

Work Order Details // 20120337536 - JUNE 2012: 905: FIRE ALARM CONTROL PANEL - ANNUAL  
PM Z-6

BEFORE STARTING FIRE ALARM PANEL ANNUAL PM PRINT OUT CURRENT FIRE ALARM PANEL SCHEDULE AND INSTALL IN FIRE ALARM PANEL DURING PM. USE OLD FIRE ALARM PANEL SCHEDULE FOR PM AND MARK UPS AND RETURN IT WITH THE FIRE ALARM PANEL TEST RESULTS DATA.

Name: \_\_\_\_\_ Craft: E-FA Reported Date: 5/1/2012 9:16:59



WO: 20120337536 Priority: 1 Target Start: 6/1/2012  
Work Type: PM New Mexico Level of Rigor: Low Rigor Sched Start: 6/4/2012  
GL Account: 0000362/02.06.01-

**Location**

Area:	2	Bldg:	905	Floor:	1	Room:	NORTH LOBBY
Equip:	1135486	905: FIRE ALARM CONTROL PANEL	Yellow Tag:				
JHE/Access:	None	ES&H? No			Quadrant: NW		
EQ Qual Level:	N/A	Not Applied				Reported as Safety Issue by Customer?:	

**Escort**

MBA/Escort Needed?: MBA/Escort Contact: Name:

Phone: Dept: Mail Stop: Pager:

**Requestor**

Area:	Bldg:	Floor:		
Room:	Quad:			
Name	Org	Phone	Pager/Cell	Mail Stop
Requested By:				
Reported By:	Adrienne Bonaguidi	048474	(505) 284-8185	(505) 951-6169
Affected Person:				0905

**Pre-Task ES&H Evaluation (Sandia crews review and sign prior to starting work)**

1. I have reviewed the work package and it provides clear guidance and requirements for the work to be performed safely (protecting the workers, area occupants/pedestrians, and the environment). This includes electrical testing (phase to phase, phase to ground, and phase to neutral).
2. I have inspected the work area (including signage and weather) to ensure work site hazards have been evaluated and I understand the required control measures (e.g. PPE, training, JSHE and/or permit, work rescheduling).
3. I have evaluated the work activity to be performed and have a clear understanding regarding which of the following safety controls are required: (1) LOTO, (2) barricading, (3) fall protection, (4) fire alarm blocks, (5) hearing protection, (6) eye protection, (7) arc flash protection, (8) shock protection, (9) face protection, (11) hand protection, (12) permits, (13) asbestos abatement, (14) respiratory protection, (15) proper footwear.
4. I have notified impacted area occupants of work activity and potential hazards and controls.

Signature of Craftsperson(s): \_\_\_\_\_

Date(s) work was evaluated and performed: \_\_\_\_\_

**New Mexico Area V Use Only**

Customer Authorization to Start Work: \_\_\_\_\_ Date: \_\_\_\_\_

**Completed**

Customer Sig: (optional) \_\_\_\_\_ Date: \_\_\_\_\_

Craft Sig: \_\_\_\_\_ Date: \_\_\_\_\_

**Draft Feedback (Use back of sheet for additional notes if necessary)**

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Notes about Work Done:

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Job Plan/Material Comments:

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Other Comments:

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Job Plan		
Job Plan:	8687-905	905:ANNUAL FIRE ALARM PM
Task IDs		
Task ID	Description	
5	Complete "Pre-Job Checklist".	
10	PM Planner prints "Fire Alarm System Test Checklist" from MS Access fire alarm database. Refer to the Fire Alarm Inspection/Test Checklist for the specific quantities of devices to be tested and for additional site-specific instructions.	
15	Put FACP account "0905" in "NO ACTION".	
20	Activate SW1 to disable all NAC circuits / programmable outputs to NAC power supplies.	
30	Activate the following SL30 switches to disable output circuits: SW2 - Disable Door Release (disable after verifying door release)	
40	Time delays to access work areas (e.g., clean rooms, vaults, locked rooms).	
50	Disconnect primary DACT/DART circuit. Verify transmittal of signals to Phoenix monitoring station over the secondary DACT/DART circuit. Reconnect primary DACT/DART circuit.	
60	Disconnect secondary DACT/DART circuit. Verify transmittal of signals to Phoenix monitoring station over the primary DACT/DART circuit. Reconnect secondary DACT/DART circuit.	
80	Verify at FACP if any addressable smoke detectors are dirty prior to performing functional tests. Replace any smoke detector that is dirty prior to performing tests.	
Number of dirty smoke detectors replaced: _____.		
Note time for detector replacement and have a PMR work order issued to cover time performing corrective maintenance.		
EST QuickStart Panel Smoke Sensitivity Menu Instructions: [Main Menu - 2) Reports] >>> [Reports Menu - 1) Maintenance] >>> [Maintenance - 1) Dirty > 80%] >>> Panel # >>> ENTER >>> [Report Output - 1) Display]. Replace smoke detectors that appear as > 80% Dirty.		
100	Test each pull station to send alarm to FACP. Verify there are no obstructions to access pull station.	

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	120	Test each ceiling-mounted smoke detector to send alarm to FACP.
	125	Test each underfloor (UF) smoke detector to send alarm to FACP.
	140	Test each restorable heat detector to send alarm to FACP.
	145	For non restorable heat detectors, electrically test each heat detector to send an alarm signal to the FACP.
	150	Test each duct smoke detector (with Remote Test Station) to send signal to FACP.
	340	Verify each building HVAC AHU shuts down upon activation of duct detector(s) for the AHU. Verify AHU restarts when FACP is reset. Notify building mechanic to restore AHU to operation if the unit does not automatically restart.
	360	Activate initiating device to release doors electrically held open. Verify doors release properly. Return doors to held open position upon conclusion of test.
	370	Activate the following water flow switches to automatically start smoke removal system: SMOKE PURGE ZONES: SPZ-1: North Section of Building 905; Activated by water flow switch M126 SPZ-2: SW Quadrant of Building 905; Activated by water flow switch M128 SPZ-3: South Center Quadrant of Building 905; Activated by water flow switches M130, M134 SPZ-4: SE Quadrant of Building 905; Activated by water flow switches M132, M136  Verify proper operation. Return smoke removal system to non-alarm condition.
	380	Activate the following SL30 switches to manually start smoke removal system: SW27 - Activate Smoke Purge Zone 1 SW28 - Activate Smoke Purge Zone 2 SW29 - Activate Smoke Purge Zone 3 SW30 - Activate Smoke Purge Zone 4  Verify proper operation. Manually turn off smoke removal system.

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Task ID	Description
400	At each NAC power supply, de-energize 120 VAC to verify AC power loss supervision. Restore AC power.
410	At each NAC power supply, disconnect batteries to verify DC power loss supervision. Restore DC power.
420	At each NAC power supply, inspect condition of lightning protection & transient suppressors.
430	At each NAC power supply, inspect batteries for corrosion or leakage.
440	At each NAC power supply, note on test checklist the manufacture date for battery (or install date). If battery date is older than 5 years, replace the batteries.
450	At each NAC power supply, take voltage readings across both batteries & at each battery. Take temperature readings. Note results on test checklist.
460	At each NAC power supply, perform battery load test.
470	Clean interior of each NAC power supply, if needed.
480	Verify proper operation of all NAC audible and visual appliances. This test is performed during the annual evacuation drill.
500	At FACP, de-energize 120 VAC to verify AC power loss supervision. Restore AC power.
510	At FACP, disconnect batteries to verify DC power loss supervision. Restore DC power.
520	At FACP, inspect condition of lightning protection & transient suppressors.
530	At FACP, inspect batteries for corrosion or leakage.
540	At FACP, note on test checklist the manufacturer date of battery (or install date). If battery date is older than 5 years, replace batteries.

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Task IDs	Task ID	Description
	550	At FACP, take voltage readings across both batteries & at each battery. Take temperature readings. Note results on test checklist.
	560	At FACP, perform battery load test.
	570	At FACP, clean interior if needed.
	580	At FACP, verify operation of FACP ground fault monitoring circuit.
	600	Verify current date & time is displayed on FACP LCD. Correct date & time if required.
	610	Illuminate all FACP lamps & LEDs to verify operation.
	620	Note FACP AC power supply voltage on test checklist.
	630	Note FACP hardware & software revision levels on test checklist.
	640	Clear FACP event history after completion of tests.
	650	Inspect all fire alarm system components for obstruction & physical damage.
	700	Activate SW1 to restore all disabled NAC circuits / programmable outputs to NAC power supplies.
	710	Activate the following SL30 switches to restore output control circuits: SW2 - Disable Door Release
	720	Verify there are no alarms or troubles on FACP.
	730	Take FACP account "0905" off of NO ACTION".
	750	FACP monitor during test
	800	Verify receipt of an alarm, supervisory, and trouble signal at the Phoenix fire alarm monitoring station at Bldg. 887.

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	810	<p>Record all data &amp; required corrective actions on test checklists. Return test checklists to Planner.</p> <p>Read cautions associated with system maintenance. Follow maintenance instructions listed on test checklists.</p>