

= Hurricane Liza ( 1968 ) =

Hurricane Liza was the third hurricane of the 1968 Pacific hurricane season . Forming from an area of the Intertropical Convergence Zone ( ITCZ ) on August 28 and reaching tropical storm strength in the same day , Liza meandered generally westward over the Pacific Ocean , reaching hurricane strength on August 29 while far from land . It maintained that intensity until September 2 , when the hurricane was downgraded to a tropical storm , but avoided tropical depression status despite the presentation seen by an Air Force reconnaissance plane . After weakening , the storm moved northwestward , weakening to a depression on September 4 , when it began a turn to the east . There is a possibility that the depression completed a small loop between the downgrade and its dissipation on September 6 .

Although it remained far from land , the waves triggered by Liza were able to reach California , where they combined with high tide , threatening beachfront homes that had weakened foundations after a previous tide . The hurricane was responsible for sweeping hundreds of Labor Day swimmers out into the ocean in Zuma Beach and Newport Beach , all of whom were saved by lifeguards . The waves also tore off a group of sun decks estimated at \$ 5 @, @ 000 ( 1968 USD ) near Laguna Beach .

= = Meteorological history = =

For a period beginning on August 25 , the ITCZ was active near the border between Mexico and Guatemala . A report of 40 mph ( 64 km / h ) winds , a barometric pressure of 1010 @. @ 5 mbar , and heavy thundershowers was received from a Coast Guard cutter called the Androscoggin while the ship was 150 mi ( 240 km ) south of Tehuantepec . The report also mentioned that the thundershowers were generating 9 @- @ foot ( 2 @. @ 7 m ) high swells . The conditions developed in a northward bend in the ITCZ that was moving westward . No activity other than clusters of rain were shown on satellite until August 28 , when a tropical disturbance suddenly developed along the bend , reaching tropical depression status as the day began . The depression became Tropical Storm Liza later that day , when the ship Jag Jawan reported winds of 60 mph ( 97 km / h ) and 1003 @. @ 2 mbar . Another ship named Teverya , which was 60 mi ( 97 km ) northwest of the Jag Jawan , reported similar wind speeds , but a pressure of 998 mbar , the lowest barometric pressure recorded from the storm throughout its life . Satellite pictures showed a vortex arrangement consisting of three cloud masses and two arching bands of cumulonimbus clouds , all of which were producing cirrus outflow .

The tropical storm moved west @- @ northwest for 48 hours after being named , reaching hurricane intensity on August 29 , with satellite pictures showing an eye . Until September 1 , all ships kept out of range of the hurricane , leaving satellite imagery as the only method for obtaining information . The August 30 ESSA @- @ 6 satellite image of the hurricane showed a circular eye embedded in a nearly circular central dense overcast ( CDO ) spanning 5 ° of latitude in diameter . Inflow was apparent in feeder bands from the south , but a large area of dry air and clear skies spanned to the north and west of the hurricane . It was estimated that the hurricane was at its peak intensity at this time . On August 31 , the CDO had shrunk , but the cyclone still maintained intensity until September 1 , when the hurricane had moved over cooler water and began to weaken due to cold inflow . Around this time , an unnamed ship passing north of the center going eastward reported winds of 85 mph ( 137 km / h ) and 40 @- @ foot ( 12 m ) to 45 @- @ foot ( 14 m ) high seas . The weakening of the hurricane accelerated , becoming uncoupled from the warm waters and losing its cirrus cap , exposing the center . An Air Force reconnaissance plane sent to investigate the storm on September 2 showed that the hurricane had weakened into a tropical storm . However , the cyclone was so disorganized at this time that the observer remarked that there was a possibility that Liza was no longer even a tropical storm . The storm continued to evaporate and was downgraded to a depression on September 4 and drifted southwestward until it dissipated on September 6 .

= = = Disputes = = =

There are two disputes between the Joint Typhoon Warning Center , the best track data , and the post @-@ season report concerning the hurricane . The first involved the peak intensity of the hurricane . The post @-@ season report released by the Environmental Science Services Administration noted that the 85 mph ( 137 km / h ) winds recorded by the unknown ship on September 1 were received two days after cool inflow , and gave the hurricane a peak intensity estimate of 115 mph ( 185 km / h ) on August 30 , making Liza a Category 3 hurricane and the most intense hurricane of the season . However , the JTWC and the best track data both gave peak intensities equivalent to the ship report on September 1 . Liza was the first of three hurricanes of the season that was thought to have reached Category 3 strength . The other two were Pauline and Rebecca .

Another dispute exists concerning the track the hurricane took , specifically between the downgrade to tropical depression and dissipation . The best track and ESSA report both showed that Liza went southwestward through the time period . However , the JTWC final report on Liza reported that Liza made a tiny loop that was entirely within 24 ° N to 25 ° N latitude and 125 ° W to 126 ° W longitude from September 4 to September 6 .

= = Impact and records = =

Despite never making landfall , the United States Weather Bureau warned that Liza could cause damage in California due to 4 @-@ foot ( 1 @.@ 2 m ) to 6 @-@ foot ( 1 @.@ 8 m ) swells it generated merging with high tide , creating 5 @-@ foot ( 1 @.@ 5 m ) to 10 @-@ foot ( 3 @.@ 0 m ) breaker waves which they reported could sweep over jetties and breakwaters as well as cause riptides on beaches . Officials at Long Beach were keeping an eye on breakwater activity and Laguna Beach lifeguards were prepared in case the swells reported there grew . At Newport Beach , the Corps of Engineers were brought in to create a buffer with sand and rock to protect homes between 41st Street and 46th Street , and concern in West Newport Beach was that the hurricane would cause more damage to oceanfront homes that were weakened by swirling seas the previous week . The waves were expected to be the only cause of damage from the hurricane , which forecaster Emii Kurtz remarked was " much too far away " to affect atmospheric weather conditions .

From September 2 to September 3 , large waves , some as high as 12 @-@ foot ( 3 @.@ 7 m ) , impacted beaches throughout southern California , with Los Angeles and Orange Counties experiencing growing breakers , and Cabrillo Beach experiencing riptides for two days straight . Due to the Labor Day beach turnout , many reports of rescuing swimmers who were swept up by waves caused by the hurricane were received . On September 2 , forty @-@ seven swimmers in Zuma Beach had to be rescued despite warnings to stay out of deep water , and an additional 261 rescues were reported in Newport . More rescues were reported the next day , although no exact total from the second day is known . At the El Morro Beach Trailer Park near Laguna Beach , a group of sun decks estimated at \$ 5 @,@ 000 ( 1968 USD ) were ripped from their supports by rough seas . Long Beach , in terms of damage , was particularly hit hard by Liza , with debris and sea foam from the heavy surf clogging storm drains . A group of tidal pools formed along an area of the beach , draining out from a parking lot on 72nd Street onto Ocean Boulevard , resulting in flooding that closed a section of the boulevard between 68th Place and 72nd Place to traffic . Various flower gardens were also reported to have been swamped by the flooding , but no damage to housing was reported . The weakened properties in West Newport Beach also sustained no additional damage .