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Earthquakes

SANTA CRUZ SENTINEL **EDITORIALS**

The Earthquake Outlook

Some day California will have another earthquake as big as the 1906 quake which caused the disastrous San Francisco fire.

This sad forecast was a consensus of opinion from most of the top seismologists attending the recent conference on earthquakes in San Francisco.

In urging that the state get involved on many levels of earthquake research, Dr. Frank Press, seismology professor at the California Institute of Technology said, "We don't know when, but there will be one" in reference to a quake as big as the San Francisco catastrophe.

Californians are familiar with earth tremors although it is somewhat doubtful if anyone ever gets used to them. No matter how you cut the cake, there are some moments of anxiety when the earth begins to shake.

Santa Cruzans experienced this feeling a few weeks ago in the Corralitos quake which, while not causing extensive damage, certainly put an emphasis on thinking about earthquakes.

Only this week the University of California announced plans for the most extensive study yet on the famed San Andreas fault with plans for construction of an underground study area near Hollister.

Because of its location atop the San Andreas fault, Hollister gets more than its share of earthquakes, including a few in recent years which have severely damaged some structures.

Most earthquake experts believe that it is possible to provide maximum protection in buildings by using known earthquake resistant rules in construction and engineering. Whether it is possible to make a building "earthquake-proof" is somewhat questionable if the quake should happen to center under a specific structure.

However, it is possible to provide good earthquake protection as is handled in the Field Act requirements on the construction of school buildings. This stringent law was passed as a result of the Long Beach quake which destroyed and damaged a number of old schools in that area. Fortunately, schools were not in session at the time of the tremor.

earthquakes are those located on filled ground. This condition prevailed in the most heavily damaged areas in San Francisco in 1906 and in some areas of Long Beach in 1933.

Incidentally, the most powerful earthquake ever recorded in California occurred in 1872 near Lone Pine in the Owens valley. The tremor was felt as far away as Nevada and Arizona, killing 27 persons and injuring at least 100 of Lone Pine's population of 300.

During the 1906 quake, the San Andreas fault rocked for a distance of 270 miles, creating earth cleavages of as much as 20 feet in places.

Speaking of the San Andreas fault earlier this week, Dr. Clarence Allen of Cal Tech termed the San Andreas the most thoroughly studied fault in the world, but added "there are many things we don't know about it."

Allen said that seismologists know little about other major faults in California and "don't even know where some are." The entire coastal area of California is on or near active geologic faults.

The Hayward fault runs down from Berkeley to Hollister where it joins the San Andreas fault while the Calaveras fault runs in the Mount Hamilton area. In the Santa Cruz area, the Ben Lomond fault is an adjunct of the San Andreas.

Almost all the scientists at the earthquake conference favor extensive research in the earthquake field and many believe that it may be possible to accurately forecast future quakes after more knowledge is obtained.

The late Bailey Willis, Stanford seismographic expert, made himself pretty unpopular in California sometime ago with his forecasts of more and more earthquakes.

Legend has it that he was lecturing in Santa Barbara about the dangers of earthquakes in that area, much to the dismay of the residents. In fact, they were supposed to be scoffing at his remarks when the 1925 quake leveled part of the town.

Adequate earthquake protection is necessary in California because of our proven vulnerable position. However, both scientists and builders agree that sound construction techniques can provide maximum safety.

However, the possibility that more research could lead to the goal of accurately predicting earthquakes is a happy thought for such forecasts could lead to saving hundreds and hundreds of lives.

We would just as soon do without earthquakes, but being forewarned could save thousands of lives should a real rockbuster occur in a heavily populated region.