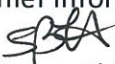




Winston-Salem State University | University of North Carolina School of the Arts
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TO: Clarisse Davis, Emergency Management Coordinator
Gary Davis, Interim Chief of Police
Lisa Smith, Chief Information Officer


FROM: Shannon B. Henry, Chief Audit Executive

DATE: December 9, 2014

SUBJECT: Business Continuity Management – Management Letter

We have completed our audit to evaluate the university's Business Continuity Management Program, inclusive of business continuity, information technology (IT) disaster recovery, and pandemic planning. Our audit scope included the calendar year 2013; however, we reviewed the university's most recent plans, which were for the fiscal year 2014. The final audit report was issued to management on November 14, 2014 and identified weaknesses in the internal control structure.

In addition, during the audit, we noted the following minor issues/concerns that do not require a response from management, however, warrant management's attention provided that the following could lead to reportable issues in the future, if not addressed.

The details of the additional items noted are as follows:

Item 1: The University of North Carolina School of the Arts (UNCSA) does not conduct regular risk assessments to assist with keeping the continuity of operations plans (COOPs) up-to-date. Without conducting regular risk assessments, the university cannot ensure the plans remain viable and appropriate.

During our review, we noted that the university created a *Pre-Disaster Mitigation Plan Campus Profile* at January 2010. The campus profile listed assets on campus, considered the hazard profile, and provided a history of the school. Additionally, the university performed a risk

assessment of twelve campus facilities in 2009. The facilities report provided data resulting from an on-site engineering inspection, plus the risk calculations. However, we were unable to determine that the university considered the information in these reports to develop their COOPs or that any risk assessment or identification activities have been performed, for business continuity purposes, since those dates.

According to the best practice guidelines as per the Business Continuity Institute:

Once implemented, the Business Continuity Management (BCM) program needs to be managed in a continuous cycle of improvement if it is to be effective. Organizations exist in a dynamic environment and are subject to changes in people, processes, market, risk, environment, geography and business strategy. To ensure that their BCM capability continues to reflect the nature, scale and complexity of the organization it supports, it must be current, accurate, complete, exercised and understood by all stakeholders and participants.

Recommendation: The university should establish a maintenance program to ensure that continuity strategies reflect the current environment and remain adequate to address risks.

Item 2: The university does not have sufficient controls in place to ensure information system assets are adequately protected from fire damage. This increases the risk of hardware and data loss.

This deficiency was addressed in the 2009 Facilities Report (mentioned in Item 1 above) and the audit noted that the university has not taken any steps to mitigate the risks.

We performed a walkthrough of the Information Technology (IT) server room, located in the Administrative Building on the campus of UNCSA, on April 7, 2014 with a follow up on June 4, 2014. This room houses the university's information system servers, storage appliances, and data tapes/hard drives for backup. While the room is equipped with a fire alarm, an emergency stop switch (for power), and fire extinguishers, there is no dedicated system for fire suppression in the building or in the server room.

A fire suppression system is designed to reduce/eliminate damage and danger caused by fires. In the case of a fire, the university's fire alarm (if working properly) would alert the fire department and those in the

building to act/evacuate. But, by the time this happens, the fire could have spread throughout the room and possibly into other parts of the building. Depending upon the circumstances and the nature of the fire, the lack of a fire suppression system could endanger lives and cause more extensive damage and property loss.

The Data Center Journal cites National Fire Protection Agency (NFPA) 75, which states the following with regards to fire suppression:

Water is a universally accepted method of extinguishing a fire. As such, NFPA 75 and other standards state that if the building structure that houses the data/technology room is fire protected with a water sprinkler system, so must be the data/technology room. If the data/technology room is not in a sprinkler-protected building, then the data/technology room owner can elect to use a water sprinkler system, a gaseous clean-agent system or a combination of both.

Standards also state that the user can always upgrade from the basic requirements with acceptable methods or technology. In other words, even if a building has water sprinklers installed, and the standard prescribes water sprinklers for the data/technology room, the user can elect to use a suitable gaseous fire suppression agent.

Recommendation: The university should consider installing a fire suppression system for the server room to mitigate the risks of damage and loss. A gas fire suppression system may prove more cost-effective as it can be installed to fit the server room, as it exists currently, without elaborate installation.

Item 3:

The university's fire extinguishers are removed from inside buildings for use at outside events that take place on campus. Removal of fire extinguishers from their established mountings may result in a violation of regulations and standards and increases the risks of asset loss and liability.

During our review, we observed the improper placement of at least one fire extinguisher. We noted that a fire extinguisher for the IT server room was positioned against a wall on the floor during two separate walkthroughs on April 7th and June 4th of 2014.

Based on our inquiry of staff, during university events where tents and/or activities are set up on campus, fire extinguishers are taken from their

mountings in different buildings and kept on hand at the outside event in case of an emergency. According to staff, the university has additional extinguishers that can be provided for events upon request. Further, according to university staff, once extinguishers are returned to the area from which they were taken, they are not always placed back on their mounting. Improper placement of fire extinguishers can result in a small fine from inspectors.

According to OSHA regulation [29 CFR 1910.157(c)]:

To avoid putting workers in danger, fire extinguishers should be located throughout the workplace and readily accessible in the event of a fire. You can usually find them in hallways, laundry rooms, meeting rooms, kitchens, mechanical/electrical rooms, and near exit doors. To prevent fire extinguishers from being moved or damaged, they should be mounted on brackets or in wall cabinets with the carrying handle placed 3-1/2 to 5 feet above the floor. Larger fire extinguishers need to be mounted at lower heights with the carrying handle about 3 feet from the floor

Recommendation: The university should follow OSHA standards and ensure fire extinguishers are maintained in their proper places at all times. The university should document their internal procedures for securing fire extinguishers for events and educate staff on these procedures to foster compliance. The university's compliance with fire safety standards, as determined by OSHA and NFPA, should be monitored by the university's environmental health and safety manager.

If you have any questions or comments concerning these items, please contact the Internal Audit staff at (336) 750-2065. Thank you for your attention to these matters.

cc: Mr. George Burnette, Chief Operating Officer