

= Pilotwings 64 =

Pilotwings 64 (??????????64 , Pairottouingusu Rokuj?yon) is a video game for the Nintendo 64 , originally released in 1996 along with the debut of the console . The game was co @-@ developed by Nintendo and the American visual technology group Paradigm Simulation . It was one of three launch titles for the Nintendo 64 in Japan as well as Europe and one of two launch titles in North America . Pilotwings 64 is a follow @-@ up to Pilotwings for the Super Nintendo Entertainment System (SNES) , which was a North American launch game for its respective console in 1991 . Also like that game , Pilotwings 64 received production input from Nintendo producer Shigeru Miyamoto .

Pilotwings 64 is a 3D amateur flight simulator that puts the player in control of one of six pilots as they try to earn pilot licenses through various forms of aviation . The events are flying an autogyro , using a jet pack , and hang gliding . Several bonus tasks are offered , such as skydiving and a human cannonball test . The game also puts focus on allowing the player to freely explore its detailed 3D environments , most notably a miniature representation of the United States .

The game received positive review scores and praise from gaming publications and news sources alike for its visual presentation and flying controls . Similar to its SNES predecessor , Pilotwings 64 serves to demonstrate the graphical capabilities of its gaming hardware . Although the flight simulator did not enjoy the same commercial success as its fellow launch game Super Mario 64 , Pilotwings 64 nonetheless went on to sell over one million copies worldwide .

= = Gameplay = =

Pilotwings 64 is a 3D flight simulator in which the player must complete a variety of missions involving different airborne vehicles and air sports . Before each mission , the player must choose one of six character pilots , each with their own advantages and disadvantages based on factors such as weight . The tests presented to the player require him or her to complete an objective in order to earn a license for the given event . Depending on the mission , points are awarded or deducted based on time , damage , fuel usage , accuracy , softness of landing , and similar criteria . The player is awarded either a bronze , silver , or gold license based on the number of points attained . More difficult tests become available as the player progresses .

There are three main events in Pilotwings 64 required to complete the game , each of which has its own objectives and unique flight controls centered around the Nintendo 64 controller 's single analog stick . The first , hang gliding , usually requires the player to fly through a series of floating marker rings or snap a photograph of a particular piece of scenery before landing in a target area . The player 's movement is affected by wind currents and altitude can be gained by flying through thermal columns . The second event is the " Rocket Belt " , a jet pack that allows the player to move and gain height as well as hover , tilt , and rotate in the air using the belt 's equipped thrusters . Goals entail flying through rings or popping large balloons before landing . The third event , the gyrocopter , challenges the player to take off and land on a runway after completing objectives like navigating a path of rings or destroying targets with missiles . Pilotwings 64 also features several bonus events that are unlocked if the player performs well in the main missions . The player can also earn medals on many of these events . They include skydiving , a human cannonball event , and the " Jumble Hopper " , which grants the player special spring @-@ loaded boots to be used in bouncing across the landscape to an end space . Lastly , Pilotwings 64 features a " Birdman " mode that puts the character in a bird suit and gives players the opportunity to freely explore the game 's detailed , object @-@ dense environments set among its four distinct islands . One of the islands is based on the United States , and has geographical replications of famous landmarks including the Statue of Liberty and Mount Rushmore and major cities such as Los Angeles , Chicago , and New York City .

Representations of Nintendo characters and many other interesting quirks can be found in the landscapes of the game .

= = Development = =

Pilotwings 64 was co-developed by the Texas-based graphics company Paradigm Simulation and Nintendo's Entertainment Analysis and Development (EAD) and Integrated Research and Development (IRD) divisions. Due to Paradigm's experience with Silicon Graphics workstations, Nintendo contacted the American company in 1994 concerning it becoming one of the Nintendo 64's "Dream Team" of first developers. Paradigm worked directly with a team at Silicon Graphics and spent nine months developing a technology base for Pilotwings 64 and Paradigm's other Nintendo 64 releases. Development on Pilotwings 64 began in earnest during June 1995, with Nintendo working on the game design and Paradigm working on the technical production. Nintendo's Genyo Takeda and Makoto Wada acted as Paradigm's primary technical and design contacts individually. Wada, the game's director, was also involved in design aspects such as modeling and animation. Shigeru Miyamoto, the producer of Pilotwings for the SNES, reprised his role for Pilotwings 64 and oversaw the project from Japan. Miyamoto's involvement was more removed than with the SNES game due to his simultaneous work on the platformer Super Mario 64.

According to Miyamoto, Pilotwings 64 was designed to allow gamers to experience free flight in realistic 3D environments on the Nintendo 64. Prior to the game's conception, Paradigm had worked on military vehicle and flight simulators, but not video games. Dave Gatchel of Paradigm disclosed that with regard to creating the game, they began with a "physics-based approach", but deviated from this in order to gain a balance between accuracy and fun for players. He indicated that there was never an issue as to whether Pilotwings 64 should be more of an arcade game or a simulation, as their goal was to "always have a more arcade feel". The technical team studied the original Pilotwings extensively during development. Pilotwings on the SNES makes use of the power of the 16-bit console, principally its Mode 7 capability. Similarly, Pilotwings 64 prominently demonstrates the graphical features of its own console. Gatchel suggested that just as design elements present in the game generated its production requirements, these same elements were influenced by the Nintendo 64's technology during development. The large islands within the game were created using Paradigm's own 3D development tool Vega UltraVision. Navigation of these environments is relatively smooth thanks to Pilotwings 64 taking advantage of several key Nintendo 64 hardware features. Conventional level of detail and mipmapping were used to reduce the computational load of distant landscape objects and terrains when they were rendered. The processes respectively substitute simpler geometrical shapes for more complex ones and less detailed textures for more detailed ones, lowering the polygon count and 3D rendering time for a given frame and thus putting less demand on the geometric engine. Pilotwings 64 also applies z-buffering, which keeps track of an object's depth and tells the graphics processor which portions of the object to render and which to hide. This, along with texture filtering and anti-aliasing, makes the object appear solid and smooth along its edges rather than pixelated.

As Nintendo was in charge of its actual game design, they dictated the aircraft and characters that would be present in the game. The six playable pilots in Pilotwings 64 are all named after various birds. The character Lark is modeled after Nester, a mascot for the North American Nintendo Power magazine. The female character Robin is called "Hooter" in the Japanese version. The soundtrack for Pilotwings 64 was composed and arranged by Dan Hess. The tracks were produced to compliment each level, such as a "soothing" jazz-inspired musical piece played during the exploratory Birdman mode. A now out-of-print CD soundtrack was released by Pony Canyon in Japan on December 16, 1996.

Pilotwings 64 was one of thirteen Nintendo 64 games shown at Shoshinkai show in Tokyo in November 1995 when the console was first demonstrated to the public as the "Ultra 64". The game was later displayed at the Electronic Entertainment Expo (E3) in Los Angeles during May 1996.

= = Reception and legacy = =

Pilotwings 64 was released in Japan on June 23, 1996 as one of three Nintendo 64 launch titles,

the other two being Super Mario 64 and Saiky? Habu Sh?gi . Pilotwings 64 managed to sell about one unit with about every tenth Nintendo 64 console , with regional sales totaling 136 @,@ 986 copies by the end of the year . The game was one of two original releases for the system during its September 26 , 1996 debut in North America , which was a few days earlier than the date set by Nintendo . While Super Mario 64 initially sold at a one @-@ to @-@ one ratio with each console in the United States , Pilotwings 64 sold an average of one copy with every fourth console . Despite selling out , some store locations for Electronics Boutique and KB Toys reported little or no units of the flight simulator being shipped to retailers . About 90 @,@ 000 copies of Pilotwings 64 were sold in its first few days on sale in the country , putting the game at number four on the NPD Group sales charts for that September . Pilotwings 64 saw a release in European nations on March 1 , 1997 , when it was one of three launch games along with Super Mario 64 and Star Wars : Shadows of the Empire . In the United Kingdom , it was listed by Esquire magazine as the " cheapest game in Nintendo 's frighteningly @-@ priced opening range of titles " . It was confirmed in early 1998 that the game had sold over one million units worldwide .

Pilotwings 64 was well received by most reviewers . The game 's combination of 3D graphics , realistic settings , and flight simulation were applauded by many news sources and major gaming publications . In his release review of the Nintendo 64 , The Seattle Times contributor Steven L. Kent found that the flight mechanics and vast areas featured in Pilotwings 64 make it one of the most impressive games ever made . Glenn Rubenstein of the website GameSpot summarized , " The graphics , sound , control , and all around excitement add up to make Pilotwings 64 one hell of a great ride . " Staff reviewers of Electronic Gaming Monthly , GamePro , and IGN all voiced positive comments on the game 's polygon rendering and frame rates , as well as its sense of control and flying . Alex Constantides of Computer and Video Games enjoyed the game 's large environments , exclaiming , " You 'll not believe just how huge the islands really are and , because certain elements are hidden at first , it 'll take you months to see everything . " IGN 's Levi Buchanan described this low @-@ pressure , " challenge without competition " aspect of the game as a design philosophy adopted by later Nintendo titles such as Nintendogs . Rich Leadbetter of Maximum said that " The sedate nature of the gameplay might not appeal to everyone , but the bottom line is that PilotWings 64 is an unparalleled test of skill , dexterity and control . It is a game that you must own and whilst not quite in the same league of ' must @-@ have 'tude as Super Mario 64 , it remains an astounding achievement and another triumph for Nintendo . "

Pilotwings 64 has been criticized for lacking innovative gameplay . The New York Times writer Ashley Dunn characterized the game 's E3 demonstration as " brain @-@ dead " in its gameplay and suggested that even young children would rather fly a dragon on the Sony PlayStation . Game Revolution issued Pilotwings 64 a particularly harsh review score , declaring the game to be nothing more than a graphical showcase for those with nothing better to do . This sentiment was echoed by the columnists of Next Generation Magazine , who noted the game as one that would most likely become a footnote in the history of the hardware on which it is played : " While it provides some interesting challenges , it 's less a game than a drop @-@ dead gorgeous example of the kind of rock @-@ solid , smoothly flowing worlds the Nintendo 64 can produce . " The sound effects present in the game were impressive to several reviewers , but the soundtrack has been negatively compared to lounge music and porn groove , although the ' Birdman ' track was highly rated .

Pilotwings 64 was ranked number 38 in Nintendo Power 's " 100 Best Nintendo Games of All Time " in its landmark 100th issue in September 1997 . In February 2006 , it was rated the 117th best game made on a Nintendo system in the magazine 's " Top 200 Games " list for its 200th issue . In July 2007 , the United Kingdom video game magazine Edge included Pilotwings 64 at number 69 on its own " Top 100 Games " list . The UK 's Official Nintendo Magazine listed it at number 40 on its " 100 Best Nintendo Games " in February 2009 .

Paradigm announced at E3 1997 that they were producing a Nintendo 64 sequel to Pilotwings 64 . However , even though Nintendo expressed interest in Paradigm 's early presentations , the game was cancelled because Nintendo did not have the resources to aid in its development at that time . There were rumors of a sequel on the Nintendo GameCube and later the Wii , development courtesy of Factor 5 , but no game was ever shown . After their briefing time at E3 2010 , Nintendo

announced a sequel titled Pilotwings Resort for the Nintendo 3DS , which was released as a launch title for the handheld console .