Bella Vista Radio Club EmComm Introduction

Amateur Radio Emergency Services

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What Is EmComm?

- EmComm, or Emergency Communications is the practice of providing communication services during emergency response, especially in situations where traditional communication modes may not be available (1).

  - Communications may be overwhelmed or completely unavailable.

  - Communications may be passed for one or multiple agencies.

  - Participants are not first responders, rather we are communicators passing messages.

  - Requires awareness, training and commitment to function as an asset instead of a liability.

EmComm or Public Service? Which is it?

- Gathering of a group of hams to monitor and provide communications for a bike race.

- Checkpoint teams relaying times and/or race numbers back to race organizers.

- Hams riding in SAG Cars (Support and Gear) relaying messages back to net control that they have picked up a rider who can't stay awake.

- Aid Stations needing restock of first aid supplies.

- A cyclist is hit by a car, is unconscious and needs immediate medical care.

- ARE YOU PREPARED?

Public Service vs EmComm

- There is a fine line between Public Service and EmComm. They are often blurred when situations change, many times rapidly.

- Simply, public service is communications without an emergency, whereas EmComm is emergency communications.

- Any situation has the capability of rapidly changing. You must be prepared for it and able to identify when it happens.

- Calm, cool, and professional communications win the day.

Emergency Communication

- Amateur radio has been providing emergency communications almost as long as it has been a service. The tragic sinking of the Titanic has something to do with it....

- The Amateur Radio Emergency Radio Service, ARES (and its predecessor Amateur Radio Emergency Corps) organized to provide emergency communications since the 1930's through the American Radio Relay League.

- Ham radio officially recognized as an emergency service by the US Government after World War II in the form of Radio Amateur Civil Emergency Service (RACES).

- Two different entities but both provide emergency communications via amateur radio. Many are intertwined for interoperability.

Amateur Radio Emergency Service (ARES)

- Administered through the ARRL.

- Organized by regions/states, called a "Section".

- Section Emergency Coordinator (SEC) appointed by (SM) or Section Manager

- SEC appoints District Emergency Coordinators (Multi-County) and Emergency Coordinators (usually one county or specific area).

- EC's work at local level with clubs, volunteers, and city/county officials "served agencies". POC.

- Members do not have to be ARRL members, but leadership does. You should be a member anyway :)

Radio Amateur Civil Emergency Service (RACES)

- Administered and activated through local and state governments. Authorized in Part 97 rules.

- Organized how the state/gov't agency sees fit.

- Emergency Managers usually require at least 18 years old, background checks and specific training.

- Activation ONLY through government agencies and when requested; limited autonomous operations.

Who Can We Serve?

Local, county, and state governmental agencies. This includes fire departments, police departments, county emergency management, state emergency management.

Federal governmental agencies including the National Weather Service (SKYWARN), Federal Emergency Mangement Agency, Homeland Security and beyond.

Voluntary Organizations Active in Disaster (VOAD) agencies such as the American Red Cross, Salvation Army, Church groups….there are literally hundreds!

Other ARES/RACES and EmComm Groups, Hurricane Watch Net, and more!
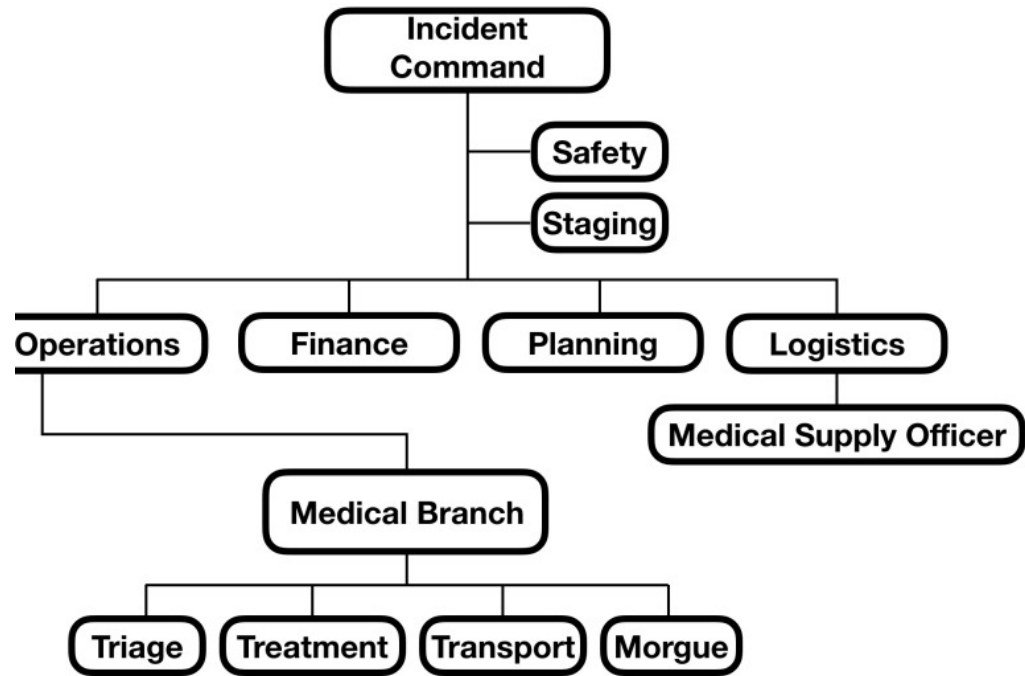
Incident Organization

The Incident Command System or ICS is a standardized, on-scene, all-risk incident management concept. ICS allows its users to adopt an integrated organizational structure to match the complexities and demands of single or multiple incidents without being hindered by jurisdictional boundaries (2).

Part of the overall National Incident Management System (NIMS) The National Incident Management System (NIMS) guides all levels of government, nongovernmental organizations and the private sector to work together to prevent, protect against, mitigate, respond to and recover from incidents.

NIMS provides stakeholders across the whole community with the shared vocabulary, systems and processes to successfully deliver the capabilities described in the National Preparedness System. NIMS defines operational systems that guide how personnel work together during incidents (3).

- Ham radio is auxiliary communications, often called AUXCOMM.

- Ham operators that participate in NIMS/ICS are becoming "Auxcomm Trained" across the US.

- Developed by Cybersecurity & Infrastructure Security Agency (CISA) in 2009 using the input of ham operators (4).

- Some states recognize Auxcomm in the communications unit of their NIMS/ICS Structure and is constantly evolving.

- Auxcomm training is coming to Northwest Arkansas soon!

Ham Radio in NIMS/AUXCOMM

What Training?

- To function alongside of todays' public safety, governmental and Volunteer Organizations Active in Disaster (VOAD), amateur radio EmComm operators need training in terminology, operations and flow of major incidents.

What Training? (cont.)

- Federal Emergency Management Agency Emergency Management Institute
  - IS-100 Introduction to the Incident Command System, ICS
  - IS-200 Basic Incident Command System for Emergency Response
  - IS-700 Introduction to the National Incident Command System
  - IS-800 National Response Framework, An Introduction

Courses are taken online, self-study and take 1-2 hours to complete.

There are many more available to increase your incident knowledge.

BVRC will host some brief overviews of these training classes soon.

- Register at FEMA EMI Student Portal: https://training.fema.gov/student/sssp.aspx

- Class links https://training.fema.gov/is/courseoverview.aspx?code=is-100.c&lang=en

Other Classes/Training EmComm Members should take:

- Kentucky ARES: Outstanding online self-study course. Many ARES Groups use and require this! http://www.kyham.net/emcomm/training/kytest.html

- ARRL EC-001 Self-Study EmComm Training http://www.arrl.org/news/arrl-self-guided-emergency-communication-course-ec-001-s-is-now-available-on-demand

- AUXCOMM Class when it becomes available.

More Training!

Pre Planning

- Traffic Handling Skills and Documents
- Coordinated frequency and mode designations
- Instructions and mission from served agency
- Backups for backups for backups
- Two is One, One is None

Commitment

Either you do or you don't. There is no in between.

Commitment

- Figure out what capacity you are able to commit to and if it aligns with organizational goals.

- Volunteer to be part of EmComm. Step up.

- Commit to training. Take courses, ask questions and become educated.

- Participate in events, both training and live.

- Test and take your radio knowledge to the highest level possible.

- Prepare your body and mind and be familiar with your mental and physical capabilities.

- Have a genuine desire to serve without self and politics. Be a true volunteer.

FEMA | Emergency Management Institute

EmComm Environment

- Your goal -after your safety- is to pass messages to their intended recipients, as clearly and quicky as possible with no errors.

- You may be asked deploy communications equipment in a dangerous environment that you aren't familiar with.

- Safety is paramount in unforgiving, poor conditions.

- You will, most likely, have to take care of yourself for the first parts of the incident, or longer.

But Isn't EmComm Dying? Not Necessarily...

- Public safety and government agencies learned from hams over the years because many of us did both. We helped patch the holes.

- Radio and phone systems have become far more robust and capable.
  - Backup Generators, DC power plants, Cellular on Wheels, Newer technologies, hardened sites.
  - Where is your ham repeater located? UPS and generator capable? Modern engineering standards? How about your home station?

- We must adapt and fill in the gaps, When All Else Fails!

- We must be ready and willing to work outside the box.

Next Steps

We will make an "active roster" of interested participants.

Begin the training process for NIMS/ICS compliance. This could be self-study or training classes hosted by the club.

Reach out to gov't agencies, other ham groups and start MOU process.

Classes/training on go-kits, traffic handling, net control and preparedness.

Discussion of ARES/RACES Groups establishment; where does the club fit in?

Establish coordinators/points of contact.

Levels of Volunteering

There is never any self-activation. Members do not show up anywhere without being told to do so by agency coordinators.

There is always room for both volunteers who can respond to a place (when officially activated) or work from their homes/home shacks. This is the beauty of ham radio. You must know what you are capable of.

Be prepared. This includes for your own well-being and where "Go-Kits" come into play.

Test, practice and participate to build "muscle memory" and be able to work under pressure.

Questions!

How long do you think you'd survive in a zombie apocalypse?

Notes

- 1. http://denverares.org/emcomm-101-what-is-emcomm/#:~:text=EmComm%2C%20or%20Emergency%20Communications%20is,modes%20may%20not%20be%20available.

- 2. https://usda.gov

- 3.https://www.fema.gov/emergency-managers/nims