SEISMIC-HAZARD MAPS FOR THE CONTERMINOUS UNITED STATES MAP J - HORIZONTAL SPECTRAL RESPONSE ACCELERATION FOR 1.0 SECOND PERIOD (5% OF CRITICAL DAMPING) WITH 10% PROBABILITY OF EXCEEDANCE IN 50 YEARS

Arthur Frankel, Charles Mueller, Theodore Barnhard, David Perkins, E.V. Leyendecker, Nancy Dickman, Stanley Hanson and Margaret Hopper

U.S GEOLOGICAL SURVEY LIBRARY DEC 1 8 2000

M(200) This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards. Any use of trade, product, or firm names is for descriptive purposes only and does not imply endorsement by the U.S. Government. No. 97-131

DISCUSSION

The acceleration values contoured are the random horizontal component. Reference site condition is firm rock, defined as having an average shear-wave velocity of 760 m/sec in the top 30 meters, corresponding to the boundary between NEHRP site classes B and C. Documentation, gridded values, and ARC/INFO coverages used to make the maps are available at: http://geohazards.cr.usgs.gov/eq/

ACKNOWLEDGMENTS

California portion of the map produced jointly with the California Division of Mines and Geology. Ken Rukstales prepared the ARC/INFO digital data and formatted the GIS

REFERENCES

Frankel, A., Mueller, C., Barnhard, T., Perkins, D., Leyendecker, E.V., Dickman, N., Hanson, S., and Hopper, M., 1996, National Seismic-Hazard Maps: Documentation June

1996: U.S. Geological Survey Open-File Report 96-532, 110 p.
Frankel, A., Mueller, C., Barnhard, T., Perkins, D., Leyendecker, E.V., Dickman, N.,
Hanson, S., and Hopper, M., 1997, Seismic-Hazard Maps for California, Nevada and
Western Arizona/Utah: U.S. Geological Survey Open-File Report 97-130, 12 sheets,

Petersen, M., Bryant, W., Cramer, C., Cao, T., Reichle, M., Frankel, A., Lienkaemper, J., McCrory, P., and Schwartz, D., 1996, Probabilistic Seismic Hazard Assessment for the State of California: California Division of Mines and Geology Open-File Report 96-08, 66 p., and U.S. Geological Survey Open-File Report 96-706, 66 p.

Note: contours are irregularly spaced

versions of the maps.

Sheet J

For sale by U.S. Geological Survey, Earthquake Maps, Box 25046, Federal Center, MS-967, Denver, CO 80225

Digital data prepared with ARC/INFO 7.0.4 running under Solaris 2.5 on a UNIX workstation Albers Equal-Area Conic Projection Standard Parallels 29.5°N and 45.5°N Central Meridian 95°W

☆ U.S. GOVERNMENT PRINTING OFFICE 1997—573-066

100°

Scale 1:7,000,000

100 200 300 400 500 KILOMETERS

1997