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Los Angeles County Disaster Communications Service

Presentation to the
W6TRW Amateur Radio Club
Deane Bouvier, N5DQ,
DCS Staff 50
04 April 2016

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Los Angeles County Disaster Communications Service Is:

- Volunteer organization of radio amateurs providing auxiliary communications to the County of Los Angeles in times of emergency
- Established in 1951 by LA County ordinance to provide disaster relief communications for the citizens of LA County
- Managed by the LA County Sheriff's Department on behalf of the County
 - Communications and Fleet Management Bureau (CFMB)
 - Also serves the Emergency Operations Bureau (EOB)
- When activated by appropriate authority, LA County DCS has California Disaster Service Worker coverage
- Recent change in Sheriff's Department management has made great improvements

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DCS Mission



- Primary mission – Support emergency management at the county level when normal means of communication fail
 - Providing communications assets county wide and staffing to the County/Operational Area EOC, Sheriff's Stations and other county agencies
 - Provide interoperability with the city radio organizations and the Governor's Office of Emergency Services (OES) Auxiliary Communications Service for status and resource requests up and down the disaster response structure
- Secondary mission - Support mutual aid and augment the emergency communications needs of the cities
 - Support City EOCs
 - Field operations
- Conduct events and training to improve emergency communications skills



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New Emphasis for DCS

- LASD is serious about Disaster Communications
 - Including HF
- LASD is serious about supporting the whole County
 - Other County agencies
 - Working with the cities
- Actively seeking more members
 - Recognition of past issues
 - Making new member process much more efficient
 - Engaging County employee hams in “hard to access” locations
- Established DCS Technical Team to address long standing hardware and frequency issues
- Established DCS Training Committee to improve training content and access to training
- Involving DCS with CFMB assets and drills

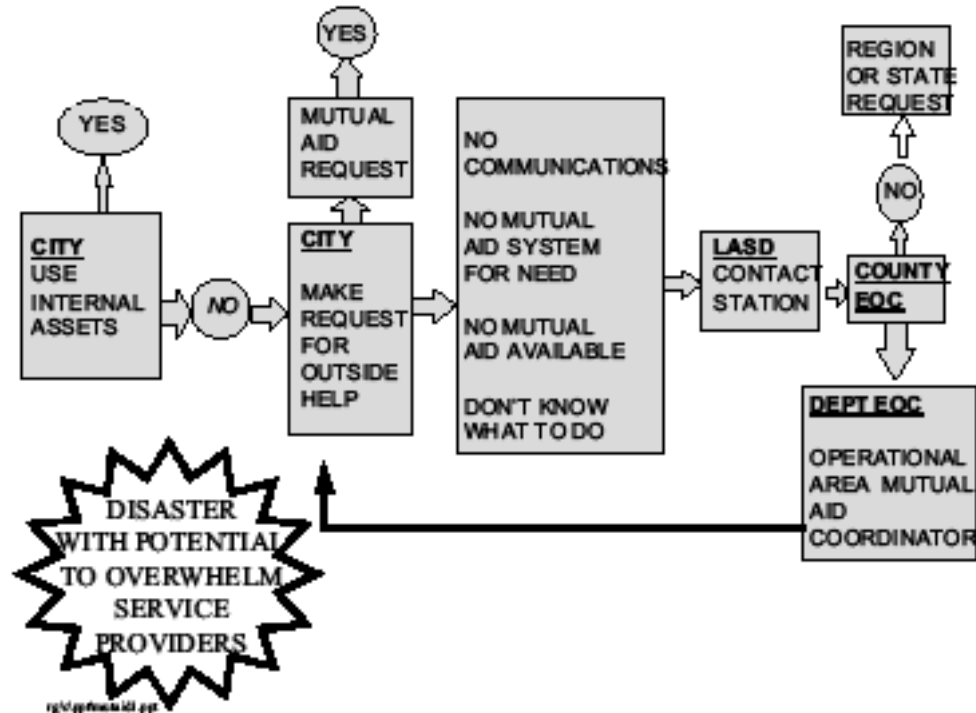


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City Assistance Requests



- Disasters are managed at the lowest level
- When resources are overwhelmed cities seek mutual aid
- If mutual aid is not available due to
 - Lack of normal communications
 - Lack of an existing system
 - City has been so devastated that managers are not sure of what steps to take
- Request for Operational Area support will be made via the city's "contact" Sheriff Station
- If normal means of communication are down, DCS is the mechanism



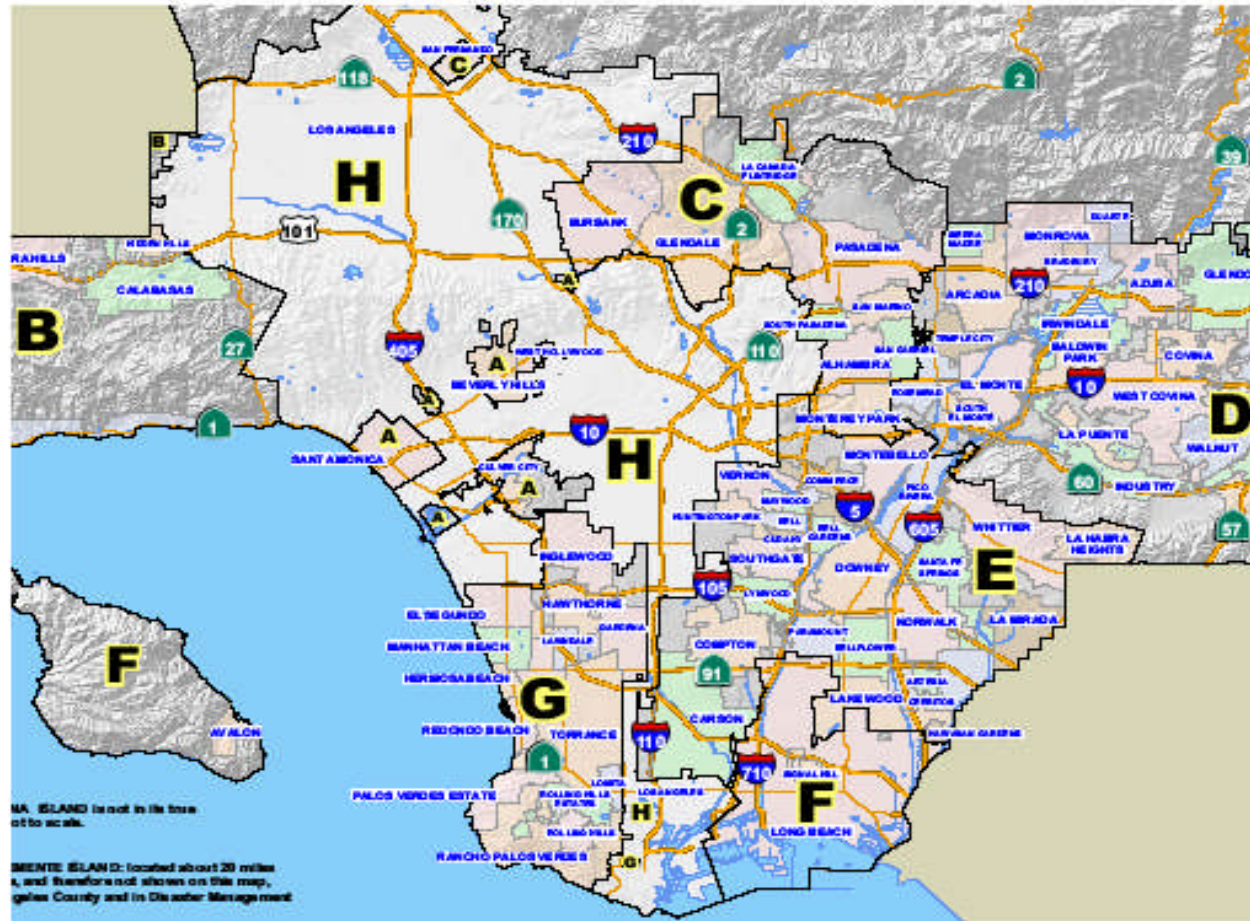
Source LA County Operational Area Emergency Response Plan



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Los Angeles County Disaster Management Areas

- The local level is the individual city and the other cities in their Disaster Management Area
- Ours is Area G
 - 14 Cities
 - 2 Sheriff Stations
- Fire Departments routinely get mutual aid from other area cities and the County



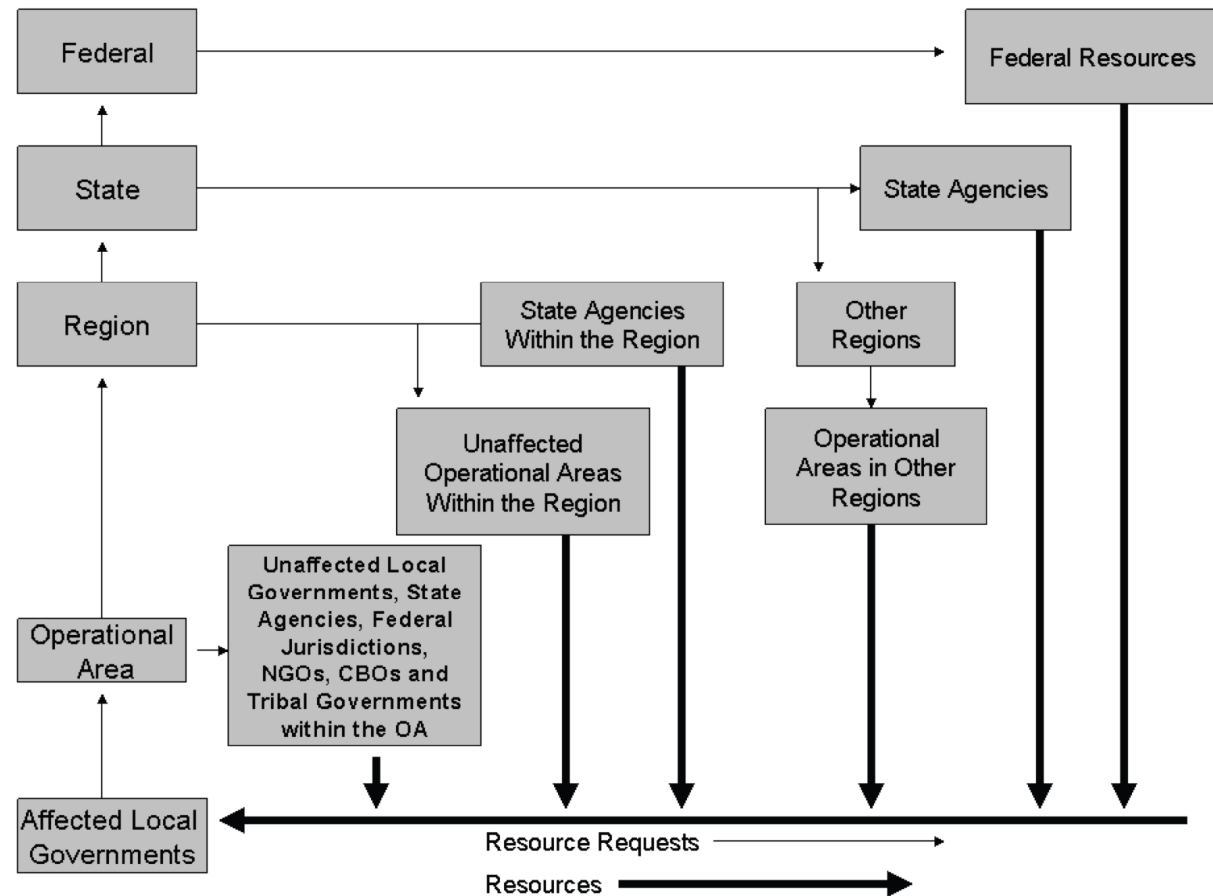
Source LA County Office of Emergency Management



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Mutual Aid Flow of Requests and Resources

- At each level when resources are overwhelmed, the mutual aid process continues
- Counties are the state's Operational Areas
- Once a local emergency is declared, the Sheriff is the Director of Emergency Operations
- When normal means of communication are unavailable, DCS is pressed into service both up and down the chain



Source State of California Emergency Plan

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Cal OES Southern Region Covers 11 Counties



Cal OES Southern Region Mutual Aid Regions I and VI



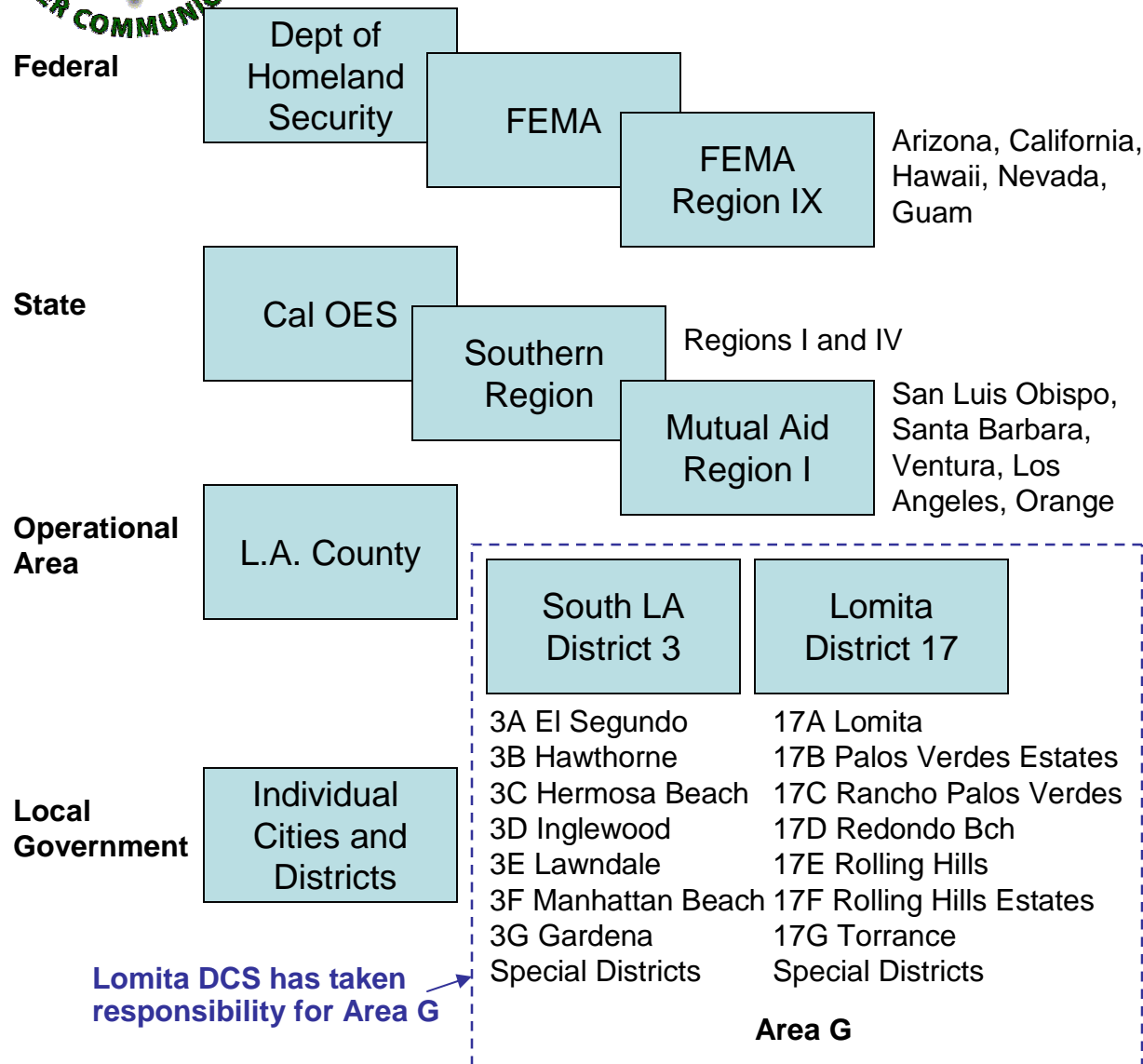
- Area managed by Southern Regional EOC

Source State of California Emergency Plan



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Levels of Emergency Management Applied to Us



Auxiliary Communication Links & Nets

- **DHS/FEMA NOC** *WGY900*
Washington
 - *Region IX Oakland WGY909*
 - FNARS*, SHARES**
 - Federal Frequencies
- **Cal OES SOC**
Sacramento (Mather)
STACOM*** State HF *KNHH558*
CESN**** *W6EMA*
40m, 75m, 160m
- **Cal OES REOC**
Los Alamitos *K1OES*
SW ACS UHF net
- **L. A. County CEOC** *K6CPT*
 - County DCS VHF nets
- **Station 17 EOC** *W6LMT*
 - District DCS VHF/UHF nets
- **City Groups** *Various*
 - City VHF/UHF nets

*FEMA National Radio System

**SHARed RESources HF Radio Program

***STAtE COMmunications Net

****CalifORNIA Emergency Services Net



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Lomita and South LA DCS Have Recently Been Combined

- South LA DCS has been vacant for at least a decade
- Lomita has the critical mass to support both
- Combining the Districts is a practical solution
- Common frequency plan and staffing
- Provides cohesion to Area G

Area G City Contact Sheriff Stations

City	Primary Sheriff Station	Alternate Sheriff Station
EL SEGUNDO	South Los Angeles Station 3	Carson Station 16
GARDENA	South Los Angeles Station 3	Carson Station 16
HAWTHORNE	South Los Angeles Station 3	Carson Station 16
HERMOSA BEACH	South Los Angeles Station 3	Lomita Station 17
INGLEWOOD	South Los Angeles Station 3	Carson Station 16
LAWNDALE	South Los Angeles Station 3	Lomita Station 17
LOMITA	Lomita Station 17	Carson Station 16
MANHATTAN BEACH	South Los Angeles Station 3	Carson Station 16
PALOS VERDES ESTATES	Lomita Station 17	Carson Station 16
RANCHO PALOS VERDES	Lomita Station 17	South Los Angeles Station 3
REDONDO BEACH	Lomita Station 17	Carson Station 16
ROLLING HILLS	Lomita Station 17	Carson Station 16
ROLLING HILLS ESTATES	Lomita Station 17	Carson Station 16
TORRANCE	Lomita Station 17	Carson Station 16



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Lomita DCS Radio Room



- Every Monday we operate
 - County nets
 - 2m, 220, 6m & 10m
 - District nets with the city organizations
 - Check into city nets
 - Cross link W6TRW 2m + K6RH 440
 - 2m simplex, 220 simplex
 - PV West 440, voice and digital
- We support various other exercises and drills like the monthly PVPUSD Schools Net



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Repeaters We Use County 2m Coverage



Mt. Disappointment hosts two 2m and one 220 County repeaters

Exploring options with TASMA for improving County-wide 2m coverage



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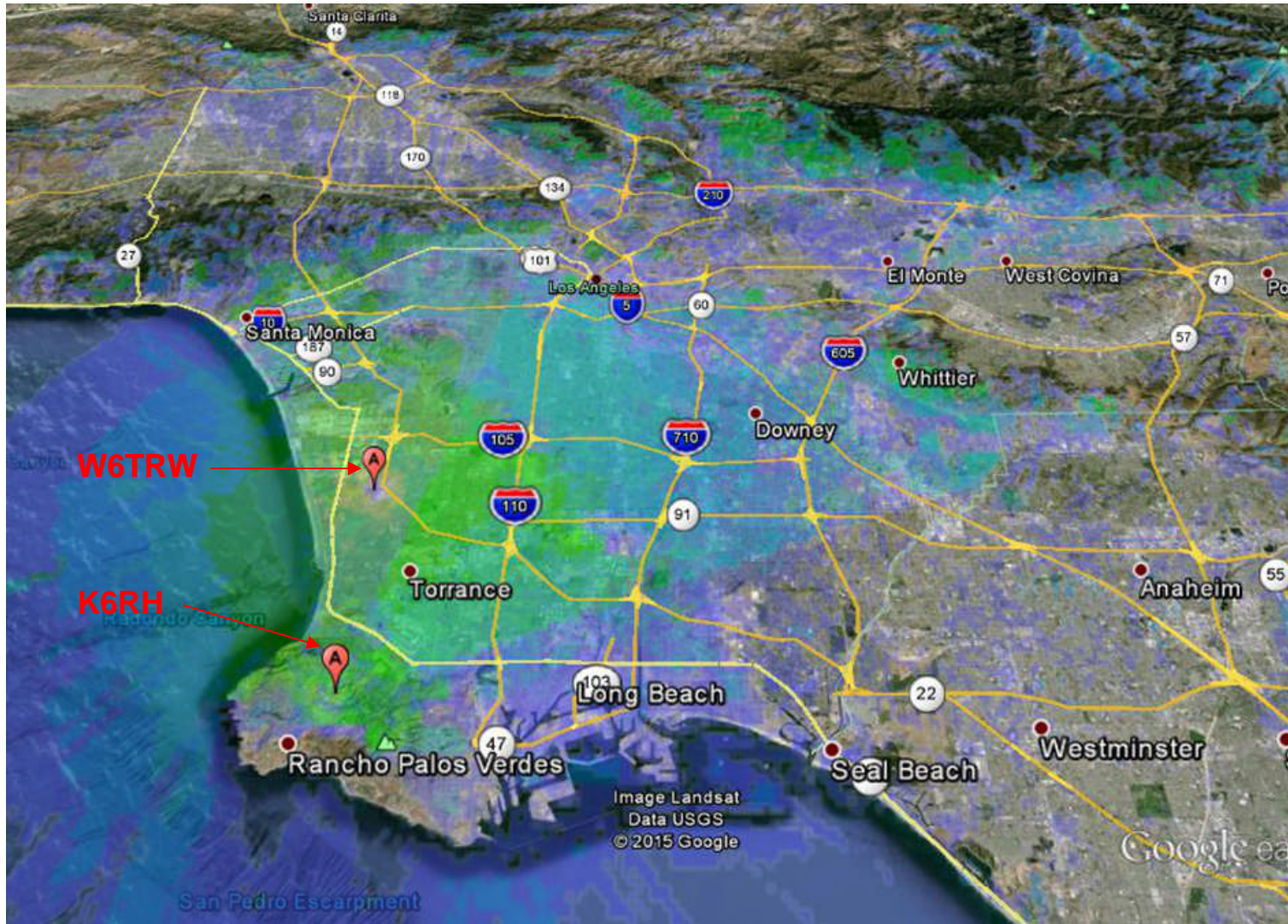
Repeaters We Use

Linked District Coverage



Linking 2 repeaters provides good coverage over most of Area G

We are exploring options for improving coverage to help the back of PV





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Digital Communications

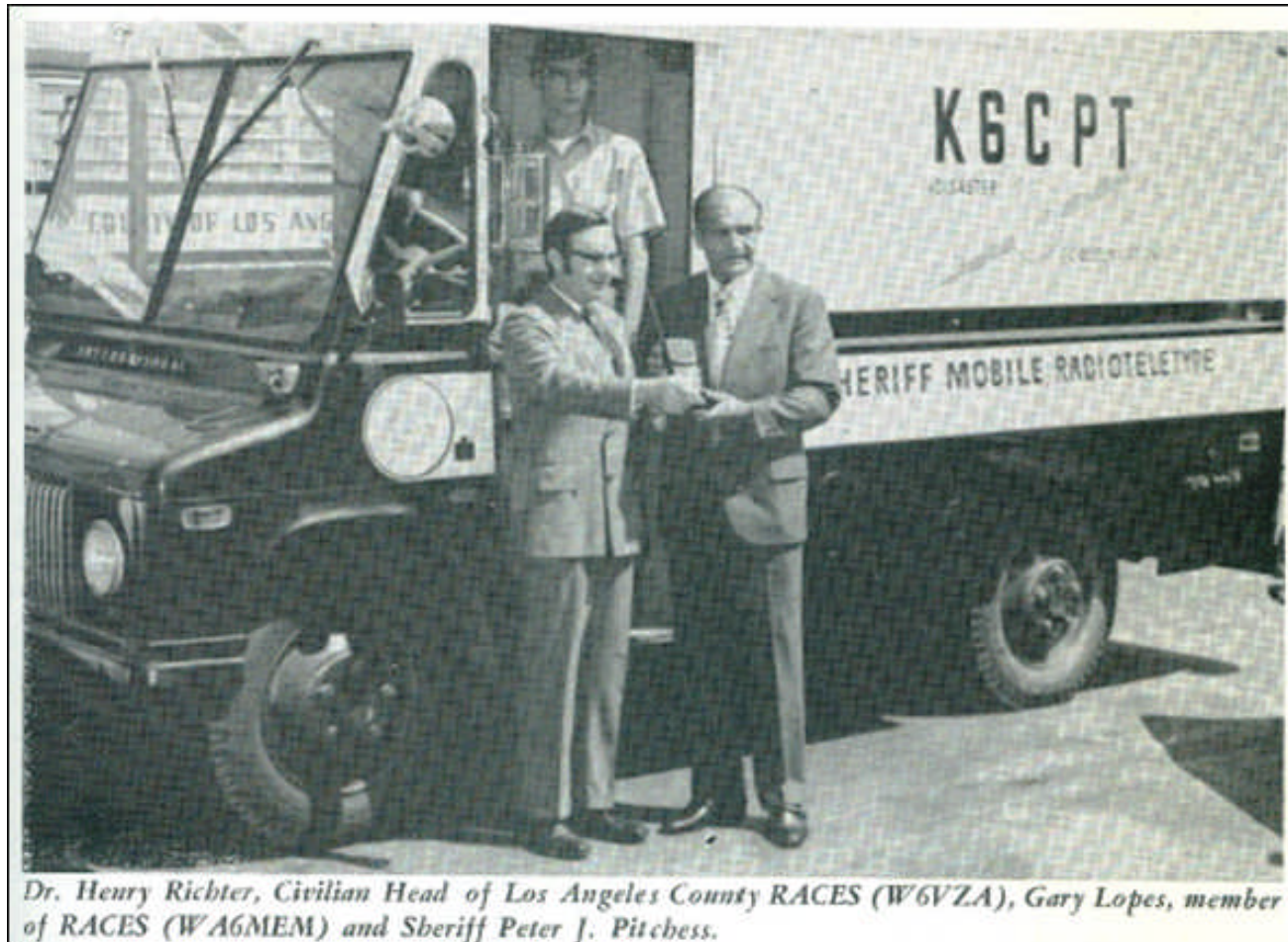
Narrowband Emergency Messaging System

- Some disaster response traffic is better suited for digital mode than voice.
 - Voice is too slow and error prone for long or involved messages
- NBEMS – a simple and easy way to send error-free digital messages
 - You don't have to buy an expensive modem or software
 - You don't even need a dedicated connection to your radio
- NBEMS produces messages on standard forms used in disaster management
 - Incident Command System (ICS)
 - Red Cross
 - ARRL Radiogram
 - Military Auxiliary Radio System
 - CSV spreadsheets
- NBEMS works with Windows, Linux and Mac computers and can be used on HF too



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Digital is Not New



Dr. Henry Richter, Civilian Head of Los Angeles County RACES (W6VZA), Gary Lopes, member of RACES (WA6MEM) and Sheriff Peter J. Pitchess.

WA6MEM is the K6RH trustee

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CFMB Mobile Communications Units



- Several deployable communications assets
- Most capable of desolate, off road operations
- Support
 - Interagency communications
 - Remote dispatch
 - Mobile repeaters
 - Satellite communications
 - HF communications
- Amateur radio equipment being installed
- DCS participates with the CFMB Technical Reserve Company in weekly maintenance and quarterly exercises
- MCU A made it to HAMCON 2015 at the Torrance Marriott



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HF Initiatives



- When infrastructure fails, we have HF
- CFMB has acquired
 - Harris military manpacks
 - EMP protected
 - Barrett HF base/mobile
 - Experimenting with Rockwell-Collins/AIRINC Urgentlink HF cellular
 - All with Automatic Link Establishment
 - Plan for Sheriff Stations to have HF NVIS antennas
- Operating on State, Rockwell-Collins and amateur HF frequencies
- CFMB relies on DCS to operate the HF radios



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Activations



- We prepare for the “big one” but activation for fires is more likely
- 2007 Catalina Fire
 - Members deployed to Catalina to establish mainland communications should the fiber link be destroyed
- 2009 Palos Verdes Fire
 - Operated from the St John Fisher CP and the Lomita Station
 - 2215 hours, 8-27-2009 to 0045 hours, 8-28-2009
- 2009 Station Fire
 - The largest wildfire in Los Angeles County history
 - Two firefighters killed
 - Destroyed Mt Disappointment repeaters



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2015 LMT Events



- Feb 1 Redondo Beach Superbowl 5/10K
- Feb 3, Mar 3, Apr 7, May 5, Oct 6, Nov 3 PV Schools Nets
- Feb 19 CFMB Radio Rodeo LMT Site
- Feb 25 - Mar 1 Islands on the Air DXpetition NA-066*
- Mar 15 Los Angeles Marathon*
- Apr 04 & 08 Semi-Annual District Membership Meeting
- Apr 25 LACDCS COMEX
- May 7 CFMB COMEX - LMT Site
- May 16 Torrance Armed Forces Parade*
- Jun 6 Gardena Emergency Preparedness & Safety Fair
- Jun 27-28 ARRL Field Day*
- Sept 11-13 HAMCON 2015
- Sept 17 CFMB 3rd Quarter COMEX
- Sept 22-24 PV School Disaster Amateur Radio Inspections
- Sept 26 Rat Beach Bike Tour*
- Sept 26, DCS 3rd Quarter COMEX
- Oct 15 Great California Shakeout
- Oct 29 & 31 Semi-Annual District Members Meeting
- Nov 1 PV Peninsula Disaster Preparedness Fair
- Nov 3 Election Night Support to Aero Bureau
- Nov 14 Palos Verdes Half Marathon
- Nov 14 Lomita Station 40th Anniversary Celebration
- Nov 19 Statewide Medical and Health Functional Exercise

*Other Hours





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Frequency Plan Development

For Official Use Only

South LA & Lomita District Frequency Plan

- Consistent frequency plan for districts to include contract/contact cities
 - Compliant with TASMA, 220SMA and SCRRBA band plans
 - Most districts isolated from their cities
 - Engage the city organizations where they exist via the DMACs
- Interoperability with other disaster radio groups
 - Red Cross
 - ARES
 - Orange County RACES
 - Cal OES Southern Region Auxiliary Communications Service
- Frequency plan shared with cities on a DMA basis
- Deploy common code plugs to the sheriff stations
- That way we can talk to each other!

Lomita Station 17 Disaster Communications Service						
W6LMT Frequency Plan						
Do not refer to frequencies on the air. Use only the frequency designators.						
Freq. Designator	Freq.	Call / Info.	Tx Offset	PL-Tx	PL-Rx	Agency
EOB Primary Mt D	145.300	K6CPT	- 0.600	100.0		L.A. County EOC Sheriff's EOB
EOB Repeater	145.300		- 0.600	156.7	100.0	
EOB RRT Ops	147.270		+ 0.600	100.0		
EOB 220	224.300		- 1.600	100.0		
EOB 6m	51.500		Simplex			
EOB 10m	29.500		Simplex			
Station 17 Primary	145.320	W6LMT	- 0.600	114.8	114.8	Lomita Station 17
Station 17 EOC Link	223.440		Simplex	156.7	156.7	
Station 17 440 Primary	445.300		- 5.000	127.3		
Station 17 Tactical	449.980		- 5.000	173.8	173.8	
Station 17 6m	TBD		Simplex			
Station 17 10m	TBD		Simplex			
Station 17 Alternate 1	145.585		Simplex	156.7	156.7	
Station 17 Alternate 2	146.535		Simplex	156.7	156.7	
Station 17 Alternate 3	145.540		Simplex	156.7	156.7	
Station 17A Primary	Reserved	W6PVE	- input 145.740	131.8	131.8	Lomita City EOC
Station 17B North	146.550		+ input 146.550	131.8	131.8	Palos Verdes Estates EOC (NART)
Station 17B South	145.740		- 5.000	131.8	131.8	
Station 17B	447.800	N6RPV	- 5.000	100.0	100.0	Rancho Palos Verdes EOC (PVAN)
Station 17C Primary 440	447.120		- 5.000	192.8	192.8	
Station 17C Secondary 440	445.720		Simplex	156.7	156.7	
Station 17C Primary 2m	146.580		Simplex	156.7		
Station 17C 2m Tactical	146.595					
Station 17D Primary	446.860	K6RPD	- 5.000	192.8	192.8	Radondo Beach EOC
		K6RFD				Radondo Beach CERT Command Vehicle
Station 17E Primary	Reserved					Rolling Hills EOC
Station 17F Primary	146.580	W6TPD	Simplex	156.7	156.7	Rolling Hills Estates EOC
Station 17G Primary	223.880		- 1.600	100.0	100.0	Torrance EOC
Station 17G 440 Alternate	446.020		- 5.000	131.8	131.8	(Torrance Amateur Radio Association)
Station 17G 90501/2	223.400		Simplex	141.3	141.3	Torrance 90501 & 90502 Area Disaster Centers
Station 17G 90503	223.520		Simplex	141.3	141.3	Torrance 90503 Area Disaster Center
Station 17G 90504	223.460		Simplex	141.3	141.3	Torrance 90504 Area Disaster Center
Station 17G 90505	223.420		Simplex	141.3	141.3	Torrance 90505 Area Disaster Center
Hermosa Primary	448.800		- 5.000	118.8	118.8	Hermosa Beach EOC (Hermosa Beach Amateur Radio Association)
PVP USD Primay	224.380		- 1.600	192.8	192.8	Palos Verdes Peninsula School EOC
PVP USD Alternate	222.120		Simplex			

- Need to add South LA city frequencies where they exist
 - El Segundo, Hawthorne, Manhattan Beach, Inglewood and Lawndale

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Today's DCS is Different



- DCS is rejuvenated on an upward trajectory
 - We have an important mission with opportunities for personal fulfillment in amateur radio
 - Management support improved
 - Membership process streamlined
 - Most Sheriff's stations have recently obtained new radios with more planned
 - Developing consistent and compliant frequency plan to be deployed County-wide, including the cities
 - We providing unique opportunities to expand radio and situational awareness skills with events throughout the County
 - To promote interoperability, we encourage member participation in their city radio groups
- In addition to seeking new members, we welcome former members to consider re-joining

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Where to Find More Information



- Our District web site:
 - <http://www.qsl.net/lmtdcs/>
 - <http://W6LMT.net>
- County web site:
 - <http://lacdcs.org>
- Email:
 - lmtdcs@qsl.net





Los Angeles County Disaster Communications Service
Lomita Station – District 17 &
South Los Angeles Station – District 3



Disaster Communications Service for the South Bay

Serving Area G of the Los Angeles County Operational Area and the contract and contact cities of:
 Lomita, Palms Verde Estates, Rancho Palms Verde, Redondo Beach, Rolling Hills, Rolling Hills Estates, Torrance,
 El Segundo, Gardena, Hawthorne, Hermosa Beach, Inglewood, Lawndale, Manhattan Beach
 and Unincorporated Areas within the Lomita & South Los Angeles Station Jurisdictions

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Lomita, CA
 90701
 Scattered Clouds
 70°F / 70°F

04/12/2018, 10:40:58 PDT

Today

- [Sign Up for District News](#)
- [2018-11-18 Public Check](#)
- [2018-10-28 Membership Meeting Check](#)
- [Weekly CA FDO Applications](#)
- [RF Presentation Page](#)
- [Check out the JARRT, PDRM and TABA websites](#)
- [Emergency Digital Information Database](#)
- [Sign Up for MMS Alerts](#)
- [Recent Publications](#)
- [Regional Warning Center](#)
- [LA Traffic Conditions](#)
- [Traffic Incidents](#)
- [Air Quality Forecast](#)
- [Weather Radar](#)
- [Los Angeles Area Weather](#)
- [Fire Weather](#)
- [Cell Fire Incidents](#)
- [BCE Outage Map](#)
- [Cell ID Power Status](#)

News Items

- [BLA Contingency Information](#)
- [TAMRA For Rancho Palms](#)
- [Oceania DCS](#)
- [Check out NEMIS](#)

References

- [Net control operators, please review the District 17 net protocol prior to arriving](#)
- [2018 Technician Train Call Out Exercise Results](#)
- [D17 Frequency Plan](#)
- [D17 Phone Tree](#)
- [Jerry's Qs](#)





Current Threats

- [San Joaquin Hills](#)
- [Long Beach](#)
- [Long Beach](#)
- [Long Beach](#)
- [Long Beach](#)

Recent Threats

- [PDRM](#)
- [PDRM](#)
- [PDRM](#)
- [PDRM](#)
- [PDRM](#)