TABLE OF CONTENTS

Section 1. INTRODUCTION

Section 2. COMMUNICATIONS SYSTEMS

   2-1. Commercial Telephone System
   2-2. Satellite Telephone System
   2-3. Cellular Telephone System
   2-4. Internet Communications
   2-5. Radio Systems
   2-6. Mobile Communications
   2-7. Mail & Courier Service

Section 3. IT SYSTEMS

   3-1. Local Area Network (AZDEM) and IT Services
   3-2. E-Team Emergency Information Management System
   3-3. MAGNET

Section 4. ALERT SYSTEMS

   4-1. Emergency Alert System (EAS)
   4-2. National Warning System (NAWAS)
   4-3. Notification and Alert Network (NAN)
   4-4. PVNGS Siren System
   4-5. Communicator Notification System

Section 5. NOTIFICATION & RECALL

Section 6. GLOSSARY
Appendices:
   A. Job Aids
      i. 2616 Digital Phone Operation
      ii. 8009 Analog Phone Operation
      iii. SEOC Satellite Phone Operation
      iv. Deployable Satellite Phone Operation
      v. SEOC Message Center Fax Operation
      vi. Activation of Phones at Alternate SEOC
      vii. Motorola XTS 5000 Operation
   B. Memorandums of Understanding, Inter-Governmental Agreements, SOP’s & Policies
      i. Arizona Public Service (800MHz Radio System, AZ EOC Network)
      ii. RACES
      iii. Communicator NXT
      iv. AZ EOC Network Western States Interoperability Project
      v. Mobile Interoperable Communications Systems
      vi. DEMA IT Policy
   C. Equipment Testing & Checklists
      i. AZ EOC Network Weekly Preamble
      ii. AZ EOC Network Weekly Checklist
      iii. DEMA Radio Network Weekly Preamble
      iv. DEMA Radio Network Weekly Checklist
      v. Mobile Interoperable Communications Systems Testing
      vi. Communicator NXT Testing
      vii. EAS Testing
      viii. Mobile Interoperable Communications Systems Operator Training
      ix. Mobile Interoperable Communications Systems Startup/Shutdown
PREFACE

This plan is published under the authority of Governor of the State of Arizona Executive Order 76-7, dated August 3, 1976, and Title 26, Arizona Revised Statutes (ARS).

The Arizona Division of Emergency Management Emergency Communications Plan replaces general Communications Annexes, Procedures and other communications guidance contained in existing Arizona Division of Emergency Management Emergency Response Plans. However, it does not replace annexes or procedures which provide detailed requirements for a particular operation, e.g., Fixed Nuclear Facility Off-Site Emergency Response Plan, or when such communications requirements are in addition to the support provided for in this plan.

Some security-sensitive items in this plan have been edited for public web viewing. Original documents are kept on file with the Arizona Division of Emergency Management.
SECTION 1. INTRODUCTION

A. Organizational Mission. The mission of the Division of Emergency Management is:

Mission: The Division shall coordinate emergency services and the efforts of governmental agencies to reduce the impact of disaster on persons and property.

B. Communications Mission.

1. The Arizona Division of Emergency Management is responsible for developing, maintaining and operating primary, secondary and alternate communications systems which will allow state government to collect and disseminate information, receive requests for assistance, and direct, control and coordinate state disaster response and recovery operations through continuing communications with local governments, the federal government, and responding state agencies.

2. The Arizona Division of Emergency Management will assist local jurisdictions in developing, maintaining and operating emergency communications systems by providing technical guidance and program development assistance that may be necessary to assure coordinated and integrated statewide emergency communications support.

C. This Communications Plan published by the Arizona Division of Emergency Management supports the accomplishment of its mission and supplements provisions of the State Emergency Response and Recovery Plan and State Emergency Operations Center Standard Operating Procedures and incorporates by reference other communications plans and agreements promulgated under separate authority, e.g., the Offsite Emergency Response Plan for PVNGS and the State Plan for the Emergency Alert System.

D. AUTHORITY. This plan is published under the authority of Governor of the State of Arizona via Executive Order 76-7, dated August 3, 1976, and Title 26, Arizona Revised Statutes.

E. GENERAL.

1. References.
   b. Title 26, Arizona Revised Statutes.
   c. State Emergency Response and Recovery Plan
   d. State Emergency Operations Center Standard Operating Procedures
   e. Offsite Emergency Response Plan for PVNGS
   f. State Plan for the Emergency Alert System
   g. Arizona State Warning Point Operations Guide for Use of the National
Warning System (NAWAS)
h. Stafford Act (Disaster Relief Act of 1974)(Public Law 93-288)
i. Code of Federal Regulations Title 44.
k. Communications Act of 1934, Presidential War Emergency Powers

2. Situation. The Governor of Arizona and its political jurisdictions must be capable of responding to any declared or undeclared emergency affecting the people and property within the State. These emergencies and disasters may be caused by nature, technology, or civil in nature; they may be national, statewide, or local in scope. The Governor and other State and Local officials must have the capability to direct, control and coordinate emergency response and recovery resources to reduce the loss and suffering of persons and property.

3. Purpose. This plan describes the communications capabilities and resources available to direct, control and coordinate emergency response and recovery resources; establishes responsibilities for communications operations; and defines operating procedures to support State and Local government jurisdictions during time of emergency or disaster.

4. Definitions. (See Glossary)
SECTION 2. COMMUNICATIONS SYSTEMS

A. Operations

1. Concept. The State of Arizona Emergency Communications net is a redundant system employing HF, VHF, UHF, and 800 MHz radio in fixed and mobile configurations, amateur radio, and dedicated, cellular and common user telephone systems. The State Emergency Operations Communications Center (SEOCC) is equipped to serve as Net Control on selected radio nets, and to interface and serve as an operating station on other state agency, law enforcement, and National Guard communications nets. Should any emergency arise which would necessitate activation of the State EOC, the Director of Emergency Management, serving as the Governor's designated representative, has primary responsibility for the EOC. The Division of Emergency Management Telecommunications Manager, under the direction of the EOC Logistics Chief, exercises direct supervision of the EOC communications systems.

2. Communications Strategy. The Division intends to develop a comprehensive emergency communications capability, which provides multiple redundancies and coverage to the entire state. The following matrix reflects current capabilities:

<table>
<thead>
<tr>
<th></th>
<th>Non-Emergency</th>
<th>Emergency</th>
<th>Ground</th>
<th>Mobile</th>
<th>Airborne</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Telephone</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satellite Telephone</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Cellular Telephone</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Internet</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Radio (UHF, VHF, HF)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Mail &amp; Courier Svc</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>IT/E-Mail Systems</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Alert Systems</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Direction, Coordination and Control.

a. Agencies having communications systems used in support of established responsibilities will normally retain operational control of those systems and equipment during emergency operations. The Director of Emergency Management, as the Governor's designated representative, may exercise overall coordination of communications systems belonging to the State of Arizona, and may use directive authority on behalf of the Governor when so designated. He may also coordinate the use of communications systems of one or more political subdivisions when
requested to do so by the using jurisdiction.

b. The Arizona Division of Emergency Management, Telecommunications Manager will exercise normal coordination with other state agencies, local jurisdictions, Federal and interstate agencies in developing operating plans and systems to assure an integrated and responsive emergency communications system. The Telecommunications Manager may exercise directive control of other state communications systems when so authorized by the Governor or the Governor’s designated representative, or when asked to do so by a county or local jurisdiction.

c. The normal communications flow is from the State EOC to County EOC, State EOC to Federal EOCs, and from State EOC to interstate EOCs. The State EOC Communications Center serves as net control for all ADEM controlled communications systems, and is the interface for all national, regional, and interstate communications operations.

4. Organization

a. The State of Arizona Emergency Communications System is organized to provide maximum flexibility and reliability in meeting statewide emergency requirements.

b. Alternate means of communications are an integral part of the system.

c. Mobile vans provide flexibility and access capability for numerous other statewide communications systems.

d. Systems configurations allow flexible staffing to meet specific operational requirements.

e. Redundancy in some modes is designed to assure reliability varying operational and geophysical environments.

f. Systems organization is further defined in Annex A, Systems Description, of this plan.

5. Responsibilities

a. The Governor of Arizona exercises executive authority over all state resources in accordance with the Arizona Statutes as revised, and exercises directive authority over the Director of Emergency Management and other State Directorates or Departments as specified.

b. The Director of Emergency Management is responsible for:
1. Exercising directive authority over all ADEM operations; and, coordinating and directing other state agencies communications resources within the limits established by the Governor.

2. Developing and supervising a comprehensive, statewide emergency communications program.

3. Coordinating with national, international, and interstate agencies to develop and integrate emergency operations plans.

4. Approving intrastate and interstate, national and international emergency communications support plans insofar as they pertain to the State of Arizona.

5. Appointing and supervising an ADEM Communications Officer.

c. The ADEM Communications Officer will:

1. Develop and maintain primary, secondary and alternate communications systems for contact with local jurisdictions, other state agencies, interstate, and national and international agencies as required support an All Hazards emergency management program.

2. Maintain liaison and coordinate with other state agencies, local jurisdictions, interstate, national and international agencies as required to prepare emergency communications operations plans.

3. Assist other state agencies and local jurisdictions in coordinating and developing emergency communications improvements.

4. Prepare, coordinate and promulgate comprehensive emergency communications plans in support of the State of Arizona Emergency Response Plans.

5. Supervise planning and operating the State of Arizona Emergency Operations Communications Center and the Alternate State of Arizona Emergency Operations Communications Center(s).

d. Local Jurisdictions are responsible for:

1. Developing, maintaining and operating local emergency communications systems in support of the local and State Emergency Communications Plan.
2. Coordinating with and being responsive to statewide emergency communications systems requirements.

e. Other State Agencies - During a declared emergency, the following state agencies will assist the Division of Emergency Management in maintaining communications through secondary and alternate systems: Department of Public Safety (DPS); Department of Transportation (ADOT); State Land Department (SLD); State Game and Fish Department; Department of Agriculture; Corporation Commission; Department of Emergency and Military Affairs (AZNG); Civil Air Patrol (CAP).

f. Radio Amateur Civil Emergency Services (RACES) will provide alternate emergency radio communications support per MOU, Appendix B.

g. Military Amateur Radio Services (MARS) will provide alternate emergency radio communications support unless precluded by Section 606, Communications Act of 1934, Presidential War Emergency Powers.

h. Amateur Radio Operators will provide alternate emergency communications support unless precluded by Section 606, Communications Act of 1934, Presidential War Emergency Powers.

i. The federal government, through FEMA Region IX, may provide supplemental communications assistance when state or local systems are inoperable. Such supplemental assistance would be discontinued when sufficient state or local systems have been reestablished.

j. The Civil Air Patrol, Inc., will provide emergency radio communications support per MOU, Appendix C.

k. Mutual Aid. The Division and the State of Arizona are signatories to a variety of mutual aid agreements, which extend the availability of communications resources. The following references and agreements should be referred to as necessary:

1. Title 26-309, Mutual Aid, Arizona Revised Statutes.
B. Execution. The Arizona Emergency Communications Plan may be implemented, in whole or in part, at any time, to support national, international, state, interstate, or local disasters; or, for emergencies that may be declared or undeclared by the Federal Government, the Governor of Arizona, the Director of the Arizona Division of Emergency Management, or at the request of a local jurisdiction. Implementation may require full or partial operation of the Emergency Operations Communications Center. Operation and staffing under designated emergency conditions will be stated in Annex D of this plan.

1. Pre-emergency Phase

   a. Local Jurisdictions. Develop and maintain a primary and alternate communications capability at a central location, which is designated for coordinating vital emergency services.

   b. State Agencies

      1. Arizona Division of Emergency Management (ADEM)

         (a) Coordinate plans and procedures of agencies and organizations involved in the State Emergency Communications System.

         (b) Develop, test and promulgate communications operations plans and procedures.

         (c) Develop procedures for activating, staffing, and operating the EOC Communications Center under varying emergency conditions.

         (d) Conduct personnel training and communications exercises on a local and statewide basis, as deemed necessary, to assure responsive and reliable communications support.

         (e) Identify key personnel and, develop and implement security programs which will assure that only authorized and trained personnel are allowed access to emergency communications equipment or systems.

   2. Other state agencies and organizations involved in the State Emergency Communications System:

      (a) Develop emergency communications support plans which make provisions for providing alternate or supplementary support to the State Emergency Communications System.
(b) Identify key personnel and implement security programs which will assure only authorized and trained personnel have access to emergency communications equipment and systems.

(c) Conduct or participate in periodic tests or exercises as deemed necessary to assure responsive and reliable communications support.

(d) Coordinate emergency communications support plans, or changes thereto, with the ADEM Communications Officer.

2. Emergency Phase

a. Warning. The emergency phase may be national, state or local in nature, and, may be declared or undeclared at the time of occurrence. Warnings may originate from National Warning Points, State Warning Points or at the request of local jurisdictions. Warnings or alerts may be associated with existing or eminent threat(s) to National security, imposing threat(s) of natural disaster, or any incident, which may pose a threat to life or property. Emergency Warnings will be disseminated as in Annex B of this plan.

b. Execution. Execution of ADEM’s Communication, Alert & Notification Plan will be as directed by the Governor of the State of Arizona, the Director, Division of Emergency Management or his authorized representative. Execution of this plan will be in accordance with Annexes A though D of this plan.

C. System Description. The State of Arizona Emergency Communications System consists of redundant capabilities to communicate with national and international agencies, State and Local jurisdictions, other state agencies, state military forces, amateur radio bands and some public utility frequencies. Each capability is described separately in the following sub-sections:

1. Commercial Telephone and Land Lines;
2. Satellite Telephone System;
3. Cellular Telephone System;
4. Internet Communications;
5. Radio Systems; and,
6. Mail & Courier Service
Figure 2-1. Radio-Telephone System

STATE OF ARIZONA
DIVISION OF EMERGENCY MANAGEMENT COMMUNICATIONS AND MESSAGE CENTER

Federal Emergency Mgmt. Electronic Mail System
Federal Emergency Mgmt. National Radio System (FNARS)
National Warning Center (NAWAS)
National Weather Service (NWS)
Federal Hwys Administration Emergency Comm System

DPS
ADOT
LAND DEPT.
APS
ARC
CAP
EAS

Other States
CAP
MARS
Amateur
AZ ANG
Other Military

Military Affiliate Radio (MARS)
Radio Amateur Civil Emergency Services (RACES)
Amateur Radio Volunteers
ADEM Communications Vans

Computer Modem
HF Radio
HF Radio with Packet
HF/VHF Radio

Desig. MARS Frequencies
Desig. RACES Frequencies
HF/VHF/800 Amateur Bands
HF/VHF/800 Amateur/Military

Telephone

General Public
City/County Units
County Emergency Operations Centers (EOC)
Indian Tribes

State Agencies

EAS
Telephone

Palo Verde Nuclear Generating Station (PVNGS)
Telephone

Federal Emergency Mgmt. National Radio System (FNARS)
National Warning Center (NAWAS)
National Weather Service (NWS)

Update September 2008
SECTION 2-1. COMMERCIAL TELEPHONE COMMUNICATIONS

A. Commercial Telephone service is available to all state agencies, local jurisdictions, Indian tribes, and national and international agencies. During non-emergency and most emergency conditions the telephone system will be the primary means of communications.

1. The State EOC PBX provides telephone drops to approximately 270 extensions. Ninety-five (95) of these lines are used on a daily basis. Up to 175 lines are available for use when the EOC is activated. Incoming calls to the State EOC for emergency information are routed to the ADEM console (244-0504) or may go directly to an individual or organization if the direct-in-dial number is known by the caller. The Arizona Telecommunications System (ATS) may be accessed by any PBX extension.

   - The State EOC PBX is hard-wired to an Iridium MXU-2000R satellite phone. This unit provides two satellite lines, accessible from any phone on the switch. Outside numbers can also call into the State EOC via the MXU.

   - The State EOC is equipped with eight (8) analog lines from DEMA’s switch for redundancy.

2. There are five (5) dedicated, ring-down landlines available to the State EOC. These special circuits are terminated in the Governor's office, the Department of Public Safety (DPS), the Arizona Radiation Regulatory Agency (ARRA), Maricopa County Sheriff and Department of Emergency Management, and various locations within the Arizona Public Service, Palo Verde Nuclear Generating Station, Utilities Company.

3. ADEM houses and supports the AZ 2-1-1 Call Center, which is designed to provide information and answer calls from the general public in the event of any emergency. The general public can dial 2-1-1 from any landline or cellular phone in Arizona to hear recorded information, or reach a live call center representative during call center activation.

4. The Government Emergency Telecommunications Service (GETS) is an emergency communications service designed to be used when National Security and Emergency Preparedness (NS/EP) personnel are unable to complete emergency calls through their regular telecommunications means. GETS uses a calling card to provide federal, state, local government, and industry NS/EP users with a higher probability of call completion during periods of natural or man-made disasters or emergencies that cause congestion or network outages. GETS features are implemented as software enhancements to the telephone switches throughout the Public Switched
Network (PSN).

The Division of Emergency Management manages 21 GETS cards.

4. Phone testing. The following are scheduled phone system checks:

<table>
<thead>
<tr>
<th>Service</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Information Center</td>
<td>Monthly</td>
</tr>
<tr>
<td>211 Call Center</td>
<td>Monthly</td>
</tr>
<tr>
<td>Emergency Operations Center</td>
<td>Monthly</td>
</tr>
<tr>
<td>Satellite</td>
<td>Monthly</td>
</tr>
<tr>
<td>Alternate State EOC</td>
<td>Quarterly</td>
</tr>
<tr>
<td>GETS &amp; WPS System</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Workstation Extensions</td>
<td>Upon Request / Used Daily</td>
</tr>
</tbody>
</table>
SECTION 2-2. SATELLITE TELEPHONE COMMUNICATIONS

Description: The Division provides minimal satellite telephone capability to ensure the Division / SEOC has can maintain communications during power failures, system congestion, and when operating liaison/assessment staff from remote field locations. The Division procured satellite phones for each county office of emergency management to provide, as a minimum, a complete satellite link with the county managers and their emergency operations centers. Additional satellite phone capability exists in the Division’s communications vans. A number of satellite phones will be maintained at the SEOC to be dispatched as needed.
SECTION 2-3. CELLULAR TELEPHONE COMMUNICATIONS

Description: The Division provides cellular telephone capability in an effort to maintain communications during power failures, system congestion, and when operating liaison/assessment staff from remote field locations. *Verizon* cellular telephones are provided to key staff and to field staff; a number of phones are maintained at the SEOC to be dispatched as needed.

During emergencies, cellular providers can experience congestion in their networks, severely curtailing the ability to use cellular services. To facilitate completion of critical calls during these high usage events, WPS gives authorized NS/EP personnel priority cellular access before subscribers who do not have WPS. WPS will not preempt calls in progress and does not guarantee call completion.

The Division of Emergency Management manages 6 WPS accounts.
SECTION 2-4. E-MAIL COMMUNICATIONS

Description: With the Department’s IT network using a broadband connection to the Internet, the Division provides the capability to communicate with the emergency management community via E-mail. Additional E-mail connectivity can be made using PDAs to provide the Division / SEOC with additional and redundant telephone capability in an effort to maintain communications during power failures, system congestion, and when operating liaison/assessment staff from remote field locations. The SEOC also has backup email capability through HF radio and WinLink.
SECTION 2-5. RADIO COMMUNICATIONS


B. Very High Frequency (VHF) radios provide coverage in the aircraft bands of 116-136 MHZ, law enforcement bands of 150-174 MHZ, and amateur 2-meter band 144-148 MHZ. In addition, VHF low band frequencies are available for contact with the Arizona Land Department, American Red Cross, Maricopa County Emergency Management and local law enforcement agencies.

C. Ultra High Frequency (UHF) radio coverage is available with the Department of Public Safety (DPS), Amateur bands and Maricopa County Emergency Management. The 800 MHZ APS system is used primarily to link the 15 county EOCs and 5 communications vehicles with the State EOC. The system also links Arizona Radiation Regulatory Agency (ARRA) field forces and the State EOC when an incident at the Palo Verde Nuclear Generating Station requires off-site response. ADEM manages a cache of 20 portable 800 MHz radios.

D. All VHF and UHF frequencies are interfaced with touch-tones and sub-audible tones for statewide repeater access. Phone patch capabilities exist for all radio services. The radio frequency coverage available to the SEOC and its mobile communications vans is:

1. SEOC radio frequency coverage:
   - All HF frequencies between 1.6 and 30 MHZ
   - All VHF and UHF Amateur Bands
   - All VHF, UHF & 800 MHz Public Safety
   - All HF, VHF and UHF Civil Air Patrol frequencies
   - DEMA VHF Radio Network (DRN)
   - Arizona Public Service 800 MHz Network

2. Communications van radio frequency coverage:
   - All Amateur HF frequencies
   - All VHF and UHF Amateur Bands
   - Selected State and Local Agency VHF and UHF frequencies
   - DRN
   - Arizona Public Service 800 MHz Network

E. The radio communications systems utilized are indicated below and detailed in this section:

1. Federal Emergency Management Agency National Radio System (FNARS)
2. State Agency Radio Nets
3. DRN
4. Amateur Radio
5. Civil Air Patrol

F. Radio testing. The following are scheduled radio net checks:

1. Net checks from the State Emergency Operations Center:

<table>
<thead>
<tr>
<th>Radio Net</th>
<th>Frequency</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>APS 800 MHz</td>
<td>Weekly</td>
<td>Wednesday AM</td>
</tr>
<tr>
<td>DRN</td>
<td>Weekly</td>
<td>Wednesday AM</td>
</tr>
<tr>
<td>FNARS (FEMA HF)</td>
<td>Weekly</td>
<td>Wednesday AM</td>
</tr>
<tr>
<td>SHARES</td>
<td>Weekly</td>
<td>Wednesday AM</td>
</tr>
</tbody>
</table>

2. Off-site checks:

<table>
<thead>
<tr>
<th>RACES(HF)</th>
<th>Frequency</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Weekly</td>
<td>Sunday AM</td>
</tr>
</tbody>
</table>

G. Federal Emergency Management Agency National Radio System (FNARS). The Federal Emergency Management Agency National Radio System (FNARS) is a High Frequency, (1.8 MHz to 30 MHz) continuous or auto scan and lock voice and radio packet system. The system provides long distance voice and text communications with FEMA Headquarters, FEMA Region IX and other regions, other State EOCs, and other national or international agencies that are equipped with like capabilities. The system is Electromagnetic Pulse (EMP) protected to assure continued communications, even under National Security conditions. The FNARS and the equipment belong to the Federal Government and is operated on frequencies designated by the FCC for National Emergency Radio Services.

H. State Agency Radio Nets.

1. Other State agencies have radio communications networks to support their mission. Annex A of this plan, the State Telecommunications Microwave and Radio Systems (2002), describes these networks in detail. Major radio networks are:

   a. Department of Public Safety (DPS)
      1. Microwave Network
      2. UHF/VHF Network
      3. Highway Patrol
      4. Criminal Investigation Bureau
   b. Emergency Medical Services Communications (EMSCOM)
   c. Department of Transportation
   d. Arizona Game and Fish
   e. Department of Corrections
   f. State Capitol Police
   g. DEMA Radio Network (DRN)
h. Department of Agriculture
i. State Parks & State Land Departments

2. The ADEM EOCC has the capability of interfacing with these other nets on a selective basis. Other state systems provide support nets, but are not primarily emergency communications nets.

I. DRN (AZNG VHF NET). The primary purpose of the DRN is to maintain radio connectivity between the Arizona National Guard Headquarters and its armories located throughout the State. The DRN is pictured below. The State and County emergency operations centers also utilize this network for emergency management radio communications.
“DEMA Radio Network”
(AZNG VHF NET)

DEMA VHF
Radio Network

The TX and RX frequencies shown on this diagram are for the repeater sites. Users who are authorized to use this system should be programmed conversely.

Repeater TX = User RX
Repeater RX = User TX

CTCSS (PL): TX = 100.0 Hz
RX = CSQ

Notes on repeater sites:
VHF Sys on DPS microwave network
RX PL - 100.0 Hz
TX PL - 123.0 Hz
DOD frequency authorization, maximum
Tx power to antenna - 25 watts

Revised 05/23/2006 - cjr
I. Amateur Radio

1. Radio Amateur Civil Emergency Services (RACES). RACES is a federally recognized program which utilizes licensed amateur radio operators, on a voluntary basis, to provide emergency radio communications support to Federal, State and Local Civil Defense (Emergency Management) agencies. All RACES operators must comply with current FCC regulations for providing emergency communications services. RACES nets may be either local or statewide, and all RACES operators must be certified as part of a recognized civil defense agency communications net prior to becoming an authorized RACES operator. In the event of a national emergency, which invokes Section 606 of the Federal Communications Act of 1934, RACES operators will be the only authorized amateur radio service available to support civil defense or emergency services operations. Should such a national emergency be declared, RACES members operating within Arizona will be restricted to operating on FCC designated radio frequencies designated for use within the State of Arizona. RACES affiliates own and operate an inventory of radio repeater transmitters and receivers that supports communications for emergency situations. RACES nets will be operated in accordance with Annex B of this plan, 1998 Memorandum of Understanding with RACES affiliates.

2. Other Amateur Radio. Amateur radio operators throughout the State of Arizona will be encouraged to participate in supporting Emergency Management/Services agencies by providing voluntary emergency communications assistance during any state or local emergency. Communications capability exists at the State EOC to operate on all authorized amateur radio frequencies. The ADEM Telecommunications Manager, in coordination with local jurisdictions Emergency Management agencies, will maintain an up to date roster of all licensed amateurs, state wide, who have volunteered to provide emergency communications assistance. This amateur radio support will be in addition to the services provided by RACES members.

3. Military Affiliate Radio System (MARS). MARS consists of FCC licensed amateur radio operators who have voluntarily agreed to participate in, and who are formally recognized members of the Military Affiliate Radio System. MARS members operate in organized nets in compliance with FCC and military regulations governing their operations, and use frequencies specified by the sponsoring military service. Most prevalent in Arizona is the Arizona Army MARS with established nets in HF and VHF bands, providing voice and radio teletype services. The Division of Emergency Management is an authorized, participating station in Arizona Army MARS.

4. Radio Text and Data. Text and data can be transmitted and received with the use of computer interfaced radio packet systems. The State EOC has packet capability on the FEMA National Radio System (FNARS), Amateur HF and VHF
bands, and Civil Air Patrol HF and VHF bands.

J. Civil Air Patrol. The Civil Air Patrol supports the State with air transport and communications capabilities. The communications capabilities are numerous and varied including ground mobile, ground relay, airborne, and airborne relay. This capacity to air/ground deploy communications assets provides a valuable resource anywhere in the State during emergencies and disasters. Packet radios provide the capability to transmit data transmission. Appendix C of this plan, Civil Air Patrol Emergency Communications Plan provides the detail and capability of CAP communications resources. Additional policies and procedures for the application of CAP communications assets are established in the State Emergency Response and Recovery Plan and the Standard Operating Procedures for the State Emergency Operations Center.
-- This Page Left Blank Intentionally --
SECTION 2-6. MOBILE COMMUNICATIONS

Description: Mobile operations and communications centers are forward-deployed throughout Arizona to aid interoperability and provide working space for emergency responders. There are six (6) communications vehicles owned by ADEM. The 40’ RV, referred to as “Bullfrog”, is housed at Papago Park Military Reservation for rapid deployment in the central region. Four “Toads” are located in Mohave, Pima, Gila, and Navajo Counties. A sixth communications vehicle, a 2004 Ford Explorer 4x4, is stationed at Papago Park Military Reservation. It contains VHF, UHF, 700/800MHz radios, and an ACU-T interoperability gateway.

- 2005 Freightliner/Grumman
- 40’ RV style vehicle on a Freightliner MT55 chassis
- Cummins 225 HP Diesel engine turbocharged
- An Onan 12 kW ‘Quiet’ diesel generator
- Three Dometic 13,500 BTUtu AC/w heat pumps
- Operator, Bunk, Communications, Galley, Media/Conference sections

- 2004 Ford Super Duty Econoline E450
- 24’ Wide body Van chassis
- V-10 Triton 6.8 liter 350HP EFI gasoline
- Dual 7.0 kW Onan gas generators
- Two 15,000 BTU AC
- Operator, Communications, Conference sections
The internal communications systems for each vehicle includes:

ACU1000
(1) **Raytheon JPS** ACU-1000 Intelligent Interconnect System w/(10) DSP and (2) PSTN cards. This radio interconnect products facilitate communications between two-way radios (HF, VHF and UHF) and various other media, such as other radios, landline telephone, cellular, and satellite. The ACU-1000 Intelligent Interconnect System provides interoperability between multiple radio systems operating on different frequencies. This gives emergency responders the capability to ‘patch’ systems together to improve communications capabilities.

RADIO
(3) Kenwood 780, VHF public safety programmable radios
(3) Kenwood 880, UHF public safety programmable radios
(2) Kenwood 980, 800 public safety programmable radios
(2) ICOM 2720, dual-band (VHF/UHF) amateur radios
(1) ICOM 706, tri-band (HF/VHF/UHF) amateur radio
(1) MOTOROLA XTL 5000, (700/800 trunked) radio
(1) UNIDEN, BC296D/BC796D (SCANNER)

SATELLITE
TracStar/iDirect Satellite High-speed Internet Systems with Priority Satellite VoIP

COMPUTER
Dell Servers
Dell Laptops
Long Range WiFi
VPN Control of all IP systems
SECTION 2-7. MAIL & COURIER SERVICE

A. Mail Service.

1. The Division’s Logistics Section provides mail pickup and distribution internal to the Division using the mail/distribution boxes located in the Logistic Section Office and the SEOC reception area.

2. Mail service support is provided to the Division by the Department Mail Room. Mail runs to the USPO are conducted daily at 1000 hours and 1400 hours.

B. Courier Service.

1. Government Courier. The Department Mail Room provides courier service. Courier runs to the Capitol Mall area distribution center are made in conjunction with the daily mail runs to the USPO is conducted daily at 1000 hours and 1400 hours.

2. Commercial Courier.

   a. Commercial courier service. Several courier services are available in the metropolitan area. The list of commercial couriers frequently changes; therefore, the State Procurement Contract List must be consulted to identify current service providers. The Logistic Section provides assistance to those desiring to use this service.

   b. Express mail/package service. State contacted service is provided by Federal Express. Pickup and delivery point is the SEOC reception area. The Logistics Section provides assistance to those desiring to use this service.
SECTION 3. IT SYSTEMS

A. IT Support and Local Area Network

Local Area Network (AZDEM). The AZDEM Network provides access to the Internet, AFIS, HRMS, and USAS. The network has approximately 250 users, which include staff from DEMA. The network consists of Novell and Windows servers and utilizes Novell GroupWise Mail program.

IT support is provided to ADEM by the Department of Emergency & Military Affairs (DEMA). DEMA employs an IT staff to provide support services and network management to ADEM. DEMA IT is responsible for all IT services to ADEM assets and programs, such as the AZ 2-1-1 call center, mobile interoperable communications systems, and the alternate State Emergency Operations Center.

Critical Infrastructure Warning Network (CWIN) is currently installed in all State Emergency Operations Centers throughout the nation, and can be used during national emergencies to restore key services.

Continuity Operations Planning (COOP) is a program currently in the development stage with Strohl Consulting Services. They have developed a web-based program called Living Disaster Recovery Planning System (LDRPS) which will be used for all Business Continuity Planning statewide.
B. E Team

Arizona Division of Emergency Management - E Team

Arizona uses E Team to document and manage exercises and disasters at the Local, State and National level.

E Team provides:

- comprehensive functionality for all critical tasks associated with emergency management, facility and event security, disaster preparedness and recovery, and business continuity.
- a common platform for training and preparedness efforts; communicating and sharing information with other responders and with the public; ordering resources to assist with a response effort; and integrating new technologies and standards to support incident management as it evolves.
- provides a common operational interface for all tasks, reports, and map views, ensuring that all users are on the same page when creating, viewing, or distributing information.
- supports SSL for secure data traffic, and offers optional wireless delivery for greater mobility in field operations.

Arizona’s E Team history: (all events not listed)

2001
  - 9/11 Terrorism Event – Statewide Response, September
2002
  - Rodeo Chediski Fire – Navajo, Apache, Gila, June
2003
  - Aspen Wildland Fire - Pima, Pinal, June - July
  - Kinishba Wildland Fire – Navajo
2004
  - Presidential Debate, October
  - Northern Arizona Winter Storms, December
2005
  - Winter Storms and Flooding Statewide, February
• Cave Creek Complex Fire, June
• Hurricane Katrina Support, September – December
2006
• Day of Action Demonstrations, April
• Woody Fire, June
• Brins Fire, June
***
• Annual Statewide Exercises

**Local entities that currently use E Team**: Fourteen County Emergency Management Offices, AZNG, AcTIC, City of Glendale HLS, City of Mesa Police Dept., City of Phoenix Police, MCSO (currently standing up E Team), designated cities/towns within all Arizona counties. State Agencies that have access to ADEM’s E Team System: AZ Dept of Ag., ADOT, AZ Dept. of Public Health, Maricopa and Pima County. Others: ARC, AZNG, Salvation Army, ASU Police.
C. MAGNET. System Description. MAGNET is the name for the State of Arizona’s wide area network. The name MAGNET was used because the actual physical layout of the main WAN backbone is the shape of a horseshoe or magnet extending through the capitol mall area. It goes down Washington Ave to the Capitol and back up Jefferson Ave. Looking at the layout of the WAN backbone on a city map it would look like a horseshoe or magnet. The goal of MAGNET is to connect all Capitol Mall State agencies and other outlying State agencies into a common wide area network.
SECTION 4. ALERT SYSTEMS

The family of emergency alert systems, which support the emergency management community, consists of the following:

1. Emergency Alert System (EAS)
2. National Warning System (NAWAS)
3. Notification and Alert Network (NAN)
4. PVNGS Siren System
5. Communicator Notification System
Section 4-1. EMERGENCY ALERT SYSTEM (EAS)

A. History.

“This is a test of the Emergency Alert System—this is only a test…” You will occasionally hear or see these words on your local television or cable station.

In 1951, President Harry Truman established CONELRAD (Control of Electromagnetic Radiation) as the first national alerting system. Under CONELRAD, radio stations were required to broadcast only on certain frequencies during an emergency alert. This prevented an enemy from attacking by using transmissions from broadcast stations as a guide for their target. CONELRAD later became the "Emergency Broadcast System" (EBS). The EBS was designed to provide the President with a means to address the American people in the event of a national emergency. Through the EBS, the President had access to thousands of broadcast stations to send an emergency message to the public. In 1994, to overcome some of the limitations of the older EBS system, the Federal Communications Commission (FCC) replaced the EBS with the Emergency Alert System (EAS). The major difference between EBS and EAS is the method used to alert broadcast stations about an incoming message.

B. Description:

The EAS provides not only the President, but national, state and local authorities, with the ability to give emergency information to the general public via broadcast stations, cable and wireless cable systems. While participation in national EAS alerts is mandatory for these providers, state and local area EAS participation is voluntary. The FCC designed the EAS in cooperation with the National Weather Service (NWS) and the Federal Emergency Management Agency (FEMA). Each of these agencies plays an important role. The FCC provides information to broadcasters, cable system operators, and other participants in the EAS regarding the technical and operational requirements of the EAS. Additionally, the FCC ensures that state and local EAS plans conform to the FCC’s rules and regulations. The NWS provides emergency weather information to alert the public about dangerous conditions. FEMA provides direction for state and local emergency planning officials to plan and implement their roles in the EAS.

The EAS uses state-of-the-art digital technology to distribute messages. The system provides state and local officials with a method to quickly send out important local emergency information targeted to a specific area. Also, the EAS digital signal is the same signal that the National Weather Service (NWS) uses on the National Oceanic and Atmospheric Administration’s Weather Radio (NWR). This allows NWR signals to be decoded by the EAS equipment at broadcast stations and cable systems. Broadcasters and cable operators can then send NWS weather warning messages almost immediately to their audiences. EAS allows broadcast stations, cable systems, participating satellite companies, and other services to send and receive emergency information quickly and automatically, even if these facilities are unattended. EAS was designed so that if one link in the dissemination of alert information is broken, the entire system does not fail.
EAS also automatically converts to any language used by the broadcast station or cable system.

Also, specially equipped consumer products, such as televisions, radios, pagers and other devices, can decode EAS messages. Consumers can program these products to "turn themselves on" for the messages they want to receive. In 1997, EAS replaced the weekly (on-air) "only a test" broadcast notifications used by the EBS with less obtrusive weekly internal tests and monthly on-air tests. All AM, FM, and TV broadcast stations, as well as cable systems, with 10,000 or more subscribers, use these procedures. The ultimate goal of the EAS is to disseminate emergency information as quickly as possible to the people who need it.

C. The Arizona State Emergency Communications Committee published the “Emergency Alert System Operational Plan” in 1998, which establishes the system and operational procedures. Appendix L consists of this plan.
Section 4-2. NATIONAL WARNING SYSTEM (NAWAS)

A. NAWAS is a dedicated landline system, which interconnects state and local jurisdictions EOCs with regional and national warning points. State and local warning points are located at law enforcement agencies or other emergency services support agencies which provide the required 24 hour a day coverage.

B. The NAWAS is ring down, voice communications system with provisions for "party line" communications. All warning points within the State may talk to each other and receive national or state traffic. However, only the State Warning Point (DPS) and it's alternate (State EOC) are able to communicate with regional or national warning points, and other states. The NAWAS is an "Official Use Only" system and all transmissions over NAWAS are considered privileged communications under the provision of Section 605 of the Federal Communications Commission (FCC) Rules and Regulations. All counties in Arizona are connected to the State EOC through State portion of the NAWAS. Federal Emergency Management Agency publication National Warning System Operations Manual, dated March 30, 2001, prescribes operating procedures for NAWAS.
Section 4-3. NOTIFICATION AND ALERT NETWORK (NAN)

A. Description: The NAN is the primary means of communications to offsite authorities using a dedicated telephone circuit, the Notification and Alert Network (NAN), which links stations at PVNGS with warning points in key government agencies. Reference: Offsite Emergency Response Plan for Palo Verde Nuclear Generation Station, January, 2007. The Offsite Emergency Response Plan for Palo Verde Nuclear Generation Station provides the protocols and format for NAN traffic and messages.

B. The PVNGS stations are: the Satellite Technical Support Center (STSC) in three generating units; the Technical Support Center (TSC); and the Emergency Operations Facility (EOF).

C. The offsite government warning points are: the Department of Public Safety (DPS) as the Primary State Warning Point; the Maricopa County Sheriff’s Office (MCSO) as the Primary County Warning Point; the Town of Buckeye Police Department; the Arizona Division of Emergency Management/State Emergency Operations Center; the Arizona Radiation Regulatory Agency; and the Maricopa County Department of Emergency Management (MCDEM).

D. The alternate notification system is the PVNGS trunked radio system that may be preempted by the utility for emergencies. Terminals are located in the same facilities as the primary NAN.

E. Communications in the field is provided by an 800 MHz voice radio net linking field monitoring teams with the Radiological Emergency Assistance Team (REAT) Forward (Buckeye Airport), TOC and ARRA representatives at the EOF. The normal line of communications is from the field teams to REAT Forward, then from REAT-Fwd to the TOC and/or EOF. The radios have the capability of direct communication to any station on the net. REAT Forward provides as net control.
NOTIFICATION AND ALERT NETWORK (NAN)
Section 4-4. PVNGS OUTDOOR WARNING SIREN SYSTEM

General. Palo Verde Nuclear Generating Station is a standardized triple-unit nuclear power facility located near Wintersburg, Arizona, approximately 45 miles west of Phoenix. Arizona Public Service holds the majority ownership of the station and operates the facility. Other owners include Salt River Project, El Paso Electric Co., PNM Resources, Southern California Edison, Public Service Co. of New Mexico, Southern California Public Power Authority, and the Los Angeles Dept. of Water & Power. As energy cornerstone of the Southwest, Palo Verde, the largest nuclear energy facility in the nation, generates electricity to serve approximately four million people.

Description: The primary means to notify the public within the vicinity of PVNGS is an Outdoor Warning Siren System placed at various locations in the 10-mile EPZ. Upon activation, the tone will cover the populated areas and alert the residents to turn on radios or televisions to receive warning messages, emergency information and protective action instructions. Should a siren(s) fail or residents fall outside the siren coverage areas, the MCSO will provide supplemental warning by telephone, door-to-door contact or loudspeakers mounted on patrol or other vehicles as necessary. Reference: Offsite Emergency Response Plan for Palo Verde Nuclear Generation Station, January, 2007.
Section 4-5. COMMUNICATOR NOTIFICATION SYSTEM

Description: The Communicator Notification System is a system that automates mass notifications. ADEM currently uses the system for staff recalls, accountability and routine notification. Software hosted on-site and backed up in Tennessee uses twenty-four (24) phone lines to call many people at one time, and deliver a message. The system can also request personnel status, and collect estimated times of arrival from responding staff. The system is tested at least once per month.

ADEM has given training and usage rights to twelve of the fifteen Arizona county emergency management agencies, along with dozens of state agencies.
SECTION 5. NOTIFICATION & RECALL

Description. The Division maintains an extensive number of directories and phone lists to facilitate the notification and/or recall of various local, state and federal agencies. These directories are updated on a regular basis by the Logistics Section, and are not included in this plan for that purpose.
SECTION 6. GLOSSARY

ADEM. Arizona Division of Emergency Management. The state agency having primary responsibility for development and coordination of state emergency response plans.

EAS. Emergency Alerting System. A system which allows, at the order of the President of the United States, preempting of normal programming on virtually all broadcast media (radio, TV and Cable), in order to deliver vital information concerning National Security crisis such as war declared by or against the United States or, an attack or eminent attack on the United States. Participation by the broadcast industry is governed through FCC licensing regulations.

EOC. Emergency Operations Center. Any designated, central facility established to provide coordinated management and control during an emergency situation.

FEMA. Federal Emergency Management Agency. The agency, within the federal government, charged with managing federal programs related to preparation for, mitigation of, response to, and recovery from any major disaster. Arizona is located in FEMA Region IX which has it's headquarters in San Francisco, CA.

FNARS. Federal Emergency Management National Radio System. A high frequency radio and radio teletype system which nets each State EOC with the associated Federal Emergency Management Agency (FEMA) regional offices.

NAN. Notification and Alert Network. A dedicated, landline system designed to alert Local and State agencies which have warning and response mandates for potential incidents at the Palo Verde Nuclear Generating Station (PVNGS) which could affect the population or environment surrounding the generating station. There is also a backup; VHF radio system to perform the same function should the landline fail. A full description of the NAN system and it's functions is found in the State of Arizona/Maricopa County Fixed Nuclear Facility Off-Site Response Plan.

NAWAS. National Warning System. A network of dedicated landlines interconnecting with the National Warning Center on a nationwide basis. All FEMA regional offices, State Warning Points, and other, selected, local and national agencies are connected with NAWAS warning points.

NWC. National Warning Center. A national agency which functions as net control for all NAWAS circuits. Regional Warning Centers (RWC) function under the direction of the NWC and are capable of becoming regional net controls stations if required.

NWS. National Weather Service. A division of the National Oceanic and Atmospheric Administration (NOAA). The State of Arizona EOC receives weather information on a continuing basis through computer modem tie with the Phoenix NWS office.

RACES. Radio Amateur Civil Emergency Service. Consists of licensed amateur radio
operators who are affiliated with a state or local civil defense organization, are recognized by the federal government, and provide voluntary emergency radio communications support in accordance with FCC rules and regulations.
Appendix A

Job Aids
2616 Phone Operation
(Meridian Digital)

To dial an internal call:
- Pick up any ADEM Meridian Digital Model #2616 phone, connected to ADEM switch.
- Dial the four digit extension.
- At the end of the call, hang up or press the Orange “RLS” button.

To Dial a Local area call:
- Pick up any ADEM Meridian Digital Model #2616 phone, connected to ADEM switch.
- Dial a 9; wait for the second dial tone.
- Complete the call by dialing the Area Code + Number. (Example: 9-602-244-0504).
- At the end of the call, hang up or press the Orange “RLS” button.

To Dial a Long distance call:
- Pick up any ADEM Meridian Digital Model #2616 phone, connected to ADEM switch.
- Dial a 9; wait for the second dial tone.
- Complete the call by dialing, a 1 + Area Code + Number. (Example: 9-1-602-244-0504)
- At the end of the call, hang up or press the Orange “RLS” button.

To Forward phone:
- Press “Forward” while phone is still on-hook.
- Enter phone number phone is to be forwarded to, including “9” if an outside number.
- Enter 6340 to forward to voicemail.
- Press “Forward” again to activate forwarding.
- To cancel, press “Forward” again.

To Retrieve Voicemail:
- Red message light will be on if a new voicemail is in the inbox.
- Pick up ADEM Meridian Digital Model #2616 phone, connected to ADEM switch.
- Press “Message”
- Dial extension and dial password as prompted
- At the end of the call, hang up or press the Orange “RLS” button.
To Retrieve Voicemail Remotely:
- Dial 602-***-****
- Dial extension and dial password as prompted
- Follow commands

To Enable Speakerphone:
- While on a call, press “Handsfree”.
- Hang up handset.
- To disable speakerphone, pick up handset.

To make a conference call:
- Pick up any ADEM Meridian Digital Model #2616 phone, connected to ADEM switch.
- Dial your first number to be conferenced.
- While on a call, press “Conference”. First party will be on hold and you will hear a dial tone.
- Dial the next party to be added to the conference call, and press “Conference” to add party.
- Continue adding parties, until you have reached a total of 6 parties, besides yourself.
- At the end of the call, hang up or press the Orange “RLS” button.

Transferring a call:
- Pick up any ADEM Meridian Digital Model #2616 phone, connected to ADEM switch.
- Press the “Transfer” button.
- The party is on hold and you hear a dial tone.
- When the LCD “Transfer” lights up steady, dial the number you are transferring the call to.
- The LCD “Transfer” light goes from steady to off.
- At the end of the call, hang up or press the Orange “RLS” button.
SEOC #8009 Phone Operation
(Meridian Analog)

To dial an internal call:
- Pick up any ADEM Meridian Analog Model #8009 phone, connected to ADEM PBX.
- Dial the four number extension. (Example: Dial: 6328, which should ring my extension.)
- At the end of the call, just hang up or press the Orange “RLS” button.

To Dial a Local area call:
- Pick up any ADEM Meridian Analog Model #8009 phone, connected to ADEM PBX.
- Dial a 9; wait for the second dial tone.
- Complete the call by dialing the Area Code + Number. (Example: 9-602-244-0504).
- At the end of the call, just hang up or press the Orange “RLS” button.

To Dial a Long distance call:
- Pick up any ADEM Meridian Analog Model #8009 phone, connected to ADEM PBX.
- Dial a 9; wait for the second dial tone.
- Complete the call by dialing, a one + Area Code + Number. (Example: 9-1-602-244-0504)
- At the end of the call, just hang up or press the Orange “RLS” button.

To make a Three way call or conference all:
- Pick up any ADEM Meridian Analog Model #8009 phone, connected to ADEM PBX.
- Dial your first number to be conference.
- While on a call, press ‘Link’ Button. Your first party is on hold.
- Wait for the second dial tone before dialing your second party.
- Continue pressing ‘Link’ button to add parties.
- A total of 6 additional parties can be linked or conferenced.
- At the end of the call, just hang up or press the Orange “RLS” button.

Transferring a call:
- Pick up any ADEM Meridian Analog Model #8009 phone, connected to ADEM PBX.
- When needing to transfer a call to another party.
- Press the ‘Link’ Button.
- The other party is on hold and you hear a second dial tone.
- Dial the number you are transferring the call to.
- When the party accepting the call pickups the receiver, hit the ‘Link’ Button, again.
- At the end of the call, just hang up or press the Orange “RLS” Button.
SEOC Satellite Phone Operation
(Iridium MXU-2000)

To Dial Out:

- Pick up any phone on ADEM’s switch
- Dial 2801. (If 2801 is in use, line will be “busy”. Dial 2802 instead for the second line.)
- Dial 0 0 1 + Area Code + Number
- Phone will connect

Outside calls into ADEM’s switch via Satellite Phone:

- Outside caller dials ***-***-****
- Caller enters ************ when prompted
- Caller dials any 4 digit ADEM extension when dial tone is heard
- Phone will connect to ADEM phone at the dialed extension
SEOC Satellite Phone Operation  
(Iridium 9505A)

Making a Satellite a call:

- Power on the Satellite phone by pressing the (pwr) Button, firmly.
- Make sure you have a clear southern exposure, with no obstructions.
- Rotate and extend the antenna and wait for the phone to lock on a satellite signal.
- When the satellite icon is displayed, the phone is ready to make your call.
- To complete your call, simply hit the (SEND) Button and wait for your call to connect.
- Put the phone next to your ear, making sure the phone’s antenna points skyward.
- At the end of the call, press the (END) button.

To Receive a call:

- Power on the Satellite phone by pressing the (pwr) Button, firmly.
- Make sure you have a clear southern exposure, with no obstructions.
- Rotate and extend the antenna and wait for the phone to lock a satellite signal.
- When the satellite icon is displayed, the phone is ready to accept incoming calls.
- When receiving a call, the phone rings, the icon ‘Incoming Call’ appears.
- To accept the call, simply hit the (SEND) Button to take your call.
- At the end of the call, press the (END) button.
SEOC Fax Operation
(Message Center Fax Machine)

To send an internal Fax:
- At the Message Center Fax Machine (MCFM) Model #UF-550.
- Fully set the Document, face down. (Make sure no staples in paper.)
- Dial the four number extensions. (Example: 6328, which should ring my extension.)
- Press the (START) Button to send fax to another fax machine.
- At the end of the fax remove your copy of sent fax.

To Send a Local Fax:
- At the Message Center Fax Machine (MCFM) Model #UF-550.
- Fully set the Document, face down. (Make sure no staples in paper.)
- Complete the call by dialing a: 9 + Area Code + Number. (Ex: 9-XXX-XXX-XXXX).
- Press the (START) Button to send fax to another fax machine.
- At the end of the fax remove your copy of sent fax.

To Send a Long distance Fax:
- At the Message Center Fax Machine (MCFM) Model #UF-550.
- Fully set the Document, face down. (Make sure no staples in paper.)
- Complete the call by dialing a: 9 + 1 + Area Code + Number. (Ex: 9-1-XXX-XXX-XXXX)
- Press the (START) Button to send fax to another fax machine.
- At the end of the fax remove your copy of sent fax.

To Copy:
- At the Message Center Fax Machine (MCFM) Model #UF-550.
- Fully set the Document, face down. (Make sure no staples in paper.)
- Press the (COPY) Button to copy document.
- At the end of the copy remove your original and copied document.
Activation of Phones at Alternate SEOC
(ASU – East)

- POC: Terrie Muchmore, ***-***-****. (Terrie.Muchmore@asu.edu)
- Alternate POC: Michelle Trimble, ***-***-****.

To Activate the ASU-East Phone System:

- When calling during normal business hours, call: ***-***-****.
- After hours, contact the Duty On Staffer’s pager number: ***-***-****
  - Ask on-duty staff to “***************”. Address is ************.

ASU Network Communications staff will activate the phone system immediately.
**XTS 5000 Model I**

**Model Number:** H18UCC9PW5AN  
**Serial Number:** 721CEJ1309  
**FLASHCode:** 100008-000480-9

### Buttons and Controls

<table>
<thead>
<tr>
<th>Index</th>
<th>Description</th>
<th>Conventional</th>
<th>Trunking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Two Position Concentric</td>
<td>Power/Volume</td>
<td>Power/Volume</td>
</tr>
<tr>
<td></td>
<td>Position A</td>
<td>Blank</td>
<td>Blank</td>
</tr>
<tr>
<td></td>
<td>Position B</td>
<td>Scan</td>
<td>Scan</td>
</tr>
<tr>
<td>2</td>
<td>Three Position Toggle</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Position A</td>
<td>Zone Select</td>
<td>Zone Select</td>
</tr>
<tr>
<td></td>
<td>Position B</td>
<td>Zone Select</td>
<td>Zone Select</td>
</tr>
<tr>
<td></td>
<td>Position C</td>
<td>Zone Select</td>
<td>Zone Select</td>
</tr>
<tr>
<td>3</td>
<td>Rotary Control</td>
<td>Channel Select</td>
<td>Channel Select</td>
</tr>
<tr>
<td>4</td>
<td>Top Button</td>
<td>Unprogrammed</td>
<td>Unprogrammed</td>
</tr>
<tr>
<td>5</td>
<td>Side Button - Top</td>
<td>Light</td>
<td>Call Response</td>
</tr>
<tr>
<td>6</td>
<td>Side Button - Middle</td>
<td>Monitor</td>
<td>Volume Set Tone</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Side Button - Bottom</td>
<td>Nuisance Delete</td>
<td>Nuisance Delete</td>
</tr>
</tbody>
</table>

### Zones and Channels

<table>
<thead>
<tr>
<th>Channels</th>
<th>Zone1</th>
<th>Zone2</th>
<th>Zone3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AZ SEOC 1</td>
<td>I-CALL R</td>
<td>764.05625 MHz</td>
</tr>
<tr>
<td>2</td>
<td>AZ SEOC 2</td>
<td>I-CALL D</td>
<td>764.06875 MHz</td>
</tr>
<tr>
<td>3</td>
<td>AZ INTST</td>
<td>I-TAC 1 R</td>
<td>775.99375 MHz</td>
</tr>
<tr>
<td>4</td>
<td>MX SEOC 1</td>
<td>I-TAC 1 D</td>
<td>NOT USED</td>
</tr>
<tr>
<td>5</td>
<td>MX SEOC 2</td>
<td>I-TAC 2 R</td>
<td>NOT USED</td>
</tr>
<tr>
<td>6</td>
<td>MX INTST</td>
<td>I-TAC 2 D</td>
<td>NOT USED</td>
</tr>
<tr>
<td>7</td>
<td>NOT USED</td>
<td>I-TAC 3 R</td>
<td>NOT USED</td>
</tr>
<tr>
<td>8</td>
<td>NOT USED</td>
<td>I-TAC 3 D</td>
<td>NOT USED</td>
</tr>
<tr>
<td>9</td>
<td>NOT USED</td>
<td>I-TAC 4 R</td>
<td>NOT USED</td>
</tr>
<tr>
<td>10</td>
<td>NOT USED</td>
<td>I-TAC 4 D</td>
<td>NOT USED</td>
</tr>
<tr>
<td>11</td>
<td>NOT USED</td>
<td>AZ-TAC R</td>
<td>NOT USED</td>
</tr>
<tr>
<td>12</td>
<td>NOT USED</td>
<td>AZ-TAC D</td>
<td>NOT USED</td>
</tr>
<tr>
<td>13</td>
<td>NOT USED</td>
<td>NOT USED</td>
<td>NOT USED</td>
</tr>
<tr>
<td>14</td>
<td>NOT USED</td>
<td>NOT USED</td>
<td>NOT USED</td>
</tr>
<tr>
<td>15</td>
<td>NOT USED</td>
<td>NOT USED</td>
<td>NOT USED</td>
</tr>
<tr>
<td>16</td>
<td>NOT USED</td>
<td>NOT USED</td>
<td>NOT USED</td>
</tr>
</tbody>
</table>
Appendix B

Memorandums of Understanding and Inter-Governmental Agreements
1. **PARTIES:**

This Radio System Coordination Agreement ("Agreement") is entered into and made effective _________________, 2005 (the "Effective Date") by and between Arizona Public Service Company, an Arizona corporation (hereinafter referred to as "APS"), and the State of Arizona, through its Department of Emergency and Military Affairs, Division of Emergency Management (hereinafter referred to as "ADEM"). APS and ADEM are hereinafter referred to individually as "Party" or "party" and collectively as "Parties" or "parties."

2. **RECITALS:**

This Agreement is made with reference to the following facts:

2.1 APS owns or operates several power plants and interconnected electric transmission and distribution systems, which are part of Arizona’s critical infrastructure. In order to manage and operate such plants and systems in an integrated manner, APS relies extensively on its Motorola 800 MHz SmartZone two-way radio system ("System"), as more fully described in Section 3, DEFINITIONS.

2.2 ADEM provides direction and control of the State of Arizona’s emergency response operations during natural and technological disasters. As of the Effective Date, ADEM uses a mix of state, county, military, and Radio Amateur Civil Emergency Services (RACES) communications systems for the purposes of communicating between and amongst its state and county emergency operating centers ("EOC").

2.3 The State of Arizona recognizes that it needs to implement various plans to protect, among other things, critical infrastructure within the State under its homeland security plans. Such plans include actions to establish a statewide radio interoperability system that will link certain government and certain private sector radio systems. As part of such plans, ADEM desires to coordinate with APS through the use of the System for the purposes set forth in Section 4.1.1, in conjunction with or in addition to ADEM’s existing radio communications systems. To enable such coordination, APS agrees to allow ADEM to access the System for such purposes under the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the foregoing recitals, the promises, covenants and provisions contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:
3. DEFINITIONS:

3.1. This Agreement includes all documents attached to or incorporated in this Agreement by reference. If stipulations in any documents attached hereto or incorporated herein by reference conflict with those contained in this Agreement, the stipulations in this Agreement shall prevail. The following words shall have these meanings when used in this Agreement: (a) "including" means "including, but not limited to" the specifically enumerated things, states, or actions; (b) "or" means "one or the other or all" of the specifically enumerated things, states, or actions; and (c) "shall" or "will" means the listed duties or actions are mandatory. In addition, the following terms shall have the respective meanings indicated, such meanings to be applicable to both singular and plural forms of the terms defined:

(a) “Action” means any claim, action, dispute, demand, or right of action, whether in law or in equity, of every kind and character.

(b) “APS Microwave System” means the microwave system which links together into a unified network to the Deer Valley Equipment, Communication Site Facilities, and the APS Dispatch Centers.

(c) “ADEM Fleet” means all ADEM radios that are compatible for use with the System.

(d) “Common System Components” means components of the System that provide common functionality to all uses of the System and which APS deems as not separate from the basic operation of the System, which consists of the Deer Valley Equipment, the APS Microwave System, System Infrastructure Configuration Database and the Software Subscription Agreement.

(e) “Communication Site Facilities” means APS’s Motorola 800 MHz SmartZone two-way radio system communication facilities (other than the facility that houses the Deer Valley Equipment), including, the following: (i) the lands on which such facilities are constructed and operated; (ii) the communication equipment, including the 800 MHz Repeater Stations and microwave radio equipment, and the power sources that provide power to operate such equipment, including, auxiliary power units (“APU”) and battery plants; (ii) buildings and structures that shelter the communication equipment and power sources, including, any building or structure, or part thereof, to which APS has a license or other rights to use; and (iv) all improvements and modifications to such lands, equipment, buildings and structures. Most of the Communication Site Facilities are located on mountain-tops.

(f) “Communication Site Facilities Land Related Fees” means all fees and other charges that APS pays to the United States Department of Agriculture Forest Service, or any other federal, state, local or tribal government, or to any other third party, for easements, rights of way, licenses or other permits for the construction, operation and maintenance of the Communication Site Facilities, and all other fees and expenses incurred in connection with the Communication Site Facilities, including, mountaintop user associations assessments.

(g) “Deer Valley Equipment” means the APS Motorola 800 MHz SmartZone equipment, including all modifications and upgrades thereto, which performs the automatic trunking channel assignments, site steering, access control, priority access, feature access (such as telephone interconnect, private call, talk group assignments) and fault management alarm and control functions. As of the Effective Date, the Deer Valley Equipment is located at APS’s Deer Valley complex in Phoenix.

(h) “APS Dispatch Centers” means the APS facilities that dispatch APS personnel to perform
work related to the transmission and distribution of electricity.

(i) "Indemnified Action" – Any willful, wanton or reckless misconduct or any negligent or intentional act or omission (including acts or omissions resulting in strict liability) arising out of, resulting from, or related to a party’s performance or non-performance under this Agreement.

(j) “APS Indemnitee” means APS and its officers, directors, employees, agents, advisers, representatives, affiliates, successors, and assigns.

(k) “Losses” means any and all liabilities, losses, damages, fines, penalties, and costs and expenses of any kind or nature, whether or not covered by insurance, including reasonable attorneys’ fees and expenses incurred in the investigation and defense of any of the same or in the enforcement of a right under this Agreement.

(l) “Priority Level” means the priority levels ranging from one through ten, which APS assigns to each Talk Group with respect to the Talk Group’s ability to communicate through the applicable channels within the System; level one, which is reserved for emergency purposes only for all users, is the highest in priority, and level ten is the lowest in priority.

(m) “SmartZone System Key” is the unique binary software code licensed and issued to APS by Motorola, Inc. which is used in programming subscriber unit (fleet radios) access to the System.

(n) “Software Subscription Agreement” means APS’s agreement with Motorola, Inc. which, among other things, provides for enhancement, or bug fixes to System infrastructure and subscriber unit (fleet radios) equipment software on a yearly basis.

(o) “System” means APS’s Motorola 800 MHz SmartZone two-way radio system infrastructure deployed throughout Arizona and the Navajo Nation Indian Reservation, consisting of:

(i) Deer Valley Equipment;
(ii) Communication Site Facilities;
(iii) APS Dispatch Centers; and
(iv) APS Microwave System.

(p) “System Infrastructure Configuration Database” means software configuration management of the System, including the programming of the APS’s mobile or portable radio fleet and the applicable ADEM Fleet that has been allowed access to the System by APS, which may require routine updates.

(q) “Talk Group” means a group of associated users of the System assigned by APS to communicate amongst themselves using channels designated to such group automatically by the System for the duration of the talk group call.

(r) “800 MHz Repeater Stations” means the mountaintop repeaters, which include, antennas, towers, alarm and control system, transmitter combiners, tower top receive amplifiers, and receiver multicouplers.
4. **SHARING LICENSE:**

4.1. APS shall grant ADEM a revocable, non-exclusive, non-transferable license to access the System in accordance with this Agreement for the purposes described in Section 4.1.1 (hereinafter the “Sharing License”), subject to the obligations of APS and ADEM to first obtain any and all licenses, license modifications, authorizations, or rule waivers, if required, from applicable federal, state, and municipal regulatory bodies pursuant to Section 4.3. The Sharing License does not entitle ADEM to have any rights to physically access or otherwise use the System. ADEM shall not access or otherwise use the System for any purpose, other than the purposes described in Section 4.1.1, without APS’s prior written consent, which APS may withhold at its sole discretion. In addition, ADEM acknowledges that the Sharing License only applies to authorized ADEM communication equipment and may only be used for purposes consistent with the requirements of C.F.R. § 90.179 and all other applicable regulations. The Sharing License is conditioned on ADEM’s adherence to the terms and conditions of this Agreement, including the obligations to make cost-sharing payments as set forth herein.

4.1.1. Subject to the terms and conditions of this Agreement, ADEM may, at its expense, access the System for the following purposes:

(a) To establish emergency communications interoperability among the State of Arizona, the counties within the State of Arizona (hereinafter the “Arizona Counties”), and APS, using the System and other communications systems, both conventional and trunked, during emergencies, by employing audio switches such as the ACU-1000.

(b) To establish an emergency command and control communications talk group between ADEM and the Arizona Counties, which will be used by ADEM primarily for emergency drills and actual emergency operations.

(c) To establish an emergency communications talk group to be used on an ‘as needed basis’ among the Arizona Counties during emergency drills and actual emergencies;

(d) To establish access by the State of Arizona’s and the Arizona counties’ emergency communications vans that are deployed during emergency drills or actual emergencies, to both of the talk groups described in paragraphs (b) and (c) above;

(e) To evaluate the possible use of packet modems on the talk group(s) assigned to ADEM for its use to facilitate message traffic handling during emergencies.

4.2. ADEM represents that its use of the System will create little day-to-day traffic, except during emergency drills and actual emergencies.

4.3. Each party will be responsible for obtaining its own licenses, license modifications, authorizations, or rule waivers from the Federal Communications Commission (“FCC”) or other federal, state or municipal regulatory bodies that are required for the joint use of the System.

4.4. Nothing in this Agreement shall constitute a provision of any service by APS to ADEM.

4.5. ADEM acknowledges that the Sharing License is being provided to it on a non-profit, cost-shared basis. ADEM further acknowledges that all shared System use by it is subject to APS’s control and that APS reserves the right to limit or restrict ADEM’s access to the System in order to protect APS primary business interests.
5. OPERATIONAL TASKS: APS, ADEM AND JOINT TASKS, COOPERATION.

5.1 APS’S TASKS.

5.1.1. Continuous Access: Under the Sharing License and subject to Section 11, NO WARRANTY, APS will enable the ADEM Fleet that ADEM will initially install at the following locations, to gain continuous access to the System: (i) the State EOC (one radio); the alternate State EOC (one radio); (iii) each Arizona county EOC (fifteen radios); and (iv) ADEM’s or the Arizona Counties’ emergency communications vans (five radios). APS will be solely responsible for the System configuration management and ADEM Fleet access to the System through the network management tools licensed or otherwise provided by Motorola Inc. to APS. Requests by ADEM for additions, deletions or changes to ADEM Fleet access to the System may be granted by APS at the discretion of APS, which shall not be unreasonably withheld, but subject to terms and conditions mutually agreed upon in writing.

5.1.2. System Key: APS may deem it necessary to provide ADEM with the SmartZone System Key for use with Motorola Inc.’s proprietary licensed Radio Service Software (“RSS”) or Customer Programming Software (“CPS”), or any other upgraded Motorola software that is functionally equivalent to the RSS or CPS, so that expeditious programming of the applicable ADEM Fleet that has been allowed access to the System by APS, may be performed by ADEM without assistance from APS; but APS shall not be responsible for providing the RSS, CPS or any other software for the purposes of programming of such ADEM Fleet or for any other purpose.

5.1.3. Talk Groups. APS will allocate up to two (2) Talk Groups to ADEM for its use in accordance with this Agreement. Additional Talk Groups may be requested in writing by ADEM to APS. APS shall not unreasonably deny such request.

5.1.4. Priority Levels. The Talk Groups assigned to ADEM will be granted, subject to Section 11, NO WARRANTY, a mutually agreed upon Priority Level. APS reserves the right, at its sole discretion, to make changes to the Priority Level of any Talk Groups allocated to ADEM.

5.2. ADEM’S TASKS:

5.2.1. Software: ADEM shall obtain and maintain at its expense all software, including, the RSS or CPS, tools, equipment, materials, and supplies to access the System in accordance with this Agreement, to program any applicable radio in the ADEM Fleet, and perform its obligations under this Agreement.

5.2.2. Contingency Plan: The ADEM shall have a contingency plan in the event that the System becomes unavailable or does not perform or operate as intended for any reason, including any reason relating to an “Uncontrollable Force” (as defined in Section 20.1), System malfunction, or radio frequency interference (hereinafter referred to as “RFI”). APS will use reasonable efforts to perform due diligence to restore System availability within a reasonable period of time.

5.3. JOINT PARTY RESPONSIBILITIES:
5.3.1. Dispatcher Access: ADEM will allow APS interoperability with ADEM by radio to coordinate emergency responses to civil or natural disturbances that may threaten life or property within the state of Arizona jurisdictional boundaries. In return, ADEM will have accessibility by radio to APS dispatchers to report or request electrical power interruptions for the safety of the public.

5.3.2. System Channel Capacity: If additional System channel capacity is required at any Communication Site Facility to meet the loading demands of either party, the parties will formulate equitable System capital improvement cost sharing based upon respective Party fleet sizes served by that specific Communication Site Facility and the additions necessary to achieve proper System loading. Either party may request Motorola Inc. to perform all predictive System loading calculations with the subsequent analysis submitted to both parties. The requesting party shall use reasonable efforts to ensure that an initial analysis will be performed by Motorola Inc., within a period of time that has been mutually agreed upon by the Parties. Such initial analysis shall be at ADEM’s expense. If APS engages Motorola, Inc, for such initial analysis, ADEM shall reimburse APS, upon receipt of an invoice, for all costs and expenses incurred by APS associated with engaging Motorola, Inc.

5.3.3. TECHNOLOGY ADVANCEMENTS:

5.3.3.1. Design Basis: If either party desires to implement technology advancements such as voice encryption or digital transmission to their respective fleet, the Association of Public Safety Communication Officials (“APCO”) 25 standards shall be the preferred design basis. Associated costs for System modifications to support these advancements shall be borne on a pro rata basis by the parties and will be determined at the time it is jointly agreed to implement these modifications. APS shall maintain all engineering design authority over those System modifications.

5.3.4. COOPERATION:

5.3.4.1. Coordination. The Parties agree to cooperate in the coordination of any System modifications or upgrades, and maintenance work under this Agreement (“Work”) so as not to materially affect the operations of the other Party. Except in the case of an emergency as determined by APS at its sole discretion, APS shall give reasonable prior notice to ADEM of its intent to perform Work on the System, if APS reasonably expects that the Work will have an affect on ADEM’s operations. APS may, without incurring any liability, suspend ADEM’s use of the System or any part thereof, for periods reasonably required to permit APS to accomplish repairs to or changes in the System.

5.3.4.2. System Malfunctions. APS will respond to System malfunction(s) within reasonable time limits based upon the severity of the event as determined by APS. APS will use its reasonable efforts to immediately respond to critical malfunctions (either site specific or System wide) upon discovery of any malfunction.

6. ALLOCATION OF COST

6.1 For the purposes of this Section 6, the term “System Modification Cost(s)” shall mean any and all costs related to any System modifications or upgrades, including, but not limited to, all costs related to applicable engineering analyses, new licensing, license modifications, permits, or
authorizations, and other costs imposed by or otherwise payable to any federal, state or municipal regulatory bodies, including the FCC or any other third party, associated with such modifications or upgrades necessary to provide for ADEM’s use of the System.

6.2. In consideration of the Sharing License, ADEM shall reimburse APS for the following:

(a) all costs that APS identifies as the System Modification Costs and to which both parties have agreed upon in advance of APS’s billing of such costs; and
(b) all costs that APS identifies as the costs associated with ADEM’s use of the System during the term of this Agreement and to which both parties have agreed upon in advance of APS’s billing of such costs.

6.3. Unless the parties otherwise agree in writing, the payment terms are net 30 days from ADEM’s receipt of APS’s invoice. If ADEM does not make payments in accordance with the terms and conditions of APS’s invoice, interest shall accrue on all of ADEM’s outstanding balance at the rate of one and one-half percent (1.5%) per month, or the maximum rate permitted by law, whichever is less, from the date the payment is due until such payment is made.

6.4. If ADEM desires an enhancement to the System beyond the scope of this Agreement, ADEM shall notify APS of such desire in writing. Upon receipt of ADEM’s request, APS may send a written acknowledgement to ADEM stating APS’s capability in connection with the System, the cost of any requested enhancement to the System, and any other terms or conditions related to such enhancement. If ADEM desires to pursue such enhancement, then the parties may negotiate the terms and conditions in connection with such enhancement, including, without limitation, an implementation plan and schedule, and payment milestones, for such enhancement. In no event shall APS be obligated to pursue any negotiations with ADEM in connection with such enhancement or perform such enhancement, except to the extent APS specifically enters into a written agreement with ADEM regarding the performance of such enhancement.

7. **OWNERSHIP AND CONTROL:**

7.1. APS shall retain legal title to the System at all times and APS shall operate and maintain the System. The Sharing License shall not create or vest in ADEM any ownership or other rights or interest in any APS property or facility, nor shall it constitute an assignment of any APS property, easements, franchises or other rights to use the public or private property on which APS property or facilities are located except as specifically set forth in this Agreement. In addition, ADEM shall not, in connection with its performance under this Agreement, encumber or permit the encumbrance of any APS property, easements, franchises or other rights to use the public or private property on which APS property or facilities are located.

7.2. All System modifications or upgrades, including, component additions or enhancements installed at Communication Site Facilities in connection with this Agreement, including such modifications or upgrades for which ADEM has agreed are necessary for its benefit, or for which ADEM has partially or wholly paid, shall become the sole property of APS and APS retains all right, title and interest in and to such System modifications or upgrades. To the extent necessary to effectuate the terms of this Section, ADEM agrees to assign (or cause its personnel and any of its suppliers or subcontractors to assign) and does hereby assign fully to APS all its or their worldwide right, title and interest in and to such modifications or upgrades. ADEM shall retain no rights, title or interest in and to such System modifications or upgrades except as provided under the Sharing License.
8. **TERM, AND TERMINATION:**

8.1. **Term.** This Agreement shall remain in effect for five (5) years from the Effective Date ("Initial Term") unless otherwise cancelled or terminated as provided in this Agreement. The parties agree that no later than 60 days prior to the end of the Initial Term or any renewal term, they will jointly review this Agreement, including amendments (if any) to determine whether to renew or terminate this Agreement. If the parties have not mutually agreed to a renewal of this Agreement at the expiration of the Initial Term or any renewal term, then the term will continue month to month (not to exceed three (3) months from the expiration of the Initial Term, or, if applicable, any renewal term) until a renewal is reached or either party provides a written notice of termination. Such notice of termination shall be effective within sixty (60) days from the date of the notice. Any written renewal agreement shall specify the term of the renewal and any other additional terms and conditions upon which the parties may agree.

8.2. **Termination**

8.2.1. **Termination for Convenience.** Upon at least ninety (90) days’ prior written notice, either Party may for its convenience terminate this Agreement. Such termination shall be effective upon the date stated in the written notice. Notwithstanding anything to the contrary in this Agreement, either Party may terminate this Agreement for convenience and without further liability by providing thirty (30) days written notice to the other if any and all license, license modification, authorization, or rule waiver, if required, from applicable federal, state, and municipal regulatory bodies for the use of and access to the System by ADEM as provided in this Agreement is not obtained by either or both Parties within six (6) months from the Effective Date.

8.2.2. **Termination for Cause.** Either party may terminate this Agreement at any time if the other party, its employees, agents or subcontractors are in material breach of any provision of this Agreement and such breach continues uncured for a period of sixty (60) calendar days following receipt of the non-breaching party’s written notice. Any failure to make payments when due shall constitute a material breach of this Agreement. All rights or remedies of the parties shall be cumulative, and not exclusive.

8.3. **Automatic Termination of the Sharing License.** The Sharing License will automatically terminate upon termination of this Agreement by either party whether for cause or convenience.

9. **ASSUMPTION OF RISK, INDEMNIFICATION, INSURANCE:**

9.1. For the purposes of this Section the following terms shall have the respective meaning indicated:

(a) “Delay” means any delay or failure of the System in any manner due to any reason, including, fluctuations, interruptions, or curtailment of the radio coverage due to an “Uncontrollable Force,” System malfunction, or RFI.

(b) “ADEM Representative” means ADEM, its employees, agents, representatives, suppliers, contractors, or anyone for whose acts ADEM is liable.

9.2. **Assumption of Risks.**
9.2.1. Except to the extent of APS’s gross negligence or willful misconduct, APS shall not be liable to any ADEM Representative for any Losses incurred by any ADEM Representative that arise out of or, result from (either directly or indirectly) this Agreement, including, any Losses that arise out of or result from any of the following: (i) any Delay; (ii) any inability to access or otherwise use the System in any manner or for any reason; or (iii) any acts or omissions of any APS Indemnitee in connection with the System or any resources related to the System, or in connection with the Sharing License, including, any assignment of the Priority Levels by APS to ADEM’s talk groups. ADEM assumes all risks of such Losses.

9.2.2. ADEM assumes all Losses that any APS Indemnitee may hereafter incur in connection with any Action arising out of, or resulting from (either directly or indirectly) this Agreement, including, any Action arising out of, or resulting from the events described in paragraphs (a) through (e) of Section 9.4.1; however, ADEM’s obligation under the preceding sentence shall not apply to the extent that APS’s Losses in connection with the event described in paragraph (a) of Section 9.4.1 arise out of or result from APS’s gross negligence or willful misconduct.

9.3. Release. ADEM hereby releases, waives, discharges, and covenants not to sue any APS Indemnitee for any Action arising out of, or resulting from (either directly or indirectly) this Agreement, which any ADEM Representative or its respective heirs, successors or assigns might assert or claim against any APS Indemnitee, except to the extent that such Action arises out of or results from APS’s gross negligence or willful misconduct.

9.4. Indemnification.

9.4.1. To the fullest extent permitted by law, ADEM will indemnify, defend, and hold harmless any APS Indemnitee for, from and against Losses that any APS Indemnitee may hereafter incur in connection with any Action arising out of, or resulting from (either directly or indirectly) this Agreement, including, any Action arising out of, or resulting from any of the following:

(a) any bodily injury, including death, to any person, or any damage or destruction of any property, caused wholly or partially by: (i) any ADEM Representative’s access to or other use of the System, in any manner or for any reason; (ii) any Delay; (iii) any inability to access or otherwise use the System in any manner or for any reason; or (iv) any Indemnified Action of any ADEM Representative;
(b) any actual or alleged non-compliance with applicable law by any ADEM Representative;
(c) any actual or alleged infringement, misuse, derogation, loss of control, or copyright violation of the SmartZone System Key or any third party intellectual property rights by any ADEM Representative;
(d) any lien or claim by any contractor of ADEM; or
(e) ADEM’s act of entering into this Agreement or any reasons of any ADEM Representative to enter into this Agreement.

9.4.2. Notwithstanding Section 9.4.1, ADEM’s obligation to indemnify APS under paragraph (a) of Section 9.4.1 shall not apply to the extent that APS’s Losses arise out of or result from APS’s gross negligence or willful misconduct.
9.4.3. ADEM’s obligation to indemnify under this Agreement shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable under any worker’s compensation laws, disability benefit laws or other employee benefit laws.

9.5. **Insurance.** The State of Arizona, Department of Emergency and Military Affairs (ADEM) is self-insured per A.R.S. 41-621. Without limiting ADEM’s indemnification obligations under Section 9.4, upon execution of this Agreement, ADEM shall deliver a Certificate of Insurance, naming APS as the Certificate Holder, directly to APS in accordance with paragraph 17. Insurance coverage limitations will be (a) Workers' Compensation and Employer's Liability insurance covering obligations imposed by federal and state laws with jurisdiction over ADEM's employees performing under this Agreement; (b) Commercial General Liability insurance with a combined single limit of Two Million Dollars ($2,000,000) each occurrence for bodily injury and property damage (the policy shall cover bodily injury, property damage, personal injury, contractual liability, products, completed operations, and the liabilities assumed under this Agreement); and (c) Business Automobile Liability insurance with a combined single limit for bodily injury and property damage of One Million Dollars ($1,000,000) each occurrence with respect to any vehicle that ADEM assigns to or uses in connection with the activities contemplated under this Agreement. The policies provided under items (b) and (c) of this subsection shall name APS and its affiliates, and the directors, officers, employees, representatives, and agents of any of them as an additional insured. The policies shall stipulate that the insurance shall be primary insurance and that any insurance carried by APS shall not be contributory insurance. ADEM shall provide APS at least thirty (30) days' advance written notice of any cancellation, non-renewal or material alteration of said policy. ADEM and its insurers providing the required coverages shall waive all rights of recovery against APS and its directors, officers, employees, and agents. Upon APS’s request, ADEM shall provide documentary evidence in a form and content acceptable to APS, confirming to APS’s satisfaction that the required insurance coverages have been obtained and will remain in effect as required by this subsection.

9.6. ADEM expressly agrees that this Section 9 is intended to be as broad and inclusive as is permitted by the laws of Arizona and that if any portion thereof is held invalid, it is agreed that the balance will, notwithstanding, continue in full legal force and effect.

10. **LIABILITY:**

10.1 NEITHER PARTY, NOR ITS RESPECTIVE OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, ADVISORS, REPRESENTATIVES, AFFILIATES OR SUCCESSORS OR ASSIGNS WILL BE LIABLE TO THE OTHER PARTY FOR ANY INDIRECT, CONSEQUENTIAL, SPECIAL OR PUNITIVE DAMAGES FOR ANY ACTIONS RESULTING FROM OR ARISING OUT OF THIS AGREEMENT, WHETHER BASED ON CONTRACT, INDEMNITY, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, PROFESSIONAL LIABILITY, CONTRIBUTION OR OTHERWISE.

10.2. LIABILITY LIMITATION. THE TOTAL LIABILITY OF ANY APS INDEMNITEE FOR ALL ACTIONS OF ANY KIND, ARISING OUT OF, OR RESULTING FROM THIS AGREEMENT, WHETHER SUCH ACTIONS ARE BASED ON CONTRACT, INDEMNITY, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, PROFESSIONAL LIABILITY, CONTRIBUTION OR OTHERWISE, SHALL NOT EXCEED THE TOTAL PAYMENTS MADE BY ADEM TO APS UNDER THIS AGREEMENT IN THE YEAR IN WHICH THE
LIABILITY ARISES.

11. **NO WARRANTY:**

11.1. ADEM acknowledges that it has inspected the System, and that it is entering into this Agreement solely in reliance upon such inspection, and not in reliance upon any representations, assurances, or other commitments or promises by APS.

11.2. APS CANNOT GUARANTEE THAT THE SYSTEM WILL ALWAYS OPERATE AS INTENDED BY THE PARTIES OR THAT IT WILL CONFORM TO THE MANUFACTURER’S DESIGN OR SPECIFICATIONS. THE SHARING LICENSE OR ANY OTHER RIGHTS GRANTED TO ADEM UNDER THIS AGREEMENT ARE PROVIDED BY APS TO ADEM “AS-IS,” AND APS DISCLAIMS ALL WARRANTIES, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE SHARING LICENSE, ANY OTHER RIGHTS GRANTED TO ADEM UNDER THIS AGREEMENT, THE SYSTEM, OR ANY MODIFICATIONS OR UPGRADES THERETO. APS EXPRESSLY DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND THE WARRANTIES OF TITLE AND NONINFRINGEMENT IN CONNECTION WITH THE SHARING LICENSE, ANY OTHER RIGHTS GRANTED TO ADEM UNDER THIS AGREEMENT, THE SYSTEM, OR ANY MODIFICATIONS OR UPGRADES THERETO.

12. **NO THIRD PARTY BENEFICIARIES:**

ADEM acknowledges and represents that this Agreement is not intended to and does not create any claims, rights, remedies, or benefits exercisable by any third party and neither APS nor ADEM undertakes any responsibility or obligation to any third party by virtue of this Agreement, and neither shall be liable to any third party by virtue of the nature and quality of the System, or other cause arising directly or indirectly out of this Agreement or its performance by either Party.

13. **CONFIDENTIALITY AND ADVERTISING:**

13.1. **Statement of Intent.** ADEM acknowledges that APS is providing it with certain proprietary information that may place APS at a competitive disadvantage or cause security concerns if released. APS is classified as Critical Infrastructure Industry by the federal government and accordingly is afforded certain protections by the Department of Homeland Security. Because of the proprietary nature of this information, ADEM believes that information of this nature is not subject to release pursuant to the public records laws and will not release such information unless required to do so by the court.

13.2 All nonpublic information that APS provides to ADEM or that ADEM acquires from any source in connection with this Agreement shall be deemed to be APS’s confidential information ("Confidential Information") unless and until APS specifically authorizes ADEM in writing to treat the information as public. Confidential Information includes: (a) any reports, specifications, know-how, strategies or technical data, processes, business documents or information, market research or other data, customer or client lists, and all other information concerning the business and affairs of APS that are owned, used, or possessed by or for the benefit of APS; (b) the Motorola SmartZone System Key; and (c) all confidential information or materials obtained by ADEM from a third party in connection with performance of this Agreement, unless and until APS specifically authorizes ADEM in writing to treat the information as non-confidential.
Confidential Information does not include: (i) information in the public domain through no fault or breach of this Agreement by ADEM; (ii) information previously and lawfully known by ADEM prior to disclosure by APS; and (iii) information rightfully learned from a third party not under restriction of disclosure.

13.3. ADEM shall not publish, release, disclose, or announce to any member of the public, press, official body, or other third party any Confidential Information, or use any of it for ADEM's own purposes or for the purposes of a third party, without the prior written consent of APS (which may be withheld by APS in its sole discretion), except disclosures required by law. ADEM may only use Confidential Information for the purposes permitted under this Agreement. ADEM shall use the same degree of care to avoid unauthorized use and unauthorized disclosure of Confidential Information as it employs with its own confidential and proprietary information of a like nature, but not less than a reasonable degree of care. Further, ADEM will implement procedures that will limit the availability of the Confidential Information to those employees of ADEM with a need to know. If APS provides consent to ADEM to disclose any Confidential Information to any supplier or subcontractor of ADEM, or any other third party, such consent shall be subject to ADEM first entering into written agreements with its supplier or subcontractor to protect the Confidential Information, with provisions of similar effect as the provisions in this Section 13.

13.4. ADEM shall not make copies, reproductions, abstracts or excerpts of the Confidential Information in whole or in part, except as authorized by APS. All copies, reproductions, excerpts or abstracts are deemed to be Confidential Information to the same extent as any originals. Upon (a) APS’s request at any time; or (b) termination of business relations between the parties, ADEM shall promptly return to APS all Confidential Information and all copies thereof or other physical embodiments of the Confidential Information.

13.5. If ADEM receives any subpoena or court order requiring disclosure of Confidential Information or otherwise believes in good faith that a disclosure of Confidential Information is required by law, ADEM shall immediately notify APS. ADEM shall, at APS’s direction, cooperate fully with APS in challenging any subpoena or court order requiring the disclosure of Confidential Information. If required by APS, ADEM shall require each person or entity to whom Confidential Information is provided to execute a certification that the person or entity understands the limitations on disclosure and use and will maintain the confidentiality of the Confidential Information and not use it other than as contemplated by this Agreement. Unless the parties agree otherwise, the confidentiality and other obligations imposed by this Section shall survive for a period of three (3) years after termination or expiration of this Agreement pertaining to the Confidential Information.
13.6. ADEM acknowledges that the unauthorized disclosure of any Confidential Information may cause irreparable harm and significant injury that may be difficult or impossible to ascertain. ADEM therefore agrees that specific performance or injunctive relief, in addition to other legal and equitable relief, are appropriate remedies for any actual or threatened violation or breach of this Agreement or an Order. ADEM shall not allege or assert that APS has an adequate remedy at law in respect to the relief sought in any such proceeding, nor shall ADEM seek the posting of a bond by APS in any such action.

13.7. Neither the name of APS nor the name of any APS facility or property shall be used in any advertising or other promotional context by ADEM or its subcontractors without the prior written consent of APS (which may be withheld by APS in its sole discretion).

14. ASSIGNMENT:

ADEM shall not transfer or assign any portion of this Agreement or its rights or obligations hereunder or otherwise dispose of any right, title or interest herein without the prior written consent of APS.

15. ENTIRE AGREEMENT:

This Agreement shall constitute the entire agreement among the Parties and shall supersede all prior proposals, representations, negotiations, or letters, whether written or oral. The Parties shall not be bound by or be liable for any statement, representation, promise, inducement, or understanding of any kind relating to the subject matter hereof not set forth in this Agreement. This Agreement may be modified only in writing, and any such modification shall be signed by duly authorized representatives of both parties.

16. GOVERNING LAW:

This Agreement shall be governed by and interpreted in accordance with the substantive and procedural laws of the State of Arizona, notwithstanding any Arizona conflict of law provision to the contrary.
17. **NOTICES:**

17.1. Any notice, demand or request provided for in this Agreement, or served, given or made in connection with this Agreement, shall be in writing and shall be deemed properly served, given or made if delivered in person, by facsimile or other electronic means (with hardcopy follow up in writing), or sent by registered or certified mail or overnight courier, postage prepaid, to the persons specified below:

**To APS:**

Arizona Public Service Company  
P.O. Box 53933, MS 3864  
Phoenix, AZ 85072-3933  
Attn: I/S EIS, Mgr Communications Systems

**To ADEM:**

Arizona Department of Emergency and Military Affairs, Division of Emergency Management, Deputy Director  
Division of Emergency Management  
5636 E. McDowell Rd.  
Phoenix, Arizona 85008

17.2. Notice given by personal delivery or overnight courier shall be effective upon receipt. Notice given by registered or certified mail shall be effective three (3) business days following the date deposited in the U.S. mail. Notice given by facsimile or other electronic means shall be effective upon receipt if received during the recipient’s normal business hours, or at the beginning of the recipient’s next business day after receipt if not received during the recipient’s normal business hours. Any Party may at any time, by written notice to the other Party, change the designation or the address of the person so specified. This Section 17 does not apply to notices and requests of a routine character. Such routine notices and requests shall be given in such manner, as the Parties from time to time shall arrange.

18. **DISPUTE RESOLUTION:**

If a dispute arises concerning this Agreement, a meeting of the disputing Parties shall be held within fifteen (15) business days after any Party gives the other Party written notice of the dispute (the “Dispute Notice”). The Dispute Notice shall set forth in reasonable detail the aggrieved Party’s position and its proposal for resolution of the dispute. A representative of each of the disputing Parties with authority to resolve the dispute shall be in attendance at all meetings. If the dispute is not resolved within thirty (30) calendar days after the first meeting of the disputing Parties, either disputing Party is free to use any other available remedy. The Dispute Notice and discussion period of thirty (30) days are conditions precedent to each disputing Party’s right to resort to any other method. A disputing Party’s failure to comply with this Section 18 shall entitle the other disputing Party to recover its costs and reasonable attorney’s fees in any judicial proceedings that circumvent this dispute resolution provision. Notwithstanding the foregoing, APS, as owner and operating agent for the System, may immediately take any action it
reasonably determines is necessary to conduct its business and operations in an efficient, safe, and secure manner, including any interim or provisional remedy.

19. REPRESENTATIONS AND WARRANTIES; BINDING OBLIGATIONS:

Each Party warrants and represents to the other Party, as of the Effective Date, that it has the corporate, governmental or other legal capacity, authority and power to execute, deliver and perform under this Agreement; provided, however, that both parties acknowledge that the performance of both parties under this Agreement is subject to obtaining any and all licenses, license modifications, authorizations or rule waivers, if required, from applicable federal, state, and municipal regulatory bodies for the access and use of the System by ADEM as provided in this Agreement. All of the obligations set forth in this Agreement shall bind the Parties, successors and permitted assigns.

20. UNCONTROLLABLE FORCE:

20.1. The term “Uncontrollable Force” shall mean any cause beyond the control of the Party unable to perform such obligation, including, failure of or threat of failure of facilities, flood, earthquake, storm, volcanic eruption, geo-hydrologic subsidence, fire, pestilence, lightning, and other natural catastrophes, epidemic, war, riot, civil disturbance or disobedience, strike, labor dispute, labor, fuel, transportation or material shortage, sabotage, subversion, action or restraint by court order or public or governmental authority (whether valid or invalid (so long as the party claiming Uncontrollable Force has not applied for or assisted in the application for, and has opposed where and to the extent reasonable, such government action or restraint)), and action or non-action by or inability to obtain or keep the necessary authorizations or approvals from any governmental agency or authority, which by exercise of due diligence such Party could not reasonably have been expected to avoid and which, by exercise of due diligence, it has been unable to overcome. It is the intent of the Parties that the foregoing examples shall not be used as a limitation on the term, “Uncontrollable Force” in interpreting or construing this Agreement. Rather the Parties intend a liberal interpretation of the term and accordingly intend that in questions of assumption of risk or contingencies, whether foreseen or not, the presumption shall be that risks not explicitly assumed by a Party are not assumed by said Party, if in fact, they are uncontrollable even with foresight. Nothing contained herein shall be construed as to require a Party to settle any strike or labor dispute in which it may be involved.

20.2. If any Party delays or is rendered unable to fulfill any of its obligations hereunder by reason of an Uncontrollable Force, that Party (“Non-Performing Party”) shall give prompt written notice with full details of the Uncontrollable Force to the other Party, and may request, in its notice, an extension of time for its performance. A Non-Performing Party that complies with the notice provisions in this Section shall be granted in writing an extension of time for performance of its obligations (except the obligations to make payment in accordance with this Agreement) equal to the time performance is delayed by the Uncontrollable Force. The Non-Performing Party shall exercise due diligence to remove such inability with all reasonable expediency. During the period of time in which the Non-Performing Party is granted an extension of time for its performance under this Section, the Non-Performing Party shall not be considered to be in default in the performance of any of its obligations hereunder (other than obligations to make payments).
21. **RELATIONSHIP OF THE PARTIES:**

Nothing herein contained shall be construed to create an association, joint venture, trust or partnership, or to impose a trust or partnership covenant, obligation or liability on or with regard to any of the Parties. Each Party shall be responsible for its own covenants, obligations and liabilities as herein provided and any collective covenants, obligations and liabilities described in any attachments to this Agreement. No Party shall be under the control of or shall be deemed to control the other Party. No Party shall be the agent of or have a right or power to bind the other Party without its express written consent, except as expressly provided in this Agreement. Nothing contained in this Agreement shall be construed as a limitation, restriction, or prohibition against APS with respect to any agreement or arrangement which APS has previously entered into or may in the future enter into with any third parties regarding the System. The rights of ADEM shall at all times be subject to any such existing agreement or arrangement, and to any such future agreement(s) or arrangement(s) with such third parties.

22. **SEVERABILITY:**

In the event that any term, covenant or condition of this Agreement, or the application of such term, covenant or condition, shall be held invalid as to any person or circumstance by any court or regulatory authority having jurisdiction, all other terms, covenants or conditions of this Agreement and their application shall not be affected thereby, but shall remain in force and effect unless a court or regulatory authority holds that the provisions are not severable from all other provisions of this Agreement.

23. **INTERPRETATION:**

The captions of the section headings hereof are for convenience only and shall not govern or influence the interpretation hereof. This Agreement is the result of negotiations between the Parties and, accordingly, shall not be construed for or against any Party regardless of which entity drafted this Agreement or any portion thereof.

24. **WAIVER:**

No delay in exercising any right or remedy shall constitute a waiver unless such right or remedy is waived in writing signed by the waiving Party. The waiver by any Party of any right or remedy hereunder shall not be construed as a waiver of any other right or remedy, whether pursuant to the same or a different term, condition or covenant.

25. **ATTORNEY'S FEES:**

The prevailing party in any proceedings instituted by either party regarding a dispute concerning this Agreement shall be entitled to recover its reasonable attorney's fees, costs, and expenses.

26. **SURVIVAL:**

Termination of this Agreement shall not relieve either party of any obligation under this Agreement which expressly or by implication survives termination of this Agreement, including its obligations under the following section headings: Assumption of Risk, Indemnification, Insurance; Limitation of Liability; Confidentiality and Advertising; Governing Law; Dispute Resolution; and Attorney's Fees.
27. **AUDIT OF RECORDS:**

27.1. For a period of five (5) years after the expiration or termination of this Agreement, APS shall retain the following documents pertaining to this Agreement: (i) copies of all invoices sent to ADEM relating to ADEM’s use of the System; and (ii) copies of all contracts between APS and third parties executed solely for the purposes of enabling ADEM to use the System. Notwithstanding anything to the contrary in this Section, APS has no obligation to retain such contracts if APS does not charge ADEM, or if ADEM does not pay APS, for any work performed or any goods provided under such contracts. Copies of all invoices and contracts that APS has an obligation to retain under this Section shall hereinafter be referred to collectively as the “Records.”

27.2. All Records shall be subject to inspection and audit by ADEM at reasonable times; provided, however, that ADEM shall (i) provide APS at least ten (10) business days’ written notice before ADEM’s inspection or audit, and (ii) comply with any confidentiality terms that APS or any applicable third party may require with respect to such Records. Upon ADEM’s written request, APS shall produce the original of any or all such Records, if available. If A.R.S. 35-214 applies to this Agreement, then APS’s obligations under A.R.S. 35-214 shall apply only to the Records and not to any other documents or records.

28. **CANCELLATION FOR CONFLICT OF INTEREST:**

Pursuant to A.R.S. 38-511, ADEM may, within three years after its execution, cancel this Agreement, without penalty or further obligation, made by ADEM if any person significantly involved in initiating, negotiating, securing, drafting or creating the Agreement on behalf of ADEM is, at any time while the Agreement or any extension of the Agreement is in effect, an employee or agent of APS in any capacity or a consultant to APS with respect to the matter of the Agreement. A cancellation made pursuant to this Section shall be effective when APS received written notice of the cancellation unless the notice specifies a later time.

29. **NON-DISCRIMINATION:**

APS shall comply with Executive Order 99-4 which mandates that all persons, regardless of race, color, religion, sex, age, national origin or political affiliation, shall have equal access to employment opportunities, and all other applicable State and Federal employment laws, rules, and regulations, including the Americans with Disabilities Act. APS shall take affirmative action to ensure that applicant for employment and employees are not discriminated against due to race, creed, religion, sex, national origin or disability.
31. SIGNATURE:

The signatories hereto represent that they have been appropriately authorized to enter into this Agreement on behalf of the Party for whom they sign. This Agreement is hereby executed as of the __________ day of _____________________, 2005.

ARIZONA PUBLIC SERVICE COMPANY
On its own behalf.

By__________________________________________

Name________________________________________

Title________________________________________
    As Authorized Agent of “APS”

Date Signed_________________________________

THE STATE OF ARIZONA, THROUGH
ITS DEPARTMENT OF EMERGENCY
AND MILITARY AFFAIRS, DIVISION OF
EMERGENCY MANAGEMENT

By__________________________________________

Name________________________________________

Title________________________________________
    As Authorized Agent of the State of
    Arizona

Date Signed__________________________________
ARIZONA STATE RACES PLAN

JUNE 12, 2004

Arizona Division of Emergency Management (ADEM)

&

Radio Amateur Civil Emergency Service (RACES)
Table of Contents

1. Introduction ................................................................................................................ ..................................82
1.1. Scope ..................................................................................................................... ...............................82
1.2. Purpose ................................................................................................................... ..............................82
1.3. Operations ................................................................................................................ .............................82
2. Authority ................................................................................................................... ...................................82
3. Authentication ..............................................................................................................................................82
4. Identification .............................................................................................................................................82
5. Implementation Procedures ................................................................................................... .......................83
  5.1. Procedures for Government Officials ....................................................................................... ............83
  5.2. Procedures for Amateur Radio Operators .................................................................................... .........83
6. Tests ....................................................................................................................... ......................................84
7. Annexes ............................................................................................................................................................84
  7.1. Annex A ................................................................................................................... ............................84
  7.2. Annex B ................................................................................................................... .............................84
  7.3. Annex C ................................................................................................................... .............................84
ANNEX A ............................................................................................................................................................85
ANNEX B ............................................................................................................................................................87
ANNEX C ............................................................................................................................................................89
APPROVALS .........................................................................................................................................................91
Introduction

Scope

This plan provides guidance for the Radio Amateur Civil Emergency Service (RACES) to support State and local government officials during certain emergency conditions.

Purpose

This plan is intended to provide coordinated operation between the Arizona State government officials and the RACES organization during times when there are extraordinary threats to the safety of life and/or property. Maximum benefits from a RACES organization can be obtained only through careful planning which identifies the organizations, agencies, and individuals concerned and assigns a definitive role to each. This plan enables agencies and organizations having emergency responsibilities to include the RACES organization in local emergency plans and programs.

Operations

This plan becomes official for the State of Arizona when signed by the Federal Communications Commission (FCC); Director or Deputy Director, Arizona Division of Emergency Management; Communications Officer, Arizona Division of Emergency Management; and the Arizona State RACES Officer. Under this plan, the Arizona State Director of Emergency Management is empowered to request the use of available volunteer communications facilities and personnel. Acceptance of or participation in this plan shall not be deemed as relinquishment of license control, and shall not be deemed to prohibit an amateur radio service licensee or broadcast licensee from exercising independent discretion and responsibility in any given situation under the terms of its license.

Authority


Authentication

The form of authentication that will be used between the activating official and the RACES organization is personal identification or knowledge of the individuals involved.

Identification

The methods used to identify a RACES member and key personnel during a communications support operation are the following:
a. Local Emergency Management Identification Card, and

b. Personal Acquaintance.

Implementation Procedures

Procedures for Government Officials

Upon notification or determination of an emergency condition or situation posing an extraordinary threat to life and/or property, the Communication Officer, Arizona Division of Emergency Management, will contact the Arizona State RACES Officer or an Alternate Arizona State RACES Officer, notifying said RACES Officer of the emergency and the nature of the emergency, and request the activation of RACES.

In order to speed personnel activation during emergency conditions or provide other announcements an authorized official may contact the Arizona Operational Area Emergency Broadcast System station and request that a public service announcement be made to assist activation of the RACES organization.

Termination of the emergency will be decided by the Director of the Arizona Division of Emergency Management at which time the RACES organization will be inactivated.

Procedures for Amateur Radio Operators

Upon request by authorized authorities, the designated RACES member(s) will report to the EOC and other appropriate sites. They will activate the net(s), using appropriate frequencies and/or repeaters.

State Net HF frequencies: Primary 3.990 MHz
(State EOC and RACES Rep. Secondary 7.248 MHz from each County.)

State Repeaters: Phoenix Calling Freq: 146.34-94 MHz

Due to the abundance of mountaintop VHF and UHF repeaters, and the large geographical areas covered in Arizona, choice of VHF and UHF repeaters will be determined by the location of the emergency, and at the discretion of the State RACES Officer.
The owners of all open repeaters and some closed linked repeaters have volunteered the use of their facilities in emergency situations.

RACES members missing a designated assignment by the EOC network control are encouraged to check in at any time.

In the event that assistance is offered by amateurs not living within the immediate area, amateurs should contact the EOC on the above frequencies or repeaters for assignment and dispatch.

At termination of the emergency, authorized officials shall initiate roll call from the EOC using any one or more of the above frequencies or repeaters. RACES members will then acknowledge and confirm receipt of termination message.

**Tests**

Tests of the system include:

One test per week of the State Net:

- Day: Sunday morning
- Time: 07:30 MST (14:30 UTC)
- Freq: Primary 3.990 MHz
  Secondary 7.248 MHz

**Annexes**

*Annex A*

Lists key personnel, their call signs, postal and email addresses and telephone numbers.

*Annex B*

Lists authorized RACES radio frequencies

*Annex C*

List of key agencies that interface with the Arizona Division of Emergency Management.
## ANNEX A

### Key Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Call Sign</th>
<th>Title</th>
<th>Res.</th>
<th>Cell</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamman, Gary</td>
<td>K7GH</td>
<td>State RACES Officer</td>
<td>Res.</td>
<td>Cell:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scottsdale, AZ 85254</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O'Connor, Rod</td>
<td>W7EKV</td>
<td>Alternate RACES Officer</td>
<td>Res.</td>
<td>Cell:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phoenix, AZ 85018</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May, Doug</td>
<td>W7IXA</td>
<td>Alternate RACES Officer</td>
<td>Res.</td>
<td>Cell:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scottsdale, AZ 85257</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gerwitz, Jim</td>
<td>AC7FN</td>
<td>Alternate RACES Officer</td>
<td>Res.</td>
<td>Off.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scottsdale, AZ 85260</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Justus, Jerry</td>
<td>KB7UKG</td>
<td></td>
<td>Res.</td>
<td>Cell:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tempe, AZ 85282</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gallagher, Edward</td>
<td>N7GKG</td>
<td></td>
<td>Res.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tempe, AZ 85282</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landau, Eric</td>
<td>K7EAL</td>
<td></td>
<td>Res.</td>
<td>Cell:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fountain Hills, AZ 85268</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Call Sign</td>
<td>Location</td>
<td>Email Address</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>-----------</td>
<td>----------</td>
<td>-----------------------</td>
<td></td>
</tr>
<tr>
<td>Reade, Art</td>
<td>N7AR</td>
<td>Phoenix, AZ 85016</td>
<td><a href="mailto:artn7ar@aztecfree.net">artn7ar@aztecfree.net</a></td>
<td></td>
</tr>
<tr>
<td>Riggs, Ron</td>
<td>AE7RR</td>
<td>Chandler, AZ 85248</td>
<td><a href="mailto:ronr@infcad.com">ronr@infcad.com</a></td>
<td></td>
</tr>
<tr>
<td>Yarger, Jack</td>
<td>W7ADZ</td>
<td>Goodyear, AZ 85338</td>
<td><a href="mailto:basherredone@cox.net">basherredone@cox.net</a></td>
<td></td>
</tr>
</tbody>
</table>
3-1. General

This chapter provides information on the use of frequencies in emergency situations when the War emergency Powers, under the provisions of the Communications Act of 1934, Section 606, as amended, have been invoked by the President.

3-2. List of Frequencies (Wartime Emergency Situations)

All of the authorized frequencies and emissions allocated to the Amateur Radio Service are available to RACES on a shared basis except in the event of an emergency that necessitates the President invoking his War Emergency Powers under the provision of Section 706 of the Communications Act of 1934, as amended. Under those provisions only RACES stations and amateur stations participating in RACES may transmit and only on the following frequencies:

<table>
<thead>
<tr>
<th>Frequency or Frequency Bands (MHz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.800-1.825</td>
</tr>
<tr>
<td>1.975-2.000</td>
</tr>
<tr>
<td>3.500-3.550</td>
</tr>
<tr>
<td>3.930-3.980</td>
</tr>
<tr>
<td>3.984-4.000</td>
</tr>
<tr>
<td>7.079-7.125</td>
</tr>
<tr>
<td>7.245-7.255</td>
</tr>
<tr>
<td>10.100-10.150</td>
</tr>
<tr>
<td>14.047-14.053</td>
</tr>
<tr>
<td>14.220-14.230</td>
</tr>
<tr>
<td>14.331-14.350</td>
</tr>
<tr>
<td>21.047-21.053</td>
</tr>
<tr>
<td>21.228-21.267</td>
</tr>
<tr>
<td>28.55-28.75</td>
</tr>
<tr>
<td>29.237-29.273</td>
</tr>
</tbody>
</table>
29.45-29.65
50.35-50.75
52-54
144.50-145.71
146-148
222-225
420-450
1240-1300
2390-2450
ANNEX C

KEY AGENCIES that interface with ARIZONA EMERGENCY MANAGEMENT

Arizona State Offices

Attorney General Office

Department of Military Affairs (National Guard)

Department of Public Service

Arizona Corporation Commission

Arizona Radiation Regulatory Agency

Department of Health Services

Department of Environmental Quality

Department of Agriculture

Department of Transportation

County Offices

All County Divisions of Emergency Management

Federal Office

National Weather Service
Volunteer Services

American Red Cross

Arizona Wing Civil Air Patrol

Arizona National Guard, Broadway Consumer

Commercial

Palo Verde Nuclear Generating Station

Arizona Public Service (APS)
APPROVALS

This plan has been reviewed and approved by the following authorities.

Lou Trammell
Deputy Director, Arizona Division of Emergency Management

Jay Vargo
Communications Officer, Arizona Division of Emergency Management

Gary Hamman
Arizona State RACES Officer

8-13-04
Communicator NXT Emergency Notification System
Arizona Division of Emergency Management

Standard Operating Procedures

This SOP contains the following numbered sections:

I. PURPOSE
II. SCOPE
III. DEFINITIONS
IV. POLICY
V. ACTIVATION PROCEDURES
VI. POST ACTIVATION PROCEDURES
VII. ADEM ACCOUNT INFORMATION

Purpose

The purpose of this document is to establish guidelines for the use/activation of the Dialogic Communications Corporation (DCC) “Communicator NxT,” hereafter Communicator. The COMMUNICATOR is capable of simultaneously transmitting notifications to multiple individuals or groups, defined by predetermined lists via a prerecorded message. These messages may be transmitted to traditional hard line telephones, facsimile machines, pagers, or cell phones. The Communicator has additional functionality as well; such as on-the-fly message recording, call-down trees, emergency and non-emergency notification via email, remote call-out activation and the simultaneous activation of multiple scenarios.

Scope

The Communicator may be utilized to notify ADEM and DEMA personnel and selected state agencies, along with county Emergency Management personnel of emergency situations, EOC activations, nuclear incidents, and other situations or events as deemed appropriate and necessary to provide for the safety of those citizens and/or personnel. The Communicator may also be utilized for EOC continuous staffing and testing.

Ultimate operational control, activation and administration of the system will be the responsibility of the Director of ADEM (or his/her designee). Operational components, such as, but not limited to, county emergency management offices, county Sheriff’s Offices, and county government, will have activation rights based on their component’s needs as dictated within this policy. Operation, testing and training will be coordinated through the Logistics section of ADEM.
Definitions

**DCC:** Dialogic Communications Corporation
730 Cool Springs Blvd Suite 300
Franklin, TN. 37067
Customer ID # 1104

**Communicator** Emergency Notification System – The primary function within the DCC Communicator that allows notifications to a select group, or all employees, depending on situational needs. The system will incorporate all ADEM personnel, along with county emergency management personnel, into the database. Communicator is capable of calling one or all ADEM employees or smaller groups within the Division or counties.

**Scenario (s):** Conditions necessary to send a notification, which may include who is being notified (ADEM, Apache County, etc) and how they will be notified (home phone, cell phone, pager, email, etc).

**Administrator (s):** Personnel authorized by ADEM to manage the Communicator. Administrators have privileges to all functions of the software, including assigning passwords and assigning security users.

**Creator (s):** Personnel authorized by ADEM to create scenarios, input contact information, create messages, and launch call outs. County Emergency Managers and other key personnel are assigned as “Creators”.

**Group:** A pre-defined list of names and contact information of potential responders or personnel. Groups are assigned by section, or by member status on a team.

**Call-Out:** A notification made by the Communicator.

**Fill Count:** A feature built into Communicator NXT that allows for a required amount of staff to be contacted, and no others. Once the required amount of staff (i.e. 5 needed out of 12 contacts) is confirmed as received message or responding, the system will abort the call-out until re-activated.

**Routine Notification:** A non-emergency notification that can be activated by any ADEM Administrator or Creator through the Director of Emergency Management or his designee. These notifications include, but are not limited to, system tests, filling staffing shortages, mass announcements, etc.

**Emergency Notification:** An Communicator scenario in which notification to employees is immediately necessary. Only assigned administrators or creators may
activate this type of scenario through their Department heads or designees. These notifications include, but are not limited to EOC activations, nuclear events, evacuations due to hazards such as flooding or HAZMAT, or medical or health related outbreaks.

**Remote Activation:** A call-in system of the Communicator that allows authorized users to call into the system, instead of using Internet activation, and activate a scenario.

**DEMAN:** DCC Communicator NXT server name, located in building M5103.

**Policy**

**AUTHORIZATION**

All notifications, regardless of nature must be approved by the authorized Department head or his/her designee. Prior to any notification, the following must be completed:

In the event two or more Sections require emergency notification, the Section charged with overall responsibility for the incident shall decide priorities. Pre-activation priority categories are defined as Test, Low, Medium, High, and Emergency. All pre-set Scenarios concerning EOC activations are classified as Emergency priority, monthly tests are classified as Test priority. Any other Scenarios shall be approved by the Director ADEM, and reviewed by system administrators.

In the event the SEOC is activated, the Director of ADEM shall set priority levels for each agency requesting use of the system. Priorities shall be set based on the greatest need.

All activations require the “report” function at the conclusion of the activation to be sent to at least two ADEM system administrators and the Assistant Director Logistics.

**NON-EMERGENCY GROUP NOTIFICATION REQUESTS**

All routine requests for callout notifications to staff must be approved by the Director of Emergency Management (or their designee).

Routine messages as deemed appropriate for public distribution by the Public Information Officer or Director of ADEM shall only be broadcasted between 0900 to 2100 hours.

**EMPLOYEE NOTIFICATION CALL-OUT**

ADEM, along with all participating county Offices of Emergency Management, shall maintain a pre-defined list of personnel for immediate use in emergency situations identified as a “call-out list”. The Department head
or his/her designee shall be responsible for the maintenance and updating of their department’s call-out list. In order to maintain accuracy of the system, the following procedure shall be in place:

All Departments that have the possibility of recalling employees must keep and maintain current lists.
Hard copies of the call-out list shall be forwarded to ADEM, to be kept as a contingency.
Occasional requests by system administrators may be made to department heads in order to keep call-out lists current. This includes, but is not limited to, using the Communicator to contact individuals via email to update their own records within the system.

EMERGENCY RESERVIST CALL-OUTS

ADEM Emergency Reservists, if to be called using the Communicator, shall be called under the direction of the requesting Assistant Director. A request shall be made to a system administrator containing:

1. Specific message text needed, including name of Assistant Director requesting activation, and call-back number
2. Fill Count, if required

EMERGENCY-SPECIFIC MESSAGE PROTOCOL

System administrators, along with the Director of ADEM (or his designate), shall have the responsibility of ensuring accurate and specific message instructions. The following scenarios require special attention:

1. Palo Verde Nuclear Generating Station – Nuclear business codes and jargon shall not be used during a Communicator call-out. Plain English messages are required, not referring in any way to the severity of the event.
2. Alternate SEOC activation – In the event the State EOC is not habitable or suited for operation, the Communicator must reflect this circumstance in the call-out message. If, at any time, the State EOC becomes inhabitable or not suited for operation, a call-out will be initiated to inform ADEM personnel and county staff, under the direction of the Director (or his designate).
3. Dual – EOC activation – In the event that both State and Alternate State EOC’s are required for use during an emergency, a call-out will be initiated to inform ADEM personnel and county staff of this condition, under the direction of the Director (or his designate).

NAMING CONVENTION

Due to the large number of departments and agencies using the Communicator system, this standard naming convention has been
implemented. All Groups, Messages, and Scenarios must comply with the following convention.

**Scenarios** shall start with the official Department Name, followed by either "Alert", "Drill", or "Test", followed by your personalized scenario description.

*Example*    Pima County Alert DMAT Activation  
*Example*    Capitol PD Drill Fire

**Groups** shall start with the official Department Name, followed by your personalized group description.

*Example*  Apache County EOC Team  
*Example*  Mohave County Toad 1

**Messages** shall start with the official Department Name, followed by your personalized message description.

*Example*  Gila County Shelter  
*Example*  Juvenile Corrections Administration

System Administrators shall have the responsibility of reviewing test and emergency call-out reports, to ensure system operability, and enhance call success rates. Administrators shall also, at their discretion, instruct users on correct phone answering operation, and troubleshoot recurring issues with specific contacts.

Creators are required to obtain PINs and User IDs from one of the ADEM administrators prior to adding any new personnel to their department. Creators are also required to notify one of the ADEM administrators before a contact is deleted from the system.

Messages for profit activity, personal use, advertising of any product or service, political messages, or to obtain telephone numbers of individuals or businesses are strictly prohibited. The only exception to this would be calls made to ADEM or county personnel to update their call-out numbers.

No additional software of any kind will be installed on the server where the Communicator resides without the approval of DEMA’s Information Technology section. Standard Windows updates and anti-viral definitions updates shall be done perfunctorily and do not require special permission.

Persons authorized to operate the Communicator shall not reveal their passwords to anyone, nor shall they broadcast any improper or erroneous information/messages. Failure to comply with this policy may necessitate firm disciplinary action.
Only trained and authorized personnel shall have access to the Communicator server, located in the server room in building M5103.

Administrators shall be available for Communicator operations and support to all agencies using the Communicator system. Administrators shall be available by telephone (work, home or cell) to the Director, Assistant Director and Duty Officer as the need arises. If a Administrator is to be out of the local area or will be unable to be reached, they must notify the other Administrator and at least the Duty Officer of who will be available for assistance with a time frame of there unavailability. There shall be at a minimum of at least one (1) Administrator/Creator available to the ADEM Director (or his designate) at all times.

**Activation Procedures**

Emergency activation of Communicator messages may be performed by the following agencies: ADEM and county emergency management personnel.

“Client Seats” are not pre-set; a scenario may be started (call-out initiated) from any Internet-capable PC.

Prior to the activation of the Communicator from any location, the person activating a Communicator emergency message must review any other activations that are currently in progress or are scheduled to activate.

Internet activation – The following procedures must be followed to activate a scenario from an Internet-capable PC:

- Verify that all information is accurate prior to activation of the Communicator.
- All DRILL messages must be prefaced and end with “This is a Drill”. Emergency call-outs will not contain “This is a Drill”, nor will they contain “This is not a Drill”.

Remote activation – The following procedure must be followed by an authorized user with access to activate a scenario from a remote location (office, cell phone, etc):

- All remote activations must follow the procedures listed in section D, which requires verification that all information is accurate prior to activation of the Communicator.
- Select the appropriate scenario and prepare to record the on-the-fly message, if necessary.

Off-site activation – If the Communicator needs to be activated using the Off-site backup server, administrators of the system must be notified immediately after the activation in order to troubleshoot the error with the ADEM server.

If Fill Counts are to be used to acquire a minimum amount of staff, the Assistant Director of the requesting Section shall determine the number used for the count.
Post Activation Procedures

Reports prepared by the Communicator shall be analyzed by ADEM logistics personnel for response times, missed calls, etc.

During emergency notifications, it shall be the responsibility of the person authorizing the activation or his/her designee to determine whether a follow-up notification is necessary.

In circumstances where a post notification is necessary, the same steps as noted in Section V of this policy will be followed.
EMERGENCY RESERVIST CALL-OUT REQUEST

<table>
<thead>
<tr>
<th>Date of Request</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Call Out to be performed</td>
<td></td>
</tr>
<tr>
<td>Assistant Director Requesting</td>
<td></td>
</tr>
<tr>
<td>Assistant Director Call Back Telephone Number</td>
<td></td>
</tr>
<tr>
<td>Priority Level Category (Circle One)</td>
<td>TEST LOW MEDIUM HIGH EMERGENCY</td>
</tr>
<tr>
<td>Type of Notification (Circle One)</td>
<td>ALERT DRILL TEST</td>
</tr>
<tr>
<td>Group Reservists to be Called from (Circle One)</td>
<td>POLICY OPERATIONS LOGISTICS PREPAREDNESS</td>
</tr>
<tr>
<td>All Reservists in Group</td>
<td>YES NO</td>
</tr>
<tr>
<td>Selected Reservists (List Names Required)</td>
<td>YES NO</td>
</tr>
</tbody>
</table>

If No on either of the above | FILL COUNT ___________

MESSAGE

Updated September 2008 99 of 118
I. **Purpose**

The purpose of this document is to establish guidelines for the use/activation of the Arizona EOC Network between state jurisdictions. The Arizona Division of Emergency Management is pursuing this venture to ensure radio interoperability between EOC’s and state EOC’s.

Arizona Public Service currently operates an 800MHz Motorola SmartZone trunked system throughout Arizona. The Arizona Division of Emergency Management currently has agreements with Arizona Public Service for the use of three analog talkgroups on this system. The talkgroups are used for both day-to-day and emergency statewide communications.

II. **Definitions**

ADEM – Arizona Division of Emergency Management

APS – Arizona Public Service

Arizona EOC Network – The three APS talkgroups used by the Arizona Division of Emergency Management and radios on the system

DEMA – Arizona Department of Emergency and Military Affairs

EOC – Emergency Operations Center

SEOC – State Emergency Operations Center

Station – Person or entity using the system

TG – Talkgroup, a “channel” on a trunked radio system

**Talkgroup Designators**

AZ SEOC1 – Primary calling talkgroup. Weekly radio checks are held on this talkgroup, along with emergency traffic.
AZ SEOC2- Administrative talkgroup. Wellness checks, information sharing, and day-to-day business are conducted on this talkgroup.

AZ INTST- Interstate talkgroup. This talkgroup was set up in advance to accommodate other state systems as an interoperability talkgroup.

III. Policy

A. SYSTEM USAGE

ADEM, with permission from APS, is granting adjoining states permission to use AZ INTST, the interstate talkgroup. The Arizona EOC Network should be used for information sharing in times of emergency, recovery from emergency, planning or exercise.

B. SYSTEM OPERABILITY

ADEM conducts weekly tests of the Arizona EOC Network at 1700 hours Zulu, 1000 hours local Arizona time. It is recommended that all agencies within the EOC network check in to the weekly roll call.

Any system outages or problems are handled by APS.

IV. Calling

A. Calling Procedure

Current and future users of the Arizona EOC Network may communicate easily and efficiently. For this reason, a standard hailing procedure is used. The station attempting to make contact should state the agency or call sign they are attempting to contact first, then state their station call sign.

For Example: Arizona State EOC is attempting to call Nevada State EOC

Proper calling procedure: “Nevada State EOC this is Arizona State EOC”

B. Common Language

The use of common language, as stated according to the National Incident Management System (NIMS), is strongly encouraged among all users.

Radio jargon such as “over”, “niner” and “figures” should be used only under certain circumstances, such as passing message traffic. “Out” is an accepted and recommended way of ending a radio transmission.
INTERGOVERNMENTAL AGREEMENT (IGA)  
BETWEEN  
THE ARIZONA DIVISION OF EMERGENCY MANAGEMENT  
AND  
__________COUNTY  
FOR THE USE OF MOBILE COMMUNICATIONS VEHICLE  

THIS AGREEMENT is made and entered into this ___ day of ___________, 2004, by and between the DEPARTMENT OF EMERGENCY AND MILITARY AFFAIRS of the State of Arizona (hereinafter “DEMA”) and the ________ COUNTY EMERGENCY MANAGEMENT OFFICE, a political subdivision of the State of Arizona (hereinafter “COUNTY”).

WHEREAS, DEMA is duly authorized to execute and administer contracts pursuant to A.R.S. 11-952, et. seq., and the DEMA Director is authorized to enter into such an Agreement pursuant to A.R.S. 26-101, et. seq.

WHEREAS, the COUNTY is duly authorized to execute and administer contracts pursuant to Title 9, Arizona Revised Statutes and A.R.S. § 11-951, et seq., and to exercise powers and duties pursuant to Title 9 and Title 13, Arizona Revised Statutes.

WHEREAS, DEMA and the COUNTY, each of whom has agreed to a joint exercise of powers common to them as to governmental functions necessary to the governmental and/or proprietary functions of such public entities contingent on the approval of their respective funding authorities, as set forth by their signatures on this Agreement.

WHEREAS, upon the termination of this Agreement by either party, all equipment shall remain the property of DEMA.

NOW, THEREFORE, IT IS HEREBY AGREED by and between the parties, as follows:

1. PURPOSE: The purpose of this Agreement is to establish an understanding between parties for the assignment and use of a Mobile Communications Vehicle, (hereinafter “MCV”). DEMA, upon approval of this agreement, will provide a MCV to the COUNTY with the understanding that this MCV will be used to support regional interoperability, communications coverage in case of an emergency or disaster and as called upon by mutual aid agreements, in support of COUNTY, REGION or STATE response to an emergency drill, exercise or actual incident. Upon assignment of the MCV from DEMA to the COUNTY, the COUNTY is required to provide the appropriate safety, maintenance, and storage, staffing and training, necessary to sustain the vehicle as described in the requirements noted below in this document. Matters relating to life-threatening situations will have priority in the use of the MCV. (Refer to attached addendum for specific vehicle information).
2. **DEMA REQUIREMENTS:**

   a. **Safety:** The COUNTY, upon acceptance of the MCV, is responsible for the upkeep and safety of the vehicle for use by authorized personnel and passengers. The COUNTY is responsible for keeping the MCV in optimum working order, protecting the safety of others during its deployment.

   b. **Maintenance:** The COUNTY shall hereby agree to be responsible for the maintenance and readiness of the MCV. This includes the costs for routine vehicle maintenance as referenced in the vehicle owner’s manual, including filters, fluids, battery, and brakes, tire rotation and alignment. Additionally, upkeep of the generators, electrical wiring, and radio equipment. DEMA will reimburse the COUNTY and be responsible for any major costs associated with vehicle or component breakdown as a result of normal operating conditions. The MCV is to be staged and ready for immediate deployment requiring fluids and batteries to be operational.

   c. **Storage:** The COUNTY shall hereby be responsible for the appropriate storage of the MCV. A secure location is necessary for deterring vandalism or theft, and a location that shields from the elements is recommended. MCV doors shall be kept locked at all times when not in use. It is necessary to have 24-hour access to the storage location so that deployment is not delayed.

   d. **Staffing:** The COUNTY shall establish, according to county protocol, a callout roster consisting of trained emergency managers or amateurs to staff the MCV when deployed. Amateurs should not only be familiar with radio equipment but familiar with phone lines and generator power as well. MCV operators should be familiar with vehicle handling on dry pavement as well as adverse conditions. A list of authorized personnel is to be sent to DEMA for their files.

   e. **Training:** The COUNTY is responsible for obtaining appropriate training to be familiar with the MCV operations. Initial training (train-the-trainer) and training materials will be provided by DEMA. The COUNTY is then responsible to train their personnel accordingly. Due to the complex nature of the ACU-1000, the computer and the radio configurations, regular “refresher” training sessions may be necessary. DEMA will provide assistance as needed for training.

   f. **Participation:** The COUNTY is to participate fully in statewide emergency exercises (drills) and actual emergencies. The MCV is to be used to its full capability to facilitate emergency operations. The MCV is a “State” asset, and under the Statewide Master Mutual Aid Agreement could be called upon by other participating agencies to help resolve communications needs in an emergency.
g. **Modifications:** All modifications or additions to the MCV or any equipment therein must be approved by DEMA. This includes but is not limited to the ACU-1000, laptop computer, radios, power supplies, antenna array, cabling, vehicle warning lights, sirens, and interior. No equipment is to be removed and used elsewhere without authorization from DEMA.

h. **Insurance:** State employees, officers and agents driving a State vehicle while in authorized governmental capacities and in the course and scope of employment or authorization are covered for liability insurance pursuant to A.R.S. 41-621. A certificate is provided as proof of compliance with the Financial Responsibility Act per A.R.S. 28-1251 et. Seq and for no other purpose. The certificate is issued by the Department of Administration, Risk Management Division, 1818 West Adams, Phoenix, Arizona 85007; telephone (602)542-2182.

3. **SUPERVISION AND CONTROL:** Management of an incident shall remain with the jurisdiction in which the incident occurs. Management of the MCV, related equipment and assigned personnel will be in accordance with existing mutual aid agreements and established protocols.

4. **DURATION OF AGREEMENT.** This agreement shall be in effect for a period of five (5) years ending on October 31, 2009, and shall be automatically renewed for an additional one-year period and at the end of each subsequent one-year period, unless either party provides 90-day written notice of intent to terminate to the other party. Except as required by law or to the extent required because of the failure of the Legislature to appropriate funds required for the continuation of the agreement, termination shall not relieve the terminating party of any unfulfilled duties existing under this agreement to the other party on the date of termination. This agreement is subject to A.R.S. 38-511 and may be cancelled pursuant thereto. The parties are entering into this agreement pursuant to A.R.S. 11-951 et seq., and A.R.S. 41-2631, et seq.

5. **INDEMNIFICATION:** Each party agrees to be responsible for its own negligence.
6. **ENTIRE AGREEMENT:** This document constitutes the entire agreement between the parties pertaining to the subject matter hereof, and all prior agreements and understandings, oral or written, are hereby superseded and merged herein. This Agreement shall not be modified, amended, altered or extended except through a written amendment signed by the parties.

7. **ADDENDUM:** Attached to this agreement is an addendum that identifies the vehicle identification number (VIN) and general component list of items that are to be delivered with the vehicle.

---

**DEMA**

BY

________________________

DAVI P. RATA CZAK
MAJOR GENERAL, AZ ARNG
DIRECTOR

---

**COUNTY OF __________**

BY

________________________

---

**ATTEST:**

**DEMA**

---

**ATTEST:**

**COUNTY OF __________**

---
-- This Page Left Blank Intentionally --
Appendix C

Equipment Testing & Checklists
Attention all stations, this is the Arizona Division of Emergency Management State Emergency Operations Center now opening the weekly 800 MHz Arizona EOC Net. This net is held every Wednesday morning at 1000 Hours. This system is owned, operated and maintained by the Arizona Public Service Company.

Today is the______ day of______________, 200_.

This is a directed net. The purpose of this net is:

1. to provide a single point of contact for EOC’s in Arizona
2. to test emergency communications procedures
3. to provide information pertinent to the operations of this group.

Is there any emergency traffic?

(Insert Any Announcements at this time)

At this time I will proceed with check-ins. If you have traffic for the net, say “with traffic” after your station call sign.

(Call the list)

(Call any stations with traffic)

Are there any late or additional stations for today’s net?

Thanks to all for participating in the Arizona EOC Net.

This is State EOC now closing the net and releasing the talkgroup back to normal service. State EOC OUT.

800 MHz
## 800 MHz Stations

<table>
<thead>
<tr>
<th>Call-Sign</th>
<th>Check-in</th>
<th>Traffic</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apache EOC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cochise EOC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coconino EOC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gila EOC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graham EOC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greenlee EOC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>La Paz EOC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maricopa EOC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mohave EOC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Navajo EOC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pima EOC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pinal EOC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Santa Cruz EOC</td>
<td>-</td>
<td>-</td>
<td>No radio.</td>
</tr>
<tr>
<td>Yavapai EOC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yuma EOC</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vehicle</th>
<th>Check-in</th>
<th>Traffic</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bullfrog</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toad 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toad 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toad 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toad 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gecko 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gecko 2</td>
<td></td>
<td></td>
<td>Ricardo Hernandez</td>
</tr>
<tr>
<td>Gecko 4</td>
<td></td>
<td></td>
<td>Ryan Goosley</td>
</tr>
<tr>
<td>Gecko 5</td>
<td></td>
<td></td>
<td>Jerry Justus</td>
</tr>
<tr>
<td>Gecko 19</td>
<td></td>
<td></td>
<td>Barry Scott</td>
</tr>
<tr>
<td>Gecko 20</td>
<td></td>
<td></td>
<td>Ron Ridgway</td>
</tr>
</tbody>
</table>

**Total Check-ins:**
NET PREMBLE – DEMA Radio Network Net

This is 51 Alpha now opening the DEMA radio net at ____ hours Zulu on the __ day of _____, 200_. Is there any emergency or priority traffic, over.

This is a directed net and all stations are asked to remain on frequency until after roll call. All traffic will go through net control. If you have traffic or information for the net, state “with traffic” after your call sign.

Roll Call follows:

At this time, are there any Arizona Army or Air National Guard stations wishing to check-in, over.

At this time, are there any Gecko stations wishing to check-in, over.

This is 51A making one last call for any late or missed check-ins, over.

This is 51A, net control station, now closing the DEMA radio net at _____ hours zulu on this ___ day of _____ 200_.

This net is now closed. DEMA Radio Network is now returned to normal use. 51A Out.

DRN
# DRN Stations

<table>
<thead>
<tr>
<th>Call-Sign</th>
<th>Entity</th>
<th>Check-in</th>
<th>No Traffic</th>
<th>Traffic</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>51D</td>
<td>DPS Phoenix</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51F</td>
<td>Forestry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51N</td>
<td>Navajo EOC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51P</td>
<td>Army MARS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51Y</td>
<td>Yavapai EOC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51AP</td>
<td>Apache EOC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51CH</td>
<td>Cochise EOC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51CO</td>
<td>Coconino EOC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51CR</td>
<td>Dept of Corrections</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51PI</td>
<td>Pima EOC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51PN</td>
<td>Pinal EOC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51YU</td>
<td>Yuma EOC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Call "Any Arizona National Guard Stations"

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Crater 12</td>
<td>AZNG</td>
</tr>
<tr>
<td>Dogpound</td>
<td>AZNG</td>
</tr>
<tr>
<td>Bullseye</td>
<td>AZNG</td>
</tr>
<tr>
<td>Casa Grande</td>
<td>AZNG</td>
</tr>
<tr>
<td>Call &quot;Any Geckos Stations&quot;</td>
<td></td>
</tr>
<tr>
<td>----------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Write In</td>
<td></td>
</tr>
<tr>
<td>Write In</td>
<td></td>
</tr>
<tr>
<td>Write In</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Call &quot;Any Stations Not Called&quot;</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>51C Civil Air Patrol</td>
<td></td>
</tr>
<tr>
<td>51E DEA Phoenix</td>
<td></td>
</tr>
<tr>
<td>51M Maricopa EOC</td>
<td></td>
</tr>
<tr>
<td>51AA ASEOC</td>
<td></td>
</tr>
<tr>
<td>51AH SFOC Hazards</td>
<td></td>
</tr>
<tr>
<td>51AR SFOC Response</td>
<td></td>
</tr>
<tr>
<td>51GI Gila EOC</td>
<td></td>
</tr>
<tr>
<td>51MO Mohave EOC</td>
<td></td>
</tr>
<tr>
<td>51RC Amer Red Cross</td>
<td></td>
</tr>
<tr>
<td>Bullfrog ADEM Mobile</td>
<td></td>
</tr>
<tr>
<td>Toad 1 TOAD1 Kingman</td>
<td></td>
</tr>
<tr>
<td>Toad 2 TOAD2 Tucson</td>
<td></td>
</tr>
<tr>
<td>Toad 3 TOAD3 Globe</td>
<td></td>
</tr>
<tr>
<td>Toad 4 TOAD4 Showlow</td>
<td></td>
</tr>
<tr>
<td>Horned Toad Cochise COM Vehicle</td>
<td></td>
</tr>
<tr>
<td>Total Check-Ins</td>
<td></td>
</tr>
</tbody>
</table>
Mobile Interoperable Communications System testing example:

ToadEx

Items to be tested:

Radio
- Input of new frequencies into Kenwood UHF and VHF radios
- Patching using ACU Controller Software – see bottom of sheet for detailed instructions
- Test patch using appropriate frequencies (use of DRN is appropriate if necessary, clear by Ryan first)
- Dispatch operation from HST on appropriate frequency
- ICOM 2720 and 706 operation (requires ham operators, if available)

Remember the Wednesday radio nets, 10:00 is the 800 MHz net, and 10:15 is the VHF DEMA Radio Net.

VoIP, Phone and Data
- Network connection to server and ACU Controller software
- Wired connection to ACU-1000 using laptop ACU Controller software
- Voice Messaging and Text Messaging to Bullfrog via Yahoo Instant Messenger
- Satellite phone call to ***_***_**** at time specified below
- Send picture from mast camera to ************

Operations
- Generator operation
- Tire pressure
- Air suspension pressure
- Fuel Level
# Communicator NXT Success Rates

## Communicator Success Rates

<table>
<thead>
<tr>
<th>Month</th>
<th>Complete Calls (%)</th>
<th>Section %</th>
<th>SERC</th>
<th>IT</th>
<th>LOG</th>
<th>OPS</th>
<th>POL</th>
<th>Prep</th>
<th>RCV</th>
<th>Hams</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JAN</td>
<td>76%</td>
<td></td>
<td>80%</td>
<td>100%</td>
<td>93%</td>
<td>82%</td>
<td>82%</td>
<td>69%</td>
<td>NA</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>FEB</td>
<td>63%</td>
<td></td>
<td>60%</td>
<td>75%</td>
<td>100%</td>
<td>55%</td>
<td>60%</td>
<td>69%</td>
<td>NA</td>
<td>20%</td>
<td>PM</td>
</tr>
<tr>
<td>MAR</td>
<td>No Test</td>
<td></td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>APR</td>
<td>66%</td>
<td></td>
<td>80%</td>
<td>50%</td>
<td>64%</td>
<td>77%</td>
<td>86%</td>
<td>44%</td>
<td>NA</td>
<td>60%</td>
<td>Weekend</td>
</tr>
<tr>
<td>MAY</td>
<td>70%</td>
<td></td>
<td>80%</td>
<td>75%</td>
<td>73%</td>
<td>73%</td>
<td>86%</td>
<td>60%</td>
<td>NA</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>JUN</td>
<td>87%</td>
<td></td>
<td>100%</td>
<td>100%</td>
<td>93%</td>
<td>68%</td>
<td>86%</td>
<td>81%</td>
<td>NA</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>JUL</td>
<td>79%</td>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>68%</td>
<td>83%</td>
<td>100%</td>
<td>NA</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>AUG</td>
<td>70%</td>
<td></td>
<td>83%</td>
<td>75%</td>
<td>67%</td>
<td>52%</td>
<td>100%</td>
<td>88%</td>
<td>NA</td>
<td>60%</td>
<td>PM</td>
</tr>
<tr>
<td>SEP</td>
<td>82%</td>
<td></td>
<td>83%</td>
<td>75%</td>
<td>80%</td>
<td>69%</td>
<td>83%</td>
<td>94%</td>
<td>100%</td>
<td>80%</td>
<td>Pre T4 Test</td>
</tr>
<tr>
<td>OCT</td>
<td>86%</td>
<td></td>
<td>83%</td>
<td>75%</td>
<td>79%</td>
<td>88%</td>
<td>88%</td>
<td>93%</td>
<td>80%</td>
<td>100%</td>
<td>TOPOFF</td>
</tr>
<tr>
<td>NOV</td>
<td>83%</td>
<td></td>
<td>83%</td>
<td>100%</td>
<td>83%</td>
<td>81%</td>
<td>88%</td>
<td>80%</td>
<td>80%</td>
<td>80%</td>
<td>Sunday/Evening</td>
</tr>
<tr>
<td>DEC</td>
<td>93%</td>
<td></td>
<td>100%</td>
<td>75%</td>
<td>92%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>TOTL</td>
<td>71.25%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
EAS Weekly Test

EAS

Recording a “Required Weekly Test” Message

CONFIDENTIAL
EAS

Sending a “Required Weekly Test” Message

CONFIDENTIAL
Mobile Interoperable Communications System
“Toad”
Operator Training

CONFIDENTIAL
State Mobile Operations/Communications Center
“Bullfrog”
Startup and Shutdown Procedure

CONFIDENTIAL