

= Flight Unlimited III =

Flight Unlimited III is a 1999 flight simulator video game developed by Looking Glass Studios and published by Electronic Arts . It allows players to pilot reproductions of real @-@ world commercial and civilian aircraft in and around Seattle , Washington . Players may fly freely or engage in " Challenge " missions , such as thwarting a theft or locating Bigfoot . The development team built on the general aviation gameplay of Flight Unlimited II , with more detailed physics and terrain , more planes and a real @-@ time weather system . Roughly half of Flight Unlimited II 's team returned to work on the sequel , supported by new hires .

Lead designer Peter James described Flight Unlimited III 's development as a struggle , thanks to a lack of interest from Electronic Arts and from Looking Glass 's management . Placed in direct competition with Microsoft Flight Simulator 2000 and Fly ! , the game failed to capture sufficient market share . It became one of Looking Glass 's biggest commercial flops , with roughly 20 @,@ 000 units sold in the United States during 1999 . This contributed to the company 's closure in 2000 . The game was well received by critics , who praised its terrain rendering and dynamic weather . Its simulated physics were lauded by several reviewers , but others felt that the physics were imprecise , and that the game 's system requirements were extremely high .

= = Gameplay = =

Flight Unlimited III is a three @-@ dimensional (3D) flight simulator video game , in which the player pilots virtual reproductions of real @-@ world planes . Players may control ten aircraft : the Lake Turbo Renegade , Stemme S10 , Mooney Bravo , Fokker Dr.I , Beechjet 400A and five planes first included in Flight Unlimited II . Plane cockpits feature simulated flight instruments such as variometers and primary flight displays , and allow for both visual and instrument navigation . The main airspace is 10 @,@ 000 square miles of Seattle terrain ; eight other Western American states are modeled as well , albeit in less detail . The California scenery from Flight Unlimited II may be imported to expand the airspace . The player shares the game 's skies with artificially intelligent (AI) planes . Real @-@ time , interactive air traffic control monitors the player 's actions and tries to prevent mid @-@ air collisions . Before a flight , the player may select which types of weather to encounter . Weather conditions such as cold fronts and thunderstorms develop in real @-@ time .

In addition to the default " Quick Flight " mode , the player may play tutorial and " Challenge " missions . The game 's tutorial mode features 26 lessons , which demonstrate basic and advanced flying techniques and then allow the player to perform them . Challenge missions test the player 's flying ability with objectives such as locating Bigfoot , rescuing a stranded hiker , stopping a theft or flying through hoops . Eleven Challenges are available , but the player may create more or download them from the Internet . Flight Unlimited III includes the level editor (" FLED ") used to develop the game , which allows players to use the game 's assets to create airports , AI flight paths and edited landscapes . Players may share their creations online .

= = Development = =

Following the release of Flight Unlimited II in 1997 , certain members of that game 's team wanted to move on to Flight Unlimited III , while others wanted to create the combat flight simulator game Flight Combat . Looking Glass Studios chose to develop the games simultaneously : the team was split into two , both supplemented with new hires . The company then surveyed customers to determine where Flight Unlimited III should take place , among other things . In May 1998 , Electronic Arts was announced as the game 's publisher , as part of a multi @-@ title marketing and distribution deal that also included System Shock 2 . Looking Glass 's goal was to build on the foundation of Flight Unlimited II and to provide what project leader Tom Sperry called " the true joy and sensation of flight in the most realistic environment available " . The company first displayed Flight Unlimited III at the MicroWINGS Conference in August 1998 . At the show , the game was revealed to take place in and around Seattle ? a choice based on fan requests and on the varied

landscape and weather of Puget Sound . Looking Glass also discussed new planes , moving objects on the ground and a real @-@ time , physics @-@ based weather system .

Former flight instructor Peter James , who had worked on Flight Unlimited II , assumed the role of lead designer . He was largely responsible for Flight Unlimited III 's lessons , planes and simulated flight instruments . James believed that other flight simulators had holes with regard to realism , and he hoped to create a more accurate experience . Photographs were captured of each plane 's real @-@ world counterpart , and construction of the 3D plane models was led by artist Duncan Hsu , a former car modeler at Papyrus Design Group . The flight physics were coded by Kevin Wasserman and involve real @-@ time calculations of force vectors , such as those acting against a plane 's yaw , pitch and roll . This system was more advanced than that of Flight Unlimited II , which was also based on force calculations . The physics code was informed by " real aircraft data " and the personal experience of pilots , and each of the planes was flown as research for the game . Because the plane cockpits of previous Flight Unlimited games had been criticized by pilots , the team tried to make Flight Unlimited III 's cockpits extremely authentic . Kemal Amarasingham recorded the planes ' sound effects , which he said involved " risking his life " by standing near jet engines and under wings .

The game 's terrain texture maps were made with satellite images rendered at four square meters per pixel , the highest resolution used in a flight simulator at that time . Artist Karen Wolff designed the terrain by combining large topographic maps into a " mosaic " , which recreated the elevations and depressions of the Seattle area . The satellite imagery was layered over the resultant polygonal mesh . Real elevation data was also used for the eight lower @-@ resolution Western American states outside of the Seattle area . Budget concerns and the storage limitations of the CD @-@ ROM format prevented the team from rendering the entire United States , despite fan demand . The 3D objects that move across the terrain were created by Yoosun Cho , who used numerous photography books for inspiration . Flight Unlimited III 's object editor let her set these objects to " move once along the path , back and forth or cycle " . The weather system , co @-@ designed by James , generates , moves and disperses weather fronts based on real @-@ time calculations of atmospheric conditions such as humidity and orographic lift .

= = = Management and final months = = =

While visiting Looking Glass to cover Flight Unlimited III 's development , journalist Dan Linton was impressed by the team management of Tom Sperry , producer Sandra Smith and vice president of marketing Michael Malizola . He wrote that they employed " suggestion and encouragement " instead of " demands " , and he believed that their work was in large part responsible for the game " setting a new standard in the industry " . Peter James later accused the wider company 's management of being lukewarm toward Flight Unlimited III during development , since their biggest sellers were action @-@ oriented games like Thief : The Dark Project . He claimed that their lack of interest turned the optimistic team into a " grumbling group of depressed and sometimes angry [people] " . Although he , Smith and Perry petitioned the company 's managers to plan future add @-@ ons and third @-@ party development for the game , James felt that they were ignored . James developed concepts for a sequel in his spare time , but his ideas were shelved to wait for Flight Unlimited III 's sales figures , which had to surpass those of Microsoft Flight Simulator 2000 for Flight Unlimited IV to be greenlit . James believed that this was " foolish " , particularly because he felt that Electronic Arts undermarketed the game . He wrote that Flight Unlimited III 's marketing manager had " great plans " but that his " hands seem [ed] tied " .

Flight Unlimited III 's official site was opened in March 1999 , and the game was shown alongside Flight Combat : Thunder Over Europe at the Electronic Entertainment Expo in May . Tal Blevins of IGN wrote that the game had " come a long way " since he had seen it earlier in the year , and that it was almost complete , with development of the real @-@ time weather system in its final stages . Full Throttle noted the game 's " impressive clouds " and " slick looking " HUD . Flight Unlimited III was shown again at EAA AirVenture Oshkosh in July , at which point beta testing was nearly complete and the game was " 90 % done " , according to James . He stated that the public reaction

was " great " , which energized the team for a short time . The game went gold that August , nine months behind schedule . James wrote that the team celebrated with a small dinner party , and that " the next few days were spent finding out how many people [were] quitting . " He left after the game 's completion to join Flightsim.com , a news and review website dedicated to flight simulators . The game was released on September 17 , 1999 .

= = Reception = =

Flight Unlimited III was placed in direct competition with flight simulators such as Fly ! and Microsoft Flight Simulator 2000 . The game failed to capture sufficient market share and became one of Looking Glass 's biggest commercial flops , with sales around 20 @, @ 000 copies in the United States during 1999 . Together with the costly development of Flight Combat , the game 's low sales used up Looking Glass 's earnings from Thief : The Dark Project and System Shock 2 , which had helped them recover from the failures of British Open Championship Golf and Terra Nova : Strike Force Centauri . These events contributed to the company 's bankruptcy and closure in May 2000 . However , the game was positively received by critics , with an aggregate review score of 88 % on GameRankings .

Josh Nolan of Computer Gaming World wrote , " FU3 is experience @-@ oriented : it 's user @-@ friendly , graphically glamorous , and lots of fun . " While he praised its visuals and air traffic control , he considered the game to be simpler than Flight Simulator 2000 because of its less detailed lessons , interfaces and flight physics . Writing for Computer Games Magazine , Denny Atkin stated that the use of turbulence " really sets FU3 apart from the competition " , and that the game 's simulation of air traffic is " like no other sim " . He praised its graphics and dynamic weather , and he found the flight physics solid in general but " overly gentle " for aerobatic maneuvers . He concluded , " It 's not only an excellent simulation of general aviation flying , ... it 's even a good game . " PC Gamer UK 's Dean Evans wrote that the game has " a poetic grandeur " , as well as an " astonishing attention to detail " greater than that of its predecessors . He praised its flight lessons and weather , and he considered the graphics to be " unbelievably delicious " . Evans summarized the game as " the most breathtaking flying experience you can get for a PC . "

Simon Bradley of PC Zone wrote , " FUIII has atmosphere in a way that MS Combat Flight Sim can 't even dream of . " He praised its graphics , flight physics , and detailed flight environment . However , he complained of " unflyably slow frame rates " and warned that the game could not be played on older computers . Tony Lopez of GameSpot called the game 's environmental modeling " simply breathtaking " and noted that elevations were rendered more smoothly than in Fly ! or Microsoft Flight Simulator . He wrote that the game 's flight physics and weather simulation were superior to those of any other flight simulator , and that the " powerful , easy @-@ to @-@ use " FLED editing tool could popularize the game . IGN writer Marc Saltzman commented that the game features " absolutely stunning terrain at all altitudes , realistic weather and lighting effects , and highly @-@ detailed planes " . Saltzman praised the accuracy of Flight Unlimited III 's physics but remarked that the game 's frame rate was " noticeably slower " than that of its rivals .