

= 1948 Atlantic hurricane season =

The 1948 Atlantic hurricane season featured the first tropical cyclone before the month of June since 1940 . The season officially began on June 15 , 1948 , and lasted until November 15 , 1948 . These dates conventionally delimit the period of each year when most tropical cyclones form in the Atlantic basin . There were 10 tropical cyclones ; six storms attained hurricane status , and four storms intensified into major hurricanes , which are Category 3 or higher on the modern Saffir - Simpson hurricane wind scale . Operationally , it was believed that a weak tropical disturbance formed over the southeast Bahamas in May and moved northwest into the Georgia coast near Savannah . This system was later excluded from HURDAT . The seventh tropical cyclone was not operationally considered a tropical cyclone , but was later added to HURDAT .

The sixth and eighth systems , designated as Dog and Easy by the Air Weather Service in real time , respectively , were the most intense tropical cyclones of the season , peaking as a Category 4 hurricane with a minimum barometric pressure of 940 mbar (27 . 6 inHg) . The former caused eight deaths and \$ 400 , 000 (1948 USD) in damage after bringing strong winds , rough seas , and heavy rainfall to Bermuda and Atlantic Canada . In Cuba and Florida , the eighth hurricane left 13 fatalities and at least \$ 14 million in damage . The ninth hurricane , assigned the name Fox by the Air Weather Service , brought similar impact to Cuba and Florida about two weeks later . In May , the first tropical cyclone killed 80 people from flooding in the Dominican Republic . Collectively , the storms of this season left around \$ 28 . 8 million in damage and 112 fatalities .

= = Season summary = =

The Atlantic hurricane season officially began on June 15 , 1948 . However , tropical cyclogenesis began on April 15 , about two months before the official start of the season . There was a total of ten tropical storms , six of which strengthened into hurricanes . Further , four of the six hurricanes deepened into major hurricanes , which are Category 3 or higher on Saffir - Simpson hurricane wind scale . Of the nine tropical disturbances detected operationally , five struck the United States with winds of 39 mph (63 km / h) or greater , while the other tropical systems affected islands , remained over the open ocean , or affected the country with winds below tropical storm intensity . Three hurricanes made landfall in the United States , while the three other storms with winds of at least 74 mph (119 km / h) largely remained at sea . Collectively , the storms of this season left around \$ 28 . 8 million in damage and 112 fatalities .

The strongest storms of the season attained Category 4 intensity ; two of the major hurricanes formed in the western Caribbean Sea and affected the United States in late September and October . A minimal hurricane struck southern Louisiana on September 4 , causing tides of 5 ft (1 . 5 m) and winds of 78 mph (126 km / h) in New Orleans . A minimal tropical storm made landfall near Destin in July . An intense hurricane attained Category 4 strength and produced extensive damage and 100 mph (160 km / h) wind gusts on Bermuda in mid - September . A Category 4 hurricane struck the Florida Keys and the Everglades in September , resulting in \$ 12 million of damages in the state . After the passage of one week , another hurricane affected the region as a Category 2 storm , after crossing Cuba with winds of 125 mph (200 km / h) . Only three direct fatalities occurred in the United States , largely because of improved evacuations and adherence to warnings and advisories .

The season 's activity was reflected with an accumulated cyclone energy (ACE) rating of 95 . ACE is , broadly speaking , a measure of the power of the hurricane multiplied by the length of time it existed , so storms that last a long time , as well as particularly strong hurricanes , have high ACEs . It is only calculated for full advisories on tropical systems at or exceeding 39 mph (63 km / h) , which is tropical storm strength .

= = Storms = =

=== Tropical Storm One ===

A broad area of low pressure in the central Caribbean Sea developed into a tropical depression early on May 22 . The circulation moved northward , and it made landfall in southwest Haiti around 1200 UTC with winds of 35 mph (56 km / h) . Over the next day , the system crossed Hispaniola and the Turks and Caicos Islands with winds unchanged . Turning to the northeast , it strengthened into a tropical storm at 1200 UTC on May 24 while over the southwest Atlantic . Shortly afterward , the tropical cyclone turned to the north . On May 25 , the storm 's forward motion slowed to a crawl ; within a few hours , the storm attained its estimated peak intensity of 50 mph (80 km / h) , as reported by reconnaissance aircraft , though no ships reported gale @-@ force winds . The next day , the cyclone started to weaken , and on May 27 , the system began to accelerate northward . The system diminished to a tropical depression on May 29 shortly prior to dissipation .

The tropical system brought heavy precipitation to Hispaniola , and widespread flooding took place across the region . In Dominican Republic , the capital city of Santo Domingo (then known as Ciudad Trujillo) was impacted significantly , where 9 in (229 mm) of rain fell in 24 hours . More than 20 bridges were swept away , isolating the city from the rest of the country . Several people went missing in the floodwaters and it is estimated that 80 people died . The storm ranks as the deadliest Atlantic tropical cyclone to form in the off @-@ season .

=== Tropical Storm Two ===

After nearly two months of inactivity , an area of disturbed weather developed in the northern Gulf of Mexico . The area organized into a tropical depression over the north @-@ central Gulf of Mexico on July 7 . The depression strengthened slightly and became a weak tropical storm early on July 9 , when it peaked with maximum sustained winds of 40 mph (65 km / h) . Several hours later , the system made landfall east of Pensacola , Florida , but quickly weakened to a depression as it moved inland . The remnants moved north through southeastern Alabama on July 10 , and the circulation dissipated over southern Tennessee on July 11 . The system produced minimal effects along the Florida Panhandle . Winds of 35 mph (56 km / h) were measured at Pensacola during the passage of a thunderstorm , and the tropical cyclone caused heavy precipitation over northern Florida , southern Alabama , and southern Georgia . Overall damage was minimal .

=== Hurricane Three (Able) ===

A strong tropical storm , named Able by the Air Weather Service in real time , was first identified on August 26 about 300 mi (485 km) northeast of Saint John , as ship reports indicated winds of Force 9 . However , it is likely that Able formed much farther east , possibly as a Cape Verde @-@ type hurricane . The tropical cyclone quickly intensified to a hurricane , and it continued to steadily progress northwest . The storm strengthened into a Category 2 hurricane on August 27 , and while turning west @-@ northwestward it continued to intensify . The cyclone peaked as a 120 mph (195 km / h) Category 3 hurricane by 1800 UTC on August 28 , which was measured by a reconnaissance aircraft flight . Its forward motion slowed on August 29 , and it began to weaken as it turned to the north on August 30 . The tropical system weakened to a minimal hurricane , and it accelerated to the northeast on August 31 . The storm soon became extratropical before striking southern Newfoundland on September 2 . Over the next several days , the system slowly weakened , and its remnants turned east before dissipating south of southern Iceland on September 5 .

In anticipation of the storm , the U.S. Weather Bureau posted hurricane warnings from Wilmington to Cape Hatteras . On August 30 , as the tropical cyclone began to turn to the north , the center was expected to pass over or near Cape Hatteras . High tides occurred along the North Carolina coastline , which prompted evacuations and precautions in the area . The remnants of the storm brought strong winds to Atlantic Canada . In Nova Scotia , the storm severely disrupted electricity and communications between Halifax and Sydney . At the latter , many trees were uprooted , with several falling on streets and cars . In Newfoundland , a wind gust as strong as 81 mph (130 km / h

) was observed . The community of Port au Port was hard hit . Among the structures damaged included a store , which lost its roof , and a church , which the storm completely destroyed . Port au Port alone suffered about \$ 200 @, @ 000 (1948 CAD) in damage . Along the shore , a number of pleasure crafts were wrecked . Some other structures , trees , and boats were impacted or destroyed throughout the province . The communities along the south coast of Newfoundland collectively experienced about \$ 400 @, @ 000 (1948 CAD) in damage . Overall , the storm left over \$ 989 @, @ 000 (1948 CAD) in damage in Canada .

= = = Tropical Storm Four (Baker) = = =

On August 30 , a tropical storm named Baker by the Air Weather Service in real time , was first detected about 275 mi (445 km) east of Barbados , by a ship that reported high easterly seas and winds of Force 10 . Upon being initially observed , Baker was already at its peak maximum sustained winds of 60 mph (95 km / h) . The small system moved rapidly westward and slowly weakened to a marginal tropical cyclone on August 31 . On the morning of September 1 , Baker passed between Saint Lucia and Martinique , when a reconnaissance aircraft mission reported a minimum pressure of 1007 mbar (29 @. @ 73 inHg) . Subsequent missions failed to detect a center of circulation , and the tropical cyclone quickly degenerated to a tropical depression . Baker dissipated over the eastern Caribbean Sea on September 1 . The storm brought heavy rainfall to several eastern Caribbean islands , though most of it was beneficial . On Puerto Rico , water supplies and crops were replenished .

= = = Hurricane Five (Charlie) = = =

An area of disturbed weather organized into a 39 mph (63 km / h) tropical storm ? named Charlie by the Air Weather Service in real time ? on September 1 over the western Gulf of Mexico . On the morning of September 2 , the poorly defined center moved northeast , and Charlie gradually intensified . It attained hurricane intensity on September 3 and then slowly accelerated toward the upper Gulf Coast . The rapidly reached its peak intensity of 80 mph (130 km / h) , and it crossed the coastline west of Golden Meadow , Louisiana , on September 4 . The center moved inland over Orleans Parish , and the weakening tropical cyclone diminished to a strong tropical storm prior to moving over southern Mississippi . Charlie continued to weaken and fell to tropical depression intensity on September 5 . The remnants turned to the north , and the circulation dissipated over northwestern Indiana on September 6 .

On September 4 , the U.S. Weather Bureau advised residents that the storm was expected to strike land between Morgan City and Grand Isle around midnight , as its forward motion had increased to 15 mph (24 km / h) . The weather service also noted that abnormally high tides were expected from the Mississippi River to Pensacola , as the center was predicted to pass east of New Orleans and move to the west of Biloxi shortly before dawn . About 1 @, @ 000 people left their homes in Terrebonne Parish and took shelter in a courthouse and school buildings in Houma . As winds increased , city officials in New Orleans ordered 2 @, @ 000 people to evacuate from a wartime housing project into an auditorium for shelter . Offshore , oil drilling platforms and equipment were destroyed by high seas near Grand Isle . The island itself was cutoff from the mainland after 5 ft (1 @. @ 5 m) inundated roadways .

Throughout southeastern Louisiana , beans were destroyed north of Lake Pontchartrain , while sugar cane and corn were flattened , especially in Lafourche , Jefferson , St. Charles , and Terrebonne parishes . Pecan and tung nut crops also suffered damage in southeastern Mississippi . The hurricane produced gusts of 78 mph (126 km / h) at Moisant Airport , and tides ranged from 3 @. @ 4 to 6 ft (1 @. @ 0 to 1 @. @ 8 m) along the coast from Mississippi to the Florida Panhandle . The maximum tide reached 4 @. @ 7 ft (1 @. @ 4 m) in New Orleans , and winds caused damage to small boats , trees , and power and communication lines . The remnants of the hurricane brought rainfall far inland , including 0 @. @ 82 in (21 mm) of precipitation observed in Detroit , Michigan . Total damage in the United States reached \$ 900 @, @ 000 .

== Hurricane Six (Dog) ==

A tropical wave moved off the west coast of Africa on September 3 and was designated as Tropical Storm Dog by the Air Weather Service in real time on the following day . 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 , Dog began to curve northward on a parabolic track , bringing it near Bermuda at peak intensity as a Category 4 hurricane on September 13 . The hurricane then began to accelerate northeastward and weaken . The waning Dog grazed Cape Race , Newfoundland , before transitioning into an extratropical cyclone on September 15 ; these remnants persisted for an additional day .

Although the storm never making landfall , Dog 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 trees . Property damage also resulted from the strong winds , totaling about \$ 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 , one person were killed . Overall , the hurricane caused eight fatalities .

== Tropical Storm Seven ==

Operationally , this storm was not considered a tropical cyclone . Late on September 7 , an extratropical system transitioned into a tropical storm about 355 mi (570 km) northeast of Bermuda . The storm curved northwestward and peaked with maximum sustained winds of 65 mph (100 km / h) and a minimum barometric pressure of 993 mbar (29 @. @ 3 inHg) . After turning northward and then northeastward , the storm began losing tropical characteristics and reverted to an extratropical cyclone on September 10 while situated about 215 mi (345 km) southwest of Sable Island , Nova Scotia . The remnants continued northeastward until dissipating just offshore Newfoundland .

== Hurricane Eight (Easy) ==

The eighth storm , designated as Tropical Storm Easy by the Air Weather Service in real time , developed from a tropical wave over the Caribbean Sea on September 18 . Early the next day , Easy strengthened into a hurricane while moving westward . Thereafter , it curved northwestward and continued to deepen . By September 20 , the system turned northward and later that day made landfall along the Zapata Peninsula of Cuba as a Category 3 hurricane on the modern day Saffir ? Simpson hurricane wind scale . Another landfall occurred in Cuba early the next day to the south of Güines . Severe destruction was reported on the island , with winds up to 90 mph (140 km / h) observed in Havana . Over 700 buildings were destroyed . Ten deaths occurred and damage totaled at least \$ 2 million , while other sources estimate " several million dollars . "

After emerging into the Straits of Florida on September 21 , Easy resumed intensification , before striking near Boca Chica Key , Florida , with winds of 120 mph (195 km / h) . By early on September 22 , the system peaked as a Category 4 hurricane with sustained winds of 130 mph (215 km / h) . Shortly thereafter , another landfall occurred near Chokoloskee at the same intensity . Severe damage was reported in the state due to strong winds . The storm was considered the worst in Key West since 1919 . Throughout the state , 1 @, @ 200 homes were severely damaged or destroyed , while 40 businesses were demolished and 237 suffered impact . There were three deaths and about \$ 12 million in damage , over half of which was inflicted on crops . The storm rapidly weakened while crossing the state and emerged into the Atlantic Ocean as only a Category

1 hurricane later on September 22 . Slight fluctuations in intensity occurred before the hurricane became extratropical early on September 24 , while located northwest of Bermuda . The remnants accelerated to the east @-@ northeastward and continued to weaken , before dissipating hundreds of miles east of Newfoundland on September 26 .

= = = Late September tropical depression = = =

On September 25 , a westward moving tropical wave near the Lesser Antilles began appearing in historical weather map . A reconnaissance aircraft flight into the system when it was over the central Caribbean Sea indicated wind gusts up to 52 mph (84 km / h) , but no circulation . During a separate flight on September 29 , it was noted that , " [a] complete search of area shows well @-@ organized circle of storm but open to west and northwest " . Although no circulation was detected , westerly winds were reported , making it likely that a tropical depression developed that day over the western Caribbean . Subsequently , the depression moved over the northern Yucatán Peninsula , which may have disrupted the poorly @-@ defined circulation . By October 1 , the system entered the Gulf of Mexico , where it began degenerating into an open trough on October 3 . Cold air and the development of Hurricane Fox in the western Caribbean prevented re @-@ generation . The remnants continued northeastward into North Florida and deepened while producing strong gales along the coasts of North Carolina and Virginia . It is possible that the remnants lasted until October 8 , when it was absorbed by Fox .

= = = Hurricane Nine (Fox) = = =

On October 3 , a tropical depression developed over the northwestern Caribbean Sea . The storm intensified into a tropical storm , designated as Tropical Storm Fox by the Air Weather Service in real time , early on October 4 . Several hours later , the storm became a hurricane . Fox then significantly deepened , peaking as a Category 3 intensity with maximum sustained winds of 125 mph (205 km / h) early on October 5 . Around that time , Fox made landfall in eastern Pinar del Río Province of Cuba . Fox crossed the island and emerged into the Straits of Florida a few hours later . Late on October 5 , the hurricane made landfall on Bahia Honda Key , Florida , with winds of 105 mph (165 km / h) and near Flamingo about two hours later . Fox emerged into the Atlantic Ocean near Fort Lauderdale early on October 6 . The storm moved northeastward and later curved to the east @-@ northeast . Late on October 7 , Fox made landfall on Bermuda with winds of 105 mph (165 km / h) . Fox weakened over the next several days and later executed a large cyclonic loop . By October 16 , it became extratropical while well east @-@ southeast of Newfoundland .

In Cuba , homes and cattle were swept away by flash flooding . Eleven deaths and about 300 injuries were attributed to the tropical cyclone . Damage in the country reached about \$ 6 million . The storm brought strong winds to Florida , with a sustained wind speed of 122 mph (196 km / h) at Naval Air Station Key West . Heavy rainfall exceeding 9 @.@ 5 in (240 mm) in Miami and three tornadoes also contributed to the damage in South Florida . Throughout the state , 674 homes were severely damaged or destroyed , while 45 other buildings were demolished . Overall , damage in Florida reached \$ 5 @.@ 5 million and there were no deaths , but 36 injuries , none of which were serious . In Bermuda , buildings were unroofed and the sides of some structures were knocked down . Electrical light wires and telephone lines were toppled across the island . Damage totaled over \$ 1 million .

= = = Hurricane Ten (George) = = =

A tropical storm developed about midway between Bermuda and Puerto Rico on November 8 . Designated as George by the Air Weather Service in real time , the storm moved quickly west @-@ northwestward . Early on November 10 , George is believed to have reached hurricane intensity after reconnaissance aircraft flights recorded a small area of winds ranging from 70 to 80 mph (110 to 130 km / h) . Peaking as a Category 1 hurricane with maximum sustained winds of 75 mph (120

km / h) and a minimum barometric pressure of 990 mbar (29 inHg) , George then curved north @-@ northwestward . Later that day , the hurricane began to become disorganized and weakened to a tropical storm . Early on November 11 , George degenerated into an area of disturbed weather while located about 195 mi (315 km) east of Virginia Beach , Virginia . As the hurricane threatened the coast of North Carolina on November 10 , hurricane warnings were issued between Cape Lookout and Cape Hatteras .

= = = Other storms = = =

In addition to the ten systems that became a tropical storm and the other tropical depression , there were a few tropical cyclones that failed to strengthen beyond tropical depression intensity . A weak broad low pressure area formerly associated with a trough developed into a tropical depression well northeast of the Lesser Antilles on April 15 . A barometric pressure of 1 @,@ 005 mbar (29 @.@ 7 inHg) was observed that day . The depression moved northward and then became stationary by April 17 , before degenerating into a trough on the next day . The next tropical depression developed from a northward moving tropical wave over the eastern Gulf of Mexico on July 31 . Although the depression continued northward , it cannot be determined if the system made landfall in the Florida Panhandle before dissipating on August 2 . Tampa recorded a 5 @-@ minute sustained wind speed of 34 mph (55 km / h) on July 31 . By August 13 , another tropical depression formed from area of disturbed weather well offshore the Mid @-@ Atlantic . The system moved rapidly northeastward and became extratropical early on August 14 . It may have been a tropical storm , based on barometric pressure of 995 mbar (29 @.@ 4 inHg) observed by a ship shortly after extratropical transition . On September 16 , a trough of low pressure developed into a tropical depression over the western Gulf of Mexico . Unfavorable conditions caused the depression to dissipated by the following day .

= = Season effects = =