The 1975 Pacific Northwest hurricane was an unusual Pacific tropical cyclone that attained hurricane status farther north than any other Pacific hurricane . It was officially unnamed , with the cargo ship Transcolorado providing vital meteorological data in assessing the storm . The twelfth tropical cyclone of the 1975 Pacific hurricane season , it developed from a cold @-@ core upper @-@ level low merging with the remnants of a tropical cyclone on August 31 , well to the northeast of Hawaii . Convection increased as the circulation became better defined , and by early on September 2 it became a tropical storm . Turning to the northeast through an area of warm water temperatures , the storm quickly strengthened , and , after developing an eye , it attained hurricane status late on September 3 , while located about 1 @,@ 200 miles ( 1 @,@ 950 km ) south of Alaska . After maintaining peak winds for about 18 hours , the storm rapidly weakened , as it interacted with an approaching cold front . Early on September 5 , it lost its identity near the coast of Alaska .

## = = Meteorological history = =

On August 26 , the tropical cyclone that was once Hurricane Ilsa degenerated into a remnant low pressure area about 1 @,@ 200 miles ( 1 @,@ 950 km ) west of the southern tip of the Baja California Peninsula . The remnants of Ilsa drifted northwestward through the Stratocumulus cloud field of the eastern north Pacific Ocean . At the same time , a mid @-@ tropospheric trough slowly intensified while gradually undergoing cyclogenesis to develop into a cold @-@ core upper @-@ level low . Early on August 31 , a low @-@ level circulation formed within the upper @-@ level low about 930 miles ( 1 @,@ 500 km ) northeast of Hawaii ; at that time , the circulation and the remnants of Ilsa were located within 370 miles ( 600 km ) of each other . The cold @-@ core low rapidly intensified as convection increased , and late on August 31 it absorbed the remnants of Ilsa , which influenced the development of the system . Convection steadily organized as it tracked westward , and it is estimated it transitioned into a subtropical depression by 18 : 00 UTC on September 1 .

With warm water temperatures , the system strengthened and began to develop tropical characteristics . Subsequent to the development of banding features , convection contracted and deepened over the increasingly well @-@ defined center , and is estimated it became a tropical storm by early on September 2 while located about 685 miles ( 1 @,@ 100 km ) north of the Hawaiian island of Kauai . The storm quickly developed a central dense overcast , and by 00 : 00 UTC on September 3 Dvorak classifications began on the cyclone . With water temperatures of over 82 ° F ( 28 ° C ) , it strengthened rapidly as an approaching cold front caused it to accelerate to the northeast . An eye became apparent on satellite imagery , and the storm intensified into a hurricane at 18 : 00 UTC on September 3 , while located about 1 @,@ 170 miles ( 1 @,@ 885 km ) south of Aniakchak National Monument and Preserve in Alaska . Upon becoming a hurricane , the cyclone was small , measuring about 85 miles ( 140 km ) in diameter .

Operationally , the hurricane was not classified due to lack of ship confirmation ; by the time it became a hurricane , the strongest winds reported by a ship was 40 mph (  $65\ km\ /$  h ) about 80 miles (  $130\ km$  ) southeast of the center . Additionally , upon developing a closed eyewall , the cyclone was beginning to interact with the frontal system to its west . However , late on September 3 , a ship reported a pressure of 1003 mbar with a 3 @-@ hour tendency increase of 13 @.@ 5 mb , suggesting a minimum pressure of under 990 mbar . At the time , the storm maintained a T @-@ number of 4 @.@ 0 , resulting in estimated winds of 75 mph (  $120\ km\ /$  h ) and an estimated pressure of 987 mbar . Maintaining hurricane status for about 18 hours , the storm continued rapidly northeastward and weakened due to strong wind shear from the approaching cold front . Early on September 5 , it is estimated the cyclone became extratropical in the Gulf of Alaska while located about 315 miles (  $510\ km$  ) southwest of Juneau , Alaska . The circulation was rapidly absorbed by the front , and the remnants quickly reached the coast of British Columbia . The remnants of the storm turned southeastward , and was last tracked definitively to a point north of Montana .

## = = Impact and records = =

At 18:00 UTC on September 3, a ship named Pluvius recorded 50 mph ( 85 km / h ) winds near the center of the storm . At 06:00 UTC on September 4, the U.S. Navy @-@ chartered cargo ship Transcolorado recorded winds of 65 mph ( 100 km / h ) about 120 miles ( 200 km ), the strongest reported winds in association with the tropical cyclone; the ship also reported 27 foot (8 @.@ 5 m) swells . No significant land impact occurred in association with the cyclone , and no fatalities were reported .

Forming at 31  $^\circ$  N , the storm formed farther north than any other Pacific tropical cyclone at the time , though , in 2000 , Tropical Storm Wene formed farther to the north . The cyclone marked the first known occurrence of a mid @-@ Pacific upper tropospheric low developing into a tropical cyclone , though Tropical Storm Fausto in 2002 redeveloped in a similar occurrence to the hurricane . The cyclone attained hurricane status at 40  $^\circ$  N , a record for a Pacific hurricane . Only Tropical Storm Dot in 1970 , Hurricane John in 1994 , Tropical Depression Guillermo in 1997 , and Tropical Storm Wene in 2000 were tropical cyclones north of the latitude , of which only John was a hurricane ; none maintained tropical cyclone status further north than the cyclone .