

# Building to a Quake?

An ominous silence along the San Andreas fault raises specters of a major seismic disturbance.

by Barbara Tufty

In certain parts of California, the great San Andreas fault is ominously quiet—possibly building up strains for a major earthquake.

With some of the world's most delicate and precise instruments, scientists listen in on this silence, as well as on the thousands of tremors and small shocks that constantly occur in that earthquake country.

**There are two** conflicting schools of thought regarding the tremors and silences along this restless earth scar.

- Some men believe these tremors could indicate that a large strain is building up beneath the earth, a strain that can be relieved only by a major earthquake.

- Other scientists say the tremors act as safety valves to dissipate the strains as they appear, thus reducing the danger of an earthquake. Thus an area that is relatively free of earthquakes in recent years but lying along a historically active fault is most likely to erupt with a large jolt.

Much of the fault has been unusually quiet for the last few years, geologists report—especially in the south, in the San Bernardino area and the Banning-Mission Creek zone, 100 miles east of Los Angeles. Another spot reported quiet is a 175-mile stretch between Cholame, on the fault east of Paso Robles, and Wrightwood, in the San Gabriel Mountains.

Yet other sections of the fault are shaking and trembling with as many as 100 or more shocks each day—the



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Geologists deplore inability to predict quakes; this shook Cholame, Calif.

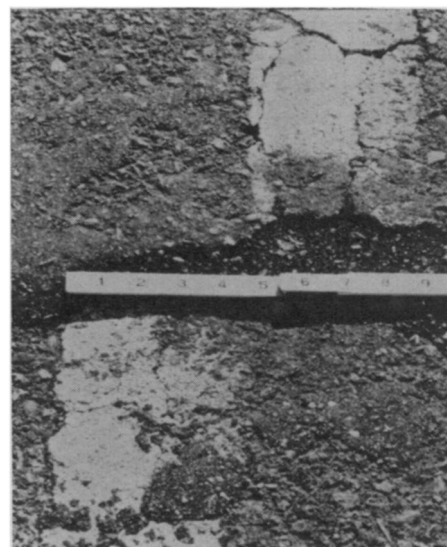
Hayward fault, east of San Francisco, for instance, and the segment of San Andreas near Hollister.

**The remarkable** San Andreas fault forms a continuous break in the earth's crust from beneath the Pacific Ocean at Point Arena, 100 miles north of San Francisco, southward to Cajon Pass. In its southern part, its identity becomes difficult to follow, as there are several faults associated with it but branching from it—Garlock, Elsinore, San Gabriel, San Jacinto and Death Valley. Some of these continue southward and extend under the Gulf of Lower California. Farther north is the Hayward fault, passing through Oakland and Berkeley.

The San Andreas fault is part of a huge earthquake zone that extends around the edge of the Pacific Ocean—along the coast of California, through the Aleutian Islands, through Kamchatka, Japan, the islands of southwest Pacific, along the coast of South America, Central America and Mexico. This active, restless zone is constantly in state of strain and motion, as mountains are raised, volcanoes occasionally erupt, rocks shift and earthquakes rattle the earth.

For billions of years, the land to the west of the San Andreas has been slowly creeping northward and into the Pacific Ocean—at a rate of about

five feet a century, or half an inch each year. Geologists have matched once-joined terrain formations on each side of the rift as far apart as 150 miles, between Tejon Pass and the



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Road center line after 1966 quake.

Salton Sea. During its lifetime of some 100 million years, the sides of the fault may have slipped away from each other for as much as 350 miles.

**The land does not** move at a constant rate. Sometimes a section will creep a few inches in a few weeks,

sometimes it barely moves. Sometimes a section will stand still for a period of years. It is during this quiet period, some geologists believe, that great blocks of rocks may become locked together. Strain then builds up in the



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### Quake scars in Carrizo Plain, Calif.

area to such a point that, like an arched bow, the earth snaps back to relieve the strain—and generates an earthquake of large proportions.

Such an earthquake occurred in April, 1906—the great San Francisco quake in which the western side suddenly slipped several feet over a length of some 250 miles. Seismologists believe another earthquake as strong as that of 1906 could occur at any time at some place along the fault.

**Geologists** have a difficult role to play. On the one hand they feel their responsibility in warning people of danger along a creeping zone or of indications of a possible sudden rupture. On the other hand they have to face the wrath of people associated with real estate, urban development or industry who complain about increased insurance policies, decreased real estate values and other economic changes that take place in a potential danger area. And worse, if the indicated earthquake or natural disaster does not occur, the scientists are subjected to loss of confidence and accusations of having cried wolf for no justified cause.

At this time earthquake prediction just is not yet precise enough to foretell exactly where and when another earthquake is going to take place. But highly trained men with highly sensitive instruments are able to indicate possible, though not certain sites.

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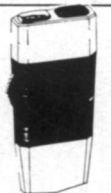
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Truly outstanding—beats anything made in this country. I never even use a mirror with the ACCUMEN, because I can actually hear when I have a perfect shave. Please send two additional shavers as gifts to friends.



**Joel Adler, 2635 Haring Street, Brooklyn, New York**

Shaving with the ACCUMEN is a pleasurable experience. I now realize that a close, non-irritating shave is possible with an electric. The formidable powerplant, if charged overnight, lasts for two weeks of shaves.

**Roger P. Siegel, 2036 E. 22nd Street, Cleveland, Ohio**

I consider your ACCUMEN the finest shaver made. It cuts fast and close and produces no razor burn. Your ad is accurate in every detail. You have a superior product.



**Harry L. Hooker, Box 11, Glasco, Connecticut**

I am very pleased with the ACCUMEN. It is all you claim it to be and much more. I have recommended it to all my friends. You may count me as a loyal user.

**Rev. Wm. H. Hohman, Pastor, Alliance, Ohio**

Please send me another ACCUMEN Shaver. This is the third one I have ordered—my friends seem to like them too much. If this keeps up I might become your East Coast representative.



**Robert Buckner, 818 N. Doheny Drive, Los Angeles 69, California**

There is only one word for the ACCUMEN—"superb". Please send me another one. I want it for my son's birthday.



**L. D. Myrah, Williamson Bldg., Cleveland, Ohio**

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