

TOLMAN HALL and MORGAN HALL

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Tolman Hall

Tolman Hall is a large five-story building in the northwest part of the campus (FIGURE 1). It was built in 1962 at a cost of 5.5 million dollars. Tolman serves as office and class space for the Department of Psychology and School of Education. It was rated "good" in a recent structural survey of campus buildings.⁶

The outside of the building is decorated with concrete parapets. Experience from past earthquakes tells us that they sometimes fall down. These potential hazards should be investigated by a qualified person.

Findings

Offices - A majority of the rooms in Tolman are used as offices. A vast number of these are very tiny with but a single desk and chair. Very few problems were noticed.

Recommendations - Refer to the checklist for the hazards of each individual room (e.g., bookshelves and hanging plants).

Laboratories - With the exception of the animal testing lab, which will be covered below, there are really no labs, at least in the classical sense, in the building. Instead, there are "dry" labs, where psychological tests, such as word associations, are conducted. The only possible hazard is with the large instruments falling over.

Recommendations - Refer to the checklist. Specifically, the large testing instruments should be secured.

Animal Testing Center - This is where the behavior of animals such as monkeys, birds, mice, and rats is studied. In the event of an earthquake, some animals might get loose from their cages. However, there are not too many ways for them to get far, as the area (the basement floor) is sealed off by heavy doors. The weak link, however, is the open access freight elevator that serves all floors. The industrious animals could easily make their way up the elevator shaft.

The lab animals are all disease-free and specially bred on the premises expressly for test purposes. In addition, through generations of in-breeding, the animals are characteristically tame. Nevertheless, the notion of hundreds of animals running around loose, while rather

amusing, is probably not in the better interests of the Board of Regents.

Recommendations - Be sure the cages are secure and put a safety screen in front of the elevator, just in case.

Media Center - This is where the rooms with hidden cameras behind one-way mirrors are. There is a lot of expensive equipment here and much of it is free standing.

Recommendations - Fasten the equipment down.

Morgan Hall

Agnes Fay Morgan Hall was built in 1953, and is located in the northwest corner of the campus (FIGURE 1). A three-story structure, it houses the Department of Nutritional Sciences, in the College of Natural Resources. Structurally, it is in good condition.⁶

The rooms on the west side of Morgan are mostly faculty offices. The remainder are combination laboratory and graduate student offices. On the roof there is a penthouse complex where controlled nutritional experiments are carried out. Usually a group of six subjects is studied at a time. They are under quarantine for the duration of the experiment, which can run as long as six months. To help the study subjects pass the time there are an exercise room, game room (with pool table), living room, and sundeck; there are visitors hours, too.

The department handles a substantial number of chemicals through its graduate research programs and undergraduate laboratory classes. The extent, however, of hazardous chemicals that see extensive usage are the standard inorganic acids (hydrochloric and sulfuric, in the main). There is some use of radioactive substances, which is limited to low level beta particle emitters, namely tritium H_3 and radioisotopic carbon C_{14} . There is little danger from this, as beta emitters do not even penetrate glass or paper.

Two known carcinogens are listed by the Department of Environmental Health and Safety as being in the Morgan Hall inventory. N-nitrosodimethylamine is used in research and Benzedrine is stored.

Findings

Offices - Every office is very similar in appearance. It has "standard" shelves and closets, and these are arranged in less than optimally safe ways, as discussed in the Results.

Recommendations - Fasten down or rearrange the furniture. For more detail consult the checklist and the general description of the hazards given at the start of this section.

Laboratories - From an earthquake safety standpoint, as well as a general one, the labs in Morgan are in unsatisfactory condition. Practically no shelves have safety retainers. Glassware and apparatus are stored precariously atop high shelves. A shortage of storage space is a major problem.

Recommendations - An across-the-board cleanup is advised. The checklist should be consulted to see which hazards exist in each room. Acquisition of additional space should be a high priority item.

Kjeldahl Room - This room deserves special attention. The Kjeldahl process is used to determine the protein content of food. Food samples are digested with sulfuric acid under high temperature. This breaks the proteins into their constituent amino acids and converts the nitrogen to gaseous ammonia. The ammonia is condensed and collected and lye (NaOH) is used to determine the quantity of molecular nitrogen that was present in the sample.

With hot acid, caustic lye, and shattering glass, this is a most inopportune place to be during an earthquake.

Recommendations - There should be safety clothing supplied in addition to the safety goggles.

Hallways - As a result of the inadequate storage space in the building, the hallways have become a sump for everything that can't fit inside the rooms. There are refrigerators, closets and cabinets, etc., lining the halls. This constricts passage, even more so if the things fall over.

Recommendations - Overall space use throughout the building needs to be re-assessed. Bracing and securing of the items should be undertaken in the meantime.