



# Jonesboro Fire Department Response Functional Exercise

# After-Action Report/Improvement Plan

December 6, 2024

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	Jonesboro Fire Department Response Functional Exercise	
Exercise Date	November 12-14, 2024	
Planning Date	October 31, 2024	
Hotwash Date	November 12-14, 2024 (After Each Day)	
Scope	This exercise is functional, and evaluated fire response capabilities to a fire situation in various locations at Arkansas State University. The scope was limited to response planning, responding, and on-scene staging. Participants utilized radio communications for reporting based on an Incident Radio Communications Plan (ICS 205).	
Focus Areas <sup>1</sup>	Response	
Capabilities <sup>2</sup>	<ul> <li>Planning</li> <li>Operational Coordination</li> <li>On-Scene Security, Protection, and Law Enforcement</li> </ul>	
Objectives	<ul> <li>Identify locations on campus on initial callouts;</li> <li>Identify the best route to respond/stage at a given campus location;</li> <li>Coordinate with other responding units to determine staging locations/routes;</li> <li>Identify capabilities, target capabilities, and gaps.</li> </ul>	
Hazard	Various; Fire Department Response Needed	
Scenario	A call for service originating from Arkansas State University's Campus, either from notification of a fire alarm or a reported working structure fire. Injects are not cumulative, but rather are different incidents at different times to reflect various possibilities of the overall scenario	
Sponsor	Arkansas State University	
Participating Organizations	Office of Emergency Management (Wyatt Reed, Exercise Director & Ronnie Gilley); Jonesboro Fire Department (Ricky Howton, Lead Controller & E1/E3/E6/T1/B1 All Shifts),	
Point of Contact	Wyatt Reed, Emergency Operations and Occupational Safety SpecialistOffice of Emergency ManagementArkansas State UniversityWReed@AState.eduor (870) 972-3352	

<sup>&</sup>lt;sup>1</sup> Selected from National Preparedness Goal's Five Mission Areas (DHS, 2015)

<sup>&</sup>lt;sup>2</sup> Selected from National Preparedness Goal List of Core Capabilities (DHS, 2015)

### Analysis of Capabilities

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 <sup>3</sup>	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
Identify locations on	Planning		X		
campus on initial callouts.	Operational Coordination	X			
Identify the best route	Planning		X		
to respond/stage at a given campus location.	Operational Coordination	х			
Coordinate with other	Planning	X			
responding units to determine staging locations/routes.	Operational Coordination	x			
	Planning	Х			
Identify capabilities, target capabilities, and gaps.	Operational Coordination	x			
	On-Scene Security, Protection and Law Enforcement				х

Table 1. Summary of Core Capability Performance

<sup>&</sup>lt;sup>3</sup> Selected from National Preparedness Goal List of Core Capabilities (DHS, 2015) Office of

### **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.

### **Capability Definitions:**

**Planning:** Conduct a systematic process engaging the whole community as appropriate in the development of executable strategic, operational, and/or tactical-level approaches to meet defined objectives.

**Operational Coordination:** Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.

**On-Scene Security, Protection, and Law Enforcement:** Ensure a safe and secure environment through law enforcement and related security and protection operations for people and communities located within affected areas and also for response personnel engaged in lifesaving and life-sustaining operations.

# **Exercise Setup**

### **Initial Training**

The initial training portion of this event included a guided tour of campus along four legs (see map in Appendix A). This training allowed players to familiarize themselves with the response routes that may be used both in the exercise and in everyday responses. Additionally, the Exercise Director evaluated the ability of emergency vehicles and personnel to navigate these routes to identify areas of vulnerability or needed correction.

Units remained in service for calls while the training took place, and little impact was noted. Adequate command staff were present to assist A-State in performing the training and exercise in a effective manner. After the initial training portion of the event, all units breaked for a lunch sponsored by the A-State Office of Emergency Management.

#### **Issues Identified:**

- Truck companies will be unable to utilize sidewalk access in the Northpark Quads due to inadequate space to swing into the turn.
- Engine companies struggle to utilize sidewalk access in the Northpark Quads. Handicap spots prevent an adequate amount of space to swing.
- Sorority houses present a challenge to both engine and truck companies due to the concrete median and bollards that are present.
- A fire zone on the east side of Aggie Way needs to be established the loading zone currently there could block a potential response.
- Parking spaces near the curve on the east side of HPESS would prevent the ability of companies to negotiate the curve if a vehicle(s) are parked there.
- Trees near the sculpture at the northwest corner of Lab Science West need to be trimmed to ensure access continuity.
- Additional signage that is easily readable should be added across campus.
- Maps need to be updated and divided by vehicle classification, not usage (e.g. truck company, engine company, ambulance, etc. versus a broadly encompassing map).
- Additional information integration into FirstDue is needed, such as farm gate code.

#### Successes Identified:

- Companies are able to navigate the entirety of Quapaw Way, including the sculpture at Lab Science West.
- Engine companies are able to drive the entirety of the sidewalk in front of the Dean B.
   Ellis Library.
- Positive feedback was given by JFD members as to the helpfulness and effectiveness of the training.

### Inject 1

Companies were initially dispatched to Lab Science West for a fire alarm.

#### **Noted Results:**

- Quapaw Street, which is no longer accessible from University Loop, shows as accessible on JFD's Geospatial Information System (GIS) routing tool.
- Although Lab Science is one building and address, it is referred to by the wings of the building (east and west). This caused understandable confusion among some responders.
- Engine companies were able to navigate through the curve of Quapaw Way and exit via the south end of the library, which was not previously thought to be possible.

### Inject 2

A single engine company was dispatched to a possible field fire. Once on scene, confirmed a working fire and initiated a full alarm assignment.

#### **Noted Results:**

- Companies were able to navigate to the correct area with ease.
- Only one shift identified the nearest hydrant and staged.

### Inject 3

Inject 3 was not performed in order to preserve time.

### Inject 4

Full alarm dispatch to the Dean B. Ellis Library for a fire alarm.

#### **Noted Results:**

- Companies overall navigated to the area well and communicated.
- One engine company took an unapproved path to obtain access to the area. The confusion seemed to stem from a communication breakdown in training. The driver believed that all double sidewalks on campus were approved emergency routes.
- One engine company attempted to exit through the entrance gate in front of the Neil Griffin College of Business in wrong-way traffic.
- A food delivery robot delayed the response of one engine company due to its inability to recognize the emergency response vehicle.

# **Exercise Director Notes**

### **Overall Evaluation**

The exercise overall appeared to be a success. The exercise was built on a mastery learning philosophy where players had to demonstrate skill and knowledge to achieve exercise objectives. Safety was ensured at all times through proper controls and public information campaigns. Because Arkansas State is essentially a community within a community, more frequent events and collaboration needs to occur to build on the success of the exercise. These opportunities include public engagement, professional development, and special operations such as hosting specialized training (high angle, confined space, etc.).

Response times seemed to be realistic and achievable, especially given the fact that companies were not running a full response. Additional data evaluation will be available in this report.

# **Player Feedback**

### **Overall Evaluation**

Overall, participants gave positive feedback on the ability to participate in this training and exercise. Many players highlighted the importance of performing both elements of the event during normal operational hours while campus was actively in session to provide a realistic training ground. More failueres and points-of-emphasis were able to be identified than would be possible in an empty-campus setting.

Participants did request for ongoing engagement from Arkansas State and the Office of Emergency Management in continuing to collaborate and train with each other.

# **Exercise Time Results**

### Day 1 (Tuesday) Results

Inject 1		
Company	Response Time (in minutes)	
Engine 1	4:00	
Engine 3	3:00	
Engine 6	7:00	
Truck 1	4:00	
Average Response Time	4:30	

Inject 2		
Company	Response Time (in minutes)	
Engine 1	5:00	
Engine 3	6:00	
Engine 6	5:00	
Truck 1	5:00	
Average Response Time	5:15	

Inject 4		
Company	Response Time (in minutes)	
Engine 1	3:00	
Engine 3	3:00	
Engine 6	3:00	
Truck 1	3:00	
Average Response Time	3:00	

<b>Exercise Day Overall Times</b>		
Source	Response Time (in minutes)	
From CSA1	4:00	
From CSA2	5:00	
From CSA3	3:40	
Engine 1	4:00	
Engine 3	4:00	
Engine 6	5:00	
Truck 1	4:00	

# Day 2 (Wednesday) Results

Inject 1		
Company	Response Time (in minutes)	
Engine 1	4:00	
Engine 3	3:00	
Engine 6	5:00	
Truck 1	4:00	
Average Response Time	4:00	

Inject 2		
Company	Response Time (in minutes)	
Engine 1	3:00	
Engine 3	N/A	
Engine 6	4:00	
Truck 1	3:00	
Average Response Time	3:20	

Inject 4		
Company	Response Time (in minutes)	
Engine 1	4:00	
Engine 3	N/A	
Engine 6	4:00	
Truck 1	4:00	
Average Response Time	4:00	

<b>Exercise Day Overall Times</b>			
Source	Response Time (in minutes)		
From CSA1	4:00		
From CSA2	3:45		
From CSA3	3:30		
Engine 1	3:40		
Engine 3	3:00		
Engine 6	4:20		
Truck 1	3:40		

# Day 3 (Thursday) Results

Inject 1		
Company	Response Time (in minutes)	
Engine 1	5:00	
Engine 3	2:00	
Engine 6	5:00	
Truck 1	4:00	
Average Response Time	4:00	

Inject 2		
Company	Response Time (in minutes)	
Engine 1	3:00	
Engine 3	6:00	
Engine 6	3:00	
Truck 1	3:00	
Average Response Time	3:45	

Inject 4						
Company	Response Time (in minutes					
Engine 1	5:00					
Engine 3	3:00					
Engine 6	8:00					
Truck 1	5:00					
Average Response Time	5:15					

<b>Exercise Day Overall Times</b>							
Source	Response Time (in minutes)						
From CSA1	5:00						
From CSA2	4:45						
From CSA3	2:40						
Engine 1	4:20						
Engine 3	3:40						
Engine 6	5:20						
Truck 1	4:00						

<b>Exercise Mean Times</b>						
Source	Response Time (in minutes)					
From CSA1	4:20					
From CSA2	4:30					
From CSA3	4:16					
To Inject 1	4:08					
To Inject 2	4:13					
To Inject 4	4:05					
Overall Response	4:09					
Engine 1	4:00					
Engine 3	3:43					
Engine 6	4:54					
Truck 1	3:54					

### **Aggregated Time Results**

### **Time Results Summary**

A review of the time results leads to the conclusion that mean response time of less than 5 minutes (of which all mean times exemplified) suggest exercise suggest and that response timing is able to achieve and exceed the target capability of response within five minutes. While the exercise pre-staged on the outskirts of campus areas, apparatus were not permitted to run a full emergency response with excess speeds, sirens, etc. due to safety concerns. Given this, the times are fairly accurate to what true responses would be from farther distances but quicker speeds.

### **Areas of Strength**

### Strength 1 (Planning)

One of the strengths identified by the exercise director and controller was the overall success and likelihood of effective response due to planning. The Office of Emergency Management and Jonesboro Fire Department maintain a close working relationship for effective interoperability. (Capability: Planning, Operational Coordination)

#### Strength 2 (Stakeholder Engagement)

Another identified strength is the engagement of key stakeholders in the process. The majority of campus stakeholders came together to welcome this training and help support it. This is a crucial component of an effect exercise program. **(Capability: Operational Coordination)** 

#### Strength 3 (Resources)

Players appreciated the resources that the Office of Emergency Management was able to provide, such as subject matter expertise and planning documentation. Players now have a contact for additional aid and resources if the need arises in a planning or response cycle. **(Capability: Planning)** 

### Areas for Improvement

#### Improvement Area 1 (Database Integration)

As management information systems (MISs) are becoming increasingly complex and more common, additional care needs to be put in to ensuring these databases and their information are appropriately shared and integrated. This may require a capabilities meeting to determine what capabilities exist between stakeholders MISs and how that data may be useful to the other party. **(Capability: Planning)** 

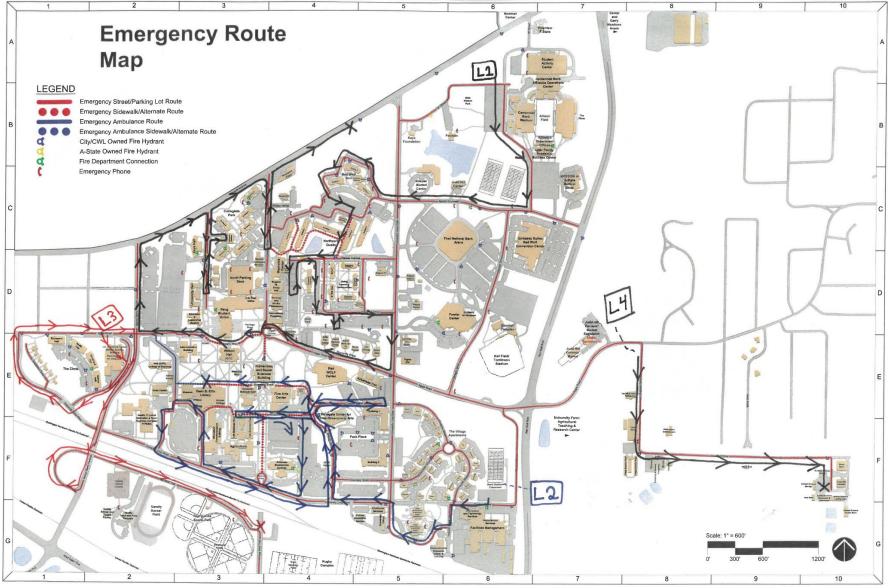
#### Improvement Area 2 (Training and Decision Support)

Additional revisions need to be made to the response and training plan as it relates to emergency response to the A-State campus. Maps and other resources need to be revised and simplified where possible to maximize the effectiveness of their information. Collaboration needs to be more frequent between A-State and response partners to ensure a more seamless interoperability and to provide decision support in pre-incident planning periods as well as in response. **(Capability: Planning, Operational Coordination)** 

#### **Improvement Area 3 (Infrastructure)**

While adequate infrastructure exists to enact an effective response, the ability to identify and access this infrastructure is difficult at certain parts of campus. For example, players reported being unable to distinguish emergency sidewalk routes from non-emergency routes as well as having difficulty identifying the routes exist at certain portions of campus. Additionally, buildings and address markers are difficult to identify in many places. Certain portions of campus, such as the North Caraway division point in front of Eugene Smith, are difficult and/or impossible to access and present a vulnerability. **(Capability: Planning)** 

# Appendix A: Training Route



Arkansas State University Revised: December 2024 by Wyatt Reed

# Appendix B.1: Exercise Day 1 Communications Plan (ICS 205)

1. Incident Name: Jonesboro Fire Department Response Functional Exercise (Day 1)			2. Date/Time Prepared: Date: 11/12/2024 Time: 0800				Da	3. Operational Period:           Date From: 11/12/2024         Date To: 11/12/2024           Time From: 0900         Time To: 1600		
4. Ba	4. Basic Radio Channel Use:									
Zone Grp.	Ch #	Function	Channel Name/Trunked Radio System Talkgroup	Assignment	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NA	Mode C (A, D, or M)	Remarks
TG	1	Exercise Response	JFD Training Ground 1	E1/E3/E6/T SIMCELL	1				D	AWIN - JFD Operational Channel
OPS	2	Internal Communications	OEM Operations	A-State OEM					A	Private Repeater - A-State OEM Operational Channel
5. Sp	ecial	Instructions:								
6. Pre	pare	d by (Communicat	ions Unit Leader) Na	me: <u>Wyatt R</u>	eed			Signa	ture:	
ICS 2	ICS 205 IAP Page Date/Time: 11/12/2024 0800									

#### INCIDENT RADIO COMMUNICATIONS PLAN (ICS 205)

# Appendix B.2: Exercise Day 2 Communications Plan (ICS 205)

1. Incident Name: Jonesboro Fire Department Response Functional Exercise (Day 2)			2. Date/Time Prepared: Date: 11/13/2024 Time: 0800				Da	3. Operational Period:           Date From: 11/13/2024         Date To: 11/13/2024           Time From: 0900         Time To: 1600		
4. Ba	4. Basic Radio Channel Use:									
Zone Grp.	Ch #	Function	Channel Name/Trunked Radio System Talkgroup	Assignment	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode (A, D, or M)	Remarks
TG	1	Exercise Response	JFD Training Ground 1	E1/E3/E6/T SIMCELL	1				D	AWIN - JFD Operational Channel
OPS	2	Internal Communications	OEM Operations	A-State OEM					A	Private Repeater - A-State OEM Operational Channel
5. Sp	ecial	Instructions:								
6. Pre	pare	d by (Communicat	ions Unit Leader) Na	me: <u>Wyatt R</u>	eed			Signat	ure:	
ICS 2	ICS 205 IAP Page Date/Time: 11/13/2024 0800									

#### **INCIDENT RADIO COMMUNICATIONS PLAN (ICS 205)**

# Appendix B.3: Exercise Day 3 Communications Plan (ICS 205)

1. Incident Name: Jonesboro Fire Department Response Functional Exercise (Day 3)			2. Date/Time Prepared: Date: 11/14/2024 Time: 0800				D	3. Operational Period:           Date From: 11/14/2024         Date To: 11/14/2024           Time From: 0900         Time To: 1600		
4. Ba	4. Basic Radio Channel Use:									
Zone Grp.	Ch #	Function	Channel Name/Trunked Radio System Talkgroup	Assignment	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/N/	Mode (A, D, or M)	Remarks
TG	1	Exercise Response	JFD Training Ground 1	E1/E3/E6/T1 SIMCELL					D	AWIN - JFD Operational Channel
OPS	2	Internal Communications	OEM Operations	A-State OEM					A	Private Repeater - A-State OEM Operational Channel
5. Sp	ecial	Instructions:								
6. Pre	pare	d by (Communicat	ions Unit Leader) Na	me: Wyatt Re	ed			Sign	ature:	
ICS 2	ICS 205 IAP Page Date/Time: 11/14/2024 0800									

#### **INCIDENT RADIO COMMUNICATIONS PLAN (ICS 205)**

# Appendix C: Improvement Plan

This IP is developed specifically for Arkansas State University as a result of the JFD Response FE conducted in November of 2024:

Area for Improvement	Corrective Item	Implementation Plan	Primary Responsible Organization	Organization POC
Database Integration	Identification of Capabilities	Work with stakeholders to identify what MIS systems and other databases are being used to determine if internal data could support the database or if the stakeholder database could support internal plans/operations.	Emergency Management (Primary)	<b>Emergency Management:</b> Wyatt Reed or Ronnie Gilley
Butubuco integration	Systematic Review	Create guidelines internally to review databases and MIS systems, both internally and with external stakeholders, to ensure information is accurate and systems functional to inform planning.	Emergency Management (Primary)	<b>Emergency Management</b> Wyatt Reed or Ronnie Gilley
	Training Schedule	Work to create a more uniform training schedule with JFD over a variety of	Emergency Management (Primary)	Emergency Management Wyatt Reed or Ronnie Gilley
		subjects to maintain knowledge and working relationship.	Jonesboro Fire Department (Secondary)	Jonesboro Fire Department Division Chief Rickey Howton
Training and Decision Support	Decision Support Resource Maintenance	Evaluate the resources currently in place for decision support to ensure they have been shared and are accurate. Create additional maintenance plans for periodic reviews to ensure they still provide accurate decision support.	Emergency Management (Primary)	<b>Emergency Management (Primary)</b> Wyatt Reed or Ronnie Gilley

Area for Improvement	Corrective Item	Implementation Plan	Primary Responsible Organization	Organization POC	
	Identification Markers	The Office of Emergency Management will work with Facilities Management and other university departments to evaluate options for updating markers of emergency routes and sidewalks for clearer communication.	Emergency Management (Primary)	<b>Emergency Management:</b> Wyatt Reed or Ronnie Gilley	
Infrastructure	Existing Infrastructure Overhaul	Work with Facilities Management and Parking Services to determine if overhauls of existing access infrastructure and designs need to be performed, such as in front of Eugene Smith or in parking areas across campus.	Emergency Management (Primary)	<b>Emergency Management:</b> Wyatt Reed or Ronnie Gilley	