

= Typhoon Nepartak ( 2003 ) =

Typhoon Nepartak , known in the Philippines as Typhoon Weng , was a modest tropical cyclone that struck the central Philippines and the southern China island of Hainan in November 2003 . Forming as a tropical depression on November 11 between Yap and Guam , the system moved westward and slowly intensified . It received the name Nepartak midday on November 12 from the Japan Meteorological Agency , becoming the 20th named storm of the 2003 Pacific typhoon season . On November 13 , Nepartak struck Samar in the Philippines and bisected the island chain . Up to four million people lost power , and transportation ground to a halt ; over 5 @, @ 000 individuals became stranded on ships forced to stay in port during the tropical storm . It was reported that 13 individuals lost their lives to the storm in the Philippines .

After entering the open waters of the South China Sea , Nepartak continued to intensify and turned more toward the northwest . It attained its peak intensity on November 16 , with maximum 10 ? minute sustained winds of 120 km / h ( 75 mph ) and 1 @-@ minute winds of 140 km / h ( 85 mph ) . After weakening slightly , the storm found a weakness in the easterly steering currents and bore north , reintensifying slightly and directly striking southwestern Hainan . There , heavy rainfall and strong winds destroyed crops , livestock , and hundreds of homes , leaving \$ 197 million ( 2003 USD ) in damage . The storm rapidly deteriorated in the Gulf of Tonkin and dissipated as it neared mainland China .

= = Meteorological history = =

Nepartak originated in a region of strong thunderstorm activity , associated with a broad trough of low surface pressure , which was situated around 640 km ( 400 mi ) southeast of Guam by 0000 UTC on November 11 . With weak wind shear and modest divergence of air over the system , it began to mature , although initially the Joint Typhoon Warning Center ( JTWC ) downplayed the potential for tropical cyclogenesis . Over the next several hours , a low @-@ level circulation center became evident and convection organized around it , prompting the JTWC to issue an updated outlook . At 1800 UTC , the Japan Meteorological Agency ( JMA ) classified the storm as a tropical depression while it was located northeast of Yap in the Caroline Islands . The JTWC issued a tropical cyclone formation alert for the system at 2030 UTC , and designated it Tropical Depression 25W at 1200 UTC on November 12 . The system intensified gradually as it began to track quickly westward toward the Philippines .

The depression had found its way to the southwestern quadrant of a large anticyclone aloft , allowing for continued strengthening . Both the JMA and the JTWC upgraded the system to a tropical storm midday on November 12 , when it gained the name Nepartak from the JMA . Simultaneously , the cyclone entered the area of responsibility of the Philippine Atmospheric , Geophysical and Astronomical Services Administration , which named it Tropical Storm Weng . Meteorologically , the storm began to exhibit improved outflow and deepening convection as it neared the central Philippines . At around 1600 UTC on November 13 , Nepartak made landfall on northern Samar Island in the Philippines before traversing the remainder of the archipelago from east to west . The cyclone emerged into the South China Sea briefly weakened and with reduced forward motion , but quickly resumed its intensification trend as it turned more toward the northwest . Shortly thereafter ? at 0000 UTC on November 15 ? the JTWC further upgraded 25W to a typhoon .

Continuing generally toward the west @-@ northwest under steering currents from a mid @-@ level ridge to its north , Nepartak maintained its windspeeds throughout the day . With an improving appearance on satellite imagery , however , the storm gained some additional strength , and the JTWC estimated 25W to have attained its first peak intensity with maximum 1 ? minute sustained winds of 140 km / h ( 85 mph ) at 0000 UTC on November 16 . Later that day , the JMA determined Nepartak to have reached maximum 10 @-@ minute winds of 120 km / h ( 75 mph ) , placing it at typhoon status . The cyclonic envelope began to ingest dry air from its surroundings , and convection began to wane , leading to slight weakening as the storm approached the island of Hainan . A shortwave trough soon cut a weakness in the mid @-@ level ridge which had previously

suppressed Nepartak to the south , allowing the cyclone to curve north and enhancing outflow over the storm . By late on November 17 , a small eye feature about 19 km ( 12 mi ) in diameter had formed , and at 0000 UTC the next day it was situated just offshore southwestern Hainan .

The cyclone 's 1 @-@ minute winds increased once again to 140 km / h , marking its second and final peak at 0000 UTC on November 18 . The JMA , however , maintained Nepartak as a severe tropical storm . The JTWC indicated that 25W made a second landfall on the coast of Hainan , although the JMA did not make such mention , implying Nepartak 's center remained over the Gulf of Tonkin . Regardless , the cyclone 's circulation had obscured most of Hainan and the Gulf of Tonkin and reached into adjacent Vietnam , and its forward speed slowed to a crawl . Extended interaction with land proved detrimental to the storm , and it began to rapidly disintegrate . Just 18 hours after its final bout of strengthening , Nepartak had been reduced to an exposed circulation center with no associated thunderstorms . Turning toward the northeast , the system had been concurrently downgraded to a tropical depression by the JTWC and JMA early on November 19 . The weak remnant low of Nepartak limped ashore over Beihai , China at 1900 UTC and dissipated shortly thereafter .

= = Impact = =

On its first landfall , the tropical storm buffeted the eastern @-@ central Philippines with damaging winds gusting up to 160 km / h ( 100 mph ) , heavy rainfall , and rough seas . At least 20 provinces experienced adverse or dangerous weather , with the worst conditions concentrated over the islands of Samar and Masbate . While structural and crop damages were limited , local infrastructure and transportation suffered the greatest . Nepartak 's winds caused complete power outages on Samar , Masbate , and nearby Marinduque , affecting their entire collective population of nearly four million individuals . Many schools were closed . The storm forced the cancellation of nearly two dozen domestic flights to and from the region , and at least 120 ferries and other vessels sought shelter in ports around the Manila , Bicol , and Visayas regions . On those ships were more than 5 @, @ 000 people who became stranded until safe passage could be made . By November 15 , five deaths had been confirmed in the Philippines , four the result of electrocutions from downed powerlines . Immediately following the disaster , then @-@ President Gloria Macapagal @-@ Arroyo made assisting the stranded passengers in coastal ports a priority . According to the PAGASA in its post @-@ storm report , a total of 13 people lost their lives , 5 others remained unaccounted for , and 11 sustained injuries . One newspaper reported that a motorized craft in the Tañon Strait capsized at the height of the storm , forcing the rescue of 11 people . Another source also describes the sinking of a boat with at least 13 survivors and one fatality . It is not clear whether these accounts cover the same incident .

Nepartak inflicted widespread destruction on Hainan , including damage to farms and buildings . Most of the island was subject to strong winds and torrential rains , but the storm helped to relieve one of the worst summer droughts in almost 65 years . Due to the danger , shipping was halted in the Qiongzhou Strait between November 16 and 19 . Nepartak impacted at least 1 @. @ 72 million people on Hainan , compromised infrastructure , and impeded industry . The storm halted the operation of mines and rendered 72 highways temporarily unusable . Crops suffered extensively ; 64 @, @ 000 ha ( 160 @, @ 000 acres ) of fields were damaged , reducing grain production by as much as 3 @, @ 200 tons . In addition , 400 head of livestock were lost to the typhoon . With about 800 homes destroyed , damage on Hainan amounted to \$ 197 million ( 2003 USD ) , and no fatalities were reported . Following the storm , a young male sperm whale weighing over 500 kg ( 1100 lb ) washed ashore near Dongfang City on the island 's southern shore , and died shortly after . Biologists speculated that the whale 's demise may have been related to typhoon , although this was not confirmed .

By the time the storm had begun to abate over Hainan , it was already nearly dissipated , and as a result produced few , if any , noticeable effects in mainland China . Across the Gulf of Tonkin , Vietnam had experienced deadly flooding in the week before Nepartak 's approach , and the typhoon initially raised concerns about worsening the situation . Officials made preparations to

minimize potentially exacerbating factors , and the cyclone remained far enough east to avoid seriously impacting the country .