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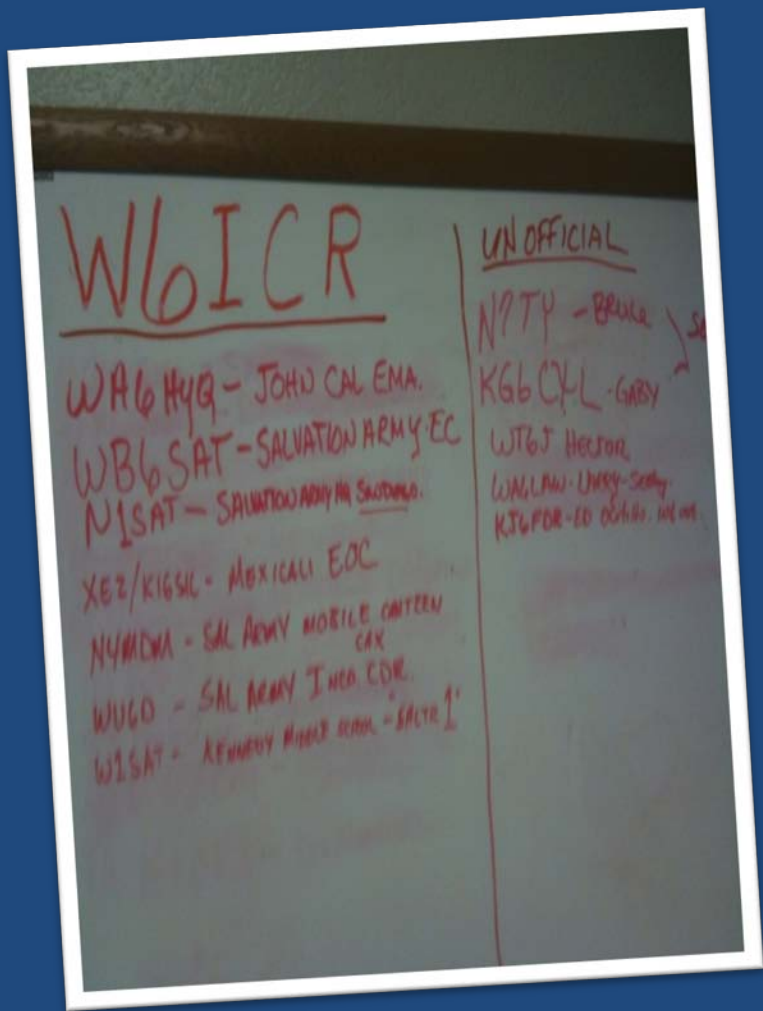


El Centro Emergency Communications April 4, 2010 Earthquake Baja CA, Mex.

Apr 5-6, 2010









Carl WU6D –
Bob Filner, Congressman 51st Dist., California
Captain Jerry Esqueda, The Salvation Army



Meeting with all concerned:
From Mexico, Red Cross,
EOC, SA, RC, Community
leaders and businesses



Red Cross –
El Centro







What is a Communication Emergency?

- ***A Communication Emergency*** exists when:
 - A critical communication failure puts the public at risk
- Variety of circumstances leads to a communication emergency
 - Overload or damage to critical day-to-day systems

What are some potential causes of a Communications Emergency locally?

Risks

Table 3. Summary of Hazard Risk in Seattle

Hazard	Frequency	Expected Effects	Potential Effects	Risk
Earthquakes	3	4.4	5.0	66.0
Windstorms	4	3.1	3.4	42.2
Snowstorms	5	2.6	3.0	39.0
Landslides	5	2.3	3.1	35.7
Civil Disorders	3	2.7	3.7	30.0
Terrorism	2	3.4	4.4	29.9
Volcanic Eruptions	2	3.2	4.0	25.6
Conflagrations	3	2.4	3.5	25.2
Hazardous Material Incidents	5	1.7	2.8	23.8
Tsunamis/Seiches	2	3.1	3.5	21.7
Floods	4	1.7	2.6	17.7
Droughts/Water Shortages	4	1.6	2.3	14.7
Air Crashes	2	1.9	2.7	10.3
Tornadoes	1	1.3	2.4	3.1

Earthquakes

US Earthquakes Causing Damage

1750 - 1996

Modified Mercalli Intensity VI - XII



Intensity

- VI
- ◇ VII
- ▲ VIII
- IX
- X-XII

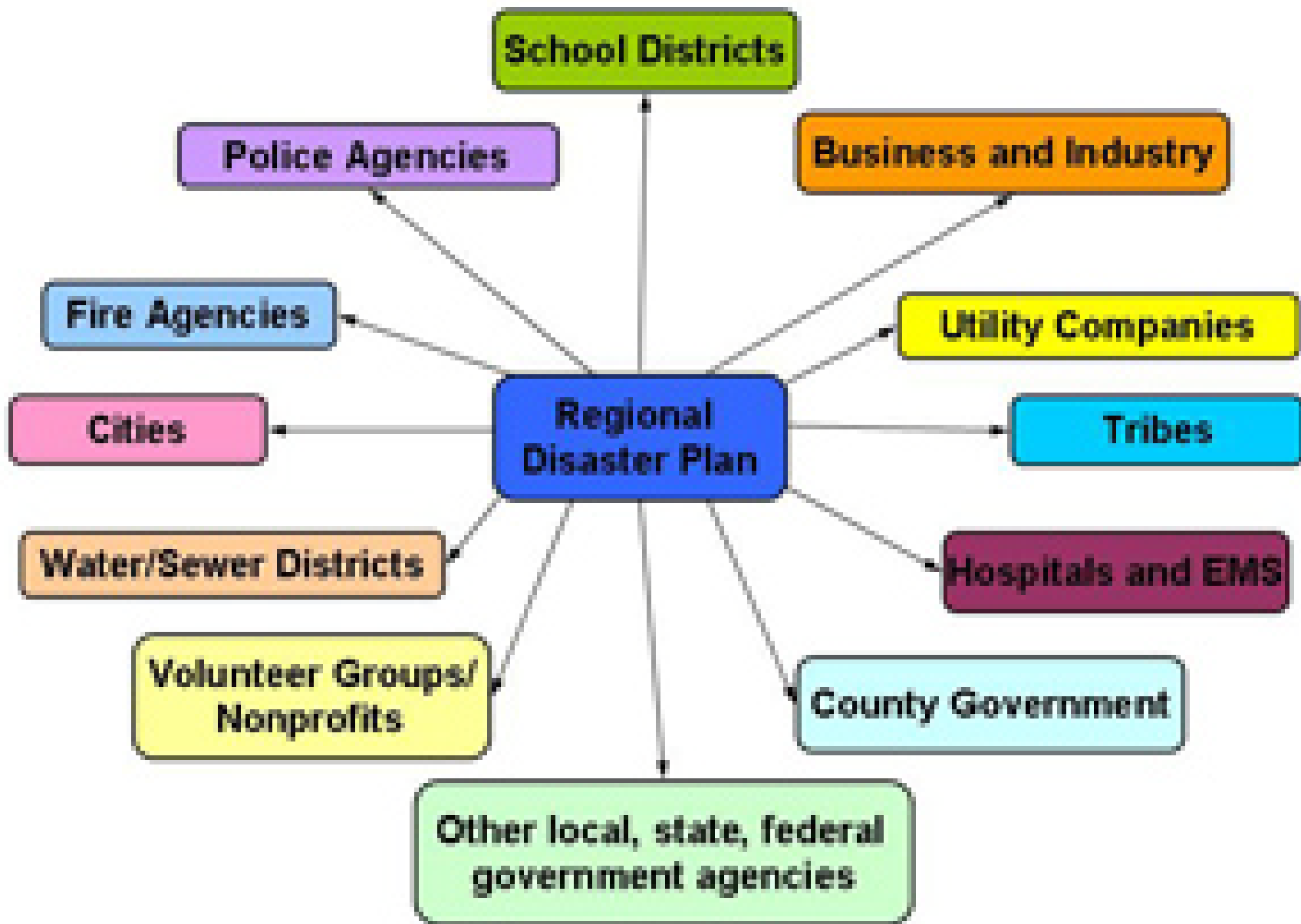
Prepared by:

USGS National Earthquake Information Center

Data Source:

Seismicity of the United States, 1750 - 1988

Preliminary Determination of Epicenters, 1980 - 1986





Hey Clem, I are gonna be on the TV tonight! We will be ARES for folks all over the county!





First five hours after a
major disaster

First five hours after a major disaster earthquake 7.5

- Am I okay
- What resources do I have
- First aid kit
- CERT team kit
- Amateur radio first aid kit
- Mode of transportation

First five hours after a major disaster

- once you are secure and safe your task is to repair/assemble a station to transmit vital information about your location, help needed for others, health and welfare

First five hours after a major disaster

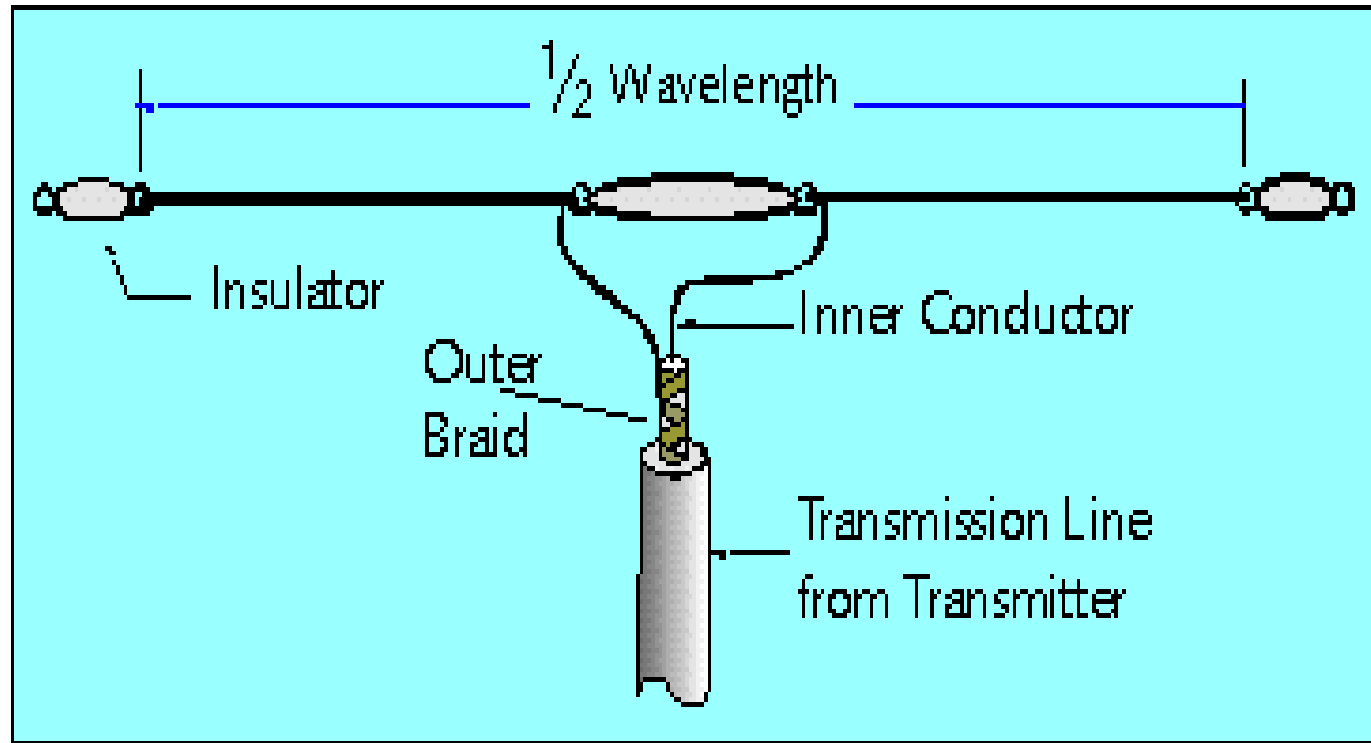
- You have a plan? This is the time to follow it!
- keep your emotions under control
- Keeping yourself safe, and making good decisions
- Move slowly not to become injured or aggravate injury

First five hours after a major disaster

Uses the standard formula, $468 / f$ MHz to calculate $\frac{1}{2}$ wavelength dipole.

You may change this number to 234 for a $\frac{1}{4}$ wave version.

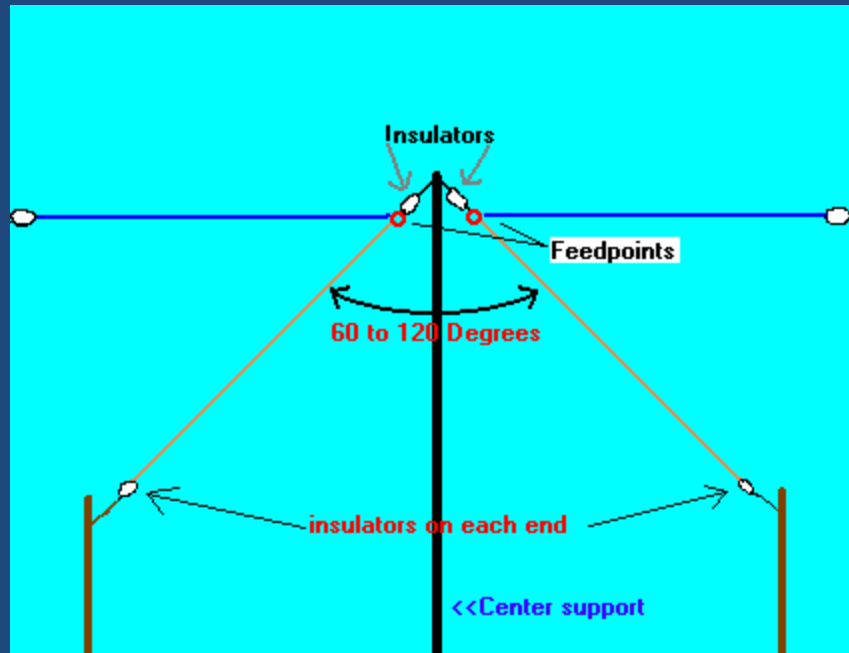
Your dipole's total length is feet
Each leg of the dipole is feet

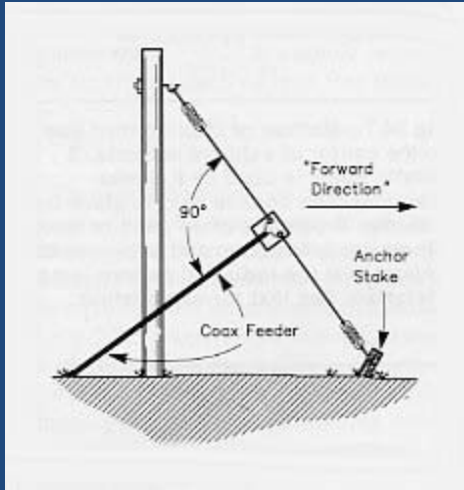


dipole antenna

1/2 wavelength dipole antenna is Tee in the middle and each leg is half of the total length

		Left leg of a dipole					
Meters	Megahertz				Feet	Inches	
80	3.800 mhz				61		6
80	3.900 mhz				59		2
40	7.250 mhz				32		3
20	14.225 mhz				16		5
15	21.400 mhz				10		11
10	28.500 mhz				8		2
10	29.000 mhz				8		0
2	146.00 mhz				1		7
1.25	223.00 mhz				1		0

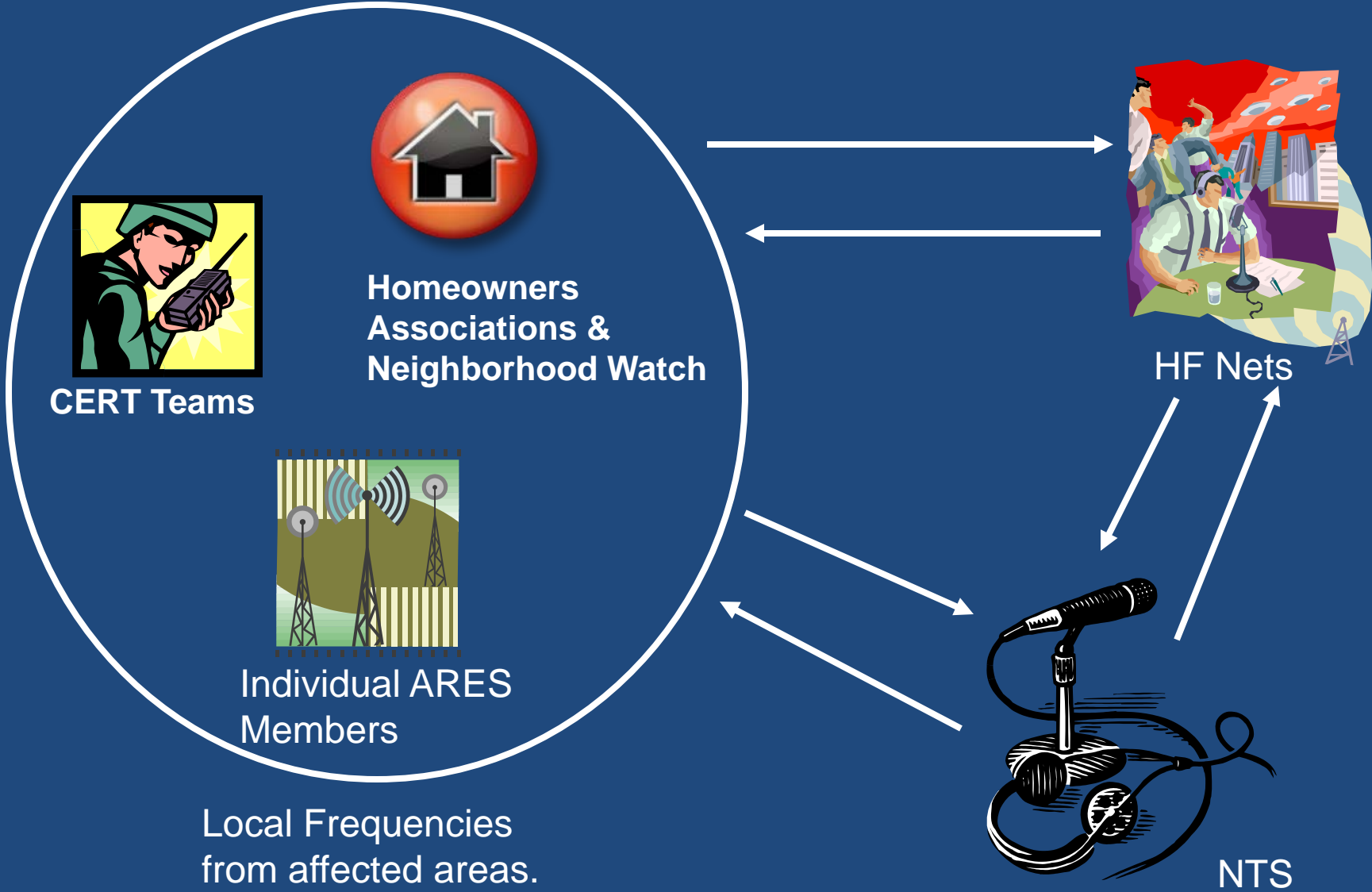




General Communications Plan

Orange Section

Orange Section Comm Plan



CERT Teams

Homeowners Associations & Neighborhood Watch

Individual ARES Members

Local Frequencies from affected areas.

HF Nets

NTS

Introduction to the Amateur Radio Emergency Service

Bob Turner, W6RHK
Section Emergency Coordinator



National Organization

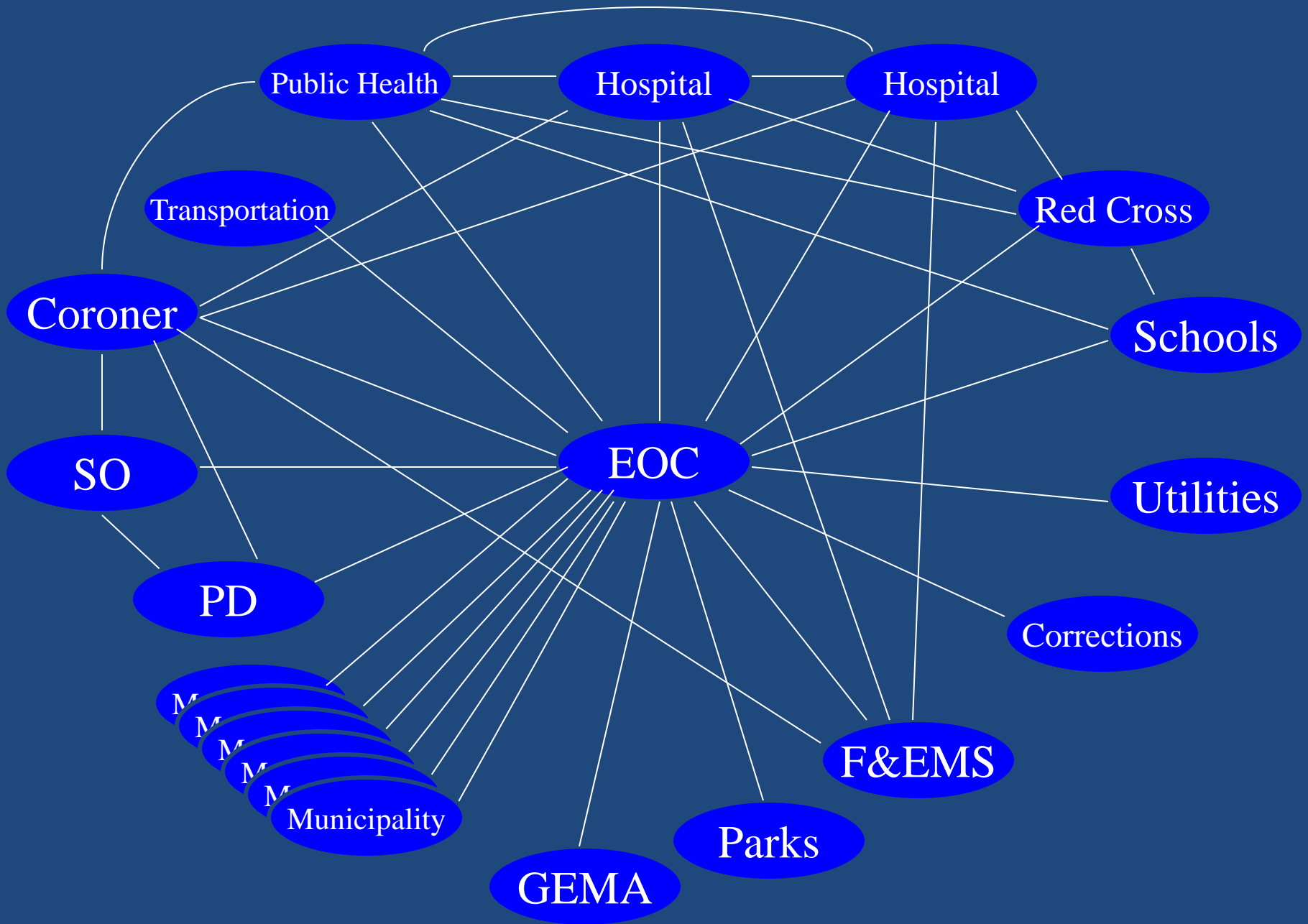
- The Amateur Radio Emergency Service is part of the Field Organization of the American Radio Relay League (ARRL)

National Organization

- ARRL has established Memoranda of Understanding with:
 - Dept. of Homeland Security, National Weather Service (NWS), National Communications System (NCS), Association of Public-Safety Communications Officials-International (APCO)
 - American Red Cross, Salvation Army, REACT International (Radio Emergency Associated Communications Teams), Society of Broadcast Engineers (SBE), National Association of Radio and Television Engineers (NARTE)

ARES Charter

"The Amateur Radio Emergency Service (ARES) consists of licensed amateurs who have voluntarily registered their qualifications and equipment for communications duty in the public service when disaster strikes. Every licensed amateur, regardless of membership in ARRL or any other local or national organization, is eligible for membership in the ARES. The only qualification, other than possession of an Amateur Radio license, is a sincere desire to serve. Because ARES is an amateur service, only amateurs are eligible for membership. The possession of emergency-powered equipment is desirable, but is not a requirement for membership." -- *ARRL Public Service Communications Manual*



Communication Systems
in & around
The City of Perris

Who has Communications Systems?

- City of Perris
- Perris Police Dept. (Sheriff's Dept.)
- Perris Fire Dept. (CalFire)
- Val Verde Unified School District
- Perris Union High School District
 - Hemet Unified School District Bus Services
- Perris Elementary School District
 - Hemet Unified School District Bus Services
- Amateur Radio Emergency Services (ARES)

Who has What?

- City of Perris:
 - VHF Repeater
 - Base station at the Repeater site
 - Hand Held radios for Key Administration and responders.

City EOC EmComm

- Satellite Phone
- County Disaster Net Mobile/Base
- City Rpt. Programmed Mobile/Base
- 220MHz HAM Mobile/Base
- VHF (2M) HAM Mobile/Base

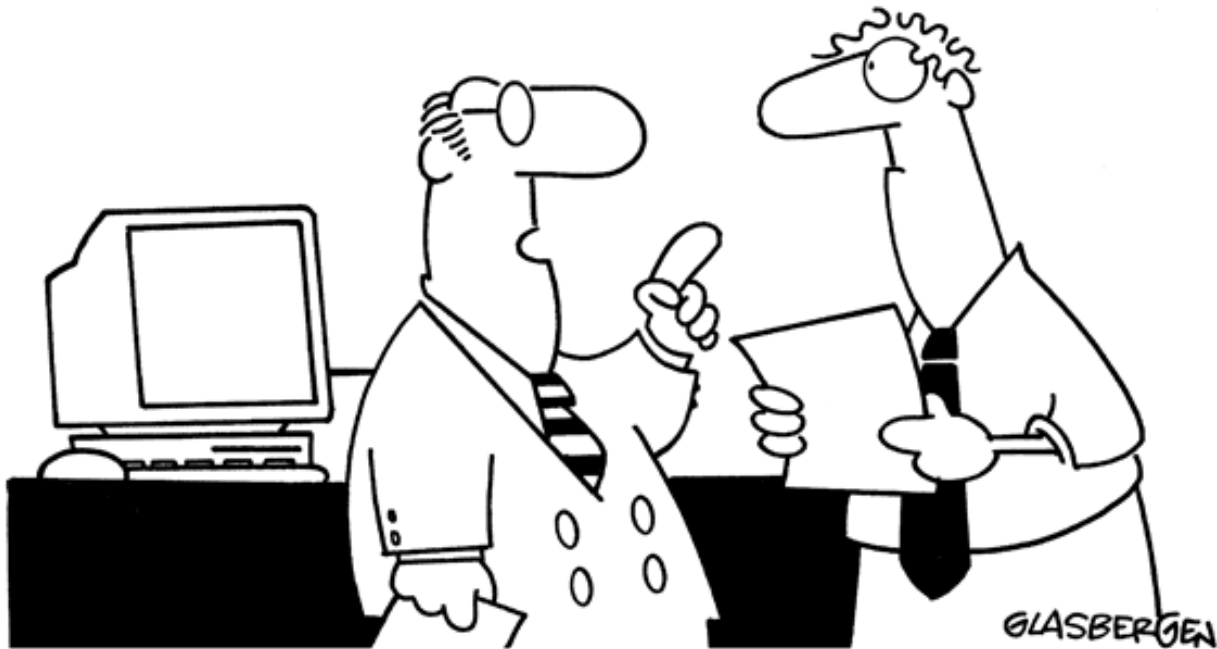
Who has What?

- Perris Police Department
 - 800Mhz Trunked
 - Computer controlled frequency and unit ID communications system.

Who has What?

- Perris Fire Department
 - VHF repeater and simplex system

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www.glasbergen.com



**“Things always get better after they get worse.
So it’s good to make things worse as quickly as possible.”**



Keeping
Amateur
Radio
Viable in
the 21st
Century

Notes

21st Century is from January 1, 2001 to December 31, 2100

20st Century is from January 1, 1901 to December 31, 2000

Volunteer manager

Don't want to simply make a contribution; the new breed of volunteers want to make a difference

Let's look at life stages: most of us simply see the world very differently when we're 20 than we do when we're 30 or 50

1	1	1	1	1	1	1	2	2
9	9	9	9	9	9	9	0	0
3	4	5	6	7	8	9	0	1
0	0	0	0	0	0	0	0	0
78y	68y	58y	48y	38y	28y	18y	8y	
	1943 - 1964 Baby Boomers							
			1965 - 1981 Gen X					
					1982 - 2008 Gen @ also Gen Y			

FACT:

In a recent survey, inactive hams indicated that they would have stayed active had they received more support from local hams and clubs, and assistance in getting on the air.





What Might Have Helped Stay Active

- Help getting started on the air
- Help getting a station together
- Support from local clubs
- Help from a mentor
- Contact with a local store/dealer
- Support from family/friends



Partnership between ARRL/AR

- Riverside disaster relief
 - San Bernardino disaster relief
 - Community Access Center
 - Hope animal assisted
 - Corona-Norco United Way
 - Salvation Army
 - American Red Cross
 - Idyllwild Help Center
 - Triabal Emergency Response Teams
 - Riverside County Public Health
- Office on aging
 - City of Corona
 - Volunteer center FEMA
 - Ramona Human Society
 - Crisis Response
 - CAP Riverside
 - UWIV
 - Catholic Charities

Partnerships # 2

- 2-1-1 Riverside County
- Lutheran social services
- Soboba Casino
- Second Harvest Food Bank
- Family services and association
- Goodwill Industry
- Living Shield Ministry
- Voluntary Center for Riverside County
- Riverside County fire OES
- Southern Baptists

Vision Statement

- To showcase Amateur Radio in as many of its forms and functions as possible by providing an interactive experience for the general public who attend our partner venues.

Club Activities

- Does the club have a club activities director:
 - For parties
 - Field Day
 - Community service
 - Events that keep social / friendships growing
 - Dinners
 - Luncheons
 - Picnics



PARTY

Youth in Clubs, Groups, or Teams



From Club
Activities to FD to
Hamfests
We are there to
help each other
That's what makes
us!
VOLUNTEERS



Care and Feeding of AR Volunteers

By

Carl Gardenias WU6D

Reference material used

THE NEW **BREED**

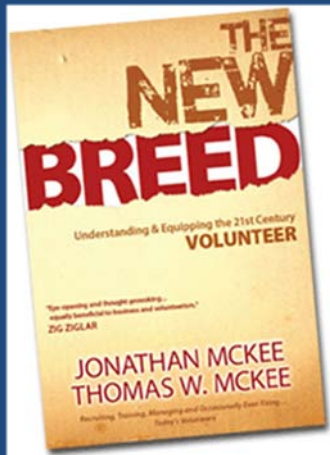
Understanding & Equipping The 21st Century

VOLUNTEER

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Jonathan McKee

Thomas W. McKee



<http://www.volunteerpowers.com>

Introduction:

The Volunteer Recruiter



Who Is The New Breed Of Volunteers

Recruiting The New Breed Of Volunteers

Finding A New Breed Of Volunteers

Tapping into two/three new breeds of volunteers

Volunteerism Is In!



Amateur Radio Expo @ L A Fair

1. Benefits to club
 - a. Exposure
2. Opportunities to:
 - a. Bring in new members
 - b. Bring in funds
 - c. Demonstrate our equipment
 - d. Emergency operations
3. Widgets
 - a. Electronics
 - b. Morse Code
 - c. Robotics
4. Team work with other groups
5. Can be done anywhere







Da

ESS











New

2.



OC Fair – Co Mesa



Club Activities

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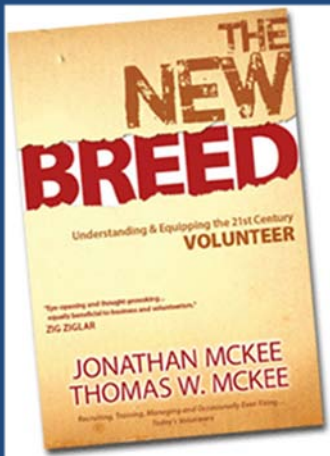
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