



ARKANSAS STATE
UNIVERSITY

Spring 2023 Fire Drills

After-Action Report/Improvement Plan

April 4th, 2023

This After-Action Report/Improvement Plan (AAR/IP) aligns exercise objectives with preparedness doctrine and related frameworks and guidance. This AAR meets Homeland Security Exercise and Evaluation Program (HSEEP) guidelines. Exercise information required for preparedness reporting and trend analysis is included.

EXERCISE OVERVIEW

Exercise Name	Spring 2023 Fire Drills
Exercise Dates	March 8-10, 2023
Scope	This exercise is a drill, planned for approximately 5 minutes at each residence hall. Exercise play is limited to activating the fire notification system in each building, monitoring the receipt and response by occupants, examining the notification system for any failures, and documenting all observations.
Focus Areas¹	Mitigation, Response
Capabilities²	<ul style="list-style-type: none"> ▪ Community Resilience ▪ Infrastructure Systems ▪ Planning ▪ Public Information and Warning
Objectives	<ul style="list-style-type: none"> ▪ Determine the operational status of fire notification systems ▪ Examine the ability of occupants to recognize hazard communication messaging ▪ Examine the occupant's response to hazard communication messaging ▪ Examine the ability of staff in encouraging and guiding evacuation efforts
Hazard	Uncontained Fire
Scenario	The fire notification system was activated via pull stations. This drill verified the panel received this notification, activated the remainder of the system automatically, and notified the designated public safety answering point (PSAP). The drill also monitored the recognition and response of occupants in identifying a potential hazard and responding using appropriate emergency procedures pre-designated by Safety & Emergency Management.
Sponsor	Arkansas State University
Participating Organizations	Environmental Health & Safety, Safety & Emergency Management, University Housing
Point of Contact	Wyatt Reed , Emergency Operations and Occupational Safety Specialist Office of Safety & Emergency Management Arkansas State University wreed@astate.edu or (870) 972-3352

¹ Based on 4 stages of Disaster Management

² Selected from National Preparedness Goal List of Capabilities (DHS, 2015)

Analysis of Capabilities

Aligning exercise objectives and capabilities provides a consistent taxonomy for evaluation that transcends individual exercises to support preparedness reporting and trend analysis. Table 1 includes the exercise objectives, aligned capabilities, and performance ratings for each capability as observed during the exercise and determined by the evaluation team.

Objective	Capability ³	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
Determine the operational status of fire notification systems	Community Resilience	X			
	Infrastructure Systems	X			
	Public Information and Warning	X			
Examine the ability of occupants to recognize hazard communication messaging	Community Resilience		X		
	Infrastructure Systems	X			
	Public Information and Warning	X			
Examine the occupant's response to hazard communication messaging	Community Resilience		X		
	Planning		X		
Examine the ability of staff in encouraging and guiding evacuation efforts	Planning		X		
	Community Resilience	X			

Table 1. Summary of Core Capability Performance

³ Selected from National Preparedness Goal List of Capabilities (DHS, 2015)

Rating Definitions:

Performed without Challenges (P): The targets and critical tasks associated with the capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. The performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws.

Performed with Some Challenges (S): The targets and critical tasks associated with the capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. The performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency were identified.

Performed with Major Challenges (M): The targets and critical tasks associated with the capability were completed in a manner that achieved the objective(s), but some or all of the following were observed: demonstrated performance had a negative impact on the performance of other activities; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws.

Unable to be Performed (U): The targets and critical tasks associated with the capability were not performed in a manner that achieved the objective(s).

The following sections provide an overview of the performance related to each exercise objective and associated capability, highlighting strengths and areas for improvement.

Residence Hall Breakdowns:

This area will identify the strengths and weaknesses of each residence hall as it relates to exercise objectives and core capabilities.

Living-Learning Communities:

Living-Learning Community (LLC) #1

Time: 5:19 | **Number Evacuated:** 26

- **Observations:** Residents were unfamiliar with evacuation points.
- **Response:** Promote the newly created Residence Hall Assembly Points map.

Living-Learning Community (LLC) #2

Time: 3:22 | **Number Evacuated:** 12

- **Observations:** Previously identified assembly point was incorrect.
- **Response:** Corrected the Residence Hall Assembly Points map to reflect the change.

Living-Learning Community (LLC) #3

Time: 4:07 | **Number Evacuated:** 7

- **Observations:** Exercise excelled all requirements.

Living-Learning Community (LLC) #4

Time: 4:03 | **Number Evacuated:** 10

- **Observations:** Exercise excelled all requirements.

Living-Learning Community (LLC) #5

Time: 4:48 | **Number Evacuated:** 8

- **Observations:** Exercise excelled all requirements.

Living-Learning Community (LLC) #6

Time: 4:39 | **Number Evacuated:** 13

- **Observations:** Previously identified assembly point was incorrect.
- **Response:** Corrected the Residence Hall Assembly Points map to reflect the change.

Miscellaneous Residence Halls:

Arkansas Hall

Time: 7:40 | **Number Evacuated:** 68

- **Observations:** Timing was notably longer compared to the previous semesters (5:25).
- **Response:** The most likely explanation identified in the hotwash was “alarm fatigue”, or the acceptance of an emergency alarm as identifying a non-emergency scenario. RA’s will continue to exemplify each future alarm’s potential importance to influence residents to take all alarms as potential emergencies.

Kays Hall

Time: 6:15 | **Number Evacuated:** 128

- **Observations:** Exercise excelled all requirements.

University Hall

Time: 5:30 | **Number Evacuated:** 59

- **Observations:** Exercise excelled all requirements.

Northpark Quads:

Northpark Quad #1

Time: 4:15 | **Number Evacuated:** 38

- **Observations:** Exercise excelled all requirements.

Northpark Quad #2

Time: 5:47 | **Number Evacuated:** 38

- **Observations:** At least one resident did not evacuate.
- **Response:** Increased awareness to residents on the importance of timely evacuations, followed up with student conduct referral.

Northpark Quad #3

Time: 4:42 | **Number Evacuated:** 22

- **Observations:** Corridor doors did not properly latch.
- **Response:** Will be referred to the work order center.

Northpark Quad #4

Time: 3:32 | **Number Evacuated:** 25

- **Observations:** Exercise excelled all requirements.

Northpark Quad #5

Time: 4:45 | **Number Evacuated:** 19

- **Observations:** Exercise excelled all requirements.

Pack Place:

Pack Place #1

Time: 5:50 | **Number Evacuated:** 61

- **Observations:** Timing is bordering on an unacceptable range. Students did not uniformly evacuate to the identified assembly point directly west of the building.
- **Response:** Increased outreach should be performed so that students know where their assembly point is and the importance of being prudent in reaching it.

Pack Place #2

Time: 6:52 | **Number Evacuated:** 61

- **Observations:** Timing is bordering on an unacceptable range. Concurrent to that, residents largely did not evacuate to the identified assembly point. Some residents refused to evacuate. Some residents either waited in their vehicles or left the scene.
- **Response:** Increased outreach should be performed so that students understand where their assembly point is and the importance of being prudent in reaching it. Students should be discouraged from leaving the assembly sight to either sit or exit in their vehicles. A new procedure will be drafted to address this.

Sorority Houses:

Zeta Tau Alpha

Time: 3:07 | Number Evacuated: 3

- Observations: Exercise excelled all requirements.

Alpha Gamma Delta

Time: 3:07 | Number Evacuated: 7

- Observations: Exercise excelled all requirements.

Alpha Omicron Pi

Time: 2:41 | Number Evacuated: 7

- Observations: Exercise excelled all requirements.

Chi Omega

Time: 2:45 | Number Evacuated: 5

- Observations: Exercise excelled all requirements.

Delta Zeta

Time: 2:37 | Number Evacuated: 3

- Observations: Exercise excelled all requirements.

The Circle:

The Circle Building #1

Time: 7:22 | **Number Evacuated:** 17

- **Observations:** The evacuation time for this building was unacceptable. Residents are repeatedly unwilling to evacuate in a timely manner.
- **Response:** Stricter regulations may need to be enforced, but a rigorous education campaign will be attempted first.

The Circle Building #2

Time: 6:17 | **Number Evacuated:** 11

- **Observations:** Timing is close to being unacceptable for this building.
- **Response:** Increased awareness among residents on the importance of timely evacuations.

The Circle Building #3

Time: 4:23 | **Number Evacuated:** 12

- **Observations:** Exercise excelled all requirements.

The Circle Building #4

Time: 7:24 | **Number Evacuated:** 12

Observations: The evacuation time for this building was unacceptable. Residents are repeatedly unwilling to evacuate in a timely manner.

Response: Stricter regulations may need to be enforced, but a rigorous education campaign will be attempted first.

Strengths

Strength 1: The fire alarm systems used in residence halls are generally high-quality systems that are well-maintained. The investment made by the University in upgrading and maintaining these systems leads them to be a reliable and fully operable mitigation and response tool, which leads to overall resilience. **(Capabilities: Community Resilience, Infrastructure Systems, Public Information and Warning)**

Strength 2: The staff did an exceptional job in helping coordinate the drills. Some hiccups were found in understanding full evacuation plans and procedures, but overall staff adapted quickly to changes and met the situation with competence. **(Capability: Community Resilience)**

Areas for Improvement

Area for Improvement 1 (Public Outreach): Many residence halls are seeing the same or similar issues repeating across numerous drill cycles. In the hotwash, participants identified the repeating issues to possibly stem from an education gap between residents and University officials. Residents may fail to understand the statutory requirements of these drills, or may simply not understand fully what to do. It seems there has been a lack of uniform communication from Safety & Emergency Management which could also lead to an ununiform response. **(Capabilities: Community Resilience, Planning, Public Information and Warning)**

Area for Improvement 2 (Hazard Communication and Response): One identified issue is that important emergency information may not be adequately available to residents and University staff within residence halls. One such identified component is each building's evacuation plan, along with the corresponding assembly points. This might aid in evacuation, although "alarm fatigue" has also been identified as a possible reason for poor or otherwise uncoordinated response. When the fire system is activated, it should be further impressed upon students that the system is communicating a potential hazard and must be taken seriously. **(Capabilities: Community Resilience, Planning, Public Information and Warning)**

Area for Improvement 3 (Policies and Procedures): It seems as though the policies and procedures regarding evacuation may be disjointed. This can be fixed through a more consistent and collective approach to laying out appropriate procedures and corresponding policies. Two areas that need to be reviewed are residents' habits to leave the drill in their vehicles, or otherwise disengage from the drill by sitting in them through the duration. Residents who fail to evacuate need to be held accountable, and this should be outlined in greater detail in University policies and procedures. **(Capability: Planning)**

Appendix A: Improvement Plan

This IP is developed specifically for Arkansas State University as a result of the Spring 2023 conducted on March 8th-10th of 2023:

Area for Improvement	Corrective Item	Implementation Plan	Primary Responsible Organization	Organization POC
Public Outreach	Follow-up Emails	Whenever issues are identified that seem consistent either across all of the campus or a specific residence hall, emails should be sent to the residence hall(s) residents with corrective action instructions.	Safety & Emergency Management (Primary) University Housing (Secondary)	Emergency Management: Ronnie Gilley or Wyatt Reed University Housing: Natalie Eskew or Jenny Keller
	Fire, Health, and Safety Blurbs	Fire safety information can be implemented into the periodic FHS emails sent by housing.	University Housing (Primary) Safety & Emergency Management (Secondary)	University Housing: Natalie Eskew or Jenny Keller Emergency Management: Ronnie Gilley or Wyatt Reed
	Move-in Information	Fire safety and other emergency information can be given by SEM during move-in.	Safety & Emergency Management (Primary)	Ronnie Gilley or Wyatt Reed
	Balcony Usage	Residents should be educated during move-in meetings on why utilizing the balcony during a fire event is a poor choice.	University Housing (Primary)	University Housing: Natalie Eskew or Jenny Keller
	Alarm Fatigue	Residents in some halls seem to become complacent when fire alarms sound. Residents should be reminded of the importance of treating every alarm as real.	Safety & Emergency Management (Primary) University Housing (Secondary)	Emergency Management: Ronnie Gilley or Wyatt Reed University Housing: Natalie Eskew or Jenny Keller

Area for Improvement	Corrective Item	Implementation Plan	Primary Responsible Organization	Organization POC
<p style="text-align: center;">Hazard Communication and Response</p>	<p style="text-align: center;">Evacuation Routes</p>	<p>Residents need to understand how to respond to a communicated hazard. In a fire, this includes appropriate evacuation routes and assembly points. These should be posted in conspicuous, highly traveled areas and on digital platforms.</p>	<p style="text-align: center;">Safety & Emergency Management (Primary)</p>	<p style="text-align: center;">Ronnie Gilley or Wyatt Reed</p>
	<p style="text-align: center;">Alarm Fatigue</p>	<p>Strengthen understanding that alarm is communicating a hazard and response actions must be taken on each separate occasion. Any issues should be reported to Emergency Management.</p>	<p style="text-align: center;">Safety & Emergency Management (Primary)</p> <p style="text-align: center;">University Housing (Secondary)</p>	<p style="text-align: center;">Emergency Management: Ronnie Gilley or Wyatt Reed</p> <p style="text-align: center;">University Housing: Natalie Eskew or Jenny Keller</p>
<p style="text-align: center;">Policy and Procedure</p>	<p style="text-align: center;">Vehicle Usage</p>	<p>The usage of vehicles to leave the scene should result in either a student conduct referral or campus citation. Identify plate numbers of these vehicles in future drills. Sitting in vehicles should be met with an initial correction request, followed by a referral to student conduct if non-compliant. This should be implemented in University Housing policy once approved.</p>	<p style="text-align: center;">Safety & Emergency Management (Primary)</p> <p style="text-align: center;">University Housing (Secondary)</p>	<p style="text-align: center;">Emergency Management: Ronnie Gilley or Wyatt Reed</p> <p style="text-align: center;">University Housing: Natalie Eskew or Jenny Keller</p>
	<p style="text-align: center;">Failure to Evacuate</p>	<p>University procedure should be to explain to residents upon move-in both evacuation plans and requirements. In the future, all students found to not evacuate <i>in a timely manner</i> will be reported to student conduct. What constitutes a timely manner will be determined by EM for each residence hall.</p>	<p style="text-align: center;">Safety & Emergency Management (Primary)</p> <p style="text-align: center;">University Housing (Secondary)</p>	<p style="text-align: center;">Emergency Management: Ronnie Gilley or Wyatt Reed</p> <p style="text-align: center;">University Housing: Natalie Eskew or Jenny Keller</p>