

= Starflight =

Starflight is a space exploration role @-@ playing adventure video game developed by Binary Systems and published by Electronic Arts in 1986 . Originally developed for IBM compatible and Tandy systems , it was later released for the Amiga , Atari ST , Macintosh and Commodore 64 . A fully revamped version of the game was developed for the Sega Mega Drive / Genesis in 1991 .

Set in the year 4620 , the game puts players in the role of a starship captain sent to explore the galaxy . There is no set path , allowing players to switch freely between mining , ship @-@ to @-@ ship combat , and alien diplomacy . The broader plot of the game emerges slowly , as the player discovers that an ancient race of beings is causing stars to flare and destroy all living creatures .

The game has been widely praised by both contemporary and modern critics , and is one of the earliest instances of a sandbox game . It led to the development of a sequel , Starflight 2 : Trade Routes of the Cloud Nebula , and influenced the design of numerous other games for decades after its release .

= = Gameplay = =

The player begins inside a space station called Starport orbiting the planet Arth . Here they buy and sell minerals , Endurium ( fuel ) , and artifacts , recruit and train crew members , and upgrade parts of the ship . The player hires a crew from five species to man the ship 's six posts : navigator , science officer , engineer , communications officer , doctor , and captain . A crewman 's proficiency is determined by the relevant skill : a science officer with a high science skill can determine more of a planet 's properties and detect aliens at a greater range , for example . Skills are increased through training , which must be purchased . One crewman can man multiple posts , but different species have different maximum skill levels . The ship is initially equipped only with engines and a limited supply of Endurium , a type of crystal used as fuel . The ship can be modified and upgraded through the purchase of weapons , armor , and shields .

The goals of the game include exploration , collection of lifeforms and minerals , and finding habitable colony worlds . Eventually , a larger goal of finding out why stars in the region are flaring dangerously and stopping the process , if possible , comes to the forefront . The main sources of income are selling minerals , artifacts , and lifeforms and recommending planets for colonization . The ship is equipped with a Terrain Vehicle that the crew can use to look for minerals and life @-@ forms . The most lucrative source of income is finding planets suitable for human life . If the science officer 's analysis shows a planet to be within acceptable parameters , the player can have the captain log a planet for colonization .

Starflight has 270 star systems , each containing from zero to eight planets for a total of 800 . All star systems can be entered and all planets landed on , though this destroys the ship if the gravity is greater than 8 @. @ 0 g . The science officer can scan and analyze the planet for information about it , including its temperature , gravity , and chemical composition . When a landing is ordered , a Mercator projection map shows the topography of each planet , as well as a cursor to select a landing point . Once the ship lands , a Terrain Vehicle can be deployed to drive across the terrain , which is periodically scanned for new information , in search of minerals , lifeforms , and alien ruins . As is the case in outer space , a heads @-@ up display monitors the Terrain Vehicle 's status .

Space is also crisscrossed with continuum fluxes , coordinate pairs that allow instantaneous travel between them without consuming fuel . Travel via fluxes cuts down significantly on fuel costs and travel time , though it causes all but the most accomplished navigators to lose their bearings .

Aliens may be cautious , friendly , or hostile , and all have distinctive speech patterns ; the player can influence alien reactions by arming weapons and shields or hailing the aliens with varying communication styles . Alien ships can be also scanned for information . Combat involves maneuvering the ship and firing weapons , either instantly damaging short range lasers or avoidable , but more powerful long range missiles . The weapon used depends on how far away enemy ships are and what the player 's ship is armed with . The player 's ship has ablative armor and regenerative shields , and can take damage to its hull and individual components .

= = Story = =

= = = Setting = = =

The galaxy is composed of eight space @-@ faring races , five of which can be hired as part of the player 's crew . Humans only exist on Arth and are not found among the stars . Other species include Veloxi , large insects who demand bribes from ships which violate their space ; Mechan , androids left over from the days of the Old Empire ; Elowan , a pacifistic race of sentient plants ; Thrynn , reptile creatures who are primarily interested in money ; Spemin , gelatinous blobs who are known for their cowardice ; Gazurtoid , octopus @-@ like religious zealots who regard all " air @-@ breathers " as infidels ; and Uhlek , a destructive fleet of ships with a hive mind . Humor also plays a role within Starflight .

= = = Plot = = =

The story begins on the planet Arth , a haven for the survivors of the Old Empire . Due to heavy radiation , the inhabitants have been forced to live beneath the planet 's crust for centuries . In recent times , the radiation has finally dissipated from the surface , allowing the population to unearth long @-@ lost technology belonging to Arth 's original settlers . The inhabitants of Arth have recently discovered two things : first , that they were once a colony world of Earth ; and second , Endurium , a crystalline mineral that fuels interstellar flight .

An independent company called Interstel is dispatching ships to mine for resources , particularly Endurium . In addition , Interstel employees are instructed to seek information about Arth 's history , alien artifacts , and planets with optimum environments for colonization . Early in the game , Arth scientists discover that stars throughout the local region of the galaxy are flaring , and the home planet of Arth is in danger .

By following clues given in Interstel announcements and through contact with alien races in space , the crew discovers an Old Empire starship adrift in space . An endlessly repeating distress call has been transmitting from the ship for over a thousand years . Before the fall of the Old Empire , a scientific expedition known as the Noah 9 left Earth in search of Heaven , a paradise world to which humans could immigrate . The expedition never arrived , leaving a fleet of Mechan ships forever waiting for their arrival . Once their coded questions are answered correctly , the Mechans assume that the crew is , in fact , the long @-@ awaited Noah 9 . Further investigation leads the crew to Earth , the home world of the Old Empire . The planet lies in ruins and is devoid of all life , but contains information about the history of Old Empire and its fate .

Additional clues are found in the Four Seedlings , a quadrilaterally symmetrical system made up of four suns . Centuries ago , the leaders of the Old Empire realized something was causing hostile aliens to flee from the center of the galaxy . The greatest minds from each of the races gathered at this location , where they discovered that the Crystal Planet was slowly eradicating all life . In a last act , they sent a human named Commander McConnell to end it , but he failed . At the start of the game , the Crystal Planet is slowly moving through the galaxy . The planet causes nearby stars to flare up and destroy all life in the system .

The player must explore solar systems , gather clues , and find special artifacts that grant access to the Crystal Planet , ultimately destroying it before the player 's home system flares . Commander McConnell 's last journal entry can be found on the surface of the Crystal Planet ; in it , he shares his discovery that Endurium is actually a race of living , sentient beings who are being burned up as fuel for interstellar travel . Because their metabolism is extremely slow due to their crystalline makeup , they are not even aware of outside life and have come to view other races as a virus . The game is won after the player successfully plants an artifact on the Crystal Planet 's surface and retreats back into space , causing the planet to explode , though the game can still be played after the Crystal Planet is destroyed .

= = Development = =

Starflight was developed by Binary Systems , a five @-@ man team consisting of Rod McConnell , Greg Johnson ( lead designer ) , Alec Kercso ( programming ) , Tim C. Lee ( graphics and programming ) , and Bob Gonsalves ( sound ) . Then @-@ vice president of Electronic Arts Joe Ybarra was also closely involved , and produced the work . The original idea for making a video game was conceived by McConnell and Ybarra in 1983 . McConnell hired colleague Dave Boulton , who had an idea for using fractals to generate an endless virtual universe , along with Kercso , Gonsalves , Lee , and Johnson , all of whom were first time game designers . Boulton quit the project early on in development , saying it was too ambitious , with Lee replacing him .

The team coded the game mostly in Forth with a few key routines written in assembler for speed . Forth was chosen since it was easier to use than assembler and more compact . This was important because the game had to fit into 128K of RAM . Many tools , techniques , and concepts used in the game were learned from other individuals in the Forth community . Some of the reference material included the " The Journal of Forth Application and Research " , FORML conference proceedings , and " Forth Dimensions " magazine .

It took " fifteen man @-@ years " and three actual years to develop the game . In a 2006 interview , lead designer Johnson said , " I had never really designed a game before ... It 's funny looking back on it now ? just by happenstance I ended up creating a very open ended system where players could go anywhere and do whatever and a story sort of unfolded . " Ybarra stated that the game was almost cancelled more than once , and came out about a year behind schedule . Johnson was guided by Archon designer Paul Reiche III during development . Reiche advised him to draft a " story network " that would highlight all the most important points of the story and list the in @-@ game objects necessary to advance from one to the next . The designers rewrote the script multiple times . The group designed what they called a " fractal generator " , which took six man @-@ years to develop and allowed them to increase the number of planets in the game from 50 to 800 . They created a separate ecosystem generator over the course of two man @-@ years of work . The alien names were created by randomly combining syllables until they had names they liked , and their code for simulating communications was rewritten four times before completion .

Starflight was released for PC on August 15 , 1986 . Originally available only on IBM , Tandy , and compatible DOS systems , it was released for the Amiga and Commodore 64 systems in 1989 and the Atari ST and Macintosh systems in 1990 , and was ported to the Sega Genesis in 1991 . The Sega version features a few changes to the overall game , such as new graphics , modifications to the ship , and upgrades for the Terrain Vehicle , including equipment to allow amphibious mining .

= = Reception and legacy = =

Critical response to Starflight upon its release was extremely positive . Hartley and Patricia Lesser complimented the game in their " The Role of Computers " column in the December 1986 issue of Dragon , calling it " stunning in its presentation and play " . In 1986 and 1987 , Computer Gaming World declared it " the best space exploration game in years " and " the best science fiction game available on computer " . The magazine named Starflight its Adventure Game of the Year for 1987 , and in August 1988 , it joined the magazine 's Hall of Fame for games highly rated over time by readers , with the third @-@ highest rating for action / adventure games on the list , and the fourth @-@ highest overall .

Science fiction writer Jerry Pournelle named Starflight his game of the month for January 1987 , stating that it was " as much a career as a game " and " fascinating " . Fellow writer Orson Scott Card wrote , " Starflight is the first science fiction computer game that actually gives you something of the experience of roaming through the galaxy . ... I have found this game obsessively fascinating ? and the graphics and player interface are superb " . He called it the " Star Wars of science fiction games . Brilliantly designed and programmed ... the standard against which all other space @-@ exploration games must be measured " . Compute ! listed it in May 1988 as one of " Our Favorite

Games " , stating that " Starflight captures the feel of a certain type of science fiction ... the game can take hundreds of hours to play fully , yet those hours are anything but boring " .

By December 1987 , the game had sold over 100 @, @ 000 copies , and it eventually went on to sell over a million copies . Ybarra said at the time that the game had created a " beachhead in the arena of sci @-@ fi " for Electronic Arts . Lee said in 2010 , " I knew it was a classic while we were building it " . Starflight was one of the earliest games to use procedurally generated content for its planets and everything on them . The techniques used created a type of roguelike environment on each planet , with the contents randomly distributed . The story network was also one of the earliest examples of a sandbox game design .

Starflight had a sequel , Starflight 2 : Trade Routes of the Cloud Nebula . Ybarra went on to create Protostar , another space exploration adventure . Reiche was inspired by the game to create Star Control , with Johnson coding three of the alien species in the game ; Computer Gaming World called Star Control II a spiritual successor to Starflight . Mass Effect director Casey Hudson tweeted in 2011 that " Starflight was a key inspiration for the ME series . " Starflight is often cited along with Elite , which appeared two years earlier with similar gameplay , as early open world space exploration games . Dwarf Fortress 's forgotten beasts were inspired by the procedurally generated lifeforms within Starflight .

Starflight has also received favorable reviews from critics and commentators decades after its release . Erin Hoffman of The Escapist in 2010 called it " one of the great breakthroughs in gaming " . In 2012 , Lee Hutchinson of Ars Technica called the game " a thing of awe and reverence " and said it " defined the genre of space exploration games " .