Auxiliary Emergency Communications (AEC)

Training Course

Unit 2: AEC Roles and Responsibilities





Office of Emergency Communications / Interoperable Communications Technical Assistance Program

Terminal Learning Objective Enabling Learning Objectives

TLO: At the conclusion of this unit, the student will describe the functions, responsibilities, and roles of personnel within the AEC function.

ELO A: Describe responsibilities of the AEC Communicator.



Enabling Learning Objectives

ELO B: Describe additional responsibilities of the AEC Manager.

ELO C: Identify components of the AEC "Go Kit".

ELO D: Participate in Exercise 2-1 SOP.



Unit Objectives

- This unit describes the general roles and responsibilities of AEC personnel
- This unit describes specific added roles and responsibilities of the AEC Manager
- Recommended equipment to be included in the AEC Communicator "Go Kit"
- Participate in 2-1 SOP Exercise



Pre-Planning Activities

FAMILY

Preparation is required for your family before you activate/mobilize:

- Prepare family disaster plan so your family will be safe
- Home emergency supplies water, food, first aid kit, flashlight, medications/prescriptions
- Evacuation Routes and Locations



Pre-Planning Activities (Cont)

- Go Bag/Survival Kit Ready on short notice
- POC (out of state) & phone number to notify & update status



AEC Communicator Task List

- An AEC Manager or AEC Communicator will not undertake any task until directed to do so by their incident supervisor
- The list on the following slides contains possible assignments that could be tasked by an AEC Manager



MOBILIZATION

- 1. Upon initial activation, obtain the following:
 - Incident name and number identifying the incident for tracking purposes
 - Reporting time and location
 - Verify communication gear requirements
 - Transportation arrangements/travel routes
 - Contact procedures during travel (telephone/radio)



- 2. Arrive at incident and check in.
 - Arrive properly equipped at the assigned incident location within acceptable time limits



INCIDENT ACTIVITIES

- 3. Obtain briefing from AEC Manager or COML. Examples of items are:
 - Current resource commitments and expectations
 - Current situation
 - Expected duration of assignment
 - Operating procedures and policies (SOPs, etc.)



INCIDENT ACTIVITIES

- 3. Obtain briefing from AEC Manager or COML. Examples of items are: (Cont)
 - Task assignment
 - Work schedule
 - Work space



- 4. Install AEC equipment per discussion with COML:
 - Utilizing appropriate/approved AEC equipment
 - Installing/testing all components of the AEC equipment to ensure systems are operational, for example:
 - Aircraft (e.g., supporting Civil Air Patrol (CAP)) and other special needs
 - Links (radio and wire-based)
 - Remotes
 - Repeaters



- Obtain installation priorities
- Cloning or programming radios
- This list is not all inclusive; the AEC volunteer is responsible for asking adequate questions



- 5. Assist with distribution of AEC equipment by:
 - Identifying kinds and numbers of AEC equipment to be distributed to specific units according to the communications plan
 - Maintaining AEC equipment inventory to provide accountability
 - Providing basic training as needed on equipment being fielded



- 6. Establish AEC Communications Center (ACC) by:
 - Coordinating location with AEC Manager/COML
 - Locate ACC away from radio frequency and electronic interference
 - Keep generators away from radio tent (ensure exhaust from generators is not in close proximity to the operations area)
 - Obtaining necessary supplies for ACC to function properly



- 7. Perform duties within the ACC by:
 - Directing AEC radio/telephone traffic to proper destinations
 - Documenting AEC radio/telephone activities on appropriate ICS forms
 - Following established routing procedures for AEC messages



- Identifying AEC system problems, both technical and operational, and determine appropriate solutions
- Setting up the filing system for ACC documentation



- 8. Coordinate resources by:
 - Notifying AEC Manager of personnel/equipment excesses or deficiencies
 - Identifying AEC resources as to capabilities, quantity, and location



- Initiate and maintain accurate records of all AEC equipment by:
 - Documenting geographic locations of AEC equipment and transfer this information to local maps (latitude/longitude, legal)
 - Initiating and maintaining an accountability system for issuing AEC hand-held and mobile radio resources
 - Keeping records of AEC resources to ensure return to proper location Homeland



Security

- 10. Perform operational tests of AEC systems throughout the duration of the incident by:
 - Acting decisively to minimize interruptions in system operation
 - Identifying and taking necessary action to accomplish minor field repair
 - Planning for battery replacement



- 11. Interact and coordinate with appropriate AEC operational personnel by:
 - Coordinating with AEC Manager regarding system coverage and needs
 - Knowing what other AEC resources may be coming to the incident
 - Participating in briefings and other planning meetings when permitted



- 12. Maintain ICS Form 214 Unit Log. The unit log will be kept current, legible, and will document all significant activities, which may include:
 - Equipment locations
 - Medical evacuations
 - Personnel changes
 - Meetings attended/briefings
 - Personnel issues



DEMOBILIZATION

- 13. Demobilization and check out by:
 - Receiving demobilization instructions from AEC Manager
 - Briefing AEC subordinate staff on demobilization procedures and responsibilities
 - Completing required ICS form(s) and turning them in to the appropriate person



- Documenting lost/damaged equipment on agency/organization specific form(s)
- Ensuring that incident and agency/organization demobilization procedures are followed
- Submitting all required information to the AEC Manager



AEC Manager Task List

In addition to the Communicator Task List

1. Obtain and assemble information and materials needed for a "Go Kit" prior to receiving an assignment, including critical items needed for the assignment and items needed for functioning during the first 72 hours.

Some items, such as local Tactical Interoperable Communications Plans (TICPs), are specific to the AEC Manager and not typically required by all AEC Communicators.



- 2. Establish and maintain positive interpersonal working relationships by:
 - Coordinating with the Communications Unit Leader and other Communications Unit personnel to share information and assure appropriate communications support is provided
 - Creating a work environment that provides diversity and equal opportunity for all AEC personnel assigned to the incident



- 3. Provide for the safety and welfare of assigned AEC personnel during the entire period of supervision by:
 - Recognizing potentially hazardous situations and informing subordinates of hazards
 - Providing safety and identifying equipment, such as vests identifying the communications function, flashlights, and glow sticks
 - Ensuring that special precautions are taken when hazards exist



- Ensuring adequate rest, hydration, and nutrition is provided to all AEC personnel
- Don't assign personnel with serious health problems
- Recognizing any special medical needs of AEC personnel



- 4. Receive and review the Incident Action Plan (IAP), if developed, or Incident Briefing Form (ICS Form 201)
- Determine requirements for communications to be established, evaluate AEC needs, and order supplies, materials, and personnel per incident protocol to keep unit operating



- 6. Organize and supervise by:
 - Assigning and monitoring AEC work assignments
 - Briefing and keeping AEC subordinates informed and updated
 - Developing and promoting team work
 - Establishing time frames and schedules
 - Following established procedures for reporting inappropriate actions



- Using the chain of command
- Briefing relief AEC personnel
- Manage or delegate the responsibility to manage the ACC
- Ensure proper demobilization
- Distribute AEC documentation as necessary
- Notify other AEC groups of assignments and communication information



- 7. Participate in meetings with the COML related to formal ICS Incident Planning meetings as the AEC subject matter expert for communications needs, by:
 - Determining the feasibility of providing the required AEC communications support
 - Providing operational and technical information on available AEC equipment
 - Providing operational and technical information on communications equipment and systems capabilities and restrictions Homeland



Security

- 8. Design AEC systems to support incident operational needs, by:
 - Preparing a communications plan for AEC support
 - Assisting with preparation of the Incident Radio Communications Plan (ICS Form 205), as may be requested by the COML
 - Coordinating through the COML for any additional communication needs
 - Verifying Estimated Time of Arrival (ETA) of personnel
 - Establish assignments based on incident requirements
 - Set schedules around operations requirements



Assembling the 72 Hour AEC "Go Kit"

- Personal Care
 - Cash (potentially no working ATMs in the area)
 - Alarm Clock (manual or battery powered)
 - Appropriate clothing with 3 or more changes
 - Personal items, toiletries, toilet paper
 - Insect repellant, sunscreen, moisturizer, and hand wipes/gel



Assembling the 72 Hour AEC "Go Kit" (Cont)

- First aid kit, medications/prescriptions
- Flashlight and extra batteries
- Keys (including site access cards/keys)
- Foul weather gear



Assembling the 72 Hour AEC "Go Kit" (Cont)

- Sustenance and Shelter
 - Beverages (water) and food for 9 meals minimum
 - Snack items
 - Candles/electric lantern
 - Waterproof matches
 - Mess kit with cleaning accessories
 - Portable stove with extra propane tanks
 - Shelter (mattress, pillow, sleeping bag, tent)



- Communications Equipment
 - Pads of paper, pencils, pens, tape, sticky-notes
 - ICS Forms (201, 205, 213, 214, 217A, and 309)
 - 24-hour clock
 - Hand-held GPS
 - Mobile and portable radio(s) as appropriate for the region and assignment, radio manuals, batteries, headset



- AEC radio programming equipment (adapters, cloning cable and/or computer, software, manuals for front panel radio programming)
- Patch cords
- Power supplies, chargers
- Standing wave Ratio (SWR) bridge(s), antenna analyzer
- Safety glasses



- Communications Equipment (Cont)
 - Multi-purpose knife
 - Volt-Ohm Meter (VOM/Multi-meter)
 - Climbing harness, if applicable and appropriate
 - Communications tool kit including soldering iron & solder (other than 110 volt)
 - Electrical, flagging, & duct tape
 - Antennas, coax, RF connectors, and proper tools



- Communications Equipment (Cont)
 - AEC Mobilization Guide
 - National Interoperability Field Operations Guide (NIFOG)
 - Local or State Field Operation Guides
 - Local system coverage maps
 - Current Repeater Directory



- Specifically added "Go Kit" items for the AEC Manager are:
 - Availability, capability and contact information for local and regional AEC personnel
 - Current SCIP and TICP for area(s) being served
 - ICS Forms 211 and 225



AEC Communicator General Information

Plain Language:

All Public Safety Agencies are required to use plain language and common terminology in major emergencies

AEC Communicators need to do the same

- Don't use "Q Signals" or "10 Codes"
- Avoid abbreviations
- Only use local time in a 24hr hour format (i.e. 2330hrs = 11:30pm)



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AEC Communicator General Information (Cont)

ITU PHONETIC ALPHABET

Α	ALFA	N	NOVEMBER
В	BRAVO	0	OSCAR
С	CHARLIE	Р	PAPA
D	DELTA	Q	QUEBEC
Ε	ECHO	R	ROMEO
F	FOXTROT	S	SIERRA
G	GOLF	Т	TANGO
Н	HOTEL	U	UNIFORM
1	INDIA	V	VICTOR
J	JULIETT	W	WHISKEY
K	KILO	X	X-RAY
L	LIMA	Υ	YANKEE
M	MIKE	Z	ZULU



OEC/ICTAP

Word list adopted by the International Telecommunication Union.

AEC-When Support Is Needed

AEC Support is needed when:

 All communications have failed, been severely disrupted, or is insufficient to meet response needs for emergencies, planned events, etc.

During emergencies/incidents, AEC should:

 If directed by the COML, maintain contact with the local dispatch center using a Public Safety radio if the COML has one for you



AEC-When Support Is Needed (Cont)

Examples of Communications Systems that may fail or become disrupted during a major incident:

- Cell phones
- FAX
- Internet connections
- Phone lines
- Public Safety radio systems



Exercise 2-1: SOP Exercise

Terminal Learning Objective

Develop a usable draft SOP for an AEC Organization

Enabling Learning Objective

Describe the components of a SOP

Instructions

- Break into groups
- Review the SAFECOM Interoperability Continuum and <u>Writing Guide for SOPs</u> slides



Exercise 2-1: SOP Exercise

Instructions (Cont)

Based on individual organization needs, for example:

- Communications Support Between EOCs
- Initial Deployment
- Logistics Support
- Net Management
- Shelter Management
- Support in Absence of Reliable Public Safety Comms



Exercise 2-1: SOP Exercise (Cont)

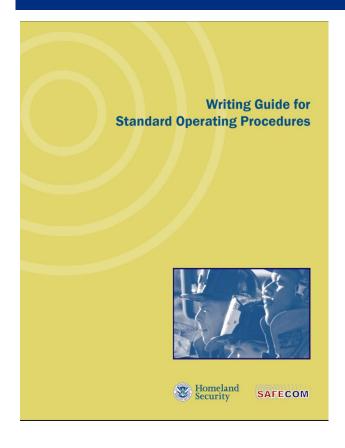
Outputs

- Draft an SOP based on the review of the SAFECOM Interoperability Continuum and Writing Guide for SOPs presentation
- Present and discuss draft SOP details per group

Exercise Duration: 1 hour



Background Document for Exercise



A softcopy can be downloaded from the SAFECOM Website at:

http://www.safecomprogram.gov/sitecollectiondocuments/sop.pdf



Section 1: Introduction

Questions to consider:

- To what capability does this SOP apply
- What is the recognized need
- Are any established agreements already in place among responders
- Who will be using the SOP
- Why is this concern being addressed



Section 2: Purpose Section 3: Scope

Purpose:

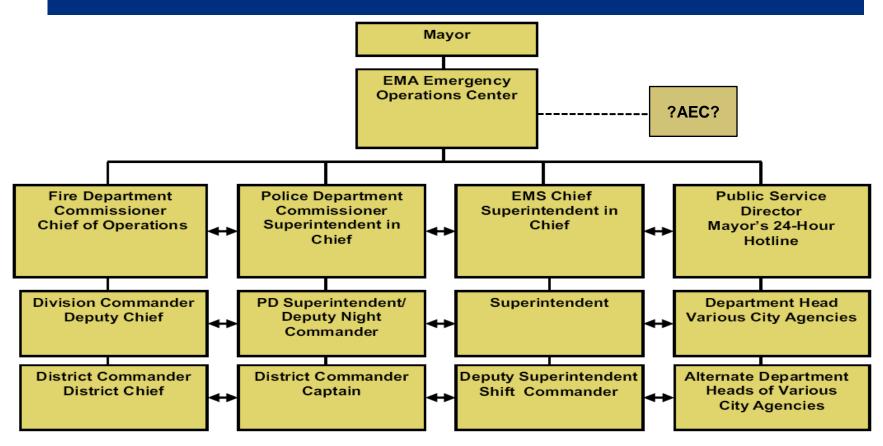
- What is the principal objective
- What is authority, roles, and procedures
- Are there other communications alternatives to the proposed solution

Scope:

- Which agencies/groups are to be included
- What level of authority
- When will this resource be used
 - Critical incidents
 - Day-to-Day
 - Discretion of Emergency Manager
 - Planned events



Section 4: Communications Structure





Sample Organization Chart



Section 5: Channel Patching and Monitoring

5a: Patching the Interoperability Channel

- What bands are going to be used
- What are the benefits of the current configuration?
- Are there more effective alternatives

5b: Interoperability Channel Monitoring

- Who will monitor the channel?
- What are the monitoring procedures once the channel is activated?



Section 6: Activation, Transfer and Discontinuation

6a: Rules of Use

- Use Common language
- Use the International Phonetic Alphabet
- NIMS/ICS compliance
- How will the channel be used
 - Emergency information transmissions

6b: Operational Procedure and Guidelines for Limited and Full Activation

- What are the requirements, procedures, and guidelines for:
 - limited activation (e.g., day-to-day incidents)
 - full activation (e.g., large-scale incidents)



Section 6: Activation, Transfer and Discontinuation (Cont)

6c: Activation Authority

- What are the procedures for requesting use of the resource
- What are the conditions for use for each organization using the resource
- What are proper uses of the resource

6d: Establishing and Transferring Net Control

- What are the procedures for requesting users to switch their radios to the support channel
- Who is involved in the procedure
- Who has the authority to order it
- Will a lead Net Control operator be designated



Section 6: Activation, Transfer and Discontinuation (Cont)

6e: Notification Process for Establishing Command Control

- What are the notification procedures for establishing command and control among participating agencies?
- Who is authorized to activate the AEC resource?

6f: Discontinuation of AEC Support

- What are the procedures for discontinuing AEC support?
- Who will make the decision to discontinue use?
- How will all participants be notified?



Section 7: Separation of the AEC Communications Channels Due to Interference

What procedures should be in place when there is intentional or unintentional interference with the AEC support resource?



Section 8: Communications Alternatives

- Telephone Conference Bridges
- Cellular/Push-to-Talk Commercial Wireless Technology
- Computerized Emergency Notification System
- Internet/E-mail
- Satellite Phones



Section 8: Communications Alternatives (Cont)

- Cache of Portable Radios on Various Bands
- Mobile Capabilities with Conventional Channels
- Dispatch/Radio Communications Center to Dispatch/Radio Communications Center Messaging
- Runner System



Section 9: Training Requirements

- Who will be responsible for ensuring that participating agencies' and organizations' personnel are familiar with the SOP and are properly trained
- What will be the minimum training requirements for:
 - How the resource is set up
 - How to select the right channel
 - Proper terminology and radio etiquette
 - Who to notify if they have a radio problem



Section 10: Testing Requirements

- What are the standardized testing procedures
- Will there be different phases of testing (i.e., weekly net testing and operational testing)
- What are the procedures for each testing phase
- When should testing take place
- What agencies/organizations should be involved



Section 11: Responsibility

- Whose responsibility will it be to ensure that these SOPs are followed when necessary
- Whose responsibility will it be to be familiar with and comply with these SOPs



SOP Exercise 2-1

- Draft and present an SOP.
- Groups have 30 minutes to prepare and 30 minutes to present and discuss.



Conclusion

Creating and applying SOPs that foster AEC support communications across an area or region can be challenging due to differences in technology, organizational structures, and the overall experience of the volunteer responders.

However, SOPs are essential for successful incident response.



Unit 2: Summary

- Described the functions, responsibilities, and roles of personnel within the AEC organization.
- 2) Described the responsibilities of the AEC Communicator.
- 3) Described additional responsibilities of the AEC Manager.
- 4) Identified components of the AEC "Go Kit."
- 5) Participate in exercise 2-1 SOP.







Office of Emergency Communications / Interoperable Communications Technical Assistance Program