APPENDIX 1

Menu Structure

Main Menu (root menu) Hit any Function Key

- F1 - History (No Password Required)
  - F1 - Alarm History
  - F2 - Event History
  - F3 - Zone History
  - F4 - Current History (Event history since reset)
  - F6 - Erase History (Level 4 Password Required)
    - F2 - Confirm Erase History
    - F3 - Unerase History
- F2 - Passwords
  - F2 - Edit Passwords
- F3 - Specials (Level 2 Password Required)
  - F1 - Sensitivities
  - F2 - Alarm Levels
  - F3 - Set Time
  - F4 - Walktest Mode
  - F5 - Diagnostics
    - F1 - Address Location
    - F2 - Supplemental Outputs
    - F3 - Supplemental Relays
    - F4 - Ground Fault
    - F6 - Loop Classification
    - F5 - More
      - F1 - Buzzer
      - F2 - LEDs
      - F3 - Power A (Main Board Power Supply)
      - F4 - Power B (Supplemental Power Supply)
      - F6 - Zone Message Test
      - F5 - More
        - F1 - Address Data
        - F2 - Addressable Outputs
        - F3 - Output Check
        - F4 - Backlight
        - F6 - Keypad
        - F5 - More
          - F1 - Addressable Fire Test
          - F2 - System Power
          - F3 - Process Interrupts
          - F4 - Jack Test
          - F5 - More

- F4 Enable / Disable (Level 2 Password Required)
  - F1 - Zones
  - F2 - Devices (Addressable)
  - F3 - Circuits
  - F4 - Communication Ports
- F6 - Configuration (Level 3 Password Required)
  - F1 - Devices (Addressable)
    - F2 - Assign Zones
    - F5 - Copy to Default
  - F2 - Zones
  - F3 - System
    - F1 - Input / Output Circuits
      - F1 - Outputs
      - F2 - Loop Circuits
      - F3 - Power Supplies
      - F4 - P42 Operation
      - F5 - Trouble Operation
    - F2 - Message (System Custon Message)
    - F3 - Patterns
    - F4 - Time Base Groups
    - F5 - Annunciators
  - F4 - Learn Mode
  - F5 - To Devices
    - F1 - All Devices
    - F2 - Modified Devices
    - F3 - Range of Devices
    - F4 - Show Modifications
  - F6 - Special
    - F1 - Calibrate Sensors
    - F2 - Timeout (Password)
    - F3 - Error Check
    - F4 - Device Address (Change Device Address)
    - F5 - Calibration Time
    - F6 - PC Trouble Clear

APPENDIX - 2 - CHEETAH CONTROLLER MESSAGES

STATUS CHANGE MESSAGES - No local piezo with event. If this message appears, and no other events are present, the display will return to the SYSTEM MESSAGE screen.

"ACKNOWLEDGE SWITCH "	ACKnowledge switch pressed
"ALARM SILENCE "	All alarm states silenced for all zones.
"ALARM UNSILENCE"	All alarm states unsilenced for all zones.
"EXTERNAL RESET "	Reset record when external reset switch pressed or ESD hit
"LOOP 1 CALIBRATION "	All configured analog devices on loop 1 have been calibrated
"LOOP 2 CALIBRATION "	All configured analog devices on loop 2 have been calibrated
"LOOP 3 CALIBRATION "	All configured analog devices on loop 3 have been calibrated
"LOOP 4 CALIBRATION "	All configured analog devices on loop 4 have been calibrated
"NO RECORD "	No Event
"PASSWORD LEVEL 1"	Password level 1 entered
"PASSWORD LEVEL 2 "	Password level 2 entered
"PASSWORD LEVEL 3 "	Password level 3 entered
"PASSWORD LEVEL 4 "	Password level 4 entered
"PASSWORD LEVEL 5 "	Password level 5 entered
"PASSWORD EXPIRED"	Password has timed-out
"POWER-UP RESET "	Reset record when panel is powered up (Cold Start)
"RECONFIGURED DEVICE"	Addressable device has been configured
"REMOTE RESET RELEASE "	Remote reset function input released
"SUPERVISRY SILENCE "	All supervisory silenced for all zones
"SUPERVISRY UNSILENCE"	All supervisory unsilenced for all zones
"SYSTEM RESET "	Manual reset at the controller (red display button)
"TROUBLE SILENCE "	All troubles silenced for all zones
"TROUBLE UNSILENCE "	All troubles unsilenced for all zones

LATCHING EVENTS - Local piezo with event.
Event latches and requires operator intervention

"ALARM PRESENT "	Alarm state for this zone activated
"ALARM ACTIVE -----"	Device has reached the alarm threshold (analog data)
"AUX POWER UNCONFIG"	Auxilliary Power Module present but unconfigured
"CONFIG MENU ACCESSED"	Trouble stored when the configuration menu is entered
"CONTAMINATED DEVICE "	Analog device is contaminated
"DIAGNOSTICS ENTERED"	Diagnostics menu entered
"KEYWORD ERROR "	Erroneous program flow
"MANUAL ALARM "	Manual pull function input present
"MANUAL PRE-DISCHARGE "	Manual release with count-down function input present
"MANUAL RELEASE "	Manual release function input present
"PRE-DISCHARGE "	Pre-discharge state for this zone activated
"RELEASE "	Release state for this zone activated
"SOFTWARE ERROR "	Erroneous Interrupt source or illegal programming instruction fetched(board related trouble)
"TEST POINT BAD "	Addr. Analog device fire test point is out of acceptable range

NON-LATCHING EVENTS - Local piezo with event. If event clears and no other events are present, the panel logs the event restore and returns to the SYSTEM MESSAGE screen.

"ABORT PRESENT"	Abort state for this zone activated
"ABORT RESTORED"	Abort state for this zone de-activated
"ABORT PRESSED "	Abort function input present, panel is in alarm state or higher
"ABORT RELEASED "	Abort function input restored
"AC1 POWER TROUBLE"	AC for main board input mising/brownout
"AC1 POWER RESTORED"	AC for main board input restored
"AC2 POWER TROUBLE"	AC for power module (SPS) input mising/brownout
"AC2 POWER RESTORED"	AC for power module (SPS) input restored
"AUD1 OPEN TROUBLE"	Audible #1 open circuit
"AUD1 SHORT TROUBLE"	Audible #1 short circuit
"AUD1 TRB RESTORED"	Audible #1 restored
"AUD2 OPEN TROUBLE"	Audible #2 open circuit
"AUD2 SHORT TROUBLE"	Audible #2 short circuit
"AUD2 TRB RESTORED"	Audible #2 restored
"AUD SWITCH DISABLED"	Enable/disable switch for audibles is in the disable position
"AUD SWITCH RESTORED"	Audible enable/disable switch returned to the enable position
"AUX POWER MISSING"	Auxilliary Power Module(SPS) not present but configured
"AUX POWER CORRECTED"	Auxilliary Power Module(SPS) replaced after being missing
"CONFIGURE FAULT "	Fault detected when configuring SOM/R2M/SRM
"CONFIGURE RESTORED"	Fault restored from SOM/R2M/SRM configuration
"AUX1 POWER TROUBLE"	Auxiliary input power (connected to BAT) trouble
"AUX1 POWER RESTORED"	Auxiliary input power restore
"AUX2 POWER TROUBLE"	Auxiliary SPS input power (connected to BAT on SPS) trouble
"AUX2 POWER RESTORED"	Auxiliary SPS input power restore
"BAT1 CHARGE VOLT LOW"	Battery charger for main board has low voltage output
"BAT1 CHARGE RESTORED"	Battery charger for main board has returned to normal
"BAT2 CHARGE VOLT LOW"	Battery charger for SPS board has low voltage output
"BAT2 CHARGE RESTORED"	Battery charger for SPS board has returned to normal
"BATTERY1 TROUBLE "	Battery for main board input missing
"BATTERY1 RESTORED "	Battery for main board input restored
"BATTERY2 TROUBLE "	Battery for power module(SPS) input missing
"BATTERY2 RESTORED "	Battery for power module (SPS) input restored
"BAD COMMUNICATION"	Communication to device has errors (parity, checksum, etc.)
"COMMUN RESTORED"	Communication to device has returned to normal
"CALIBRATION FAULT"	Fault detected during calibration of this address
"CALIBRATION RESTORED"	Calibration fault has been restored. Device now has valid data.
"CFG ERROR 1: MR-----"	Configuration error #1 - suppression zone requires manual release (zone number appended to this message)
"CFG RESTO 1: MR-----"	Configuration error #1 restored
"CONFIG ERROR 2: IN/O"	Configuration error #2 - every input needs an associated output
"CONFIG RESTO 2: IN/O"	Configuration error #2 restored
"CONFIG ERROR 3: AL V"	Configuration error #3 - no analog device with alarm verification delay can be assigned to a suppression zone
"CONFIG RESTO 3: AL V"	Configuration error #3 restored

"CONFIG ERROR 4:SENS"	Configuration error #4 - Photo sensor has too high alarm sensitivity
"CONFIG RESTO 4:SENS"	Configuration error #4 restored
"CFG ERROR 5: W------"	Configuration error #5 - Watermist zone needs an SRM (zone#)
"CFG RESTO 5: W ------"	Confiugration error #5 restored
"CFG ERROR 6: W ------"	Configuration error #6 - Watermist zone has an abort (zone#)
"CFG RESTO 6: W ------"	Configuration error #6 restored
"CFG ERROR 7: ON TIME"	Configuration error #7 - SRM assigned to Watermist and zone has no “on-time”
"CFG RESTO 7: ON TIME"	Configuration error #7 restored
"CFG ERROR 8: ZN-TYPE"	Configuration error #8 - SRM assigned to Watermist and alarm type of zone
"CFG RESTO 8: ZN-TYPE"	Configuration error #8 restored
"CHECKSUM ERROR -----"	Configuration checksum error, board level (circuit number)
"CHECKSUM OK -----"	Checksum error restored (circuit number)
"CHECKSUM ERROR -----"	Zone configuration checksum error (zone number)
"CHECKSUM OK -----"	Zone checksum error restored (zone number)
"CIRCUIT SHORT "	Supervised output circuit shorted
"CIRCUIT OPEN "	Supervised output circuit open
"RESTORE CIRCUIT"	Supervised output circuit restored from fault
"DRILL INPUT ACTIVE"	Drill function input activated
"DRILL INPUT RESTORED"	Drill function input restored
"DRILL PRESENT"	Drill state for this zone activated
"DRILL RESTORED"	Drill state for this zone restored
"DEVICE MISSING "	Device was polled but not found
"DEVICE PRESENT "	Device returns, cancelling MISSING trouble
"DISABLED ZONE -----"	Zone disabled (zone #)
"ENABLED ZONE -----"	Zone enabled (zone #)
"DISABLED CKT -----"	Board circuit has been disabled (circuit #)
"ENABLED CKT -----"	Circuit has been enabled (circuit #)
"DISABLED DEVICE"	Device has been disabled
"ENABLED DEVICE "	Device has been re-enabled
"DISABLED LOOP 1"	Loop 1 has been disabled
"ENABLED LOOP 1 "	Loop 1 has been enabled
"DISABLED LOOP 2"	Loop 2 has been disabled
"ENABLED LOOP 2 "	Loop 2 has been enabled
"DISABLED LOOP 3"	Loop 3 has been disabled
"ENABLED LOOP 3 "	Loop 3 has been enabled
"DISABLED LOOP 4"	Loop 4 has been disabled
"ENABLED LOOP 4 "	Loop 4 has been enabled
"GND FLT PRESENT"	Ground fault present.
"GND FLT RESTORED"	Ground fault trouble restored to normal

"INTERNAL FAULT "	Addressable device trouble (Hochiki polling command (08))
"INT FAULT RESTORED"	Internal fault trouble restored
"INVALID ABORT ACTIVE"	Abort switch pressed in zone, no alarms present
"INV ABORT RESTORED"	Abort switch released in zone, no alarms present
"LOOP MODULE MISSNG"	Loop module not in place but devices are configured on them
"LOOP MODULE RESTORED"	LOOP MODULE MISSING trouble has cleared
"L1 OPEN CLASS A"	Loop 1 has open circuit on class A wiring
"L1 CLASS A RESTORED"	Loop 1 class A open circuit is restored
"L2 OPEN CLASS A"	Loop 2 has open circuit on class A wiring
"L2 CLASS A RESTORED"	Loop 2 class A open circuit is restored
"L3 OPEN CLASS A"	Loop 3 has open circuit on class A wiring
"L3 CLASS A RESTORED"	Loop 3 class A open circuit is restored
"L4 OPEN CLASS A"	Loop 4 has open circuit on class A wiring
"L4 CLASS A RESTORED"	Loop 4 class A open circuit is restored
"MULTIPLE DEVICES "	Multiple devices detected at this address
"RESTORED MULTIPLE"	Multiple devices trouble has cleared
"PALARM1 ACTIVE -----"	Device above pre-alarm1 threshold (analog data)
"PALARM1 RESTORE -----"	Device restored below pre-alarm1 threshold (analog data)
"PRE-ALARM1 PRESENT"	Pre-Alarm1 state for this zone activated
"PRE-ALARM1 RESTORED"	Pre-Alarm1 state for this zone de-activated
"PALARM2 ACTIVE -----"	Device above pre-alarm2 threshold (analog data)
"PALARM2 RESTORE -----"	Device restored below pre-alarm2 threshold (analog data)
"PRE-ALARM2 PRESENT"	Pre-Alarm2 state for this zone activated
"PRE-ALARM2 RESTORED"	Pre-Alarm2 state for this zone de-activated
"PC COMMUNICATION ERR"	The PC was interrupted during a configuration process
"PC COMMUNICATION OK"	The PC communication trouble has cleared
"PC CONFIGURING PANEL"	Configuration is currently being changed by the PC
"PC CONFIGURING DONE"	The PC has finished configuring the panel
"PROCESS INPUT ACTIVE"	Process control function input present
"PROCESS RESTORE"	Process control function input restored
"PROCESS PRESENT"	Process state for this zone activated
"PROCESS RESTORED"	Process state for this zone de-activated
"REMOTE RESET ACTIVE"	Remote reset switch activated and not released
"SUPERVISORY ACTIVE"	Supervisory function input present
"SUPERVISORY RESTORED"	Supervisory function input restored
"SUPERVISORY PRESENT"	Supervisory state for this zone activated
"SUPERVISORY RESTORED"	Supervisory state for this zone de-activated
"SYSTEM POWER LOW"	System 24 volt dc power is below limit for reliable operation
"SYSTEM POWER OK"	System 24 volt dc power is returned to normal limit
"TROUBLE INPUT ACTIVE”	Trouble function input present
"TROUBLE RESTORED"	Trouble function input restored
"TROUBLE PRESENT"	Trouble state for this zone activated
"TROUBLE RESTORED"	Trouble state for this zone de-activated
"UART FAILURE"	UART has been corrupted by ESD and then re-initialized
"UART RESTORED"	UART failure trouble is restored

"WALKTEST ACTIVE"	Walktest is activated
"WALKTEST EXPIRED"	Walktest timeout expired
"WATERFLOW ACTIVE"	Waterflow input activated
"WATERFLOW RESTORED"	Waterflow input de-activated
"WATERFLOW PRESENT"	Waterflow state for this zone activated
"WATERFLOW RESTORED"	Waterflow state for this zone de-activated
"WATERMIST ACTIVE"	Watermist input activated
"WATERMIST INACTIVE"	Watermist input de-activated
"WIRING FAULT-OPEN "	Open circuit fault on FRCM
"WIRING FAULT-SHORT "	Short circuit fault on FRCM
"WIRING FAULT RESTORE"	Wiring fault on FRCM has returned to normal
"WRONG DEVICE KIND "	Wrong KIND of devices has been found
"RESTORED DEVICE KIND"	Correct KIND of device has been restored to this address
"ZONE DISABLE ACTIVE"	Zone disable input activated
"ZONE DISABLE RESTORE"	Zone disable input de-activated

APPENDIX 3 - CHEETAH Battery Calculation Form

	Standby Current		Alarm Current
1. CSC	0.250 A		0.250 A
2. SLM (if installed)	0.075 A		0.075 A
3. CRM4 (0.010A per relay)	0.000 A		_____A
4. Communication Loop (CSC + SLM)	_____A	<SAME#>	_____A (note 4)
5. Auxiliary Power (CSC + SPS)	_____A (note 1)		_____A (note 2,4)
6. Notification Circuits	0.000 A		_____A (note 2)
	_____A Total (1)		_____A Total (2)

Addressable Device Current		Communication Loop (#used)(current)=total	Auxiliary Power (#used)(current)=total
55-020	FRCM	(_____)(0.46 mA)=_____	n/a
55-021	SOM	(_____)(0.32 mA)=_____	(_____)(0.53 mA)=_____(note4)
55-022	SRM	(_____)(0.27 mA)=_____	(_____)(mA)=_____(note4)
55-023	R2M	(_____)(0.54 mA)=_____	n/a
60-1028	Thermal detector	(_____)(0.50 mA)=_____	n/a
60-1021	Photo detector	(_____)(0.50 mA)=_____	n/a
60-1032	Ion detector	(_____)(0.50 mA)=_____	n/a

Notification model (#used)(mA each) = Total Current (A)

_____

_____

_____

_____

_____

Standby Capacity = [Total (1)] x [standby time] + [Total (2)] x [0.083] (note 5)

Minimum Battery Size = [Standby Capacity] x [1.2] =_____Ah (note 3,5)

NOTES:

1. - Auxiliary Power cannot exceed 1.0A (CSC only), or 2.0A (CSC+SPS) in normal standby condition.
2. - Auxiliary Power plus Notification Power cannot exceed 5.0A (CSC only), and 10.0A (CSC+SPS).
3. - CSC can support up to 65 Ah of standby batteries. SPS can support up to an additional 65 Ah of standby batteries for a system total of 130 Ah.
4. - Addressable device currents above are identical for Normal Standby and Alarm Condition. Auxiliary Power does not include current delivered to SRM or SOM output circuits during alarm condition. SRM's auxiliary power consumption is 10.0 mA when using an ARM module and 1.2 mA when using a solenoid.
5. - Standby time should be 24, 60 or 90. 0.083 represents 5 minutes of alarm. 1.2 represents battery derating factor.

APPENDIX - 4 - CONFIGUATION FORMS

TIME BASE CONTROL GROUP										
	ON	OFF	S	M	T	W	T	F	S	H
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										

HOLIDAY (H) = UP TO 18 HOLIDAYS

OUTPUT STATES SELECTABLE

NONE
PROC
TRB
SUPR
DRLL
ABRT
PAL1
PAL2
ALRM
PRED
RELE
WMST

LOOP CIRCUIT		
	CLASS A/B	ENABLE E/D
LOOP1		
LOOP2		
LOOP3		
LOOP4		

POWER-IN		
	AC	24VDC
	Y/N	BATT/AUXIN/NONE
MAIN		
SPS		

PATTERNS					
INDEX	PATTERN				USE
0	0000	0000	0000	0000	STEADY OFF
1	1111	1111	1111	1111	STEADY ON
2	1100	1100	1100	0000	TEMPORAL
3	1100	1100	1100	1100	SLOW PULSE
4	1010	1010	1010	1010	MARCH TIME
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

ZONES									
ZONE#	ALARM	SUP						E/D	ZONE NOTES
					DELAY		ABORT		
		CROSSZ	COUNTZ	SINREL	MAN	AUTO	(1-6)		

PHOTO/ION/HEAT											
LOOP-ADDRESS	TYPE	ALARM1	ALM-DAY	PRE-ALM	PRE-ALM	ALMVER	TIMEBAS	DRIFT	ENABLE	ZONE(S)	CUSTOM MESSAGE
	PHOTO/	S1	S2	P1*	P2*	AV(10-60)	TB(0-15)	Y/N	E/D	UP TO 32	
	ION/HEAT	PHOTO=8-35 ION=80 HEAT=35-50				or N					

* Pre-Alarm values for photo sensors 01-35

FRCM																	
LOOP-	DETECT	MANALRM	WATERFL	SUPER	PROCESS	MANREL	ABORT	SUPER-L	SILENCE	ZONE-DIS	RESET	DRILL	TROUBLE	REL-WCT		ZONES	
ADDRESS	NO	NO	NO	NO/NC	NO/NC	NO	NO	NO/NC	NO/NC	NO/NC	NO	NO/NC	NO/NC	NO	E/D	UP TO 32	CUSTOM MESSAGE

SOM & R2M										
LOOP-ADDRESS	WALK TEST E/D	ENABLE E/D	INDEX # (0LO-15HI)	STATE	ZONE	PATTERN (0-15)	OP CODE (0-3)	SILENCE Y/N	RESOUND Y/N	CUSTOM MESSAGE

OUTPUT STATES SELECTABLE
NONE, PROC, TRB, SUPR, DRLL, ABRT, PAL1, PAL2, ALRM, PRED, RELE, WMST

SRM						
LOOP-ADDRESS	STATE ALRM/PRED RELE/WMST	DEV 24VSOL/ARM 12VSOL	TIME CONT or 1-1270 SEC	ENAB E/D	ZONES UP TO 32	CUSTOM MESSAGE

APPENDIX - 5 - ABORT TYPES

These abort types are programmable by zone using configuration menu. Countdown does not begin until the system is in the predischarge state.

TYPE 1: Abort is effective only if active upon entry into predischarge state. Countdown continues during abort activation. Upon abort deactivation (during predischarge), the release cannot again be aborted, so release occurs upon countdown completion. Conforms to Industrial Risk Insurers (IRI) requirements.

TYPE 2: Countdown continues during abort activation. Release occurs when both the countdown is completed and the abort is deactivated.

TYPE 3: If the abort is active during predischarge, release occurs upon abort deactivation.

TYPE 4: If the abort is active during predischarge, release occurs 10 seconds after abort deactivation. If counter was below 10 seconds upon abort activation, then.....

TYPE 5: Upon abort deactivation, countdown occurs from the full programmed countdown time. Prior to countdown completion, abort activation extends the countdown time to the programmed length. Does not conform to UL requirements, but is allowed by some Local Authority having Jurisdiction.

TYPE 6: Upon abort deactivation, system operates in “NYC mode” which has a 9 second verification delay, then a 30 second countdown. Prior to countdown completion, abort activation again extends the countdown time. During 120 second verification delay, the system emulates continuous abort activation. After a 90 second delay, the system starts a 30 second predischarge delay. Does not conform to UL requirements, but is allowed by some Local Authority having Jurisdiction.

NOTE: The ABORT switch delays releases initiated by automatic detection schemes. Releases initiated by activated Manual Release input circuits override the Abort Switch.

APPENDIX - 6 - ANTI-STATIC PROCEDURE

!!! WARNING !!! Always wear a grounding strap when handling modules.

Handle modules by the edges only and avoid touching the integrated circuits. Wearing natural fibers such as cotton can also help reduce static buildup. It is possible to build up to a 30,000 volt potential (or greater) between yourself and other surfaces. Static discharges of 3000 volts are not perceptible to the touch. Discharging voltages much smaller than this into electronic circuits can cause damage.

Damage due to electrostatic discharge is often not immediately fatal to circuitry, but rather causes latent failures which degrade components causing erratic operation and possible failure at some later time. Keep all modules in protective static bags except when they are installed in the enclosure. Handle them carefully (keeping yourself grounded) while installing modules. If the installer is grounded at all times, damage due to static discharge will not occur.

The preferable ground point is chassis ground. This can be obtained at the green wires attached to enclosure studs. There does not have to be “zero” ohms between the installer and ground to be considered “grounded”. In fact, most ground straps have a characteristic impedance of 1000 to 1,000,000 ohms to protect the installer from shock potential.

APPENDIX - 7 - ERROR CHECKING CODES

CONFIGURATION RULE TEST #1
Every suppression zone must have at least one manual release input assigned to that zone. If the man_release bit is set then this rule does not apply.

CONFIGURATION RULE TEST #2
Every input must have an associated output, regardless of the state assigned by the function of that input. Since all analog devices will activate the on-board supplemental relay assigned to alarm, only FRCM's need be checked. Only those FRCM's assigned a function which does not activate an on-board supplemental relay need be checked for an SOM or supervised circuit matchup.

CONFIGURATION RULE TEST #3
No analog device witha an alarm verification delay can be assigned to a suppression zone.

CONFIGURATION RULE TEST #4
No analog photo with the high velocity selection can have a sensitivity greater than 2.5%.

CONFIGURATION RULE TEST #5
Every watermist zone must have an SRM assigned to it.

CONFIGURATION RULE TEST #6
No watermist zone must have an abort assigned to it.

CONFIGURATION RULE TEST #7
An SRM assigned to watermist state must have a zone with an on-time.

CONFIGURATION RULE TEST #8
An SRM assigned to watermist state must be assigned to a suppression zone.

APPENDIX - 8 - OPERATION SPEED OPTION

To minimize response times, the system uses an interrupt driven response to inputs. For extreme speed optimization, particular “faster” addresses can be used. For these extreme high speed systems, a good design methodology is to set critical devices to addresses that are queried first after an interrupt.

The first level of priority is to use low addresses. In general, devices at addresses 1-8 are the first addresses searched for an interrupt. However, many low order addresses at or immediately above multiples of 8 also offer excellent speed performance. (such as 8-11, 16-18, 24-25, 32)

Best addresses, in approximate order of speed performance after an interrupt are:
1, 2, 8, 3, 9, 16, 4, 10, 17, 24, 5, 11, 18, 25, 32, 6, 12, 19, 26, 33, 40, 7, 13, 20 etc.

If high speed is required, another technique is to use multiple loops to minimize the number of devices per loop. Using four loops versus two loops can provide approximately twice the speed performance.

APPENDIX - 9 - SYSTEM OPERATION POSTING

P/N 02-4207

OPERATING INSTRUCTIONS
FIKE PROTECTION SYSTEMS
10-052 CHEETAH CONTROL SYSTEM

OPERATIONAL CONDITIONS

SYSTEM STATUS	LED's ON	AUDIBLE STATUS	LCD DISPLAY
Normal Standby:	AC Power LED on	All audibles off	System OK
Loss/Low AC	AC Power LED off Trouble LED flashes	Local piezo on	AC1 or AC2 power trouble
System Trouble:	Trouble LED flashes	Local piezo on	Trouble Type Trouble output(s) on
Supervisory Alarm:	Supervisory LED flashes	Local piezo warbles	Supervisory Type Supervisory output(s) on
Pre-Alarm:	Pre-Alarm LED flashes	Local piezo chirps	Pre-Alarm Type Pre-Alarm output(s) on
System Alarm:	Fire Alarm LED flashes	Local piezo chirps	Alarm Type Alarm output(s) on
Predischarge:	Fire Alarm LED flashes	Local piezo chirps	Predischarge Type Predischarge output(s) on
Release:	Fire Alarm LED flashes	Local piezo chirps	Release Type Release output(s) on

To Silence Panel: Open Door
Press the Acknowledge button

To Reset Panel: Open Door
Press Reset button

To Silence Outputs: Open Door
Press Alarm Silence button

CAUTION: Remove AC and battery power before servicing equipment

IN CASE OF TROUBLE CONTACT:

_____
_____
_____
Phone # _____

<OR>

Customer Service Department
Fike Protection Systems
Division of Fike Corporation
(816) 229 - 3405

Refer to Fike Installation, Operation and Maintenance Manual #06-149

Frame this sheet and place adjacent to control equipment.

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