

This book is dedicated to . . .

James Gulledge, 17, Route 1, Marion. Died while visiting at Shawnee Village.

Ferne Kobler, 67, 1427 Shawnee Drive, Marion. Died in her apartment at Shawnee Village.

Zelma Latham, 79, 905 E. Boulevard, Marion. Died at her home.

Lynn Moore, 18, 701 E. Monroe, Herrin. Died while visiting at Shawnee Village.

Pauline Pearson, 63, 1405 Shawnee Drive, Marion. Died in her apartment at Shawnee Village.

Mae E. Rader, 79, 1427 Shawnee Drive, Marion. Died in her apartment at Shawnee Village.

James Bryan Simmons, 11, Route 1, Johnston City. Died while shopping at P.N. Hirsch Store.

Helen White, 62, 1425 Shawnee Drive, Marion. Died in her apartment at Shawnee Village.

Leonna White, 96, 1425 Shawnee Drive, Marion. Died in her apartment in Shawnee Village.

Effie Jane Wilson, 59, 109 N. Seventh St., Marion. Died while working at P.N. Hirsch store.

A special thanks to Richard Darby, owner of Richard Darby Public Relations Agency, for the stories, aerial photos and many of the ground photos that appear in this book. Mr. Darby was editor of The Marion Daily Republican 1962-71. From 1971 to date, he and his wife Nancy have operated the public relations and advertising agency. Mr. Darby worked on special assignment with news staff members of The Marion Daily Republican and Sam Hancok of United Press International to bring the news and photos to readers of The Marion Daily Republican. The newspaper staff members covering the tornado were Mike Van Dorn, Jim Kirkpatrick, Cindy Lee and Stan Meyer. Also on special assignment were Karen Book and Bob Blanchard. The efforts of all these people are reflected in this book.

COVER PHOTO: McKinley Elementary School was hit hard by the tornado that ripped through Marion at 3:16, Saturday, May 29.

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Richard and Nancy Darby

Southern Illinoisan Staff Photo

TORNADO

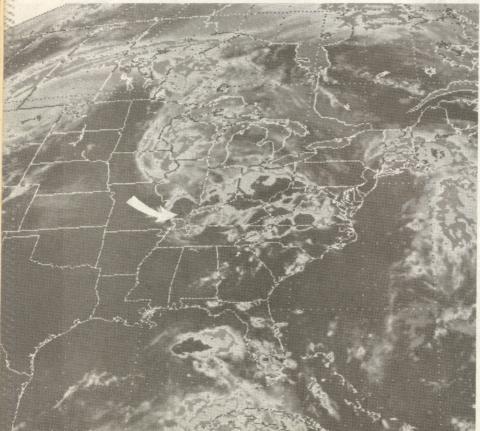
THE MARION STORY TOLD IN PICTURES AND WORDS

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Marion Distributor

The Marion Daily Republican





Satellite photos show weather disturbances at the approximate time that the tornado was on the ground at Marion, III., May 29, 1982. The photo at top shows high, hazy clouds that extend far into the atmosphere as moisture is hurtled upward by the tremendous force generated by the storm. The arrow indicates the approximate location of Marion and multiple storm areas are barely visible as darker spots indicating concentrated moisture and/or the dimpled tops of funnel formations. Photo at left is infrared type which shows energy concentration as darker areas. Note the huge dark area over southern Illinois with solid black dot (shown by arrow) which pinpoints intensive concentration of energy generated by many funnel clouds. Many of the funnel clouds remained aloft and a few touched the ground.

Photo Courtesy of National Oceanic & Atmospheric Administration Satellite Field Services Station, Kansas City, Missouri



Southern Illinoisan Staff Photo

Twisters touched down west of town at several spots before the big one reached down and slammed into Marion.

Marion disaster: May 29, 1982, 3:16 p.m.

Slow, calculating, destructive. The tornado seemed to have a mind of its own. It started on the west edge of Williamson County, lifted over Carterville, and then touched down east of Carterville, on the north side of Illinois Route 13.

It stayed on the north side, sometimes just a few yards from the major highway, knocked out the Airport Racquetball Club on the northwest corner of the intersection of Route 13 and 148, and crossed 148 onto the Williamson County Airport property, where it demolished a small instrument landing building.

But midway on the airport property the tornado, still traveling east, crossed Route 13, twisting down the lights for the airport entrance as it went. Now on the south side of Route 13, the tornado destroyed houses and mobile homes. Three dead horses could be seen in a field by the airport.

Still traveling east, the twister, as if it had a mind for finding the places it would do most damage, struck Miller's Do-It-Yourself Home Center and continued toward Marion,



Disaster (Cont.)

traveling only 10 to 15 miles per hour, according to an estimate from Tom Redickas, coordinator of the Williamson County Emergency Services and Disaster Agency.

As it came into the main part of Marion, its first opportunity was the Regal 8 Inn, Marion Truck Plaza and Marion Ford-Mercury.

Eying Marion Plaza Shopping Center and Town & Country Village Shopping Center, the twister chewed up retail store after store.

Stores of all kinds were severely damaged or completely destroyed. People's Bank was

(Continued)

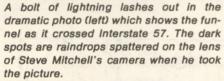


Photo Courtesy of The Marion Daily Republican

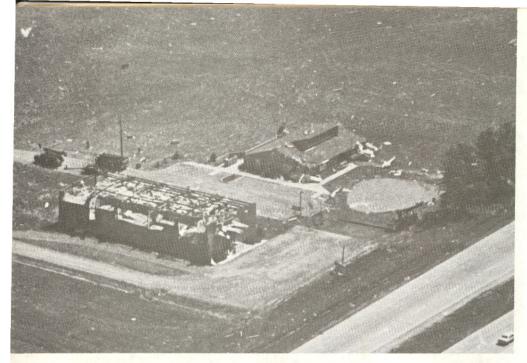


Photo Courtesy of The Marion Daily Republican

Steve Mitchell of Route 3, Marion, took this picture from near the Pepsi Bottling plant which shows the funnel as it was in the Williamson County Airport area.

Marion's Industrial park, located on the west edge of the city of 15,000, was one of the first places struck in the city. It is the location of Doric Vault Co. and Terrace Fence Co. At upper left is Lowe's Lumber yard, which had some damage.





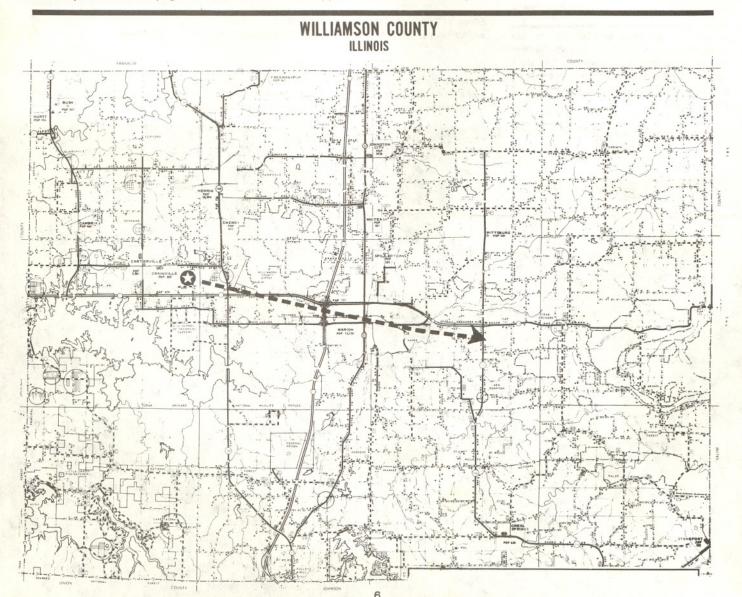
The Airport Racquetball Club, just west of Williamson County Airport, was heavily damaged, but only an instrument landing system building was damaged at the airport. Close up of the Racquetball Club on page 7 shows how the tornado ripped off sides of the building.

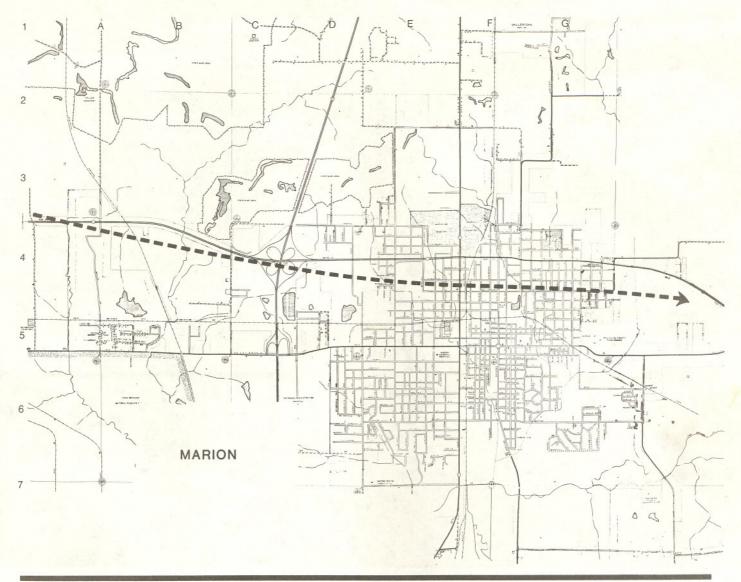
Disaster (Cont.)

totally ruined, and King City Federal Savings & Loan was hit hard.

By this time hundreds, perhaps thousands of Marion residents, some of whom had never seen a tornado, were watching it approach. They had heard the weather alert on local radio. It was advancing so slowly the sight-seers felt they had plenty of time to watch and then head for the basement at the last minute.

One elderly resident, hearing the radio and storm-warning siren at City Hall but not yet seeing the twister, kept repeating, "Tornadoes don't hit Marion. They never have."





Then he saw debris swirling through the air about 14 blocks away. Within seconds he caught a good glimpse of the destructive force and headed for the basement. He was safe. But scores of others weren't.

Leaving the two shopping centers, the twister leveled more housing and made its way to the third major shopping center in Marion, Westmore Plaza and the major apartment complex, Shawnee Village, both which were wiped out.

From the shopping center, the twister cut its way through the business and residential area, moving a little more south to make its way down Boulevard. The businesses at the intersection of Boulevard and Court and those at





Regal 8 Inn on the left and Marion Truck Plaza on the right were among the first businesses hit. A close-up of Regal 8 Inn destruction is shown below.



Disaster (Cont.)

Boulevard and Fair were among the losses.

It finally lifted and left Williamson County at Route 166 east of Marion. In all, it had touched down along 14 miles of the county. Sunday, May 30, 1982, a day after the twister hit, Illinois Governor James Thompson described the damage as "incredible."

Ten people were dead. A total of 136 were treated and/or released at the hospital. Many others were hurt but did not seek treatment.

Redickas said Energy, Herrin and Marion had eight to 10 minutes of "lead time" before the twister hit at 3:16 p.m. Saturday, May 30.



Marion Truck got the clean-up job started. (Photo above and top right.)

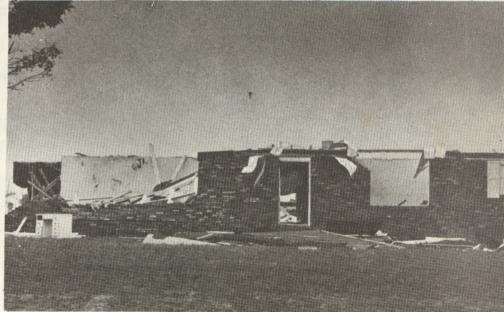
A tornado watch covering Williamson County was issued at 1:30 p.m. to extend until 7 p.m.

As the twister approached from the northwest, "it looked like it would skirt by, but it didn't," said Redickas. Officials expected it to hit the western half of the county. But there was a cool front extending from northwest to southeast, with cells on the line moving east, developing the tornado that hit Marion.

Marion Memorial Hospital admitted 27 victims, Marion V.A. Hospital 8 and Herrin Hospital 4. Nearly a hundred others were treated and released.

Shock and disbelief were initial reactions. And it took several days for the reality to become evident to the area.





Airport area homes were hard hit on the western edge of the city.





With cars stacked like a salvage yard, Marion Ford-Mercury was a disaster. Immediately in front of it is Mel-O-Creme Donuts, and Taco Gringo at right. Photos below show destruction on the car lot and inside the showroom. John Crouch, salesman, looks over the destruction done inside the showroom. Pictures on right hand page reveal how the tornado transformed the new car lot into "over" used vehicles.













Workers remove one of the seven bodies found in Shawnee Village. Three other persons died in the tornado, and 161 were treated and/or treated and released at three hospitals.

A time of terror, destruction . . . and death

McKinley School was declared a total loss.



Ten dead, 161 injured, property damage in excess of \$100 million. It took days after the May 29, 1982, Marion, Il., tornado disaster to determine the immediate loss, but the full impact would not come for weeks and perhaps months.

The Southern Illinois city of 15,000 suffered its worst disaster ever. Fifty-three businesses hit—about half of them totally destroyed or sustaining major damage—scores homeless and about 850 without jobs due to the loss of the retail establishments.

The Saturday afternoon twister hit Marion at 3:16 p.m., sending shock throughout the area known as "Little Egypt." Gov. James R. Thompson described the damage as "incredible." A swath 300 to 400 yards wide was chewed through the center of town, destroying a housing complex, two shopping centers, a truck plaza, motel, businesses and homes.

In addition to the loss of revenue from jobs, several hundred thousand dollars in sales tax revenue could be lost if businesses were unable to open back up quickly, Mayor Robert L. Butler pointed out.

Within minutes after the disaster, emergency personnel and vehicles began arriving at the scenes. Later, others would come from as far as 100 miles away.

Scores of workers were at Shawnee Village apartment complex, digging through the rubble to uncover victims, a few of them dead, many of them injured. Some of the uninjured residents were in shock. Many were directing rescuers to areas believed to be covering victims.

One middle-aged man kept repeating, "My God, my daughter's in there." Another was saying "God bless you, God bless you" to rescuers as they removed him from the rubble.

Initially, emergency vehicles were having difficulty entering and leaving the damaged areas because of the heavy flow of traffic from sight-seers. Later, however, traffic would be restricted to persons needing to travel, and no one would be able to visit the scene without a pass.

Several persons said the area looked like a war zone. Many pointed out that they did not believe a tornado could hit Marion, because they knew of none ever striking in the past.

Sheriff Jerald Kobler, Police Chief L.B. Hunter, Mayor Robert Butler and State's Atty. Randy Patchett were busy coordinating efforts. Working with State Sen. Gene Johns they were also successful in getting the Illinois National Guard into the area.

Power was off throughout Marion, and emergency generators were being brought in from many sources, some as far north as Centralia.

Marion Junior High School served as a temporary morgue, and Coroner Jim Wilson and other authorities were notifying next-of-kin.

Thanks to cooperation from volunteer law enforcement and emergency services personnel numbering perhaps 500, operations were being conducted as smoothly as possible under the tragic circumstances, including



An elderly woman is prepared for transportation in a Carterville ambulance. Volunteers from a 100-mile radius helped.



A young lady is escorted from the demolished Shawnee Village apartments.

With rubble higher than their heads, rescue workers wade through the Shawnee Village ruins.





A woman wrings her hands as rescue workers work to remove her husband from the rubble of their tornado-demolished home in Shawnee Apartments behind a Marion shopping center Saturday. The man later was pulled free with the comment, "God bless you" to the rescuers.

Terror (Cont.)

the fact that many of the local personnel in some way or another were victims. Sheriff Kobler's aunt, Ferne Kobler, was killed by the twister when it hit the apartment complex.

Mayor Butler was working with his right forearm in a bandage. The mayor had been traveling on Carbon Street when he saw the tornado coming. He drove through the parking lot in an attempt to avoid the twister, but his car was slammed against a pole, and another auto came to rest on top of his. His car destroyed, Butler crawled through a window. "It was no contest," he said.

Regina Swafford, wife of assistant Police Chief Ron Swafford, suffered a head injury, lacerations and bruises. She was visiting friends at Shawnee Apartments.

Officials and photographers who viewed the path of destruction from airplanes and



A wide view of Shawnee Village shortly after the storm hit is shown. Some of the citizens were friends and relatives of residents of the apartment complex. Others were sight-seers. Shortly afterward the area was sealed off to all but authorized persons.

helicopters were the first to receive the total impact.

Besides dwellings and stores, scores of cars and other property had been destroyed or badly damaged. Some cars were upside down, some were atop other vehicles, and one landed upside down on People's Bank.

Churches served as emergency shelters for the homeless.

"I think we were very lucky," said Gov. Thompson at a news conference. "The loss of life and the number of injuries were grievous, but could have been much worse had the storm occurred later when more people were home and could not have been alerted."

Thompson, who declared Williamson County a disaster area, said he would appeal for federal assistance.

Tom Redickas, coordinator of the Williamson County Emergency Services and Disaster Agency, said it would be almost impossible to give a



Several persons died when the tornado struck the P. N. Hirsch Department Store in the Town & Country Shopping Center.



Stores in the center of Town & Country Village Shopping Center were destroyed.



A crane was used to remove rubble from a drainage ditch well into the night, seeking possible victims.

Lowell's Jewelers and Distributors, just west of two shopping centers, sustained major damage.

Terror (Cont.)

complete list of towns which sent equipment and/or people to Marion.

The volunteers included police, firemen, emergency services personnel, medical personnel, Red Cross, Salvation Army, Public Health Department, Environmental Protection Agency, coal mines, Civil Air Patrol, contractors, private pilots, Scott Air Force Base, churches and more. There were about 150 National Guardsmen.

The Guard troops, coming from West Frankfort and Mt. Vernon armories, were called to Marion about 8 p.m. Saturday, May 29, following an order from Gov. Thompson.

The troops were located at the various disaster sites throughout the city, and worked in shifts of 35 to 40 persons.

Central Illinois Public Service had restored power to 80 percent of Marion by 6:30 p.m. Sunday, May 30. Fifteen crews, some of them coming from as far north as Macomb, worked throughout the night.

Accompanying Gov. Thompson on the survey of the disaster





In a joint effort, firemen and rescue workers lift a wall to determine whether there are any victims under it.

area were several other state officials, including Erie Jones, director of the Illinois Emergency Services and Disaster Agency, and Sen. Johns.

On Tuesday morning, June 1, Mayor Butler said an application was put together through the Federal Emergency Management Agency and was being finalized in Chicago.

Butler also said that a disaster relief fund had been set up through the city treasurer's office, and persons wanting to contribute were welcome. The money would be distributed and used where needed.

Marion Ministerial Alliance was busy finding clothing, cooking utensils, places to live, etc., for victims.

Weather hampered cleanup efforts. A heavy rainfall drenched Marion Sunday afternoon and on Memorial Day afternoon severe thunderstorms, lightning and winds gusting to 65 miles per hour temporarily stopped efforts by volunteers and homeless residents attempting to salvage what was left.



An apartment building wall is lifted from a drainage ditch (extending from lower left of photo) where rescue workers feared some bodies might be covered.



Electrical crews began restoring power lost on Stockton Street.



Destruction in the vicinity of the Boulevard and Logan intersection can be seen in this aerial. Sherlock Holmes' home is in center of photo, with an apartment complex to the left of it.

Terror (Cont.)

Workers feared that the high winds would down walls barely left standing at Shawnee Village—a seven-acre low-and middle-income housing project. Many cleanup chores were abandoned to be resumed the next day.

ESDA said that in the early days following the tornado most homeless residents were living with relatives or in shelters set up by the Red Cross.

A Chicago geophysical scientist said he estimated the tornado winds reached up to 250 miles per hour at the height of the debacle.

Despite block after block of

rubble to be searched, officials were able to determine by Monday that all of the people reported missing after the tornado had turned up safe.

State Police brought specially trained dogs to the site to sniff out any victims. The search turned up none.

Dennis L. Ryll, Marion M.D., was at his office on West Main Street as the tornado approached. "You have to see it first-hand to appreciate it," Dr. Ryll said. Later he would be among 15 to 20 other doctors and scores of nurses at Marion Memorial Hospital treating the injured. He also helped remove some of the injured from a drainage ditch behind the apartments.

The Red Cross was asking for donations of money to help its relief efforts in Marion, estimating the need for \$200,000 to \$300,000. Donations can be sent to: St. Louis Bi-State Chapter, American Red Cross, 4050 Lindell, St. Louis, Mo., 63108, Attn. M. Mooshie.

More than 200 students and school personnel who have used McKinley School, on North Court, will be in some other facilities next fall. The twister almost completely removed the top floor of the structure. Loss to the building apparently was total. Jefferson School also was damaged, but it will be repaired in time for school next fall. Jefferson received roof damage and window breakage.





Laura Caldwell searches through the ruins of her home. Hearing the tornado warning on radio, she looked outside and saw it coming. Mrs. Caldwell then went back into the house and held onto a chair. She said she thought the chair was going to be pulled from her. "God help me," I said. "And he did."



Typical of the destruction of homes in Marion were those along North Market and Boulevard Streets.

Homes on North Market Street were heavily damaged. Boulevard and Stockton were also hard hit.



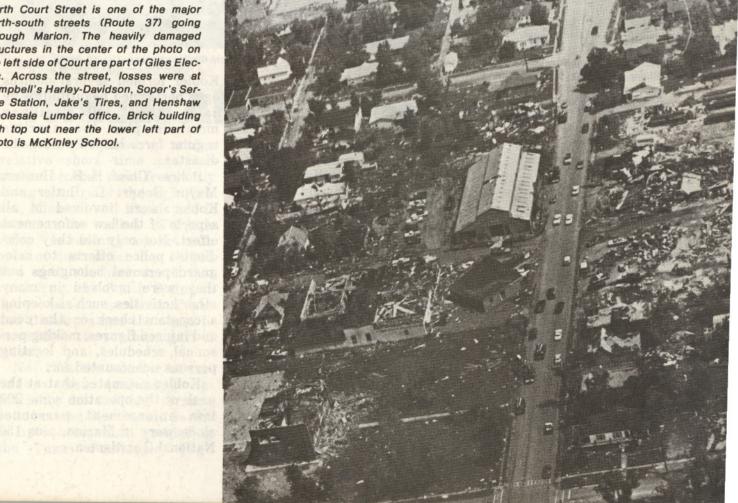


This damage along Boulevard made it appear to be a war zone near the center of the photo.





North Court Street is one of the major north-south streets (Route 37) going through Marion. The heavily damaged structures in the center of the photo on the left side of Court are part of Giles Electric. Across the street, losses were at Campbell's Harley-Davidson, Soper's Service Station, Jake's Tires, and Henshaw Wholesale Lumber office. Brick building with top out near the lower left part of photo is McKinley School.





Sheriff Jerald Kobler, at Town & Country Village Shopping Center, had high praise for all persons working after the disaster, including several hundred volunteers.

"So much help came, we probably will never have a complete list," said Sheriff Jerald Kobler of Williamson County. "Take a map and draw a radius from Centralia to Paducah, and you have who came to help."

"Our first priority was to remove the dead and injured from the scene," the sheriff said. "After that initial effort, we had the major job of coordinating security and volunteers. A major turning point was when the Illinois National Guard arrived at dusk" on Saturday, May 29, the day of Marion's worst disaster, the tornado killing 10 persons.

Kobler said that although the task of sealing off the destruction area was complicated, it was accomplished with only two incidents of looting, and those two persons were arrested.

The Sheriff's Auxiliary which Kobler formed several months ago "performed beautifully," he said. About 20 auxiliary members plus the sheriff's regular force helped during the disaster.

Police Chief L.B. Hunter, Mayor Robert L. Butler and Kobler were involved in all aspects of the law enforcement effort. Not only did they coordinate police efforts to safeguard personal belongings but they were involved in many other activities, such as keeping a constant check on the dead and injured figures, making personnel schedules, and locating persons unaccounted for.

Kobler estimated that at the peak of the operation some 200 law enforcement personnel alone were in Marion, plus 150 National Guardsmen.

Volunteer Aid & Professional Help Came by Hundreds



Stockton Street, looking east from North Market, shows typical damage. In foreground electrical wires and street lights are seen. Upper right is the home of Mrs. John Giles, Sr.

Tornado Alley . . . The Twister Trail

In the 1800's and up until a relative short time ago tornadoes occured more frequently along a corridor through Kansas, Missouri and Illinois and it came to be called "Tornado Alley." In recent years the main area of destruction has shifted to a more southerly track that runs from the South Plains in Texas, across northern Texas and Oklahoma and then east to more often the southern part of Illinois.

Not that the number of tornadoes has decreased appreciably in the old tornado belt, but the devastation seems to have been much greater in the Texas Panhandle, High Plains and other parts of that region.

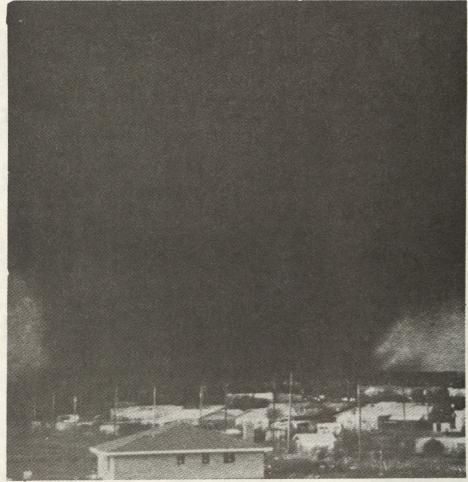
The violent twisting windstorms occur more frequently in the Middle Western United States than anywhere else in the world with middle and southern U.S.S.R. being the second most affected area.

It may come as something of a surprise to many persons, but since 1916, when the Weather Bureau started keeping records on such things, tornadoes have killed approximately 12,000 persons.

Many times that number have been injured and the property damage is almost incalculable, soaring into the billions as the cost of reconstruction has gone up.

The worst tornado in recorded history came down in Western Missouri and ripped across the state then on through Illinois and Indiana on March 18, 1925. Its path was 220 miles long and the massive funnel was up to a mile wide at most points. It traveled at a speed of 60 miles per hour and killed 689 people in all with 606 in Illinois alone, of which, 234 died in Murpysboro, Ill

There have been several twisters since which have killed more than a hundred persons, usually in large cities where



The massive funnel that struck Wichita Falls, Texas on April 10th, 1979 cut a wide path of destruction because the "mother cloud" was relatively near the ground.

Marion's homes were smashed, ripped and thrown everywhere. The bared basement (below) yawns open to the skies above.



Tornado Alley (Cont.)

stores, schools, apartment projects or such have been hit.

The tornado season, when the massive funnel clouds are most numerous and the most severe, is ripe in the south between March 15 and June 15 with May usually the peak month. However, tornadoes are common in other areas from April through June and even later in the far north. In fact, some of the most devastating have struck in the late winter months.

This year 351 twisters counted in May by the National Severe Storms Forecast Center broke the 1965 record of 274, according to Fred Ostby, director of the center.

The tornadoes thru May this year have killed at least 47 people, including the 10 who died when the twister cut through Marion, Ill.

The worst day this year was April 2, when 90 tornadoes were reported in Texas, Missouri, Arkansas and Mississippi. The day ended with 28 people dead, more than the total of 24 deaths recorded in all of 1981.

The death toll included four in Mississippi, three in Oklahoma, three in Kansas, three in Missouri, 11 in Texas, 13 in Arkansas and the 10 added from Marion, Ill.

Most of the tornadoes this year were reported in Texas, Oklahoma, Kansas, Missouri, Illinois and Indiana.

It is not unusual for from 500 to 1,500 tornadoes to strike in various parts of the U.S. during any given year.

They can range in size from a few yards up to a mile and a quarter wide. They can travel extremely long distance on the ground without rising, but on occasion do a hop, skip and jump like series of maneuvers.

As the warning system has been perfected, some weather officials and psychologists worry that many persons will go around with a morbid fear of the storms. However, the odds of being hit by a tornado are many, many times less than that of being struck by an auto in one's lifetime.

There are two major tornado belts in the U.S.

The first runs from deep in West and North Texas north through Oklahoma, Kansas, Missouri, Illinois, Ohio, Nebraska, Iowa and east across the Iowa Valley. The second, "Dixie Alley", runs from East Texas across Arkansas, northern Louisiana, Mississippi, Alabama and Georgia.

There have been as many as 100 tornadoes in these areas in 24 hour periods. Nature truly can be a killer as well as a life giver.

Tornadoes are particulary destructive to automobiles, mobile homes and small wooden frame homes.





A pickup flees from the Paris funnel (April 2, 1982) which was similar to Marion's storm in both size and direction of travel.







Fred Ridlen and his grandson, Danny, stand amid the rubble left at 1000 N. Monroe, where Ridlen's son, Listone, lives. Listone, his wife and daughter lay in the hallway during the tornado, while the house rolled over onto his new fishing boat. Listone's daughter was hospitalized for a possible broken back. Listone is an employee of CIPS (electric company). The company truck at his home had the windows crushed out, while his suburban and boat were also ruined.



Hundreds of cars were damaged or destroyed. Crushed under debris, rolled or thrown in all directions, struck by flying objects, glass broken out, flipped over and even tossed atop buildings.









Afterwards . . . Repair, Reopen or Rebuild!

"Most businesses will rebuild, many of them as soon as possible. Some will even expand." So reported Doraine Fletcher, executive vice president of Marion Area Chamber of Commerce, whose office was one of the centers of intense activity after the Marion, Ill., tornado.

People's Bank was open the next day after the Memorial Day holiday, using a mobile bank unit and two travel units for office space. Bank President Gerald Feezor pointed out that bank information is on computers. He said that a building

will be constructed on the same site.

King City Federal Savings & Loan was to resume operations after repairs to the facility. Tom Kirby said Village Squire clothing store and Village Cobbler shoe store would be temporarily relocated at the site of the former Robert Hall store west of Marion.

Marion Kroger store was able to reopen June 1 after plywood was used to enclose the north part of the building, where a wall was blown away. Medicare-Glaser quickly reopened its pharmacy section and planned to rebuild.

By June 2, Fletcher could report that Town & Country Village Shopping Center would be completely rebuilt.

Fletcher's office was serving as a clearinghouse for businesses seeking temporary quarters until their present stores could be replaced. Other major firms outside Town & Country with plans to reopen include Wal-Mart, Lowell's Jewelers & Distributors, Marion Ford-Mercury and Marion Truck Plaza.

The Chamber official also reported that Shawnee Village would be rebuilt.

It would cost about \$575,000 for the cleanup effort, he said. This would include cleaning up the residential areas, tree removal, clearing the commercial areas and cleanup at Shawnee Village.

Of 53 businesses hit by the storm, Fletcher said, 17 were totally destroyed and 10 had major damage. Of the homes struck, 102 were destroyed, 60 had major damage, and hundreds more sustained comparative "minor" damage.



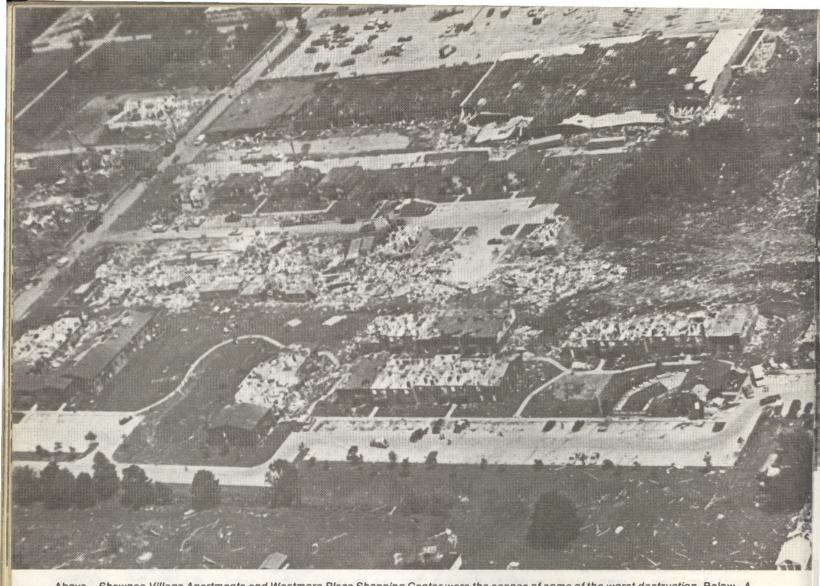
The Kroger store's north wall was missing, but the supermarket quickly resumed business. (And below) With one wall standing, Fisher's Children's Wears as it appeared after the twister struck. Plans are to rebuild in the same location.





Most of the damage and destroyed areas of Marion Plaza Shopping Center and Town & Country Shopping Center can be seen in this aerial photo. Town & Country was the hardest hit of the two. Photo below shows closeups of shops in the middle of Town & Country Village Shopping Center, where total losses occurred.





Above - Shawnee Village Apartments and Westmore Plaza Shopping Center were the scenes of some of the worst destruction. Below - A view of Shawnee Village, toward the northeast. Many of Marion's 1000 homeless resided in the apartment complex, which will be rebuilt.





The middle of Shawnee Village apartment complex was perhaps the hardest hit place in Marion. The same kind of debris seen in the foreground (photo below) was found in various other sections of Marion. In center of photo one stretcher is removing a body, while another is going to the rubble where the search for other victims continues.

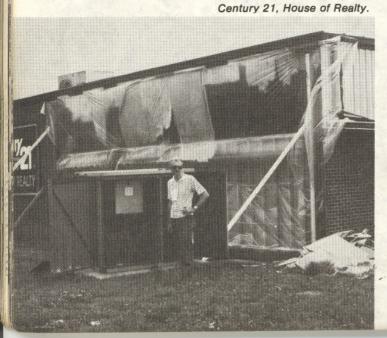




Foodliner in Town & Country.



Business or politics as usual.



Amoco station at Regal 8 Inn.



Guardsmen patrol at Ben Franklin.

Long John Silvers.







Private homes in the area near Shawnee Village were in the middle of the worst.







Marion's worst disaster ever brought volunteers from throughout the area. Here, they are looking through the P. N. Hirsch and neighboring store sites for victims.

Tornado Studies - Where to be or not to be



ALTHOUGH THE death-dealing winds of tornadoes, small, "maxi", and in between, have been ravaging both rural and populated areas of the U.S. for a century or more, it is only in the last few years that a serious study has been made on how to protect people and property against them.

In some instance, by "building for tornadoes," and in others by changing long-held beliefs about which part of a house or building is the safest.

It was as a result of intensive study of the massive Lubbock tornado May 11, 1970—some said there were as many as three or four funnels "marching in tandem" across the city—that an all-out effort was made to build homes and businesses to meet the danger of the 200 and 300-mile per hour

winds in the vortex of the funnels.

As a result of the "block buster" which left one fourth of Lubbock in a shambles, a team of professors at Texas Tech started seeking ways and means of making buildings as immune as possible to the winds.

The result, in conjunction with other researchers over the Midwest and even as far away as Australia, has been a radically changed approach on tornado protection.

Some of the researchers claim that results—in much lower casualties—already have resulted from the studies, partially funded by the federal government and the schools and researchers themselves.

Before the studies began, there was a popular belief, supported by the Weather Bureau to a point, that "the safest spot" in a house or building "is in the southwest corner," usually the area from which the tornado approaches.

However, studies of the damage in the Lubbock tornado, and others since, have shown conclusively that the central portion of a house—usually a hall or bathroom—was by far safer than the southwest corner or any other area of the home.

Similar conclusions were drawn on businesses and industrial buildings, including improved wall and roof construction, anchoring of foundations and such to withstand extreme "stress and pull"

"stress and pull."

One of the researchers, Dr. Ernst (cq) W. Kiesling, of the Texas Tech Engineering faculty and one of the tornado study team members, has completed several homes in Lubbock, Texas, on which he incorporated the latest safety factors.

One of the features is reinforcing a bathroom or closet in one part of the house as a shelter area into a near tornado proof shelter above ground. The room has reinforced flooring, with strong steel tie rods which link it to concrete and steel reinforced walls and ceiling, then covered with normal wood paneling or such. Added cost for the "tornado room" runs from \$400 on up to several hundred, depending on size and strength.

The National Weather Service says such "new knowledge" of how tornadoes damage and destroy buildings can now be applied to make schools and other structures—as well as

homes - safer.

In the NWS sponsored study, a team of professors says that twisters acquire their deadliness from the mixture of revolving winds and a forward motion.

Because most tornadoes ap-







Above - Working into the night at Town & Country Shopping Center digging out and cleaning up. Below - A trailer was squashed by being slammed into the ground.

Studies (Cont.)

proach from the southwest, the researchers say the most extreme blast will come from that direction. As a result, schoolrooms on upper floors and facing south and west usually will be hardest hit. Such areas should be the first evacuated as a storm approaches, they warn.

The safest places in schools with no basements normally will be in the interior corridors on the lowest floors opening to the east and north. The researchers also suggest taking shelter on the lowest floor and under the ceiling with the shortest roof span.

Large auditoriums, gymnasiums and the like should be avoided, they said, because the winds have a tendency either to push the walls out or lift the roof, later letting the structure fall downward, thus posing a grave danger to anyone under it.

Previously, it was believed that the effect of the low pressure eye of a tornado was greater than that of the wind itself—that when the eye passed over a structure it had a tendency to "explode" the air



trapped in the building, pushing the walls outward and the roof upward.

On the contrary, studies in-

dicate otherwise.

The investigation shows walls and windows on the south and west were most often pushed in, not out, while a north wall sometimes, but rarely, would fall outward.

It was indicated that the wind force of a fast-moving tornado might be 100 miles or more an hour stronger on the side that is increased by the forward portion of the storm, than on the opposite side of the tornado—thus the first blow often doing the most destructive damage.

The researchers listed the major effects of peak tornado winds, in order of importance as:

•The disintegrating pressure of the wind against the walls, windows and doors;

•The devastating effect of missiles propelled by the wind;

 The collapse of high portions of buildings such as chimneys into lower parts which would otherwise suffer little damage;

•And the explosive pressure differential when air pressure inside the building is momentarily higher than outside.





Top right - Jerry and Judy Miller and their two children pressed themselves against the only remaining basement wall while the remainder of the house blew away. Center right - Assistance crews decide on a plan of action. Bottom right - Many homes and businesses on Court Street were ripped apart.





Debris was scattered across the park areas.

Safety Tips . . .

In the past five years, there have been 824 tornadoes reported in Texas. No other state has come close.

Several of them have caused death and havoc in both urban and rural regions.

Most of the twister activity has been in the Panhandle, South Plains and the Northwestern and Northeastern parts of Texas. The "Tornado Belt" or "Tornado Alley" seems to have shifted slightly to the south in recent years, some observers argue.

As a result, those sections of the state just mentioned now fall in the "frequent" category where the swirling winds may strike in the Spring and Summer, although they have been known to drop down in the Winter and Fall.

Because of the frequency of such storms, the Texas Insurance Advisory Association has added its own safety tips on preparing for a possible tornado.

Among them are these suggestions:

• Know how to spot a tornado. Tornadoes are preceded by such weather as heavy thunderstorms, with lightning and strong winds, heavy rain and hail. A tornado may make a roaring noise similar to a locomotive. And a dark, spinning col-

umn or funnel cloud, often drops to the ground just ahead of a wall cloud of heavy rain or hail.

- Know the difference between a tornado watch, which indicates conditions are right for a tornado, and a tornado warning which is issued by the Weather Service when a funnel could have been spotted. The tornado warning means that persons in the expected path should take shelter immediately.
- If time permits, seek shelter from a tornado in a cellar or other underground structure that, when possible, will have an air outlet to help equalize pressure. A basement is the best place for shelter in a home. Otherwise, a hallway, closet or bathroom preferably near the center of the house will do.
- At all costs, avoid being in an automobile during a tornado. Even a ditch or culvert is better than an auto.
- Since most deaths caused by tornadoes result from flying debris, curling up to protect the head and chest areas, with some sort of mattress or other protective material, is advisable.
- Avoid auditoriums, gymnasiums and other structures with wide, free-span roofs. Avoid wires and nails when walking in an area hit by such storms.



Above - The town area was scattered with debris. Below - The 900 to 1100 blocks of Court Street are shown as they appeared from the air.





Marion's newest bank, People's Bank of Marion, was destroyed, but the bank was able to open up after the Memorial Day holidays, using mobile facilities.





Olie Musgrave, vice president of People's Bank (center) searches through what was once his office. Below - The bank's drive-in facilities took on a new look.







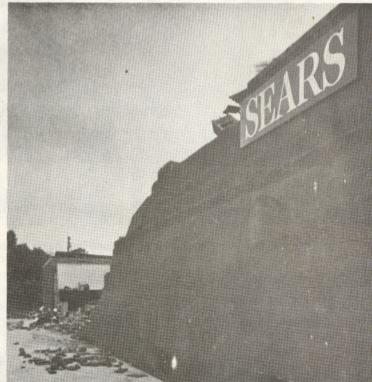






Above - King City sign disappeared. An overturned truck trailer is shown in the foreground. Right - Sears Home Improvements Center had a quick remodeling job in the wake of the tornado. Below - Thomas Wimberly of Radio Shack dons gloves to begin digging out debris.









Employees and their relatives helped gather materials inside People's Bank. Below - A car landed upside down atop People's Bank of Marion.







A gas tank from five blocks away rolled over vehicles and ended up partially on the hood of a Mustang in Stanford Street.

Formation theories vary

THE FORECAST of a tornado, in specific terms, is still not the exact science Weather Service officials would like.

But, it is coming closer each year.

So close in fact that hundreds of lives are being saved by timely warnings and improved safety precautions.

Much of the science of Tornado Forecasts has come about in the last 10 to 15 years.

Actually, the man generally credited with having as much to do with tornado forecasts as anyone had a first row seat for one of the most devastating ever to hit an American City—the Tuesday, May 6, 1975 storm which struck Omaha, Neb.

He was Col. Robert C. Miller. Miller, who was living in Bellevue, an Omaha suburb, and was from the Air Force, was working as a civilian meterologist at the Military Weather Warning Center at Offutt Air Base.

Miller, according to The Omaha World-Herald, was one of the pioneers in the tornado forecast business, helping formulate many of the factors and "signs" which now serve as guideposts in determining the possibility of a twister in a given area.

It was in 1948 while Miller was stationed at Tinker Air Force Base, Oklahoma City, that he and another military meterologist, Maj. E.J. Fawbush, made the first scientific forecast of a tornado.

Before that "first" some 32 years ago, the feeling among many in the business was that any forecast of one of the whirling storms could prove as disastrous as the storm itself, by causing panic among the populace.

After a tornado caused heavy damage to Tinker AFB March 20, 1948, the base commander asked the meterologists "to look into the possibility of maybe forecasting this type of storm."

"We looked into several past cases and found seven or eight that looked similar in surface and upper air features," Miller said. "We then made up a set of

(Continued)



A worker rushes a 2x4 to help prop fallen walls, enabling a trapped and injured resident to be removed at Shawnee Village.

A 56 x 14 trailer was moved 11/2 blocks and was demolished. Terry Craig stands in the midst of the trailer that was in his backyard.



Theories (Cont.)

rules, never expecting to really use them."

As fate would have it, only five days after the March 20 blow at Tinker, conditions that fit all their "signs" prevailed again.

With encouragement from their commanding officer, the two weathermen issued a tornado forecast, convinced that by the next morning they would be the laughing stock of the Oklahoma City area.

However, the tornado struck, the panic did not develop among the populace, damage and injuries were held to a minimum—and a new era in weather forecasts was born.

Four years later, it was standard procedure for all U.S. Weather Bureaus, later designated National Weather Service offices, to issue tornado forecasts.

In the intervening years, the process has been refined and developed into a fine science, with Weather Service officials now able to "call the shots" to an amazing degree.

Also, improved use of radar and the "doppler," which measures the speed inside a tornado as well as its forward progress, has brought the profession to even a higher degree of accuracy.

In the first 27 years through the Omaha tornado, Miller said he probably issued 2,000 tornado forecasts. Many forecasts are easy "because the storms have all the earmarks of barn burners," he said.

Miller at the time joined other Weathermen in debunking one myth about tornadoes. It is that usually there is a period of "calm" or stillness just before a tornado strikes, even if there has been rain and hail and wind.

(Continued)

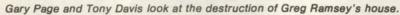


Court Street scenes.





The home of Mr. and Mrs. Henry Burress, 910 N. Market was severely damaged. He is a Marion City Commissioner.





Theories (Cont.)

This is not always true, he noted, since wind and turbulence may be pouring into the core of the storm system breeding the tornado. Too, he noted, just because a tornado has passed does not mean additional danger still does not lurk.

In the May 11, 1970 Lubbock Killer Tornado for instance, as many as three funnels, marching at times in tandem and other times one behind the other seemed to have hit the city. Actually, heavy wind damage was caused in some areas of Lubbock after the first main blow struck.

But, one rule of thumb does apply. If the storm clouds have a "greenish-black" look and the "goopy" or muggy air hangs heavy over an area, the possibility of further weather trouble exists. That's when the tornado forecasters are called upon to do their stuff.





Town & Country Village Shopping Center damage was among the worst.











Damage cost figures will be extremely high because of extensive damage done to such business areas as Wal Mart Shoping Center shown on this page. Most tornadoes do the heaviest damage in residential areas since they comprise the major area of a city. The Marion tornado was different, however, in that it travelled along a highway where most businesses are concentrated, before moving into a more residential area. Most businesses began immediate plans for rebuilding.







Gray Plaza Motel suffered damage to rooms and the surrounding area.



Irwin Typewriter Exchange, across from Giles Electric.



Entrance to Lowell's.

North end of Town & Country Shopping Center was still in operable condition, though damaged.











Stockton Street home damage.













Court Street area.

A Diary of Tornadoes

WEATHER SCIENTISTS know tornadoes exist—they come out of the sky and at times are deadly. But, that's about where the unanimity of opinion ends.

There is a basic difference of opinion on how a tornado forms before it hits the ground. A Texas A&M University meteorologist has thrown a startling new premise into this ring of controversy. Dr. Phanindra Mohan Das blames rain and hail forces for generating tor-

nadoes.

His theory has raised eyebrows across the scientific community. Some say he may be correct, others view it with skepticism.

"There are scientists who want to ignore the possibility that rain and hail play a definite role in tornado formations," Dr. Das declared. "But, falling rain and hail do trigger a tornado.

"Rain or hail falls, dragging upper air with it. In the process, it evacuates the air aloft. Air then rushes into fill this space," he explained. "The in-rushing motion tightens the whirling motion of a rotating cloud. Pressure inside this whirl is still low, and it helps draw upward the unstable atmosphere below.

"Energy is released into this upward-moving air," Das said. "It intensifies the whirling motion, forming the tornado."

The surface energy cannot be ignored, Das said, because energy is stored in the humidity



The business areas of Marion were hit hard by the tornado. 53 business were hit by the storm, 17 totally destroyed and 10 had major damage. But most planned to rebuild, and for some, to even expand.



Tornado (Cont.)

close to the ground. The key is the downward and upward currents, and pressure, caused by the rain, hail or both.

"Many scientists agree with us that energy is tapped. But our efforts to model and simulate a full-blown tornado have not been totally successful.

"We have, however, seen a funnel form," Das said.

If the Texas A&M weather scientist can prove his theory, weathermen will be able to improve tornado forecasting.

Today, the prediction of tornadoes is based on statistics, mainly because knowledge of actual tornado formation conditions clearly defined.

Weathermen begin by estimating a statistical chance that tornado conditions are possible. Sometimes, the tornadoes develop before proper warnings can be given.

"The advantage of our research is that it is completely atmosphere oriented," Das said, "while most others are restricted by limitations imposed by laboratory conditions.

"I am thoroughly convinced we are on the right track," Das declared.

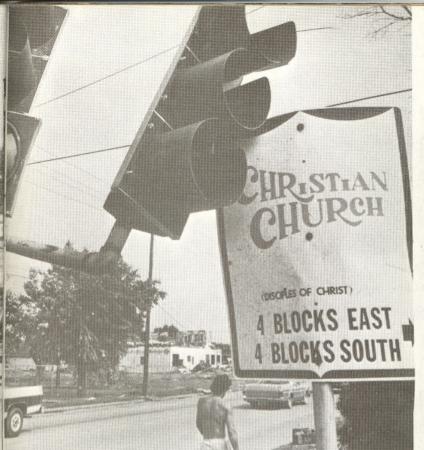
"There is the fact rain and often hail precede or follow a tornado. I just can't ignore this association," he said.

Das' research used mathematical equations stored in a series of computer programs. He said tornado research in the past has involved two different scientific paths. One is speculative—people try to recreate what has happened—and the other is based on laboratory modeling with fluids and air.

"Scientists in the past have formed vortexes in the laboratory using fluids or air, and have shown some similarities between the funnels formed in nature.

"However, the laboratory models do not represent actual atmospheric conditions," Das said.

There may be some truth in models, because they deal with basic physics. But the formation of an individual tornado in the atmosphere is different, Das believes, even though it may appear similar to laboratory funnels.





Top left - Signs and traffic lights were mangled, as shown at the intersection of Boulevard and Court streets. Top Right - Boatright Real Estate began clean-up tasks after the tornado. Center Right - Bricks, poles and debris were shuffled behind Giles Electric on Court Street. Humor prevailed through the traumatic times. A portion of a wall left standing at Jake's Tire Company was room enough to leave a message.









Boulevard Street homes.





Homes everywhere in the path suffered. Officials estimated that as many as 1,000 persons were left homeless.







Inside or outside, hundreds of cars sustained millions of dollars in damages.









George Aingrando with Giles Electric for 41 years cleans up, while temporary plywood is nailed into place





The Industrial Park west of Marion was in the path of destruction.

Shock, despair, . . . then rebuilding

After the shock came the sharing. After despair, there was hope. And even as debris was being hauled away truck load by truck load, remodeling and rebuilding had already begun. This was Marion, Il., victim of a tragic tornado-a week later.

"The level of cooperation has been tremendous," said Barbara Pinzka, coordinator of information for the Red Cross disaster headquarters and operations center in Marion. "The outpouring of help has been heartwarming, and people have been working incredible hours."

Seventy-eight families had applied for assistance, which includes food, clothing, medical assistance, relocation expenses

and home repairs.

The Red Cross said that 750 families had suffered one type of damage or another. Forty percent of them had completely lost their homes, according to Pin-

The Rev. James Bryant, pastor of First Baptist Church, reported that "Everybody has been working together." His church was the center of collections of clothing. "We are overstocked already," he said.

Two large U-Haul trucks full of clothing collected at the shopping center in Mt. Vernon came in. A van full of clothing came from Metropolis. First, Second, and Third Baptist, Alderstate United Methodist, First Presbyterian, and Zion United Church of Christ were acting as collection points for clothing and other items for the victims.

The churches and other groups were working in cooperation with the Red Cross.

A week after the tornado almost to the hour, the Red Cross reported it had served its 20,000th meal.

Ms. Pinzka said that Harlan Keel, a doughnut-maker from Knoxville, Tenn., set up facilities and has been making doughnuts all week. "He's given away 80 to 90 dozen."

Marion Pepsi-Cola Bottling Co. had distributed products it bottles all week, as had Royal Crown and other companies.

Richard Stewart of Effingham donated 100 pounds of fresh gulf coast shrimp to the disaster relief kitchen and Dave Lattan of Prairie Farms, Carbondale, donated the use of a refrigerated semi-trailer.

EDS Federal Corp was donating 12 portable radios to Sheriff Jerald Kobler to help his men cover the disaster, and Crab Orchard & Egyptian Railroad, a Marion shortline railroad, offered "piggyback" trailers for use in storing property exposed to the elements until permanent quarters could be found.

A shipment of toys was expected from a Catholic church relief organization.

The Marion Daily Republican offered free classified ad space to victims.

Marion Optometrist Paul R. Boyt, like many others in the city, had a dual role. As captain of the Sheriff's Auxiliary, he and other Auxiliary Deputies worked with little sleep the first three days after the tornado. Later, he was examining victims and prescribing glasses.

The Red Cross had received more than \$7,000 in contributions for tornado victims. Most checks were for \$20 or \$25, but one retired Green Bay, Wis., couple on Social Security sent a check for \$50 with a letter saying, "We're not rich, but we want to share something with those who need it more than we do."

The Red Cross announced that contributions could be (Continued)



Homes near the airport were severely hit as the tornado made its way into town.



A newly opened clinic near the airport suffered damage.





A Mobile Communication Center was set up. Below - Red Cross units were set up to aid storm victims.



Below - The Salvation Army set up an Emergency and Disaster Unit to assist residents.



Rebuilding (Cont.)

made to the donor's local chapter or mailed to: American Red Cross, Southern Illinois Tornado, 205 E. Main, Marion, Ill., 62959.

Glen Smith, spokesman for Central Illinois Public Service Co., said only about 400 customers in the Marion area were without electrical service seven days later. He said there had been storms causing more widespread damage to CIPS facilities but the May 29 tornado apparently caused the most concentrated damage CIPS ever has experienced to its facilities.

State Sen. Gene Johns of Marion reported that State Treasurer Jerome Cosentino was preparing to make available \$10 million low interest loans to aid in rebuilding Marion. Johns and a representative of Cosentino's office were meeting with six Marion lending institutions about distributing the funds, which would be available for both commercial and consumer loans. The funds would be made available to area banks and sav-

(Continued)

ings and loan associations, offered with reduced interest rates.

Marion School System announced that McKinley School would have to be torn down. The students would be assigned to Marion Junior High School and Lincoln Elementary School. Unit Supt. A.C. Storme, said the 70-year-old building would be condemned by the Illinois Capitol Development Board. The twister demolished the third floor and roof.

City Treasurer Ron Joyner said, "Everybody's been super." He was referring to the disaster fund set up through his office. In the first four days, \$6,500 had been contributed.

Employees of Wolohan Lumber Co., who had won \$500 in a sales contest, chose to donate the money to the disaster fund rather than go through with plans to attend a professional baseball game. The company also gave \$500.

There were \$1,000 donations

Below - Clean up behind the Command Post and next to Goodyear



Below - The Pepsi plant offered drinks to clean up crews.





63

Rebuilding (Cont.)

from The Bank of Marion, Bank of Egypt and Medicare-Glaser Drugs. Britt Airways, which had recently begun serving Williamson County Airport, contributed \$1,500.

St. Joseph's Catholic Church established a relief fund with a goal of \$3,000.

First Christian Church (Disciples of Christ) of Marion planned a special memorial service for all the victims.

Business and government leaders in Marion were preparing for a trip to Charles City, Iowa, a city which had recovered from a tornado and in gratitude has provided expense-paid trips for a dozen people to learn how to best deal with the situation.

"Sure we've had our lumps," said Doraine Fletcher, executive vice president of Greater Marion Chamber of Commerce. "But the attitude of our people—the spirit of cooperation—has been just terrific. We'll be back. We'll be back—bigger than ever."

Fletcher was encouraged by a meeting of 73 business owners, officials from lending institutions, and city and county government officials. He estimated that 95 percent of the businesses, including all the major ones, would be back. Some would expand.

On Saturday, June 6, President Reagan approved Gov. James R. Thompson's request for federal disaster assistance and designated Williamson County a "Major Disaster" area.

Mayor Robert L. Butler was pleased with "tremendous cooperation" from neighboring towns.

It was estimated that 1,400 persons would seek assistance of one type or another.



Sgt. Ellis stands in front of the Ben Franklin Store to safeguard the area.



Norman Childress has mobile communication set up in front of Lowell's Discount Store. Below - Military guards are on duty to guard against looters.











