Taiwan Earthquake Hits Home for Engineering Professor

By Judson C. Davis
Capital Times Staff Writer

As monks chant mournfully and bereaved relatives weep over the death of loved ones, Penn State students struggle to identify with the loss felt by those living in Taiwan. But for at least one member of the Penn State community, the tragedy and devastation hit home.

Dr. Yochia Chen, associate professor of engineering at PSH, has been watching the news from Taiwan with both heartfelt and professional concern. Chen has done extensive research on earthquakes and their effects on buildings and bridges.

His primary concern, understandably, was for his family. Chen has a father, three sisters and one brother living in Taiwan. His siblings all have families and two of his sisters live in Taichung, the third largest city in Taiwan and just 20 miles from the quake's epicenter.

"At the beginning, it was pret-

ty tough to reach them because communication systems were knocked down," stated Chen.

After several attempts, he was able to talk to one of his sisters. "I was very relieved to hear that everybody was okay." Chen exclaims.

One of Chen's sisters lives on the ninth floor of a downtown Taichung high-rise apartment. Fortunately, her building was spared.

Being afraid for herself and her two young children, she refused to return to her apartment. Instead, she opted to stay with her sister, who lives in the same city but in a much safer two-story building.

She returned to her apartment a week later only after government engineers certified the building safe.

With land being a precious and expensive commodity in Taiwan, it is not uncommon to find that most people live in high-rise apartments, much like the one Chen's sister resides in.

Many high-rise apartments collapsed under the 7.6 magnitude quake that struck in the early morning hours of Sept. 21.

"This is the reason for so many people being killed," explained Chen. "Most people were asleep when the quake hit and were unable to escape the devastation."

At last count, the unimaginably large number of dead had totaled more than 2,000.

Being familiar with Taiwan's building codes as they pertain to earthquakes, Chen was surprised to find out that even some of the newer high-rise apartments, built after codes were changed to consider earthquakes, had toppled to the ground in a heap of rubble.

"Around 1985 the [Taiwan] building industry adopted a modern seismic design code," stated Chen. "What got me the most was that buildings three to five years old, built to withstand earthquakes, collapsed!"

Reports are surfacing daily of violations of building codes by those in the construction industry eager to maximize profits by cutting corners.

Eighteen contractors, engineers, architects and surveyors have been ordered not to leave the country while other investigations continue, television reports say.

Authorities in Taichung County released on bail four men involved in the construction of a collapsed building, the United Daily News reported. Three others were denied bail in a case that allegedly involved collusion and the use of shoddy materials.

Fears are now turned toward deadly aftershocks that persist to shake and rumble across the island country.

Nearly 8,000 were registered by Sept. 27, with 20 to 50 tremors occurring each hour since the major earthquake struck.

"Aftershocks can last for

weeks, if not months, causing further damage to already weakened structures" stated Chen.

On Sept. 26, an aftershock, which measured 6.8 in magnitude, shook the country, killing at least three people, injuring at least 58 and burying 20 in the rubble of yet more collapsing buildings.

Taiwan's Central Weather Bureau listed the initial quake at a 7.3 magnitude, a little less than the U.S. Geological Survey's 7.6 estimate.

Chen explained that the difference is because Taiwan uses a different standard from the commonly used Richter scale.

Taiwan is hit by dozens of earthquakes each year, but most are centered in the Pacific Ocean, east of the island, and cause no damage. The quake that hit Sept. 21 was the country's second deadliest - a 7.4 magnitude quake killed 3,276 people in 1935.

CAMPUS POLICE REPORT

By Kristy Pipher

Capital Times Staff W

September 16, 1999

5:13 p.m. Escort service. Provided escort for student from the Olmsted Building to Meade Heights.

10:08 p.m. Escort service. Provided escort for student from the library to Meade Heights.

11:10 p.m. Escort service. Provided escort for student from the Olmsted Building to Meade Heights.

11:14 p.m. Escort service. Provided escort for student from the Olmsted Building to Meade Heights.

11:17 p.m. Motorist assistance. Provided a jumpstart to a vehicle.

11:19 p.m. Traffic stop on Kirtland Avenue. A verbal warning was given for traveling at unsafe speeds in a residential neighborhood.

11:40 p.m. Power outage in Meade Heights. Power restored to Meade Heights.

September 20, 1999

9:57 p.m. Escort service. Provided escort for student from the Olmsted Building to Meade Heights.

September 21, 1999

1:38 a.m. Domestic dispute. Husband and wife had a disagreement. There was no physical altercation and peace was restored.

7:46 p.m. Report of a large group of smokers in front of the Olmsted Building. A verbal warning was given.

10:28 p.m. Escort service. Provided escort for student from the police station to Meade Heights.

September 22, 1999

9:59 p.m. Traffic stop at College Avenue and University Drive. A written warning was issued for a moving violation.

10:02 p.m. Traffic stop at College Avenue and University Drive. A citation was issued for traveling the wrong way on a one-way street.

10:07 p.m. Escort service.

Provided escort for student from the Olmsted Building to Meade Heights.

10:09 p.m. University regulations violation. Requested that a group of smokers move from the front entrance of the Olmsted Building due to University smoke free regulations.

September 23, 1999

3:03 p.m. Student assistance. Escorted a student who was a theft victim in Middletown Borough back to their Meade Heights residence.

5:02 p.m. Motorist assistance. Provided a jumpstart on student vehicle.

6:30 p.m. Traffic stop on College Avenue. A citation was issued for a speed-related moving violation.

6:55 p.m. Traffic stop on College Avenue. A citation was issued for a speed-related moving violation.

September 24, 1999

1:18 a.m. Noise complaint. Checked the area for disorderly subjects. A verbal warning was

given.

11:57 p.m. Noise complaint. Complaint of disorderly groups. A verbal warning was given.

6:10 p.m. Traffic stop on College Avenue. A traffic citation was issued for a speed related moving violation.

10:38 p.m. Escort service. Student patrol provided an escort from the Olmsted Building to Meade Heights.

September 28, 1999

7:25 p.m. Motorist assistance on Wharton Avenue. Provided a jumpstart for vehicle.

7:28 p.m. University policy violations. Disbursed a group of 15 smokers from the front of the Olmsted Building who were violating the University's smoking policy.

7:33 p.m. Escort service. Student patrol provided an escort from the Olmsted Building to Meade Heights.

7:34 p.m. Escort service. Student patrol provided an escort from the Olmsted Building to Meade Heights.

10:04 p.m. Escort service. Student patrol provided an escort from the Olmsted Building to Meade Heights.

September 29, 1999

10:15 p.m. Vehicle assistance. Provided a jumpstart at the Olmsted Building.

10:35 p.m. Escort service. Provided a student escort from the Olmsted Building to Weaver Avenue.

September 30, 1999

6:10 p.m. Traffic stop on College Avenue. A citation was issued for a speed-related moving violation.

8:00 p.m. Escort service. Student patrol provided an escort from the Olmsted Building to Meade Heights.

8:35 p.m. Escort service. Student patrol provided an escort from the Olmsted Building to Meade Heights.

8:38 p.m. Traffic stop on College Avenue. A citation was issued for a speed-related moving violation.