











Amateur Radio Emergency Services

- What is ARES?
 - The Amateur Radio Emergency Service® (ARES) consists of licensed amateurs who have voluntarily registered their qualifications and equipment, with their local ARES leadership, for communications duty in the public service in the event of a communications emergency.
 - ARES consists of more than 40,000 licensed amateurs nationwide.

What...

...is Emergency Communications

•The actions taken to continue to move information between Governments (Federal, State, Local), Non-Governmental Agencies, and between Citizens during a communications emergency. Goal: Establish reliable communication to convey pertinent information.

...is a Communications Emergency

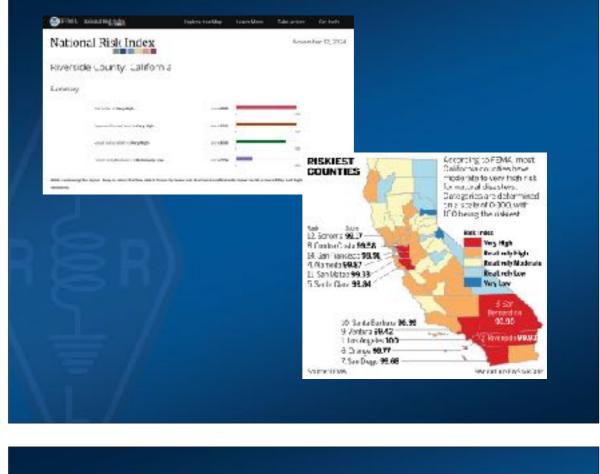
- •A communications emergency exists when a critical communications system fails or is overloaded and puts the public at risk.
- (ARRL Introduction to Amateur Radio Emergency Communications, 2019)

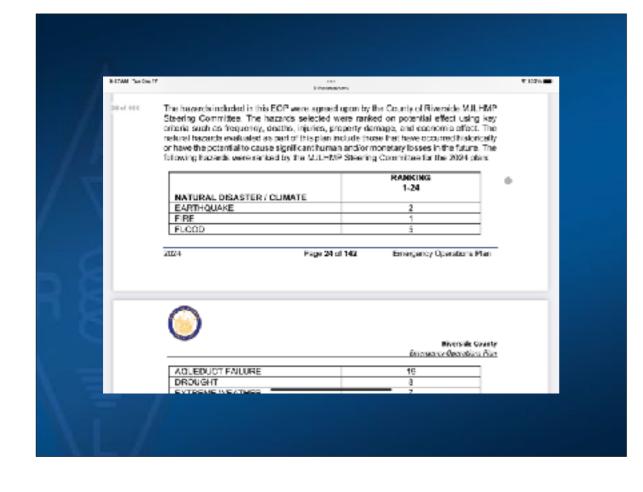
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What information are we sending and why?

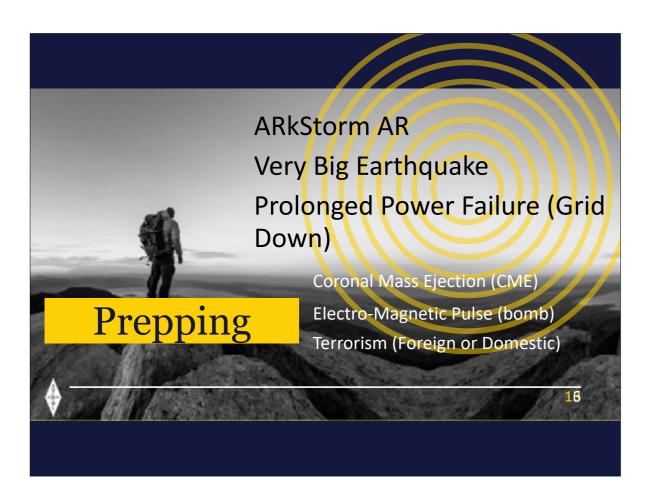
"Situational Awareness"

Local information
Health and status
Weather
Status of current events/efforts
Requesting supplies/relief
Welfare Traffic





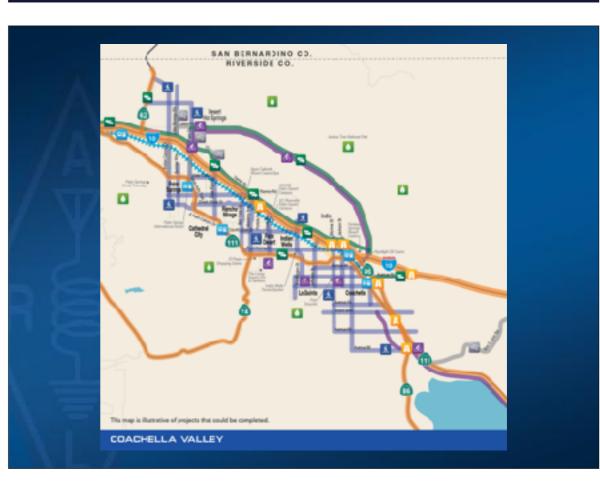
AQUEDUCT FAILURE	
AQUEDUCT FAILURE 19 DROUGHT 8	
DROUGHT 8	
EVERSONE MICKENSON 7	
EVINONE MENINCY	
INSECT INFESTATION 15	
LANDSLIDE 14	
TGRNADO 22	
ANTHOPOGENIC / TECHNOLOGICAL	
CVIL DISCRDER 17	
COMMUNICATIONS FAILURE 12	
CYBER ATTACK/ CYBER TERRORISM 10	
DAM FAILURE 13	
ELECTRICAL FAILURE 6	
HAZARDOUS MATERIALS INCIDENT 9	
JAIL/PRISON EVENT 20	
NUCLEAR INCIDENT 23	
FIPELINE DISRUPTION 21	
RADIOLOGICAL INCIDENT 24	
TERRORIST EVENT 11	
TRANSPORTATION FAILURE 16	
WATER SUPPLY DISRUPTION / 18 CONTAMINATION	
MEDICAL	
EMERGING / RE-EMERGING 3	
HINFECTIOUS DISEASES	





What Resources Do We Have?

- Excellent planning. (Local, County, State)
- R.A.C.E.S. via RivCo EM.
- Active CERT Teams.
- NGO's very well represented.
- 17 repeaters in 9 locations.
 - includes solar 220 + CV GMRS.
 - Every mode imaginable.
- Flat topography = simplex.
- · Not as isolated as we think.
- Active nets including Analog, Digital, AREDN, Winlink.
- · One of the largest Ham clubs in the US.



Repeaters I Can Hit Edom Hill (5) Tram (3) JW Marriott (1) CVARC (1) Toro (3) Indio (1) Santa Rosa (1) Snow Peak (1) CV GMRS (1)

Where does ARES fit?

- ARES moves <u>information</u> from affected areas by volunteer members on the ground in the affected area to other members both within and outside the affected area.
- This information is transmitted via local frequencies to other members using HF, VHF/UHF frequencies to move traffic onto the National Traffic System (NTS) and/or to other Governmental and Non-Governmental organizations or simply to other citizens who are prepared to help. This includes local Emergency Operations Centers.
- ARES volunteers are encouraged to monitor their normal net frequencies during times of crisis and be ready to relay information and/or assume the position of net control. Anyone can activate net control; does not require ARES leadership.

Neighbors helping neighbors.

How Emergency Communicators Activate



How Do We Activate?

- · Incident Happens.
- Email, Text Alerts. (aresdb.com)
- Announce on all DRATS repeaters.
- Open Net on San J repeater.
- Take roll and inventory needs and resources.
- Leadership activates ICS.
- Continual updates for situational awareness.
- Respond to situation as appropriate.











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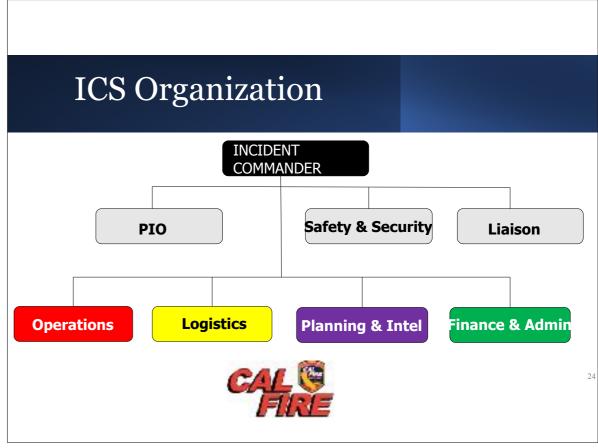




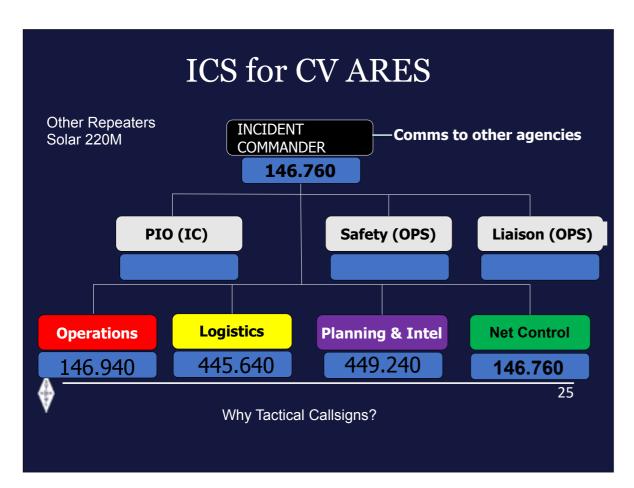
What is the Incident Command System?

ICS:

- Is a standardized, all-hazards incident management concept. (Everybody uses it)
- Enables a coordinated response among various jurisdictions and agencies. (Everybody uses it)
- Establishes common processes for planning and management of resources. (Everybody uses it)
- Allows for integration within a common organizational structure. (Everybody uses it)



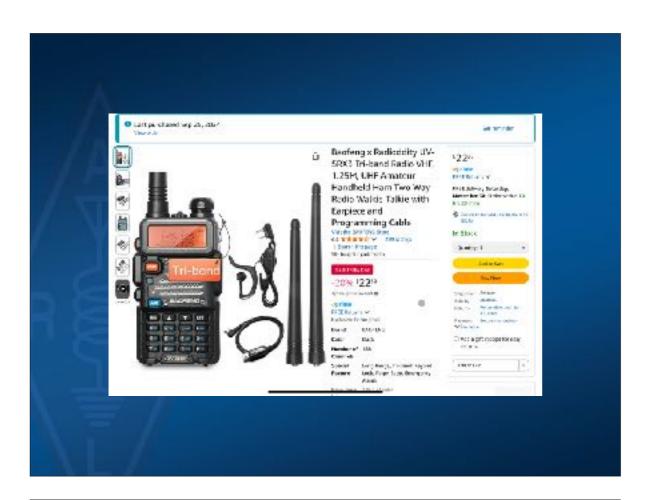
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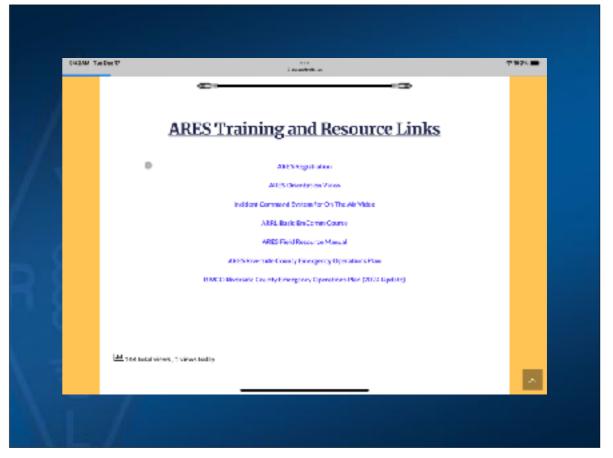




Comm Plan PACE
(primary, alternate, contingency, emergency)

"Base this on the mission"

P= Cell
A= 2m/220/440/Digital Repeater (Base/Batt)
C= HF Winlink (Base/Batt)
E= Simplex or Runner (HT)



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 - Simple, resilient, flexible, and prepared.

