Meeting Review
EVLA FM200 Fire Panel Alarm Sequence and Equipment Shunting

1) Pre Alarm -- Analaser Sniffer System -- Analaser will auto set sensitivity level. Once sensitivity is set this early warning smoke sensing system will provide a supervisory alarm. Alarm signal will be sent to FM200 Remote Annunciator panel in Operations. After Correlator is operational sensitivity level will be reset.

Sniffer Failure Mode: Alarm signal will be sent to FM200 Remote Annunciator panel in Operations.

Operations response will be determined at a later date.

2) First Alarm – from Main FM200 Fire Panel -- One smoke detector has sensed smoke.
A) Alarm signal will be sent to FM200 Remote Annunciator panel in Operations.
B) With initiation of First Alarm all HVAC equipment will be shunted (shutdown).
C) Alarm signal will not be sent to Building Fire Panel only to Operations through Remote Annunciator.
D) FM provide signals (power off), through shunt circuit, to two louvers allowing make up air dampers to close.

Operations response will be determined at a later date.

3) Second Alarm --
A) A second smoke detector has sensed smoke. Alarm signal will be sent to FM200 Remote Annunciator panel in Operations. Operations response will be determined at a later date.

B) Sixty (60) second countdown to discharge starts.

C) At the beginning of the 60 countdown: Shunt circuiting will provide the following:
1) FM Panel provides signal to Correlator CPCC. Pull off one of the contacts provided at the FM Panel.

D) At the end of the 60 second countdown: (or Water Pressure Switch Activation)
1) FM panel will send an alarm signal to Pre Action Sprinkler Panel (Potter Controller). When conditions zone #1 alarm (from FM panel) and Low Air pressure are satisfied zone #3 will open solenoid; letting water fill to Clapper Valve.
PreAction will only discharge after sprinkler fusible link has melted opening the head or heads. As air bleeds from the piping, water will fill and discharge.
2) FM Panel provides signal (power off), through shunt circuit, to two air relief dampers dampers, opening dampers. Power on holds dampers closed.
3) FM Panel provides signal (power on), through shunt circuit, to two fire dampers, melting fusible links. Need second relay module for fusible links.
4) FM Panel provides signal (power on), through shunt circuit, to turn off power in the main power panels and Correlator Power Plant.
480V Power Panel non UPS
480V Power Panel non UPS to Correlator Power Plant
208V Power Panel UPS providing all 208V and 110V requirements in the Correlator Room.
480V Power Panel UPS providing 480V UPS requirements in the room.
-48V output from the Correlator Power Plant battery Strings.

3) FM Panel provides signal to VLA Building Fire Panel.

4) If the Abort (reset (Press and Release)) button is hit any time during the 60 seconds the 60 second count down will restart. A keyed System reset is the only way to abort discharge.

4) Other Alarms –

A) Supervisory alarm signals from the PreAction Sprinkler panel will be feed through the FM200 Panel and to the FM200 Remote Annunciator panel in Operations. Low Air pressure, Water Flow Pressure Switch (to clapper?), Manual pull activated, or Valve Tamper switch will initiate this signal.

B) A Water Pressure Switch will be installed down stream of the Pre Action Cabinet. Water flow will Initiate shunting of the following:
480V Power Panel non UPS
480V Power Panel non UPS to Correlator Power Plant
208V Power Panel UPS providing all 208V and 110V requirements in the Correlator Room.
480V Power Panel UPS providing 480V UPS requirements in the room.
-48V output from the Correlator Power Plant battery Strings.
HVAC Equipment??

C) Operational Alarms from the HVAC Equipment. The HVAC equipment will be wired to a Liebert Control panel (AC4). Alarms from the air handlers will be sent to Operation through the Site M&C System.

D) Any Fire related building alarms will initiate a separate alarm in the Correlator Room indicating a potential fire some where in the building. Personnel will be instructed to exit the building (through the mezzanine shielded room exit door) when this alarm sounds.

FIRE SUPPRESSION SYSTEM
SEQUENCE OF OPERATION MATRIX

SYSTEM OUTPUTS

SYSTEM INPUTS	CONTROL UNIT FUNCTIONS													NOTIFICATION								SUPPLEMENTARY		
	ALARM LED/ALARM CONTACT	TROUBLE LED/TROUBLE CONTACT	SONALERT (SOUNDER @ SCP)	TIME DELAY START	–	TIME DELAY RESUME	TIME DELAY STOP	AGENT DELAY STOP	BELL	HORN	HORN / STROBE	OUTSIDE DISCHARGE STROBE	SUPERVISORY SIGNAL	SPRINKLER SIGNAL	SHUNT ROOM SOLENOID	FM200 REMOTE POWER	DISABLE FIRE ALARM PANEL	BUILDING DISCHARGE (SEE NOTE 1)	HVAC SHUTDOWN	COMPUTER SHUTDOWN	PRE ACTION SHUTDOWN	AUX.	–	MAKEUP SPRINKLER CHARGED	FUSIBLES MELT FIRE DAMPERS CLOSES
ANALASER II PRE – ALARM			•									•			•										
1ST DETECTOR	•		•						•						•				•					•	
2ND DETECTOR			•	•						•				•						•	•				
MANUAL RELEASE	•		•					•		•	•			•	•			•	•		•			•	•
ABORT INPUT(press AND release)		•	•				•																		
ABORT INPUT(press and release)						•																			
TIME DELAY EXPIRE								•			•			•				•							•
AGENT DISCHARGE											•							•							•
SPRINKLER TAMPER			•									•						•							
SPRINKLER WATER FLOW	•		•											•				•	•	•	•				
SPRINKLER VALVE MANUAL RELEASE	•		•															•	•	•	•				
SPRINKLER LOW AIR			•									•						•							
MAINTENANCE SWITCH BYPASS			•													•									
–																									