

= Hurricane Uleki =

Hurricane Uleki , also referred as Typhoon Uleki , was a long @-@ lived tropical cyclone in August ? September 1988 that had minimal effects on land . Originating from a disturbance in the Intertropical Convergence Zone in late @-@ August , Uleki was identified as a tropical depression well to the southeast of Hawaii on August 28 . Steady organization ensued as it moved west , becoming a tropical storm on August 30 and a hurricane on August 31 . Rapid intensification took place thereafter and the storm reached its peak intensity on September 2 as a Category 3 on the Saffir ? Simpson hurricane wind scale . Hurricane Hunters investigating the cyclone found peak winds of 125 mph (205 km / h) and a barometric pressure of 957 mbar (hPa ; 28 @.@ 26 inHg) . Thereafter , Uleki stalled for two days to the southwest of Hawaii , resulting in heavy surf across the state . The dangerous swells killed two people on Oahu .

Unfavorable environmental conditions caused weakening of the hurricane by September 4 as it resumed a west @-@ northwest course away from Hawaii . Conditions later became favorable and Uleki acquired winds of 105 mph (165 mph) on September 7 , constituting its secondary peak . The hurricane crossed the International Dateline on September 8 and was reclassified as typhoon . Remaining well away from land , the cyclone steadily weakened to a tropical storm by September 12 . Gradually turning north and later east , the degrading cyclone transitioned into an extratropical cyclone four days later and ultimately dissipated on September 17 near the International Dateline .

= = Meteorological history = =

In late @-@ August 1988 , increased convective activity was noted along the Intertropical Convergence Zone by forecasters at the Central Pacific Hurricane Center (CPHC) . An area of low pressure subsequently developed within this disturbance and was designated as Tropical Depression One @-@ C at 12 : 00 UTC on August 28 . Upon classification , the depression was situated roughly 800 mi (1 @,@ 300 km) southeast of the Big Island of Hawaii and moving west @-@ northwest . Steady intensification ensued over the following day with the system attaining gale @-@ force winds by 18 : 00 UTC on August 29 , at which time it was assigned the name Uleki . The storm later attained winds of 75 mph (120 km / h) on August 31 and was dubbed a hurricane as it passed 350 mi (560 km) south of Hilo . Thereafter , Uleki underwent a sudden period of rapid intensification and achieved major hurricane status later that day . After reaching this strength , Uleki 's forward motion gradually lessened and eventually almost ceased altogether on September 1 as upper @-@ level steering currents collapsed .

With the hurricane situated to the southwest of the Hawaiian Islands , Hurricane Hunters conducted several weather reconnaissance missions into the storm . On September 2 , they found maximum surface winds of 125 mph (205 km / h) and a minimum barometric pressure of 957 mbar (hPa ; 28 @.@ 26 inHg) ; this corresponded to the peak intensity of Uleki . At the time , Uleki displayed a well @-@ organized , tight circulation . The hurricane meandered in the same general area over the next two days , executing several small loops , with a slight northward drift . During this time , its circulation increased in coverage but became less @-@ organized as weakening ensued . Increased wind shear and restricted outflow took their toll on the hurricane . The cyclone 's winds dropped to 80 mph (130 km / h) by 12 : 00 UTC on September 4 as it resumed its west @-@ northwest track under the influence of a subtropical ridge away from the Hawaiian Islands . Uleki passed roughly halfway between Johnston Atoll and the French Frigate Shoals on September 5 . By September 7 , the weakened trend halted and environmental conditions favored reintensification . As Uleki neared the International Dateline , it regained winds of 105 mph (165 km / h) .

At 00 : 00 UTC on September 8 , the CPHC transferred warning responsibility of Uleki to the Joint Typhoon Warning Center (JTWC) and the storm was subsequently referred to as a typhoon . Transfer of warnings occurred when the storm was at 178 ° W rather than at the dateline , where the boundary between the Central and West Pacific basins exists , for unknown reasons . Three hours later Uleki made its closest approach to Midway Atoll , passing 200 mi (320 km) to the south . Shortly thereafter the system crossed the International Dateline and the Japan Meteorological

Agency (JMA) also began advising on the system . The JMA estimated Uleki to have had a pressure of 945 mb (hPa ; 27 @. @ 91 inHg) at this time ; however , this value was derived from satellite estimates rather than direct measurements . Uleki maintained this strength through September 10 as it continued on its west @-@ northwest course . On that day , the typhoon again entered a region of weak steering currents between two anticyclones within the subtropical ridge . A trough approaching from the west was forecast to prompt Uleki to turn east ; however , the typhoon maintained a general northwest motion in a stair @-@ stepped fashion . Increasing wind shear and cooler air soon imparted weakening , and Uleki degraded to a tropical storm by September 12 .

Continued effects from shear stripped the cyclone of all deep convection , and by September 14 only a band of cirrus clouds remained in association with Uleki . The JTWC issued their final warning on the system at 00 : 00 UTC that day accordingly . The JMA maintained the system as a tropical depression as the former typhoon began turning to the east . Uleki later transitioned into an extratropical cyclone on September 16 as it accelerated to the east . The system dissipated the following day near the International Dateline , far from any major landmasses .

= = Preparations and impact = =

As the hurricane stalled to the southwest of Hawaii on September 3 , tropical storm watches were issued for Oahu , Kauai , and Niihau . High surf advisories were raised for all islands as well . Following Uleki 's turn to the west on September 5 , the tropical storm watches were discontinued . The storm 's erratic movement proved to be troublesome for forecasters and they continuously warned residents to be cautious and alert should the storm double @-@ back to the state . On September 4 , lifeguards at Waikiki Beach and Ala Moana Beach rescued 19 people caught in 5 to 6 ft (1 @. @ 5 to 1 @. @ 8 m) swells . Further north in Oahu , two people drowned after being caught in rough waters .

The storm moved roughly halfway between the French Frigate Shoals and Johnston Island on September 5 with no adverse effects in either region due to its weakened state . On September 7 , the 300 residents of Midway Atoll and United States Coast Guard personnel stationed on Kure Atoll prepared for possible hurricane @-@ force winds from the storm . Hurricane Uleki ultimately passed 200 mi (320 km) south of Midway Atoll and produced some coastal flooding from increased surf . Some breaking waves spilled onto the runway at Henderson Field .