

V. VETERAN'S ADMINISTRATION HOSPITAL, SAN FERNANDO

Of 58 total fatalities in the 1971 earthquake, 47, or about 80%, were caused by structural collapse at the San Fernando Veterans Administration Hospital. Thirty-one patients and ten employees died at the VA hospital; 6 others died later after being moved to other medical facilities. The last body was not recovered from the wreckage until noon on February 13, four and a half days after the earthquake.

Though there were no strong motion recording devices at the hospital, the site was approximately four and a half miles from the epicentral region in the area of high intensity along the northerly edge of the San Fernando Valley, and it was only a little more than a mile from the Pacoima Dam accelerograph that recorded severe ground motion in excess of 1g. However, of the 45 buildings and 6 support structures in the hospital complex only six collapsed. Of these, two were heavily occupied (where the casualties occurred), two were unoccupied garages, constructed in 1939 and one was a one story office, unoccupied at the time of the shock. The remaining collapsed buildings consisted of a garage and the hospital fire house, a potentially essential building (though in this instance no fires occurred at the hospital as a result of the earthquake).

The complex had 420 general hospital beds and 36 nursing home beds: collapse of all occupied buildings would have obviously drastically changed the statistics. Statements that "the VA hospital completely collapsed" thus greatly oversimplify the situation.

a. Structures and Damage:

The full list of buildings is scheduled below, together with a note on their damage status. An aerial photo taken the day of the earthquake also provides an accurate impression of the mixture of damage states, and shows that the entire complex was far from being leveled (Figure 9). In general the damage pattern is explainable by currently accepted theory and could have been largely predicted, at least in relative terms.

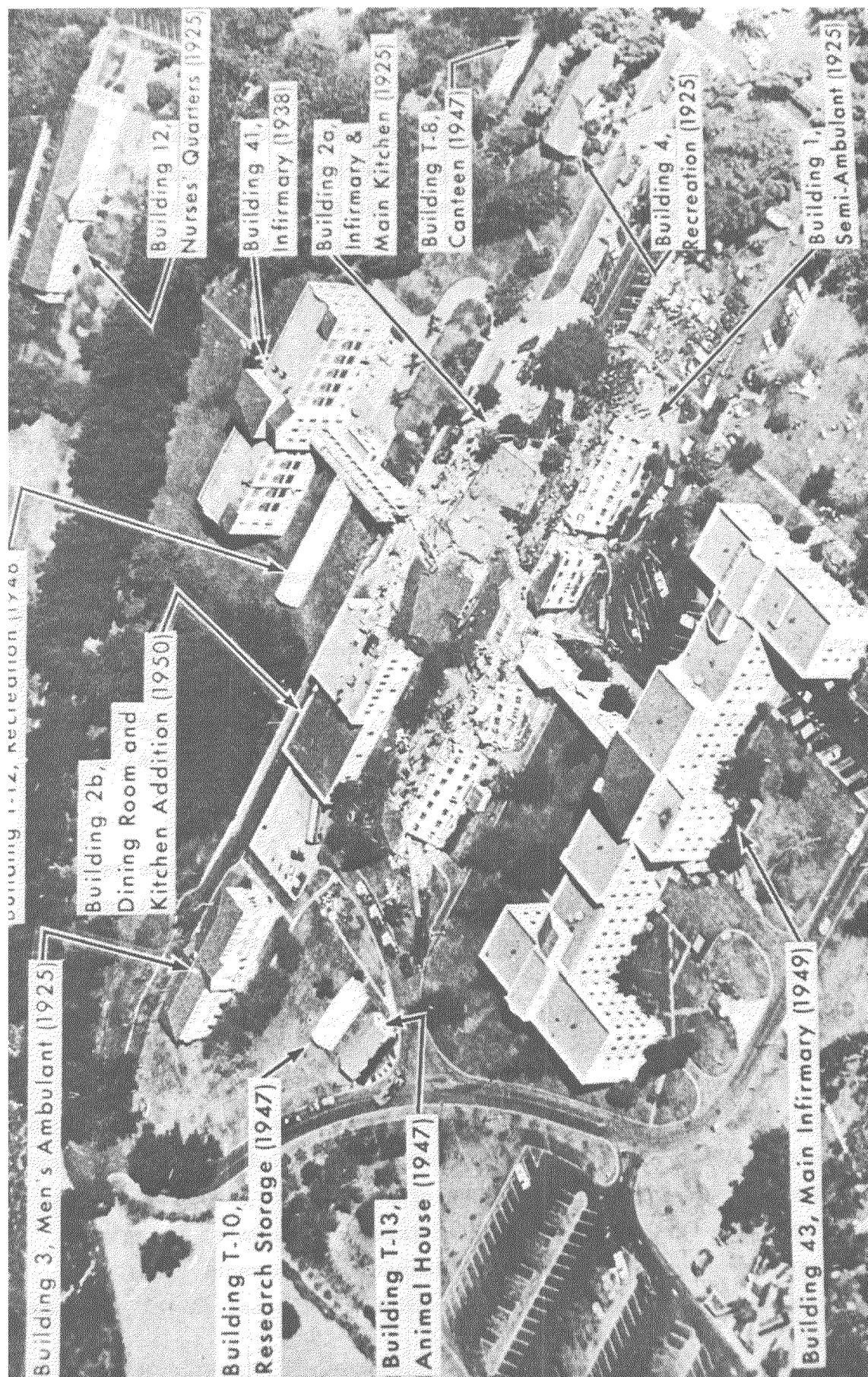


Figure 9: The center portion of the Veterans Hospital complex, showing the collapsed buildings. (Photograph from Lew, H.S., "Engineering Aspects of the 1971 San Fernando Earthquake," National Bureau of Standards, Washington, D.C., 1971.)