

In our "spare" time, we walked on the Great Wall (at two places) visited Ming tombs, the Summer Palace, Forbidden City; saw Ching Dynasty treasures, the great plaza, parks, Chinese magic and acrobatic shows, a zoo with two types of Panda bears, had boat rides including Shanghai harbor, and we were guests at frequent banquets, all excellent with a great variety of food. We were busy from early morning to late evening, seven days per week for almost three weeks.

#### Quayaquil, Ecuador Earthquake of August 18, 1980

On August 18, 1980 an earthquake rated at  $M_s = 5.6$  (USGS) shook major parts of Ecuador. Its epicenter was about 40 km NW from Quayaquil at 80.04W and 1.94S. In recent years I have usually telephoned or cabled selected EERI members in foreign countries to get reliable, firsthand data not only for itself but to help make decisions as to further action. In this case, Otton Lara, consulting engineer in Ecuador, advised me that 14 or 15 were killed in Quayaquil and 80 to 90 injured. About 1,000 were made homeless. At 12 to 15 km north of the epicenter there was cracking of the clay soil, also cracks through tennis courts, floor tile, and a swimming pool at a country club. Most of the Quayaquil damage was to the local "mixed" residential construction of wood framing with masonry filler walls. There was also cracking in the walls of bigger buildings; the main beam in a stadium cracked; a large 10-story building had cracking only in the first story exterior columns which probably indicates not only torsional response but that exterior joints (especially corner joints) do not provide the confinement and value of interior joints where beams (or girders) frame in on four sides instead of two or three. He also reported an industrial building damaged no doubt because the slab was built on only one-half of the area, thus preventing effective diaphragm action. There were no strong motion records obtained. We thank Señor Lara for his report and ask him to keep us posted in the future. No EERI team was sent to Ecuador at the time.

#### Mexico Earthquake of October 24, 1980

An EERI report on two Mexican earthquakes is at the printer now and will soon be mailed to all members. Meanwhile, another earthquake occurred on October 24, 1980. We contacted Jorge Prince and Leonardo Zeevaert and got the following cabled replies.

Mexico City no damage to engineered buildings bridges public utilities stop close epicenter native villages suffered considerable usual recorded damage similar last earthquake Oaxaca-. Stop reconnaissance team will find similar phenomena  
Leonardo Zeevaert.

Confirming this morning's phone reply to your telegram received today on Mexican earthquake stop we dont have yet information enough about points one to four stop however damage so extensive in epicentral region as to perhaps make worthwhile recon team although almost no places nearby to stay overnight stop regards  
Jorge Prince Instituto de Ingenieria.

There was also a phone call from Dr. Prince, who will no doubt report more at a later time. According to press reports at least 55 were killed. Worst hit was the state of Oaxaca, but Mexico City also had some damage, as before.

Because of these cabled messages, the similarity to the other two recent Mexican earthquakes which were well covered, no team was sent to Mexico for this recent earthquake. I expect other reports to be elsewhere in this NEWSLETTER.

#### Northern California Earthquake of November 8, 1980

At 2:27 am P.S.T. an earthquake occurred offshore from Trinidad, with its epicenter initially reported about 30 miles NNW of Eureka. Its magnitude  $M_L$  was tentatively reported as 7.0 (UCB) and its epicenter at  $41.0^\circ N$ ,  $124.6^\circ W$ . A depth of 16 km was also reported. USGS reported the magnitude as 6.6 to 7.1 and epicenter  $40.93 N$ ,  $124.48 W$  or farther west. The damage was fairly light except for a 2-span collapse of the southbound lanes of a main highway overpass following which a car and a pickup dropped some 30 feet to the ground below. There was also temporary disruption of utilities and some damage at local mills. The nearby PG&E nuclear power plant was undamaged. I asked Roger Scholl to coordinate the findings of several EERI investigators and I sent Peter Yanev to the site on the day of the earthquake. A preliminary report is to be found elsewhere in this NEWSLETTER. It would seem that this area performed quite well, in general. No doubt the frequency of earthquakes in the region has shaken out some of the worst hazards and/or led to strengthening. Also, wood frame construction, if well built, can stand considerable