

shaking. Apparently there are many overpass or freeway structures yet to be improved. The one that failed in this case had skew spans. We thank all the investigators who reported in this issue.

#### Algerian Earthquake of November 10, 1980

Two days after the Eureka event a magnitude 7.3 earthquake virtually destroyed the "new" city of El Asnam, Algeria. I term this "new" because the city was essentially destroyed in 1954 by another earthquake and was rebuilt over the last 2-1/2 decades. This earthquake is thus of vital interest because most of its buildings were new, "engineered," and yet collapsed. Obviously, we need to distinguish between "engineered" and "earthquake engineering" -- there is a vital difference. Moreover "earthquake-engineered" varies over a wide spectrum from barely meeting an old code to the very extensive analysis of nuclear and LNG facilities.

USGS early reports gave  $M = 7.3$ , depth 33 km, and epicenter at 36.38 N, 1.27 E. There were four accelerographs within 90 km of the epicenter but none functioned, reportedly because of prior vandalism. Apparently the earthquake occurred on a holiday or else the casualties -- estimated at 20,000 dead at the time of this writing -- would have been much greater. It so happened that Hareh Shah had just returned from Algiers where he and the Blume Center at Stanford have been doing risk analyses and other research for the Algerian government. In fact their pre-earthquake maps showed the area of this earthquake as a potential "hot spot." The Algerian government cabled him to return at once and I took advantage of this by appointing him EIC for EERI's preliminary investigation of this earthquake. Others were added to the team subsequently and NRC also sent a second team with which EERI is collaborating. Elsewhere in this issue is a comprehensive and, certainly prompt, preliminary report of this very important earthquake with numerous building collapses of 1, 2, 3, or more stories and a Y-shaped fault break with almost every conceivable type of fault motion in the region. Apparently the building failures are not due to liquefaction. Hareh and the others deserve our thanks for this fast, comprehensive reporting under difficult circumstances. There will be more later.