

= Hurricane Karl (1980) =

Hurricane Karl was a late @-@ season and unusual tropical cyclone that formed during the 1980 Atlantic hurricane season . A minimal Category 1 hurricane on the Saffir ? Simpson Hurricane Scale , Karl developed at the center of another , larger extratropical cyclone over the North Atlantic . After being classified a subtropical cyclone on November 25 , it became more independent of its parent storm and grew into a full @-@ fledged hurricane . It peaked in intensity on November 26 , and ultimately dissipated as it merged with another system .

Karl holds the record for the northernmost formation of a November tropical or subtropical cyclone in the Atlantic Ocean . It also attained hurricane strength at an unusual latitude , and contributed to one of the most active Novembers on record in terms of tropical cyclones . However , it stayed over open waters and did not have any effects on land . It was the 11th named storm of the season , and due to the lack of damage , its name was not retired .

= = Meteorological history = =

Hurricane Karl originated in a low pressure area that formed along a frontal boundary near the southeastern United States . It approached the Canadian Maritimes the next day and strengthened to below 1000 millibars . On November 24 , the broad cyclone was located south of Newfoundland , and early the next day a mass of convection developed near the core . It evolved into a separate vortex , and due to the lack of inhibiting wind shear , a small cyclone developed . It became a subtropical storm at 0000 UTC before executing a tight counterclockwise loop as it rotated within the larger cyclone . About 18 hours later , the storm strengthened and gained enough tropical characteristics to be designated a hurricane , accompanied by the formation of a pronounced eye feature . At the time , it was situated around 610 miles (1 @,@ 110 km) west @-@ southwest of the Azores . Although the development of a tropical cyclone within a non @-@ tropical storm is rare , it is not unprecedented . An unnamed hurricane in November 1991 also formed in this manner .

After being classified as a hurricane , Karl gradually strengthened , and its circulation became more distinguished from the surrounding cloudiness . A trough that emerged from North America steered the hurricane eastward , and on November 26 , it reached its peak intensity with maximum sustained winds of 85 mph (140 km / h) and a central barometric pressure reading of 985 mbar (hPa ; 29 @.@ 09 inHg) . Karl maintained this strength for approximately 18 hours until beginning to weaken slightly as it accelerated towards the northeast . On November 27 , the storm 's eye became more ragged as the cyclone passed within 230 miles (370 km) of the Azores and started to show signs of deterioration . The trough over the North Atlantic developed into the dominant low pressure area , and Karl turned northward around its periphery . It merged with another approaching system and was declared dissipated by November 28 .

= = Records and impact = =

Hurricane Karl was unusual in several aspects . It developed late in the hurricane season , which runs from June 1 through November 30 , over waters colder than the standard limit for tropical cyclone formation . It marked the farthest @-@ north development of a November tropical or subtropical cyclone on record . While the 1991 unnamed hurricane was farther north , it became a subtropical storm late on October 31 , and had moved south by November 1 . Karl attained Category 1 hurricane status farther north than any other storm (in any month) until the 1991 unnamed hurricane became a hurricane at a higher latitude . The storm 's record was also surpassed by Hurricane Noel in 2001 . Karl was reported at the time to be the farthest @-@ east hurricane during the last 10 days of the month of November . Additionally , it maintained hurricane intensity until reaching 45 @.@ 0 ° N , at which point it became extratropical ; only Hurricane Lois in 1966 lasted as a hurricane farther north in the month of November .

When Karl became a hurricane on November 25 , the 1980 season became notable for having two November hurricanes ; the other was Jeanne . This tied 1932 and 1969 for the record of the most

November hurricanes , which was later accomplished during the 1994 season . Later , 2001 broke this record with three hurricanes . The cyclone never affected land , and as a result , no deaths or damages occurred . One ship to the northwest of Karl 's center recorded 35 mph (55 km / h) winds and an air pressure of 993 mbar .