

Wildland Firefighting Radio Communications Lessons Learned Comments -2012

#1- Radio Frequency Change: Radio frequency spectrum changes occurred for a few wildland fire response agencies during late 2011/early 2012. (pre-fire season) Frequency changes were not always effectively communicated to critical partners.

Wildland firefighting quickly becomes interagency in nature as fast spreading wildfires encompass multiple jurisdictions requiring initial responders to utilize different radio networks and systems. Because of these multijurisdictional operations, most wildland fire emergency first response agencies use multi-channel, multi group two-way radios pre-programmed with their respective cooperating agencies radio frequencies. During the initial stages of an incident where multiple agencies are involved, emergency first responders may need to communicate on each other's cooperating agency frequencies until a communication plan can be established. Inaccurate frequency information in cooperator radios is often a prelude to the decrease of emergency first responder safety and effectiveness. *Communicate often, Communicate early.* When an agency changes a frequency, as most of us have experienced, there can be a delay with your interagency partners making your frequency changes in their radios. The Southwest wildland firefighting agencies often communicate these changes through a Southwest Radio Communications Group specific to wildland firefighting. However, this effort might not be the ultimate solution since non-fire emergency first responders usually do not get this valuable frequency change information. Groups like the Southwest Border Communications Working Group can be ideal platforms for these initiatives. This interagency frequency use strategy is common within the Fire environment but may soon become obsolete as technology changes. Perhaps interoperability solutions such as the *Arizona Interagency Radio System (AIRS)* and others similar to it can be incorporated as a supplement in addition to keeping responder radios up to date with cooperating agency frequency information.

AIRS: One of many comprehensive interoperability systems that is currently in use today, and specific to Arizona, is the Arizona Interagency Radio System, (AIRS). This Arizona based network is a suite of more than 40 full-time, always on, statewide strategically located, cross-banded suite of repeaters (VHF-UHF-800Mhz) that are designed to provide interoperable communications capability to first responders of police, fire, EMS and other first responders through agreement with the State of Arizona. This statewide cross banded suite of radio repeaters operates on designated interoperability frequencies in the VHF, UHF and 800 MHz bands. The State of Colorado also has a similar interoperability radio system. More info can be found at: <http://www.azpsic.gov/library/airs/>. Tactical line of sight frequencies that are not cross banded are also pre-established within the AIRS radio network.

#2- Frequency Naming Conventions: The use of frequency naming conventions to replace the actual naming of the specific frequency can sometimes lead to increased confusion. Keep it simple. Most often, in an effort to try to make things simpler, like establishing a generic name for a pre-defined frequency, i.e, Air-to-ground, TAC6, etc... sometimes sets the stage for more confusion unless they are nationally recognized conventions. Naming a frequency, in this case, *Air-to-Ground 21* or *Air-to-ground 96* in fact potentially increases the confusion instead of simply naming the frequency for what the frequency actually is. .i.e, 168.550 TX & RX. This procedure is currently under review. Also, It is becoming a common convention to list all frequencies to four digits past the decimal, i.e 168.3500 MHz. Note: The NWS weather channels are not being narrow-banded and should still be listed as wideband on ICS-205 & ICS-217A's even post 2012.

#3- Document Version Control: Ensure version control for radio frequency maps and resource lists. There were a few occasions where interagency dispatch centers distributed frequency information incorrectly based upon out of date info. Frequency lists should have dates and/or version numbers clearly marked. Use of the ICS-217A (Radio Communications Frequency Resource Availability) can make for consistent frequency management between agencies.

#4- Interagency Radio Frequency Sharing Agreements: The Southwest Wildland Fire Group is looking to establish a standardized interagency radio frequency sharing agreement for all Southwest Wildland Firefighting agencies that will meet Agency (Federal, State, County, Local) and FCC rules for sharing frequencies for emergencies & disasters. This will encompass version control, release of frequency information, authentication of correct frequency information by communications specialists for their respective agency and a Radio Communications Frequency Resource Availability List (ICS 217A) for all participants in wildland fire.