PURPOSE

This University of Nevada, Reno Facilities Services Department Standard Operating Procedure (SOP) provides guidelines to complete annual fire alarm system and fire sprinkler system tests at the Nevada System of Higher Education Computing Center Building. These guidelines include building contact list information, list of equipment, location of panels and sprinkler equipment, and specific component operating instructions for use prior to performing a test at this facility.

This building is considered a “critical system” building with mandatory pre-test notification and scheduling requirements.

PROCEDURE

The following SOP will be used by all FPS Shop personnel when performing fire alarm and fire sprinkler testing.

Contact Information
Prior to scheduling or performing any work within this facility, notification and approval of one of the following individuals is mandatory:

- Director-Data Center and Facilities Plan - Richard Ayala – 702-895-4551
- Senior Director for Computing Services - Jim McKinney – 775-789-3752
### Equipment and Location

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Area/Room</th>
<th>Specific Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Alarm Control Panel-Notifier AFP 500</td>
<td>Basement mechanical room #002</td>
<td>West wall</td>
</tr>
<tr>
<td>Fire Sprinkler Deluge (pre-action) release panel (includes data room electrical shunt trip relay)</td>
<td>Room #18</td>
<td>South wall</td>
</tr>
<tr>
<td>Clean Agent releasing panel (Halon system) This system is currently out of service.</td>
<td>Room #27A</td>
<td>South wall</td>
</tr>
<tr>
<td>HVAC shunt trip reset button</td>
<td>Room #27A</td>
<td>North wall</td>
</tr>
<tr>
<td>Fire sprinkler post indicator valve, this is the shutoff valve for the fire sprinkler system.</td>
<td>Outside of building</td>
<td>West side</td>
</tr>
<tr>
<td>Fire sprinkler backflow prevention device</td>
<td>Room #27A</td>
<td></td>
</tr>
<tr>
<td>Fire sprinkler Deluge (pre-action) system tree and solenoid valve</td>
<td>Above ceiling in hallway C1</td>
<td>West hallway</td>
</tr>
<tr>
<td>Fire sprinkler system main drain valve</td>
<td>Above ceiling in hallway C4</td>
<td>North hallway</td>
</tr>
<tr>
<td>Computer room’s power shunt trip reset switch</td>
<td>Basement mechanical room #004A</td>
<td>See Electrical Shop SOP for power shunt trip reset procedure and outline of device locations.</td>
</tr>
</tbody>
</table>

### Prior to Fire Alarm/Fire Sprinkler Test

1. Contact building personnel as listed above to schedule a test date and time prior to start of any task within premises. Notification and authorization of time and date must be confirmed with Fire/Life Safety Supervisor to proceed with all testing, whether quarterly and annually.

2. This test **must** be performed by at least **two qualified** fire/life safety technicians. **No exceptions.**

3. Place account on test with Burgarello monitoring company, reference account #61005121.

4. At main fire alarm control panel (basement), remove (lift) audible bell circuit #1 & 2 to silence building notification devices.
5. At Fire Sprinkler Deluge (pre-action) Panel (room 18), perform these functions to disable panel:
   a. Remove the “ice cube” relay located in the bottom right corner of this panel. This will prevent computer room power shunt trip from occurring.
   b. Turn the disable slide switch to the “off” position. This is the little blue slide switch on the right side of the panel.
   c. Remove (lift) output #1 (horn) and #3 (solenoid). Solenoid will trip from pull station below this panel and heat detectors in the two main computer rooms.

**Send Test Signals to Deluge Panel**
1. Close and open tamper switch on Deluge (pre-action) system located above ceiling in hallway C1.
2. Open small red valve on bottom right side of Deluge (pre-action) tree. This will trip the pressure switch and provide 24VDC at the solenoid valve terminal of the Deluge Panel. Reset panel.
3. Test heat detector in either of the main two computer rooms. It should also provide 24VDC to the solenoid valve terminal of the Deluge Panel. Test all remaining heat detection within these two rooms. Reset system.
4. Test the pull station located under the Deluge Panel. It should provide the same results as stated above. This will conclude all necessary testing within this control panel.

**Completion of Fire Alarm/Fire Sprinkler System Test**
1. Test all remaining tamper and flow switches within the building. Tampers are located in the main computer room (27A), waterflow points are in the “secondary” roof hatch located in the northeast corner of the north hallway (C4). Technician must walk west in attic space to locate the riser flow point.
2. Test all remaining heat/smoke detectors, pull stations throughout the building.
3. Clear all panels alarm conditions.
4. Restore Deluge Panel in the following order:
   a. Replace output wires #1 (horn) and 3 (solenoid).
   b. Reinstall “ice cube” relay.
   c. Re-enable the blue “disable” slide switch. The bell above you will ring for a second while the system restores. Be ready for it.
5. At the main basement fire alarm control panel, replace audible bell circuits #1 & 2 to restore complete systems back to normal.

**Deluge Panel Zones**
- Pull station below panel.
- Heat detectors throughout main computer rooms 27A, B, & C.
- Deluge (Pre-action) alarm pressure switch (above ceiling in hallway C1).
- Deluge (Pre-action) system tamper valve (above ceiling in hallway C1).
Main Fire Alarm Control Panel Zones

- Main workflow
- Post indicator valve
- Tamper
- Halon system (out of service)
- Deluge system
- Pull Stations
- Heat Detectors

IMPLEMENTATION

The FPS supervisor is responsible for the implementation of this SOP within area(s) of responsibility.

TRAINING

All qualified fire and fire sprinkler technicians will receive complete and thorough training on these systems throughout this building prior to performing any tasks associated with testing of fire alarm and fire sprinkler systems within this building. The supervisor shall ensure regular review of and compliance with this SOP manual.

COMPLIANCE

Compliance with all UNR and FMS policies and procedures is required of each employee. Failure to comply with this SOP may result in disciplinary action as outlined in the Nevada System of Higher Education Prohibitions and Penalties, and/or the Nevada System of Higher Education Board of Regents Handbook.