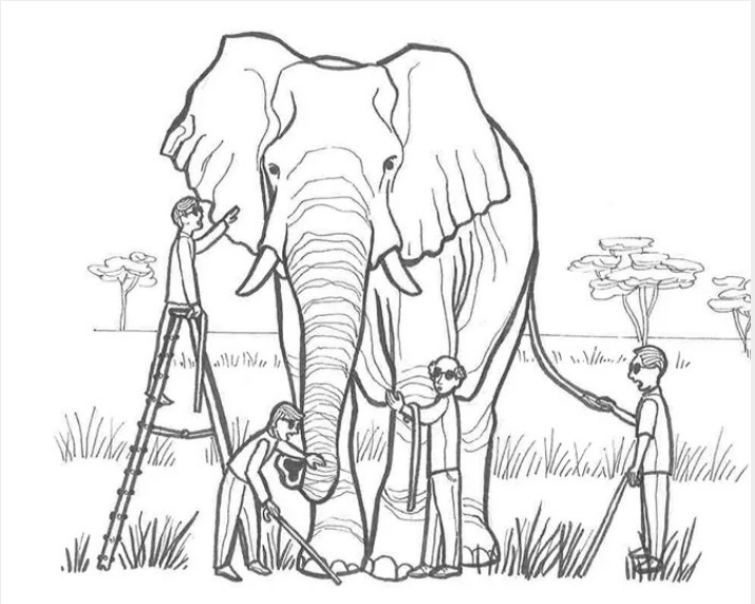
The Parable of the Blind Men & the Elephant

(Amateur Radio Service & EmComm)

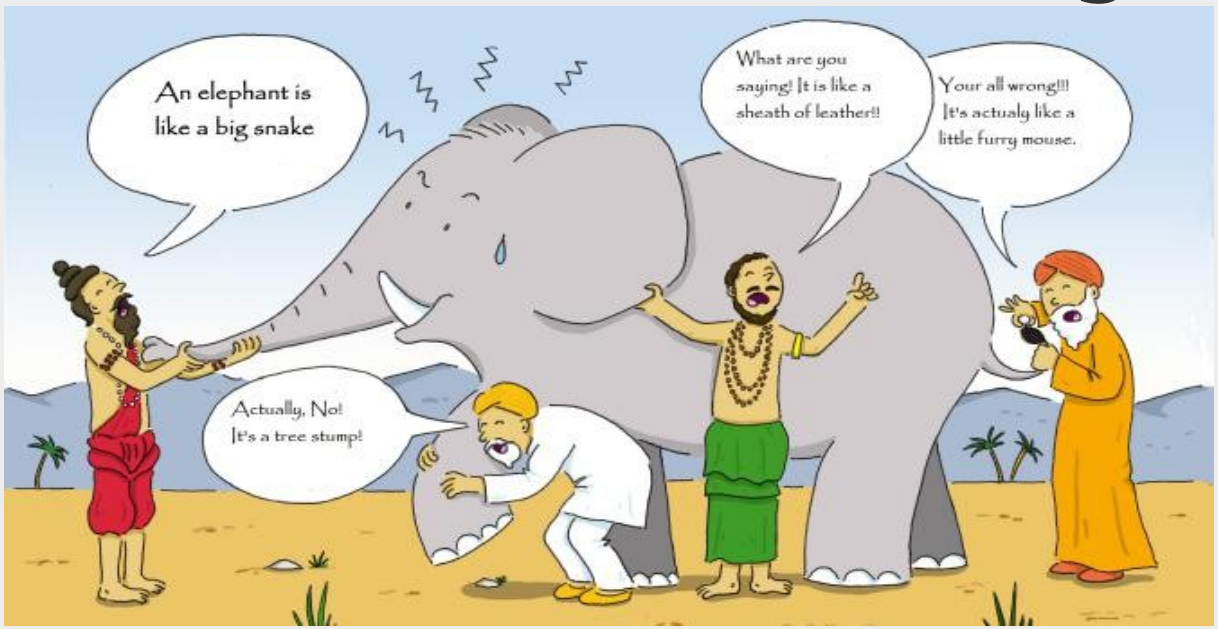


A folk tale from India that teaches intercultural awareness by illustrating how different perspectives lead to distinct points of view.

A group of blind men encounter an elephant at the side of the road for the first time. Each blind man feels a different part of the elephant's body, but only one part:

– the side
– the trunk
– the tusk
– the tail.

Misunderstanding:



- They then describe the elephant based on their limited experience. Their descriptions of the elephant are different from each other.
- In some versions they come to suspect that the other person is dishonest and they come to blows.

The moral of the story is that humans have a tendency to claim absolute truth based on their limited, subjective experience as they ignore other people's limited, subjective experiences which may be equally true.

Organizational Viewpoint

We have seen this story play out when it comes to the “elephant” of emergency communications.

Why Does it Matter?

- Emergency communications is a significant justification to the FCC that allows us to keep the wide range of frequency privileges that we enjoy.
- To make things work, it is important we maintain good relationships between the various groups.

Volunteers & Professionals:

- There has been an increasing number of challenges keeping volunteers from working together with public safety staff in emergency situations and disaster communications.

Challenges:

- **Disruptions due to changes in technologies:**
  - Served agencies go high tech.
    - Increased use of computers and databases.
    - Computer Aided Dispatch.
    - A variety of enhanced digital communications options. [P25 phase II]
    - WEB EOC.

Challenges:

- Served agencies have put up barriers:

Extensive training is required.

Background checks.

Credentials and certifications.

More Challenges:

- Greater Complexity:
  - Insurance and regulatory requirements.
  - Technical and interoperability requirements.
  - It can be difficult to figure out how we can work together.

US Government Challenges:

DHS & FEMA have enticed local, county, state, and territorial governments to embrace new training and procedures. [NIMS, ICS, etc.]

- Amateur radio groups need to embrace these changes in order to stay compatible.
- We must speak the same language, and understand the same concepts, to operate effectively together.

Solutions:

These challenges have not been easy to overcome. It has taken some time.

Looking around the country…

- Many jurisdictions have met these challenges and found ways to work together.
- We can use successful examples in other jurisdictions as a guide to help here in Hawaii.

Perspective:

ARES is all inclusive, all FCC licensed amateur radio operators can participate.

For a variety of reasons many of us will not be willing or able to dedicate the time and effort needed to meet the requirements some served agencies may have.

What follows is a summary of a real life event from Iowa ARES SEC Lelia Garner, WA0UIG.

Perspective:

Based upon presentation from:

Iowa ARES SEC Lelia Garner, WA0UIG.

- Her story, was presented at a recent ARES meeting.
- It provides perspective, and demonstrates how we can all provide valuable service to our community.

Derecho in Iowa
(Monday, August 10)

Photo by NOAA

Derecho

- A derecho is a widespread, long-lived, straight-line wind storm that is associated with a fast-moving group of severe thunderstorms known as a mesoscale convective system[1] and potentially rivaling hurricanic and tornadic forces.
- Often increase in strength after onset, and may exceed hurricane-force.

Derecho in Iowa
(Monday, August 10)

Photo by NOAA

Derecho

- Derechos can cause hurricane-force winds, tornadoes, heavy rains, and flash floods.
- Damage from this event was 11 billion.

What would you do if?

- Initial warning received of 90 MPH winds that will happen in 30-45 minutes.
- 15 minutes prior to event, warning is broadcast to expect 100 MPH winds.
- She got home at 12:15 PM, grabbed HT and phone, and by 12:30 was sheltering in the basement.

What would you do?

- When the wind started to die down, she tried to go upstairs, but winds were still 75+ MPH.
- The wind went horizontal.
- After 45 minutes the storm was gone...it was now wet, but not raining.

What Happened?

- Peak gusts 140 MPH. (estimated)
- Wind measured 126 MPH. (Atkins, Iowa)
- Wind sensors went down, NWS, etc.

What Happened?

- All cell phone, public safety communication systems, and amateur repeaters down.
- Power, land line, internet, radio, and TV gone.

What Happened?

- It took a week to get an EOC activated locally. (Event hit several States)
- There were no served agencies to communicate with.
  - No Red Cross, Salvation Army, etc.
  - No contact with public safety.

What did they know?

- HF Antennas were down. Trees were down. Structures were ripped apart.
- They didn’t know how widespread the damage was.
- Others, in neighboring communities were better off, but didn’t know how bad the situation was just outside of their simplex range.

What would you do first?

- Check yourself & family for injury.
- Look for hazards in immediate area.
- Help your neighbors?

What happened next:

Individual Operators Self Activated:

- They monitored frequencies to gain situational awareness.
- They checked batteries, and ability to setup off grid power.
- They started talking to each other & did what they could to help their communities.
    - Addressed life/safety concerns
    - Helped sick / elderly.

Initial Response:

- **Informal.** They didn’t pass formal message traffic, use forms, or act as a part of any formal group.
- They helped each other with basic needs.
- They setup generators to help refrigerate perishable medicine and food.

Other Radio Traffic?

- Frequencies were used for:
  - Moral support.
  - Health and Welfare messages.
  - Inexperienced operators setup a simplex net which lasted for many days.
- Before long, they were just talking to each other.
- They told jokes on the air to keep each other going.

Lessons for us?

- Emergency situations may play out over a long period of time.
- All stations that still have power to transmit have a role to play.
- We may have no served agency or group to work with.
- Perhaps we are focusing too much on forms, protocols, titles, and positions.

What is most important?

- We have no idea how a disaster will play out. Perhaps we can work on:
  - Upgrading our capabilities, helping others upgrade theirs.
  - Building good relationships.
  - Building Trust & Knowing each others capabilities.
- Being kind may be more important than being right.

Plan for the future:

- National groups have provides us with examples to follow when working within other groups.
- Remain Positive. Conflicts, negativity, and disagreements will discourage volunteerism, and cause groups to not want to engage with us.

How can we be ready?

- Hawaii VOAD:
  Red Cross, Catholic Charities, Project Vision, Habitat for Humanities, Salvation Army, Aloha United Way-211, and more.

Partners:

- ARES, FEMA, Hi EMA, Hawaii County Civil Defense Agency

Have a Plan, Practice it.

- How will I receive Emergency Alerts and Warnings?
- What is my shelter plan?
- What is my evacuation route?
- What is my Family/Household communications plan?
- Is my emergency preparedness kit ready?

Helpful Resources:

- Make use of advice at:
  - www.ready.gov/plan
  - www.hawaiicounty.gov/departments/civil-defense/emergency-preparedness
- Sign up for HC CDA Alerts and Notifications at:

  https://member.everbridge.net/index/3719141030625 63#/signup

What do we do first?

First duty is to self & family. Check that:

- You are okay, your family is okay.
- You have developed action plans.
    - Be ready to Work Your plans!
- You are already much more prepared than the average person.

What to do next in a disaster?

- Make sure your surroundings are save. You may want to:

Shut off circuit breakers?

Turn off propane gas until you can make sure there are no leaks?

Is the structure of the house or businesses around you damaged? (CERT has a good section on damage assessment which will help you determine if safe to stay inside.)

Safety First:

- Disasters can bring lots of broken glass, which is dangerous.

If you’re okay after the initial event, it is critically important that you not injure yourself.

Take time to remediate immediate dangers.

Pro Tip: A shop vac can quickly suck up lots of broken glass, even off of your lawn.

Goal: Do the most good for the greatest number of people

- This might not involve amateur radio at all.
- People who are not prepared tend to panic and do stupid things.
- Look up and down your street, there may be someone you can save a lot of grief, with a little advice or help.

Assumptions:

- We are already far ahead in disaster preparedness. Right?
- We've got extra batteries, flashlight, radios and scanners for situational awareness, and go kits.
- We've got a supply of food, water, medicines, first aid supplies, and hopefully solar power or generator.

Situational Awareness:

- ***Situational awareness is key:***

Start to listen to any sources available to you ASAP, even while working your emergency plan.

- In the Iowa Derecho, they had no idea how widespread the disaster was for several days.

What WA0UIG Experienced:

- Her phone service was up for about 3 minutes after the storm moved on...

She had just enough time to call her daughter outside the area to tell her she was okay.

Her daughter responded by saying: ‘Okay from what?’

- People across the state were hard hit, but, not as bad as what they were experiencing locally.

What WA0UIG Experienced:

- They had no grid power or internet
- TV and Radio Stations were down.
- All local infrastructure was down.
- The Derecho hit Monday morning. The first outside help started showing up on Friday. EOC was setup by Sunday.
- People had to make due with what they had on hand.

Once they got HF working...

- When they asked for information, stations in other areas told them to check the internet...
- People outside their area didn’t know about their desperate situation.
- State ARES leaders later expressed regret that they didn’t do more...

Community Emergency Response Teams?

- CERTs in their AREA were not active.
- CERTs in Hawaii County cannot self activate arbitrarily.
- CERTs in Hawaii can activate without a call out from HC CDA by following their SOGs.
- WA0UIG stated that active CERTs in their area would have been helpful.

Hawaii ARES:

- Hawaii ARES has developed ICS-205 plans which include HF, VHF, & UHF frequencies on phone and digital modes.
- If a disaster hit without warning, would you know these frequencies?
- ARES leaders know each other between county and state levels, and are working together.

Do you know them?

Do they know you?

Hawaii ARES

- ARES leaders on other islands are building relations with HI-EMA and other disaster response organizations.
- The Hawaii State EOP and other efforts provide multiple redundant methods of communications between HI-EMA and HC CDA.

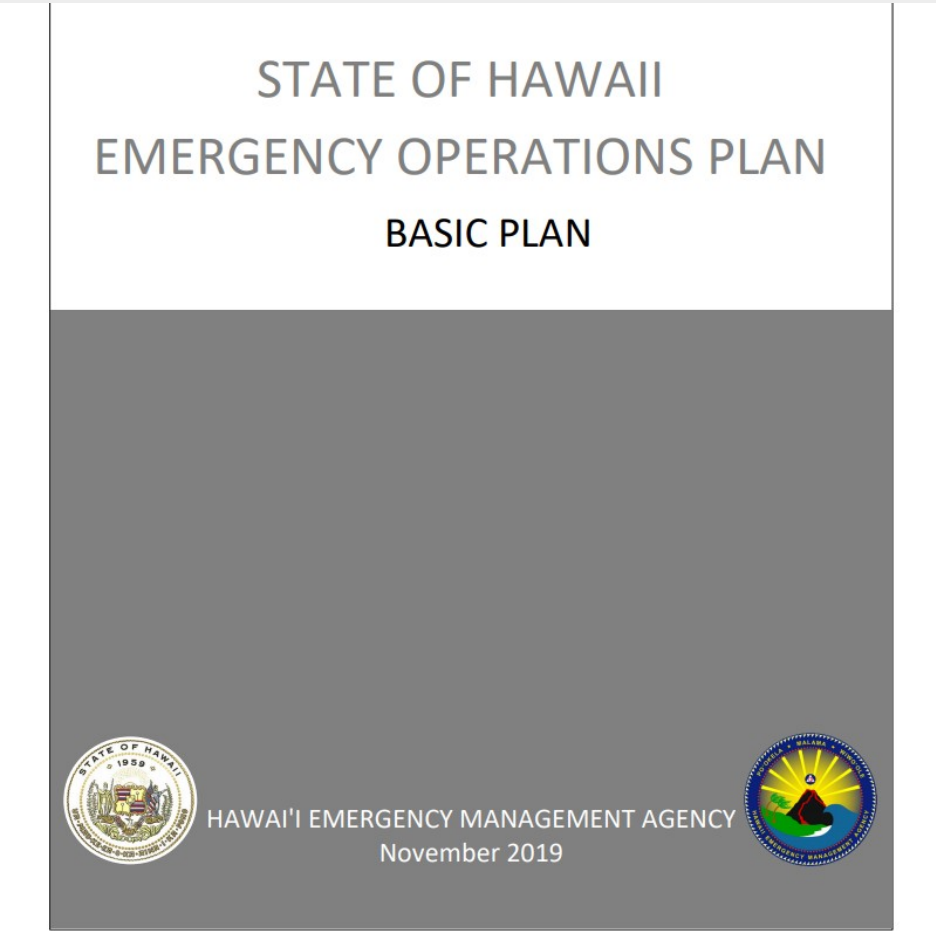
Hawaii ARES:

- Does not impose strict requirements. Any amateur radio operator can be a part of ARES.
- Visit the HawaiiARES.net website:
  - Click Members, Register New Member or
  - Click Members, Login.
  - Update your profile, including the Equipment and qualifications area.

Hawaii ARES:

- If you have not received the:
  "You have been added to the HawaiiARES@groups.io group" email...
  - Check your Spam or Junk email folder.
  - Log in to your profile on HawaiiARES.net. Check the email address listed.
  - Go to the groups.io website and use the search to find HawaiiARES. Click "Apply for Membership."

State of Hawaii EOP:



Hawaii EOP

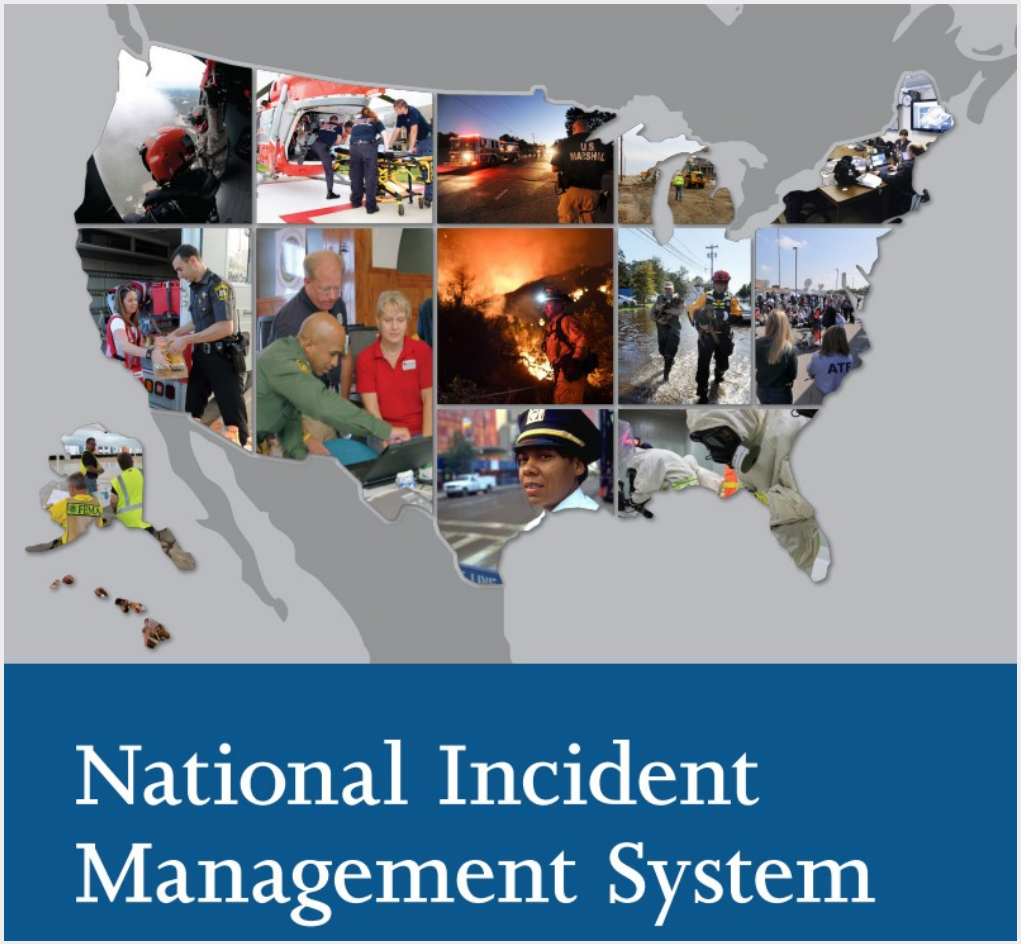
Review the:

- Hawaii Emergency Operations Plan
  - Basic Plan
  - 5-Year Strategic plan
- Published at:
  http://dod.hawaii.gov/hiema/sert-resources/plans-and-planning-resources/ (96 pages)
- The County of Hawaii is also required to maintain a NIMS compliant EOP.

Hawaii State Plan:

- The state has worked hard to implement NIMS compliant plans in all departments and agencies.
- It uses an “all-hazards” approach, and defines specific incident annexes to provide additional direction and guidance.

What is NIMS?



What is NIMS?

- National Incident Management System:

NIMS provides the foundation that allows all departments, agencies, NGOs, and volunteer groups to effectively work together within and across geographical regions and at all levels of government, business, and the non-profit sector.

With NIMS we work together to prevent, protect against, mitigate, respond to, and recover from incidents.

What does NIMS do?

- NIMS provides a common framework to integrate diverse capabilities and achieve common goals.
- NIMS addresses:
  - Resource Management.
  - Command and Coordination.
  - Communications and Information Management.

NIMS Is:

- A set of concepts and principles for all threats, hazards, and events across all mission areas.

  Prevention, Protection, Mitigation, Response & Recovery.

- Scalable, flexible, and adaptable; used for all incidents, from day-to-day to large-scale

NIMS Is:

- Standard resource management procedures that enable coordination among different jurisdictions or organizations.
- Essential principles for communications and information management
- The Incident Command System (ICS) is one component of NIMS, in the area of Command and Coordination.

Why does NIMS matter to us?

- The State and County plans use best practices, developed nationwide.
- They contain sound advise built on a solid foundation.
- We can learn from and model our plans based on nationally recognized standards.
- We will then ‘speak the same language’ and work together effectively.

Hawaii EOP Implementation

AUTHORITY AND ADOPTION LETTERS

EXECUTIVE SIGNATORY PAGE

The most fundamental function of government is providing for the safety and welfare of the public. An effective emergency management program is essential to ensuring the state of Hawai'i fulfills this responsibility when our residents and visitors are threatened or impacted by emergencies or disasters.

The ***State of Hawai'i Emergency Operations Plan*** establishes the framework the state will use to organize and coordinate its emergency management activities when the state's assistance is required to save lives and to protect public safety, health, welfare and property.

This plan establishes the emergency management responsibilities of state departments and agencies, and identifies how they will work with the Hawai'i Emergency Management Agency (HI-EMA) to ensure the state is prepared to execute a well-coordinated, timely and consistent disaster response. The plan also addresses how the state's activities will be integrated with county and federal government response efforts and incorporate partners from the private sector and non-governmental organizations.

The ***State of* Hawai'i *Emergency Operations Plan*** is intended to be a living document that evolves and improves as the outcomes of ongoing planning efforts, exercises and real-world events are incorporated.

The execution of this plan requires the collective efforts and ongoing commitment of all state entities, all levels of government and the community at large. I am confident this plan provides the structure that will facilitate the ongoing collaboration necessary to protect the people of Hawai'i.

I hereby promulgate the ***State of Hawai'i Emergency Operations Plan***.

David Y. Ige
Governor
State of Hawaii
May 9, 2017

- Order signed by Governor Ige, May 9th, 2017.

Hawaii State EOP:

- It Defines 16 functional groups called STATE EMERGENCY SUPPORT FUNCTIONS. (SESF)
- Each state department is required to develop and maintain a plan for emergency operations that supports the HI-EOP.

Hawaii State EOP

- State EOP defines and mandates:
  - Assignment of emergency duties and authorities by division, branch and position.
  - A physical or virtual DEPARTMENT OPERATIONS CENTER (DOC)
  - Procedures for activation and notification.
  - Plan implementation including internal policies, procedures, and checklists.

Hawaii State EAP

- Emergency Action Plan. (EAP)
  - The goal is to get personnel at the worksite to safety as quickly as possible and account for their welfare.
  - Each departmental worksite is required to maintain and practice their EAP.
  - A worksite evacuation coordinator & roster of personnel assigned to the worksite is maintained.

Hawaii State COOP?

- CONTINUITY OF OPERATIONS PLANS (COOP)
  - All state departments are required to maintain current all-hazards COOPs.
  - COOPs address the continuity of critical functions during operational disruptions and plans for restoration of normal operations.

Hawaii State EOP:

- The HI-EOP is supported by other specialized state plans:
  - State of Hawai'i Mitigation Plan.
  - Hawai'i Emergency Management Agency Strategic Plan.
  - State of Hawai'i Multi-Year Training and Exercise Plan.

Hawaii County:

- Hawaii County has published a 610 page Multi-hazard mitigation plan at:

  https://www.hawaiicounty.gov/departments/civil-defense/multi-hazard-mitigation-plan-2020

- See the Hawaii County Civil Defense Agency (HC CDA) Website at: https://www.hawaiicounty.gov/departments/civil-defense

Hawaii County

- Hawaii County has taken significant steps to be NIMS compliant and is working to train employees on NIMS and ICS.
- Hawai County Plans have similar structures and requirements to State Plans.

Hawaii County:

- Plans are similar because they generally need to be NIMS compliant to receive federal funding.
- All plans have components that encourage and facilitate volunteer cooperation from groups like ours.
- Tracking and reporting of volunteer hours contributed is an important funding Reimbursement mechanism at the County & State level.

Information about ACS:

- The ACS was created and is activated by Hawaii County Civil Defense.
- Doug Wilson, KH7DQ is our primary contact.
- HC CDA may stand up ACS for Drills and exercises.
- ACS can be a means for CERT and Amateur Radio operators to get messages to the EOC when internet and phones are inoperable.

ACS (Continued)

- ACS has operated in past events and exercises on HF and VHF.
- During the 2019 SET we also passed message traffic via Winlink to ACS.
- Traffic was passed from ACS into the WebEOC system.
- Would you like us to schedule a separate ACS presentation from KH7DQ?

More about NIMS:

- An important part of Resource Management in NIMS is called Resourcing typing:

Resources are ‘typed’ based upon capabilities.

Resources are listed as type 1 (Most capable) through type 4.

NIMS Resource Types:

- Resource typing is defining and categorizing, by capability, the resources requested.
- For equipment, teams, and units, minimum capabilities are defined.
- NIMS resource typing definitions serve as the common language for the mobilization of resources.

Resource Type Example:

A Type 1 fire engine is designed for structural fire fighting. It will typically include a pump that operates at 1000 gpm, a 400 gal/tank, 1200 ft. 2 1/2″ hose, 400 ft. 1 1/2 ” hose, 200 ft. 1″ hose, 20 + feet of ladder, a 500 gpm Master Stream, and minimum staffing of four firefighters.

Example: Type 4

USFS Type 4 Fire Engine

What is AUXCOM?

- “AUXCOMM” is an umbrella term and acronym for “auxiliary communications.”

It was developed by CISA in 2009 with the assistance of amateur radio subject matter experts.

The concept is to educate as many amateur radio entities to work and train with public safety personnel, understand the value of the National Incident Management System (NIMS) Incident Command System (ICS)

AUXCOMM

- AUXCOMM embraces NIMS, ICS, and includes:
  - Defining of Positions (COML, COMT)
  - Training Requirements. (Position taskbook)
  - Resource typing of Communication Units.
- The program is implemented by an Agency having jurisdiction.

AUXCOMM

- Not all states have implemented AUXCOMM. No program in Hawaii County.
- Colorado is a leading state in implementing this model: Visit:

  https://dhsem.colorado.gov/emergency-management/field-services/auxiliary-communications

AUXCOMM

- Carter Davis, KH6SV with DHS, CISA, Emergency Communications Division lead the last AUXCOMM training in Kailua Kona in July 2019.
- I will follow up with him to see where Hawaii is in moving forward on this program.
- For more information visit: https://www.cisa.gov/safecom/auxiliary-emergency-communications-overview

What is Hawaii VOAD?

- Hawaii Voluntary Organizations Active in Disaster.

Please Visit their website at:
https://www.hawaiistatevoad.org/

What is COAD?

- Community Organizations Active in Disaster
  - In Hawaii, each county has a COAD, which is a division of Hawaii VOAD.
  - Organizations providing disaster related services can join the COAD in their county, or in multiple counties.
  - COAD members are also Hawaii VOAD members.

Hawaii VOAD/COADs

- BIARC is a member the Hawaii Island VOAD/COAD and so also a member of Hawaii VOAD.
- BIARC has a vote in the annual election for the Officer and Director positions.
- Any interested BIARC member may be nominated for election, or serve on any of the HVOAD/COAD committees.

Hawaii VOAD/COAD

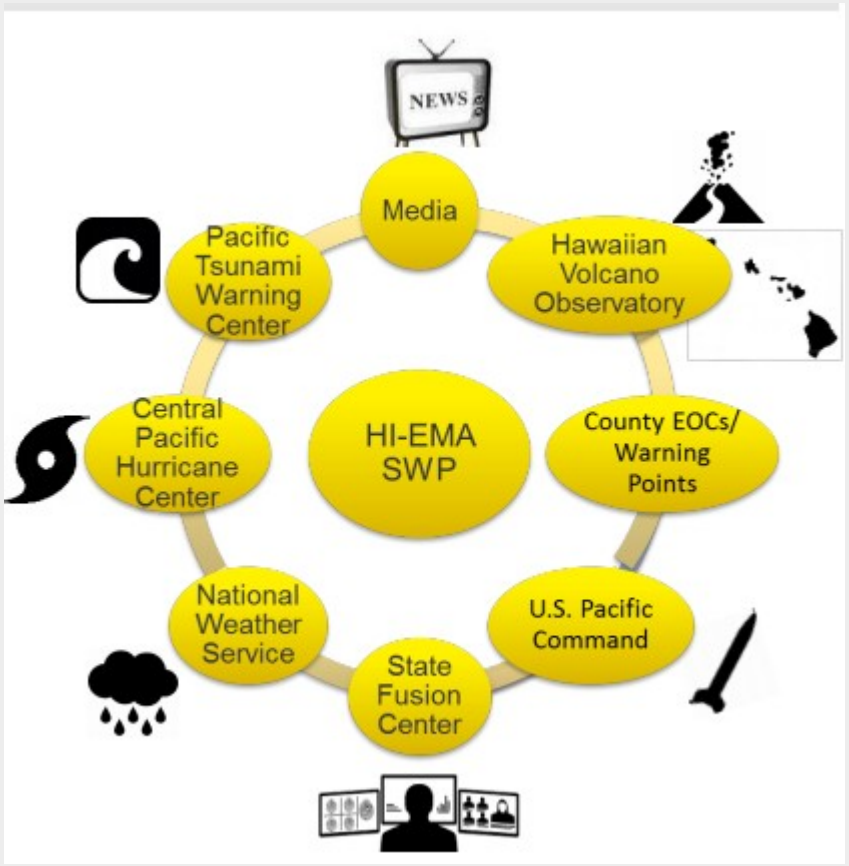
- David Miller, KH6CZ is the BIARC representative to Hawaii VOAD/Hawaii Island COAD.
  - BIARC members interested in running for office should let him know.
  - If you want to serve on a working group, let him know. He will inform the chair of the working group.
    - Also inform him if you would like to help a COAD group with disaster communications. (davroymill@gmail.com)

Hawaii VOAD/BI COAD

- Tony Kitchen, WH6DVI is Chair of the BI COAD Communications working group.
  - Please let him know if you would like to join our working group.
  - We are attempting to pair amateur radio operators with COAD partners who may need training and assistance with communications when traditional means of communication fail.

(TonyKitchen808@gmail.com)

Thank You!



Thank you for your willingness to serve our island community.