

= Subtropical Storm Nicole (2004) =

Subtropical Storm Nicole was the first subtropical storm to receive a name using the standard hurricane name list that did not become a tropical cyclone . The fourteenth tropical or subtropical storm of the 2004 Atlantic hurricane season , Nicole developed on October 10 near Bermuda from the interaction of an upper level trough and a cold front . The storm turned to the northeast , and after attempting to transition into a tropical cyclone , it dissipated as it was absorbed into a larger extratropical storm .

Nicole dropped moderate amounts of rainfall in Bermuda , while rough seas caused problems for cruise lines . In Canada , the remnants of the storm combined with an extratropical storm produced strong winds and rainfall , damaging trees and power lines . The remnant storm also produced gusty winds across New England , while swells from the storm provided welcome surf conditions along the East Coast of the United States .

= = Meteorological history = =

An upper @-@ level trough and a decaying cold front persisted across the western Atlantic Ocean in early October . The interaction between the two led to the formation of an area of low pressure on October 8 to the southwest of Bermuda . The system lacked a single well @-@ defined circulation , though it possessed gale force winds as it moved northwestward . The system gradually became better organized , and though there were no signs of tropical development on October 9 , computer models suggested a subtropical storm could form . On October 10 , a well @-@ defined low @-@ level circulation developed as a band of clouds formed in the northern portion of the system . Shortly thereafter , curved bands developed in the northwestern portion of the center , while the strongest winds associated with the storm occurred more than 115 miles (185 km) from the center . Based on the broad wind field and the cloud signature , it is estimated the system organized into Subtropical Storm Nicole on October 10 while located about 140 miles (225 km) southwest of Bermuda .

The first National Hurricane Center forecast on Nicole noted the development of convection over the western portion of the center , and that if the trend continued , transitioning into a tropical cyclone would be possible . The first discussion also predicted a peak intensity of 65 mph (105 km / h) . A mid @-@ level trough turned the storm northeastward , and early on October 11 it passed about 60 miles (95 km) northwest of Bermuda . Shortly after passing Bermuda , Nicole developed persistent deep convection near the center , while Advanced Microwave Sounding Unit overpasses indicated the potential of a warm core within the system . Though Nicole attempted to acquire tropical characteristics , strong upper @-@ level wind shear prevented the transition . As the storm accelerated northeastward under the influence of a large extratropical storm south of Nova Scotia , it briefly reached peak winds of 50 mph (85 km / h) . Subtropical Storm Nicole lost its circulation as it was absorbed by the larger extratropical storm on October 11 .

= = Preparations , impact , and naming = =

On October 9 , one day prior to Nicole forming , the Bermuda Weather Service issued a gale warning for the island . The agency also issued a Tropical Storm Watch shortly after the storm developed . All warnings were canceled after the storm passed the island . Winds on Bermuda peaked at 44 mph (71 km / h) in association with Nicole , while gusts peaked at 60 mph (97 km / h) prior to the storm developing . Nicole and the precursor extratropical storm dropped heavy precipitation , amounting to 5 @-@ 86 inches (148 mm) over a three @-@ day period at the Bermuda International Airport . Thunderstorms were also reported on the island . Poor weather conditions from Nicole forced the cancellation of several events at the tourist @-@ driven Bermuda Music Festival , including acts by Isaac Hayes , Gerald Albright , and Anita Baker . Strong winds knocked down power lines , leaving over 1 @-@ 800 homes and businesses without power . Unsettled conditions also resulted in airport delays . High winds delayed or altered the courses of

four cruise ships . High waves of 10 to 12 @-@ foot (3 to 3 @.@ 6 m) in height left several cruise ship passengers seasick ; one sick person was rushed to a local hospital on Bermuda .

The Canadian Hurricane Centre issued seven bulletins on the storm , though the system only briefly entered the centre 's response zone before it dissipated . Due to moisture from Nicole combined with the extratropical storm , the Atlantic Storm Prediction Centre issued heavy rainfall and wind warnings for large portions of the Canadian Maritimes . The remnants of Nicole , combined with a powerful extratropical storm , produced strong winds across the Maritimes , including over 80 mph (130 km / h) on western Cape Breton . The strong winds uprooted trees and downed power lines , while the winds combined with rough seas cancelled ferry crossings and restricted access to the Confederation Bridge . The storm complex also dropped over 2 inches (60 mm) of rainfall , causing flooding in eastern Nova Scotia . The storm 's passage during the middle of apple harvest caused troubles for Annapolis Valley .

The remnants of Nicole , combined with the extratropical storm , produced strong winds in New England , with gusts of up to 65 mph (105 km / h) . In Maine , the winds snapped branches off trees , and also downed trees and power lines . Power outages were reported , primarily in coastal portions of Washington and Hancock Counties . Nicole produced moderate swells along the East Coast of the United States . Conditions for surfing were best in New York and Rhode Island , where swells of over 4 feet (1 @.@ 2 m) occurred .

Eleven ships reported tropical storm force winds in association with Subtropical Storm Nicole . The maximum recorded wind was 50 mph (80 km / h) while the storm was at peak intensity , while the minimum recorded pressure was 995 mbar as Nicole was being absorbed by the extratropical storm .

Since 2002 , subtropical storms have been assigned names from the same naming sequence as tropical storms . Nicole was the first named subtropical storm since the policy change to not achieve full tropical cyclone status . In 1972 and 1973 , four subtropical storms were named using the Phonetic alphabet , while all other subtropical cyclones remained unnamed .