Arkansas Interoperable Communications Field Operations Guide (ARFOG)

Version 1.0 dated March 2015

Introduction

The Arkansas Field Operations Guide (ARFOG) is a technical reference for emergency communications planning and for radio technicians responsible for radios that will be used in disaster response. The ARFOG includes rules and regulations for use of statewide and other interoperability channels, AWIN radio programming templates, and other reference material, formatted as a pocket-sized guide for radio technicians to carry with them.

The ARFOG is meant as a companion work to the National Interoperability Field Operations Guide (NIFOG). Throughout the ARFOG you will find references to the NIFOG. If you do not have a copy of the NIFOG you may download or request copies at www.publicsafetytools.info. If you are not familiar with interoperability and mutual aid communications, start with the "How to Use the National Interoperability Field Operations Guide" section.

Record of Change

Change Number	Date	Pages Changed	Change Date	Change Made By

About this Guide

Points of Contact for this Guide

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The purpose of the Arkansas Tactical Interoperable Communications Field Operations Guide (ARFOG) is to be used to increase efficiency in establishing interoperable communications during incidents, create a consistent knowledge base of interoperable communications channels and networks, and provide a helpful tool for pre-planning and interoperable communications training and exercises.

Please send updates, corrections, or comments about the ARFOG to Penny Rubow.

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"Interoperability is the ability of public safety agencies to talk across disciplines and jurisdictions via radio communications systems, exchanging voice and/or data with one another on demand, in real time, when needed, and as authorized."

"Arkansas has formally adopted the National Incident Management System (NIMS) as the template for managing incidents.

Local jurisdictions overwhelmed by event(s) are obligated to coordinate with State, Federal and private sector support teams. Each layer of government must use its capabilities effectively in support of the other layers. They must complement each other for their separate actions to result in achievement of a common goal. The NIMS Incident Command System (ICS) offers a proven structure to create an effective team from very diverse members."[1]

Do not self-deploy; respond only when requested.

When arriving at the site, immediately check in with the Incident Command.

[1] Arkansas Comprehensive Emergency Management Plan, May 2014

RESPONDING TO INCIDENTS

Contacting ADEM

Phone	501-683-6705 or 800-322-4012
AWIN Radio	ADEM 1, ADEM 2, or MAC Call
E-mail	adem@adem.arkansas.gov
FAX	501-683-7890

Requesting assistance when working an incident

Contact Incident Command (IC) for any additional support needed. IC will coordinate with ADEM to request the needed resources.

AVAILABLE COMMUNICATIONS RESOURCES

ALL REQUESTS FOR RESOURCES LISTED BELOW ARE COORDINATED THROUGH ADEM. The Information provided below is for planning and coordination purposes.

ADEM CIO is the State Communications Coordinator (COMC).

Communications Unit Leader (COML)

The COML is a position under the Logistics Section of the Incident Command System (ICS). The COML reports directly to the Logistics Chief or Incident Commander. A COML's responsibilities include:

- Developing plans for the use of communications equipment and facilities
- Managing the distribution of communications equipment to incident personnel
- Coordinating the installation and testing of communications equipment

- Supervising volunteer communicators, if available, such as the amateur radio emergency communications support team
- Supervising other members of the Communications Unit such as the Communications Technician (COMT), Radio Operator (RADO), and Incident Communications Center Manager (INCM), if those positions are filled during an incident

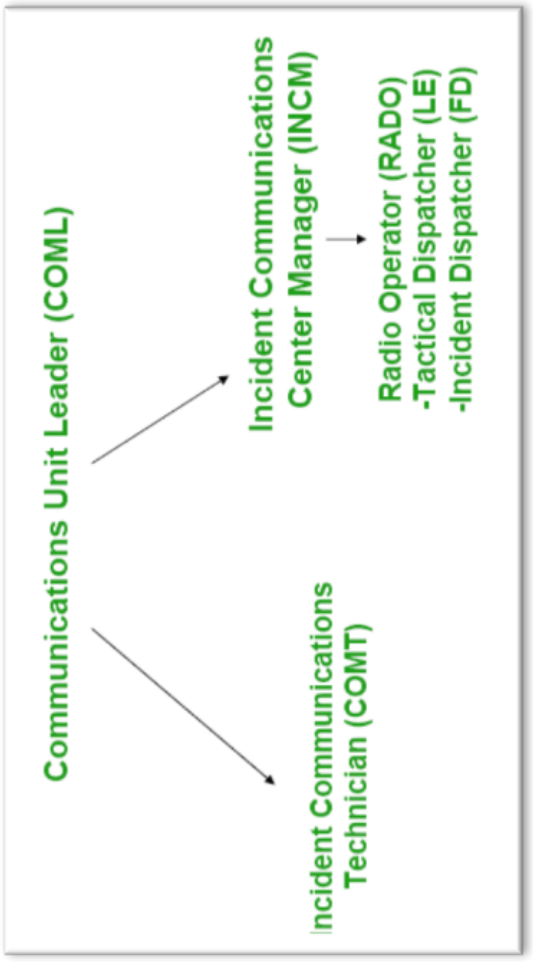
Communications Unit Technician (COMT)

The COMT reports directly to the Logistics Chief or COML. The COMT's responsibilities include:

- Implementing plans for the use of communications equipment and facilities
- Distributing communications equipment to incident personnel
- Troubleshooting communications equipment issues

Radio Dispatch Personnel

ADEM is the communications point for all things Emergency Management related and operates 24x7, 365 day a year. Staffing these positions are highly trained Duty Officers. Their primary responsibilities are to interact with all counties in the State of Arkansas to keep record and assist local Emergency Managers with state resources if requested. They serve as a warning point and local call center to report both natural and man-made disaster situations. Duty Officers use call down lists to notify essential personnel based on the severity of an incident.


Communications Unit Leader (COML)
Incident Communications Center Manager (INCM)
Radio Operator (RADO)
-Tactical Dispatcher (LE)
-Incident Dispatcher (FD)
Incident Communications Technician (COMT)

AWIN Sites on Wheels (SOW) – Request Procedure

1. Use of Sites on Wheels for incidents that are planned Special Events:
   a. A written request must be submitted to the AWIN Management team – the request will be located on the AWIN website: http://www.awin.arkansas.gov .
   b. The request must be submitted three weeks in advance so the logistics may be determined.
2. Emergency usage of Sites on Wheels:
   a. ADEM Duty Officer receives request and notifies ADEM CIO.
   b. DIS Emergency Management Liaison Officer (EMLO) receives the request from ADEM.
   c. The request is forwarded to the AWIN group.
   d. AWIN personnel reviews the request.
   e. AWIN staff conduct preliminary research and makes recommendations for deployment or alternatives to deployment of a SOW.
   f. DIS EMLO provides recommendation to ADEM.
   g. ADEM authorizes deployment.
3. Considerations for deploying a SOW:
   a. Two (2) qualified personnel must be available to set up the Sites on Wheels.
   b. 24x7 security must be provided to prevent vandalism.
   c. Deployment site must be level.
   d. Deployment site must be free of overhead and horizontal obstructions; trees and power lines inhibit the setup of the SOW.
   e. Deployment site must be stable; a paved area is the most desirable.

f. Deployment site must be an open area of at least fifty (50) feet by fifty five (55) feet.

g. The generator must be refueled and maintained as necessary.

Cache Radio Request Procedure

1. ADEM Duty Officer receives request and notifies ADEM CIO.
2. ADEM CIO determines if cache radios are available and authorizes deployment.
3. ADEM Duty Officer notifies DIS Emergency Management Liaison Officer (EMLO).
4. ADEM Duty Officer and EMLO coordinate on transportation and delivery of radios.

Amateur Radio Go-Kits Request Procedure

The state has two deployable amateur radio Go-Kits that may be requested. These are particularly useful in Search and Rescue operations, where terrain may inhibit other kinds of voice communications. The Go-Kits contain: antennas, base stations, power supply and charger.

1. ADEM Duty Officer receives request and notifies ADEM CIO.
2. ADEM CIO determines if amateur radio Go-Kits are available and authorizes deployment.
3. ADEM Duty Officer notifies DIS Emergency Management Liaison Officer (EMLO).
4. ADEM Duty Officer and EMLO coordinates on transportation and delivery of Go-Kits.

Communications Gateways

Communications gateways are used to establish communications between two or more disparate voice communications systems.

1. ADEM Duty Officer receives request.
2. ADEM Duty Officer coordinates with county OEM or DIS EMLO on deployment and support.

The table below provides, by county, the type of gateway unit available in that county. County personnel should become familiar with the operation of these devices.

County	Device Type		County	Device Type
Arkansas	Motobridge		Lincoln	ACU 1000 & ACU - T
Ashley	Radio **Gateway** Unit		Little River	None
Baxter	Motobridge		Logan	Radio Gateway Unit
Benton	None		Lonoke	ACU - T
Boone	ACU 1000		Madison	Motobridge
Bradley	ACU 1000		Marion	Radio Gateway Unit
Calhoun	ACU - T		Miller	ACU - T
Carroll	Motobridge		Mississippi	Radio Gateway Unit
Chicot	ACU - T		Monroe	ACU 1000
Clark	ACU 1000		Montgomery	None
Clay	Radio Gateway Unit		Nevada	ACU 1000

Cleburne	Motobridge		Newton	ACU 1000
Cleveland	ACU 1000		Ouachita	Motobridge
Columbia	Radio Gateway Unit		Perry	Radio Gateway Unit
Conway	None		Phillips	None
Craighead	ACU 2000 & ACU - T		Pike	ACU 1000
Craighead	ACU - T		Poinsett	Radio Gateway Unit
Crawford	Motobridge		Polk	None
Crittenden	Radio Gateway Unit		Pope	Radio Gateway Unit
Cross	Radio Gateway Unit		Prairie	ACU 1000
Desha	ACU - T		Pulaski	Motobridge
Drew	Radio Gateway Unit		Pulaski	ACU 1000
Faulkner	Motobridge		Randolph	Radio Gateway Unit
Franklin	ACU 1000		Saline	Motobridge
Fulton	ACU 1000		Scott	None
Garland	Motobridge		Searcy	ACU 1000
Grant	ACU - T		Sebastian	None
Greene	Radio Gateway Unit		Sevier	Radio Gateway Unit
Hempstead	Radio Gateway Unit		Sharp	Radio Gateway Unit
Hot Spring	Radio Gateway Unit		St Francis	Radio Gateway Unit
Howard	Radio		Stone	ACU - T

	Gateway Unit			
Independence	ACU 1000		Stone	ACU - T
Izard	None		Union	Motobridge
Jackson	Radio Gateway Unit		Van Buren	Radio Gateway Unit
Jefferson	ACU - T		Washington	Trident, ACU 1000 (Permanent) ACU T (Mobile)
Johnson	Radio Gateway Unit		White	Motobridge
Lafayette	None		Woodruff	ACU 1000
Lawrence	ACU 1000		Yell	Radio Gateway Unit
Lee	None			

Civil Support Team

1. ADEM Duty Officer receives request and notifies ADEM Director.
2. ADEM Director gets Governor's Office approval.
3. ADEM Duty Officer sends formal request to DOMS.

Cellular Assets (Voice and Data)

1. ADEM Duty Officer receives request and notifies ADEM CIO.
2. ADEM CIO notifies DIS Emergency Management Liaison Officer (EMLO).

3. DIS EMLO coordinates with carriers to augment or restore communications.

Satellite Phones (Iridium Satellite Phones and MVSAT)

1. ADEM Duty Officer receives request and notifies ADEM CIO.
2. ADEM Duty Officer coordinates with county OEM or DIS EMLO on deployment and support.

Mobile Command Units

ADEM and Arkansas State Police each have Mobile Command Units that are available for deployment.

1. ADEM Duty Officer receives request and notifies ADEM CIO.
2. ADEM CIO determines if MCU's are available and authorizes deployment for ADEM MCV and coordinates for the ASP MICC.

Equipment Capabilities	ADEM MCV	ASP MICC
AWIN Radios	X	X
HF-3200 Radio with Antenna	X	X
Cache of FRS Radios for First Responders	X	
Cache of AWIN Radios for First Responders	X	X
Cache of Law Enforcement Radios		X
UHF/VHF Radios	X	X
Ham Radios	X	X

Fixed Ham Antenna		X
City Police Frequencies		X
County Talk Groups	X	X
ASP Air to Ground Frequency		X
ACU 1000	X	X
Mast with Camera		X
Trac Star Internet Satellite	X	X
Trac Star Internet Operational	X	X
Private Branch Exchange (PBX)		X
Air Cards for Internet	X	X
Internal Network with Server	X	X
Satellite Phones	X	X
Display Presentation System		X
Smartboard	available	X
BMS Downlink System (Air to Ground Video)		X
SWAT Repeater		X
Tellular System	X	X
Direct TV	X	X
Printer, Scanner. Copier	X	X
Wireless Internet from Satellite	X	X
Wireless Internet from Cellular Modem		X
Burn Toilet	X	

EMERGENCY COMMUNICATIONS PLANS

How to Use the ARFOG

The ARFOG is recommended for use by emergency responders when requiring radio interoperability on the Arkansas Wireless Information Network (AWIN), the use of communications gateways, and the use of statewide deployable assets. When using these shared resources, emergency responders should follow the SOPs provided herein. This guide provides information for radio technicians when supporting an incident. The ARFOG may also be used by emergency communications planners.

Arkansas Comprehensive Emergency Management Plan

The full text of the Comprehensive Emergency Management Plan can be found at:

www.adem.arkansas.gov/ADEM/Divisions/Preparedness/Planning/index.aspx

STATEWIDE EMERGENCY COMMUNICATIONS PLAN

Below is an abbreviated version of the Statewide Emergency Communications Plan. Contact ADEM for the full version.

1. Introduction/Purpose
   a. The purpose of this all hazards Statewide Emergency Communications Plan is:
      i. To identify interoperable conventional voice and data communications between the State Emergency Operations Center (SEOC) or the Arkansas Response and Coordination Center (ARCC) to all parties that have a need to

communicate and include; the Governor's Office, county Chief Elected Official or their designated representative, Local Emergency Management Coordinators, other State Agencies, Volunteer Groups, and Federal entities.

ii. To identify alternate means of communications during outages and provide guidance to establish procedures for the use of alternate communications.

2. Concept of Operations

a. Conventional Communications

i. Voice communications to the SEOC/ARCC are available by telephone at 501-683-6705 or 800-322-4012. The SEOC/ARCC can be reached over the Arkansas Wireless Information Network (AWIN) using the ADEM 1 or ADEM 2 talk group, or over the MAC Call talk group. In addition, the ARCC is the State Warning Point with the National Warning System (NAWAS), with national and state phone systems. For instant voice and text messaging to emergency management shareholders, ADEM will use the State Emergency Notification System (SENS).

ii. The primary means of data communications are email and FAX. Reports can be made to adem@adem.arkansas.gov . The FAX number to the SEOC/ARCC is 501-683-7890. ACIC is used by the ARCC during an emergency to transmit and receive hard copy administrative traffic. Utilizing a satellite downlink, ACIC provides an automatic notice to police agencies of watches, warnings and

alerts issued by the National Weather Service. Information pertaining to weather, traffic or other hazardous conditions can be shared or disseminated between jurisdictions immediately.

iii. The ADEM webpage at www.adem.arkansas.gov provides an interface to report incidents, additionally there is a "contact us" submission capability. WebEOC, the situational awareness software is hosted at the SEOC/ARCC, can be used for communications with other online WebEOC users via the instant message feature which is incorporated in the software. The WebEOC message capability is available at all times.

b. Alternate Communications

i. When conventional communications fails, there may be no warning. All agencies should use alternate means of communications to contact the SEOC/ARCC to get information or assigned personnel should report to the SEOC.

ii. Voice communications can be established with the Network Innovations MSAT satellite phones that all counties and ESF primary agencies have. The ARCC monitors the AR ALL talk group 24 hours a day. The satellite phone numbers to the ARCC are: Satellite to Satellite 500-180-4072, Toll Free 877-821-8656, 703 number 703885315, and Direct Number 1366, the Toll Free number may be reached by any telephone device. Iridium® Satellite phones are issued to the Governor, ADEM Director, Deputy Director, and each ADEM Area

Coordinator. In addition, the Radio Amateur Civil Emergency Services (RACES) will be activated for outages of conventional communications and will provide voice capability in accordance with the Arkansas RACES Plan that is maintained separately. Agencies with a Military Auxiliary Radio System (MARS) License can use voice communications to contact the SEOC, using the procedures listed in the Arkansas MARS plan under a separate cover. Direct voice communications with Federal Emergency Management Agency (FEMA) Region VI will be through the FEMA National Radio System (FNARS), with a transceiver in the ARCC.

iii. Data capability can be maintained internally at the SEOC/ARCC with email and internet for users on the ADEM domain within the local area network (LAN). WebEOC can also be used as a message system within the LAN. Outside email capability can occur through RACES and MARS using WinLink email communications, including Region VI for RRFs. Additionally, external internet service can be obtained with the TracStar Satellite system on the roof of the SEOC or the ADEM Mobile Command Vehicle (MCV) and piped into SEOC/ARCC with limited bandwidth. The Arkansas Crime Information Center (ACIC) terminals are used by the ARCC during an emergency to transmit and receive hard copy notices of watches, warnings and alerts issued by the National Weather Service.

c. Order of Priority for Alternate Communications
   i. Light Squared Satellite Phone, Push-to-Talk feature.
   ii. Any Satellite Phone using dial capability.
   iii. RACES/MARS capability (1st data priority)
   iv. ACIC message system.

ARKANSAS ARES/RACES PLAN

The call sign for the ADEM is KB5LZK.

Statewide Emergency Nets

All statewide emergency nets should be activated on or near these frequencies:

VOICE:

80 meters primary: 3987.5 kHz

40 meters primary: 7260 kHz

40 meters secondary: 7285 kHz & 7235 kHz

VHF Local 2 meter Repeaters

VHF Simplex Primary: 146.520 MHz

DIGITAL:

147.495 MHz packet

145.010 MHz packet

145.590 MHz packet

80 meters WinLink: 3626.9 kHz

40 meters Winlink: 7068.9 kHz

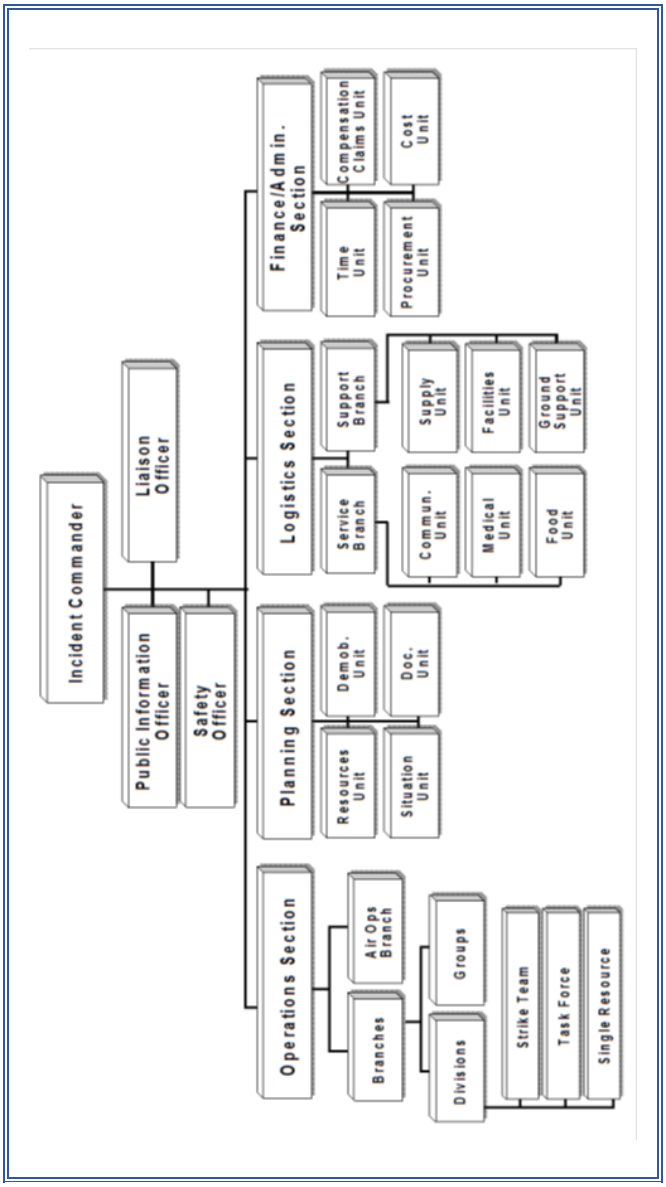
40 meters Winlink: 7101.2 kHz Pactor 3

30 Meters WinLink 10146.2 kHz

APRS: 144.390 MHz

THE NATIONAL INCIDENT MANAGEMENT SYSTEM

The National Incident Management System (NIMS) is a systematic, proactive approach to guide departments and agencies at all levels of government, nongovernmental organizations, and the private sector to work together seamlessly and manage incidents involving all threats and hazards—regardless of cause, size, location, or complexity—in order to reduce loss of life, property and harm to the environment. Additional information on NIMS as well as training resources maybe found at: https://www.fema.gov/national-incident-management-system


Incident Commander
Liaison Officer
Public Information Officer
Safety Officer
Finance/Admin. Section
Compensation Claims Unit
Cost Unit
Time Unit
Procurement Unit
Logistics Section
Support Branch
Supply Unit
Facilities Unit
Ground Support Unit
Service Branch
Commun. Unit
Medical Unit
Food Unit
Planning Section
Demob. Unit
Doc. Unit
Resources Unit
Situation Unit
Operations Section
Air Ops Branch
Branches
Groups
Divisions
Strike Team
Task Force
Single Resource

USE OF INTEROPERABILITY CHANNELS

Communications when responding outside of your normal service area:

- Know which Interoperability Channels are being used for the event
- Hailing Channels

Plain Language

It is the Policy of the Arkansas Interoperable Communications Committee that:

- All users on the AWIN system will utilize common language instead of 10-codes or other cryptic language to facilitate communication in emergencies.

Standard:

To be in compliance with NIMS, common language will be the required mode of communication for all AWIN radio transmissions in emergency situations.

Because the safety of responders and the public is of paramount importance, clear communication between all responders is critical. Therefore, establishing a standard method of communication to be used in emergency situations is of the utmost importance. 10-codes hold different meanings in different jurisdictions which leaves the chance for miscommunication to occur. During emergency situations all responders, whether they be local or multi-jurisdictional, must be able to communicate clearly with each other. In addition, they must know and utilize commonly established operational structures, terminology, policies and procedures.

The use of common terminology facilitates the ability of Area Commanders, State and local EOC personnel, Federal Operational Coordinators, and emergency responders to

communicate clearly with each other and effectively coordinate response activities, no matter what the size, scope or complexity of the incident. The ability of responders from different jurisdictions and different disciplines to work together depends greatly on their ability to communicate with each other.

While the National Incident Management System does not require plain language for internal operations, it strongly encourages it, as it is important to practice every day terminology and procedures that will need to be used in emergency incidents and disasters.

It is required that plain language be used for multi-agency, multi-jurisdictional and multi-discipline incidents, such as major disasters and exercises. Beginning Fiscal Year 2006, federal preparedness grant funding is contingent on the use of plain language in incidents requiring assistance from responders from other agencies, jurisdictions, and functional disciplines.

Identification Procedures

When responding to multi-jurisdictional/multi-disciplinary incidents field units shall first give their agency identifier followed by the person/entity they are calling. For example, “ADEM 400 to Washington County 100”. Communications between field units and Dispatch shall be conducted in a business-like manner, using proper language and correct procedures.

AWIN Mutual Aid Channels - Interoperable Communications Guidelines

There are four types of communications incidents. In each of these incidents, the responding agency/entity should have the flexibility to use the resources they need to communicate.

However, each agency/entity should utilize the system in the least resource intensive mode necessary.

- Use of Simplex or Direct channels, if in close proximity. For example – for search and rescue operations, or on-site coordination of small scale emergencies.
- The Incident Commander designates one of their talkgroups for use as the Command talkgroup.
- Use of AWIN interoperable talkgroups. (Mutual Aid Channels (MAC) or Regional Interoperability talkgroups).

1. **Local Incident** - Defined as operating within the entity's jurisdiction or close proximity of the entity. The first choice, if available, should be the use of National Public Safety Planning Advisory Committee (NPSPAC) direct mutual aid channels. Radios use talk around mode when using NPSPAC Direct channels. Each of these channels works within the transmission/reception range of each unit. These channels do not use AWIN trunked repeater sites. Responders will be able to communicate effectively within radio transmission/reception of each other. (Typically 10 miles or less depending on use of portable or mobile radios.) This is not a requirement and each responding agency/entity has the flexibility to utilize the AWIN resources as required to adequately communicate during an incident. A list of the NPSPAC direct channels appears in the NIFOG under Non-Federal 800 MHz National Mutual Aid Repeater Channels.
2. **Entity to Entity Interoperability** - Defined as operating in a multi-jurisdictional mode, but not necessarily in close physical proximity. It is the responsibility of the Incident Commander to coordinate Interoperable communications through the use of AWIN resources.

This could range from the use of agency/entity shared talkgroups, the coordination of a regional talkgroup oral request to ADEM to designate a Mutual Aid Channel (MAC) for use on the incident.

3. **Multi-jurisdictional or Statewide Emergency** - Defined as a statewide or regional incident involving two or more agencies or entities needing coordinated action. Large Scale or Statewide Emergencies operate the same as entity to entity communications. However, in large scale multi-jurisdictional incidents ADEM will coordinate the required communications channels.
4. **Hailing** - Defined as one entity making contact with another entity on a designated channel for non-emergency communication. An agency/entity may contact another agency/entity which utilizes the AWIN system by utilizing the MAC-Call talkgroup. Communication between the two entities should continue after contact on MAC-5. The purpose of this ability is to facilitate agency or entity contact as needed through the radio system. For an agency/entity to effectively utilize the Hailing capability, the entity will need to monitor the MAC-Call at their dispatch or they will not hear incoming communications requests. This ability is subject to the following guidelines for usage:

    - Arkansas Department of Emergency Management (ADEM) supports the use of MAC-Call for Entity to Entity Hailing.
    - ADEM, by policy, allows only one MAC talkgroup to be utilized without ADEM approval. That talkgroup is MAC-Call. All other MAC talkgroups require ADEM approval for use.
    - Extended Communication between agencies/entities should not occur on MAC-Call. The communicating agencies/entity should move to

MAC talkgroup 5 for the necessary communication. MAC Channel 5 will be designated as the "State Non-Emergency Interoperability Talkgroup". As such, this talkgroup may have multiple conversations and there should be no expectation for privacy on this talkgroup. ADEM will not permit the use of other MAC talkgroups for non-emergency communications.

- If an incident occurs, ADEM may order MAC-Call traffic to be emergency traffic only. If this occurs, non-emergency traffic should be discontinued.

SATELLITE PHONES

MSAT Satellite Interoperability

Interoperable Push-to-Talk (PTT) groups have been established for users with the capability to utilize the Light Squared PTT feature.

There are four Satellite Mutual Aid Radio Talkgroups (SMART) that may be used in Arkansas.

1. Arkansas 1 Talkgroup

a. This talkgroup is open to all Public Safety agencies in Arkansas for Command and Control, on-scene coordination, planned events, coordination with the ADEM, and other dispatch centers that monitor this group.
b. The Net Control will be the ADEM which will also have the responsibility to monitor this talkgroup on a 24x7 basis. Requests to join this talkgroup will be sent to AWIN.Operations@arkansas.gov.

2. CUSEC-1

a. Central United States Earthquake Consortium Talkgroup: This talkgroup is open to all entities that are in the CUSEC partner states. The Net Control and management of this talkgroup is the State of Indiana. Requests to join this talkgroup should be sent to CUSEC-1@cusec.org.

3. SE-SMART Talkgroup

a. Membership for this talkgroup consists of the southeast states (AR, AL, FL, GA, KY, LA, MS, NC, SC, TN, VA, and WV). The Net Control and management of this talkgroup is Fairfax County, VA OEM/Public Safety Communications. Requests to join this talkgroup should be sent to SESMART@fairfaxcounty.gov

4. J-SMART Talkgroup (Justice SMART)

a. J-SMART is for Public Safety agencies, but more focused on the law enforcement community. The management for J-SMART is the Department of Justice. Requests to join this talkgroup should be sent to SMART@usdoj.gov .

To get a unit out of Suspend, e-mail the ESN to:

activations@nigovernment.com

Technical Support for MSAT:

1 866 708 1880

Using the MSAT phones

Switching On & Off

To turn the unit on or off, depress the Power Key for two to three seconds. When the unit is powered on and ready for use, the display will show the beam (eg. B3) and signal strength (eg. S99).

Volume

The volume is can be adjusted while listening to a call and using the scroll keys. This helps the user achieve the proper listening level of the audio output. The volume may also be adjusted via the “admin” menu.

Making a phone call

When the unit is in the idle state, enter the 10 digit telephone number and press the “Send” key. To end the call, press the “End” key.

Push-to-Talk (PTT)

Use the PTT key to initiate a call. Wait for the “Go Ahead” tones and “User ON” message displayed on the unit before speaking.

Changing Talk Groups (Channels)

When the unit is in the idle state, select the “Group” soft key and use the scroll keys to change talk groups. If private calling has been enabled, select talkgroup 00, then enter the device number of the unit you wish to call and press the PTT key.

Satellite Phone Directory

Push-to-Talk numbers and talkgroups.

0	AR-Private
1	AR-C
2	AR-NW
3	AR-NE
4	AR-SW
5	AR-SE
6	AR-ALL
8	CUSEC-1
9	SESMART
10	E-SMART (EMS)
11	F-SMART (Fire)
12	L-SMART (Law Enf)
13	I-SMART
15	J-SMART

Direct Dial Satellite Phone Numbers

Account Name	Toll Free	DN	Status
ADIS Ashley OEM	8775614437	1373	Sleep
ADIS Ashley OEM	8778489286	1699	Sleep
ADIS Carroll OEM	8775532199	1375	Sleep
ADIS Carroll OEM	8774791442	1721	Active
ADIS Cleburne OEM	8772813180	1327	Sleep
ADIS Cleburne OEM	8778011575	1697	Active
ADIS Cleveland OEM	8772739325	1372	Active
ADIS Cleveland OEM	8778011578	1691	Sleep
ADIS Columbia EOC	8778398395	1354	Sleep
ADIS Conway OEM	8772813181	1328	Sleep
ADIS Conway OEM	8774726860	1692	Sleep
ADIS Conway OEM	8774726875	1700	Sleep
ADIS Conway OEM	8772739432	1702	Active
ADIS Cross OEM	8773665374	1346	Active
ADIS Cross OEM	8773200616	1560	Sleep
ADIS Cross OEM	8773200630	1559	Sleep
ADIS Cross OEM	8778697023	1616	Sleep
ADIS Faulkner OEM/OEOC	8772813183	1331	Active
ADIS Faulkner OEM/OEOC	8777778665	1732	Sleep
ADIS Garland OEM	8773033064	1355	Active
ADIS Garland OEM	8778697027	1690	Active

ADIS Grant 911 Dispatch	8004732006	0075	Active
ADIS Independence 911 DISPATCH	8774131770	1358	Active
ADIS Jefferson OEM	8776959433	1341	Active
ADIS Lawrence OEM and Sheriff's Office	8774131771	1359	Sleep
ADIS Lawrence OEM and Sheriff's Office	8772956519	1551	Sleep
ADIS Lawrence OEM and Sheriff's Office	8772956522	1554	Sleep
ADIS Lincoln OEM	8772092898	1342	Sleep
ADIS Lincoln OEM	8772956539	1707	Sleep
ADIS Lincoln OEM	8772956540	1659	Active
ADIS Madison OEM	8772092911	1376	Sleep
ADIS Madison OEM	8773134339	9878	Sleep
ADIS Montgomery Sheriff's Office	8778367712	1035	Sleep
ADIS Montgomery Sheriff's Office	8772786960	1659	Active
ADIS Pike County Sheriff's Department	8772739249	1356	Sleep
ADIS Prairie OEM	8778869247	1531	Active
ADIS Saline OEM	8772739210	1343	Active
ADIS Saline OEM	8774172169	1542	Sleep
ADIS Sevier OEM	8774172170	1543	Sleep
ADIS Van Buren County Judge's Office	8775457489	1344	Sleep

ADIS Washington WC DEM	8772739294	1368	Active
ADIS Washington WC DEM	8777513027	1573	Sleep
ADIS White OEM	8772808847	1345	Active
ADIS White OEM	8775682801	1812	Sleep
ADIS Woodruff Sheriff's Dept.	8772739310	1370	Active
ADEM	8773059848	1366	Active
AHTD	8772252743	1428	Active
AHP	8778793361	1427	Active
AGFC	8778793489	1426	Active
AFC	8775928107	1425	Active
ANG	8772743941	1430	Active
ADHS	8772743973	1424	Active
ASP Tactical Operations	8772885506	1674	Sleep
ASP Tactical Operations	8774318085	1675	Sleep
ASP Executive Protection	8775109614		Active
ASP MICC	8777659663		Active
Arkansas Energy Office	8775207981	9883	Active
Arkansas Agriculture Department.	8775207986	9976	Active
ADEQ	8775208002	9974	Active
State Capitol Police	8776633629	9973	Active

ADEM/Gov Office	8777866898	9910	Active
ADEM	8778218656	9900	Active
ADEM	8778220220	9899	Active
ADEM	8778254650	9898	Active
ADEM	8778257657	9897	Active
ADEM	8772893443	9896	Active
ADEM	8772901800	9895	Active
ADEM	8775649168	9894	Active
ADEM	8775649451	9893	Active
ADEM	8772811511	9892	Active
ADEM	8772826858	9891	Active
ADEM	8772833842	9890	Active
ADH	8778338061	5198	Active
DIS/AWIN	8777513084		Sleep
DIS/AWIN	8774575357	9888	Sleep
DIS/AWIN	8774575398	9887	Sleep
DIS/AWIN	8774575578	9886	Sleep
DIS/AWIN	8774575579	9885	Active
DIS/AWIN	8778581840	9884	Sleep
ADIS Arkansas OEM	8772739321	1028	Active
ADIS Arkansas OEM	8773452901	1386	Sleep
ADIS Arkansas OEM	8773557342	1687	Sleep
ADIS Columbia OEM	8774929476		Active
Arkansas Department of Information Systems	8772838306		Active

Arkansas Department of Information Systems	8772885967		Active
Arkansas Department of Information Systems	8775949201		Active
Arkansas Department of Information Systems	8004119345		Active
Arkansas Department of Information Systems	8004119822		Active
Arkansas Department of Information Systems	8004119824		Active
Arkansas Department of Information Systems	8004119828		Active
Arkansas Department of Information Systems	8004444817		Active
Arkansas Department of Information Systems	8004446567		Active
Arkansas Department of Information Systems	8004461887		Active
Arkansas Department of Information Systems	8004631863		Active
Arkansas Department of Information Systems	8004746620		Active
ASP Tactical Operations	8778581860	9882	Sleep
ASP Tactical Operations	8772399894	9879	Sleep
ASP Tactical Operations	8774466292	9875	Sleep
ASP Tactical Operations	8774466304	1704	Sleep

ASP Troop A	8776633637	9972	Active
ASP Troop B	8776326606		Active
ASP Troop C	8776326608		Active
ASP Troop D	8773653015		Active
ASP Troop E	8772742810		Active
ASP Troop F	8773881697		Active
ASP Troop G	8773653023		Active
ASP Troop H	8773653025		Active
ASP Troop I	8773653018		Active
ASP Troop J	8772397472	9880	Active
ASP Troop K	8002669294		Active
ASP Troop L	8773653026		Active

STATEWIDE RADIO PROGRAMMING TEMPLATES

	ZONE									
	Z1	Z2	Z3	Z4	Z5	Z6	Z7	Z8	Z9	Z10
MODE / TALKGROUP										
1	A-LAW COM	A-DISP N	MAC CALL	A-EMS	ACIC	ASU	AFC	ADEM 1	SW1	
2	B-LAW COM	A-DISP S	MAC 1	B-EMS	AHP	ASU TAC1	AFC LAW	ADEM 2	SW2	
3	C-LAW COM	B-DISP	MAC 2	C-EMS	ALETA	UALR	AFC TAC1	CENTRAL 1	SW3	
4	D-LAW COM	C-DISP	MAC 3	D-EMS	CRIME LAB	ABC	DOC	CENTRAL 2	SW4	
5	E-LAW COM	D-DISP	MAC 4	E-EMS	HEALTH	ABC-ATCB	PRISONER	CENTRAL 3	SW5	
6	F-LAW COM	E-DISP	MAC 5	F-EMS	HUMAN SVC	ATCB	DOC TAC1	CENTRAL 4	SE1	
7	G-LAW COM	F-DISP	MAC 6	G-EMS	ADPT	NPSPC1D	JC DISP	CENTRAL 5	SE2	
8	H-LAW COM	G-DISP	MAC 7	H-EMS	ADPT ADM	NPSPC2D	SYS NET	NW1	SE3	
9	I-LAW COM	H-DISP	MAC 8	I-EMS	ADPT TAC	NPSPC3D	JC OES	NW2	SE4	
10	J-LAW COM	I-DISP	MAC 9	J-EMS	ADPT TAC2	NPSPC4D	JC VFD	NW3	SE5	
11	K-LAW COM	J-DISP	MAC 10	K-EMS	NAT GRD	NPSPC5D	CLEVLAND	NW4	NE1	
12	L-LAW COM	K-DISP	MAC 11	L-EMS	ADEQ	NPSPC1R	EMER NET	NW5	NE2	
13	PRISONER	L-DISP	MAC 12		CAP	NPSPC2R	INTEROP		NE3	
14	SO NET1		MAC 13		AG&F	NPSPC3R	DIRECT	FIRE ACAD	NE4	
15	SO NET2		MAC 14		DIS	NPSPC4R			NE5	
16	ASMD		MAC 15		DISTECH	NPSPC5R				

For Official Use Only

Part Time (Interoperability Only)

MODE / TALKGROUP	ZONE Z1	Z2	Z3	Z4	Z5	Z6	Z7	Z8
1	County TG	SW 1	MAC CALL	A-LAW COM	A-EMS	ACIC	ASU	AFC
2	ADEM 1	SW 2	MAC 1	B-LAW COM	B-EMS	AHP	ASU TAC1	AFC LAW
3	ADEM 2	SW 3	MAC 2	C-LAW COM	C-EMS	ALETA	UALR	AFC TAC1
4	CENTRAL 1	SW 4	MAC 3	D-LAW COM	D-EMS	CRIME LAB	ABC	DOC
5	CENTRAL 2	SW 5	MAC 4	E-LAW COM	E-EMS	HEALTH	ABC-ATCB	PRISONER
6	CENTRAL 3	SE 1	MAC 5	F-LAW COM	F-EMS	HUMAN SVC	ATCB	DOC TAC1
7	CENTRAL 4	SE 2	MAC 6	G-LAW COM	G-EMS	ADPT	NPSPC1D	JC DISP
8	CENTRAL 5	SE 3	MAC 7	H-LAW COM	H-EMS	ADPT ADM	NPSPC2D	SYS NET
9	NW 1	SE 4	MAC 8	I-LAW COM	I-EMS	ADPT TAC	NPSPC3D	JC OES
10	NW 2	SE 5	MAC 9	J-LAW COM	J-EMS	ADPT TAC2	NPSPC4D	JC VFD
11	NW 3	NE 1	MAC 10	K-LAW COM	K-EMS	NAT GRD	NPSPC5D	CLEVLAND
12	NW 4	NE 2	MAC 11	L-LAW COM	L-EMS	ADEQ	NPSPC1R	EMER NET
13	NW 5	NE 3	MAC 12	PRISONER		CAP	NPSPC2R	INTEROP
14	-	NE 4	MAC 13	SO NET1		AG&F	NPSPC3R	DIRECT
15	FIRE ACAD	NE 5	MAC 14	SO NET2		DIS	NPSPC4R	
16			MAC 15			DIS TECH	NPSPC5R	

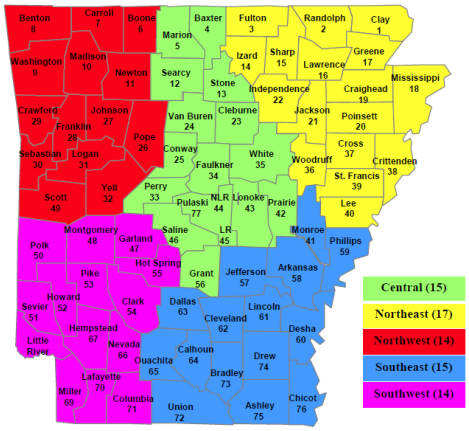
Trauma Communications

Zone number	Zone 1	Zone 2	Zone 3	Zone 4	Zone5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	Zone 11	Zone 12	Zone 13	Zone 14	Zone 15
Zone name	TRAUMA	MAC	ADEM 1	ADEM 2	EMS	ADM NW	ADM NC	ADM NE	ADM AV	ADM M	ADM SW-1	ADM SW-2	ADM SE	CONV	CONV OLD
1	TRAUMA 1	MAC CALL	ADEM 1	SW 1	A-EMS	BENT E DISP	BAXT E DISP	CLAY E DISP	CRAW E DISP	CONW E DISP	CALH E DISP	LITT E DISP	ARNA E DISP	8CALL90	NPSPC1R
2	TRAUMA 2	MAC 1	ADEM 2	SW 2	B-EMS	BOON E DISP	CLEB E DISP	GRAI E DISP	FRAN E DISP	FAUL E DISP	CLAR E DISP	MILL E DISP	ASHL E DISP	8TAC91	NPSPC2R
3	TRAUMA 3	MAC 2	CENTRAL 1	SW 3	C-EMS	CARR E DISP	FULT E DISP	CRIT E DISP	JOHN E DISP	LOND E DISP	COLU E DISP	MONT E DISP	BRAD E DISP	8TAC92	NPSPC3R
4	TRAUMA 4	MAC 3	CENTRAL 2	SW 4	D-EMS	MADI E DISP	INDE E DISP	CROS E DISP	LOGA E DISP	PERR E DISP	DALL E DISP	OUAC E DISP	CHIC E DISP	8TAC93	NPSPC4R
5	TRAUMA 5	MAC 4	CENTRAL 3	SW 5	E-EMS	NEWT E DISP	IZAR E DISP	GREE E DISP	POPE E DISP	PULA E DISP	GARL E DISP	PIKE E DISP	CLEV E DISP	8TAC94	NPSPC5R
6	TRAUMA 6	MAC 5	CENTRAL 4	SE 1	F-EMS	WASH E DISP	JACK E DISP	LAWR E DISP	POLK E DISP	SALI E DISP	NEVA E DISP	SEVI E DISP	DESH E DISP	8CALL90D	NPSPC1D
7	MAC CALL	MAC 6	CENTRAL 5	SE 2	G-EMS		MARI E DISP	LEE E DISP	SCOT E DISP		HEMP E DISP	UNIO E DISP	DREW E DISP	8TAC91D	NPSPC2D
8	WEATHER	MAC 7	NW 1	SE 3	H-EMS		SEAR E DISP	MISS E DISP	SEBA E DISP		HOTS E DISP	LAFA E DISP	GRAN E DISP	8TAC92D	NPSPC3D
9		MAC 8	NW 2	SE 4	I-EMS		SHAR E DISP	MONR E DISP	YELL E DISP		HOWA E DISP		JEFF E DISP	8TAC93D	NPSPC4D
10		MAC 9	NW 3	SE 5	J-EMS		STON E DISP	PHIL E DISP					LINC E DISP	8TAC94D	NPSPC5D
11		MAC 10	NW 4	NE 1	K-EMS		WAYN E DISP	PRAI E DISP							
12			NW 5	NE 2	L-EMS		WHIT E DISP	PORN E DISP							
13				NE 3			WOOD E DISP	RAND E DISP							
14				NE 4				STFR E DISP							
15				NE 5											
16															

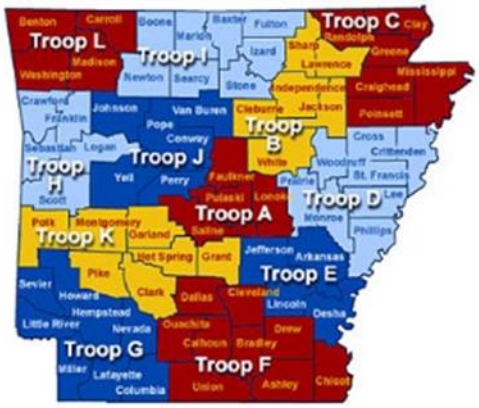
REFERENCE MATERIALS

Maps of Arkansas

ADEM Emergency Management Area Map



Arkansas State Police Troop Map



Communications Unit Leader (COML) Position Checklist

1. Obtain briefing from the Logistics Section Chief or Service Branch Director.
2. Organize and staff Unit as appropriate:
   a. Assign Communications Center Manager and Lead Incident Dispatcher.
   b. Assign Message Center Manager and ensure adequate staff is assigned to answer phones and attend to fax machines.
3. Assess communications systems/frequencies in use; advise on communications capabilities/limitations.
4. Develop and implement effective communications procedures (flow) internal and external to the incident/Incident Command Post.
5. Assess Incident Command Post phone load and request additional lines as needed.
6. Obtain copy of Communications Resource Availability Worksheet (ICS Form 217A) which provides RF information for the applicable area. If ICS Form 217A has not been completed or is unavailable, it should be prepared).
7. Prepare and Implement Incident Communications Plan (ICS Form 205):
   a. Obtain current organizational chart.
   b. Determine most hazardous tactical activity; ensure adequate communications.
   c. Make communications assignments to all other Operations elements, including volunteer, contract, or mutual aid.
   d. Determine Command communications needs.

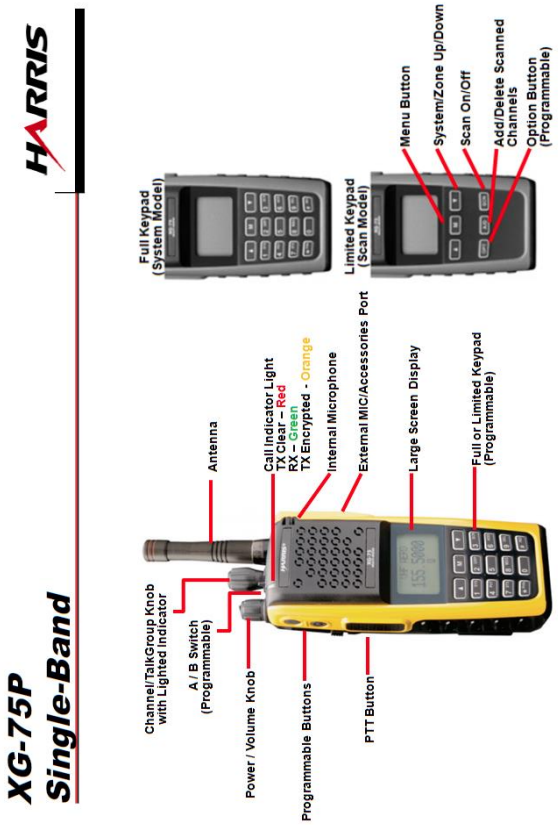
e. Establish and post any specific procedures for use of Incident Command Post communications equipment.

8. Include cellular phones and pagers in Incident Communications Plan (ICS Form 205T) if appropriate:
   a. Determine specific organizational elements to be assigned to telephones.
   b. Identify all facilities/locations with which communications must be established (shelters, press area, liaison area, agency facilities, other governmental entities' Emergency Operations Center [EOCs], etc.), and identify and document phone numbers.
   c. Determine which phones and what numbers should be used by specific personnel and their purpose. Assign specific telephone numbers for incoming calls, and report these numbers to staff and off-site parties such as other local jurisdictions, State and Federal agencies.
   d. Do not publicize OUTGOING call lines.
9. Activate, serve as contact point, and supervise the integration of volunteer radio organization into the communications system.
10. Ensure radio and telephone logs are available and being used.
11. Determine need and research availability of additional nets and systems:
   a. Order through Supply Unit after approval by Section Chief or appropriate official
   b. Federal systems:
      i. Additional radios and other communications devices, including repeaters, radio-telephone interconnects and satellite down-link capabilities

may be available through FEMA or the USDA's Forest Service.

12. Document malfunctioning communications equipment, facilitate repair.
13. Establish and maintain communications equipment accountability system.
14. As required, provide technical information regarding:
    a. Adequacy of communications system currently in use
    b. Geographic limitations of communications equipment
    c. Equipment capabilities
    d. Amount and types of equipment available
    e. Anticipated problems in the use of communications equipment
15. Estimate Unit needs for expected operations
16. As required, request relief personnel
17. Provide briefing to relief personnel on current activities and unusual situations.
18. Document all activity on Unit Log (ICS Form 214).

Radio Quick Reference Sheets


HARRIS
XG-75P
Single-Band
Full Keypad (System Model)
Limited Keypad (Scan Model)
Menu Button
System/Zone Up/Down
Scan On/Off
Add/Delete Scanned Channels
Option Button (Programmable)
Antenna
Call Indicator Light
TX Clear – Red
RX Green
TX Encrypted - Orange
Internal Microphone
External MIC/Accessories Port
Large Screen Display
Full or Limited Keypad (Programmable)
Channel/TalkGroup Knob with Lighted Indicator
A / B Switch (Programmable)
Power / Volume Knob
Programmable Buttons
PTT Button


HARRIS
XG-25P
Single-Band
Antenna
Speaker
External MIC/Accessories Port
Internal Microphone
Menu Button
System / Zone Up-Down
Scan On / Off
Add / Delete Scanned Channels
Channel/TalkGroup Knob
Power / Volume Knob
Call Indicator Light
TX Clear – Red
RX – Green
TX Encrypted - Orange
Programmable Buttons
PTT Button
Large Screen Display
Full or Limited Keypad
(Programmable)
Option Button (Programmable)

Motorola ASTRO XTS 2500, Model 1

ASTRO® XTS™ 2500 / XTS™ 2500I
Digital Portable Radio, Model I
Quick Reference Card

Product Safety and RF Exposure Compliance

Caution — Before using this product, read the operating instructions for safe usage contained in the Product Safety and RF Exposure booklet enclosed with your radio.

ATTENTION!

This radio is restricted to occupational use only to satisfy FCC RF energy exposure requirements. Before using this product, read the RF energy awareness information and operating instructions in the Product Safety and RF Exposure booklet enclosed with your radio (Motorola Publication part number 6881095C98) to ensure compliance with RF energy exposure limits.

Write your radio's programmed features on the dotted lines.

Radio On/Off

1. On - On/Off/Volume knob clockwise.
2. Off - On/Off/Volume knob counterclockwise.

Zones/Channels

1. Zone - Move **Zone** switch to desired zone.
2. Channel - Turn **Channel Selector** switch to desired channel.

Receive/Transmit

1. Radio on and select zone/channel.
2. Listen for a transmission.
   OR
   Press and hold **Volume Set** button. Release **Volume Set** button.
   OR
   Press **Monitor** button and listen for activity.
3. Adjust volume, if necessary.
4. Press and hold **PTT** to transmit; release to listen.

Send Emergency Alarm

1. Radio on and press **Emergency** button. You see red LED; you hear short, medium-pitched tone.
2. When dispatcher's acknowledgment is received, you hear four tones; alarm ends; radio exits emergency.

Send Silent Emergency Alarm

1. Radio on and press **Emergency** button. You see no LED; you hear no tone.
2. Press **PTT**.
3. Alarm continues until you exit by:
   - Press and hold **Emergency** button for one second
   OR
   - Press and release **PTT**.

Motorola ASTRO XTS 2500, Model 1.5

ASTRO® XTS™ 2500 / XTS™ 2500I
Digital Portable Radio, Model 1.5
Quick Reference Card

Product Safety and RF Exposure Compliance

Before using this product, read the operating instructions for safe usage contained in the Product Safety and RF Exposure booklet enclosed with your radio.

ATTENTION!

This radio is restricted to occupational use only to satisfy FCC RF energy exposure requirements. Before using this product, read the RF energy awareness information and operating instructions in the Product Safety and RF Exposure booklet enclosed with your radio (Motorola Publication part number 6881095C98) to ensure compliance with RF energy exposure limits.

Radio On/Off

1. On – On/Off/Volume knob clockwise.
2. Off – On/Off/Volume knob counterclockwise.

Zones/Channels

1. Zone – Move **Zone** switch to desired zone.
2. Channel – Turn **Channel Selector** knob to desired channel.

Receive/Transmit

1. Radio on and select zone/channel.
2. Listen for a transmission.
   OR
   Press and hold **Volume Set** button. Release **Volume Set** button.
   OR
   Press **Monitor** button and listen for activity.
3. Adjust volume, if necessary.
4. Press and hold **PTT** to transmit; release to listen.

Send an Emergency Alarm

1. Radio on and press **Emergency** button. You see red LED; you hear short, medium-pitched tone.
2. Display shows EMERGENCY.
3. When acknowledgment is received, you hear four tones; alarm ends; radio exits emergency.

Send a Silent Emergency Alarm

1. Radio on and press **Emergency** button. You see no LED; you hear no tone.
2. Press **PTT**.
3. Alarm continues until you exit by:
   - Press and hold **Emergency** button for one second
   OR
   - Press and release **PTT**.

Write your radio's programmed features on the dashed lines.

Motorola ASTRO XTS 1500, Model 1.5

ASTRO® XTS™ 1500
Digital Portable Radio, Model 1.5
Quick Reference Card

Product Safety and RF Exposure Compliance

Before using this product, read the operating instructions for safe usage contained in the Product Safety and RF Exposure booklet enclosed with your radio.

ATTENTION!

This radio is restricted to occupational use only to satisfy FCC RF energy exposure requirements. Before using this product, read the RF energy awareness information and operating instructions in the Product Safety and RF Exposure booklet enclosed with your radio (Motorola Publication part number 6881095C99) to ensure compliance with RF energy exposure limits.

Write your radio's programmed features on the dashed lines.

Radio On/Off

1. On – On/Off/Volume knob clockwise.
2. Off – On/Off/Volume knob counterclockwise.

Zones/Channels

1. Zone – Move **Zone** switch to desired zone.
2. Channel – Turn **Channel Selector** knob to desired channel.

Receive/Transmit

1. Radio on and select zone/channel.
2. Listen for a transmission.
   OR
   Press and hold **Volume Set** button. Release **Volume Set** button.
   OR
   Press **Monitor** button and listen for activity.
3. Adjust volume, if necessary.
4. Press and hold **PTT** to transmit; release to listen.

Send an Emergency Alarm

1. Radio on and press **Emergency** button. You see red LED, you hear short, medium-pitched tone.
2. Display shows EMERGENCY
3. When acknowledgment is received, you hear four tones; alarm ends; radio exits emergency.

Send an Emergency Call

1. Radio on and press **Emergency** button. A short, medium-pitched tone sounds.
2. Press and hold **PTT**. Announce your emergency into the microphone.
3. Release **PTT** to end call.
4. Press and hold **Emergency** button for one second to exit.

Motorola ASTRO APX 7000

MOTOROLA

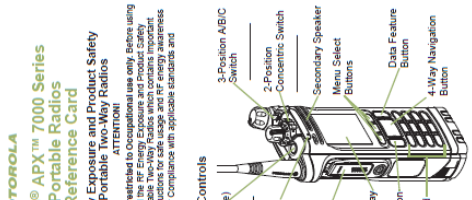
ASTRO® APX™ 7000 Series Digital Portable Radios Quick Reference Card

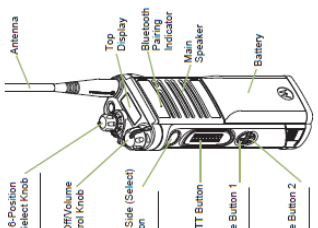
RF Energy Exposure and Product Safety Guide for Portable Two-Way Radios

ATTENTION!

This radio is restricted to Occupational use only. Before using the radio, read the RF Energy Exposure and Product Safety Guide for Portable Two-Way Radios which contains important operating instructions for safe usage and RF energy awareness and control for compliance with applicable standards and regulations.

Radio Controls





Receiving and Transmitting

1. Select zone/channel.
2. Listen for a transmission.
   OR
   Press and hold **Volume Set** button.
   OR
   Press **Monitor** button and listen for activity.
3. Adjust volume, if necessary.
4. Press the PTT button to transmit; release to receive.

Sending an Emergency Alarm

1. Press and hold the **Emergency** button*.
2. The display shows **Emergency** and the current zone/channel. Radio sounds a short, medium-pitched tone, and the LED blinks red momentarily.
3. When acknowledgment is received, you hear four beeps; alarm ends; and radio exits emergency.

** Default emergency button press timer is set to 1 second. This timer is programmable, see page 67 in the user guide for details.*

To exit emergency at any time, press and hold the Emergency button.

Radio On/Off

- **On** – On/Off/Volume knob clockwise.
- **Off** – On/Off/Volume knob counterclockwise.

Zones and Channels

- **Zone** – Zone switch to desired zone.
- **Channel** – Channel switch to desired channel.

68007024034-F

English

Motorola ASTRO APX 7000XE

MOTOROLA

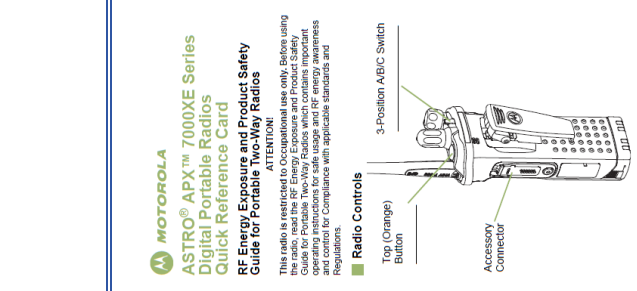
ASTRO® APX™ 7000XE Series Digital Portable Radios Quick Reference Card

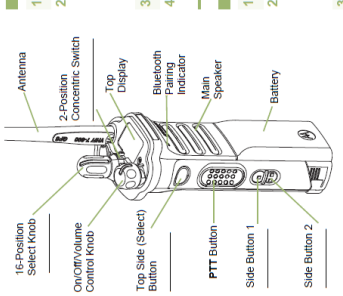
RF Energy Exposure and Product Safety Guide for Portable Two-Way Radios

ATTENTION!

This radio is restricted to Occupational use only. Before using the radio, read the RF Energy Exposure and Product Safety Guide for Portable Two-Way Radios which contains important operating instructions for safe usage and RF energy awareness and control for Compliance with applicable standards and Regulations.

Radio Controls





Radio On/Off

- **On** – **On/Off/Volume** knob clockwise.
- **Off** – **On/Off/Volume** knob counterclockwise.

Zones and Channels

- **Zone** – **Zone** switch to desired zone.
- **Channel** – **Channel** switch to desired channel.

Receiving and Transmitting

1. Select zone/channel.
2. Listen for a transmission.
   OR
   Press and hold **Volume Set** button.
   OR
   Press **Monitor** button and listen for activity.
3. Adjust volume, if necessary.
4. Press the **PTT** button to transmit; release to receive.

Sending an Emergency Alarm

1. Press and hold the **Emergency** button*.
2. The display shows **EMERGNCY** and the current zone/channel. A short, medium-pitched tone sounds, and the LED blinks red momentarily.
3. When acknowledgment is received, you hear four beeps; alarm ends; and radio exits emergency.

* ***Default emergency button press timer is set to 1 second.*** *This timer is programmable, see page 33 in the user guide for details.*

To exit emergency at any time, press and hold the ***Emergency*** *button.*

1303 East Algonquin Road, Schaumburg, Illinois 60196, U.S.A.

PMLN5818E

English

Sending an Emergency Call

1. Press the **Emergency** button.
2. Press and hold the **PTT** button. Speak clearly into the microphone.
3. Release the **PTT** button to end call.
4. Press and hold **Emergency** button to exit emergency.

*To exit emergency at any time, press and hold the **Emergency** button.*

Sending a Silent Emergency Call

1. Press the **Emergency** button.
2. The display does not change; the LED does not light up, and there is no tone.
3. Silent emergency continues until you:
   Press and hold the **Emergency** button to exit emergency state.
   OR
   Press and release the **PTT** button to exit the Silent Emergency Alarm mode and enter regular dispatch or Emergency Call mode.

*To exit emergency at any time, press and hold the **Emergency** button.*

Display Status Icons

	Blinks when the battery is low.
	The more stripes, the stronger the signal strength for the current site (trunking only).
	Direct radio to radio communication or connected through a repeater. **On** = Direct **Off** = Repeater
	This channel is being monitored.
	**L** = Radio is set at Low power. **H** = Radio is set at High power.
	Scanning a scan list.
	**Blinking dot** = Detects activity on the Priority-One Channel during scan. **Steady dot** = Detects activity on the Priority-Two Channel during scan.
	The vote scan feature is enabled.
	**On** = Secure operation. **Off** = Clear operation. **Blinking** = Receiving an encrypted voice call.
	**On steady** = View mode **Blinking** = Program mode

A or B or C	**Basic Zone Bank 1** **A** = Radio is in Zone 1. **B** = Radio is in Zone 2. **C** = Radio is in Zone 3.
D or E or F	**Basic Zone Bank 2** **D** = Radio is in Zone 4. **E** = Radio is in Zone 5. **F** = Radio is in Zone 6.
A, B, C ... ... X or Y	**Enhanced Zone Bank** **A** = Contains Zone 1, Zone 2 and Zone 3, **B** = Contains Zone 4, Zone 5 and Zone 6, **C** = Contains Zone 7, Zone 8 and Zone 9, . . . **X** = Contains Zone 70, Zone 71 and Zone 72, **Y** = Contains Zone 73, Zone 74 and Zone 75.
	Bluetooth is ready.
	Bluetooth is connected to the device.

For Official Use Only

Motorola ASTRO APX 4000, Model 2

MOTOROLA ASTRO® APX™ 4000 Model 2 Digital Portable Radios Quick Reference Card

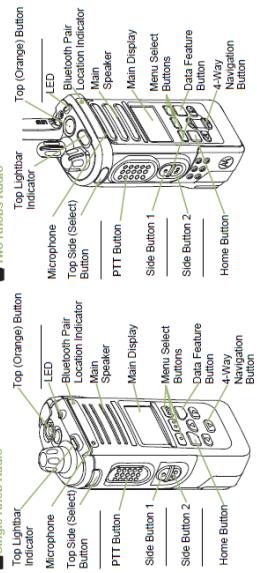
RF Energy Exposure and Product Safety Guide for Portable Two-Way Radios

ATTENTION!

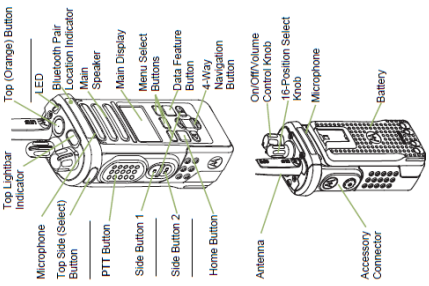
This radio is restricted to Occupational use only. Before using the radio, read the RF Energy Exposure and Product Safety Guide for Portable Two-Way Radios which contains important operating instructions for safe usage and RF energy awareness and control for Compliance with applicable standards and Regulations.

Radio Controls

Single Knob Radio



Two Knobs Radio



Radio On/Off

- **On** – Press and hold the **MFK** until the display lights up.
- **Off** – Press and hold the **MFK** until you see **Power off?**, then press **Menu** Select button below **Yes**.

Radio On/Off

- **On** – Rotate the **On/Off/Volume Control Knob** clockwise until you hear a click.
- **Off** – Rotate the **On/Off/ Volume Control Knob** counterclockwise until you hear a click.

Select Zone and Channel

1. Press the **MFK** to see on the screen.
2. Turn the **MFK** to scroll to desired zone or channel.
3. Press **MFK** to select the desired zone or channel and exit Mode Change.

Select Zone and Channel

1. Rotate the preprogrammed **16-Position Select Knob** to the desired channel.

Receiving and Transmitting

1. Select zone/channel.

1303 East Algonquin Road, Schaumburg, Illinois 60196, U.S.A.
10/14

PMLN6073E

English

2 Listen for a transmission.
OR
Press and hold **Volume Set** button.
OR
Press **Monitor** button and listen for activity.
3 Adjust volume, if necessary.
4 Press the PTT button to transmit; release to receive.

Sending an Emergency Alarm

1 Press and hold the **Emergency** button*.
2 The display shows **Emergency** and the current zone/channel. Radio sounds a short, medium-pitched tone, and the LED blinks red momentarily.
3 When acknowledgment is received, you hear four beeps, alarm ends, and radio exits emergency.
4 Press and hold the **Emergency** button to exit emergency.

** Default emergency button press timer is set to 1 second.*

Sending an Emergency Call

1 Press the **Emergency** button.
2 Press and hold the PTT button. Speak clearly into the microphone.
3 Release the PTT button to end call.
4 Press and hold **Emergency** button to exit emergency.

Sending a Silent Emergency Call

1 Press the **Emergency** button.
2 The display does not change; the LED does not light up, and there is no tone.
3 Silent emergency continues until you:
Press and hold the **Emergency** button to exit emergency state.
OR
Press and release the **PTT** button to exit the Silent Emergency Alarm mode and enter regular dispatch or Emergency Call mode.

Display Status Icons

	MFK is in Mode Change feature.
	MFK is in Volume Change feature.
	Receiving a call or data.
	Transmitting a call or data.
	Blinks when the battery is low.
	The more stripes, the stronger the signal strength for the current site (trunking only).
	Direct radio to radio communication or connected through a repeater. **On** = Direct **Off** = Repeater
	This channel is being monitored.
H or L	**L** = Radio is set at Low power. **H** = Radio is set at High power.
	Scanning a scan list.

Menu Navigation

‹ or › to Menu Entry.

•, ••, or ••• directly below Menu Entry to select.

⌂ to exit.

‹ or › to scroll through sub-list.

•, ••, or ••• directly below Menu Entry to select.

	Blinking dot = Detects activity on the Priority-One Channel during scan. **Steady dot** = Detects activity on the Priority-Two Channel during scan.
	The vote scan feature is enabled.
IP	On = User is currently associated with the radio. Off = User is currently not associated with the radio. **Blinking** = Device registration or user registration with the server failed due to an invalid username or pin.
	Data activity is present.
	Bluetooth is ready.
	Bluetooth is connected to the device.
	On = Secure operation. Off = Clear operation. **Blinking** = Receiving an encrypted voice call.
AES	On = AES Secure operation. Off = Clear operation. **Blinking** = Receiving an encrypted voice call.
	On = Location feature enabled, and location signal available. Off = Location feature disabled. **Blinking** = Location feature enabled, but location signal unavailable.

English

Using GETS and WPS

HOW TO MAKE A Government Emergency Telecommunications Service (GETS) CALL

For priority treatment from **landline** phones:

1. Dial 1-710-627-4387
2. At the tone, enter your 12-digit PIN
3. When prompted, dial your destination number (area code + number, or international number). Do not enter a 1 before the destination area code.

HOW TO MAKE A Wireless Priority Service (WPS) CALL

For priority treatment from **mobile** phones:

1. Requires presubscription to WPS
2. Enter *272 + Destination Number + Send (for example: *272 + 202-555-1212)
3. Optional *272 + 1 + 202-555-1212

WPS should not be used to call 911.

Emergency Communications Guidance

SAFECOM

www.dhs.gov/safecom

The National Emergency Communications Plan (NECP) is a strategic plan that sets goals and identifies key national priorities to enhance governance, planning, technology, training and exercises, and disaster communications capabilities. The NECP provides recommendations, including milestones, to help emergency response providers and relevant government officials make measurable improvements in emergency communications over the next three years.

National Public Safety Telecommunications Council (NPSTC) www.npstc.org

The National Interoperability Field Operations Guide (NIFOG) is a technical reference for emergency communications planning and for radio technicians responsible for radios that will be used in disaster response. The NIFOG includes rules and regulations for use of nationwide and other interoperability channels, tables of frequencies and standard channel names, and other reference material; formatted as a pocket-sized guide for radio technicians to carry with them. http://www.safecomprogram.gov/SAFECOM/nifog

Federal Emergency Management Agency (FEMA) www.fema.gov

The Department of Homeland Security Target Capability List (TCL) describes the capabilities related to the four Homeland Security mission areas: Prevent, Protect, Respond, and Recover. It defines and provides the basis for assessing preparedness. It also establishes national guidance for preparing the Nation for major all-hazards incidents, such as those defined by the National Planning Scenarios.

NIMS Integration Center

www.fema.gov/national-incident-management-system

The National Incident Management System (NIMS) provides a systematic, proactive approach to guide departments and agencies at all levels of government, nongovernmental organizations, and the private sector to work seamlessly to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life and property and harm to the environment.

Arkansas POC Information
Critical Telephone Numbers

Agency	24x7 Contact
Arkansas Department of Emergency Management (ADEM)	501-683-6700
Arkansas Wireless Information Network	501-683-1798
AWIN Program Director	501-682-5358
Arkansas State Police	501-618-8282
ARES/RACES/MARS (Through ADEM)	501-683-6700

Phonetic Alphabet

The phonetic alphabet (shown below) is the standard in Arkansas for transmission of difficult to pronounce words or place names. The excess use of the phonetic alphabet wastes time on radio networks. Clarification of words can very often be made using plain English spelling without the need to resort to phonetic spelling. When using the phonetic alphabet, the radio operator needs to proceed by using the pro word "I SPELL."

A- Alpha
B- Bravo
C- Charlie
D- Delta
E- Echo
F- Foxtrot
G- Golf
H- Hotel
I- India
J- Juliet
K- Kilo
L- Lima
M- Mike
N- November
O- Oscar
P- Papa
Q- Quebec
R- Romeo
S- Sierra
T- Tango
U- Uniform
V- Victor
W- Whiskey
X- X-ray
Y- Yankee
Z- Zulu

Glossary and Terms

ARCC	Arkansas Response and Coordination Center
Cache radios	Also known as “swapped radios,” refer to maintaining a cache of standby radios that can be deployed to support regional incidents. These radios may be from a regional cache or from a participating agency. These radios allow all responders to use common, compatible equipment during an incident.
CAM	Communication Assets Mapping
CAS	Communication Assets Survey
CASM	Communication Assets Survey and Mapping
COMC	Communications Coordinator
COML	Communications Unit Leader
COMT	Incident Communications Technician
CTCSS	Continuous Tone-Coded Squelch System
DHS	Department of Homeland Security
DIS	Department of Information Systems
EOC	Emergency Operations Center
Gateway Systems	Interconnect channels of disparate systems (whether on different frequency bands or radio operating modes), allowing first responders using their existing radios and channels to be interconnected with the channels of other

	users outside of their agency. Dispatch consoles that are able to create patches will also be captured as gateways.
FEMA	Federal Emergency Management Agency
FOG	Field Operations Guide
IC	Incident Commander
ICC	Incident Communications Center
ICP	Incident Command Post
ICS	Incident Command System
INCM	Incident Communications Center Manager
Interoperability	The ability to communicate between agencies that utilize disparate radio systems and other interoperability methods such as mutual aid channels, gateways, dispatch centers and radio caches. Interoperable resources are defined as shared systems, shared channels, gateways, and radio caches
Inter-System Shared Channels	Refers to common frequencies/talk groups established and programmed into radios to provide interoperable communications among agencies using ***different*** radio systems. "Channel," in this context, refers to the name of a common frequency/talk group visually displayed on a user's radio.
Intra-System Shared Channels	Refer to common frequencies/talk groups established and programmed into radios to provide interoperable communications among agencies using the ***same*** shared radio

	system. "Channel," in this context, refers to the name of a common frequency/talk group visually displayed on a user's radio.
MACS	Multiagency Coordination System
Mobile Communications Units (MCUs)	Also known as a Mobile Communications Centers (MCCs), Mobile Communications Vehicle (MCV), or Mobile EOCs) refers to any vehicular asset that can be deployed to provide or supplement communications capabilities in an incident area. Examples of the types of communications devices an MCU can house are: subscriber and base station radios of various frequency bands, gateway devices, satellite phones, wireless computer networks, video broadcasting/receiving equipment, etc. Typically these communications devices are permanently located or stored in the MCUs when not used. The MCU should also be able to temporarily provide the electrical power required to operate the communications devices.
MOUs	Memoranda of Understanding
NAC	Network Access Code
NECP	National Emergency Communications Plan
NIFC	National Interagency Fire Center
NIMS	National Incident Management System
NRF	National Response Framework
RADO	Radio Operator

Shared Systems	Refer to a single radio system used to provide service to several public safety agencies.
SEOC	State EOC
SOP	Standard Operating Procedure
THSP	Technical Specialist
TICP	Tactical Interoperable Communications Plan
UACSC	Urban Area Communications Steering Committee

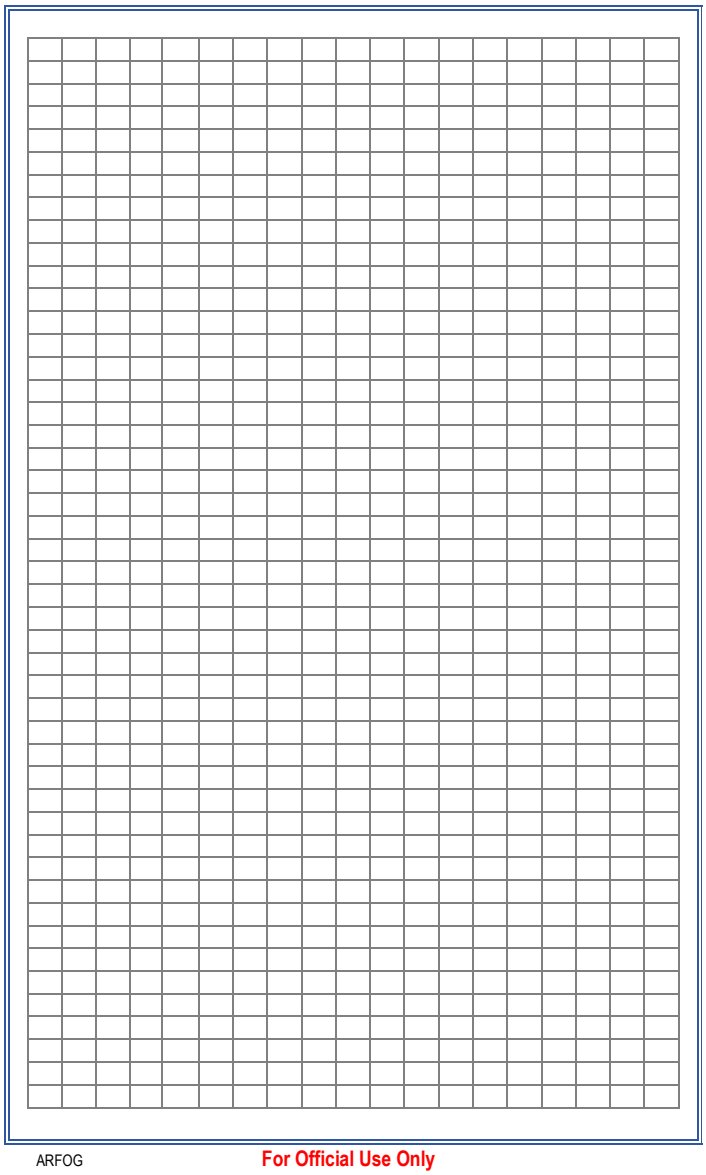
Web Site Links

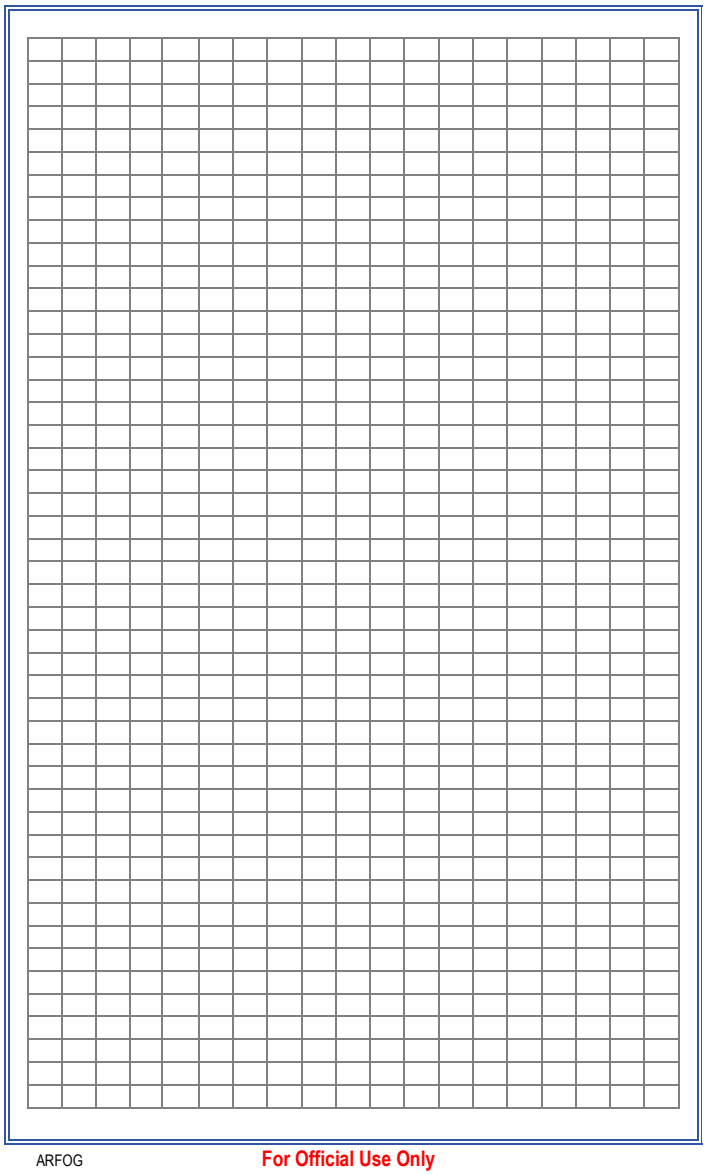
American Radio Relay League (ARRL): www.arrl.org
APCO International: www.apcointl.org
CASM: https://casmnextgen.com/login/LoginForm.php
DHS OEC: www.dhs.gov/about-office-emergency-communications
EMAC: www.emacweb.org
FCC Enfoncement Bureau: www.fcc.gov/eb
FCC Public Safety & Homeland Security Bureau: www.fcc.gov/public-safety-homeland-security-bureau
FCC Special Temporary Authority (STA): www.fcc.gov/encyclopedia/special-temporary-authority
FCC ULS: wireless.fcc.gov/uls
FEMA: www.fema.gov
Government Emergency Telecommunications Service (GETS): www.dhs.gov/gets
Homeland Security Information Network: http://www.dhs.gov/homeland-security-information-network-hsin
Lessons Learned Information Sharing: www.llis.gov
National Emergency Communications Plan: http://www.dhs.gov/xlibrary/assets/national_emergency_communications_plan.pdf
National Interagency Fire Center (NIFC): www.nifc.gov
National Interagency Incident Communications: www.fs.fed.us/fire/niicd
National Interoperability Information Exchange (NIIX): www.niix.org
National Regional Planning Council (NRPC) www.nrpc.us
National Response Framework Resource Center www.fema.gov/emergency/nrf/
National Telecommunications & Information Admin (NTIA): www.ntia.doc.gov
National Wildfire Coordinating Group (NWCG): www.nwcg.gov
NIFOG: http://publicsafetytools.info/nifog_info/nifog_info.php
NIMS Information: www.fema.gov/emergency/nims
NPSTC: www.npstc.org
Radio Reference: www.radioreference.com

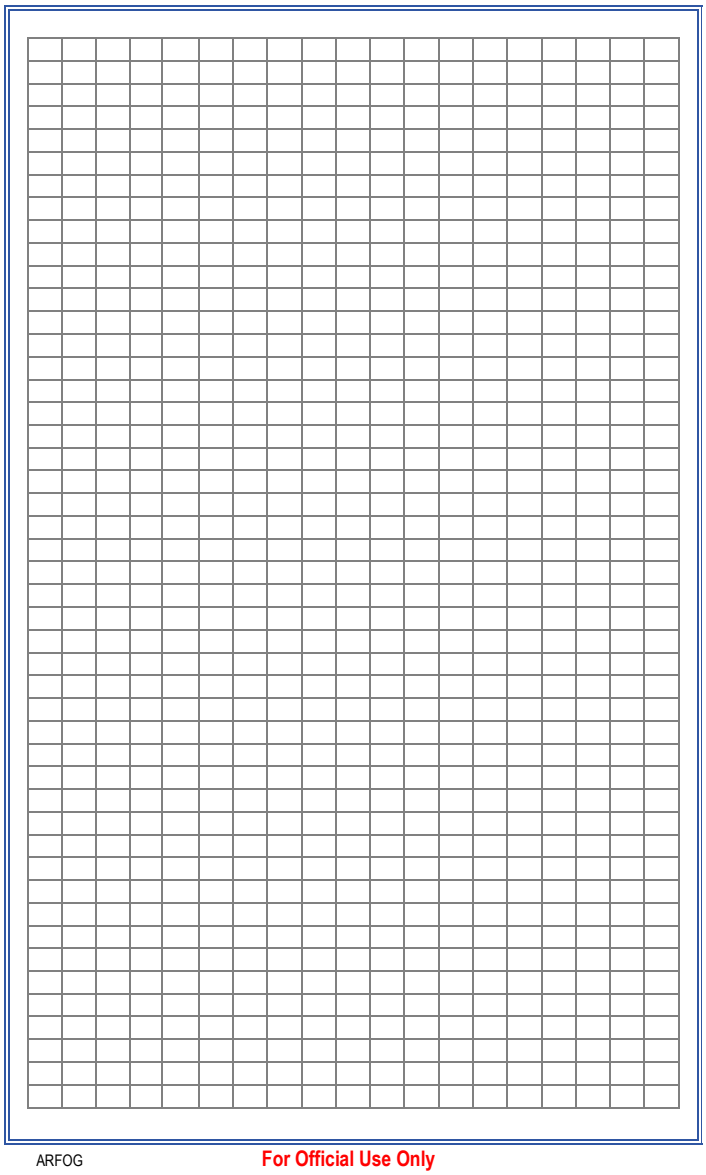
SAFECOM: http://www.dhs.gov/safecom
Telecommunications Service Priority: www.dhs.gov/tsp
Wireless Priority Service (WPS): www.dhs.gov/wps

NOTES

NOTES








Arkansas
Field Operations Guide
Arkansas Field Operations Guide (ARFOG)