## = Hurricane Pauline (1968) =

Hurricane Pauline was the deadliest hurricane of the 1968 Pacific hurricane season . Forming from a disturbance in the Intertropical Convergence Zone on September 26 and becoming a tropical storm on September 29 , the hurricane strengthened to a peak of 85 mph ( 137 km / h ) as a Category 1 hurricane on the Saffir @-@ Simpson Hurricane Scale on September 30 before making landfall just east of La Paz , Baja California Sur , near Ciudad Constitución in Mexico , exiting over the Gulf of California . Before making a second landfall on the state of Sonora on October 3 , Pauline lost tropical characteristics . The storm continued inland , passing directly over Ciudad Obregón before dissipating south @-@ southeast of Sierra Vista , Arizona .

There is very little information as to the effects of Pauline on Mexico , but during the passage of the hurricane over Magdalena Bay , a boat disappeared with its five occupants . Despite a large @-@ scale search for the boat or any possible remnants , no trace was ever found . The remnants of Pauline triggered showers over the southwest United States and may have been responsible for a damaging tornado which occurred near Glendale , Arizona .

## = = Meteorological history = =

The Intertropical Convergence Zone disturbance that developed into Hurricane Pauline was first noticed by meteorologists 200 mi (  $320~\mbox{km}$  ) southeast of Acapulco and 1 @,@ 500 mi ( 2 @,@ 400 km ) -2,000 mi ( 3 @,@ 200 km ) west of dissipating Tropical Storm Orla . The disturbance was in a large area of convection west of Guatemala in the Gulf of Tehuantepec that began to spread 500 mi (  $800~\mbox{km}$  ) to the west @-@ northwest on September 26 . Satellite imagery at this time showed an area of reflective clouds roughly 500 mi (  $800~\mbox{km}$  ) long and 200 mi (  $320~\mbox{km}$  ) wide . Shortly thereafter , the disturbance was upgraded into a tropical depression . After being upgraded , a vortex began to organize at its center and the depression began to intensify . On September 29 , a ship 200 mi (  $320~\mbox{km}$  ) south of the center reported winds of 17 mph (  $27~\mbox{km}$  / h ) to 23 mph (  $37~\mbox{km}$  / h ) and a minimum pressure of 1008 mbar , the only pressure reading left on best track data for the entire season . Other than this ship , all other active boats steered away from the center of the developing system . Later that day , it was determined that the depression had reached tropical storm strength .

After being named , Pauline displayed signs of a tight circulation , but satellite pictures were unable to pick up any distinct features due to nearby cirrus outflow . Later that day , however , satellites picked up a feature in the hurricane that resembled an eye , but closer inspection showed that the eye was either a shadow or a gap between bands and that the real center was 50 mi ( 80 km ) west of the eye . On September 30 , the storm turned to the northwest and its forward speed accelerated to 9 mph (  $14 \ km \ / \ h$  ) . Around this time , a satellite picture showed a genuine eye beginning to form and banding features became apparent . Even though the picture was distorted due to by electronic problems , the tropical storm was subsequently upgraded to hurricane intensity . On October 1 , the ship Overseas Joyce recorded 80 mph (  $130 \ km \ / \ h$  ) to  $85 \ mph$  (  $137 \ km \ / \ h$  ) north @-@ northeast winds , a heavy swell from the east @-@ southeast and a pressure of  $1002 \ mbar$  . An estimate based on satellite pictures placed the Overseas Joyce at  $15 \ mi$  (  $24 \ km$  ) to  $20 \ mi$  (  $32 \ km$  ) away from the center . Another nearby ship , the Golden Eagle , reported south @-@ southeast winds of  $50 \ mph$  (  $80 \ km \ / \ h$  ) and high seas  $75 \ mi$  (  $121 \ km$  ) east of the center .

Further investigation into the hurricane was limited to ship reports , and a satellite image on October 1 was mostly not helpful due to another electronic problem; however, it showed that the hurricane had shrunk. A United States Air Force reconnaissance plane flew into the hurricane that day and reported that the eyewall was open on the southwest quadrant. After the breakup of the first eyewall , a break in the clouds lead to the possibility that another eye was forming 30 mi (48 km) to the north @-@ northwest of the previous eye.

No information on the hurricane was available for October 2 , when it made landfall near Ciudad Constitutión in Baja California Sur . After landfall , La Paz reported winds of 60 mph (  $97\ km\ /\ h$  ) from the northwest , which began weakening in the next hour . Satellite imagery showed that

Pauline had moved over the Gulf of California , the interaction with land having weakened it to a tropical storm . The storm moved north , making a second landfall near Navojoa . The storm continued inland , passing directly over Ciudad Obregón . The storm dissipated south @-@ southeast of Sierra Vista in Arizona .

= = Impact , records , and naming = =

Damage totals from Baja California Sur in relation to the hurricane were never received , but light damage was reported in Navojoa . The Pasadena @-@ based newspaper reported that a tourist in Mazatlán at the time had sent a card saying that the hurricane was responsible for cutting off @-@ shore capers . Mexican Navy members in Magdalena Bay reported that while passing over , Pauline had clocked winds of 115 mph (  $185\ km\ /\ h$  ) , the equivalent of a Category 3 hurricane on the Saffir @-@ Simpson Hurricane Scale . The Navy report of 115 mph (  $185\ km\ /\ h$  ) winds came after another report that the 40 @-@ foot (  $12\ m$  ) auxiliary @-@ powered yawl called the Tiare was missing in the same bay . The ship had left Newport Harbor on September 25 with the destination being Puerto Vallarta and was occupied by a family of five people . The last reported sighting of the yawl was off Cedros Island . After the report of the missing yawl was received , the United States Coast Guard engineered a search for the vessel . The search was called off after covering an area of 50 @,@ 000 sq mi (  $130\ @,@$  000 km² ) with no results . The ship was reported as lost and the five occupants were listed as dead . Despite not finding any sign of the ship , the Coast Guard was praised for the extensive search .

The remnants of Pauline were responsible for scattered showers in an area ranging from southern California to Utah and New Mexico . In Arizona , Tucson , Phoenix , and Gila Bend all reported rain on October 3 even though Pauline was centered 200 mi ( 320 km ) southeast of Douglas . The remnants also caused an F2 tornado on the Fujita Scale . The tornado touched down near Glendale and followed an erratic path to the west , injuring three people due to flying glass , one of which was hospitalized due to their injuries , and causing severe damage to two apartment buildings . Automobiles were damaged by falling concrete blocks and various buildings and trailers were also damaged . In total , the tornado was responsible for \$ 50 @,@ 000 to \$ 500 @,@ 000 in damages .