

FIGURE 72.—International Airport at Guatemala City. Note that some windows are broken.

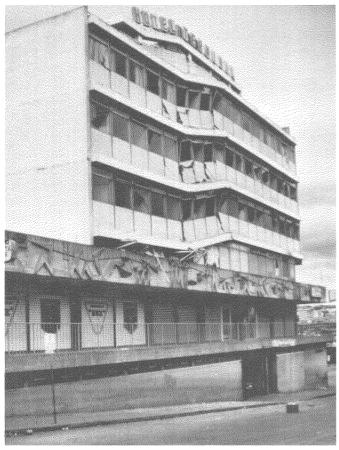


FIGURE 73.—Hotel Terminal in Guatemala City Columns in third story collapsed.

Restated, a brick "non-structural" panel wall is an effective shear wall in a concrete frame as long as the "non-structural" wall remains intact.

Few instances of precast-concrete construction were inspected. One hospital structure, being a one-story "shear wall" building, had no damage to its roof, which consisted of a long span of precast concrete planks ("Spancrete"). There was no interconnection between the planks. A precast-concrete double-tee roof at the Universidad del Valle collapsed, but this building was in the course of construction, and its final bracing system was incomplete.

In general, building performance ranged from good to excellent, but several spectacular failures occurred. For example, in the Hotel Terminal (fig. 73), columns failed in the third story (fig. 74). Another example is the dormitory-classroom unit of the Catholic Boys School (Colegio San Javier), which collapsed owing to failure of its second-story columns (fig. 75). Figure 76 shows a collapsed column at the second floor of this unit. The time of night at which this earthquake occurred prevented major life loss in this building, since the first and second floors are used as classrooms.

A large number of hospitals were evacuated in Guatemala City owing to structural damage and to functional impairments.

Functional problems caused in multistory buildings were commonly in the form of elevator outages, and most elevators were still nonoperational 2 weeks after the event. Standby power remained in service