields

Input fields are generally areas on the dialog box where you enter data by typing information for the account you are editing.

- **Numeric Input Fields**

  Numeric fields are used for entering numeric data such as user codes and exit time delays.

  When the number must be within a specific range, the field will not allow you to enter a number outside the range. For example, if you entered 256 for an exit delay timeout (where the range is 0 to 255 seconds), ACAS will display the message, `Value not in the range 0 to 255`. When you press Ok, on the message dialog box, the cursor is positioned in the field that caused the error.

- **Text Input Fields**

  Text fields may accept any characters, but are generally used to enter text. These fields are typically used for storing names of partitions, areas, zones and so on. The system will prompt you if you leave a mandatory field blank.

Selection Fields

Selection fields accept only specific data, which you select by scrolling through the choices using the keyboard arrow keys. The system will not allow you to enter any other option.

Use the ↓ and ↑ keys to scroll through selections.

This field is currently highlighted.

Acas

Site   Online   Functions   Reports   Exit

[▐] ══════════════════════════ 4821 Area Options ═══
Account: 12(added 12)

Area Name: Area 1 ◣
Auto Close Operation: Auto Arm
Exit Delay Timeout: 10

Area Close Time Schedule: Always
Area Close Exit Delay Time: 10

Area Open Time Schedule: Always

Area Options
[ ] Enable Auto Open
[ ] Audible Trouble Alert When Armed

F1 Help   Select the Mode for Auto Close(arming)

This message indicates that the Auto Close Operation field is a selection field.

Figure 3-5. Selection Fields

Check Boxes

By selecting or de-selecting check boxes, you can enable or disable the selected option. To select (enable) an option, position your cursor on the check box field, then click or press the space bar. An X will appear in the braces in front of the option name. Repeat this action to de-select (disable) the option. The X will disappear, indicating that the option is disabled.

These options are not selected.

Options
[X] Allow zone bypass
[X] Allow arming
[X] Allow disarming
[ ] Limit user to touchpad
[ ] Card can only arm & disarm
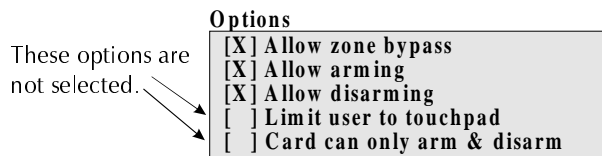
Figure 3-6. Check Box Selections

Buttons

Buttons look and operate much like real buttons. You can use the mouse or your keyboard to "press" buttons on your ACAS program screen and initiate an action. While most of the buttons look the same, there are differences in their actions. Table 3-3 provides button descriptions.

Table 3-3. Button Functions

Button Type	Description
Pick (or Change)	When you press Pick Areas, Pick Doors, Change Schedules, and so on, a screen displaying the possible choices will appear. On this screen, you must make a selection from the list and then press the Selection button.
Select	Selects the highlighted item from a list and returns to the previous program screen. The selected data will appear in the appropriate field.
Accept	Save the current program screen data and closes the dialog box. If you close the dialog box without pressing this button, the system will ignore any selections or changes.
Cancel	Ignores any data changes made and closes the dialog box. For example, if you make a mistake when making programming changes, click Cancel to prevent the edits from taking effect. (You can also click on the [■] icon in the upper left-hand corner of the dialog box, or press the [Esc] key.)
Ok	Press to acknowledge the error and close the dialog box.
Sort	Sorts the displayed list alphabetically by name or numerically by user ID.
Add	Displays another dialog box for you to enter new data.
Edit	Displays the selected account information for updating.
Done	Saves changes that may have occurred on several program screens or indicates completion of a particular task. Closes the dialog box.

Button Type	Description
Export	Press to save selected events to a text file.
Remove or Delete	Deletes the highlighted item in the associated list. A message will ask you to confirm the delete action. If you accidentally delete an item you want to save, you can press the Cancel button on the dialog box from which you initiated the delete request.

Lists

The ACAS software can store data for up to 1,800 users. When you select Edit Users from the Site menu, users display by default in the order they were added to the system. You can press the Sort button to display users in numerical order by their user number (not by access code).

ACAS provides a scroll bar with lists that are visible on the program screen. Figure 3-7 shows an example list box.
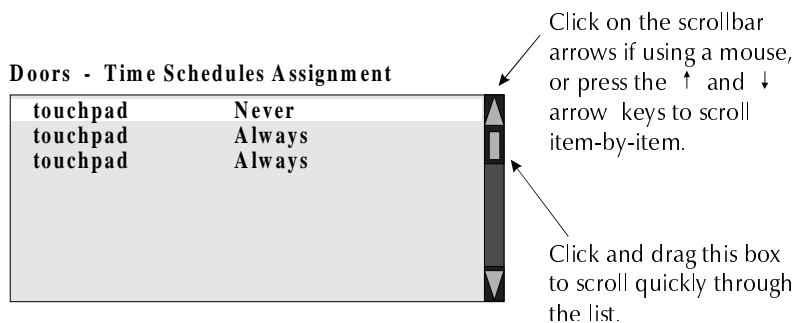
Figure 3-7. Scrolling Through a List

For some selection fields, you can only enter data chosen from a list of valid data. An arrow shown at the end of a field identifies this type of selection field. To display the list, click on the arrow or press the ↓ arrow key on the keyboard. Scroll through the list

until you highlight your selection. Double-click with the mouse or press ⌶Enter⌷ to fill in the field and close the list.

The list is alphabetical. If you enter a letter, the cursor will jump to the first item in the list that begins with the letter.

Event:

If you know the event name, you can begin typing and ACAS will search for it incrementally.

For example, to find DATE TICK, type "DAT" and the cursor will jump to here.

COLD ZONE BYPASSED
COLD ZONE TROUBLE
COLD ZONE TROUBLE RESTORED
COLD ZONE UNBYPASSED
DATA LOST
DATE CHANGED
DATE TICK

When you continue typing and type "DATE", the cursor jumps to here.

When you type "DATE T", the list jumps to here.

Press Page Up, Page Down, Home, End, or arrow keys to start the search over.

Figure 3-8. Selection Field With Drop-Down List

Data Verification

Most ACAS fields accept only specific data. Numeric input fields, for example, often require the number entered to be within a certain range. Selection fields require that you select one of the choices displayed when you scroll through the field. When you enter invalid data and press the Accept button, ACAS will display an error message. When you select OK at the dialog box, the system places your cursor in the field where it found incorrect data.

ACAS verifies all of the site data and checks for any discrepancies, such as duplicate user codes, when you try to download the data to the control panel. See Section 6 for more information.

Section 4.
System Functions

This section describes options for controlling and maintaining the ACAS software. Most options described in this section appear on the Functions menu as shown in Figure 4-1.
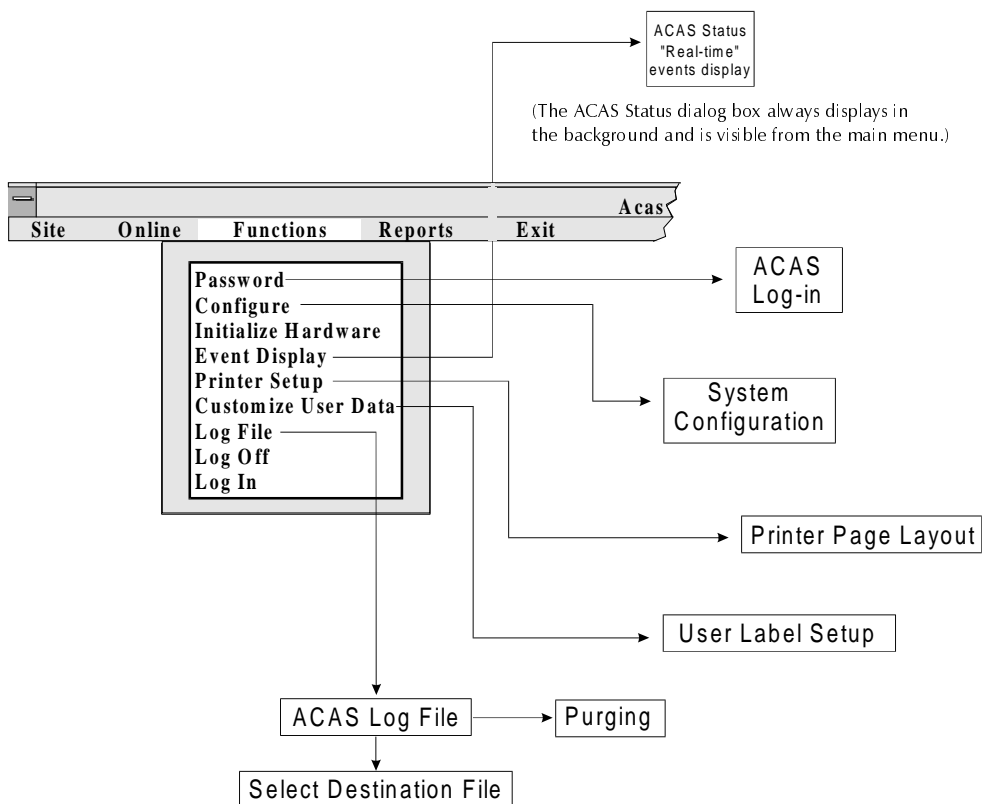
Figure 4-1. Functions Menu Structure

Log Off / Log In

Select Log Off from the Functions menu to terminate the current operator's session. When no operators are logged in, the system can continue to receive calls from panels, but all other functions are disabled. Once you select Log Off, the log off screen continues to display, but most menu options have been disabled. ACAS automatically logs out the operator if there is no keyboard or mouse activity after a configurable time period (see "Communication Hardware Setup" in Section 2).

Select Log In from the Functions menu to begin a new operator's session. When you select Log In, dialog boxes prompt you for your operator ID and password.

Operator Security Levels

The system administrator programs an access level for each operator at the time of entry into the system. Table 4-1 indicates privileges for each level.

Table 4-1. Operator Security Levels

Functions	Level 1	Level 2	Level 3
Site menu			
Select Site	X	X	X
Add		X	X
Edit		X	X
Subscriber data		X	X
Edit time range for auto polling		X	X
Delete time range for auto polling		X	X
Add time range for auto polling		X	X
Delete		X	X
Find User	X	X	X
Edit Users		X	X
Add Users		X	X
Remove Users		X	X
Edit User		X	X
User ID		X	X
User code		X	X
User card		X	X
User profiles		X	X
Select different profile		X	X
Edit profiles		X	X
Add new profile		X	X
User Name		X	X
Edit Time Schedules		X	X
Edit User Profiles		X	X
Edit Areas		X	X

Functions	Level 1	Level 2	Level 3
Print (account information)		X	X
Online menu			
Program Panel		X	X
Read Options		X	X
Read Event History (from panel)	X	X	X
Virtual Touchpad	X	X	X
Functions menu			
Password			
Modify own password	X	X	X
Modify all passwords			X
Configure			X
Initialize Hardware	X	X	X
Event Display	X	X	X
Printer Setup		X	X
Customize User Data			X
Log file			
Purge (clear all ACAS entries)			X
Export log file		X	X
Print log file		X	X
Log Off	X	X	X
Log In	X	X	X
Reports menu			
Standard	X	X	X
New	X	X	X
Custom	X	X	X
Clear Buffer			X
Archive Buffer		X	X
Load Archive			X
Exit menu			
Exit ACAS	X	X	X

Operator IDs and Passwords

Operators of all security levels must enter a valid operator ID and password before access is granted to the ACAS system. See "Running ACAS" in Section 2 for initially logging into ACAS.

If the operator enters an invalid ID or password, a message will notify the operator that the log-in has failed. Most menu selections are disabled and the operator can then only re-attempt a Log-in or Exit the software.

After successfully logging in, you can change the password at any time. When you select Password from the Functions menu, ACAS prompts you for the Operator ID and a password. If your security level is 1 or 2, ACAS will display a dialog box for changing your password. You can only change your own password.

If your security level is 3, the following dialog box displays:
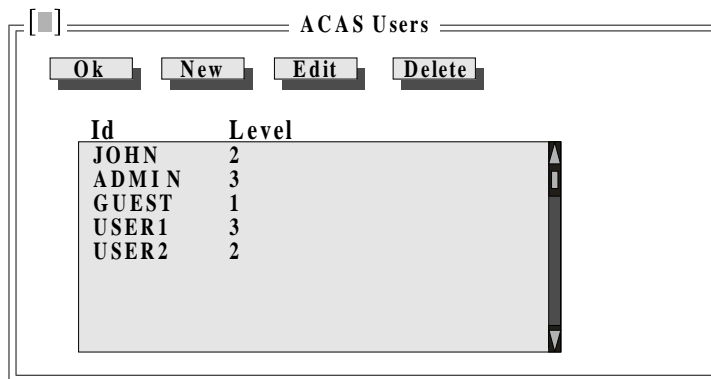
Figure 4-2. Changing, Adding, or Editing a Password (Level 3)

The default security level is Level 3, providing unlimited access to all functions (see Table 4-1 for details). Security level 3 operators can add, delete, and change any operator's security level and password.

When you press the New or Edit buttons on the ACAS Users screen, the following dialog box displays:
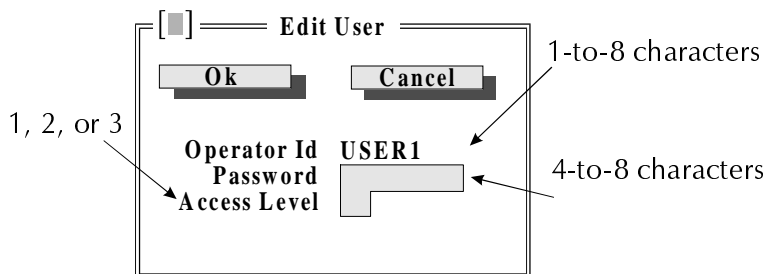
Figure 4-3. Changing a Password (Levels 1 and 2)

If you are a level 3 operator, you can change an operator ID only by deleting it, and then re-entering the operator into the system under a different ID. You cannot delete your own password.

ACAS automatically logs off an unauthorized operator attempting to change passwords.

Initializing a Communication Hardware Device

At times, you may need to re-establish communication with a hardware device such as a modem. If you are having trouble communicating with a modem, for instance, initializing can often solve the problem. You can also initialize the communication device if the download modem was turned off or disconnected when you began using the ACAS software. Note that if you already have a panel online, initializing automatically disconnects the panel.

To manually initialize the system to accept communication, select Initialize Hardware from the Functions menu. During the initialization, ACAS will display the message `Initializing System...Please Wait` and `Initializing Modem...Please Wait` at the bottom of the screen.

If the initializing fails, an error message will appear. Press the Ok button to close the Error dialog box. Check your hardware connections to resolve the problem, then try re-initializing the system. See Section 8 for more information on troubleshooting.

Log File

ACAS logs every event or use of the software. Figure 4-4 shows a sample log file screen.

Click on this box to close this dialog box   ACAS system activities that have occurred

```
┌─[█]──────────────────── ACAS Log File ─────────────────────┐
│  Date      Time     Operator  Action                        │
│  10/10/1995 11:24:10 ADMIN    Purge Log Entries          ▲  │
│                                                             │
│  10/10/1995 11:25:23 ADMIN    standard Report               │
│  10/10/1995 11:26:34 ADMIN    new Report                    │
│  10/10/1995 11:26:51 ADMIN    new Report                    │
│  10/10/1995 11:27:31 ADMIN    standard Report               │
│  10/10/1995 11:27:47 ADMIN    new Report                    │
│  10/10/1995 11:28:10 ADMIN    Exit Program                  │
│  10/10/1995 11:30:04 ADMIN    ARLEN Login Attempt Failed    │
│  10/10/1995 11:30:08 ADMIN    Operator Logged In            │
│  10/10/1995 11:30:19 ADMIN    standard Report               │
│  10/10/1995 11:30:48 ADMIN    Exit Program                  │
│  10/10/1995 12:04:39 ADMIN    Operator Logged In            │
│  10/10/1995 12:04:59 ADMIN    new Report                    │
│  10/10/1995 12:05:22 ADMIN    standard Report               │
│  10/10/1995 12:05:45 ADMIN    Event Buffer Cleared       ▼  │
│                                                             │
│           [ Purge ]   [ Export ]   [ Print ]   [ Done ]     │
└─────────────────────────────────────────────────────────────┘
```

Deletes all entries in the log   Sends log file to printer

Saves the data in a text file

Figure 4-4. Sample Log File Display

The log file is a good reference for when you are having system problems because it documents all ACAS system activities (events).

Printer Set Up

The Printer Set Up option appears on the Functions Menu. This
menu is for changing the number of characters that prints across
the page (paper width). The default is 80 for width. The number
of lines that prints per page is automatically set for the paper size
you are using. If your printer can accommodate wider print-outs,
use this option to change the printer settings.

```
┌─[■]══ Printer Page Layout ═══════┐
│                                   │
│   Paper Width   │ 80 │            │
│                                   │
│   Printer Port  ┌──────────┐      │
│                 │ ( ) File │      │
│                 │ ( ) LPT 1│      │
│                 │ ( ) LPT 2│      │
│                 └──────────┘      │
│     │  Ok  │        │ Cancel │    │
│                                   │
└───────────────────────────────────┘
```
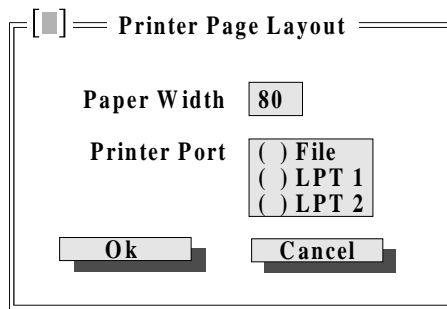
Figure 4-5. Printer Set Up Dialog Box

When you select Print Options from the Site menu, your system
options (not event data) are sent to either your printer or to a file
that you can view or edit with a text editor.

Selecting LPT 1 or 2 indicates the port to which your printer is
connected. If you select File, ACAS will store your system options
in the ACAS\DATA directory in the format
`<account number>.PRN` (for example, `345432.PRN`).

Section 5
Event Tables

The following sections are tables of eventcodes and parameters used in I/O application state-ments. Eventcodes are numbers that represent a system event; parameters are optional pieces of additional information associated with the event.

- Column 1 is a description of the event.

- Column 2 is the eventcode.

- Column 3 lists parameters associated with the event.

- Column 4 tells if the event can receive and/or generate events. Events listed as "receive only" can be used in conditional statements but cannot be used with the genevt command to generate new events. Events listed as "receive and generate" can be used in conditional statements and with the genevt command to generate new events. Events listed as "gener-ate only" are not used in conditional statements; they are used only with the genevt com-mand to generate new events.

5.1   Accessing Area Bit Masks

Parameters that store information about area where an event occurred, require use of bit mask-ing to determine the area number. The bit mask is a mathematical operation that can be used to calculate whether bits are on or off.

Table 5-1: Bit Mask Values

Area #	Value
1	1
2	2
3	4
4	8
5	16
6	32
7	64
8	128

5.2   Zone Events

Most zone events require a zone type code. Zone type codes are listed in Table 5-3 (next page).

Table 5-2: Zone Events

Event Description	Eventcode	Parameters	Receive/Generate
Zone alarm	20 + zone type code	param1 = Zone number param4 = Area bit mask	Receive only
Zone trouble	70 + zone type code	param1 = Zone number param4 = Area bit mask	Receive only
Zone not ready	120 + zone type code	param1 = Zone number param4 - Area bit mask	Receive only
Zone ready	170 + zone type code	param1 = Zone number param4 - Area bit mask	Receive only
Zone alarm restored	220 + zone type code	param1 = Zone number param4 - Area bit mask	Receive only
Zone trouble restored	270 + zone type code	param1 = Zone number param4 - Area bit mask	Receive only
Zone cross alarm alert	320 + zone type code	param1 = Zone number param4 - Area bit mask	Receive only
Bypass zone	500	param1 = Zone number param2 = User ID	Receive and Generate
Zone bypassed	501 + zone type code	param1 = Zone number param2 = User ID param3 = Area bit mask	Receive only
Unbypass zone	551	param1 = Zone number param2 = User ID	Receive and Generate
Zone Unbypassed	552 + zone type code	param1 = Zone number param2 = User ID param3 = Area bit mask	Receive only

5.2.1   Zone Event Type Codes

Section 5.2 lists eventcodes for zone events. In some cases, a code indicating type of alarm is used with the eventcode. Table 5-3 lists these codes.

EXAMPLE:

Eventcode 24 (actually eventcode 20 + zone type code 4) means that a burglary alarm has occurred. This is because:

   20 = Eventcode for a zone alarm (from Section 5.2).
    4 = Zone type code for burglary (from Table 5-3).

Table 5-3: Zone Types and Their Code

Zone Type	Code
Fire	0
Holdup	1
Emergency	2
Panic	3
Burglary	4
Tamper	5
Gas	6
Undefined	7
Water	8
Heat	9
Cold	10
Sprinkler	11
Doorbell 1	12
Doorbell 2	13
Key Arming Input	14
[Reserved, do not use.]	15
Door Monitor	16
Fire Contact	17
Egress Input	18

5.3   Chime or Doorbell State Change Events

Parameter: param1 = Zone number

Event Description	Eventcode	Parameters	Receive/Generate
Chime zone not ready	653	param1 = Zone number	Receive only
Chime zone ready	654	param1 = Zone number	Receive only
Doorbell1 zone changed	655	param1 = Zone number	Receive only
Doorbell2 zone changed	656	param1 = Zone number	Receive only

5.4   Duress Event

Parameter: param1 = Zone number assigned to duress code

Event Description	Eventcode	Parameters	Receive/Generate
Duress trigger event has occurred	657	param1 = zone number assigned to duress code	Receive only

5.5   Arm Request Events

Table 5-4: Arm Request Events

Event Description	Eventcode	Parameters	Receive/Generate
Reset alarms in areas	1000	param1 = Area bit mask param2 = User ID (if applicable)	Receive and Generate
Auto arm areas	1001	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Manual arm areas	1002	param1 = Area bit mask param2 = User ID (if applicable)	Receive and Generate
Exception arm areas	1003	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Auto force arm areas	1004	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Manual force arm areas	1005	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Exception force arm areas	1006	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Auto disarm areas	1007	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Manual disarm areas	1008	param1 = Area bit mask param2 = User ID (if applicable)	Receive and Generate
Exception disarm areas	1009	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Manual disarm areas and reset alarms	1011	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Exception disarm areas and reset alarms	1012	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Activate interior 1 in areas	1013	param1 = Area bit mask param2 = User ID (if applicable)	Receive and Generate
Activate interior 2 in areas	1014	param1 = Area bit mask param2 = User ID (if applicable)	Receive and Generate
Deactivate interior 1 in areas	1015	param1 = Area bit mask param2 = User ID (if applicable)	Receive and Generate
Deactivate interior 2 in areas	1016	param1 = Area bit mask param2 = User ID (if applicable)	Receive and Generate

5.6   Arm Acknowledge Events

These events are generated *after* the request has been completed.

Table 5-5: Arm Acknowledge Events

Event Description	Eventcode	Parameters	Receive/Generate
Alarms have been reset	1030	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Area auto armed	1031	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Area manually armed	1032	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Area exception armed	1033	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Area auto force armed	1034	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Area manual force armed	1035	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Area exception force armed	1036	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Area auto disarmed	1037	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Area manually disarmed	1038	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Area exception disarmed	1039	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Area auto disarmed and alarms reset	1040	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Area manually disarmed and alarms reset	1041	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Area exception disarmed and alarms reset	1042	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Interior 1 activated	1043	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Interior 2 activated	1045	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Interior 1 deactivated	1047	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Interior 2 deactivated	1049	param1 = Area number (1-8) param2 = User ID (if applicable)	Receive only

5.7   Area Status Events

Table 5-6: Area Status Events

Event Description	Eventcode	Parameters	Receive/Generate
Make areas instant	1060	param1 = Area bit mask param2 = User ID (if applicable)	Receive and Generate
Area made instant	1061	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Make areas delayed (not instant)	1062	param1 = Area bit mask param2 = User ID (if applicable)	Receive and Generate
Area made delayed (not instant)	1063	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Activate chime in areas	1064	param1 = Area bit mask param2 = User ID (if applicable)	Receive and Generate
Chime activated	1065	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Deactivate chime in areas	1066	param1 = Area bit mask param2 = User ID (if applicable)	Receive and Generate
Chime deactivated	1067	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Clear alarm memory in areas	1068	param1 = Area bit mask param2 = User ID (if applicable)	Receive and Generate
Alarm memory cleared	1069	param1 = Area bit mask param2 = User ID (if applicable)	Receive only
Silence areas	1070	param1 = Area bit mask param2 = User ID (if applicable)	Receive and Generate

5.8 Timer Events

Table 5-7: Timer Events

Event Description	Eventcode	Parameters	Receive/Generate
Entry delay timer expired	1080	param1 = Area bit mask	Receive only
Exit delay timer expired	1081	param1 = Area bit mask	Receive only
Swinger bypass timer expired	1083	No parameters	Receive only
Report delay timer expired	1084	param1 = Area bit mask	Receive only
Alarm restore timer expired	1085	param1 = Area bit mask	Receive only

Auto Arm Timer Expired Event	1086	param1 = Area bit mask
		param2 = Timer mode
		  0 = auto arm delay time request
		  1 = power-up arm timer request
			Receive only

Entry and/or exit delay timer changed event	1093	param1 = Entry/exit delay timer changed
		  BIT1 on = Entry delay timer changed
		  BIT2 on = Exit delay timer changed
			Receive only

Auto arm ten second tic	1094	No parameters	Receive only

Set auto arm delay time	1095	param1 = Area number in bits (See Section 2.4.2 for more information.)
		
		param2 = timer value (0-255 minutes)
		
		param3 = timer mode
		  0 = auto arm delay time requested
		  1 = power-up arm timer requested
			Receive only

5.9 Late to Close/Open Events

Table 5-8: Late to Close/Open Events

Event Description	Eventcode	Parameters	Receive/Generate
Late to close	1091	param1 = Area number (1-8)	Receive only
Late to open	1092	param1 = Area number (1-8)	Receive only

5.10 System Events

System-wide events that are not related to a specific partition, zone, or area.

Table 5-9: System Events

Event Description	Eventcode	Parameters	Receive/ Generate
One second tic	1200	param1 = Hour*256 + minute	Receive only
System power up	1202	No parameters	Receive only
Expander trouble	1203	param1 = Device ID (low byte). See Note below.	Receive only
Expander trouble restore	1204	param1 = Device ID (low byte) See Note below.	Receive only

Note: For eventcodes 1203 and 1204, you need to access only the low byte of the word (high byte contains data that is not used in an application). The expression (param1 & 255) masks off the high byte.

EXAMPLE: if ((eventcode == 1203) & ((param1 & 255) == 3)

Event memory cleared	1205	No parameters	Receive only
AC trouble	1206	No parameters	Receive only
AC restoral	1207	No parameters	Receive only
Power supply trouble	1208	param1 = Power type 0 = smoke power 1 = fire bell (4884), currently not available 2 = auxiliary power	Receive only
Power supply restored	1209	param1 = Power type 0 = smoke power 1 = fire bell (4884), currently not available 2 = auxiliary power	Receive only
System battery restoral	1210	No parameters	Receive only
System battery trouble	1211	No parameters	Receive only
Log threshold	1212	No parameters	Receive only
Log overflow	1213	No parameters	Receive only
Local program begin	1214	No parameters	Receive only
Local program success	1215	No parameters	Receive only
Local program fail	1216	No parameters	Receive only

Table 5-9: System Events

Event Description	Eventcode	Parameters	Receive/ Generate
Listen in begin	1221	No parameters	Receive only
Phone line trouble	1222	param1 = line# (1 or 2)	Receive only
Phone line restoral	1223	param1 = line# (1 or 2)	Receive only
Automatic test	1225	param1 = account priority level (1-255)	Receive and Generate
Manual test	1226	param1 = user ID	Receive and Generate
Test end	1227	No parameters	Receive only
Test start	1228	No parameters	Receive only
Service required	1232	No parameters	Receive and Generate
User code tamper	1280	No parameters	Receive only
Date changed	1281	param1 = User ID	Receive only
Time changed	1283	param1 = User ID	Receive only
Date tic	1400	param1 = Year*256+month Year = Current year-1900 Month = 1 -12	Receive only
User code changed	1284	param1 = User ID	Receive only
User code deleted	1285	param1 = User ID	Receive only
User code added	1286	param1 = User ID	Receive only
Printer out of paper trouble	1300	param1 = Device number	Receive only
Printer out of paper trouble restore	1301	param1 = Device number	Receive only
Printer offline trouble	1302	param1 = Device number	Receive only
Printer offline trouble restore	1303	param1 = Device number	Receive only

5.11 Time Schedule Events

Table 5-10: Time Schedule Events

Event Description	Eventcode	Parameters	Receive/Generate
Schedule start	1233	param1 = Number of time schedule that changed	Receive only
Schedule end	1234	param1 = Number of time schedule	Receive only

5.12 Door Access Events

Table 5-11: Door Access Events

Event Description	Eventcode	Parameters	Receive/Generate
Door access inhibited	1260	param1 = Door number param2 = User ID (if applicable)	Receive only
Door access enabled	1261	param1 = Door number param2 = User ID (if applicable)	Receive only
Door held open	1263	param1 = Door number	Receive only
Door restoral	1264	param1 = Door number	Receive only
Door access granted	1265	param1 = Door number param2 = User ID (if applicable)	Receive only
Door access denied	1266	param1 = Door number param2 = User ID (if applicable)	Receive only

5.13 Audible Alert Events

These events indicate if audible alarm signals have been turned on or off.

Table 5-12: Audible Alert Events

Event Description	Eventcode	Parameters	Receive/Generate
Internal and external speaker sound turned on	1309	param1 = Eventcode from the alarm event, indicates the type of alarm that occurred.	Receive only
Internal and external speaker sound turned off	1310	param1 = Eventcode from the alarm event, indicates the type of alarm that occurred.	Receive only
Internal speaker alarm sound turned on	1311	param1 = Eventcode from the alarm event, indicates the type of alarm that occurred.	Receive only
Internal speaker alarm sound turned off	1312	param1 = Eventcode from the alarm event, indicates the type of alarm that occurred.	Receive only
Speaker trouble sound turned on	1313	No parameters	Receive only
Speaker trouble sound turned off	1314	No parameters	Receive only
Cross alarm alert tone	1315	No parameters	Receive only

5.14 Dialer Report Events

These events are generated by the dialer after it receives acknowledgment for reported events from the central station.

Table 5-13: Dialer Reports Events

Event Description	Eventcode	Parameters	Receive/Generate
Report acknowledged	1330	param1 = Eventcode that was reported.	Receive only
Report failed	1331	param1 = Eventcode that was reported.	Receive only
Dialer reset requested	1332	No parameters	Receive only
Dialer has been reset	1333	No parameters	Receive only
Date tic	1400	param1 = Year*256+month Year = Current year-1900 Month = 1 -12	Receive only
Account trouble, dialer failed to report to an account.	1410	param1 = Account priority level (1-255)	Receive only
Account trouble restore	1411	param1 = Account priority level (1-255)	Receive only

5.15 System Command Events

These events are used to control system resources. **No parameters associated with these events.**

Table 5-14: System Command Events

Description	Eventcode	Receive/Generate
Request to turn off smoke power	1500	Receive and Generate
Smoke power turned off (acknowledgment)	1501	Receive only
Request to turn on smoke power	1502	Receive and Generate
Smoke power turned on (acknowledgment)	1503	Receive only
4884 bell output on (acknowledgment)	1505	Receive only
4884 bell output off (acknowledgment)	1507	Receive only
Request to enable reporting	1508	Receive and Generate
Request to disable reporting	1509	Receive and Generate
Request to turn on the auxiliary relay	1510	Receive and Generate
Request to turn off the auxiliary relay	1511	Receive and Generate
Auxiliary relay turned on (acknowledgment)	1512	Receive only
Auxiliary relay turn off (acknowledgment)	1513	Receive only

5.16 X10 Control Events

Codes for controlling the X10 devices that are attached to the system.

Table 5-15: X10 Control Events

Description	Eventcode	Parameters	Receive/Generate
X 10 on	2500	param1 = Device ID number of 4880 where X10 module is located. param2 = House Code and Unit Number (See Note below.)	Generate only
X 10 off	2501	param1 = Device ID number of 4880 where X10 module is located. param2 = House Code and Unit Number (See Note below.)	Generate only
X 10 all lights on	2502	param1 = Device ID number of 4880 where X10 module is located.	Generate only
X 10 all lights off	2503	param1 = Device ID number of 4880 where X10 module is located.	Generate only
X 10 all off	2504	param1 = Device ID number of 4880 where X10 module is located.	Generate only
X 10 dim	2505	param1 = Device ID number of 4880 where X10 module is located. param2 = House Code and Unit Number (See Note below.)	Generate only
X 10 bright	2506	param1 = Device ID number of 4880 where X10 module is located. param2 = House Code and Unit Number (See Note below.)	Generate only

Note: param2 = House Code and Unit Number
(HOUSEA through HOUSEP and UNIT1 through UNIT16)

If you need to access both House Number and Unit Number, add them together; param2 will be the calculation, for example, (HOUSEA + UNIT1).

5.17 Output Control Events

Eventcodes for controlling system voltage outputs and relays on 4880 expanders and 4860C touchpad devices.

Table 5-16: Output Control Events

Event Description	Eventcode	Parameters	Receive/Generate
Turn output on	2550	param1 = Device ID number (required for all events) param2 = Output number, 1-20 for the 4880, not needed for the 4860C	Generate only
Turn output off	2551	param1 = Device ID number (required for all events) param2 = Output number, 1-20 for the 4880, not needed for the 4860C	Generate only
Turn all outputs off (This command turns off all outputs. For example, if the device is a 4880 and outputs 1-20 are all used, they will all turn off.)	2552	param1 = Device ID	Generate only
Turn all outputs on (This command turns on all outputs. For example, if the device is a 4880 and outputs 1-20 are all used, they will all turn on.)	2553	param1 = Device ID	Generate only
Turn more than one output on (This command turns on specified outputs from a group of outputs.)	2555	param1 = Device ID param2 = Location of the output See Section 2.4.3 for more information about this eventcode.	Generate only
Turn more than one output off (This command turns off specified outputs from a group of outputs.)	2556	param1 = Device ID param2 = Location of the output See Section 2.4.3 for more information about this eventcode.	Generate only

5.18 Touchpad Events

The following events indicate that user has pressed keys 0-9 on the touchpad while using the Aux Menu. See Section 2.5 for more information.

Table 5-17: Touchpad Events

Description	Eventcode	Receive/Generate
User pressed touchpad key $\boxed{0}$	9000	Receive only
User pressed touchpad key $\boxed{1}$	9001	Receive only
User pressed touchpad key $\boxed{2}$	9002	Receive only
User pressed touchpad key $\boxed{3}$	9003	Receive only
User pressed touchpad key $\boxed{4}$	9004	Receive only
User pressed touchpad key $\boxed{5}$	9005	Receive only
User pressed touchpad key $\boxed{6}$	9006	Receive only
User pressed touchpad key $\boxed{7}$	9007	Receive only
User pressed touchpad key $\boxed{8}$	9008	Receive only
User pressed touchpad key $\boxed{9}$	9009	Receive only

Section 6.
Communication with the Control Panel

This section describes options for communicating with the control panel.
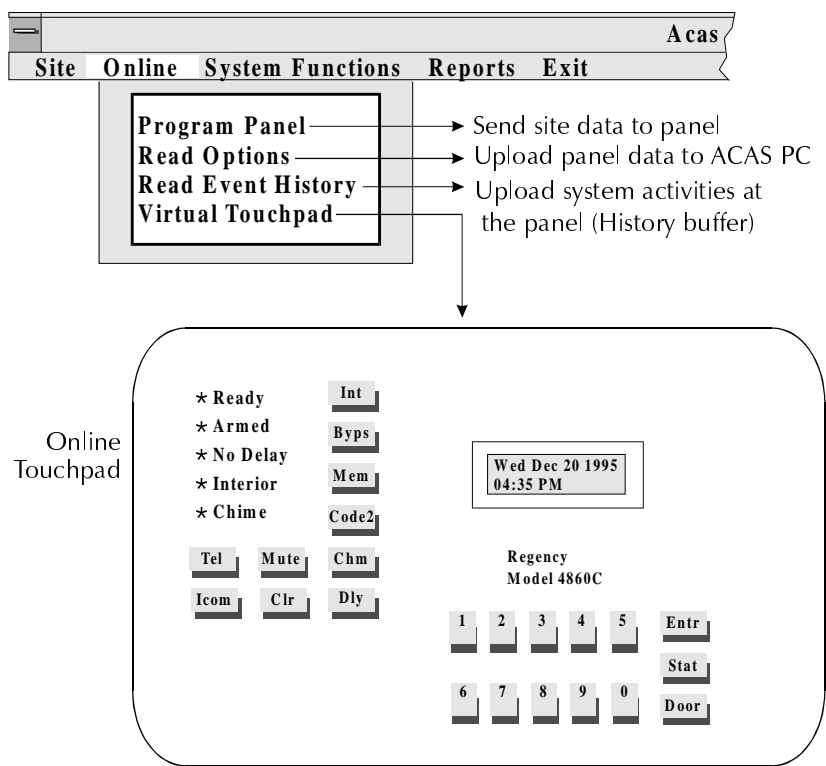

Figure 6-1. Online Menu Structure

Connecting to a Control Panel

The On Line Site Info: fields on the ACAS Status dialog box (Figure 6-3) indicate whether or not a communication link exists between ACAS and a site's control panel.

You can edit an account while background processes are running for the account that is online. For example, you can edit user information for one site at the same time events are automatically uploaded from another site. However, you cannot perform any Online menu functions if the Site being Edited and the Online site are not the same site.

When a connection is made, the Site Name and Account # fields are filled in. The Communication Status field displays the following message, which indicates the panel is online: `Account <number> Hold \`. The spinning \ character indicates that the communication function is active.

The panel will remain online until the operator presses the Disconnect button on the ACAS Status dialog box or ACAS receives a termination message from the panel.

See "Communication Hardware Setup" in Section 2 for hardware connections. See Section 8 for more information on communication problems.

Direct Connection

In most cases, your system will be set up for a direct connection to the panel if the ACAS system is onsite. When you press the Connect button, ACAS will dial the panel to establish communication with the site shown in the Site being Edited field on the ACAS Status dialog box.

Modem Connection

If your system is set up to communicate through a modem, ACAS will prompt you for additional information when you press the Connect button on the ACAS Status dialog box (Figure 6-2).
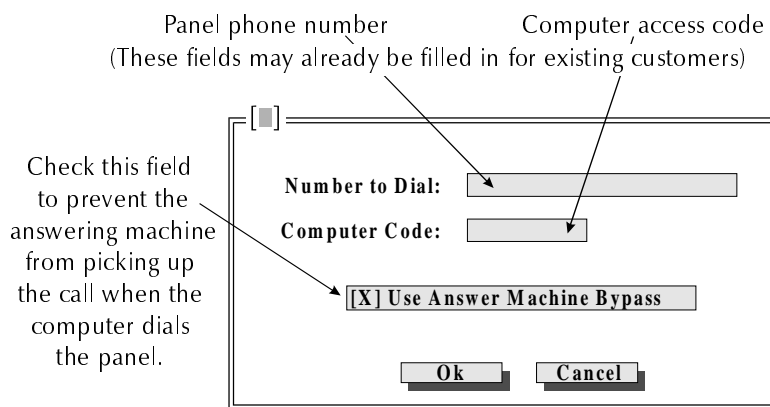

Figure 6-2. Information for Modem

The Answer Machine Bypass selection on this dialog box temporarily overrides the current setting for this feature, which is entered when you add or edit a site (see "Editing a Site" in Section 5 for more information).

If this option is selected (X) on this dialog box, ACAS will call the panel using the following call sequence:

1. Computer dials the panel phone number.
2. Waits long enough to ring once (the default is about 7 sec.)*
3. Hangs up.
4. Pauses (the default setting is about 10 sec.)*
5. Dials again to connect to panel.

* These delays are configurable. See page 2-7 for details.

Sending Data to the Panel (Program Panel)

When you finish editing account information, you can select Program Panel from the Online menu to send the new data to the control panel. ACAS performs an account audit to check for any errors in the changed data, such as duplicate user IDs, and then attempts to connect to the panel. The panel accepting the new data is shown in the On Line Site Info: fields on the ACAS Status dialog box.

The panel will reset for the new options to be valid only after the panel is no longer online (disconnected). Note that when your panel disconnects, it may disarm. If you need to re-arm the system after disconnecting, you can do so using the Virtual Touchpad (see page 6-9).

Uploading Data from the Panel (Read Options)

If changes have been made to the options at a site, the new data must be uploaded to ACAS. You may want to upload the panel data prior to any ACAS activity to ensure that you have the most current data.

Normally, uploads of site data must be initiated by ACAS. However, for new sites, the panel can initiate an upload to the ACAS PC. ACAS will automatically create a new site in the ACAS system even without operator assistance. This new site will appear in the list of sites with a default name such as `Uploaded <account number>`.

Attempts to upload options from the panel by existing sites are ignored.

For existing sites, an ACAS operator selects Read Options from the Online menu to upload system options. ACAS uploads data from the site indicated in the Site being Edited field on the ACAS Status dialog box (Section 5).

Note: The data stored in the ACAS system for the Site being Edited will be overwritten with the new data. User names and custom screen labels are not overwritten.

Viewing Events at a Site

Events are any activities that occur at the control panel such as arming and disarming, door access, alarms, and so on. You can either activate a real-time event display to watch events as they occur at a site, or upload the recent history of events that have occurred at a site.

Read Event History

For troubleshooting or to view the history of activity at a particular panel, you can upload the event history from the control panel. For new sites, ACAS will prompt the panel to first upload their system options. The panel must initiate the options upload.

Once the ACAS system has the panel data, the ACAS operator can select Read Events from the Online menu. ACAS will dial the panel phone number to establish a connection with the panel. An error displays if there is no connection.

If you are viewing the real-time events display (Figure 6-3) when ACAS successfully uploads the panel event buffer, the events are appended to the current list. The data is also appended to the existing event database, on which you can run a report. See Section 7 for more information on reports.

Real-Time Events

When the site is online, select Event Display from the Functions menu to toggle on and off the real-time event display. When the display is active, the events appear in a list appended onto the ACAS Status dialog box. Figure 6-3 is an example of a real-time display.

ACAS marks new events as they occur with asterisks. Pressing the Event Check button removes the asterisks, acknowledging that you have viewed the new events.

Events occurring in real-time at the site

Figure 6-3. Real-Time Event Display

The installer can set up your system to display events as they are occurring (real-time), or to display events only when a certain amount of activity takes place. Talk to your installing company about which type of events to display for your system.

Unsolicited Event Uploads

A site can also call the ACAS system at any time to upload data from their panel for editing or troubleshooting. This activity is known as an *unsolicited event upload*, and can only occur if the installer sets up an ACAS reporting account on the panel.

 For incoming calls a Hold button appears on the ACAS Status dialog box that can be used to keep the account online after the events upload. Once the communication status is idle, the button becomes invisible. This feature is used to enter touchpad emulation mode after the panel dials the site. If no request is made to remain online, the communication session terminates.

Automatic Event Uploads

Your system can be programmed to automatically upload events to ACAS according to a time schedule that you select.

A system administrator can establish automatic event uploads by editing the time schedule associated with a site. Time schedules for automatic event uploads can only be set when you are editing site data. See "Editing a Site" in Section 5 for screen details.

ACAS only uploads event data once every time the time schedule becomes active. A time schedule becomes active when any of its time ranges is satisfied or the current time on the PC falls within that time range. Once events are uploaded, ACAS does not attempt any further uploads. However, if the panel does not answer the call or the phone line is busy, ACAS will re-dial the panel after two minutes as long as the time schedule is active.

If more than one account has the same time range in their time schedules, ACAS will dial each panel until the automatic event uploads occur for each panel or the time schedule expires.

Virtual Touchpad

ACAS provides an online touchpad for interfacing directly with the control panel. When you select Virtual Touchpad from the Online menu, ACAS connects with the control panel and a simulated touchpad appears on your screen (Figure 6-4). Connection to the site is done automatically if you are not currently connected.
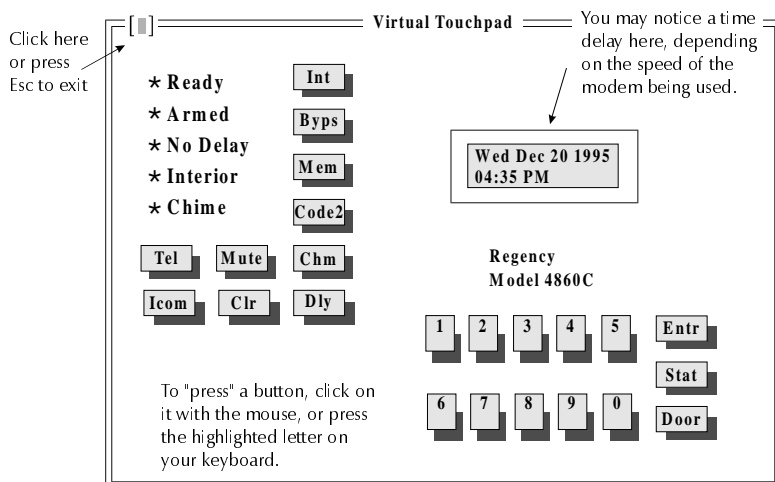
Figure 6-4. Online Touchpad

While your system can physically support only 24 touchpads, this additional touchpad has no physical limitations so your system can actually support up to 25 functioning touchpads.

The Virtual touchpad functions the same way an actual touchpad functions that is connected to your control panel, and you can perform any task that you normally perform onsite. Refer to the *Census 4821 Installation and Operation Manual (P/N 150960)* for operation details.

Note: The Virtual touchpad may not be active during an alarm.

Section 7.
Event Reports

This section describes the menus for running event reports.
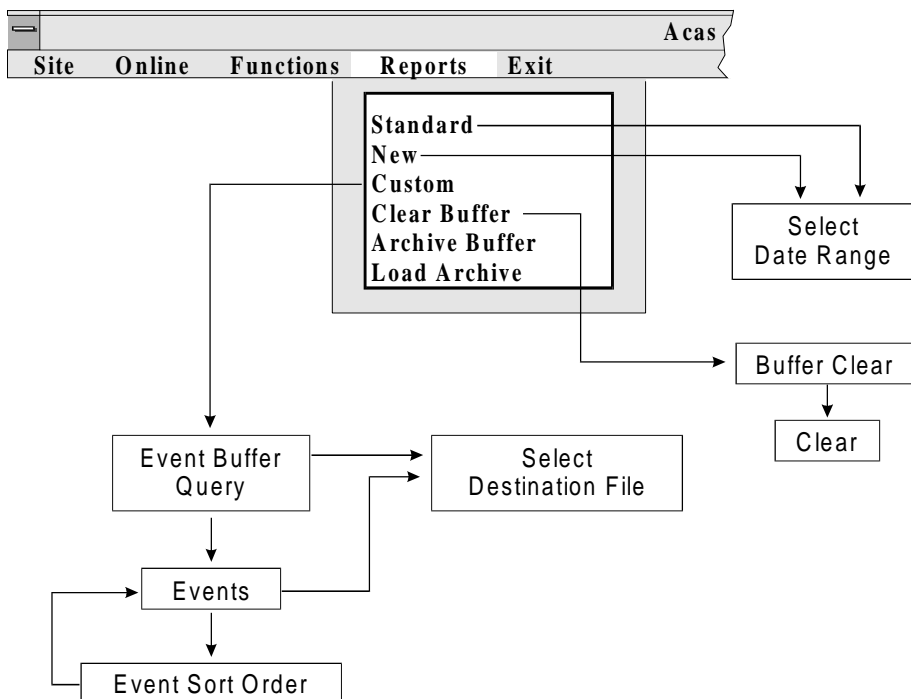
Figure 7-1. Reports Menu Structure

ACAS system operators can generate reports on events to be sent to a printer, to a file in ASCII format, or to the computer display. Reports can include records selected based on date, door, person, or event type.

Standard Reports

Standard reports display all the information stored on the ACAS PC included for the specified date range. When you select Standard from the Reports menu, a dialog box prompts you to enter a date range for the report. Press the View button to display the events that occurred during the entered time range. ACAS lists all the events currently stored in the ACAS system if you do not specify a date range.
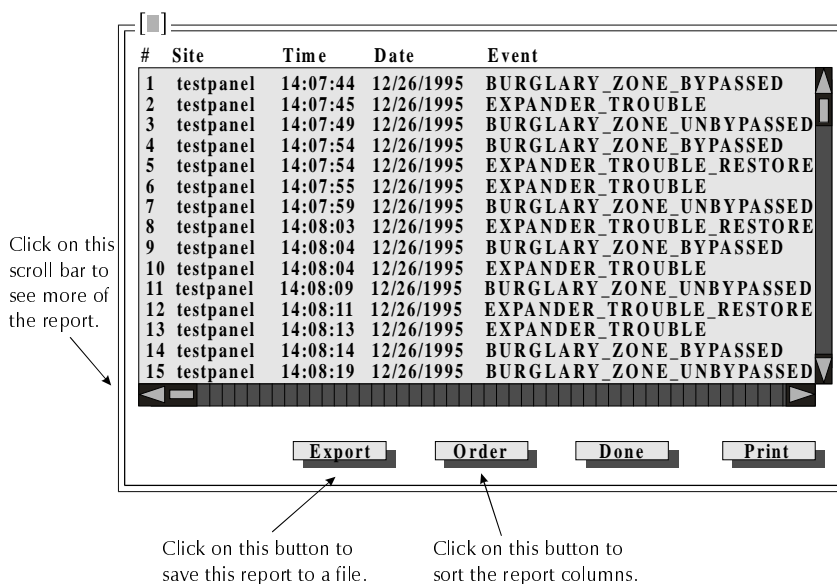
Figure 7-2. Standard Event Report

Events are listed in the order that they were sent to the ACAS PC.

You can sort the event data in the order of your preference. Press the Order button to display the Event Sort Order dialog box (Figure 7-3). Use the buttons at the bottom of the display to arrange the event categories, then press the Done button.

Report event categories

[■] ═══════════════════ **Event Sort Order** ═══════════════════

Site	**Printed**
Time	**Printed**
Date	**Printed**
Code	**Printed**
Partition	**Printed**
Sequence	
Parm 1	**Printed**
Parm 2	**Printed**
Parm 3	**Printed**
Parm 4	**Printed**
Parm 5	**Printed**

Hit Space Bar To Toggle Print Or Double Click With Mouse

Up	**Down**	**Top**	**Done**	**Cancel**

Move item up one in the list   Move item to top of the list

Move item down one in the list

Figure 7-3. Event Sort Order Dialog Box

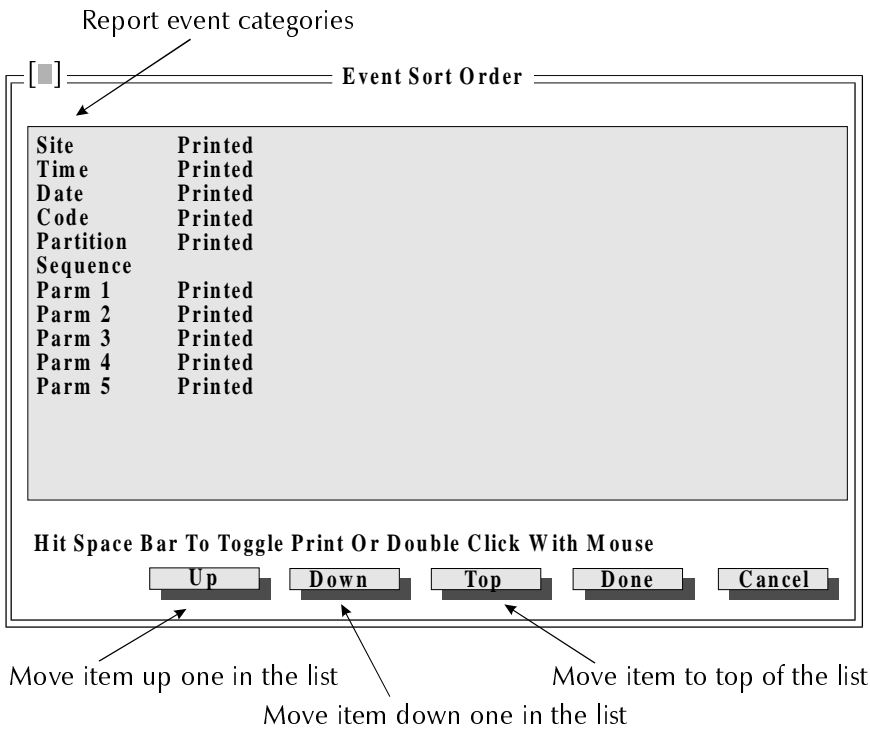# New Reports

From the Event Report menu, select New to report events that have occurred since the last New report. This allows the date selection to be easily incremented for generating periodic reports. Function buttons for this report are the same as for Standard reports.

Custom Reports

Custom reports enable you to be more selective on what to include in a report. You can specify different sites, date and time ranges, event types, and event parameters for each report. After specifying the search criteria, press the Run button. Figure 7-4 shows an example of search criteria entered on the Event Buffer Query dialog box and the resulting report.

Parameters automatically display when you select an event.

Click here with the mouse or press the ↓ key to display a list of selections.

Press Run to initiate the report

[■]══════════════════ Event Buffer Query ══════════

Events: USER_CODE_DELETED
Param: <empty>↓
Site:
Part:
Date:
Time:

Events:
Param: <empty>
Site:
Part:
Date:
Time:

Events:
Param: <empty>
Site:
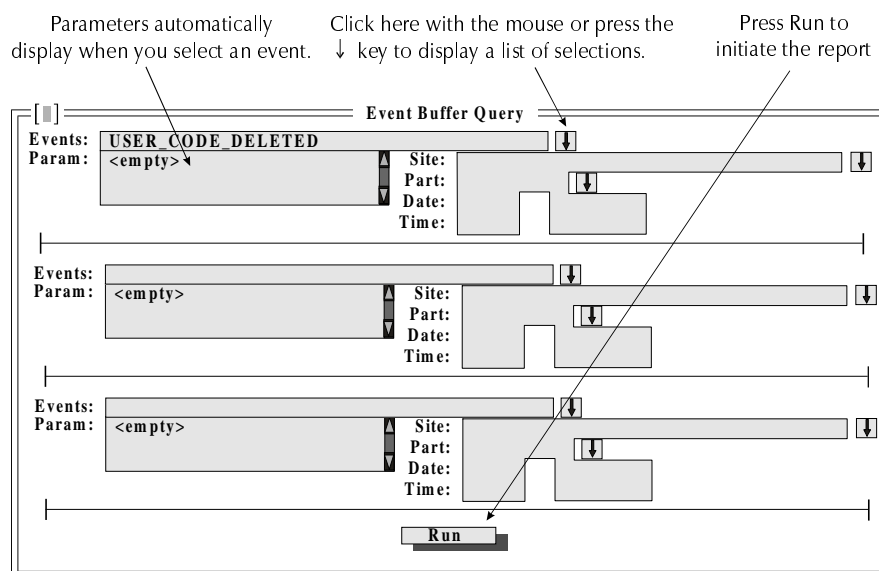Part:
Date:
Time:

Run

Figure 7-4. Custom Report Dialog Box

Managing Event Buffer Data

The event buffer is a storage location for events uploaded from the control panel and currently residing on the PC. This includes events from all sites. From the Reports menu you can delete the contents of the buffer, save the events in the buffer to a file, or upload archived event data.

Clear Buffer

Deletes the event data currently stored in the buffer. ACAS prompts you for a date range if you want to remove only a portion of the buffer contents.

Archive Buffer

Saves the event buffer history to a file. When you select Archive Buffer, a dialog box prompts you for a date range. When you enter a beginning and ending date, ACAS saves only the event data in the specified date range. You can save the entire buffer contents by leaving the date fields blank and pressing the Ok button. A dialog box will prompt you for a file name and disk location.

Note: Even though the buffer includes events from multiple sites,
*   you can only archive events by date ranges, not by site.*

Load Archive

Uploads event buffer history from file. When you select Load buffer, a dialog box prompts you for the location and name of the file containing the archived event data.

Section 8.
Troubleshooting

This section of the manual offers suggestions for troubleshooting communication and software problems. Please read this section if you encounter a problem when using the ACAS software.

The ACAS Log File documents all ACAS system events. If you encounter a problem while using the system, the log file can help you track down the solution. See Section 4 for more information.

If these suggestions do not solve your problem or if you encounter a problem that is not listed here, contact your installation company for assistance.

ACAS System Messages

Table 8-1 shows some messages that ACAS may display.

Note: Some of the messages listed here indicate normal conditions.

Table 8-1. Error Messages

Message	Meaning / Possible Cause
Aborting	An operator entered the Abort command to end an in-progress communication session.
Account [#] Download (%)	A download is in progress for the specified account. Percentage completed in parentheses.
Account [#] Hold	An operator entered the Hold command to keep the panel online.
Account [#] Upload (%)	An upload is in progress for the specified account. Percentage completed in parentheses.

Table 8-1 continued from previous page.

Message	Meaning / Possible Cause
Busy Signal	The communication device you are attempting to call is busy.
Disconnecting (panel will call back)	The panel is disconnecting before calling back. (Auto Call Back feature has been enabled.)
Disconnecting (security not granted)	You do not have access rights to call the panel. (Check the computer code programmed for this account.)
Modem Error	Problem with a modem. Consult your modem manual for possible causes. See "Communication Problems" for help with troubleshooting communication problems.
No Answer	The communication device you are attempting to call does not answer.
No Carrier	Unable to establish communication. Could be many causes. See "Communication Problems".
No Dial Tone	The communication device you are using cannot dial out. (Make sure the communication device is connected to the phone line.)
Time-out Aborting	Communication session aborted (not through ACAS operator command). May indicate problem with phone line. See "Communication Problems".
Could not activate communication	This messages occurs when you start the ACAS software if a functioning device is not connected to the computer. (This may be a normal condition if you are using ACAS for programming and do not need to up- or download.) See "Communication Problems" if you are having problems with communication.
Failed to Open / Bad Table	ACAS has encountered a problem with your computer. May indicate a hard disk failure. Be prepared to re-install ACAS software from a backup.

Communication Problems

Troubleshooting communication problems can be complex because problems can occur both at the panel and with ACAS. If communication does not occur or was incomplete, here are some things to try:

- Make sure communication device is connected to the phone line and that dial tone is present. If you suspect that noise on the telephone line is causing a problem, try any or all of the following:

    - Hang up and try again;

    - Initialize hardware;

    - Disconnect house phones, but leave tip and ring on, then try again.

- Initialize hardware. From ACAS, select Initialize Hardware from the Functions menu. Reset the modem at the panel, if possible.

- If the ACAS displays `Modem Error`, check that the modem is on and that no trouble lights are turned on. Consult your modem manual for additional information.

- Check the Log File for sequence of event occurrences.

- Make sure that the configurations you have chosen for the communication devices are compatible with each other. See Section 2 and your modem manual for more information.

- If you are communicating to the Census 4821 internal modem, make sure you have selected the reverse frequency command (dial suffix). See Section 2 for more information.

Problems Installing or Running ACAS

You will not be able to run the ACAS software if your computer does not have sufficient memory (RAM) or disk space. Minimum requirements are: 4 megabytes RAM (at least 2 of the 4 megabytes must be extended free memory); 8 megabytes free hard disk space. (See Section 2 for complete information.)

If you have sufficient memory and disk space and the software does not load or run, try reinstalling. Make sure you follow the instructions in Section 2. Make note of any error messages that occur. If you still cannot install or run the software, contact your installation company.