

## The Big One Is Coming, And We Will Be Ready

The largest earthquake preparedness exercise ever held in California will occur on Thursday November 13<sup>th</sup>. The event is called “The Great Southern California ShakeOut”. You can go to the website [www.shakeout.org](http://www.shakeout.org) for all of the details, planning, and ShakeOut video clips. The video clips themselves are mind boggling and very sobering. The exercise will also be the basis of this year’s statewide emergency response exercise, Golden Guardian 2008.

The Great Southern California ShakeOut is based on a potential magnitude 7.8 earthquake occurring at 10:00 AM on the southern San Andreas Fault— approximately 5,000 times larger than the magnitude 5.4 earthquake that shook southern California on July 29.

It’s not a matter of if an earthquake of this size will happen—but when. And it is possible that it will happen in our lifetime.

Dr. Lucy Jones of the U.S. Geological Survey has led a group of over 300 scientists, engineers, and others to study the likely consequences of this potential earthquake in great detail. The result is the ShakeOut Earthquake Scenario.

In an earthquake of this size, the shaking will last for nearly two minutes. The strongest shaking will occur near the fault (in the projected earthquake, the Coachella Valley, Inland Empire and Antelope Valley). Pockets of strong shaking will form away from the fault where sediments trap the waves. In the projected earthquake, it would occur in the San Gabriel Valley, in East Los Angeles, and also along the Santa Clara River basin in Ventura County hitting the cities of Fillmore, Santa Paula, and the City of Ventura very hard.

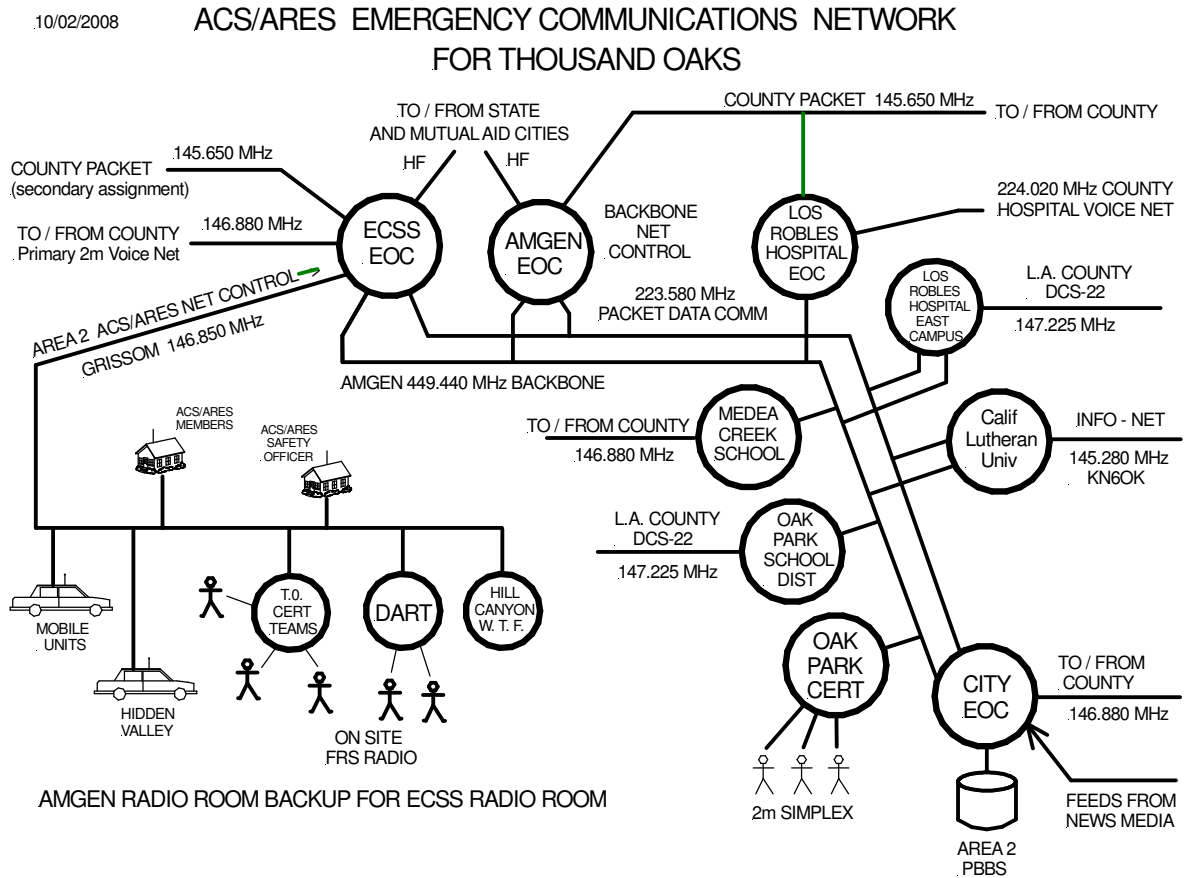
An earthquake of this size will cause unprecedented damage to Southern California— greatly dwarfing the massive damage that occurred in Northridge’s 6.7-magnitude earthquake in 1994. In summary, the ShakeOut Scenario estimates this earthquake will cause some 2,000 deaths, 50,000 injuries, \$200 billion in damage and other losses, and severe, long-lasting disruption.

Ventura County will be heavily involved in the Golden Guardian (government agency) aspects of the exercise including most of the cities in Ventura County, law enforcement, all of the hospitals, Red Cross, schools, and other critical government agencies, as well as ourselves Ventura County Auxiliary Communication Services (ACS).

As a quick background update, ACS is the name that has replaced the old RACES name. ACS allows us to provide a much wider range of emergency communications services than we were able to provide under RACES. As most of you know, Ventura County ACS is divided into eight areas corresponding to the eight major cities in the County. Thousand Oaks is Area 2.

Golden Guardian will be a massive test of our ACS Area 2 Emergency Radio Communications Plan, including extensive voice and packet communications.

Our Area 2 emergency radio communications network diagram is shown below:



We support and have radio equipment installed at the following Emergency Operation Centers (EOCs): East County Sheriff’s Station (ECSS), The City of Thousand Oak (at the Civic Arts Plaza), Los Robles Hospital main campus, Los Robles Hospital east campus, California Lutheran University (CLU), and Amgen Corporation. We also serve and have radio equipment at the Oak Park Unified School District office and Medea Creek Middle School, Oak Park CERT Team, the Thousand Oaks DART team, and Thousand Oaks American Red Cross Shelters.

The Area 2 Emergency Radio Communications Network is a distributed architecture in both the assignment of people and placement of equipment. Our work load is distributed across all locations to avoid people at one location being overloaded with work, while people at other locations sit idle. The radio equipment is also distributed so that if some sites are destroyed, the remaining sites will have sufficient resources to keep the Area 2 network running and providing services to our Area 2 customers.

We provide three primary services to our Area 2 customers. These services are:

- Rapid response emergency radio communications,
- Big picture information, and
- Info-Net.

Our customers played an extensive role in defining these services.

Rapid response emergency communications is our traditional RACES emergency communications service. When a disaster hits, we deploy to our Area 2 EOCs as quickly as possible after ACS activation to handle interagency communications traffic.

The emergency communication service that our ACS Area 2 customers have requested most is providing them with “Big Picture Information” on the evolving crisis. All of our customers have fairly good radio communications within their own organizations. For example, the Thousand Oaks Police Department at East County Sheriffs Station (ECSS) has excellent communications with law enforcement throughout the County. But, they do not have the man power to determine the amount of destruction throughout Conejo Valley, or the situation at California Lutheran University (CLU) and its neighboring retirement village, etc. Los Robles Hospital can talk to other hospitals throughout the County. The City of Thousand Oaks has good radio communications with its other City facilities. Oak Park School District has good radio communications from its district office to its various schools. However, these organizations become isolated islands when a disaster hits and they lose all cell phone, telephone, and internet service. Their management teams, working in their individual Emergency Operation Centers (EOCs), have gut wrenching decisions to make in trying to figure out how to deal with the emergency. But, they usually have little or no knowledge on the scope or severity of the evolving crisis to base their decisions on. They can communicate within their own organization, but they can not reach anyone outside. Any news media reports that they receive will generally be dealing with other areas in Southern California, not Conejo Valley. Their satellite phones, if they have them and if they are charged up, will probably not work as well as hoped. Often the number that they are trying to call will be busy. With our extensive ACS emergency communication networks we can provide them with much of the information that they need. Obtaining this service is the primary reason that each of our Area 2 customers have spent a significant amount of money buying the radio equipment that we specified for them. This is also our most demanding service going way beyond anything that we have provided in the past and requiring heavy integration of both voice and packet communications.

Info-Net is a lesson that we learned directly from the San Diego fires last year. They didn't have one! During an emergency, most nets identified in our Area 2 plan will be restricted to ACS members for their assigned tasks. Info-Net is the single exception. Within Area 2 the non-ACS amateur radio operators far outnumber ACS members. During an emergency these non-ACS hams will need a voice net that they can check into to get information so that they can get their families to safety or shelter in place. These

non-ACS hams can also provide law enforcement and other agencies with considerable first hand accounts of situations throughout the area. Because of its extensive networks, ACS will have an enormous amount of information concerning the disaster that can be released to non-ACS hams. The Area 2 Info-Net, running on one of our 2 meter repeaters, will provide Area 2 non-ACS hams with better information on the crises than they can obtain elsewhere. It is anticipated that a large number of non-ACS hams will check into Info-Net to obtain information and to provide information that they are aware of. The Thousand Oaks Police Department is highly supportive of Info-Net because of the large number of "on the ground" observers that it provides them. This net will be run from our CLU EOC.

The ACS services that we are providing to our community are very serious. Our customers are depending heavily on us. There is no where else that they can get the services that we are providing to them! We need a lot of people to do this, not only amateur radio operators but non-hams as well. If you look at all of the work that we have to do, only about half of it involves talking over the radio. We need an extensive team of non-hams to handle all of the critical background work. Changing from RACES to ACS allows us to bring non-hams into the program. We now have a number of husband and wife teams in the program. If you are not already a member of ACS, we need you! If you know of non-hams that would like to get involved in emergency communications, please have them get in contact with us.

Thank you.

Ken Larson KJ6RZ  
ACS Area 2 Emergency Coordinator