

= Hurricane Audrey =

Hurricane Audrey was an extremely destructive tropical cyclone which primarily impacted areas of the South Central United States in June 1957 . The first named storm and hurricane of the annual hurricane season , it first formed on June 25 , 1957 from a tropical wave which moved into the Bay of Campeche , developing so quickly that it was never recorded at tropical depression status . Situated within favorable conditions for tropical development , Audrey quickly strengthened , reaching hurricane status just a few hours after being classified as a tropical cyclone . Moving generally northwards , it continued to strengthen as it approached the United States Gulf Coast . On June 27 , the hurricane reached peak sustained winds of 145 mph ( 230 km / h ) , making it a major hurricane . At the time , Audrey had a minimum barometric pressure of 945 mbar ( hPa ; 27 @. @ 91 inHg ) . The hurricane made landfall at the same intensity between the mouth of the Sabine River and Cameron , Louisiana later that day , causing unprecedented destruction across the region . Once inland , Audrey rapidly weakened and turned extratropical over Louisiana on June 28 , before fully dissipating on June 29 .

Prior to making landfall , Audrey severely disrupted offshore drilling operations in the Gulf of Mexico . Damages from offshore oil facilities alone was estimated at \$ 16 million . Audrey caused much of its destruction near the border between Texas and Louisiana upon its first and only landfall . The hurricane 's strong winds resulted in widespread property and infrastructural damage . Power outages also resulted from the strong winds . However , as typical with most landfalling tropical cyclones , most of the destruction at the coast was the result of the hurricane 's strong storm surge , which was amplified by Audrey 's rapid deepening just prior to landfall . The hurricane 's storm surge was reported to have peaked as high as 12 ft ( 3 @. @ 7 m ) , helping to inundate coastal areas . Damage from the surge alone extended 25 mi ( 40 km ) inland . The rough seas killed nine people offshore after capsizing the boat they were in . Further inland in Louisiana , the storm spawned two tornadoes , causing additional damage . The hurricane also dropped heavy rainfall , peaking at 10 @. @ 63 in ( 270 mm ) near Basile , Louisiana . In Louisiana and Texas , where Audrey first impacted , damages totaled \$ 128 million .

After moving inland and transitioning into an extratropical cyclone , Audrey caused additional damage across the interior United States . The storm produced 23 tornadoes across Mississippi and Alabama , causing \$ 600 @, @ 000 in losses and killing two people . As it moved towards the northeast , moisture associated with the extratropical remnants of Audrey intersected with a weather front over the Midwestern United States , producing record rainfall that peaked at 10 @. @ 20 in ( 259 @. @ 08 mm ) in Paris , Illinois . The resultant flooding resulted in ten fatalities . Elsewhere in the United States , the storm brought strong winds , causing additional damage . Further north in Canada , 15 people were killed in Ontario and Quebec . Strong winds and torrential rainfall disrupted transportation services . In Quebec , ten people were killed in the Montreal area , making Audrey the deadliest hurricane to strike the Canadian province in recorded history . The storm was also considered the worst storm to strike Quebec in at least 20 years . In the United States , Audrey killed at least 416 people , the majority of which were in Cameron Parish Louisiana , though the final death total may never be known . Damage totaled \$ 147 million in the country , at the time the fifth @- @ costliest hurricane recorded in the US since 1900 . The name Audrey was later retired from usage as an identifier for an Atlantic hurricane .

= = Meteorological history = =

Between June 20 and 25 , 1957 , an ill @- @ defined tropical wave moved across the Caribbean Sea , over the Yucatán Peninsula , and into the Bay of Campeche . The system was difficult to trace until a report on June 24 from Carmen , Mexico confirmed the presence of a low pressure area . Later that evening , a shrimp boat in the Bay of Campeche reported sustained winds of 40 to 45 mph ( 65 to 75 km / h ) and a barometric pressure of 1008 mbar ( hPa ; 29 @. @ 78 inHg ) . As the disturbance developed , a large trough extended from a low over the Hudson Bay into the Gulf of Mexico . The " latitudinal superposition " of these systems resulting in the intensification of both .

Situated over an area of high sea surface temperatures ( approximately 85 ° F ( 29 ° C ) ) and within a region of favorable upper @-@ level divergence , the tropical disturbance rapidly deepened overnight . The system was declared a tropical depression early on June 25 as it became stationary over the southern Gulf of Mexico . An aircraft reconnaissance mission into the storm on June 25 revealed that the system had already intensified into a hurricane , reporting winds of 100 mph ( 155 km / h ) . At this time , Audrey was located approximately 380 mi ( 610 km ) southeast of Brownsville , Texas .

After attaining hurricane status , Audrey began to slowly move northward in response troughing in the upper @-@ levels of the atmosphere . Continued reconnaissance missions into the storm revealed a well @-@ developed structure , indicating that the system had become increasingly powerful . Only one observation close to the storm 's center was made from this point until its landfall ; the tanker Tillamook encountered the hurricane 's western eyewall between 0910 and 1025 UTC on June 27 . During this time , a pressure of 969 mbar ( hPa ; 28 @.@ 62 inHg ) was measured . According to the Hurricane Database , Audrey attained winds of 125 mph ( 201 km / h ) shortly after passing this tanker , making it a Category 4 on the modern @-@ day Saffir ? Simpson hurricane scale . Around 1430 UTC on June 27 , the eye of Audrey made landfall between the mouth of the Sabine River and Cameron , Louisiana . Adjustments were made to the strength of Hurricane Audrey winds were previously thought to have been at approximately 145 mph ( 233 km / h ) . Later research showed the maximum sustained winds only reached 125 mph ( 201 km / h ) .

After maintaining its eye 60 mi ( 95 km ) inland , Audrey dramatically weakened and transitioned into an extratropical cyclone as it turned northeastward over Louisiana , and reached Tennessee as a 995 mb ( hPa ; 29 @.@ 39 inHg ) low . At this point , the system interacted with a wave extending from a polar front near Chicago , Illinois and subsequently re @-@ intensified . Curving northward and later northwestward around another extratropical low , the system attained a pressure of 974 mb ( hPa ; 28 @.@ 76 inHg ) as it moved near Lake Huron . The rapid deepening of Audrey as an extratropical cyclone was stated to be similar to that of Hurricane Hazel in 1954 . By this point , the system was again producing hurricane @-@ force winds , with Jamestown , New York reporting gusts up to 100 mph ( 155 km / h ) . By June 29 , the system became entangled with the other cyclone and was eventually absorbed into its circulation over southern Quebec .

= = Preparations , impact , and aftermath = =

The name " Audrey " was soon retired and will never be used again to name a hurricane . Because of this , it was the only use of the name Audrey for the Atlantic Basin . Hurricane Audrey left \$ 147 million ( 1957 USD ) in damage and at least 416 fatalities in the US , most in eastern Texas and western Louisiana . Audrey is ranked as the sixth deadliest hurricane to hit the United States mainland since accurate record @-@ keeping began in 1900 . No future hurricane caused as many fatalities in the United States until Katrina in 2005 .

= = Gulf of Mexico = =

One mobile drilling rig sank , with four tenders suffering damage when pulled loose from their mooring and running aground . The damage from all offshore oil facilities totaled US \$ 16 million ( 1957 dollars ) .

= = Texas and Louisiana = =

Shortly after Audrey was classified as a tropical cyclone , the United States Weather Bureau advised ships in the path of the storm to exercise caution and small craft to remain in port on June 26 . In addition , the Weather Bureau requested for Texas and Louisiana to issue hurricane watches for their coasts . These requested watches were later succeeded by a hurricane warning for the entire Louisiana coast later that day . This warning was later extended westward to include areas of the Texas coast south to High Island , Texas . Northwest storm warnings were issued for the upper

Texas coast north of Galveston , Texas , while southeast storm warnings were issued for coastal areas between the western border of Mississippi and Pensacola , Florida . These warnings remained posted until Audrey made landfall . Small craft warnings were issued the next day for coastal areas between Brownsville , Texas and Pensacola , Florida .

Residents in exposed low @-@ lying areas were urged to evacuate , due to the potential for high and damaging storm surge . Evacuation procedures in Texas began on June 27 , starting with residents in the Bolivar Peninsula area . Several power lines were redirected to Fort Davis to act as an emergency supply in the event of a mass evacuation . In Louisiana , schools were set up as emergency shelters . All residents on Grand Isle were urged to evacuate after the island was isolated from the mainland during Hurricane Flossy a year prior ; 3 @,@ 400 residents later evacuated from the island to cities in southern Louisiana . However , 600 residents remained on the island during the storm . Civil defense groups in the state placed key personnel in the area on 24 @-@ hour duty .

===== Texas =====

Although making landfall near the border between Texas and Louisiana , areas of eastern Texas saw relatively less damage associated with Audrey . In Port Arthur , Texas , winds gusted to 85 mph ( 135 km / h ) , while the barometric pressure fell to 966 mbar ( hPa ; 28 @.@ 52 inHg ) . The strong winds blew down communication lines and uprooted trees . Storm surge heights exceeded 6 ft ( 1 @.@ 8 m ) in coastal areas north of Galveston . Further south in Corpus Christi , Texas , storm tides peaked at 4 ft ( 1 @.@ 2 m ) above normal , washing out portions of Mustang Island Park Road . A 0 @.@ 75 mi ( 1 @.@ 2 km ) section of Texas State Highway 87 between High Island and Sabine Pass , Texas was later closed after sections of the highway were washed out by high water . Further inland , rainfall peaked at 7 @.@ 35 in ( 187 mm ) at Jefferson County Airport , setting a daily rainfall record . Overall , Audrey caused \$ 8 million in damages and nine deaths in Texas .

===== Elsewhere in the United States =====

While moving inland , Audrey spawned 23 tornadoes which killed two people and injured 14 others in Mississippi and Alabama , while causing \$ 600 @,@ 000 ( 1957 USD ) in damage . In the Midwest , the flow of moisture from Audrey intersected a weather front to its north , creating a large storm with associated rainfall of 5 inches ( 130 mm ) to 11 inches ( 280 mm ) extending from central Missouri east @-@ northeast across central Illinois and central Indiana . The 10 @.@ 20 inches ( 259 mm ) of rain that fell in Paris , Illinois led to a monthly precipitation record for June of 17 @.@ 65 inches ( 448 mm ) and its wettest year on record with a total of 61 @.@ 59 inches ( 1 @,@ 564 mm ) . It also flooded the entire town . The storm dropped huge amounts of rain that caused significant flooding , leaving 10 fatalities . In Pennsylvania , the storm produced 65 mph ( 105 km / h ) sustained winds while winds of 95 ? 100 mph ( 153 ? 161 km / h ) were reported in New York . In Canada , winds up to 80 mph ( 129 km / h ) were reported and there were 15 fatalities .

As an extratropical cyclone , Audrey brought hurricane @-@ force winds as far east as St. Albans , Vermont , where a gust of 80 miles per hour ( 130 km / h ) was measured . Throughout the state , countless trees and power lines were downed . In Maine , rough seas stirred up by the storm forced yachts to be grounded .

===== Canada =====

The remnants of Audrey entered Ontario with tropical storm force winds after crossing Lake Ontario . Heavy rainfall in the province washed out roads and rail lines . Six people were trapped in Algonquin Provincial Park for four days due to dangerous river currents and downed trees blocking roads . One boy drowned and a firefighter died due to the storm , and three other people died in Ontario due to traffic accidents . In neighboring Quebec , the remnants of Audrey were considered the worst storm in about 20 years , and over 100 houses were damaged by floods . The Montreal

district of Saraguay lost power for several days . Throughout Montreal , there were 10 deaths , nine of which due to traffic accidents . This made Audrey the deadliest tropical cyclone in Quebec on record .