Earthquake Rattles Residents Of Tristate

The Tristate area was rocked by an earthquake at 2:53 p.m. Sunday that measured 5.1 on the Richter scale but caused only minor damage to homes throughout the Ohio Valley region.

There were no reports of incidents as calls flooded in from people at home and in the area. Three northeast of Lexington, Ky., on the Kentucky side of the Ohio River Valley. Tremors lasting 15 to 30 seconds were felt over a 12-state area, including Indiana, West Virginia, Michigan, Illinois, the Carolinas, Pennsylvania and New York. The ground visibly shook in southern Ontario as well.

The rare quake, measured by the U.S. Geological Survey's Cincinnati Earthquake Information Service in Columbus, Ohio, rattled dishes in cupboards, set overhead lamps swinging, jolted mirrors and pictures and dropped chandeliers on some older homes.

WINDOWS WERE reported broken in Reading and Phelps. One plate was knocked out and chimneys downed throughout the area. Cincinnati's City Hall showed minor damage when a stone fell from near the roof, damaging external woodwork.

It was the first tremor felt in Cincinnati since November 1966. The last external tremor was reported in Mason County, Ky., in May 1991.

State emergency officials said an estimated 200 buildings were damaged. Most of the damage was merely broken windows and chimneys, but some of it was more severe.

"It was real strong, it shook the floor and it shook the outside," said June Stewart, Mayville. Mayville resident Margaret Thompson said the earthquake knocked pictures from the walls and plates from the shelves. "I was really, really scared," she said.

Ray Bayburn, Mayville, said, "We're not accustomed to this sort of thing here. It was really, really unbelievable." Bayburn said several antique and a few personal items damaged in his wife's antique shop. He also said there were cracked windows in the town.

"IT SHOOK everything up pretty bad," said F. B. Flemington, Ky. Fagg's, dispatcher Bill Rafter said the city of 3,500 about 20 miles south of the river. The dispatcher said there were no reported injuries but that the quake shook several houses off foundations, cracked chimneys and knocked over plants and furniture.

The sheriff's department of Adams, Brown and Highland counties reported fallen chimneys throughout the area.

In Highland County, a chimney collapsed on the roof of a house owned by R. C. Lucas, 315 E. 8th St., Manchester, Ohio. About 15 miles northeast of the Ohio River, the tremors shook the whole community. "I don't know what an earthquake feels like, but it shook our chandeliers and knocked the TV out. I'll tell you, it shook things up," he said.

"Lucas added that three brick chimneys falling from a two-story house were knocked down, and the windshield of a car parked in the driveway."

"I used to have a rocking chair in Paducah, and I could see that when that chair rocked, we were having another one," she said.

Mount Adams resident Cathie Wests said St. Gregory Street met her neighbors on the street after the quake. "There was a flock of blackbirds outside, and they were flying around like crazy. All the trees were shaking," Wests said. "It was really weird to watch."

Security guards at Children's Hospital, Elland and Bethesda Ave., said the quake was felt on all five floors. Patients left their rooms in the University of Cincinnati General Hospital to find out what had happened.

No city water services were interrupted, and there was no reported damage to city streets or Cincinnati Gas and Electric lines within the city limits.

Earthquake capable of tremendous damage

A quake with a measure of 5 is capable of causing "considerable damage," while a 6.5 rates a definition of "severe damage."

Every increase of one number, say from 5.1 to 6.1, means the ground motion is 10 times greater. Some experts say the actual amount of energy released may be 30 times greater.

But, cautioned Dr. Edward J. Walter, a seismologist at John Carroll University in Cleveland, the strongest effects of the quake would be felt only at the epicenter, at the place where the earthquake originated.

Sunday’s Temblor Not Region’s First

BY FELICIA LEE

That place was near Mayville, Ky., this time, which means only people may have felt the full effects of the quake. An earthquake itself is nothing more than the shifting of the earth's crust.

He added that, unlike tornadoes and other natural disasters, earthquakes are explicit set of environmental prerequisites. They are also difficult to predict and measured.

Henry Pollock, a University of Miami-earthquake analyst, does know how to determine the epicenter of an earthquake.

The biggest question when the vibrations arrive at different seismograph stations around the country, he said, "Each machine measures how strongly the earthquake was felt in that area. We call it the magnitude," he said.

"Instead, we use the magnitude to predict the amount of energy released," he said. "We call it the magnitude," he said.

Pollock called the 5.1 quake "a bit too loud, I think," he said. "It's over. Kline warned that the next 48 hours may bring "aftermaths," or the vibrations that are felt after the main tremor.

Kline said there is no way to predict if the aftershocks will take place. In fact, because this part of the country so seldom experiences quakes, the information to predict earthquakes in the first place is not very extensive or sophisticated, he said.

And why did it happen? No one knows for sure.

Pollock, with a shrug in his voice, said it was "just one day in the history of the earth."

A low, dull noise accompanied the vibrations, most callers said. Some claimed the earthquake was a sign of a coming apocalypse. Others wondered if they were imagining things.

"I was laying in bed on the first floor and thought I heard the whole floor shaking," said Mrs. Donald Schrader, 104 Hickory Dr., Delhi Township.

"THE WALLS were shaking, and so were the chairs, as if they were massaging chairs," her husband added. There was a rumble muting, similar to an overloaded dryer. After the door was closed, the pack heard the flower pots and plants on our patio kept shaking.

Cincinnati Police District Two Officer Jim Cox said a caller from East Avenue reported his television set and couch lifted because of the quake.

The dispatcher at Cincinnati Police District One, downtown, said there were no reports as far away as Bloomington, Ind.

Mrs. Patterson Pogue, Hyatt Park, was reminded of the time she lived in California in the 1920s, when she said, the enduring more than 200 small earthquakes in one week.

EARTHQUAKE:杭州外發布警報，市民因震感被驚醒。
Kentucky's earthquake

13 other states feel it, but damage is minor

Information for this story was gathered by Courier-Journal reporters Al Cross, Jay Lawrence, Jim Detten, Virginia Bell, Elinor Brecher and John Long, and by the Associated Press.

The worst earthquake to hit Kentucky since 1918 was centered next to the northern part of the state and shook up a considerable area far enough across the central United States yesterday.

Depending on how close you were to the center, located a few miles west of the Ohio River town of Maysville, the quake was either a chimney-topper or just a floor-shaking experience.

It was scary, but no injuries were reported there or anywhere else.

For most people in Louisville, the quake was little more than a frightening curiosity. The worst damage reported was a chunk of plaster falling from the ceiling and a basement floor cracking in a residence in the West End.

"I was sitting in a chair, and I felt things moving," said Jesseann Bryant, 33, of 2132 Guthbert St., where the damage occurred. "It looked like an earthquake, and it was rocking back and forth. It scared me to death."

But most people in Louisville didn't feel a thing — among them Miss Bryant's 75-year-old father, Jesse Bryant, who was in his car at the time of the tremor hit.

The U.S. Geological Survey in Golden, Colo., said the earthquake began at 2:52 p.m. and registered 5.1 on the Richter Scale, making it a "moderate" quake. According to most reports, the tremors lasted from 15 seconds to about 45 seconds.

The earthquake was felt in 14 states from Michigan to Alabama and from New York to Missouri, and fans watching a baseball game in Detroit's Tiger Stadium were told they had just been through an earthquake.

There was serious damage to houses from Frankfort to Mount Sterling in Kentucky, with most of the damage in Maysville and surrounding rural areas.

But in Cincinnati and Lexington, the two metropolitan areas nearest the epicenter, the harm was slight.

In Lexington, 45 miles southwest of the center pinpointed by the geological survey, the shaking was not detected from grocery shelves and pictures fell from walls. In Cincinnati, 50 miles northwest of the center, the front steps of City Hall caved in when a stone ornament fell.

The cause of the quake was a mystery to scientists because it occurred on or near the edge of a basin of the central United States.

"It's very rare for an earthquake of that size to occur anywhere east of the Mississippi," said Donald Finley, a spokesman for the geological survey.

"Although the magnitude was more than 4.0 on the Richter scale in the eastern United States, it was only .1 magnitude in the western United States."

Scientists said moderate earthquakes can cause considerable damage, and this one might have had it, but the area had not been centered in any of the populated tobacco-farming country.

Here are the details:

The damage

Maysville is about 12 miles east of the spot that the federal Earthquake Information Center estimated as the epicenter of the quake.

Several buildings in Maysville had cracks in their walls up to 8 inches wide, and the main residential area north of downtown had clumps of bricks that had fallen from chimneys littered the yard.

Damage appeared to be centered downtown, where buildings are older.

Gordon Nichols, spokesman for the state Emergency Services department, said a state team would visit the town today to make a damage estimate. The state may ask for federal assistance to help repair the damage, he said.

Nichols said his department's area coordinator reported that 200 homes and businesses were damaged in Maysville.

Outside Maysville in Mason County, Nichols said the tiny community of Maysick reported eight to 10 homes damaged.

An 800-foot-tall smokestack at the Spurlock Station of Eastern Kentucky Power, two miles west of Maysville, appeared to sway between 12 and 15 feet during the tremor, witnesses at the plant said. The natural, 10-story-sway is eight feet.

And from Mount Sterling to the southeast and as far west as Frankfort, there were other scattered damage reports.

"The first floor of my house is made of brick," said Joel Mazzu, who lives north of Frankfort on U.S. 127, said the quake "hurt me in the wee back side of my house."

He said inside walls dropped down an inch or two, windows pushed in a bathroom and more cabinets dropped down than an inch.

"You can pull the bricks out of my house on the back: take shield of them and pull them out," he said. And he said other houses in the subdivision had similar damage.

In Mount Sterling, about 30 miles east of Lexington, police closed a street and house off its foundation, chimneys were damaged, and several minor damages were reported of cracks in sidewalks.

In Ewing, in Fleming County, the fire department reported cracked stonework, cracks in walls and the hospital and some chimneys down.

Throughout much of Kentucky, however, there appeared to be more('''9788968808485''')

Kentuckians as far west as Owensboro and Bowling Green and as far east as Ashland, Pikeville and Hatton reported feeling the tremor.

Nichols said there were many reports to the state disaster center in Frankfort of small damage such as cracking off tables.

"We are now working with the Department for Natural Resources, safety inspectors, and they're working on basements, damage of the nature that could cause problems," Nichols said.

The effect of the tremor on under-ground coal mines in Eastern Kentucky was uncertain.

"I don't think it could have had a big effect, unless it was a real big earthquake," said Jerry Spencer, manager of the Harlan County office of the federal Mine Safety and Health Administration.

Spencer said that he had heard of no mine damage.

Louisville

Residents all over Jefferson County reported shaking houses, vibrating soft, rattling glassware, swaying chandeliers and nervous pets. But unlike law enforcement authorities reported no serious damage.

John Harrision noted that the earthquake on the 23rd floor of the Citizens Plaza building in downtown Louisville.

Harrison said that the building swayed and shook violently and that he had not filed a claim.

The real-estate manager for South Central Bell said Louisville's earthquake surpassed one he experienced in San Francisco last summer. "That wasn't anything like this one," he said.

Throughout Jefferson County other residents told how they survived the shake.

"I was sitting on the couch and it felt like there was a school bus going by," said Richard Kersting of 207 Casper Drive in Pleasure Ridge Park.

"I thought it was strange and I decided to check the couch sometimes and that's what it was," he said. "I didn't want him. We could see the door swinging."

Mary Hawkins of 4108 North Lane in 8th Ward said she was watching a couch when it woke me up. Everything in my living room was vibrating. I was in one in Yakima, Washington, so I knew what it was. Everything in my living room was doing the same thing.

"It reminded me of when I was in Japan during the war," said A.E. McMillin of 4613 Keifer Road. "This was as bad as any of the quakes there. I was in the floor. The ceiling was like a shot to the head."


"It was a lot like a sudden," said Mrs. John Beall of 492 Hilltop Road in South Louisville. "Then my cabinet doors and the doors in the house started shaking."

"My husband (James) lived in California for a number of years and he said he recognized it immediately," said Roberta Hagan of 7213 Keifer Way, off Westport Road. "We could feel the tremor of the earth. We could actually see the tremor of the east and south side of the house and the garage."

I was sitting in a chair and my chair almost went out from under me, and my 'great big old table started to rattle like a wagon' as I remember, as we were in the living room, I was on the east side of the house, and it scared the living b—— out of me."

The epicenter

According to coordinates supplied by the Earthquake Information Center, the epicenter was near the point where Mason, Breckenridge and Robertson counties intersect, between the towns of Maysville, Brossville and Mount Olive.

But Dr. Ronald Street, a seismologist of the Kentucky Geological Survey, said he had reports of three different "epicenters." All three are not far apart in Northern Kentucky, with one centered near Maysville, another near Flemingsburg and a third near the border of Fleming, Robertson and Nicholas counties.

Street described his earth sound reports that the earthquake was felt as far east as Cumberland and as far west as St. Louis.

"We have minor earthquakes periodically, but this was a little unusual," said Edward Walter of the Seismological Laboratory at Jefferson University in Cleveland. "This was pretty sizable and could possibly have caused a lot of damage around it, given low close to it is to a populated area."

Walker was unable to say what caused the quake.

"That's a question we'd all like to know the answer to," he said. "It's all part of a structure far beneath the surface. The structure in the southern part of the country and comes through Kentucky and the western part of Ohio."

Finley, spokesman for the U.S. Geological Survey, said that records on file do not show a previous earthquake in the Maysville area. But he noted that on May 28, 1933, a much smaller quake occurred northeast of the site in Northern Kentucky.

Robert Blakely, a geophysicist with the Indiana Geological Survey, said the earth is "like a very very geologist" that grows and shrinks that are they are often "haphazard and chaotic."

Blakely also explained why some people didn't feel the earthquake.

"Generally, the higher you are in a building, the less likely you are to feel it," he said. Also, he said, houses on bedroom floors are more likely to feel tremors less than those on floor bottom, which "shakes like a bowl full of jelly."

Robert Blakely and Finley emphasized that yesterday's quake did not occur along the fault line that runs through New Jersey.

Jon Jefferson, reporter, Louisville, Kentucky.

Monday, July 28, 1930.

The Courier-Journal.
Earthquake's odd location amazes experts

By JIM DETIEN
Courier-Journal Staff Writer

Geologists are not all that surprised that an earthquake occurred so much of Kentucky yesterday. After all, two of the nation's most serious quakes occurred in 1911 and 1912 in New Madrid, Mo., only 270 miles southwest of Louisville.

But they are amazed that it occurred in Northern Kentucky, an area where no serious quakes have been recorded in recent years.

"That's very surprising," said Dr. Ronald Street, a geologist at the University of Kentucky, "It occurred in an area where there is no known active fault line.

And the experts are surprised by the earthquake's intensity -- 2.4 on the Richter scale, which is considered "moderate" by the U.S. Geological Survey.

Most scientists said last night that it is still far too early to know why yesterday's quake occurred or whether additional tremors can be expected.

And no one would guess whether the tremor could have an impact on the construction of the Marble Hill nuclear power plant being built by Service Indiana about 60 miles west of where the center of yesterday's quake is believed to have occurred.

The potential hazards of earthquakes have been a factor in determining the location of nuclear power plants in the United States.

Although the center of yesterday's earthquake has not been officially determined, the experts' preliminary findings are that it occurred about 12 miles west of Maysville.

But they do say that yesterday's quake was one of the strongest centered in Kentucky in many decades, perhaps the strongest since the 1811-1812 series of major earthquakes.

By comparison with those quakes -- which were centered in eastern Missouri not far from the Kentucky border -- yesterday's tremor was mild indeed.


The ground roiled like a sea in a great deepening thing, rose as if to go with about 3 miles away, drove to her sister's house and the quake hit. Her sister, Cynthia Fowler, had been at work at the hospital, and she came home to find many things standing on their own.

"It was a frightening thing," Miss Fowler said.

As daylight fell, two police officers paced in front of the Bank of Maysville, watching for signs of earthquake. A window had been shattered at the bank, and a police guard was to patrol the area all night, the patroline said.

Several windows had been broken on the doors above Kilgo's Pharmacy, Maysville's post office and a nearby store, but a glass hole in one window was evidence of the aftershock that shook the area.

Despite a persistent drizzle, spectators scurried to the fountains, trying to catch a glimpse of the damage. Firemen drilled into heavy rubber roofs to remove debris, taking a short coffee break.

Many residents feared the damaged has been caused by firemen, but the buildings do not appear to be in danger.
**Midwest Quake Shakes Chicago Area**

**By Michael McCabe**

Shock waves from a "moderately strong" earthquake in Kentucky were felt in the Chicago area Sunday afternoon, shaking buildings, rattling dishes, and providing thousands with a first earthquake experience.

The quake was recorded at 1:02 p.m. with an epicenter about 40 miles north-northwest of Lexington, according to the United States Geological Survey's National Earthquake Information Center in Golden, Colo. There were no immediate reports of damage or injuries.

Preliminary measurements put the magnitude of the quake at 5.04 on the Richter scale, strong enough to shake buildings throughout the Midwest, including Kentucky, Ohio, and Illinois, according to Wavery Perrot, an earthquake center spokesman.

The survey service in Golden, Colo., was established in 1897 as a means of recording earthquake activity and has recorded over 400 earthquakes in the region since its inception.

This earthquake was one of several that have occurred in the Midwest in recent years, including a 5.6 magnitude quake in Ohio in 1975 and a 5.4 magnitude quake in Missouri in 1976.

The survey service provides real-time data on seismic activity and has been instrumental in improving earthquake-resistant building codes and emergency preparedness plans across the region.

**Quake causes little damage in Louisville**

**Tremor, 5.1 on scale, was centered in state**

By ROBIN GARR

Louisville Times Staff Writer

Barbara Moore said she was shaken by the earthquake when her chair started to move across the kitchen floor.

"I heard a rumbling sound like thunder, but I knew it wasn't thunder," said Ms. Moore, who was visiting her parents on Clover Lane.

"Sounds like thunder, but it was a earthquake," she added. "My parents' house shook for a few minutes, but it was a small tremor."

According to the U.S. Geological Survey's National Earthquake Information Center, the earthquake was centered in southern Kentucky, about 20 miles southeast of Louisville.

No injuries were reported, and local officials said there was no damage to property.

"It was a small tremor, but it was enough to make us all jump," said local resident Jack Brown.

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**Earth Tremor Shakes Up Area**

**BY SYDNEY HILL**

**Earthquake Reporter**

Fear, rummaging and disbelief all shook the Greater Cincinnati area Sunday afternoon along with what the federal government's geological agency called an "earthquake." It was a "small but noticeable" tremor, according to the U.S. Geological Survey's National Earthquake Information Center in Golden, Colo.

A Clough Pike woman thought she was experiencing a "terrific hangover" when her windows started to rattle and a mirror on the wall rattled so hard she thought it would break.

William Martin of 3486 Wagstaff Ave, Priceville, said his kitchen floor "rolled back and forth." His TV shook, then his chair shook. And I weigh 220 pounds," the startled Martin said.

**RUM SHEETS**

William Martin of 3486 Wagstaff Ave, Priceville, said his kitchen floor "rolled back and forth." His TV shook, then his chair shook. And I weigh 220 pounds," the startled Martin said.

**BETTY SMITH**

"I've never seen anything like this," said Betty Smith, who lives across the street from Martin.

"I heard a rumbling sound like thunder, but I knew it wasn't thunder," said Ms. Smith, who was visiting her parents on Clover Lane.

"Sounds like thunder, but it was a earthquake," she added. "My parents' house shook for a few minutes, but it was a small tremor."

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Quakes Not New To Area

The Ohio Valley has a spotted history of earthquakes, strange as it seems. Little damage has ever been reported.

The modest shudder that ripped through Ohio, Indiana and Kentucky Sunday wasn't the first time people in the Cincinnati area took to streets and basements thinking that maybe this time. Somebody was calling in his markers.

- A quake ripped through the city Aug. 21, 1900, the center traced to Charleston, W.Va. That shock, the papers said, sent thousands out into the night, some to pray.

- June 1, 1897, Cincinnati saw a 40-second tremor grip the city and the rest of the country, east all the way to the Atlantic Ocean.

- A quake hit in February, 1905. No damage was reported, followed by another mild tremor two months later.

- Shortly after 8 p.m., Sept. 21, 1981, a shock ripped the Queen City and Kentucky side of the river, moving some buildings on their foundations by as much as three inches, reports said. Those in Mount Adams headed into their basements, newspaper accounts say, "in case their homes came tumbling down." Others reported "dancing" radios.

- Earthquakes hit again Nov. 9, 1988, and Nov. 16, 1993, but both were mild.

Geologist Calls Quake 'Whopper' For Tristate

BY SUE MacDONALD
Source: Cincinnati Post

OXFORD, Ohio—A Miami University geologist said Sunday's earthquake may be one of the strongest tremors recorded in the Tristate area.

"That's a whopper for this area," remarked geology professor John K. Pope when told that Sunday's quake registered 5.8 on the Richter scale. "That may be the largest one ever recorded around here." (Officials later revised the Richter scale estimate to 5.1.)

Pope heard his house "groan" Sunday afternoon and wasn't sure what caused it.

Several of his neighbors called later in the afternoon to say their homes had suffered unusual noises also, and that's when he figured the odd happenings amounted to an earthquake.

POPE SAID the Midwest has been known to endure "occasional activity" from earthquakes because of a series of faults that traverse the area.

"But it's most unusual to have any kind of activity in this area," he explained. "I have never heard of anything powerful happening in this area.

The National Weather Service estimated the quake registered 5.5 on the Richter scale and was centered near Maysville, Ky.

Pope said Maysville lies along a geologic line known as the Kentucky River Fault Zone, which stretches in a J-formation from southwest of Lexington to near Maysville.

"There's some evidence that (the Kentucky River Fault Zone) may continue northward into Ohio," he said. The city of Ada, in north-central Ohio, has been known as a center of "very, very minor activity," he said.

THE CINCINNATI area, he noted, is located on the interior of the North American plate and is fairly distant from any junction of plates, or faults.

Except for a devastating earthquake that struck Tennessee in the early 1800s, the Midwest has been known only for "occasionally activity," he said.

"One of the most violent earthquakes that was ever recorded in American history was reported in westernmost Tennessee in the early 1800s," he said.

Most of the damage from that earthquake struck the Belfoot Lake area in Tennessee. The epicenter of that quake was registered at New Madrid, Missouri, he said.

BECAUSE THE Tennessee area and the Mississippi River valley were sparsely settled at the time, the quake caused very little human damage, he said.

Other earthquake faults in the Midwest include the Swanee Town Fault that stretches from Tennessee to southern Illinois, and the Rough Creek Fault in Indiana, which runs in a north-easterly direction through the state, he said.

Humans do not sense earthquakes until they reach about 4.0 on the Richter scale, he said.

"If this had been California," he quipped, "nobody would have thought anything about it."
Earthquake Jolts 14 Eastern States

A rare earthquake registering 5.1 on the Richter scale sent a shock wave up to a minute long from Alabama to southern Canada Sunday, shattering windows and swaying buildings in 14 states and rattling millions of people in two major league baseball games.

The U.S. Geological Survey's National Earthquake Information Service in Golden, Colo., said the quake, which occurred at 5:02 p.m. EDT, was centered in Kentucky about 45 miles southeast of Cincinnati and 50 miles northeast of Lexington.

No deaths or injuries were reported, but hundreds of buildings in Kentucky sustained damage, mostly minor.

The Geological Survey said seismographs in the area detected a magnitude of 5.1 on the Richter scale. It is a scale used to measure the magnitude of earthquakes. Earlier, officials had given it a 5.3 rating.

Don Finley, a spokesman for the U.S. Geological Survey, said there was no known damage in that area. Waverly Person, a geophysicist with the Earthquake Information Center, said quakes were very rare in that part of the United States and that Eastern quakes rarely register above 5.

Scientists said that, unlike California earthquakes, which are triggered when two large plates of the earth's crust move against each other, the one of several faults, Sunday's quake occurred in an area that has only a plate and no fault. Scientists are not sure what causes earthquakes that are centered in the interior of a plate.

Felt in Ontario, Canada

The earthquake was felt in Michigan, Wisconsin, Ohio, West Virginia, Virginia, Pennsylvania, New York, Alabama, Kentucky, Tennessee, and North and South Carolina, and also was recorded in southern Ontario in Canada.

At Detroit's Tiger Stadium, 40,000 baseball fans watching the Tigers battle the Oakland Athletics noticed the stadium sway, and were told by the announcer that they had felt an earthquake.

"The fans all looked at one another, but there wasn't a stampede to get out," said police officer Mike Werner, stationed in an upper deck.

The quake was also felt in Municipal Stadium in Cleveland, where the Indians were playing the California Angels in a double-header that was postponed by the league.

For the most part, the quake caused mainly puzzlement, excitement—even disbelief. Telephone calls from seismologists who felt something were reported to police and sheriff's offices in places as widespread as Ashe- ville, N.C., and Carls, Ill.

"The Whole House Rattled"

"I was upstairs when the radiator started to jiggle and then the whole house rattled," said Fran Zanello, a college English instructor who lives in Tokyo, Ky., about 20 miles south of Cincinnati. "I went downstairs and said, 'Hey, I just felt an earthquake,' and everybody laughed."

In Mayville, Ky., '0 miles northeast of Lexington on the Ohio River, state emergency officials said an estimated 200 buildings were damaged. Most of the damage was merely broken windows and chimneys, but some of it was more severe.

"We had Kentucky state capital of Frankfort. 25 miles west of Lexington. Joel Moss said the earthquake "busted the back side of my house" and that other homes in his subdivision had minor damage.

Switchboards Lit Up With Calls

"It knocked me out of my chair," said Sgt. William Krueger at the Indiana State Police Operations Center in Indianapolis. He said calls were coming in "from all over."

At Oak Ridge and Knoxville, Tenn., switchboards at newspapers and radio stations lit up with calls shortly before 3 p.m. Residents reported that dishes rattled for several seconds.

The tremor was felt throughout the central Ohio area as well as in the Cincinnati and Cleveland areas.

The tremor shook parts of West Virginia as well. Logan County and the 

"We have minor earthquakes periodically, but this was a big one," said Walter of the Seismological Laboratory at John Carroll University in Cleveland. "That was pretty sizable and could have caused a lot of damage, depending on how close it is to a populated area."

Walter was unable to say what caused the quake.

Tennessee Civil Defense authorities said the tremor was felt throughout much of the state.

Avalon, Pa., policeman Bernie Kesting said there were two tremors in his community, one for a minute at 2:55 p.m. and a second shortly after that lasted 30 seconds.

"A guy who used to live in California called and said his house and lamp were shaking and it probably was an earthquake because he had been through many of them," Kesting said. "It was the first one around here in my 32 years."

Earthquake Peril Largely Ignored in East

Few Building Codes Guard Against Damage by Seismic Forces

By BILL STALL

WASHINGTON—Many cities shaken by last Sunday's unusual earthquake, which hit the East and Midwest, have effectively exempted themselves from building-code provisions designed to protect against injury and damage caused by seismic forces.

The earthquake, which registered 5.1 on the Richter scale, did not appear to cause any major concern about the adequacy of the state's seismic-design criteria for buildings, dams and nuclear power plants, a survey of officials showed.

The epicenter of the earthquake was computed to be in Kentucky: about 50 miles northeast of Lexington and 45 miles southeast of Cincinnati. Nuclear power plants under construction in the region were designed to withstand larger earthquakes than the ones that occurred. There were no reports of injuries Sunday, which was a large percentage of the area.

The city of Lexington, the seat of the state's largest city, had no serious damage reported. The city's public safety officials said there were no incidents of cracking or damage. The TVA officials said they were confident the dams were safe and would withstand any likely earthquake.

A Rare Quake

Rattles 14 States: Damage Is Minor

by Albert Prentiss

A "very rare" earthquake centered in western Kentucky rattled residents and buildings yesterday in at least 14 states from Michigan to South Carolina and in parts of Canada. No deaths or injuries were reported, but hundreds of buildings in Kentucky, Indiana and Illinois showed damage.

Don Finley, a spokesman for the U.S. Geological Survey in Golden, Colo., said the 1:02 p.m. earthquake reduced 3.7 to the Richter scale and was centered about 10 miles southeast of Cincinnati and 80 miles northeast of Lexington.

Waverly Person, a seismologist with the U.S. Geological Survey National Earthquake Information Center, said the quake was very rare in that part of the country.

The tremor might be a measure of recent movement at or near the top of the crust. It is a common occurrence in places as widespread as Arizona.

In Mayville, Ky., 10 miles northeast of Lexington on the Ohio River, state emergency officials said an estimated 200 buildings were damaged. The damage was merely broken windows and chimneys, but some of it was more severe.

The Kentucky state capital of Frankfort, 25 miles west of Lexington, Joel Moss said the "busted the back side of my house" and that other homes in his subdivision had minor damage.

Switchboards Lit Up With Calls

"It knocked me out of my chair," said Sgt. William Krueger at the Indiana State Police Operations Center in Indianapolis. He said calls were coming in "from all over."

At Oak Ridge and Knoxville, Tenn., switchboards at newspapers and radio stations lit up with calls shortly before 3 p.m. Residents reported that dishes rattled for several seconds.

The tremor was felt throughout the central Ohio area as well as in the Cincinnati and Cleveland areas.

The tremor shook parts of West Virginia as well. Logan County and the

"We have minor earthquakes periodically, but this was a big one," said Walter of the Seismological Laboratory at John Carroll University in Cleveland. "That was pretty sizable and could have caused a lot of damage, depending on how close it is to a populated area."

Walter was unable to say what caused the quake.

Tennessee Civil Defense authorities said the tremor was felt throughout much of the state.

Avalon, Pa., policeman Bernie Kesting said there were two tremors in his community, one for a minute at 2:55 p.m. and a second shortly after that lasted 30 seconds.

"A guy who used to live in California called and said his house and lamp were shaking and it probably was an earthquake because he had been through many of them," Kesting said. "It was the first one around here in my 32 years."

You'd expect some minor structural damage in Cincinnati, we did not," said Harms. The National Bureau of Standards said "the damage was very low awareness of earthquake risk in much of the country. The natural inclination of a large number of the population is to be self-protective, to be able to protect themselves from earthquake standards of the sort that are mandatory in California.

The code provides an exemption for areas in which there is no record of an earthquake. It also provides for the protection of infrastructure and buildings. The code requires that buildings be designed to withstand seismic forces.

Stavrides was asked whether, in view of the Sunday quake, felt in several northeastern states, he expected to see more buildings to be designed to withstand seismic forces.

"I doubt it," he said. "The Northeast is not exactly an earthquake-prone region, and the building codes are not designed for that."

Washington Post
July 25, 1980
Temblor!

It’s no California dream — quake did shake up our state

It’s not supposed to occur in Michigan, but residents as far west as Grand Rapids and as far east as Stoney Point, Ontario, felt a slight tremor at 2:54 p.m. Sunday, when the southeast portion of the state was hit by a minor earthquake.

The tremor apparently was the upper tall of a quake that was centered in Kentucky, 45 miles southeast of Cincinnati, Ohio, and 50 miles northeast of Lexington, and hit 14 Midwestern states, including Ohio, Tennessee, Illinois, Indiana, and portions of West Virginia, Pennsylvania, New York, North and South Carolina and Alabama, as well as southern Ontario.

It was the first local tremor since Feb. 2, 1976, when one shook the downstream area and southern Ontario.

At its center, the quake measured 5.1 on the Richter scale. In Detroit, the tremor slightly shook houses and downtown office buildings, but apparently did not cause any damage.

STARTLED RESIDENTS soon flooded Detroit news agencies and the National Weather Service with inquiries about what they thought they had felt.

Bea Banash of Romeo said she was lying in bed reading a book with the tremor shaking her house.

"It felt like somebody was under the box spring and raised it up," she said. "We have a vibrator on our bed, I thought maybe that thing had started up, so I unplugged it."

Weather service officials said the area has experienced similar light earthquakes every 15 or 20 years.

Samples quakes were "very rare" because, unlike in California and other coastal regions, the earth there was not weakened by cracks or faults to cause any shocks in the earth's crust.

Don Finley, spokesman for the U.S. Geological Survey Center in Golden, Colorado, said the agency had not been able to determine what caused the quake.

In Glasgow, Ky., workers at a waste supply station were forced to evacuate the facility, and a house trailer was reported overturned in Granger County in eastern Tennessee.

In the Detroit area, no injuries or damage were reported.

RUIEN A. VEGA of Detroit was watching Tigers baseball when announcer George Kell and Al Kaline mentioned the earthquake.

"We had just got through eating," he said. "I had made some tacos and I thought I had poisoned myself. My stomach started quivering."

"Frankly, I thought, 'What the hell is going on?,'" said St. Norman Lynn, a former Colorado resident, now living in West Bloomfield Township. "My wife and I have gone through them before, we were surprised. They're not supposed to happen in Michigan."

DURING THE FIFTH inning of the first game of a doubleheader at Tiger Stadium the top levels began swaying.

"The thing started swaying," reported security guard Mike Werner, who was stationed in the upper deck. "People started looking around, wondering what was going on. I knew it wasn't just caused by people moving around or rooking. I knew it was something else."

"I was getting out of there (the press box)," said one sports writer. "I thought it was the girders giving way."

"As heck, earthquakes don't scare me," said manager Sparky Anderson. "Tornadoes scare me, but earthquakes don't."

DETROIT FREE PRESS/MONDAY, JULY 28, 1980

The Dallas Morning News

Monday, July 28, 1980

Quake hits eastern part of Midwest

United Press International

An earthquake registering 5.1 on the Richter scale sent a minute-long shock wave from Alabama to southern Canada Sunday, shattering windows, swaying buildings and rattling fans at two major league baseball games.

The quake, at 1:35 p.m. Dallas time, was centered in Kentucky, 50 miles northeast of Lexington and about 45 miles southeast of Cincinnati, reported the U.S. Geological Survey's National Earthquake Information Service in Golden, Colo.

No injuries were reported, and property damage was minor.

Earlier, officials had given the quake a 3.3 rating.

"It was a pretty good size earthquake for that area," said Don Finley, spokesman for the earthquake information service.

The quake was the first recorded in Kentucky, Finley said. Tremors extended into Illinois and Ohio, as far east as Pennsylvania, Virginia and North Carolina, and into northern South Carolina, Canada.

Status tuned off the roof of Cincinnati City Hall and damaged the sidewalk, police said. Stagnant air created a concert in the RKO Palace Theater in Columbus, Ohio, said a 2-foot piece of plaster crashed to the floor.

The whole floor started shaking," said stagehand Joe M ceremonized, "I thought it was just the aftereffects of last night."

"I thought the house was falling down," said a woman in a Columbus suburb. "I thought I was going to die."

The tremor was felt by thousands of people at Tiger Stadium in Detroit and Municipal Stadium in Cleveland.

The Tigers were in the middle of a game with the Oakland As when the stadium press box "moved several inches," spectators said.

The tremor rumbled through downtown Detroit, shaking several large buildings, including the 75-story Plaza Hotel.

Tremors were felt in Chicago, and were reported as far south as northern Alabama.

"It lasted a good 30 seconds," said Vicky Rodger, who was visiting her parents in New Market, Ala., about 5 miles from the Tennessee state line. "It was as if the bed and the clothes in the closet began shaking, the mirrors and the windows began shaking. Even the bed was shaking. It was crazy."

State Police Sgt. William Kruuger said he was watching a baseball game on TV in his 3rd-floor Indianapolis office when he felt the shaking.

"A table started wobbling, pictures started swaying, and the utensils walked in here started moving around. I headed for the door," he said.

Tennessee Civil Defense authorities said the tremor was felt throughout the state.

"One trailer was shaken off its blocks in Grainger County, but that's about the most serious damage," civil defense spokesman Danny Daniel said.

Greg Hutchins, a disc jockey at WZAP Radio, in Bristol, Va., said he noticed a table moving while he was broadcasting.

"The whole console was shaking," he said. "I thought one of the other disc jockeys had slumped in and was pulling my leg. I looked under the table but nobody was there."

Quake was felt in these states.

Quake in U.S. rattles Ontario

TORONTO — (CP) — A "very rare" earthquake, centred in Kentucky with tremors felt as far away as southern Ontario, rattled buildings in a dozen states yesterday from Michigan to South Carolina.

No injuries were reported, but some buildings in Kentucky were damaged.

Don Finley of the U.S. Geological Survey in Golden, Colorado, said the quake at 2:52 p.m. had registered 5.1 on the Richter scale. It was centred 72 kilometres southeast of Cincinnati, Ohio.

A geophysicist with the earthquake information center said that earthquakes were very rare in that part of the continent and that quakes in eastern states rarely register above 4.0 on the scale — a measure of ground motion recorded on seismographs.

(Every increase of one number means a tenfold increase in magnitude. An earthquake of 3.5 can cause slight damage; a 6.0 can cause severe damage.)

The tremors were felt in southern Ontario from London, St. Thomas and Sarnia area, through Kitchener-Waterloo and Toronto and as far north as Barrie. No injuries were reported.

Residents flooded police and radio stations with calls.

Dr. Anne Stevens, a seismologist with the University of Toronto, said that earthquakes were very rare in that area, but that the tremors in Ontario had been felt mainly by people in high-rise apartment buildings.

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Earthquake Rocks 15 Eastern States
And Canada; No Injuries Reported

By Mike York
Of The Herald Staff

A rare earthquake, centered about 45 miles northeast of Lexington, shook parts of 15 states and Canada yesterday afternoon.

No injuries were reported, but authorities in several Kentucky counties said the quake, which registered 5.1 on the Richter scale, shattered windows, toppled chimneys and moved houses from their foundations.

Most Lexington residents felt a local tremor of 20 to 35 seconds of vibrations that began about 2:52 p.m. Windows rattled, and cans and jars fell from the shelves at several local stores.

"It was like riding in an old school bus," said one east Lexington resident. "I kept thinking, 'This isn't supposed to happen here.'"

Fayette School Board member Judy Tipton of 224 Burke Road in western Lexington said the tremors in her neighborhood lasted about 30 seconds.

"It scared me spitless," Mrs. Tipton said. "I heard the dishes rattling, and I saw everyone running outside — it was terrifying."

In Cincinnati, a cornice fell at the main entrance to city hall, leaving a two-foot-wide crater in the sidewalk.

According to the Toronto Star, residents of high-rise apartment buildings in Darrie, Ontario — 60 miles north of Toronto — felt the quake.

Reports of mild tremors came from as far east as Roanoke, Va., as far south as Greenville, S.C., and Florence, Ala., and as far to the northwest as Milwaukee.

The most severe damage occurred in Maysville, about 12 miles northeast of the epicenter. City Manager Dennis Redmond said several building were damaged, and a church was closed after sustaining structural damage.

The shocks broke numerous windows, Redmond said, including a 12-foot pane at the Bank of Maysville and several large windows at local supermarkets.

"We think that, at a minimum, there are at least 200 to 300 houses that have some kind of damage — broken windows, cracked foundations, collapsed chimneys," Redmond said. "There was a tremendous roar. My home began to quiver and shake, and then it got worse."

"I got up and tried to walk across the floor, and you couldn't tell where the ground was — it's something I'll never forget. Everybody was in the streets because there were certain their houses were going to fall."

Fleming County Sheriff G.W. White said houses in Fairview and Pecksridge were moved from their foundations, and "several" chimneys collapsed in Cowan — about 10 miles from the quake's center.

Farther south, in Owingsville, a falling chimney hit a new van, denting the vehicle's roof and scratching its fenders.

"I hated it," said Tony Barber, the van's owner. "We've got a yard full of brick."

In Frankfort, a homeowner in a subdivision north of town said the tremors collapsed part of his house.

"It busted the whole backside of my house," said Joel Mans. He also said the earthquake lowered his windows at least an inch and pushed his windows in.

"You can pull the bricks out of my house," he said.

At Detroit's Tiger Stadium, about 40,000 fans were told by an announcer that the arena's swaying had been caused by an earthquake.

"The fans all looked at another, but there wasn't a stampede to get out," said police officer Mike Werner, who was in the stadium.

Louis Posey, a geologist with the Kentucky Geological Survey, said the quake apparently occurred along the Maysville Fault, which runs from the Kentucky River south of Lexington through Paris to the Ohio River.

An earthquake is caused, he said, from stress and tension in the ground pushing against faults or "zones of weakness" in underground layers of rock.

Lexington Herald, Lexington, Ky.,

Monday, July 28, 1980

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