- In order to make the most efficient use of the AWIN system, ADEM encourages all counties to utilize the following procedures.
- 1. Use the county talk group for day-to-day interoperable communications within your respective county.
- **2.** Use the regional channels for countywide or regional interoperable emergency communications.
- **3.** Plan and practice a process for converting personnel from the day-to-day radio system to the AWIN radio system.
- **4.** For the purpose of coordinating emergency operations, emergency management personnel will make initial contact on statewide channel ADEM CALL (ADEM 1)
- **5.** AWIN radios support the use of "talk around" mode. These talk groups are called NPSPAC 1-5 in the AWIN radio. These talk groups provide radio-to-radio communications. This will function within the transmission range of the radio being used. For a handheld radio, this is typically one mile or less.
- Keys to interoperable communications
  - 1. Know who you need to talk to
  - 2. Know why you need to talk to them
  - 3. Know when you need to talk to them
  - 4. Use plain-speak when you talk to them

## **AWIN Technology**

AWIN is a multiple site, statewide, trunked communications system based on a digital 700/800 MHz system using the Association of Public Safety Communications Officials (APCO) Project 25 (P-25) standard. APCO P-25 is the industry standard for public safety developed to allow any manufacturer's P-25 radios to operate on the system. AWIN provides statewide operations, within the coverage area of the system, for public service entities using P-25 digital 700/800 MHz radios. This type of system offers entities the following benefits:

- The ability to coordinate communications with other agencies or jurisdictions.
- The ability to purchase radios from more than one vendor.
- The ability to share resources to enhance communications and control costs.

## **AWIN** Contact Information

24/7 phone support and technical assistance Department of Information Systems Call Center at (501) 682-HELP (682-4357) or toll-free (800) 435-7989

Email: awin.support@arkansas.gov

AWIN Program assistance
Penny Rubow at
(501) 682- 5358
Email:
penny.rubow@arkansas.gov

Rebanding project assistance
David Baker at (501) 682-1185
Email:
david.baker@arkansas.gov

AWIN System technical assistance
Bruce Lantz at (501) 683-1339
Email:
bruce.l.lantz@arkansas.gov

# the Arkansas Wireless Information Network

# "Protecting Arkansas communities through communications"

## **AWIN...**Helping the people of Arkansas



Imagine being lost in the woods...it's dark and cold. Now imagine you're only five years old. Search and rescue teams in northwest Arkansas were faced with this very scenario in 2006. Teams from Benton, Carroll, Franklin, Madison, and Washington counties received the call. A young boy with medical problems was lost in rural Madison County. The teams responding to the incident worked with the Arkansas Department of Emergency Management (ADEM) throughout the night until the child was found.

One key in this successful search was the interoperable communications system, AWIN. "What's nice about the AWIN

system is that it allowed different counties and response agencies to communicate on a common system, and allow for communications back to our local jurisdictions during the search. Also, it allowed incident command at the site to coordinate with the searchers prior to them actually arriving on the scene," said Washington County Emergency Management Coordinator John Luther.

When tornados ripped through northeast Arkansas in April 2006 destroying homes and businesses, Randolph County officials were pleased with the assistance AWIN provided to relief efforts.

When county officials were alerted to damage caused by the storms, they put the AWIN system to work. Officials recruited cadets from the local training academy, arming them with AWIN radios to coordinate their assignments with the local dispatch center. In addition, deputies worked throughout the county and communicated using the AWIN system. "Using the AWIN radios worked really well for us. We didn't have to clutter up our other channels," said Randolph County Emergency Management Coordinator Marty Cagle.

Cagle was initially concerned that AWIN radios would be put into inventory and never used. After receiving the radios, Cagle took the initiative and did some coverage testing throughout the county with his AWIN portable. He was impressed with the clear reception in areas where agencies previously had no radio communications. "I was greatly surprised by the reception. It sounded like the dispatchers were right there next to me." Cagle even took the radio into a canyon where agencies had responded to emergencies before and was able to communicate with dispatchers from the bottom of a ravine.



# **About AWIN**



"AWIN is more successful because of the involvement of local officials in the project."
-Arkansas
County Judge
Sonny Cox



"Arkansas State Police is excited to provide the foundation for AWIN and glad to be a partner with other state and local agencies in bringing improved communications to Arkansas' first responders. Due to the success of these upgrades, for the first time ever ASP command can listen in on field operations anywhere in the state from our Critical Incident Command Center." -Arkansas State

**Police Colonel** 

**Steve Dozier** 

The disastrous events of September 11, 2001, focused attention on the urgent need for those responding to a crisis to be able to communicate reliably and effectively with each other. AWIN is addressing that need by providing interoperable communications throughout the State of Arkansas under Command and Control plans designed by each county. According to Arkansas County Judge and Steering Committee Member Sonny Cox, "AWIN is the future of communications between county and state officials and first responders."

Interoperable communications is the ability of public safety and public service personnel to communicate and coordinate with other agencies or entities throughout the state via AWIN. Based on the Command and Control plan, any entity designated by the county judge as a part of the Command and Control structure receives some level of AWIN capable communications.

In order to make the AWIN project a success, local and state representatives recognized several areas that needed to be addressed.

- 1. Equipment. The Arkansas State Police radio system provided the statewide infrastructure which could be upgraded to meet interoperability needs. The work to upgrade the system from analog to digital was completed in February 2006.
- 2. Funding. The State of Arkansas, guided by the Arkansas Department of Emergency Management (ADEM), identified funding methods, in addition to more than \$20 Million in bond funds from the Arkansas State Police, to be used for upgrading existing systems, adding additional tower sites in five counties, and deployment of equipment to the first responder leadership in every county of the state. By leveraging existing infrastructure and making prudent decisions with federal and state funding, the State of Arkansas now has a system valued in excess of \$200 Million.
- **3. Planning.** During the planning and design process, the State of Arkansas obtained the services of a third party engineering firm to ensure sound project planning and infrastructure design. The firm continues to provide insight on the project and strategic planning to ensure a high level of return on investment.
- 4. Coordination and cooperation. Two groups were formed and assigned responsibility for the AWIN system. The AWIN Steering Committee provides direction and guidance to AWIN Program Management. The AWIN Local Leadership Council provides the local point-of-view and provides advice and guidance to the AWIN Steering Committee.
- 5. Radio spectrum. Project team members coordinated with the State's Association of Public Safety Communication Officials (APCO) representative to identify and resolve licensing issues. Further, the state is actively involved in the 800 MHz re-banding effort and is in the planning phase for addressing Arkansas' needs for 700 MHz and 800 MHz issues.

## AWIN's role in public safety

### **Better Incident Management**

- AWIN assists in management of personnel during a crisis...Local radio systems can be used for operations, while the AWIN system relays Command and Control traffic. All personnel responding to an incident with AWIN capable equipment can be directed to an assigned talk group allowing all responders to receive the same information in real-time.
- First Responder Leadership can communicate with each other to make quick and effective command decisions.
- Command personnel can monitor and coordinate an incident from anywhere in the State of Arkansas utilizing AWIN.
- Radios can be used in "talk-around" mode (direct radio to radio, bypassing the tower) if more appropriate for an incident.

#### **Clear Continuous Communication**

- Audio quality is advantageous on the AWIN system
- Troop boundaries have been eliminated, allowing for statewide roaming and better coverage.

#### **Peace of Mind**

- Multiple points of system monitoring help to ensure that problems are identified and addressed quickly.
- Multiple locations around the state with trained technicians.
- 24 X 7 call center and technical support.
- Readily available technical field support that can be deployed to remote sites.

#### **Helpful Hints for Emergency Managers**

- AWIN program management recommends all entities on the system utilize NIMS standards when dealing with multiple agency events.
- It is the responsibility of the Incident Commander (IC) to coordinate interoperable communications.
- AWIN is a tool for interoperable communications.
- AWIN offers the IC the following methods to achieve interoperable communications during an emergency.
  - 1. Use of ADEM regional talk groups. These talk groups are on first-come basis and do not require notification of ADEM for use.
  - Use of ADEM Mutual Aid Channels (MAC). To utilize these talk groups the IC should contact ADEM and request a MAC channel for the event.



(2.)