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EARTHQUAKE ENGINEERING
RESEARCH INSTITUTE

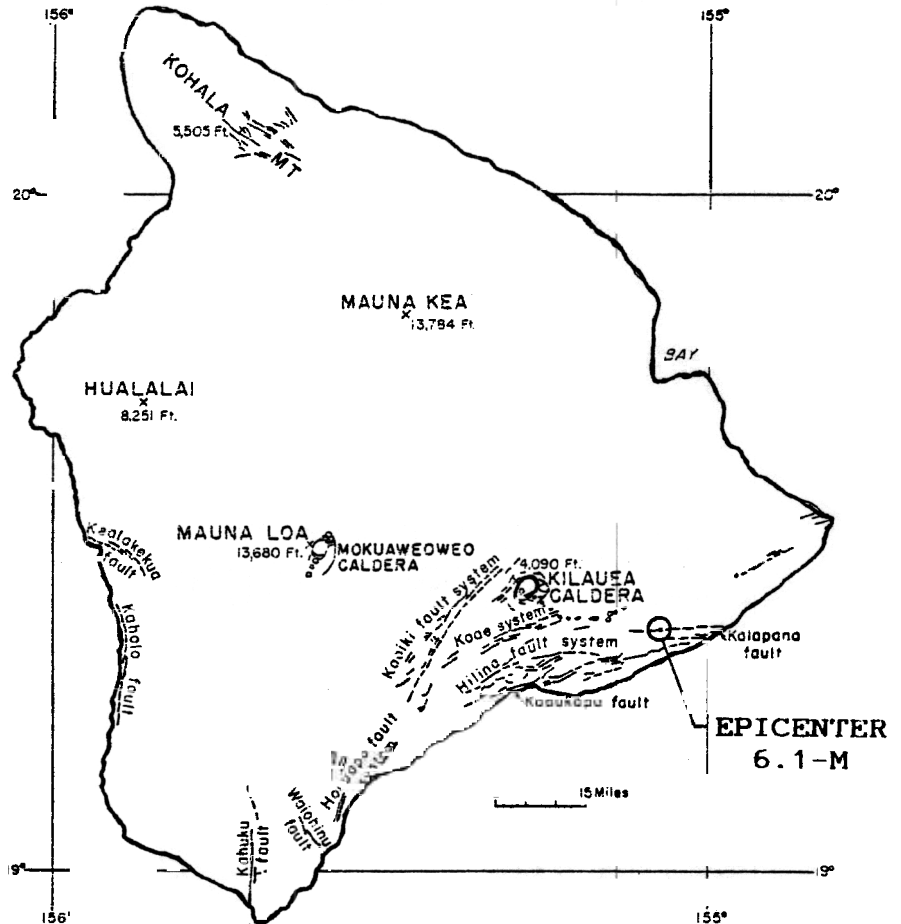
NEWSLETTER

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NEWS OF THE PROFESSION

June 25, 1989 Earthquake Kalapana, Hawaii



PRESIDENT'S MESSAGE

In a strong show of support, EERI members voted 541 to 279 for a 50% increase in dues for 1990. On behalf of the EERI Board of Directors, I want to thank you for your strong vote for financial independence during future development of EERI programs. However, the measure, which elicited the largest vote in EERI's history, failed by six votes to gain the necessary 2/3 of those voting by letter ballot.

The Board is giving serious consideration to the results of this election and will evaluate what subsequent action will be in the best interests of the Institute and its membership. Failure of this measure to pass means that EERI will continue to rely on outside grants and revenue from publication sales and seminars to support membership services. It will

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--Walter Lum and Norby Nielsen
Members EERI

A strong earthquake struck the southeast coast of the island of Hawaii, west of Kalapana, on June 25, 1989. According to Bob Koyonagi, seismologist at the USGS Hawaii Volcano Observatory (HVO), instrumental data indicated an origin time of 17:27:04 (H.S.T.), at epicentral coordinates of 19.36 degrees north latitude and 155.08 degrees west longitude, depth of 9 km, and preliminary magnitude of 6.1. Directions of first motions from the signals suggest that the initial rupture from the mainshock was a seaward movement of the south flank of Kilauea Volcano, along a subhorizontal plane near the bottom of the volcanic crust that overlies the pre-volcanic ocean floor. Kilauea has been active for the past 6 years.

According to the civil defense report following the quake, 5 homes were destroyed, 10 suffered major damage and 100 minor damage. Total damage was estimated at \$653,000. No one was seriously injured.

Other types of damage included several localized collapses of loose rock walls, and rockfalls from 2 steep highway cuts.

The EERI investigation team of Norby Nielsen and Walter Lum noted that one house that was elevated on posts to allow for a garage under the house collapsed. Apparently the posts supporting the house were poorly braced and the house fell on the truck parked in the garage. It was reported that another house elevated on posts also collapsed but this was not verified because it was located in the middle of an active lava

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**1991
MARCH**

March 11-15, 1991 2nd Int. Conf. on Recent Advances in Geot. Earthq. Eng. and Soil Dyn., St. Louis, MO. A 500 word abstract by November 1, 1989 to, and info. from, Shamsheer Prakash, University of Missouri-Rolla, MO 65401 USA. Ph. (314) 341-4489 or -4461; Fax (314) 341-4729.

JUNE

June 3-7, 1991. Sixth International Conference On Applications Of Statistics And Probability In Civil Engineering (CERRA/ICASP 6), in Mexico City. A 600 word abstract by 31 January 1990. Info: CERRA/ICASP 6, Instituto de Ingenieria, UNAM, Apartado 70-472, Coyoacan, 04510, Mexico, D F, Mexico. (10/89)

AUGUST

August 19-20, 1991. 3rd U.S. Conference on Lifeline Earthquake Engineering, Los

Angele California Info:
Ms. El beth Yee : ASCE
Headqu ers, ph (415) 705-
7544 /89)

August 26-28, 1991. 4th Int. Conf. on Seismic Zonation at Stanford. Info: Haresh Shah, Stanford Univ., CA 94305; Ph. (415) 723-3921 or Roger Borchardt, USGS, Menlo Park, CA 94025. Ph. (415) 329-5619.

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field. Two other damaged homes were old abandoned structures. The fifth damaged structure appears to be an owner-built,

poorly-framed structure under construction.

Probably, the most significant feature of this earthquake is the minor damage resulting from an M 6.1 quake. This may be attributed to the area being sparsely populated, and the construction consisting mainly of light wood structures on rocky ground.

Aftershocks during the first two days of activity indicate concentrations of hypocenters in the south flank, east of the main shock, inferring rift spreading and seaward movement of the eastern section.



Photo courtesy of Jim Griggs, USGS-HVO



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