

= 1948 Bermuda ? Newfoundland hurricane =

The 1948 Bermuda hurricane (Air Weather Service designation : Dog) was an intense and long-lived Cape Verde type tropical cyclone that wrought significant damage to Bermuda and areas of Newfoundland in September 1948 . The storm was the eighth named storm and third hurricane of the annual hurricane season . Originating as a tropical wave off the coast of Africa on September 4 , the cyclone tracked a general westward path for much of its initial stages as it gradually intensified , reaching tropical storm intensity shortly after development and then hurricane intensity a day later . After reaching a longitude roughly equal to that of the Lesser Antilles , the hurricane began to curve northward on a parabolic track , bringing it near Bermuda at peak intensity as a Category 4 hurricane on September 13 . Afterwards , the hurricane began to accelerate northeastwards and weaken . The waning tropical cyclone grazed Cape Race before transitioning into an extratropical cyclone on September 15 ; these remnants persisted for an additional day .

Despite never making landfall , the tropical cyclone disrupted numerous shipping lanes and inflicted damage on Bermuda and Newfoundland . In the former , the hurricane brought winds in excess of 100 mph (160 km / h) , downing power lines and felled trees . Property damage also resulted from the strong winds . Overall damage on the island totaled \$ 400 000 . After passing west of Bermuda , the tropical cyclone tracked across numerous shipping lanes . Two ships , the Leicester and Gaspar , encountered the hurricane and became stricken in open waters . Though most people were rescued from both ships , six people perished on the former while one died on the latter . Beginning on September 15 , the hurricane tracked east of Newfoundland , producing heavy rainfall on land . The precipitation flooded roads and caused streams to overflow , inundating additional areas . On the island , two people were killed . Overall , the hurricane caused eight fatalities .

= Meteorological history =

On September 3 , the tropical wave from which the resulting hurricane would develop from was detected just off the coast of western Africa near Dakar . This marked the second consecutive year in which a tropical cyclone could be traced back as far east as Africa . In HURDAT the official database for tropical cyclones in the North Atlantic dating back to 1851 Atlantic hurricane season the area of disturbed weather is estimated to have organized into a tropical storm by 0600 UTC the following day . Over the course of the succeeding week , the tropical cyclone moved in a general westward direction as it gradually intensified , reaching hurricane intensity by 0000 UTC on September 5 and then attaining the equivalent of a modern day Category 2 hurricane on the Saffir Simpson hurricane scale at 0600 UTC on September 8 . Up until this time , its existence and trek across the central Atlantic was only inferred , however , aircraft reconnaissance detected and as such confirmed the existence of the tropical cyclone the following day while the hurricane was situated approximately 900 mi (1 400 km) east of Antigua . Operationally , however , the reconnaissance flight significantly underestimated the winds of the tropical cyclone , with estimates of tropical storm force winds at the storm 's center .

Thereafter , the hurricane began curving northward as it continued to intensify , reaching the equivalent of a modern day Category 3 hurricane a major hurricane by September 11 . Two days later , the storm strengthened further into a Category 4 hurricane . As no reasonably quantifiable strengthening occurred afterwards , this also marked the storm 's official peak intensity as maximum sustained winds were analyzed at 135 mph (215 km / h) . However , aircraft reconnaissance estimated wind speeds of at least 140 mph (225 km / h) at roughly the same time frame . The storm 's northward recurvature caused it to track just west of Bermuda late on September 13 . Afterwards , a weakening trend began as the hurricane tracked northeastward into more northerly latitudes . By September 15 , the storm had been downgraded to minimal hurricane intensity . After passing south of Cape Race later that day , the hurricane transitioned into an extratropical cyclone , and continued to track northward until it was last noted by 1800 UTC the next day near Greenland . During the storm 's twelve day trek , the hurricane tracked approximately 3 500 mi (5 600 km) , roughly equidistant to the distance between New York and

London .

= = Preparations and impact = =

= = = Central Atlantic and Bermuda = = =

As the hurricane traversed the Central Atlantic , the United States Weather Bureau indicated that the storm would not be a threat to continental land masses due to its isolated position . However , ships in the storm 's vicinity and to the northwest of the hurricane were advised caution . Other shipping lanes in the forecast path of the hurricane were also warned . After recurving in the direction of Bermuda , the British overseas colony was advised to begin prompt precautionary measures against storm surge and strong winds , which were expected from the hurricane . Aircraft from the United States Air Force and Navy stationed in Bermuda were sent to airfields in the United States to avoid the hurricane , while a Navy task force of twelve ships including the escort carrier USS Mindoro (CVE @-@ 120) were dispatched from the island . The U.S. naval operating base moved boats from exposed areas into safer parts of the base . Similar precautionary measures were undertaken by the British naval operating base .

On Bermuda , the hurricane brought sustained winds estimated between 93 ? 103 mph (150 ? 166 km / h) , with higher gusts . A minimum pressure of 958 mbar (hPa ; 28 @.@ 30 inHg) was recorded , though a lower pressure may have occurred on the island as the barometer had been falling at the time . The strong winds downed power lines and felled trees , littering insular streets with debris . As a result , power outages occurred and loss of telecommunications was reported . Radio stations based on the island went silent due to the power loss . An emergency backup power generator at King Edward Memorial Hospital was used to restore electrical power to the facility . However , oil lamps were still used in place of any form of electrical lighting . Several slate roofs were torn from their buildings from the strong winds . Heavy rainfall associated with the hurricane flooded long stretches of roadway . Some roads were blocked and rendered impassable by the rainfall . At the local harbor , six vessels were inundated by the strong offshore wave action . Overall , property damage on the island was estimated at \$ 400 @,@ 000 .

= = = Mid @-@ Atlantic and Newfoundland = = =

After sweeping past Bermuda , the Weather Bureau continued to advise caution to shipping lanes in the storm 's proximity . Two coastal railway steamers destined for a Newfoundland port were delayed as a result of the approaching storm . All flights headed for Torbay Airport were suspended until the storm 's passage . Before affecting Newfoundland , however , the hurricane impacted numerous shipping lanes in the open Atlantic . The freighter Leicester , which had departed from London and was headed for New York City , was caught in the hurricane late on September 14 while situated roughly 400 mi (640 km) southwest of Cape Race , Newfoundland . As weather conditions deteriorated , the ship began to list , and as such the crew abandoned the ship late the following day . The American steamship Cecil N. Bean and the Argentinian steamship Tropero both assisted in rescue operations and rescued 39 crew members . However , six other remained unaccounted for and were presumed dead . The Portuguese fishing schooner Gaspar was also caught in the storm roughly 300 mi (480 km) off of Newfoundland , and although initial reports presumed that it had already sunk , the United States Coast Guard indicated that the ship was in no need of assistance . However , the ship was still abandoned and 41 crewmen were rescued , though one person was lost .

Much of the effects from the hurricane on Newfoundland occurred on September 15 and continued until September 18 . With winds equivalent to that of a Category 1 hurricane , the cyclone brushed east of the island , bringing extensive flooding . Offshore , a ship estimated winds in excess of 80 mph (130 km / h) off of Grand Bank . Precipitation peaked at a record 4 @.@ 5 in (110 mm) at Fort Pepperrell . In St. John 's , train traffic was effectively halted because of the hurricane . Silt

kicked up by the strong winds covered railroad tracks in the southern portions of the city , while heavy rainfall flooded several city streets . Similar problems occurred in Avondale . The nearby Rennie River overflowed its banks , inundating adjacent land . The urban flooding damaged adjacent infrastructure . A three @-@ year @-@ old girl died on September 16 after a landslide triggered by the rain filled the first floor of her home . This was the only death associated with the hurricane on the island . In Holyrood , the local highway was washed out in areas . A small trestle with two concrete abutments were swept off into the adjacent bay . Another road leading to Cape Saint Francis suffered wash outs as deep as 4 ft (1 @.@ 2 m) . Small bridges were also damaged , and some were washed away . As with the Rennie River , the Waterford River also overflowed its banks due to excessive recharge , and as such inundated 13 homes . Another river near Kilbride overflowed , flooding adjacent plots of land and tearing apart pavement . In this manner , several roads were rendered impassable and were cut off to traffic .