

## = Mohawk Airlines Flight 411 =

Mohawk Airlines Flight 411 , a Fairchild FH @-@ 227B twin @-@ engine turboprop , registered N7811M , was a scheduled domestic passenger service operated by Mohawk Airlines , between Albany and Glens Falls , New York . On November 19 , 1969 , it crashed into Pilot Knob Mountain , killing all 14 passengers and crew on board .

The National Transportation Safety Board ( NTSB ) concluded that the crash was caused by the captain 's improper execution of an instrument approach , combined with a severe downdraft at a low altitude , which resulted in the aircraft descending uncontrollably into terrain .

## = = History of flight = =

On the evening of November 19 , 1969 , at about 20 : 03 EST , Mohawk Airlines Flight 411 , a twin engine Fairchild FH @-@ 227B turboprop , departed from Albany International Airport near Albany , New York . It was operating as a scheduled passenger / cargo flight on an instrument flight rules ( IFR ) flight plan to its destination of Warren County Airport in Glens Falls , New York , 37 nautical miles ( 69 km ) northeast , with an estimated flight time of about 15 minutes .

At 20 : 07 : 32 EST , just 4 minutes after takeoff , Flight 411 was cleared by air traffic control ( ATC ) for " a VOR approach to runway 19 " . The aircraft overflew the Glens Falls airport and proceeded northbound , subsequently reversing course . Shortly after course reversal , at about 20 : 20 EST , the aircraft hit trees on the northwest slope of the Pilot Knob Mountain , then impacted a rock cliff from which it fell 34 feet ( 10 m ) and became lodged between trees and caught fire . Of the 11 passengers and 3 crew on board , there were no survivors .

## = = Investigation and final report = =

The accident was investigated by the National Transportation Safety Board ( NTSB ) . The Flight Data Recorder was recovered intact from the wreckage , but the Cockpit Voice Recorder had been damaged in the post @-@ crash fire and was unusable .

The weather at Glens Falls at the time of the accident was reported as " 2 @, @ 100 ( feet ) overcast , visibility 7 ( miles ) in light rain , wind 180 ( degrees ) at 12 ( knots ) , peak gusts 22 ( knots ) , altimeter 2980 , runway 19 in use " . The surface temperature was 54 degrees Fahrenheit ( 12 degrees Celsius ) .

The investigation revealed that ATC cleared the flight to " the VOR approach " , without actually specifying which specific VOR approach procedure was to be used , possibly leaving it to the flight crew 's discretion . According to the radio communication transcript , the flight crew did not inquire as to which specific approach was in effect . There were two published VOR approaches at the time , one from the north and one from the south . The northern approach , called " VOR / DME 19 " , was not legally available to the crew under these circumstances , as Mohawk company policy prohibited reliance on DME as a primary navigational instrument . The other VOR approach , called " VOR 1 " , was the only one legally available to the flight , and would have required descending while approaching the airport from the south during the final approach segment , followed by a " circle to land " maneuver , landing to the south on runway 19 .

Despite this , possibly due to their concerns with passenger comfort ( the VOR 1 approach would have required performing the " circle to land " maneuver at a relatively low altitude over the airport to land on runway 19 ) , or possibly by simply being late to set up for the recommended VOR 1 approach ( the flight time was only about 8 minutes from takeoff at Albany to the Glens Falls area , with a significant tailwind component of approximately 50 knots ) , the crew did not execute the VOR 1 approach . Instead , the crew appeared to select an improvised and unauthorized modified version of the VOR / DME 19 approach , which included flying outbound followed by a course reversal at about 10 nautical miles ( 20 km ) north of the airport , over Lake George . As the crew performed what appeared to be an unpublished and unauthorized procedure turn for course reversal on the VOR / DME 19 approach path , they descended prematurely and hit the side of a mountain . It was

subsequently determined that a 60 @-@ knot ( 110 km / h ) southerly wind created a downdraft effect which , coupled with the aircraft 's low altitude over the terrain , contributed to the crash .

In their final report , issued on June 25 , 1970 , the NTSB determined the following official Probable Cause for the accident :

The captain , while conducting an approach , exceeded his clearance limits and , thereafter , flew the aircraft into a severe " lee of the mountain downdraft " at an altitude insufficient for recovery . No evidence was found to explain why this particular approach was attempted .