## c. The Experience:

The following picture of the experience at Olive View Hospital is based on interviews in April, 1981 with members of the staff who were present at the time of the earthquake.

Dr. Bruce Picken was the Associate Chief of the Mental Health Program at Olive View at the time of the earthquake, and was awakened by it at his home. He was unable to communicate with the hospital so he proceeded there by car; fortunately he chose a route that was clear and arrived at the hospital between 7:00 and 7:30am. When he arrived at the hospital grounds he noticed a large stream of patients coming down Olive View Drive, headed for the administration area. Dr. Picken proceeded to the Mental Health area where he helped sort patients, dividing them into two categories: patients who could go home and patients who could not and must be evacuated to other facilities. At this point in the process there was some loss of control, in that one doctor was busy keeping records about the disposition of the mental health patients, while another doctor, unaware of prior efforts, came along and made alternate dispositions so that it was difficult to ascertain where some of the patients had been sent. The sorting out process took about 2½ hours - from about 7:30am to 10:00am - and all patients had been evacuated from the grounds by noon. Dr. Picken felt that in a number of cases the follow-up care on patients was inadequate.

Dr. Picken made some general comments about damage to the two-story Mental Health building and damage to the main hospital. There was an embankment located directly behind the Mental Health building and when the first floor of this building collapsed patients in the nursing unit in the second floor were able to evacuate directly onto this embankment. Dr. Picken commented that in the main building, although the outside fire stair towers fell, people were still able to get out of the building using interior stairs. He confirmed other accounts that the damage to the hospital was worse in the basement and was progressively less higher up in the building. In the Mental Health building the staff was able to

get records out of the nursing unit to help identify patients and to make dispositions. Dr. Picken felt that eventually the Olive View staff was able to salvage a lot of equipment from both the hospital and the mental health facility.

Dr. Picken commented that the staff and patients behaved very responsibly and calmly; they reacted very well and did what was needed to be done. The biggest problem after the disaster was getting the response organized and maintaining control. A radio system not dependent on local power would have been very helpful. During the early part of the evacuation and disposition of patients, runners were used as a means of communication. Dr. Picken also felt that a better record system was needed; one that could be utilized in an emergency to keep better track of patients.

During the afternoon after the earthquake, Dr. Picken and other members of the staff began to look for alternative facilities. Outpatient psychiatric services were initiated in old wooden buildings that had escaped major damage and which had been used for this purpose before the new building had been completed. Arrangements were made that day to provide out-patient medical care in the San Fernando Health Center, which is also run by the County. This out-patient service operated until approximately a year after the earthquake, at which time L.A. County purchased the Mid-Valley hospital in Van Nuys for use as an interim facility, until the new building could be constructed on the grounds of Olive View. In-patient and medical/surgical out-patient services were then initiated at the Mid-Valley Hospital. Psychiatric out-patient services continued in the old buildings at Sylmar and some psychiatric in-patient services were initiated in leased facilities. Thus hospital services were continued in three locations rather than only one.

Dr. Picken commented that, after a disaster like the 1971 earthquake, the major activity of the administration and director of medical services is to try to keep things going. In line with that, a major activity becomes the search for more space in which to operate and to protect the hospital staff. Since Olive View was one component of a large public

system the decision was made to re-assign the patients and staff to other parts of the system, hopefully in a way that would not result in a large portion of the staff deciding to quit. The re-assignment of staff and the re-allocation of specialty services and acquisitions of space at other county facilities involved a great deal of negotiation between hospitals after the earthquake.

Electrician <u>Hugo Innocenti</u> was standing in the hospital lobby at the time of the earthquake. The hospital had been experiencing trouble with the emergency generator transfer switch and maintenance was scheduled for that morning, with a manufacturer's representative due to arrive at 6:00am. A crew of electricians had arrived early to make preparations for shut down of life safety and critical electrical equipment and to set up extension cords in the Intensive Care Unit. Fortunately for the electrical staff the manufacturer's representative did not arrive on time, so the staff went from the Generator Room to the Lobby to wait for him. Simultaneously, one of the mechanical crew had gone up to the roof to turn off the air-conditioning system.

Mr. Innocenti heard a noise that he described as the noise you hear when the air-conditioning ducts contract after an air-conditiong system is turned off. He thought that the mechanic on the roof had just turned off the air-conditioning, and then he felt the earthquake. He found out later that the air-conditioning had been turned off sometime before, so he feels that the noise he heard was the first indication of the earthquake. When it began, the noise of the earthquake was fantastic; his first reaction was to grab the window sill at the telephone operator's station and put his head in an alcove which was there to protect it. Nevertheless, he did suffer a head injury which he did not discover until some time in the afternoon of the first day.

It was a lucky accident that the electrical crew was in the Lobby of the building when the earthquake occurred rather than in the generating room, because the generating room was decimated. So were most of the areas on the ground floor in the first level, including surgery, central supply, the kitchen, the warehouse, and the out-patient clinic. The upper floors suffered progressively less damage as one went higher up, but all lost power. At the nursing stations there were no flashlights; they had battery lanterns, but these could not be found in the dark.

Marie Smith, the administrator on duty, was trapped in her office and the telephone operators were trapped in the telephone room.

The first task of the electricians was to free Marie and the operators. There was concern about the safety of the mechanical crewman who had gone up to the roof to turn off the A/C system, but it turned out that he had been able to come downstairs and at the time of the earthquake was standing near the loading dock. He got out from under the loading dock before the canopy collapsed.

The electricians next assisted in the evacuation of patients. The elevators were down and the exterior fire stairs had fallen or were badly damaged so that the only evacuation route was down the two interior stairwells. These were relatively undamaged except on the first and second floor where there were occasional damaged stairs. Ambulatory patients were evacuated first and then non-ambulatory patients were evacuated using stretchers and a two-man carry technique. Evidently the evacuation went smoothly although the systematic approach that Pacoima Memorial Lutheran Hospital used in their evacuation was not as evident at Olive View. Each nurse evacuated her own floor. There were no injuries during the evacuation; however, two patients who were on lifesupport systems died as a result of the power failure. As patients came out of the hospital they were assembled in one of the parking lots which became a staging area for ambulance and helicopter evacuation to other facilities.

Just after the earthquake one of the electricians was sent to a fire department station, located on the grounds of Olive View, only to discover that the doors of the fire station had jammed and the engines couldn't get out. However, within an hour the fire department had arrived on the scene with battery lanterns and rescue stretchers, which proved very useful. Before that time an off-duty motorcycle patrolman arrived on the grounds and communication was established through the use of his radio.

Altogether eight buildings on the hospital grounds were completely evacuated. Patients from Olive View were sent to various hospitals in the area, for the most part to other county facilities such as LA County/ USC and Long Beach. An Aid Station was opened up in Building 30, and a Command Post was established in the mechanical office. All of the patients had been evacuated from the facility by about noon and at that time the facility ceased to operate as a hospital except for limited clinic service.

The mechanical crew then turned their attention to restoring services. There was no telephone, power, sewage and water. Fortunately LA County/ USC hospital was able to supply needed equipment, such as flashlights, tools, medicine and portable generators, for use on an interim basis. Portable toilets were rented from a vendor. The Department of Water and Power was notified that the power had been knocked out and working with the mechanical staff of Olive View, electrical power was re-established in about two days. The phone company set up a microwave station on the grounds.

All of the Olive View employees, with the exception of the mechanical staff and other support personnel, were dispatched to other County hospitals in the system. This was in contrast to the Pacoima Memorial Lutheran situation where many employees had to be laid-off. In the County system employees were just re-assigned to other places and no one lost their job; however, some people resigned and took early retirement because they were faced with a long commute to other facilities.

John Barabba was the electrical foreman at Olive View at the time of the earthquake. Mr. Barabba had lived through earthquakes before but never one like the 1971 earthquake. His home was about 1½ miles from Olive View and after the earthquake he proceeded directly to the hospital, arriving between 6:20am and 6:30am. His first concern was the safety of the crew of electricians, because he knew that they were supposed to be in the Generator Room which he found to be devastated. Later he found out that they had been in the Lobby at the time of the earthquake.

The evacuation of the hospital had already started when Barabba arrived, and he helped out with it. It was dark when he arrived on the scene but he found that some people who were aiding in the evacuation had flashlights. Fortunately the mechanical crew that was at the hospital at the time of the earthquake was able to assist in the evacuation. They were also able to free the telephone operators who were trapped in the telephone room and the chief nurse Marie Smith who was trapped in her office.

Even though the hospital did not resume normal operations after the earthquake the campus continued to function. The laboratories and shops were repaired and resumed operation as did administration. Barabba notes that morale was an important factor in post-earthquake environment; even though there was plenty of work to be done around the grounds most of the work was focused on getting things back into commission. Barabba commented that there was enough work for twice the work force he had at his disposal; however, after the earthquake his work force was cut back by 25%.

Donna Robinson and Grey Smith were on the nursing staff at Olive View at the time of the earthquake. Robinson is now the Associate Director of Nursing at the new Olive View facility located in a purchased property in Van Nuys and Grey Smith is the Assistant Nursing Director. Neither Robinson nor Smith were in the hospital at the time of the earthquake. Robinson came to the hospital from Newhall, arriving about 8:00am after circumventing some roads that were out of commission. Smith had seen the report of the hospital on television and came in, arriving at about 8:00am also. They found that between 80-100 members of the night shift were on duty at the time of the earthquake. Some of these people sustained minor injuries, and one ambulance driver was crushed to death when a canopy fell on top of him. In addition, three patients were injured, but not seriously, when the dayroom in which they were sitting fell over, but remained intact.

Robinson and Smith reported that the fifth floor looked like people had just gotten up hurriedly and left. However, on the lower floors the

damage was worse, and the lowest level of the building sustained major damage. The laboratory, medical records, clinics, emergency rooms, central service, and operating rooms that were located on that level were totally devastated. Fortunately, the medical records secretary, who would have been on duty at the time of the earthquake, called in sick, for a dirt patio located over the medical records office collapsed on top of it. One nurse was trapped temporarily in one of the operating rooms.

Many Olive View employees lived in houses or dormitories on the hospital grounds and they were able to get to the scene of the disaster quickly. No one remembers who gave the orders to evacuate and each ward of the hospital evacuated separately. Since there were no elevators, and the exterior fire stairs were inoperative, evacuation took place down the interior stairwell. A nurse on one of the locked mental wards went to the stair tower and found a 20 foot gap between the tower and the building. She stationed people there so that patients would not attempt to use that stairwell. Robinson and Smith mentioned that the layout of the building created some confusion as to how to get to the central stairs. Many patients and even some employees were not familiar with how to evacuate the building, for it had only recently been occupied, and the staff had not yet gotten the feel of the building. They mentioned that this is a potential problem in many new buildings and recommended that nurses be trained in alternate routes in evacuation as part of their ongoing disaster response training. One of the interior stairwells was reported as safe from the fifth floor to the third floor and at that point patients were re-routed to another stairwell. On the first and second floor the stairwell handrails were off.

In general, there was a very good patient response to the evacuation, especially among the mental health patients although some of these patients reportedly became unruly later. During the first hours after the earthquake there was no communication in or out of the hospital. Officials eventually used a fire truck radio to establish communication. There was no electricity because all incoming lines were severed by the earthquake. The emergency system was put out of operation.

Robinson and Smith reported on some of the problems related to the evacuation. There was no central place to send patients to as they were evacuated from the building. They were either moved to other locations on the grounds, discharged by doctors that were on the scene at the time, or transported to other hospitals like LA County/USC. There was an attempt to relocate patients in other buildings on the grounds, and members of the staff went out and reconnoitered, but unfortunately some of the buildings to which patients were relocated were in turn found unsafe and patients had to be re-evacuated. Some patients were moved 3 or 4 times before being evacuated from the grounds of the hospital. It appears that there was a problem with the routing sheets that the hospital had prepared, dispersing patients to other facilities. In addition, sometimes LA County/USC re-routed patients again to other facilities.

The staff first evacuated patients and then went back into the building to retrieve patient charts. Smith reports that some charts got through with the patients but not enough, so that a lot of repeat medical tests were administered, a practice which is potentially dangerous. This occurrence underscored the need both for better communication to enable coordination, and for better records and documents that can be assembled quickly and sent off with patients. In addition, the radiology department was destroyed along with many x-rays, and many patients had to be re-x-rayed since a substantial number of hospital patients were tuberculosis patients. The other thing this underscored was the need for a procedure to assess very quickly the damage to physical facilities to determine whether they are safe, as well as the need for designated backup areas. It also appeared that there was no designated Command Post during the evacuation. Throughout the day helicopters and people from the surrounding community showed up to volunteer their services.

Soon after the earthquake an emergency clinic was set up on the grounds to treat hospital employees and patients arriving from the outside. The first semi-permanent Olive View clinic was set up five days after the earthquake in the San Fernando Health Center. Additional clinics were set up in the surrounding area. In March of 1972, Olive View officially moved to a former proprietary hospital in Van Nuys.

Perhaps a problem more serious than re-locating patients was what to do about the 800-900 Olive View employees who were displaced by the collapse of the building. During the first month after the earthquake a system was organized to re-route the staff members to other county facilities. Afterwards for the next three months the staff showed up every morning at 6:00am at Olive View and were bussed by the County to some other county facility. At the end of that time staff members had to provide their own transportation. Robinson and Smith report that this entire re-location effort was bad for employee morale and many employees took early retirement.

After the earthquake Smith was assigned to the LA County/USC Medical Center, initially to keep track of the Olive View patients. She then became the personnel officer for Olive View employees that had been assigned to LA County/USC in the laboratory, dietary and nursing departments.