Grasping Exercise Design and AAR/IP Writing

Arkansas Department of Health
Preparedness and Emergency Response
Training and Exercise Program

Revision: 2018_a

Introductions

Overview

> "Good people do not need laws to tell them to act responsibly, while bad people will find a way around the laws"
>
> ~ Plato

Housekeeping:

- Bathroom Locations.
- Emergency Exits.
- Mobile Phones:
  - Stun, Silent, or Off
  - Take calls

- Work together!
- Break(s)
- Respect one another's ideas.
- Safe environment.
- The Parking Lot.

Purpose

To provide participants an opportunity to evaluate **their** steps to design an effective exercise process.

This training will introduce you to the following concepts:

- Designing and developing an exercise
- Conducting an exercise
- Evaluating an exercise
- Developing and implementing an improvement plan

Objectives

- Identify essential elements of a training program.

- Describe the Homeland Security Exercise and Evaluation Program (HSEEP) essential components for developing an exercise program.

- Understand the different types of exercise.

- Understand the exercise evaluation process and tools used to identify gaps to improve operational readiness.

Why exercise?

- Evaluation of plan.

- Individual training.

- System improvement.

Why exercise

- More specifically:

  - Test and evaluate plans, policies, and procedures.

  - Reveal planning weaknesses.

  - Reveal gaps in resources.

  - Improve organizational coordination and communications.

  - Clarify roles and responsibilities.

Why exercise

- This also includes:

    - Train personnel in roles and responsibilities.

    - Improve individual performance.

    - Gain program recognition and support of officials.

    - Satisfy regulatory requirements.

Building types of exercises

The bracket describes what type of exercise?

Full-Scale		
Functional Exercises		
Drills		
Games		
Tabletops		
Workshops		
Seminars		

Capabilities

Discussion Based

Planning/Training

Discussion-Based   Operations-Based

Exercise Planning Teams

- Represent full range of whole community stakeholders and participating stakeholder organizations.

- Help make the scenario realistic and plausible.

- Trusted agents.

Roles and Function of Planning Team

- Determine exercise objectives, evaluation plan and control play

- Design, develop, conduct and evaluate results of exercise

- Develop scenario, EEG's and other exercise documents

Planning Meetings

- Concept and Objective Meeting
  - Identify the scope and objectives of the exercise

- Initial Planning Meeting
  - Exercise design requirements identified
  - Develop exercise documentation
  - Assign roles and responsibilities
  - Scenario and timeline development

Planning Meetings

- Midterm Planning Meeting
  - Review draft documentation.

- Final Planning Meeting
 - Ensure all elements of exercise are ready for conduct.

Designing exercises

- Review plans and policies:

Conducting a needs assessment will help you define the problems, establish the reasons to do an exercise, and identify the functions to be exercised.

Designing exercises

- Defining the scope:

  – Type of emergency

  – Location

  – Functions
  (Duration & Objectives)

  – Participants

  – Exercise type
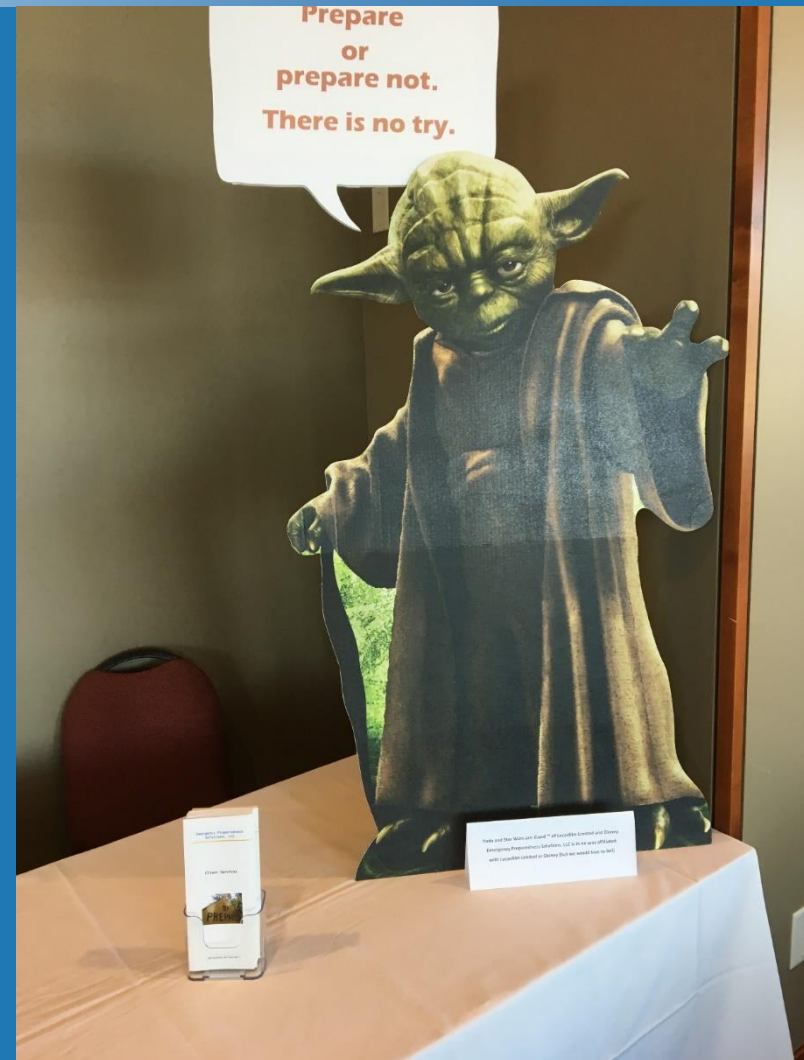
Designing exercises

- Writing a statement of purpose equates:

  To incorporate the scope and decisions (type of emergency, location, functions, organizations, and exercise type) into a single sentence.

Designing exercises

- Define objectives:

A description of the performance you expect from participants to demonstrate competence.

- SMART
  - Simple
  - Measurable
  - Achievable
  - Realistic
  - Task Oriented

An objective should state *who* should do *what* under *what conditions,* according to *what standards.*

Designing exercises

Designing exercises

Designing exercises

Skill	Description	Associated Verbs
Traditional		
Knowledge	Primarily observation and recollection of information, students require memorization of basic information	find, retrieve, describe, list, recognize, recall, name, memorize, repeat, review
Comprehension	Students understand information or grasp meaning, interpret facts	paraphrase, explain, summarize, restate, sketch, identify, express, discuss, recognize
Application	Students move beyond basic comprehension and begin to apply what they've learned; students expected to use concepts they've learned in new situations	execute, implement, apply, modify, use, illustrate, examine, demonstrate, solve
Analysis	Students see patterns, organize parts, recognize hidden meanings, identify components	analyze, separate, order, explain, connect, distinguish, deduce, divide, compare, select, explain, infer
Synthesis	Use old ideas to create new ones, generalize from given facts, relate knowledge from several areas, predict, draw conclusions	plan, devise, hypothesize, schematize, create, construct
Evaluation	Compare and discriminate between ideas, assess value of theories, presentations, make choices based on reasoned argument, verify value of evidence, recognize subjectivity	assess, decide, recommend, convince, select, judge, explain, discriminate, support, conclude
Revised		
Remember	Recalling information	find, retrieve, describe, list, recognize, recall, name, memorize, repeat, review
Understand	Explaining ideas and concepts	paraphrase, explain, summarize, restate, sketch, identify, express, discuss, recognize
Apply	Using information in another familiar context	execute, implement, apply, modify, use, illustrate, examine, demonstrate, solve
Analyze	Breaking information into parts to explore meaning and relationships	analyze, distinguish, deduce, compare, contrast, infer, deconstruct, differentiate, calculate
Evaluate	Justifying a decision or course of actions	critique, judge, assess, discriminate, convince, support, rate, value, rate, score, select
Create	Generating new ideas, products or ways of viewing information/concepts	design, construct, devise, invent, produce, formulate, assemble, propose, estimate, plan

Bloom's Taxonomy on verbs!

Designing exercises

- Compose a narrative:

An **exercise** is *a scenario that simulates an emergency*. Part of this scenario is the narrative, which is a brief description of the events that have occurred up to the minute the exercise begins.

- The narrative has two important functions:

  - First, it sets the mood for the exercise.
  - Second, the narrative sets the stage for later action.

Designing exercises

- Prepare messages (injects)

  – Determination of messages sent,

  – Credibility (??),

  – Relationship to expected actions,

  – Message variables:

    - (Who), (send), (what), (to whom),

  – Format, and

  – Spontaneous messages.

- MSEL (Master Scenario Events List)

Designing exercises

- Check-List expected actions.

- Write messages (Injects).

- Determine what should be evaluated.

Scenario Inject (MSEL)							
Date	Time	INJECT MODE	IMPLEMENTER CONTENT	SEND TO	SEND FROM	Expected Outcome	Additional Comments

Evaluation

- Exercise objectives (where they met)?

- Needed improvements? List them:
  - EOP, procedures, or guidelines
  - Emergency management system

- Any deficiencies in training or staff?

- Any need for equipment?

- Did the plan hold or is further exercising necessary?

Evaluation

Skills	Attributes
• Appropriate technical expertise in evaluation • Communication skills, both verbal and written • Organizational ability • Ability to see the relationship between events and objectives • Ability to adjust to rapidly changing situations	• "People skills," sensitivity • Objectivity • Self-motivation • Willingness to help • Honesty and integrity (reports facts truthfully, keeps information confidential) • Familiarity with the plan

Exercise Documents

- Controller/Evaluator Handbook (C&E Handbook)

- Exercise Plan (ExPlan)

- Situational Manual (SitMan)

- Extent of plan agreement (XPA)

- Exercise Evaluation Guides (EEG)

Controller/Evaluator Handbook

- Exercise Overview
- General information
  - Objectives and Core Capabilities
  - Roles and Responsibilities
  - Assumptions and Artificialities
- Logistics
  - Safety
  - Site access
- Post exercise evaluation activities

C/E Handbook Continued

- Participant, Controller, Evaluator Information and Guidance

- Appendix

  - A: Exercise Schedule
  - B: Exercise Participants
  - C: Communications Plan
  - D: Exercise Site Maps

  - E: Exercise Scenario
  - F: Controller and Evaluator Assignments
  - G: Acronyms

Exercise Plan

- Exercise Overview

- General information
  - Objectives and Core Capabilities
  - Roles and Responsibilities
  - Assumptions and Artificialities

- Logistics
  - Safety
  - Site access

- Post exercise evaluation activities

EXPlan Continued

- Participant Guidance

- Appendix

  - A: Exercise Schedule
  - B: Exercise Participants
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  - E: Exercise Scenario
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Situation Manual

- Exercise Overview

- General Information
  - Objectives and Core Capabilities
  - Roles and Responsibilities
  - Assumptions and Artificialities

- Modules
  - Scenario
  - Key Issues
  - Questions

SITMAN Continued

- Appendix

  - A: Exercise Schedule

  - B: Exercise Participants

  - C: Relevant Plans

  - D: Acronyms

Extent of Plan Agreement

EXTENT OF PLAY AGREEMENT
For the [Exercise Name]
[Date]

1. Purpose
Insert the information in brackets.

This Extent of Play Agreement (XPA) identifies the conditions that will be used to develop, conduct, control, and evaluate the [Exercise Name], as agreed to by [Participating Organization] and the Exercise Director for [Sponsor Organization].

2. Executive Summary
Provide a brief description and overview of the exercise.

3. Identified Exercise Objectives and Core Capabilities
Provide a list of exercise objectives and the core capabilities aligned to each objective.

Exercise Objective	Aligned Core Capability
[Exercise Objective 1]	[Core Capability]
[Exercise Objective 2]	[Core Capability]
[Exercise Objective 3]	[Core Capability]
[Exercise Objective 4]	[Core Capability]

4. Standards & References
Provide the information in brackets.

[Sponsoring Organization] will use the following references, plans, and procedures during exercise play:
- [Insert plan, policy, or procedure, include validation date of plan]
- [Insert plan, policy, or procedure, include validation date of plan]
- [Insert plan, policy, or procedure, include validation date of plan]

5. Exercise Parameters
Provide an overview of the exercise scenario and intended outcome of the exercise. Include details such as the date, time, and location of the exercise and the intended exercise type (e.g. tabletop, functional exercise, or full-scale exercise).

6. Exercise Participants
Identify participants and their intended role in the exercise. Include players, with expected level of play, observers, and intended media participation.

Participant *(Name, Position, & Organization Name)*	Exercise Role *(Player, Observer, Media)*	Expected Level of Play *(Dates/Times of Play)*

7. Signatures & Conditions
Insert the names and organizations of the Exercise Director and Participating Organization representative.
The following agree to support this exercise as described herein:

_____   _____
[Name of Exercise Director]   [Name of Representative]
Exercise Director   [Title]
[Sponsor Organization]   [Participating Organization]

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Exercise Evaluation Guides

EXERCISE EVALUATION GUIDE

Exercise Name: [Insert exercise name]	Organization/Jurisdiction:	Venue:
Exercise Date: [Insert exercise date]	[Insert organization or jurisdiction]	[Insert venue name]

Response
Exercise Objective: [Insert exercise objective]

Core Capability: 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.

Organizational Capability Target 1: [Insert customized target based on plans and assessments]
Critical Task: [Insert task from frameworks, plans, or SOPs]
Critical Task: [Insert task from frameworks, plans, or SOPs]
Critical Task: [Insert task from frameworks, plans, or SOPs]
Critical Task: [Insert task from frameworks, plans, or SOPs]
Source(s): [Insert name of plan, policy, procedure, or reference]

Organizational Capability Target 2: [Insert customized target based on plans and assessments]
Critical Task: [Insert task from frameworks, plans, or SOPs]
Critical Task: [Insert task from frameworks, plans, or SOPs]
Critical Task: [Insert task from frameworks, plans, or SOPs]
Critical Task: [Insert task from frameworks, plans, or SOPs]
Source(s): [Insert name of plan, policy, procedure, or reference]

Organizational Capability Target 3: [Insert customized target based on plans and assessments]
Critical Task: [Insert task from frameworks, plans, or SOPs]
Critical Task: [Insert task from frameworks, plans, or SOPs]
Critical Task: [Insert task from frameworks, plans, or SOPs]
Critical Task: [Insert task from frameworks, plans, or SOPs]
Source(s): [Insert name of plan, policy, procedure, or reference]

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Organizational Capability Target	Associated Critical Tasks	Observation Notes and Explanation of Rating	Target Rating
[Insert Organizational Capability Target 1 from page 1]	• [Insert Organizational Capability Target 1 Critical Tasks from page 1]		
[Insert Organizational Capability Target 2 from page 1]	• [Insert Organizational Capability Target 2 Critical Tasks from page 1]		
[Insert Organizational Capability Target 3 from page 1]	• [Insert Organizational Capability Target 3 Critical Tasks from page 1]		
		Final Core Capability Rating	

Evaluator Name _____

Evaluator E-mail _____

Phone _____

Ratings Key
P – Performed without Challenges
S – Performed with Some Challenges
M – Performed with Major Challenges
U – Unable to be Performed

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EEG

Ratings Definitions

Performed without Challenges (P)	The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. 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 core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. 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 core 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 core capability were not performed in a manner that achieved the objective(s).

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Evaluations

- Exercise objectives (where they met)?

- Needed improvements? List them:
  - EOP, procedures, or guidelines

  - Emergency management system

- Any deficiencies in training or staff?

- Any need for equipment?

- Did the plan hold or is further exercising necessary?

After the exercise

- Meetings:
  - Hotwash
  - Debriefing

- Evaluation . . .
  - Written assessment offering:
    - 3 positive instances, and
    - 3 critical cases from the exercise

- AAR-IP

HOTWASH

WHAT WORKED, WHAT NEEDS WORK

Self-Assessment Part I

Organisations

Context analysis and assessment of strengths and weaknesses

Risk communication and risk education

Self-Assessment Part II

General public

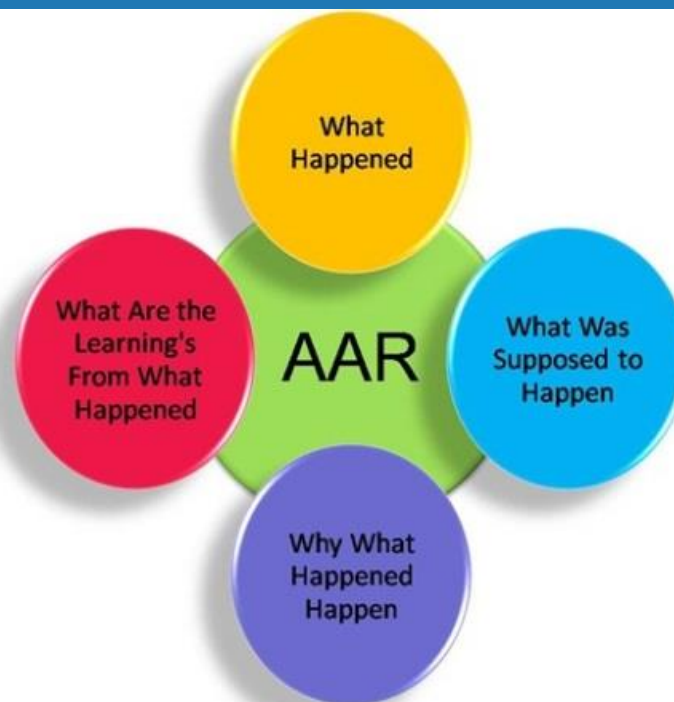Assessment of strengths and weaknesses in preparedness and of communication needs

Why AARs?

After Action Review

Every time wheels roll...
Ask these five questions:

1. What was our mission?
2. What went well?
3. What could have gone better?
4. What might we have done differently?
5. Who needs to know?

What Happened

What Are the Learning's From What Happened

AAR

What Was Supposed to Happen

Why What Happened Happen

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[Exercise Name]

After-Action Report/Improvement Plan
[Date]

The After-Action Report/Improvement Plan (AAR/IP) aligns exercise objectives with preparedness doctrine to include the National Preparedness Goal and related frameworks and guidance. Exercise information required for preparedness reporting and trend analysis is included; users are encouraged to add additional sections as needed to support their own organizational needs.

EXERCISE OVERVIEW

Exercise Name	[Insert the formal name of exercise, which should match the name in the document header]
Exercise Dates	[Indicate the start and end dates of the exercise]
Scope	This exercise is a [exercise type], planned for [exercise duration] at [exercise location]. Exercise play is limited to [exercise parameters].
Mission Area(s)	[Prevention, Protection, Mitigation, Response, and/or Recovery]
Core Capabilities	[List the core capabilities being exercised]
Objectives	[List exercise objectives]
Threat or Hazard	[List the threat or hazard (e.g. natural/hurricane, technological/radiological release)]
Scenario	[Insert a brief overview of the exercise scenario, including scenario impacts (2-3 sentences)]
Sponsor	[Insert the name of the sponsor organization, as well as any grant programs being utilized, if applicable]
Participating Organizations	[Insert a brief summary of the total number of participants and participation level (i.e., Federal, State, local, Tribal, non-governmental organizations (NGOs), and/or international agencies). Consider including the full list of participating agencies in Appendix B. Delete Appendix B if not required.]
Point of Contact	[Insert the name, title, agency, address, phone number, and email address of the primary exercise POC (e.g., exercise director or exercise sponsor)]

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ANALYSIS OF CORE CAPABILITIES

Aligning exercise objectives and core 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 core capabilities, and performance ratings for each core capability as observed during the exercise and determined by the evaluation team.

Objective	Core Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
[Objective 1]	[Core capability]				
	[Core capability]				
[Objective 2]	[Core capability]				
[Objective 3]	[Core capability]				

Ratings Definitions:
- Performed without Challenges (P): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. 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 core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. 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 core 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 core capability were not performed in a manner that achieved the objective(s).

Table 1. Summary of Core Capability Performance

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

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[Objective 1]

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

[Core Capability 1]

Strengths

The [full or partial] capability level can be attributed to the following strengths:

Strength 1: [Observation statement]

Strength 2: [Observation statement]

Strength 3: [Observation statement]

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: [Observation statement. This should clearly state the problem or gap; it should not include a recommendation or corrective action, as those will be documented in the Improvement Plan.]

Reference: [List any relevant plans, policies, procedures, regulations, or laws.]

Analysis: [Provide a root cause analysis or summary of why the full capability level was not achieved.]

Area for Improvement 2: [Observation statement]

Reference: [List any relevant plans, policies, procedures, regulations, or laws.]

Analysis: [Provide a root cause analysis or summary of why the full capability level was not achieved.]

[Core Capability 2]

Strengths

The [full or partial] capability level can be attributed to the following strengths:

Strength 1: [Observation statement]

Strength 2: [Observation statement]

Strength 3: [Observation statement]

Areas for Improvement

The following areas require improvement to achieve the full capability level:

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Area for Improvement 1: [Observation statement. This should clearly state the problem or gap; it should not include a recommendation or corrective action, as those will be documented in the Improvement Plan.]

Reference: [List any relevant plans, policies, procedures, regulations, or laws.]

Analysis: [Provide a root cause analysis or summary of why the full capability level was not achieved.]

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APPENDIX B: EXERCISE PARTICIPANTS

Participating Organizations
Federal
State
[Jurisdiction A]
[Jurisdiction B]

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APPENDIX A: IMPROVEMENT PLAN

This IP has been developed specifically for [Organization or Jurisdiction] as a result of [Exercise Name] conducted on [date of exercise].

Core Capability	Issue/Area for Improvement	Corrective Action	Capability Element[1]	Primary Responsible Organization	Organization POC	Start Date	Completion Date
Core Capability 1: [Capability Name]	1. [Area for Improvement]	[Corrective Action 1]					
		[Corrective Action 2]					
		[Corrective Action 3]					
	2. [Area for Improvement]	[Corrective Action 1]					
		[Corrective Action 2]					

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[1] Capability Elements are: Planning, Organization, Equipment, Training, or Exercise.

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FEMA Trainings

- ## IS-120: An Introduction to Exercises
  - https://training.fema.gov/is/courseoverview.aspx?code=IS-120.a

- ## IS-130: Exercise Evaluation and Improvement Planning
  - https://training.fema.gov/is/courseoverview.aspx?code=IS-130

- ## E132: Discussion-based Exercise Design and Evaluation
  - https://training.fema.gov/emicourses/crsdetail.aspx?cid=E132&ctype=R

Resources

- My County Emergency Manager:
  - http://ardem.publishpath.com/emergency-management-coordinators

- Find your Local Health Unit:
  - http://https//www.healthy.arkansas.gov/health-units

- ADH Preparedness Website:
  - http://www.healthy.arkansas.gov/programs-services/topics/emergency-response-and-preparedness

- ADEM Website:
  - http://www.adem.arkansas.gov

Resources (Cont'd)

- FEMA Independent Study:
  - http://training.fema.gov/IS/
- FEMA Emergency Management Institute:
  - http://training.fema.gov/EMI/
- Center for Domestic Preparedness:
  - https://cdp.dhs.gov/
- CDC Preparedness Tools:
  - http://emergency.cdc.gov/
- CDC Preparedness Training:
  - http://emergency.cdc.gov/training/