

= Hurricane Arlene (1963) =

Hurricane Arlene was the first tropical cyclone of the 1963 Atlantic hurricane season and one of the wettest storms ever recorded in Bermuda . Originating from a tropical depression on July 31 , Arlene quickly intensified into a Category 2 hurricane on August 2 . After attaining this intensity , the storm quickly weakened and turned west . By August 4 , Arlene had degenerated into a tropical depression . The storm failed to re @-@ organize until August 7 , by which time it restrengthened into a tropical storm . The following day , Arlene re @-@ attained hurricane @-@ status before passing directly over Bermuda . Several hours after passing the island , it reached its peak intensity with winds of 105 mph (160 km /) and a barometric pressure of 969 mbar (hPa ; 28 @.@ 61 inHg) . By August 11 , Arlene transitioned into an extratropical cyclone before being absorbed by another cyclone later that day .

Along its track , several hurricane warnings and watches were issued for the Leeward Islands ; however , no damage was reported on any of the islands . The storm has its greatest impact in Bermuda where high winds and near @-@ record rainfall downed trees , power lines and caused flooding . Damages across the island amounted to \$ 300 @,@ 000 (1963 USD ; \$ 2 @.@ 1 million 2009 USD) .

= = Meteorological history = =

Hurricane Arlene was first identified as a tropical depression on July 31 between the Lesser Antilles and the Cape Verde Islands by the TIROS VI satellite . The large cyclone , estimated at five degrees in diameter , steadily tracked westward and eventually northwestward and intensified into a tropical storm on August 2 . Later that day , a Navy reconnaissance aircraft reached the storm and found a clear eye and a barometric pressure of 987 mbar (hPa ; 29 @.@ 15 inHg) , resulting in Arlene being classified a hurricane . This meant that the storm had rapidly intensified from a tropical depression to a hurricane within the span of 18 hours . The intensification continued for another 6 hours , at which time the storm attained its initial peak strength with winds of 100 mph (155 km / h) , classifying Arlene as a Category 2 hurricane .

Early on August 3 , Arlene began to weaken as it turned towards the west once more . The storm continued to slowly weaken before rapidly degenerating into a tropical depression on August 4 . The quick decrease in intensity was the result of a sudden increase in vertical wind shear near the core of the cyclone . Later that day , the system passed near the northern Leeward Islands ; however , the depression was poorly organized . The former hurricane steadily tracked northwestward and began to regenerate on August 7 .

As the storm began to reorganize , the forward motion had become virtually stationary but later began to increase as Arlene turned northeastward , beginning recurvature into the main belt of the Westerlies . Ships in the vicinity of the depression reported that it had regained gale @-@ force winds on August 8 , resulting in advisories on Arlene being re @-@ initiated around that time . Later that day , a Navy reconnaissance plane found hurricane @-@ force winds around the center of the storm , resulting in Arlene being upgraded to a minimal hurricane a second time .

During the day on August 9 , Arlene passed directly over Bermuda with winds of 85 mph (140 km / h) . The storm continued to intensify after passing the island , with reconnaissance recorded a minimum pressure of 969 mbar (hPa ; 28 @.@ 61 inHg) and maximum winds reached 105 mph (160 km / h) . The hurricane began to weaken hours later , with winds decreasing below 100 mph (155 km / h) by the afternoon of August 10 . Shortly after , Arlene transitioned into an extratropical cyclone , while maintaining hurricane @-@ force winds , over the north Atlantic . The remnants were absorbed by a larger cyclone near Newfoundland on August 11 .

= = Preparations and impact = =

On August 3 , the National Weather Service in San Juan , Puerto Rico issued hurricane warnings for the northern Leeward Islands and a hurricane watch for the Virgin Islands . Later that day , the

watch was expanded to include Puerto Rico . By August 4 , the hurricane warnings were lowered to gale warnings and the watch was discontinued as Arlene weakened to a tropical storm . Later that day , all warnings were canceled since the storm had further weakened to a tropical depression . On August 8 , after Arlene regenerated , residents in Bermuda were advised to not venture offshore on any vessel and rush all hurricane preparations to completion .

In Bermuda , Arlene produced winds up to 85 mph (140 km / h) and a pressure of 974 @. @ 5 mbar (hPa ; 28 @. @ 78 inHg) was recorded during its passage . A maximum gust of 98 mph (158 km / h) was recorded at Kindley Air Force Base . Tree limbs and power lines were downed across the island , a few small boats sank in rough seas and flooding was reported in some areas . The hurricane produced the second highest tropical cyclone @-@ related rainfall on the island , peaking at 6 @. @ 05 in (154 mm) . In all , damages in Bermuda amounted to \$ 300 @, @ 000 (1963 USD ; \$ 2 @. @ 1 million 2009 USD) .