Summary of Newspaper Articles

Deseret News – Salt Lake City, UT (last date searched 04/18/1975)

Headline:	Quake Rumbles Through 4 States
Date:	03/28/1975
Info Categories:	B, E, H, I, L, N, P, S
Headline:	<u>'Main Street Was Blitzed'</u>
Date:	03/28/1975
Info Categories:	B, I, L, N, P
Headline:	Aftershocks Keep Area Jittery
Date:	03/29/1975
Info Categories:	A, B, E, G, L, P, S
Headline:	Farmer Finds Quake Fissures
Date:	03/31/1975
Info Categories:	E, G, P, S
Headline:	<u>Scientists Find No Scars In The Wake Of The Quake</u>
Date:	04/01/1975
Info Categories:	A, B, E, S
Headline:	Feel The Earthquake? Please Fill Out Form
Date:	04/01/1975
Info Categories:	A, P, S
Headline:	<u>Pets' Reactions On Quake Sought</u>
Date:	04/04/1975
Info Categories:	A, S
Headline:	<u>Quake Threat</u>
Date:	04/07/1975
Info Categories:	A, I, S
Headline:	Quake Damage Forces Closures At Old School
Date:	04/08/1975
Info Categories:	A, B, I, P
Headline:	<u>It's Panic That Kills In Quake</u>
Date:	04/10/1975
Info Categories:	A, P
Headline:	<u>4 Holes Discovered After Recent Quakes</u>
Date:	04/14/1975
Info Categories:	G, P, S

Headline:	Quake Forecasts By Satellite?
Date:	04/16/1975
Info Categories:	A, I, S

Idaho Statesman – Boise, ID (last date searched 04/04/1975)

Headline:	Mountain West Hit By Quake
Date:	03/28/1975
<u>Info Categories</u> :	B, E, N, P
Headline:	<u>'Moderate' Tremor Hits East Of Malad</u>
Date:	03/28/1975
Info Categories:	E, P, S
Headline:	Malad Clears Away Debris Tossed About In Earthquake
Date:	03/29/1975
Info Categories:	B, E, L, N, P, R, S
Headline:	<u>Utah, Idaho Again Feel Aftershocks</u>
Date:	03/31/1975
Info Categories:	E, P, S
Headline:	Idahoans Advised On Quake Survival
Date:	04/02/1975
<u>Info Categories</u> :	A, E

Post-Register – Idaho Falls, ID (last date searched 04/02/1975)

Headline:	Quake Effect Recorded Here
Date:	03/28/1975
Info Categories:	E, P
Headline:	<u>'Earthquake'A Real Moving Picture</u>
Date:	03/28/1975
Info Categories:	H, I, P
Headline:	<u>Aftershocks 'Little Larger'</u>
Date:	03/29/1975
Info Categories:	E, G, S
Headline:	<u>Utah Scientists Downgrade Power Of Earthquake</u>
Date:	04/01/1975
Info Categories:	E, S

Salt Lake Tribune – Salt Lake City, UT (last date searched 04/11/1975)

Headline:	<u>Quake Hits Mountain Area, Damage Slight</u>
Date:	03/28/1975
Info Categories:	A, E, I, L, P, S
Headline:	<u>U. Cast Interprets 'The Price' WellDespite Quake</u>
Date:	03/28/1975
Info Categories:	I, P
Headline:	Experts Assess Damage, Results Of Earth Tremor
Date:	03/29/1975
Info Categories:	B, E, G, I, L, P, S
Headline:	Expert Says We Must Live With Earthquakes
Date:	03/29/1975
Info Categories:	A, S
Headline:	Quake's Ferocity Found Intense In Remote Utah
Date:	03/30/1975
Info Categories:	B, E, I, N, P, S
Headline:	Dan Valentine's Nothing Serious
Date:	03/31/1975
Info Categories:	H, P
Headline:	<u>Fault Lines Found In Quake</u>
Date:	03/31/1975
Info Categories:	G, P, S
Headline:	Readers Requested To Fill Out Earthquake Questionnaire
Date:	04/02/1975
Info Categories:	A, E
Headline:	<u>Savant Says 'Clays' A Peril In Quakes</u>
Date:	04/04/1975
Info Categories:	E, G, S
Headline:	Quake Region Studies Show Great Threat
Date:	04/08/1975
Info Categories:	G, S
Headline:	<u>Old School Damaged By Quake</u>
Date:	04/09/1975
Info Categories:	A, B, I, P

Headline:	Earth Jolt Bypassed Drill Bore
Date:	04/10/1975
Info Categories:	B, I

Headline: Date: Info Categories: Oneida Evaluates Quake Loss 04/11/1975 A, B, I, L

Information Categories

A -- Aid:

provide medical services, shelter, donations, loans, advice, encouragement, implement safety measures

B -- Building Damage:

structure itself plus windows and chimneys (typically damage visible from outside the building)

E -- Earthquake Description:

where, when, duration, direction, sound, motion, number and timing of aftershocks

G -- Geologic Effects:

changes at the Earth's surface, fault scarps, rockfalls, landslides, ground cracks, ground subsidence, sand boils, water spouts; effects on springs, lakes, wells

H -- Humor:

I -- **Impact:** changes in daily routine; rumors; influx of reporters, politicians, cost in dollars

L -- Lifelines:

effects on transportation: roads, bridges, railroads, airports effects on communications: telephone, telegraph effects on power, gas, water, and sewer lines effects on dams

N -- Nonstructural Effects:

effects on plaster, furnishings (typically damage or rearrangement of furnishings visible inside a building)

P -- People:

effects on and responses to, during and after; deaths, injuries, near misses

R -- Recovery: clean up, rebuild

S -- Scientific: explanation of the day

Back to Summary: Page 1, Page 2, Page 3, Page 4

QUAKE RUMBLES THROUGH 4 STATES

By Dexter C. Ellis

A heavy earthquake rattled a four-state area Thursday night, but the only extensive damage was in Malad City, Idaho, about 40 miles from the epicenter.

In Malad, just north of the Utah border, almost every home and building bore some evidence of the temblor, from shattered brick walls to littered grocery stores and smashed bottles of liquor in the state liquor store.

The earth tremors radiated outward for 200 miles or more in every direction from the source believed to be a system of faults along the Promontory Range in western Box Elder County, near where the Golden Spike was driven to complete the transcontinental railroad in 1869.

The quake, which occurred at 8:32 p.m., registered 6.2 on the Richter Scale, making it the heaviest earthquake in the continental United States since the deadly Los Angeles area quake in 1971.

Had it been centered in a populated area, say geologists, it could have caused great destruction and considerable loss of life.

As it was, damage was light, although extensive in Malad, and there was only one reported injury.

Scientists warned that aftershocks can be expected in the next few days or weeks.

Kena Lee Smith, 17, a spectator at a rehearsal for the "Miss Malad" beauty pageant, received minor cuts and bruises when a wall panel fell on her.

But thousands of people were alarmed and frightened in an area from Idaho Falls on the north to Delta, Utah on the south and extending east to Rock Springs, Wyo., and west to Jackpot, Nev.

A typical reaction was that of waitress Irma Sorenson at Hickman's Cafe in Snowville, a border town about 70 miles northwest of Brigham City, Utah.

"It scared us real bad. It just trembled for what seemed like hours," she said. "The groceries and canned goods were knocked off the shelves. We just closed up and went home."

The quake's potential destructiveness is indicated by a comparison with other far-moredestructive temblors.

The quake which destroyed San Francisco in 1906 measured a massive 8.6 on the Richter scale, while the 1959 quake which toppled a mountain near Yellowstone Park registered 7.1.

Thursday night's quake, at 6.2, was only slightly less intense than the 1934 quake which, emanating from the same general area, caused far greater damage and two deaths.

The Richter Scale is a measure of ground motion as recorded on seismographs. A quake of 3.5 can cause slight damage in the epicenter area; 4 moderate damage; 5 considerable damage; 6 severe damage; 7 widespread damage, and 8 tremendous damage.

Citizens throughout the 400-mile-wide area where the rolling of the earth was felt, paused at least momentarily in what they were doing.

Tall buildings in Salt Lake City swayed.

Dancers at the Hotel Utah Skyroom were swinging and swaying considerably more than usual for a few seconds, according to Mrs. Ellen Marshall of the checkroom. One waitress got physically ill. Most of the customers continued their dining and dancing, but many rushed to phones to check on the safety of their children at home, said Mrs. Marshall. Rich Newton of Logan said he and some other people were in the middle of a prayer "when the room started to shake. We wondered if we had said something wrong," he said. At Utah State University, pianist Irene Peery was in the middle of Beethoven's Waldstein Sonata when the recital hall started shaking.

Two or three in the audience walked out, the remainder started murmuring and Miss Peery stopped briefly. She resumed her playing in a few seconds after things settled down.

Two crews from the University of Utah seismograph center were searching for the source of quake today in an area between Malad and Snowville.

Steve Bellon, senior technician-analyst for the center, said between 30 and 40 aftershocks had been measured by the station, but said only three or four could have been felt by people.

The crews were checking for fissures in the earth which, judging by the intensity of the quake, could be fairly large, from six inches to a foot wide.

Also, all dams and reservoirs in the quake area were being examined for possible damage, according to Al Britton, director of Salt Lake County Emergency Services.

Damage reports were widespread in Malad.

The rock fireplace at the home of Dale Price, 181 Bannock, caved into the room. The twostory Warner Bush home lost a chimney.

Serious one-inch cracks opened up in the elementary school and in the high school auditorium.

Fortunately, in view of the bitter cold spell, few utility services were interrupted.

The quivering earth shattered a water main in Bothwell, west of Brigham City, but the inconvenience was minimized by the fact that several residents have their own sources of water.

President Ford's son, Jack, giving a speech at Box Elder High School, was whisked off the stage by Secret Service men as the building started to sway.

He went back inside later for punch and cookies.

Minor damage was reported in other small border communities.

At the home of rancher Rex P. Waldron in Samaria, Idaho, five miles west of Malad, the contents of cupboard shelves and clothes closet shelves were emptied onto the floor but there was no other damage.

"We had a swinging chandelier that was about hitting the ceiling," said Waldron. "Trudy (age 16) was taking a bath, and most of the water was on the floor, though she was still in the tub."

A 500-gallon fuel tank in the yard of a neighbor was shaken off its stand and "got gasoline all over a car and pickup," said Waldron. "Luckily it didn't hit anything else."

"It was quite a surprise to get hit two nights in a row," said Waldron. He thought the quake which was felt in the area Wednesday night lasted longer, but was not as severe.

"The baby didn't even wake up," the rancher added. "He slept through the whole thing." Judging from telephone calls which poured into law enforcement agencies, the quake was felt through Utah County and as far south as Delta, Utah, some 100 miles from Salt Lake City.

Central circuits of Mountain Bell in Ogden and Salt Lake were instantly overloaded. Several patrons, unable to get calls through, interpreted this as a break down of the system caused by the quake.

"Virtually every person on our exchanges must have picked up a telephone to call someone right after the shock," said an Ogden telephone repairman.

The repairman, who was in an office on the sixth floor of an Ogden building, said, "The

building was shaking so bad I was ready to jump out the window."

Provo residents were among those who felt the "rolling ship" sensation of the quake. "We could feel the whole building move," said Highway Patrol Dispatcher Blaine Wilson.

"It felt like someone was jumping on the back of my truck," said Art Henderson,

conservation officer with the Division of Wildlife Resources. He was driving near the mouth of Provo Canyon.

[Deseret News; March 28, 1975]

'MAIN STREET WAS BLITZED'

By Harry Jones

MALAD CITY, Idaho--Walls fell, foundations cracked and windows shattered here Thursday night. Malad is the largest community near the epicenter of the quake which shook the Mountain West at 8:32 p.m.

One section of Main Street looked a little like London following the blitz. Bricks and mortar tumbled from the three-story Evans Co-op Building. No one was injured.

Windows all along Main Street were shattered by the tremor.

Two chimneys at the Ernest Waldren home tumbled, crashing into the front yard of the home.

The quake struck during a rehearsal at the school of the Miss Malad beauty pageant. The girls were on stage in their bathing suits at the time.

People watching the rehearsal said Stephen Sweeten, a student at the school, stopped a panic as about 75 people stampeded toward a small exit. He calmed them down, and had them exit in an orderly fashion.

Don Christoffersen was on a cat-walk high above the stage just seconds before the tremor struck. He climbed down as the cat-walk swung wildly back and forth.

Bill Neal, a deputy sheriff, was on duty at the time. He had to hang onto a table to keep from being thrown to the floor.

The front of the W. D. Thorpe residence buckled and bricks tumbled to the front porch. Unreplaceable antiques were smashed as they fell from shelves in the Thorpe front room. Several grocery stores along Main Street had contents of the shelves dumped onto the floor.

More than two cases of bottles were smashed when they tumbled from the shelves of the State Liquor Store, Dale Thomas, manager, reported.

There were cracks in the old foundation of the Pioneer Museum. A sink at the Blue Goose Inn was ripped from the wall.

At the Platt Price ranch, a large tank containing diesel fuel was toppled and the contents lost.

Practically every home reported dishes smashed or pictures falling from the wall.

Officers reported there was no looting. Windows were hurriedly boarded up and debris picked up from the street.

Phone service was interrupted for a short time.

[Deseret News; March 28, 1975]

AFTERSHOCKS KEEP AREA JITTERY

By Dexter C. Ellis

MALAD, Idaho--Heavily damaged farm buildings, indicating savage earth movements, were found west of here Friday by scientists driving into the area to investigate Thursday's quake.

Meanwhile, aftershocks--one strong enough to be felt in Salt Lake City at 7:01 a.m. today-continued to be felt by jittery area residents. Both Malad and Snowville, Utah, residents felt several aftershocks Friday night.

Police officers in the high-rise Salt Lake Metropolitan Hall of Justice felt this morning's tremor and also received several calls from Salt Lake County residents who detected the earth movement.

The aftershock was the heaviest of more than 100 which have been registered at the University of Utah seismic laboratory.

At an intensity of 4.6 on the Richter Scale, it was sufficient to revive fears in Malad of a repeat of Thursday evening's quake which caused widespread, but relatively minor, damage. Another shock about 10 a.m. Friday registered about 4 points.

"The one this morning was so bad we thought if it gets any worse, it's going to be like the last one," said Norma South, a resident. "But luckily it wasn't."

Geologists stressed that aftershocks are normal and usually diminish in intensity. The Thursday shock registered 6.2 on the Richter Scale.

No additional damage has been reported in Malad, but new details of Thursday's quake were received.

Mr. and Mrs. Fred Gilgen, 90 and 88 years of age, lost 350 gallons of furnace oil when a line broke, allowing the sticky fluid to pour into their basement.

Stam Thomas, operator of the Malad IGA store, said smashed merchandise represents a loss of \$1,000.

Promoters of tonight's "Miss Malad" beauty pageant fear many of the sellout crowd of 200 who bought tickets for the event may stay away out of fear of another quake.

The 20-year-old brick building in which the pageant will be held was cracked by Thursday's quake. It was there that the only known injury from the tremor occurred.

Kennallee Kent, whose older sister Cindy is a contestant, suffered a badly bruised leg when a piece of ceiling paneling fell and struck her during a pageant rehearsal Thursday. The contestants were in bathing suits and two of them ran out into the bitter cold night. The potential deadliness of the quake was demonstrated by the condition of farm buildings

in the epicenter area.

Vacant buildings were moved off their foundations, brick chimneys destroyed, heavy stoves moved across rooms and dishes were smashed, said Bruce Kaliser of the Utah Geologic Survey.

He was with a team of scientists which bucked snow and mud in a four-wheel drive vehicle to investigate the epicenter of the heavy earthquake which rattled a four-state area Thursday night.

Kaliser said the damage in the epicenter area--near Blue Springs in northwest Box Elder County, Utah--indicated a savage shaking that could have caused injuries or death.

The damage to buildings was much worse than reported in Malad and other towns in the area, he said. For instance, a large metal storage bin at one farm collapsed, and the grain was spread over the ground.

"We didn't find any major ground breaks," he said. "We did find some minor ground cracking, but nothing significant.

"We were looking for a fault, but we found no evidence of this," he added.

"If the farms had been inhabited, it would have led to casualties," the geologist said. "Fortunately all the houses were abandoned. On our way out we ran into many of the owners trying to get in to inspect their property."

The quake gave Utah's Emergency Operating Center a chance to test its facilities under genuine conditions of a possible disaster, and everything reportedly went well.

The center became operational at 8:31 p.m., according to Donald R. Spradling, director of the Office of Emergency Services. Emergency operating centers in Salt Lake City, Box Elder and Davis counties were operational by 9 p.m.

The National Warning System (NAWAS "Hotline") was used extensively, said Spradling, for both interstate and intrastate communication. Contact was established with Idaho, Colorado and Wyoming.

The Highway Patrol communications system, the Emergency Services System, radio amateurs and citizens band capabilities were pressed into service, he explained. After damage areas were inspected and dams in the area surveyed, it was concluded that

no "disaster" declaration was warranted.

No cracks or leaks were found in any of the earthen or concrete dams, but a Federal Aeronautics Administration official from Malad City said he found a disturbance at the Malad-Holbrook Divide apparently caused by the quake.

Norman Jaussi, traveling his customary route to check navigation instruments, found a 200-foot-long depression in a snowdrift. Nearby was a crack in the snow running for hundreds of feet.

Dr. Kenneth Cook, director of the University of Utah's seismic study station, said there will be many more aftershocks in ensuing weeks.

The Thursday night quake figure of 6.2 was the highest in the continental United States since a 1971 quake near Los Angeles which caused a billion dollars damage and claimed several lives.

Cook said the epicenter of Thursday's quake in the Blue Springs area was farther west than originally supposed. It is located in a valley where faults have been relatively inactive, he said.

Teams from the seismic laboratory spent Friday placing temporary monitors in the area between Snowville and Malad.

[Deseret News; March 29, 1975]

FARMER FINDS QUAKE FISSURES

TREMONTON--Expected ground cracks--almost inevitably caused when a sharp earthquake occurs--are believed to have been found northwest of here.

Jagged lines in the snow, discovered Saturday and Sunday by wheat farmer Earl Fuhriman and his son, were almost certainly caused by Thursday's quake, said Utah geologist Bruce Kaliser.

Fuhriman and his son used a snowmobile to reach the area which is about four miles north of the Utah-Idaho border and a short distance north of where geologists quit looking for quake faults Friday.

"Fuhriman and his son got up there Saturday and Sunday and confirmed the cracks were where we anticipated they would appear," Kaliser said. "One was a mile long, running north and south, and the other was about 200 feet long, running toward the center of Pocatello Valley."

The geologist said he planned to inspect the area today to make sure the cracks are earthquake faults.

A study of the breaks in the earth, he said, could lead to knowledge of when the last earthquake had occurred.

The Pocatello Valley is about 100 miles northwest of Salt Lake City. Fuhriman is among about three dozen farmers whose farm land there is used in the summer and fall. Scientists who visited the epicenter area Friday found evidence of violent earth

movements which would have caused heavy damage and casualties had they occurred in populated areas.

However, Thursday's quake, although measured on the Richter scale at 6.2--the strongest in the continental United States since 1971--caused only one slight injury. Damage was limited to Malad, Idaho, and other small border towns.

The quake was felt within a radius of 200 miles, including Salt Lake City, where tall buildings swayed.

However, the quake's epicenter was sufficiently distant to prevent serious damage in populated areas.

[Deseret News; March 31, 1975]

SCIENTISTS FIND NO SCARS IN THE WAKE OF THE QUAKE

MALAD, Idaho--No fault scars have been found in the still trembling Pocatello Valley, and scientists now estimate Thursday's earthquake was not as strong as first believed. Dr. Kenneth L. Cook, professor of geophysics at the University of Utah, said there are cracks in the snow running in several directions.

This indicates there was a violent heaving and shaking of the earth. But there is no displacement of the ground, known as a fault, with one side remaining higher than the other, such as normally occurs in a quake of that magnitude.

The quake, which caused considerable damage in Malad, is consequently being downgraded from 6.3 to 6 on the Richter Scale, Cook said.

Eleven portable seismographs, placed around the valley to record aftershocks, indicate there is one about every minute--hundreds each day, said Dr. Cook.

The epicenter, he said, appears to be about 15-20 miles southwest of Malad and about 20 miles east of Snowville.

He said the aftershock tremors, imperceptible to anyone except those living in nearby towns such as Stone and Holbrook, will continue for months, perhaps even a year or two. In Malad, where damage was widespread but light, residents continued to look for and find new damage.

A 25-foot smokestack on the Malad High School building was torn down because it was considered unsafe due to quake caused cracks.

In Samaria, five miles to the southwest, a newly remodeled brick home was found to have severe damage to two outside walls.

The Malad Second Ward chapel, an older brick building, has extensive cracks in the plaster.

[Deseret News; April 1, 1975]

FEEL THE EARTHQUAKE? PLEASE FILL OUT FORM

Utah scientists are seeking the help of Deseret News readers in finding out more about last Thursday's earthquake near the Utah-Idaho border.

Readers are asked to fill out the following questionnaire about the 8:32 p.m. quake, even if they didn't fell the shock of the earth movement.

The information will be used by the University of Utah Seismograph Stations in a study of ground motion and damage associated with the earthquake.

[Deseret News; April 1, 1975]

PETS' REACTIONS ON QUAKE SOUGHT

If your dog, cat, horse or goldfish acted strangely just prior to the earthquake a week ago the Utah Geologic Survey would like to hear from you.

The information is needed for part of the agency's earthquake hazard reduction plan which requires an evaluation of strange and unusual events related to a quake.

Bruce Kaliser of the Geologic Survey said the agency has reports that animals sometimes behave in an unusual way just before an earthquake. Their keen ability to note foreshocks is similar to a dog's sense which allows it to hear high-pitched whistles which a human is unable to notice, he explained.

He said the Japanese are so convinced of the validity of such instincts that they are studying whether animals can be relied upon in a pre-earthquake warning system. Anyone who believes he has valid information of this nature is invited to call the Geologic Survey at the University of Utah.

[Deseret News; April 4, 1975]

QUAKE THREAT Fault Storing Stress, Geophysicist Says

By Gordon Eliot White

WASHINGTON--A federal government geophysicist says the Utah-Idaho area can expect more destructive earthquakes in the future.

Dr. Al Rogers, leader of a team of geologists who have been studying the March 27 quake which hit the two states, said the 500-mile-long Wasatch Fault could be storing stresses which could eventually result in a major earth movement.

Rogers, part of the U.S. Geological Survey team from Golden, Colo., said the Utah-Idaho area has produced six major earthquakes of magnitude six or greater this century.

"It will undoubtedly produce more in the future," he added. Because there are more people and more buildings in the area, we can expect future earthquakes to be more destructive, he said.

The March 27 tremor was magnitude 6.3 on the Richter scale, Rogers said. It was the strongest quake in the U.S. since the 1971 shock in San Fernando, Calif. By comparison, the 1906 San Francisco earthquake was magnitude 8.3.

That quake "underlines the need to better define the area's earthquakes," Rogers said, and has led the USGS to undertake additional studies in the area.

Rogers also said "people are moving into areas that are potentially unsafe because of earthquake-related hazards."

The USGS and the University of Utah have deployed a network of sensors in the quake area to measure aftershocks around Malad, Idaho, the center of the recent quake.

"A special effort will be made to locate the aftershocks precisely and thus give us a better understanding of the area's future earthquake potential as well as its geological and tectonic structure," Rogers said.

The USGS team said a close study of the quake area after March 27 showed no damage to reservoirs or ground damage beyond cracks in snow or frozen mud.

A foreshock of magnitude 4.5 preceded the March 27 quake by 24 hours, Rogers said. **[Deseret News; April 7, 1975]**

QUAKE DAMAGE FORCES CLOSURES AT OLD SCHOOL

By Joe Costanzo

Substantial damage to the old Sumner School building, 636 3rd East, has forced immediate closure of three areas of the structure, Salt Lake City Commissioners learned today.

John Troskie, of the federally assisted Code Enforcement Agency, whose offices are in the school, said the damage was caused by the March 27 earthquake.

Commissioners were told by Troskie that he ordered three sections of the school closed because he feared for the safety of people using the building. Sumner was leased to the city two years ago for use by social aid agencies and education programs.

Troskie said the front entrance, the basement kitchen and the assembly room of the building have apparently suffered damage caused by the earthquake. He conducted a study of the damage following the earthquake at the request of Public Safety Commissioner Glen N. Greener.

"I would feel at ease if the school were closed because of falling bricks," Troskie said. He added that there are 80 to 90 children in the school and "my back is against the wall" if anything happens to them. The children are part of a private experimental school program carried out in cooperation with the city Board of Education.

City Atty. Roger Cutler was directed to study the lease agreement with the Board of Education to determine if the city or the school board is responsible for repairing damage. However, commissioners agreed the danger was severe enough to require an immediate study to determine if the building should be closed entirely.

"We've decided to do a rough evaluation of the safety," Greener said. "If we find anything wrong we will close the school immediately and conduct an in depth study."

Commissioner Steven M. Harmsen, who directs the Building Inspection Department, said Troskie is qualified to determine safety hazards, but suggested a detailed structural analysis be conducted by engineers.

Commissioners agreed with the immediate action and asked all parties to expedite the review.

[Deseret News; April 8, 1975]

IT'S PANIC THAT KILLS IN QUAKE

The most important thing to remember if and when an earthquake strikes is don't panic. This is part of the first rule listed in a government document on earthquakes prepared by the National Oceanic and Atmospheric Administration.

After describing earthquakes and what causes them and their effects, the pamphlet lists six rules to help you survive during the shaking, and eight rules to observe after the shaking.

"An earthquake strikes your area and for a minute or two the 'solid' earth moves like the deck of a ship. What you do during and immediately after the tremor may make life-and-death differences for you, your family, and your neighbors," the documents states. Here are the six rules for during the shaking:

1. Don't panic. The motion is frightening but, unless it shakes something down on top of you, it is harmless. The earth does not yawn open, gulp down a neighborhood and slam shut. Keep calm and ride it out.

2. If it catches you indoors, stay indoors. Take cover under a desk, table, bench or in doorways, halls and against inside walls. Stay away from glass.

3. Don't use candles, matches or other open flames, either during or after the tremor. Douse all fires.

4. If the earthquake catches you outside, move away from buildings and utility wires. Once in the open, stay there until the shaking stops.

5. Don't run through or near buildings. The greatest danger from falling debris is just outside doorways and close to outer walls.

6. If you are in a moving car, stop as quickly as safety permits, but stay in the vehicle. A car is an excellent seismometer and will jiggle fearsomely on its springs during the earthquake; but it is a good pace to stay until the shaking stops. After the shaking:

1. Check your utilities, but do not turn them on. Earth movement may have cracked water, gas, and electrical conduits.

2. If you smell gas, open windows and shut off the main valve. Then leave the building and report gas leakage to authorities. Don't reenter the house until a utility official says it is safe.

3. If water mains are damaged, shut off the supply at the main valve.

4. If electrical wiring is shorting out, close the switch at the meter box.

5. Turn on your radio or television (if conditions permit) to get emergency bulletins.

6. Stay off the telephone except to report an emergency.

7. Don't go sight-seeing.

8. Stay out of severely damaged buildings; aftershocks can shake them down.

The earthquake pamphlet is available for 30 cents from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 0317-0058.

[Deseret News; April 10, 1975]

4 HOLES DISCOVERED AFTER RECENT QUAKES

By Flo Munson and Hal Knight

Utah is starting to resemble a large piece of Swiss cheese--full of holes.

They apparently are related to an earthquake which rumbled across the state March 27. So far, four have been reported, including two in the Salt Lake City area, one at Tremonton and one in Bothwell, Box Elder County.

Scientists think some of the holes may have been old excavations long since filled in, but collapsed by the force of the quake.

Largest of the openings has been found under a road between Big Cottonwood and Little Cottonwood Canyons. It consists of two connected shafts, one horizontal and one vertical. Harry Good, a University of Utah geologist, found the hole, which is about five feet in diameter and eight feet deep. It connects with a larger horizontal shaft at least 40 feet long. The opening is right along the Wasatch Fault, and Bruce Kaliser of the Utah Geological Survey said it may have been caused by the quake or might be an old mine shaft uncovered by the earth movement.

Scientists have shined lights into the pit, but have not gone inside to inspect it in detail. Old-time residents in the area said there is supposed to be a mine under the road, but Kaliser said there are no immediate signs of mine shoring in the cavern.

Further exploration of the hole is needed to determine its origin and if the Wasatch Fault is moving. The Utah Highway Department is considering closing the road because of the hazard caused by the hole.

Kaliser said another hole has been found on the edge of an orchard near East Mill Creek. It is about four feet in diameter and five feet deep.

It is similar to the first hole near Tremonton in that artifacts have been found in the earth, leading scientists to believe it is a man-made hole which was filled in until the quake broke down the soil.

The geologist said the evidence was "positive" that the East Mill Creek hole appeared as a result of the quake or its aftershocks and didn't simply open up on its own.

At Bothwell, the hole opened up right in front of the garage of Mr. and Mrs. Reed Anderson. The hole was first noticed prior to the earthquake, but scientists said it may be connected with the quake.

The hole is not far from the one found at Tremonton on the other side of Salt Creek. The Bothwell hole is about six feet in diameter and 10 feet deep and is filled with water.

The Andersons have fished from its depths a 44-year-old license plate, some unidentified bones, a railroad spike, and old tire rim and petrified wood.

The Tremonton hole appeared in the lawn of Mr. and Mrs. Robert Anderson (no relation to the family in Bothwell) and is about five feet deep.

Scientists say there was an aftershock on April 6, the day the hole appeared. They indicated the collapse of the ground was caused by the shock. Possible earth stress is indicated by water which occasionally spurts from the hole.

[Deseret News; April 14, 1975]

QUAKE FORECASTS BY SATELLITE?

WASHINGTON--Sen. Frank E. Moss, D-Utah, chairman of the Senate Committee on Aeronautical and Space Sciences will hold a public hearing in Utah April 26 on earthquake hazards and predictions. His space committee has the assignment and responsibility for research of space phenomena and its application to research on earth.

In May of last year, Moss spoke in Salt Lake City on early warning systems that might be possible through the satellite programs of NASA. He underlined the "... need for early warning systems," and continued with, "Those who concern themselves with earthquakes want to be warned only when certain movements take place in the earth's surface." An Earth Resources Technology Satellite (ERTS) was launched in July 1972 with a system enabling accurate mapping of geological structures which reveal the processes taking place in the earth's crust to indicate earthquake activity, he noted.

Under a program called the Earth and Ocean Physics Program, techniques for equipment and methods to identify earthquake hazards and the prediction of time, intensity, and location of earthquakes are being developed by NASA.

Moss announced last October the selection of a site near Bear Lake, Utah, as one of two locations in the western United States for earthquake monitoring by satellite.

"I am convinced that within the foreseeable future we will have an early warning system for earthquakes and will be able to map with considerable accuracy those areas which have high earthquake potential," he said.

A list of witnesses is being completed for the public hearing scheduled for Saturday, April 26, at 9:30 a.m. in the State Office Building auditorium in Salt Lake City.

[Deseret News; April 16, 1975]

MOUNTAIN WEST HIT BY QUAKE

SALT LAKE CITY (AP)--An earthquake, potentially capable of severe damage, rocked a 400-mile-wide area of the central Rocky Mountains Thursday night, causing only minor damage in the small town of Malad City.

The quake, which struck at about 8:39 p.m. MDT, also shook skyscrapers in Salt Lake City, the region's largest city.

A dispatcher for the Oneida County sheriff's office in Idaho said bookcases tipped over, light fixtures broke and cracks appeared in the walls of the high school in Malad.

She said several plate glass windows were broken and small cracks appeared in homes in the town of 2,000. A wheelbarrow full of bricks toppled from a building in town.

Authorities reported a teenaged girl in Malad suffered the only injuries--bruises and a cut received when an acoustic wall panel fell on her head while she watched a practice for the "Miss Malad" pageant in the high school auditorium. Kena Lee Kent, 17, was treated at a local hospital and released.

Telephones were reported out in Logan and Ogden, Utah, both north of Salt Lake City, and in portions of Salt Lake City.

However, a telephone company spokesman said the outages were due to overloaded circuits as thousands of residents sought information on the quake.

The National Earthquake Information Center near Denver said the quake was centered on the Utah-Idaho border near Malad City, and registered 6.4 on the Richter Scale.

Dozens of unofficial reports of the quake came from Twin Falls and Burley, from Jackpot, Nev., Idaho Falls and Pocatello; Rock Springs, Thane and Afton, Wyo., to the east, and Provo and Delta, Utah, to the south.

On Wednesday night, a quake in Northern Utah registered 3.5 on the Richter Scale. "It scared us real bad. It just trembled for what seemed like hours," said Irma Sorenson, 62, a waitress at Hickman's Cafe in Snowville, near the quake's epicenter.

[Idaho Statesman; March 28, 1975]

'MODERATE' TREMOR HITS EAST OF MALAD

MALAD (AP)--An earthquake that occurred east of here Wednesday night has been described by University of Utah scientists as "moderate" in strength.

Robert Smith, of the university's department of geophysics, said the tremor registered at 4 on the Richter scale, which he said was a moderate tremor and one not expected to cause damage.

He said the area along the Idaho-Utah border has about one earthquake a year of varying intensities.

Smith said the tremor appeared to have been centered east of Malad. He said it woke residents in the area but apparently didn't cause any damage.

The National Earthquake Information Center in Golden, Colo., reported it measured the tremor at 4.3 on the Richter scale at 10:48 p.m.

[Idaho Statesman; March 28, 1975]

MALAD CLEARS AWAY DEBRIS TOSSED ABOUT IN EARTHQUAKE

By Annette Jenkins and Statesman News Services

The 2,000 resident of the Eastern Idaho city of Malad Friday were cleaning debris dumped into the streets by the most severe earthquake in the continental U.S. in four years. "Lots of chimneys fell down and there are cracks in the walls of brick buildings and cracked plaster," Sheriff Ken Wharton of Oneida County reported.

Kenalee Kent, 14, was cut and bruised when a wooden panel fell on her leg at the Malad High School auditorium where Miss Kent was practicing for the Miss Malad Pageant. She was the only person injured in the town nearest the epicenter of the quake. Wharton said there might have been a panic if the auditorium had been filled for the pageant.

But Malad residents took the big shake calmly, Wharton said. Three large plate glasses in the business district were smashed by the quake. Employees at the Gerald Thomas electric and furniture store were busy Friday sorting electrical parts which had been jarred from shelves.

Bricks tumbled from the front of the W. D. Thorpe home and left a pile of rubble on the front porch.

Mrs. Dale Price returned from a party to find her living room full of bricks from the collapsed fireplace.

A bathroom sink fell off a wall in a bar in Samaria, Idaho.

Rancher Rex P. Waldron, whose home is five miles west of Malad, said contents of cupboard shelves and clothes closet shelves were dumped on the floor.

"We had a swinging chandelier that was about hitting the ceiling," said Waldron. "Trudy, 16, was taking a bath and most of the water was on the floor, though she was still in the tub."

The tremor, a hefty 6.3 on the Richter scale swayed tall buildings in Salt Lake City and was felt in a 400-mile area throughout Northern Utah, Southeastern Idaho and Southwestern Wyoming.

One person who may have felt the most concern was Alan Templeton, American Falls reservoir superintendent who noted the "eerie feeling" of the quake as he was watching television. He hurried to American Falls Dam, to check the structure, so weakened by age that it no longer holds capacity storage.

He said seepage readings indicated there had been no damage.

The Salmon River Canal Co. said there was no damage to the Salmon Dam near Jackpot, Nev.

The National Earthquake Information Center in Golden, Colo., said it was the most intense earthquake in the U.S. since the 1971 tremor that killed 65 persons, injured 1,000 and caused more than \$1 billion damage in Los Angeles. That one had a 6.5 Richter reading. The difference was that Thursday night's jolt hit in desolate desert country north of the Great Salt Lake on the Utah side of the line, a good 20 miles from Malad and Snowville, Utah, a tiny hamlet which also was well shaken.

Waverly Person, geophysicist at the earthquake center, said the 1959 quake in Yellowstone National Park registered 7.1 and reached 10 on the intensity scale. He said it would not be close to the 10 rating. He explained that the intensity scale goes to 12, which means total destruction.

Person said the quake could be associated with the Wasatch fault, but most other quakes in this area were located to the south of the fault. The quake with the greatest intensity in

this area was on March 12, 1934, which registered 6.6 at Kosmo, Utah. This tremor was felt in Boise, Rock Springs, Wyo., Santa Rosa, Calif., and Elko, Nev.

Disaster officials checked dams Friday in the mountains above Utah's populated Wasatch Front, but found no damage. The Mountain Fuel Supply Co. reported constant pressure at its check stations and no reports of line breaks.

Veteran newsman Carl Hayden of Hagerman, who has covered five major earthquakes, was at Jackpot and timed the quake. He said it was a "double shake" with the first tremor lasting for 15 seconds, then a one-minute pause until the second tremor which lasted another 15 seconds.

A dance performance in Salt Lake City was interrupted when some patrons said the entire balcony was shaking and demanded their money back. Customers at a showing of the movie "Earthquake" unexpectedly experienced the real thing, but apparently thought it was only the special effects.

President Ford's son, Jack, a student at Utah State University, was speaking at a Northern Utah school. Secret Service agents rushed him from the stage as the building started to sway, but he returned.

Dr. Robert Smith, a seismologist at Utah University, said the possibility of a stronger quake yet to come could not be ruled out, since two earthquakes occurred in the same general area in two days, with the second more intense than the first.

"We should be prepared for the worst," he said.

[Idaho Statesman; March 29, 1975]

UTAH, IDAHO AGAIN FEEL AFTERSHOCKS

LOGAN, Utah (AP)--More earth tremors were felt along the Utah-Idaho border Sunday in the aftershock of Thursday night's earthquake which jolted the Wasatch front.

Dr. Walter Arabasz, University of Utah Seismographic Station, said the aftershocks are continuing and are expected to continue for some time. He said this is normal following an earthquake.

The tremors felt Sunday registered an estimated 3 to 4 on the Richter scale, Arabasz said. Thursday's quake hit 6.3 on the Richter scale, making it the strongest earthquake in the continental United States since 1971.

Arabasz said there were four quakes Sunday morning which hit between 3 and 4 on the Richter scale.

Law enforcement officials said they had received no reports about more tremors or damage.

[Idaho Statesman; March 31, 1975]

IDAHOANS ADVISED ON QUAKE SURVIVAL

IDAHO FALLS (UPI)--Civil defense authorities, in the wake of Thursday's earthquake, are warning residents along the Wasatch Fault what to do if another quake hits.

Some 155 aftershocks have been recorded in the Malad area, the hardest-hit community in the quake, but only five of the aftershocks have measured three and four on the Richter scale at Ricks College in Rexburg.

The quake's epicenter was located in a desolate area. Geologists have said it was strong enough to have caused causalities if the tremor had hit a major town.

Civil defense authorities have advised residents of the area that the best thing to do in the event of an earthquake is to stay put. If indoors, they recommended getting into a corner of a room or under a table and staying away from glass and mirrors.

If outside, they advised staying away from high walls and trying to get under doorways where there is added structural strength.

[Idaho Statesman; April 2, 1975]

QUAKE EFFECT RECORDED HERE

An earthquake with the epicenter south of Malad City Thursday at 8:30 p.m. was recorded on two seismograph machines in East Idaho, a highly sensitive one at the Health Laboratory at the Idaho National Engineering Laboratory and another at Ricks College at Rexburg.

The Post-Register received a number of calls from people saying they felt slight tremors at about 8:30 p.m. Thursday.

The earthquake recalled the tragic one at Madison Valley northwest of Yellowstone Aug. 17-18, 1959, which shattered a mountain and caused a lake from Madison River. It resulted in 29 deaths, 22 of the bodies still buried under the mammoth rock and dirt dam. Three "before" quakes and more than 50 "after" quakes were recorded on the delicate seismic machines at Ricks College.

Edmund J. Williams in charge of the seismic machines, said the smaller "after" quakes are triggered by the large quake because of readjustments and pressure on the smaller faults. Williams said the smaller quakes registered between one and two on the Richter Scale, just barely detectable by humans.

Williams said the seismic machines at Ricks are geared to record small quakes. Williams said the quake detection needles were swinging back and forth six inches.

At the INEL, Dr. Adrian H. Dahl, chief of the Environment Scientific Branch, said his seismograph machine is set at such a sensitive level that the quake measurement went off the scale. He said some accelerometer machines placed at strategic points, including Taylor Mountain, Hamer, Monteview and Howe peak would estimate the Richter reading at

3, or at least below 4 as it tripped none of the devices at the INEL or perimeter. He said the machine registered at 4.9 on Richter Scale of an earthquake at 11:49 p.m. last

Wednesday. He added his machines are recording tremor aftershocks every few minutes. His machines are so sensitive they can register earthquakes as far as Japan and Alaska and even USSR nuclear blasts, Dr. Dahl said.

[Post-Register; March 28, 1975]

'EARTHQUAKE'--A REAL MOVING PICTURE

SALT LAKE CITY, Utah (AP)--Patrons at a movie theater in downtown Salt Lake City said they thought the trembling was only part of the movie they were watching: "Earthquake." Box office personnel said they knew it was real, however.

People throughout a 400-mile area around the Utah-Idaho border felt the effects of a Thursday evening earthquake which registered over 6 on the Richter Scale and was the strongest in the United States since 1971.

Mrs. Kenneth Wharton, wife of the Oneida County (Idaho) sheriff, said "some cuckoo clocks in Malad City that haven't worked for years have started up."

[Post-Register; March 28, 1975]

AFTERSHOCKS 'LITTLE LARGER'

SALT LAKE CITY (AP)--The strongest aftershock so far since Thursday night's major earthquake near the Utah-Idaho border was recorded at 7 a.m. today, the University of Utah seismology center reported.

The center had forecast that aftershocks would occur for days but center director Kenneth L. Cook said this morning's tremor was "a little larger than we had predicted."

He said the aftershock was felt in Salt Lake City about 80 miles south of the suspected epicenter of Thursday night's earthquake.

According to the seismology center, evidence indicated the epicenter of today's aftershock was within five miles of Thursday's earthquake, which had been pinpointed just north of the small community of Blue Creek near the border.

The Oneida County sheriff's office at Malad City, Idaho, where most of the damage occurred Thursday night, said it did not receive any reports of additional damage today. Cook said the aftershock was recorded at the university at 4.6 to 4.7 on the Richter scale, which was considerably less than the shock measured Thursday night. He said the exact reading of the main earthquake has not yet been determined but he said it may be less than the 6.3 reported earlier, possibly about 6.0.

That reading still would be considered a "major" earthquake capable of substantial damage in populated areas. However, Thursday's tremor occurred in a relatively remote area of Utah and Idaho.

Meanwhile, a University of Utah scientist who surveyed the area of the earthquake Friday said there appeared to be no breaks in the ground, although he said much of the area was snow covered.

Steve Bellon, an analyst for the university's earthquake center, said one scientist did find some breaks in the snow near the border but was unable to determine if there were fissures in the ground beneath it.

He said this morning's aftershock was strong enough to have toppled chimneys that may have been weakened by the main earthquake.

Thursday's earthquake was the strongest in the United States since a 1971 tremor in California killed 64 persons and caused millions of dollars of damage.

[Post-Register; March 29, 1975]

UTAH SCIENTISTS DOWNGRADE POWER OF EARTHQUAKE

TREMONTON, Utah (AP)--The University of Utah Seismology Center said Monday it downgraded an earthquake along the Utah-Idaho border last week from 6.3 to 6 on the Richter Scale.

The Richter Scale is a measure of ground motion as recorded on seismographs. An earthquake of 3.5 on the scale can cause slight damage in the local area; 4 can cause moderate damage; 5 considerable damage; 6 severe damage. A 7 reading is a major quake capable of widespread heavy damage; 8 is a great quake capable of tremendous damage.

The San Francisco earthquake of 1906 registered 8.25.

The University announcement came after geologists from the Geologic Survey toured the area near the epicenter. Officials said the downgrade resulted from a weekend study of their instruments.

At the scene Monday, officials reported seeing numerous ground fractures, one of them a mile long.

Bruce Kaliser of the Utah Geology and Mineral Survey, said the deep fractures "are an indication the valley floor subsided after the tremor. The fractures represent ground fracturing, but not necessarily ground faulting."

Center Director Kenneth Cook and Dr. Robert Smith said portable recording machines in the area four miles north of the Idaho border with Utah have recorded numerous aftershocks.

The Thursday earthquake was described as the strongest in the country since 1971. Only one minor injury was reported and damage reports were scattered.

[Post-Register; April 1, 1975]

QUAKE HITS MOUNTAIN AREA, DAMAGE SLIGHT

By Vandra Webb

An earthquake rocked a 500-mile area of Utah, southern Idaho and western Wyoming Thursday night, shaking buildings and rattling homes but causing little damage. The earthquake hit at 8:32 p.m. The trembling lasted from 10 to 15 seconds in downtown

Salt Lake City. No injuries were reported.

The earthquake registered 6.2 on the Richter Scale, said Dr. Robert Smith, University of Utah Seismograph Center. The 1906 San Francisco earthquake registered 8.6 on the Richter Scale. The Aug. 18, 1959 Hebgen Lake earthquake near West Yellowstone registered 7.1 on the scale.

The quake's epicenter was near the small community (population 35) of Blue Creek in Box Elder County near the Idaho border. A milder earthquake was felt Wednesday night. Its epicenter was pinpointed about 40 miles from Malad and measured 4 on the Richter Scale.

Unpredictability Noted

"While we have no way of predicting for sure whether another quake may occur, we can't rule out the possibility," Dr. Smith said.

He said this was particularly true since two earthquakes had occurred in the same general area in the past two days.

"We should be prepared for the worst," he said.

"Normally, quakes which occur in succession get smaller but in this case the reverse has occurred. We just have no way of telling for sure," he said.

Should another earthquake occur, Dr. Smith advised Utahns to stay clear of falling debris. "Get under a bed or table or stand in a doorway," he said. "In no case go outside or attempt to drive a car. If on the road, immediately pull over and stop."

Reports of the earthquake came from Burley, Idaho Falls, Pocatello and Malad, Rock Springs, Thane and Afton, Wyo., and from Tremonton and Logan in the north to Cedar City in the south in Utah.

View on Quake

"It didn't damage anything but it sure felt like an earthquake," said Ellis Mitchell, 1820 Berkely St. (2240 East).

Salt Lake City Commissioner Jennings Phillips Jr., 1525 Westmoreland Pl. (1300 South), said his chandelier and a chair began to move when the quake hit.

On the University of Utah campus a performance of the Utah Repertory Dance Theater was interrupted with demands from some patrons seated in the balcony for their money back.

They said the entire balcony shook.

In Ogden, all night classes were halted and all buildings, except for dormitories, were vacated at Weber State college.

No injuries or damage was reported in Weber County by the sheriff's office or Ogden Police.

Several older buildings were damaged in Tremonton which is about 20 miles southeast from Blue Creek. The damage involved falling plaster and cracks in walls.

In Malad, the Oneida County Sheriff's office said bookcases tipped over, light fixtures broke and small cracks appeared in some homes.

Felt Heavy Shock

"We felt a heavy shock," said Mary Matthews. "I mean it rocked things. Dishes fell out of cupboards. The lights blinked for a second."

Telephone service was reported interrupted in many Utah Communities. However, there was no damage to telephone lines, according to Kenneth O. Hill, public relations director, Mountain Bell.

"Our biggest problem has been locked exchanges," said Mr. Hill. "Too many people were calling at once to find out what was happening. They jammed switchboards."

A Highway Patrol dispatcher in Provo said the quake was felt there but reported no damage.

An Orem Police dispatcher said he did not feel the tremor but patrolmen said cars felt like they were shaken by the wind.

There appeared to be little damage in the Salt Lake area, according to Al Britton, director of Salt Lake County Emergency Services.

Checks for Leaks

As a precautionary measure, all reservoirs in the area are being checked for cracks and possible leaks, he said.

The Utah Highway Patrol reported its switchboard was swamped with calls from residents. "The State Office Building behind the Capitol really shook," a dispatcher said.

There was no damage reported.

A fire alarm malfunctioned at LDS Hospital immediately after the tremor but there were no other problems.

At Holy Cross Hospital a few telephone lines went out "briefly" but there were no other problems.

A few patients were shaken at St Mark's Hospital. University Hospital reported no problems.

Although officials reported receiving calls about the earthquake, no damage was reported in Millard, Juab, Tooele, Summit and Wasatch counties.

[Salt Lake Tribune; March 28, 1975]

U. CAST INTERPRETS 'THE PRICE' WELL--DESPITE QUAKE

By Nancy Funk

Gregory Solomon, the furniture dealer, had barely begun to examine the antiques in the Franz' attic when the stage of Pioneer Memorial Theatre shifted to the north by about two inches.

The chandeliers swayed and the audience began mumbling but the actors presenting Arthur Miller's "The Price" never missed a cue.

With the exception of a few people in the second balcony, Thursday night's opening theatergoers remained for the play's entirety in spite of the tremor felt throughout three states.

[Salt Lake Tribune; March 28, 1975]

EXPERTS ASSESS DAMAGE, RESULTS OF EARTH TREMOR

By George Raine

Westerners who were shaken Thursday night by an earthquake centered on the Idaho-Utah border, Friday counted damage--but more than that, blessings--in the wake of the heaviest U. S. earth disturbance in four years.

The bulk of the damage caused by the 8:32 p.m. quake was reported in Malad City, Idaho, as the tremor charged through a 200-mile-wide area of the central Rocky Mountains. There was only one minor injury.

Immediately Thursday night, the Utah State Emergency Operating Center was activated, and Idaho authorities acted, too. Then, Friday morning, no disaster declaration or assistance request appeared appropriate, Donald R. Spradling, executive director of the State Office of Emergency Services, told Gov. Calvin L. Rampton.

Send Crews to Site

Friday morning, the University of Utah and Gov. Rampton dispatched crews to the site of the epicenter to determine whether the quake had caused any fissures in the ground, or ruptures in any dam or reservoir.

The university study results will not be available until Saturday, but State Engineer I. Hansen said on returning Friday his crew had found no damage to water resources. By Utah National Guard helicopter and on-sight inspection, the crew, with Dan Lawrence, director of the State Division of Water Resources, blanketed earth-filled dams throughout the area at Blue Creek, Snowville, the Hyrum, Mantua and Porcupine dams, and the Utah Power & Light-owned concrete Cutler Dam and found no damage. Dams in Cache and Box Elder counties withstood the assault, they said.

There was one report from Idaho.

Finds Disturbance at Divide

Norman Jaussi, a Federal Aeronautics Administration official from Malad City, found a disturbance at the 6,800-foot level of the Malad-Holbrook Divide. He attributed it to the earthquake.

He found a snowdrift that had been interrupted--a 200-foot depression in length, and about 40 feet wide. Just north of it he located a crack in the snow running "hundreds of feet west and north." At the time--10 a.m.--drifting snow was covering the depression.

He found two other depressions in the snow he related to the larger ones. Snow there is from eight to 10 feet deep. The depressions are within one quarter mile of one another, and the area is about 13 miles west of Malad.

Travels Road Often

Mr. Jaussi said he travels the road practically daily to check navigation instruments. He said the remainder of his route remains smooth with blown snow.

That information was relayed to Dr. Kenneth L. Cook, director of the University of Utah Seismograph Station, which, incidentally is one of the foremost stations of its kind in the nation. Dr. Cook was its spokesman Friday, with other staff members at the epicenter seeking out any fissures which are probable with a quake of this measure.

He stressed that had the earthquake, which measured 6.3 on the Richter Scale, been centered in a densely populated area, death and tremendous property damage--not the easy earthquake talk preoccupying Westerners Friday--would have resulted. Fortunately, it was only talk, experts said.

Dr. Cook underlined the fact that the disturbance's epicenter was rooted in the empty, snowdrift-clogged Blue Springs Valley and not in a densely populated center.

That does not, he said, soften the concern of residents of the small communities who suffered some property damage, and although no definite reports are in, perhaps damage to their land.

Dr. Cook said, too, that perhaps Utahns haven't felt the last of the earthquake.

In the 15 hours that followed, approximately 100 aftershocks occurred, and he expects one or two of them had a 4-point Richter Scale reading. (Callers to The Tribune said they felt two--at 9:30 p.m. Thursday and 10 a.m. Friday.)

They will continue for the next several days, perhaps sharply, and then for weeks, much less in magnitude, if the earthquake-as-usual pattern continues, he said.

Follows Smaller Quake

The Thursday quake came a little more than 22 hours on the heels of a 4-point tremor which, like its bigger brother, shook people and property, on a smaller scale. Its center was also close to the border.

Both epicenters are close to Blue Creek (population 35), Box Elder County, very near the Welfare Farm of the Church of Jesus Christ of Latter-day Saints. The sensation of the larger quake was felt from Pocatello to the north, Evanston and slightly further to the east, Provo to the south and Wells, Nev., to the west.

Officers at the National Earthquake Information Center at Golden, Colo., confirmed that this was the heaviest earthquake in the United States since the 6.6 quake which rocked California's San Fernando Valley Feb. 9, 1971, killing 64 persons and creating \$1 billion in damage.

A geophysicist at the Golden facility, Waverly Person, said he did not think there would be another major quake in the area.

"I think we've had the main shock," he said.

Reports No Damage

Back in Utah, a northern Utah maintenance engineer for I-80, John Gunderson, reported no damage to the highway Friday.

But damage reports flowed from Malad City. Store front bricks and mortar littered sidewalks. Display windows shattered. Two chimneys tumbled. Dishes and canned goods tumbled to floors.

A girl at a Miss Malad rehearsal was cut on the leg when a scenery panel fell. Kenna Lee Kent, 14, a daughter of Mr. and Mrs. Robert Kent, was the tremor's lone victim.

President Gerald R. Ford's son, Jack, a Utah State University student, was speaking at an assembly at Box Elder High School. Secret Service agents rushed him from the stage as the building began to move . . . but the quake passed.

In Salt Lake County, there was one report of damage--a water main at 28th South and 30th East--which AI Brinton, director of the county's emergency services office, assumes was caused by the quake.

County dams holding back major reservoirs showed no damage, he said, while ones in more remote locales will be checked via snowmobile.

In Malad City, bricks fell from the home of W. D. Thorpe, and the fireplace bricks in Mrs. Dale Price's home collapsed. A bathroom sink fell off a wall in a bar at Samaria, Idaho, and an overhead diesel fuel tank owned by Platt Price of Samaria spilled.

Malad rancher Rex P. Waldron said contents of cupboard shelves and clothes closet shelves were emptied onto the floor.

In Snowville, Utah, Irma Sorenson, a waitress at Hickman's Cafe, said, "It scared us real bad. It just trembled for what seemed like hours. The groceries and canned goods were knocked off the shelves. We just closed up and went home."

At Hill Air Force Base, there was a "whiplash" at the 11-story aircraft control tower. Operators couldn't keep their balance and were evacuated for 15 minutes. There was no damage.

Portable seismographs from the U. of U. are now in canyons between Malad and Snowville, and while there are no definite reports of broken earth from underground rupturing rocks, an earthquake the size of Thursday's could produce fissures between six inches and a foot, said Steve Bellon, senior technician-analyst at the U. center. [Salt Lake Tribune; March 29, 1975]
EXPERT SAYS WE MUST LIVE WITH EARTHQUAKES Area Of Seismic Activity

By Jim Woolf

"Utah is in a zone of intense seismic activity. We have the same hazard potential as areas along the San Andreas Fault in California," says Dr. Kenneth L. Cook.

Dr. Cook is director of the Utah Seismograph Stations and a professor of geophysics at the University of Utah.

"We know we have had large earthquakes in the past and may again in the future. We shouldn't panic. All we can do is to live in and try to improve our environment," he said.

Before Pioneers

Dr. Cook says evidence of a large earthquake in the past includes a large displacement at the base of Little Cottonwood Canyon. There, a formerly smooth deposit of material left from a glacier has been sliced by a fault and one side has been dropped several feet. "This earthquake occurred about 200 years before the pioneers came into the valley. It reminds me of the movement during the Yellowstone earthquake. If all that movement occurred at once it may have been like the San Francisco earthquake of 1906 which killed 700 persons," Dr. Cook said.

The reason for the seismic activity along the Wasatch Front, running from Malad City, Idaho, to Levan, Juab County, is this is an area where two large sections of the earth's crust are pulling apart. This results in the valley floors dropping and the mountains tilting, explained Dr. Cook.

Seismic Gaps

One promising result of the current research has been the identification of "seismic gaps." These are areas where little or no movement has occurred over a long period of time. The scientists believe that the little earthquakes are beneficial because they gradually release stress before it is able to build up.

Two of these gaps are between Salt Lake City and Ogden; and Salt Lake City and Provo. "These areas seem more likely to have a large earthquake than other areas," said Dr. Cook, "but it doesn't necessarily meant it will be a destructive earthquake."

32 Seismometers

Earthquake research at the university has a budget of about \$250,000 annually and uses some \$3 million worth of equipment.

The earthquake monitoring program along the Wasatch Front, directed by Dr. Cook, uses 32 seismometers placed near the faults. A seismometer is a sensitive instrument placed in the ground that measures slight movements in the earth.

These send messages to the Mineral Sciences Building at the University of Utah campus where the signals are sorted, amplified and read out on a screen.

The whole process from the occurrence of an earthquake until it is recorded at the university takes about 12 minutes allowing up-to-date measurements of earth movement. Will we be able to predict earthquakes along the Wasatch Front?

"Earthquake prediction is a hope, not a promise. Some areas may never be predicted, some might," replied Dr. Cook.

One possible means of prediction being experimented with is monitoring the speed of seismic waves.

Dr. Cook said recent experiments have shown that before a major earthquake the seismic waves slow down because the rock deep below the surface develops cracks from the pressure.

These cracks then fill with water which speeds up the seismic waves and lubricates the fault--greatly increasing the chances of an earthquake.

Research on this is still in the preliminary stages, says Dr. Cook.

[Salt Lake Tribune; March 29, 1975]

QUAKE'S FEROCITY FOUND INTENSE IN REMOTE UTAH

By Charles Seldin

The wrath of the earthquake that Thursday night shook a four-state area appears greater than originally estimated, a Utah geologist said Saturday. Bruce Kaliser, of the Utah Geology and Mineral Survey, said he visited the area of the quake's epicenter--about 80 miles north of Salt Lake City--by four-wheel-drive vehicle on Friday. After hiking to what he determined to be the exact epicenter, Mr. Kaliser said he found abandoned homes completely knocked off their foundations.

Meanwhile, the strongest aftershock since Thursday night's major quake was recorded at 7:01 a.m. Saturday at the University of Utah Seismology Center.

Registers 4.6 on Scale

Steve Bellon, an analyst for the university's earthquake center, said the aftershock registered 4.6 on the Richter Scale and occurred within five miles of the original quake's epicenter.

The major quake, Mr. Bellon said, measured closer to 6.0 than the 6.3 originally recorded. It was the most severe in the United States since 1971, when a tremor killed 64 persons in California.

Mr. Kaliser said Saturday, "The physical evidence of earth movement in the area of the epicenter was far more intense than what was reported earlier."

Knocked Off Foundations

"We found a collapsed metal storage bin, and several homes had been rocked off their foundation. Most of the movement appeared to be in a north-south motion," he said.

The epicenter was near Blue Creek (population 35), Box Elder County, and just north of the Utah-Idaho border.

The country is virtually inaccessible because early spring snows and drifting have blocked roads. Most buildings in the area are used only in the summer and fall for dry farming, he said.

None Occupied

All were abandoned, Mr. Kaliser said.

He said damages resulting from an earthquake are not recorded from the Richter Scale. An earthquake's intensity, from the standpoint of damage to people or structures, is judged by the Modified Mercalli Intensity Scale.

He said the Utah-Idaho quake would have been rated VIII or IX on the Mercalli Scale. The damage scale uses Roman, rather than Arabic, numerals.

The Richter Scale is a measure of ground motion as recorded on seismographs: Every increase of one number means a tenfold increase in magnitude. Thus, a reading of 7.5 reflects an earthquake 10 times stronger than one of 6.5.

"If those homes had been occupied, there would certainly have been casualties. Everything on their shelves had been spilled, foundations were badly cracked and the buildings shifted on their foundations," Mr. Kaliser said.

The geologist said he found no large earth or snow slides but found "intensive ground cracking caused by the severe ground motion."

He said the movement was so strong that a 10,000-pound farm tractor stored in a barn moved about a foot to the north.

Mr. Kaliser said he could not estimate the monetary damage resulting from the earthquake.

Although there was intensive ground cracking, there were no fissures, he said. Fissures are usually of considerable length and depth and constitute a major restructuring of the earth.

Sensations from the quake were felt from Pocatello in the north, Evanston and slightly farther to the east, Richfield to the south and Wells, Nev., to the west.

The only known injury from the tremor was Kenna Lee Kent, 14, a daughter of Mr. and Mrs. Robert Kent, Malad City. The girl was cut on the leg when a scenery panel from a Miss Malad rehearsal fell on her.

In Malad City, the hardest hit town, several homes were damaged. Elsewhere, the effects were confined to "what might have been, rather than what was," according to officials at the seismograph station.

Of the epicenter site, Mr. Kaliser said, "If the weather had not prevented the rural homes from being occupied, the farm residents caught in the quake would have needed emergency help.

"They would have been thrown across the walls, some of which opened up enough to slide your arm through," the geologist added.

The university seismograph center had forecast that aftershocks would occur for days after Thursday's quake.

Dr. Kenneth L. Cook, center director, said an earthquake of 3.5 on the Richter Scale can cause slight damage in the local area; 4 can cause moderate damage; 5 considerable damage; 6 severe damage.

A 7 reading, Dr. Cook said, is a "major" quake capable of widespread, heavy damage. A quake rated 8 is capable of tremendous damage.

[Salt Lake Tribune; March 30, 1975]

DAN VALENTINE'S NOTHING SERIOUS

Monday Wash Line: The big talk in Utah this past weekend has been earthquake. The state was hit by a sizable tremor Thursday evening. Naturally, people became nervous.

Anytime the earth shifts, people become nervous.

But actually, in the earthquake record books, the United States has been better than lucky. Earthquakes in the United States have claimed only 1,500 lives since the founding of the nation--and 500 of the victims perished in the 1906 San Francisco disaster.

Actually, 1500 earthquake casualties in 200 years is not too many . . when you consider the earthquake that rocked Shenshi, China, in the year 1556 and killed 830,000.

Another Chinese earthquake in 1731 killed 100,000 souls in Peking.

And in 1908, an earthquake claimed 160,000 victims in Messina, Italy.

Actually, North America seems remarkably free of earthquakes compared to the rest of the world. The Orient is earthquake prone, as is South America . . . Asia is earthquake prone, and Europe has had more than its share.

Of course, the earthquake death totals back several hundred years ago were staggering compared to today's because of the lack of medicines and medical care and sanitation know-how.

Still, earthquakes are scary.

When the ground starts to dance an eerie dance, the soul knows sudden fear.

One story going around town in the aftermath of the Thursday night earthquake is that a customer--a little worse for wear--was entering the state liquor store on West 3rd South. Suddenly, the floor quivered. The customer stopped, turned a little white and muttered to himself, "I guess I've had too much already." And he left without buying a thing. And one Salt Lake mother, so I hear, was sitting in the living room Thursday night when the lights began to shake. She shouted to her children upstairs: "Hey, you kids, stop dancing so hard!"

And that's the end of the earthquake items.

[Salt Lake Tribune; March 31, 1975]

FAULT LINES FOUND IN QUAKE Scientists Note Aftershocks

TREMONTON, Utah (AP)--After several days of searching remote farmland along the Utah-Idaho border, a Utah farmer and his son apparently have found two fault lines from last Thursday's earthquake, says a Utah state geologist.

The earthquake, described as the strongest in the United States since 1971, rumbled through a sparsely populated region of the West and caused only one minor injury and only scattered property damage.

Utah state geologist Bruce Kaliser said Sunday it appeared that two fault lines, one about a mile long, had been discovered by Earl Fuhriman and his 28-year-old son, Sidney, roughly four miles north of the Idaho border.

Heavy Snowfall

He said the fault lines were found Saturday and Sunday a short distance north of where searchers quit looking Friday. The area had been virtually inaccessible last week because of heavy snowfall and drifting.

"You can see the mark in the ground but the soil is such that it has run back together," said the elder Fuhriman in a telephone interview.

Fuhriman is a dryland farmer in the basin, known as the Pocatello Valley, where the apparent fault lines were found. He lives in Tremonton during the winter.

The basin, about 80 miles northwest of Salt Lake City, is not inhabited during winter months but about three dozen farmers have property they use there in the summer and fall.

Broken Glass

"We could see one crack in the snow three-quarters to one inch wide. It looked just like a piece of broken glass in the frozen snow," Fuhriman said. "We could see where it was heaved up in little chunks.

"In a place or two we could detect a little upward movement, but it looks like there was upheaval and then the ground settled back down," Mr. Fuhriman said.

He was accompanied by Dr. Kenneth L. Cook, director of Utah Seismographic Stations, who said he thinks the largest fracture marks the epicenter of the earthquake.

Kaliser said the longest fracture ran north and south through the basin, while the second was about 200 feet in length running across a farm and under a farm building.

He said geologists would visit the area Monday to determine if the breaks were the actual earthquake faults or just phenomena related to the quake.

"It does not appear there was a big displacement as scientists had expected," said Kaliser. He said geologists had expected a quake of the magnitude of Thursday's would have produced a vertical break in the ground of possibly one foot.

Kaliser surveyed an area near the faults Friday but quit looking before they were located. The geologist said damaged, but unoccupied, farm buildings near the epicenter of the quake showed that the tremor would have caused casualties and widespread destruction if the area had been populated.

Shocks Continue

Aftershocks from Thursday's earthquake continued to jolt the Wasatch Front. After examining the fault and damage done by the earthquake, Dr. Cook estimated the earthquake had a Richter magnitude of six or slightly lower. Original estimates put it at 6.3. He said the tremor was caused by the dropping of the valley floor along its eastern edge. [Salt Lake Tribune; March 31, 1975]

READERS REQUESTED TO FILL OUT EARTHQUAKE QUESTIONNAIRE

Dr. Kenneth L. Cook, professor of geophysics and director of the University of Utah Seismograph stations, has requested readers of The Salt Lake Tribune to fill out and mail the above questionnaire concerning the March 27 earthquake.

The Pocatello Valley earthquake, with its epicenter southeast of Snowville, Box Elder County, was felt in the three states of Utah, Idaho and Wyoming on March 27 at 8:32 p.m. Damage was relatively heavy in Malad City and near the epicenter.

Many aftershocks also were felt in the area near the Utah-Idaho state line.

[Salt Lake Tribune; April 2, 1975]

SAVANT SAYS 'CLAYS' A PERIL IN QUAKES

Water-seeped clays underlying most of the valleys along the Wasatch Front could turn to liquid in a major earthquake, says Dr. Robert B. Smith.

"This means that where there is a strong shock to the quick-clay you suddenly have got a condition where the ground gives way to a soil that is essentially liquid. If you have weight pushing down, the structures push into it," he said.

Dr. Smith is a professor of geophysics at the University of Utah.

Location of Clays

He says mapping of quick-clay sediments by university geologists indicate they underly much of the domestic and industrial areas, as well as highways, railroads and airports. Dr. Smith said another hazard is that a quake could trigger large snow and rock avalanches in the mountains east of Salt Lake City. The recent quake centered in Pocatello Valley released three "substantial" snow avalanches east of there, he said. "We the researchers have to take the premise that we should prepare for the worst and I'm trying to point out the consequences of a large earthquake on the Wasatch Fault," the earthquake expert said.

Seismic Gaps

He has conducted studies covering the distribution of earthquakes along the Wasatch Front during the past 14 years.

His research has identified the existence of two "seismic gaps," areas of low seismic activity. The first extends from Brigham City to Bountiful and the second from Holladay to Payson.

The March 28 earthquake which rocked the Intermountain area about 8:35 p.m. measured 5.75 on the Richter scale, said Dr. Kenneth L. Cook, professor of geophysics at the University of Utah and director of the U. seismograph station.

He said seismographs in Logan and Dugway, Tooele County, were off scale at the time of the quake and the station at the College of Eastern Utah, Price, measured 5.75. [Salt Lake Tribune; April 4, 1975]

QUAKE REGION STUDIES SHOW GREAT THREAT

RESTON, Va. (AP)--A geophysicist who studied the March 27 earthquake centered near the Utah-Idaho border has painted a grim picture of potential destruction by future tremors. "The area has produced at least six strong earthquakes of magnitude six or larger this century and will undoubtedly produce more in the future," Dr. Al Rogers of the U.S. Geological Survey was quoted as saying. "We can expect future earthquakes to be more destructive, however, because more and more buildings and people are moving into areas that are potentially unsafe because of earthquake-related hazards."

In a news release Monday at the Geological Survey's national center at Reston, Dr. Rogers also was quoted as saying parts of the Wasatch Fault between Ogden, Utah, and Salt Lake City have not moved in several decades. This was a matter of considerable concern because the fault may be storing stresses which could eventually result in a major earthquake, he said.

Stretches 160 Miles

The Wasatch Fault stretches some 160 miles from Levan, in central Utah, to just north of Brigham City, a small city in the northern part of the state.

The March 27 quake was centered in a sparsely populated area. Only one minor injury was reported and damage was comparatively light, even though the tremor's severity was regarded as sufficient to produce heavy destruction.

The release said the severity was 6.3 on the Richter Scale, although University of Utah scientists revised their estimate downward to 6.

The release said Geological Survey scientists found that except for cracks in frozen snow and mud, there was no evidence the quake caused ground breakage, rockslides, dammed streams or damaged reservoirs or irrigation canals.

Could Be Concealed

Quakes of this magnitude frequently produce such ground damage, and snow may conceal such evidence, which could help to pinpoint the particular fault which produced the quake, the release said.

Because of the severity and large number of aftershocks, a network of seismometers was deployed around the area of Malad City, Idaho, where damage was heaviest, the release said.

"A special effort will be made to locate the aftershocks precisely and thus give us a better understanding of the area's future earthquake potential as well as its geologic and tectonic structure," Rogers was quoted as saying.

"At the same time, detailed studies of the aftershocks can help determine the area's particular response to ground shaking and other earthquake forces and thus give us some idea of the risks and hazards associated with future earthquakes."

The release said, "The Wasatch fault and Cache Valley faults are likely to generate large earthquakes in the future, and many of these large earthquakes include Salt Lake City, Provo, Orem, Springville, Ogden and Brigham City.

[Salt Lake Tribune; April 8, 1975]

OLD SCHOOL DAMAGED BY QUAKE?

Structural damage to Sumner School, 636-300 East,--apparently caused by the earthquake which shook the region 10 days ago--has forced closure of three areas, Salt Lake City officials said Tuesday.

Building and Housing Services Director Craig E. Peterson said the front stairway, auditorium and basement kitchen were ordered closed as a "precautionary" measure. He said cracks in the areas have been marked and there's been no movement since they were discovered. However, the action was done for safety, he said.

Earlier in the day, housing inspector John Troskie told city commissioners the damage was noticed shortly after the quake. He requested scientists study the building for safety problems and the city hire a consulting engineer to see if it were safe for the public. **[Salt Lake Tribune; April 9, 1975]**

EARTH JOLT BYPASSED DRILL BORE Projects Okay

Brigham City--The earthquake on March 27 "did not effect the bore" eight miles north of here according to the vice president of Geothermal Kinetics of Phoenix, Ariz.

Ward Austin, who oversaw the drilling to more than two miles in the earth, reported the epicenter was too distant to affect the bore.

Mr. Austin said the University of Utah has proposed a program to the National Science Foundation for the development of the site.

Geothermal and the Utah Power and Light Co. expended about \$1 million in the joint venture that began in February, 1974, and ceased in June, the same year.

The Geophysics Department at the University of Utah has reviewed the records of the drilling operations and Mr. Austin reported Geothermal is interested in further developing the site.

Funds coming from a federal government agency would be directed toward the research of energy.

[Salt Lake Tribune; April 10, 1975]

ONEIDA EVALUATES QUAKE LOSS \$959,357 In Damage

MALAD CITY, Idaho (UPI)--The March 27 earthquake and aftershocks along the Idaho-Utah border caused an estimated \$959,357 damage to homes, businesses and other structures in Oneida County, Mayor Glen B. Williams said Thursday.

H. V. Peden, chairman of the Oneida Chapter, American Red Cross, reported that about 80 percent of the homes in Oneida County and most other structures were checked during a survey of damage by 55 Red Cross volunteers.

Damage Mounts

As aftershocks continued more than a week after the earthquake which registered 6.3 on the Richter scale, structural damage intensified, especially in buildings of older masonry construction.

Damage to 520 homes was estimated at \$653,600 with seven of the homes considered destroyed. Two of the 26 businesses damaged also were classified as destroyed although they are still occupied. There was \$2,500 damage to inventories.

Farm buildings such as granaries, shops and other outbuildings sustained an estimated \$91,000 damage.

Peden said the amount of damage could go even higher when the effects of the tremors on irrigation deep wells has been determined. Some farmers in the area have reported roily waters in domestic wells since the earthquake and damage to the irrigation wells would push the total much higher.

Start in May

In normal years, irrigation wells are not put into operation until May.

Damage to one well already has been verified. The Smith Dairy Farm at Pleasantview, six miles southwest of Malad, reported that a flowing well has decreased its output since the quake.

The well had provided water for a young dairy herd and without the water supply, the dairymen are considering moving the stock to another field where the animals will at least have creek water.

Malad High School gymnasium, of school buildings in the area, was the most severely damaged. Private engineers who surveyed the building the day after the quake said the walls at the southwest corner where the gym joins the main structure should be replaced. Many chimneys in the area toppled or were cracked by the quake. In some cases the mortar was shaken from between the bricks.

Of churches in the community, the worst damage was sustained at the Pleasantview Church of Jesus Christ of Latter-Day Saints Ward Chapel where a band of plaster dislodged at the top of the masonry walls.

In addition, the front entryway to the LDS Bishop's Warehouse on Bannock Street was dislodged from the main part of the building. The building now must be entered through the rear door.

The United Presbyterian Church, a 90-year-old structure, did not appear to sustain damage beyond the breaking of two windows.

The Oneida County Courthouse, U.S. Post Office, and the Oneida Hospital all escaped serious damage.

[Salt Lake Tribune; April 11, 1975]