FLIGHT ODYSSEY

Storyland STUDIOS

Design Competition 2021

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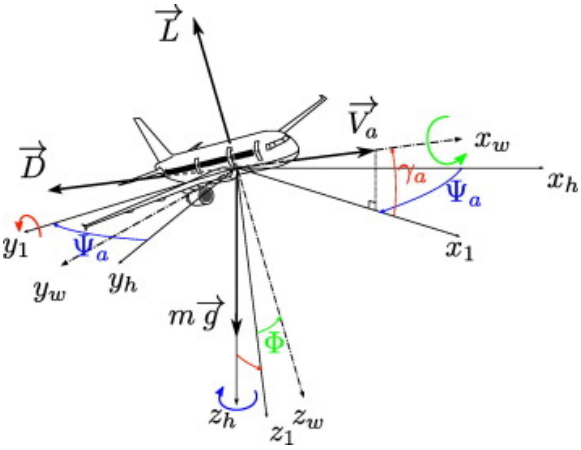
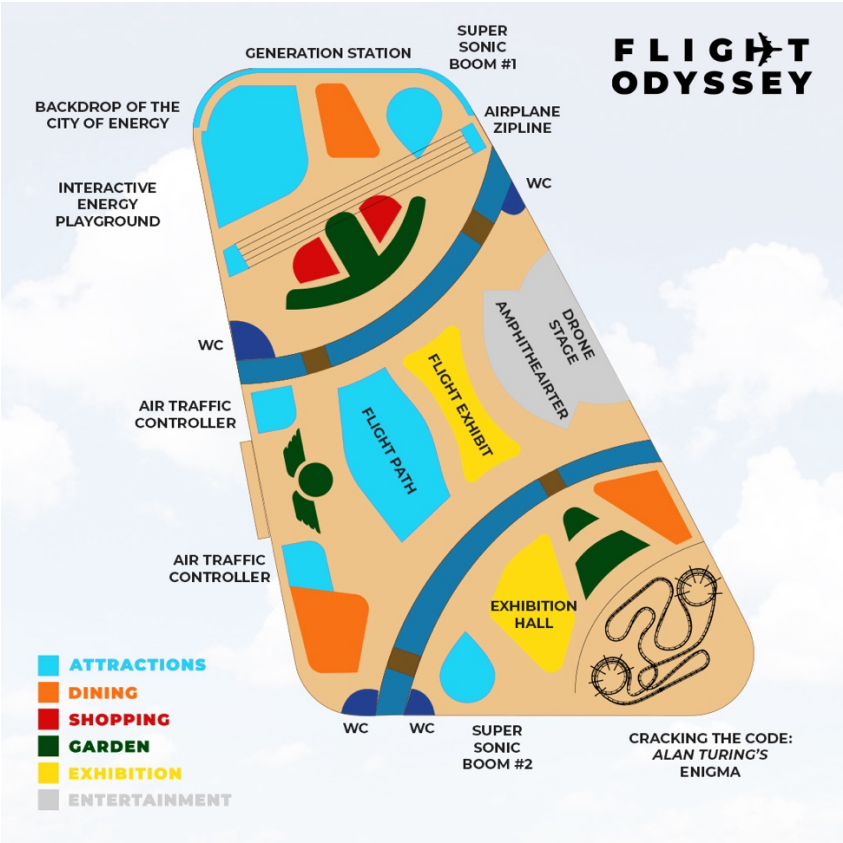
Theme Park Showcase

Introduction



Amusement parks around the world have long been staples of fun and entertainment, ranging from early Medieval fairs in the Middle Ages to the cultural behemoths of Disney and Universal in modern times. They provide the opportunity for designers to dream up new attractions that push the laws of physics in adrenaline-inducing thrill rides as well as family classics such as slow-moving dark-rides that the entire family can enjoy. A *theme park* however expands a designer's vision from a single ride concept to an entire realm of immersion, encompassing rides, shopping experiences, dining venues and live entertainment that must all cohesively convey a story to its audience, and must do so with a purpose – enter *Flight Odyssey.*

Inspired by the world of aviation and aerospace, *Flight Odyssey* was born out of a desire to teach and educate, as well entertain and excite, its audience by exploring the multi-faceted benefits, technical innovation and perhaps unconventional ways that aviation has shaped our modern world.

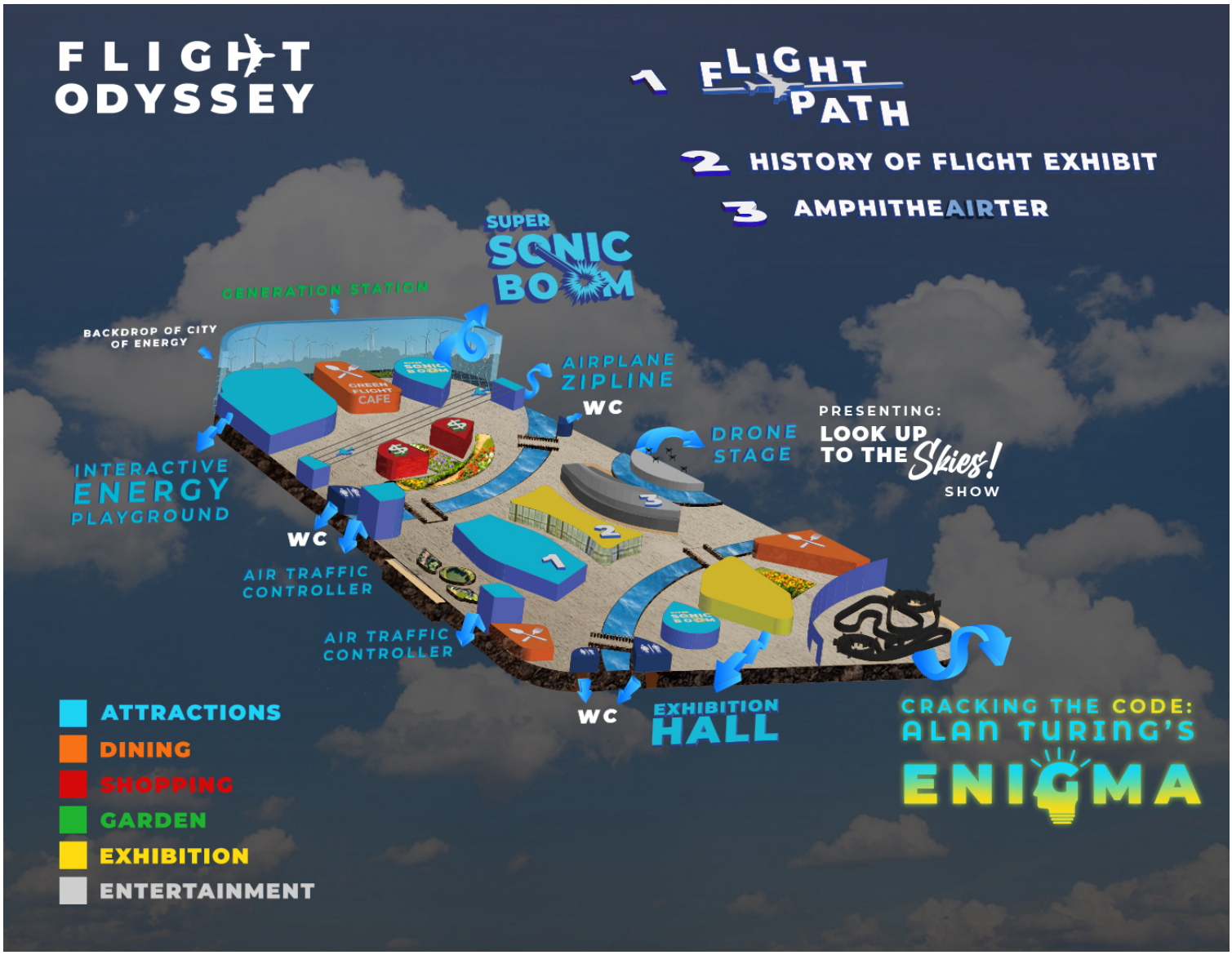


Park Overview

With an overall park boundary inspired by aircraft tail designs, *Flight* Odyssey is divided into three key theme areas that together help bring a greater understanding of the significance of aerospace engineering in our society. These three themed areas are:

- Transportation Station (TS)
- Innovation Station (IS)
- Generation Station (GS)

Each of these areas features at least one signature attraction, in addition to interactive guest areas, shopping and dining experiences and exhibition halls showcasing the history of aviation as well as the innovative technology being created for future generations to take to the sky!



Themed Area Breakdown

Transportation Station (TS)

The largest of the three park areas, Transportation Station (TS) is based on the concept of travel and the use of aircraft and spacecraft as transportation, with a major focus on commercial aviation, its origins and its future.

Featured Attraction - Flight Path

Flight Path is an innovative, interactive dark ride in which the ride path of the vehicle is chosen in real time by guests. After the vehicle boarding is complete, the ride vehicle will move through an aircraft maintenance bay, where engineers will inform them of their ability to select which flight experience they would like to have. After a brief overview presentation by the engineers, guests will be prompted to select one of three buttons in front of their seating assignment corresponding to their chosen flight experience within an allotted time frame. The vehicle will then calculate the majority ruling and will follow the corresponding vehicle path utilizing a trackless RFID system – should no selections be entered or a tie be tallied, the vehicle will default to the ride path with the least vehicle traffic to ensure a constant flow of ride vehicles through the show building. The attraction's three plotlines to choose from are:

- Space Astronaut Camp – guests are whisked through NASA's astronaut training facility before preparing for flight aboard a rocket that flies them out of Earth's orbit and back
- Commercial Flight – guests have a personalized flight experience to landmarks around the world, emphasizing at least one location from all six continents, with a particular emphasis on showcasing foreign cultures
- Air Force Training – guests are enlisted to try out a military-jet obstacle training course to determine their expertise level and coordination skills

Secondary Attraction – Air Traffic Control Strategy

In this interactive, puzzle-like experience, two control towers at the borders of Transportation Station will feature a number of memory and color coordination games that guests must answer correctly as they compete against the opposite control tower team. Each

subsequent game set is presented at a higher difficulty, and the first control tower to complete all tasks with no mistakes will successfully clear the runways of aircraft traffic and win the game.

Exhibit Hall: The History of Flight

This exhibition will detail the origins of aviation, with an emphasis on lesser-known aviation pioneers from around the globe such as Alberto Santos-Dumont.

Innovation Station (IS)

The park's thrill area, Innovation Station (IS) features a strong technology focus, specifically showcasing the use of aviation in groundbreaking technology and a showcase of innovative new flight concepts. This area is home to the park's flagship attraction – Cracking the Code: Alan Turing's Enigma.

Featured Attraction – Cracking the Code: Alan Turing's Enigma

This attraction is an indoor, steel-roller coaster inspired by analog coding sequences cracked by Alan Turing in the birth of computer-science during the Second World War. In the attraction queue, guests are queued through Turing's research laboratory where they learn from Mr. Turing himself that he needs to deliver an important coded message to the Ally leaders on the front. Each guest is handed a card in the queue with a scannable code. He then enlists the help of guests to board a C-47 military transport aircraft in order to fly across enemy lines and deliver the encoded messages to the front. When loading their ride vehicle, guests will scan their QR codes to their seating location, and a secret message composed by combining all the QR codes in the passenger train will appear at the vehicle exit.

Exhibit Hall: The Wings of Innovation

This exhibition hall will display the technological innovations being researched in the aviation world in order to create faster, more energy-efficient aircraft. Key displays will show the progress of blended-wing planes and aircraft featuring a transparent fuselage, as well as modern advancements in the field of supersonic flight.

Generation Station (GS)

The third themed area is Generation Station (GS), which is focused on the concept of aviation as a leading force of change in the world, specifically in energy production (i.e. power generation) as well as in a catalyst for inspiring others to enact change and break barriers in today's ever-evolving society. A particular importance will be placed on highlighting the innovative ways aviation is used to benefit the world in areas other than transportation.

Featured Attraction – Supersonic Boom!

This attraction is a supersonic transport ride modelled after the Concorde aircraft and serves as a means of transportation between the two sides of the park – two loading/unloading platforms are found in both Generation Station and Innovation Station to give guests an alternate way to cross the park. As a showcase of the importance of sustainability, the energy from this attraction is used to power sections of the GS area in conjunction with other renewable energy sources.

Secondary Attraction – Aircraft Zipline Power Generator

GS will feature a zipline across the park area for thrill seekers in which riders board a hang glider wired across the land. The friction generator from the hang glider cables as riders descend will also contribute to energy production in the park.

Secondary Attraction – The Energy Generator Playground

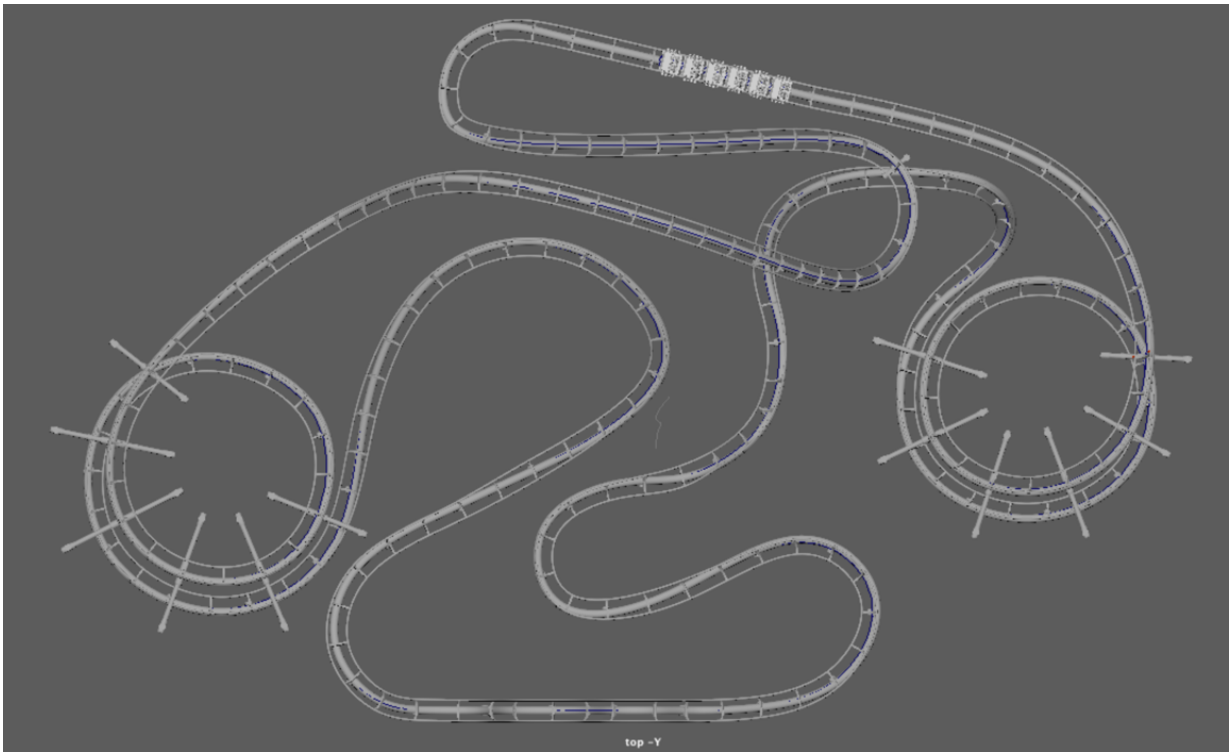
This interactive playground will give younger guests a chance to climb and play across several playsets themed around the use of conservation and renewable resources. Examples will include the use of aircraft for depositing fire-retardant foam to combat forest fires and clean energy practices through wind-turbine power generation.

Entertainment

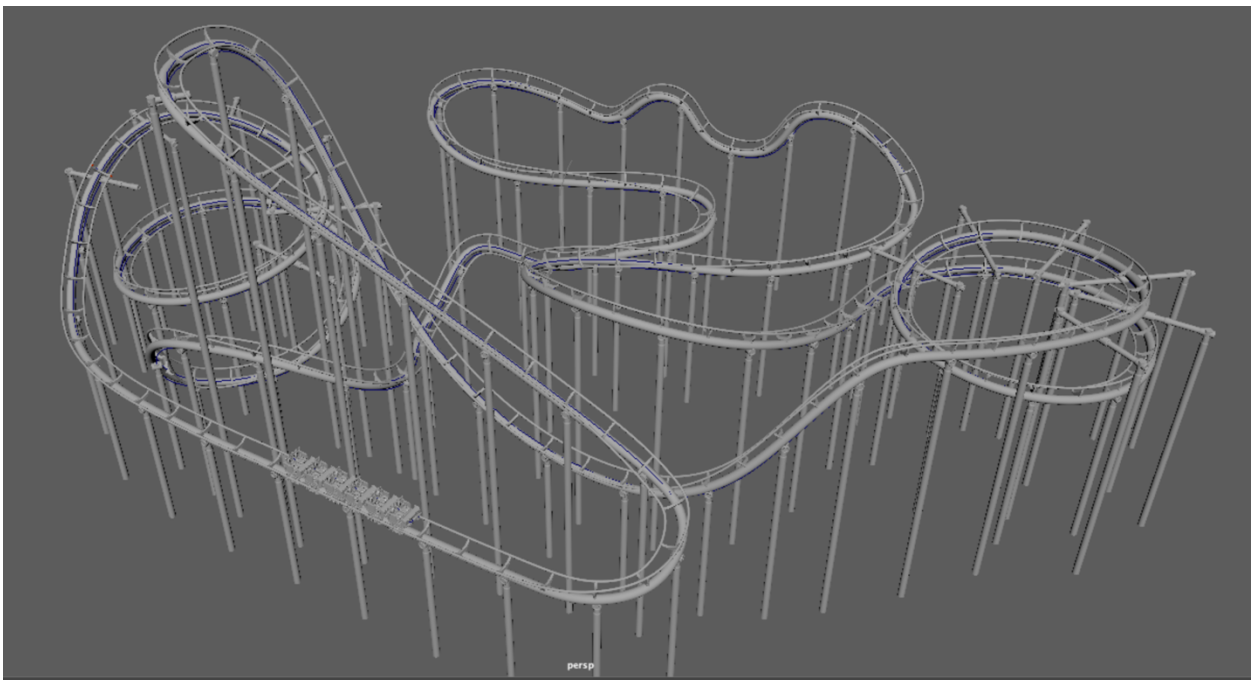
Within Transportation Station will be an amphitheater for a nighttime spectacular titled *Look Up to the Skies! – a Skytacular Experience*, a thematic celebration performed by programmable drones showcasing significant achievements in the world of aviation and space exploration.

Ride Showcase – Cracking the Code: Alan Turing's Enigma

Cracking the Code: Alan Turing's Enigma is an indoor, steel roller coaster designed as *Flight Odyssey's* flagship attraction. The attraction was modelled entirely using Maya 2020 software, including all track geometries and layout, track supports, coaster car creation and detailing, rider seats and car wheel assemblies affixed to the track.



The track design was made to feature one lift hill, five drops, one downward-spiraling helix, one upward-spiraling helix and one bunny-hill section to deliver high thrills to older guests while still allowing for younger riders.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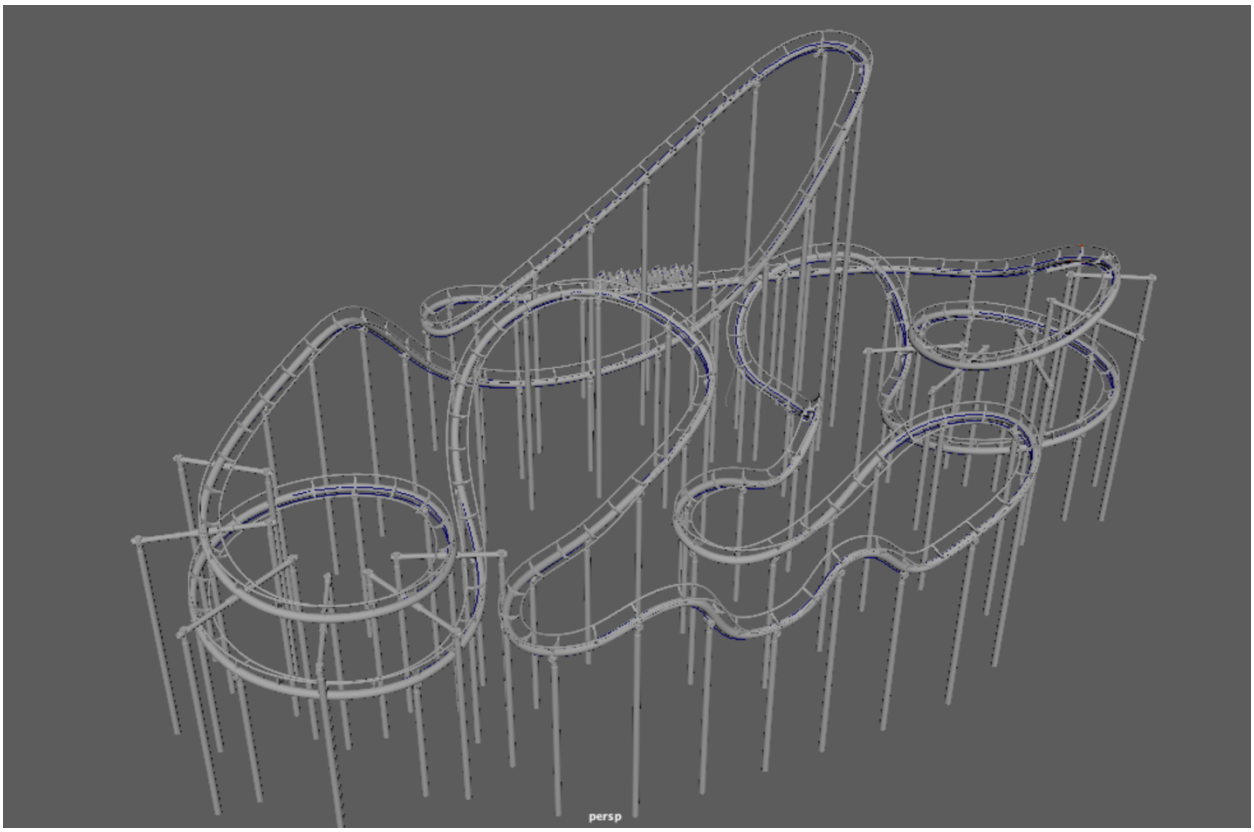
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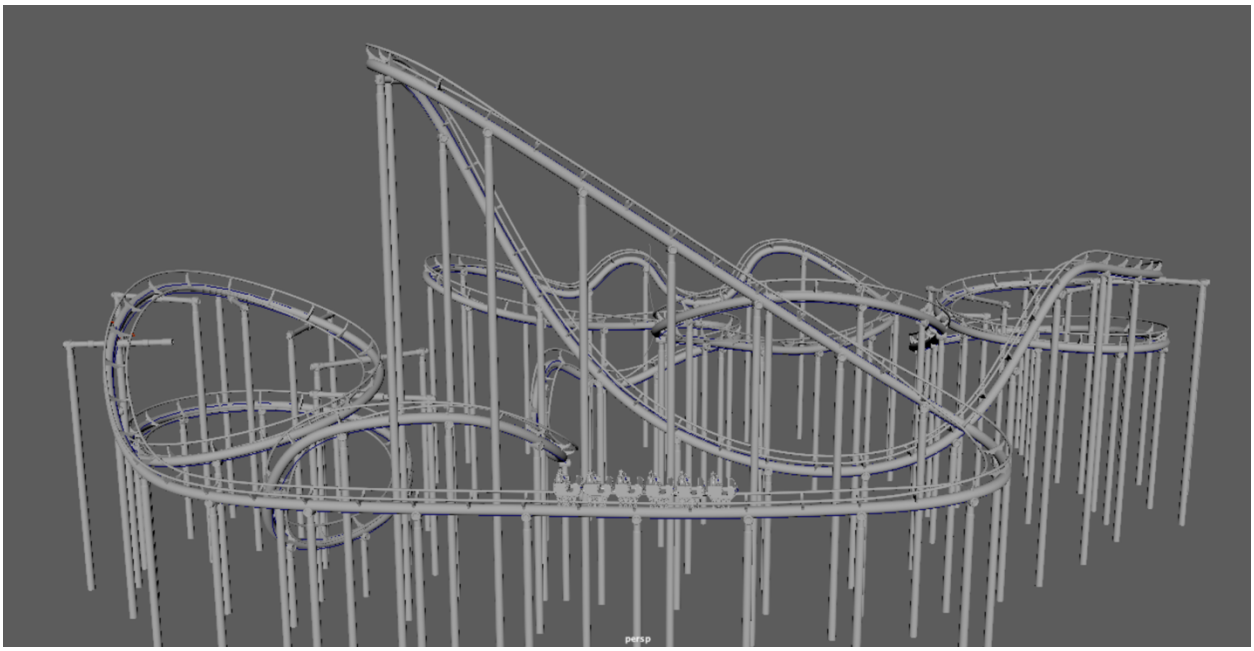
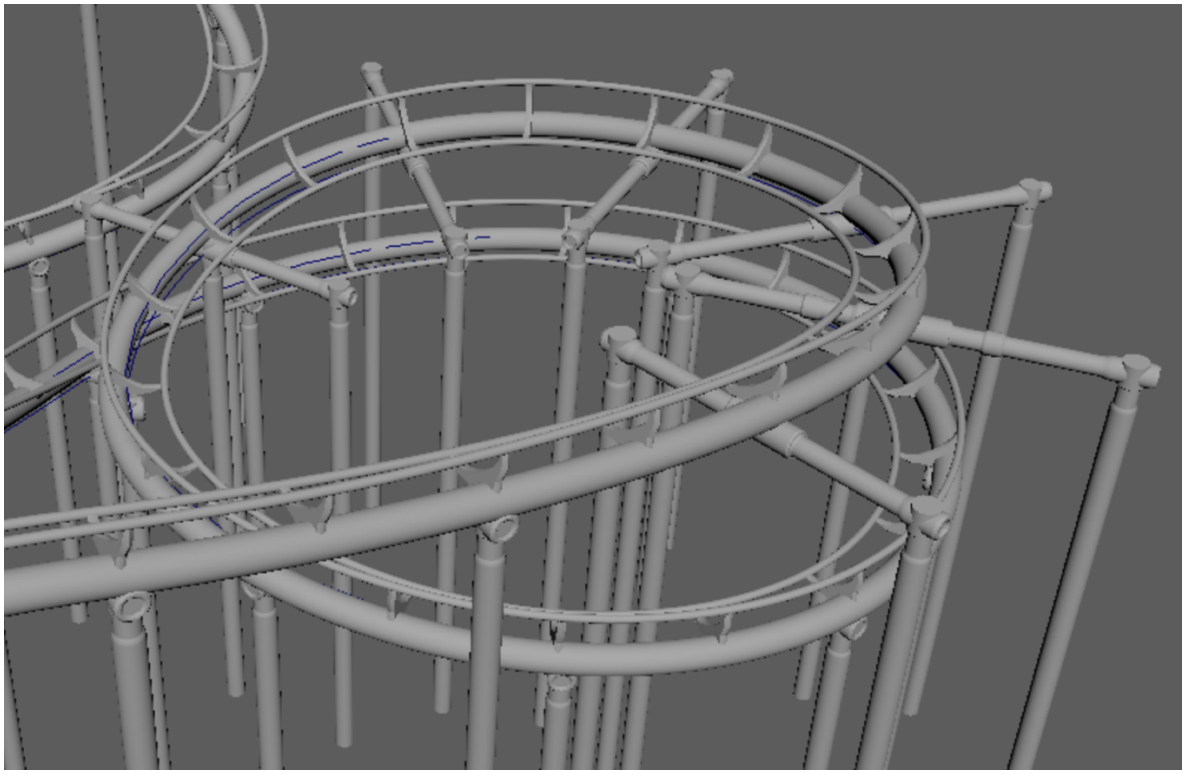
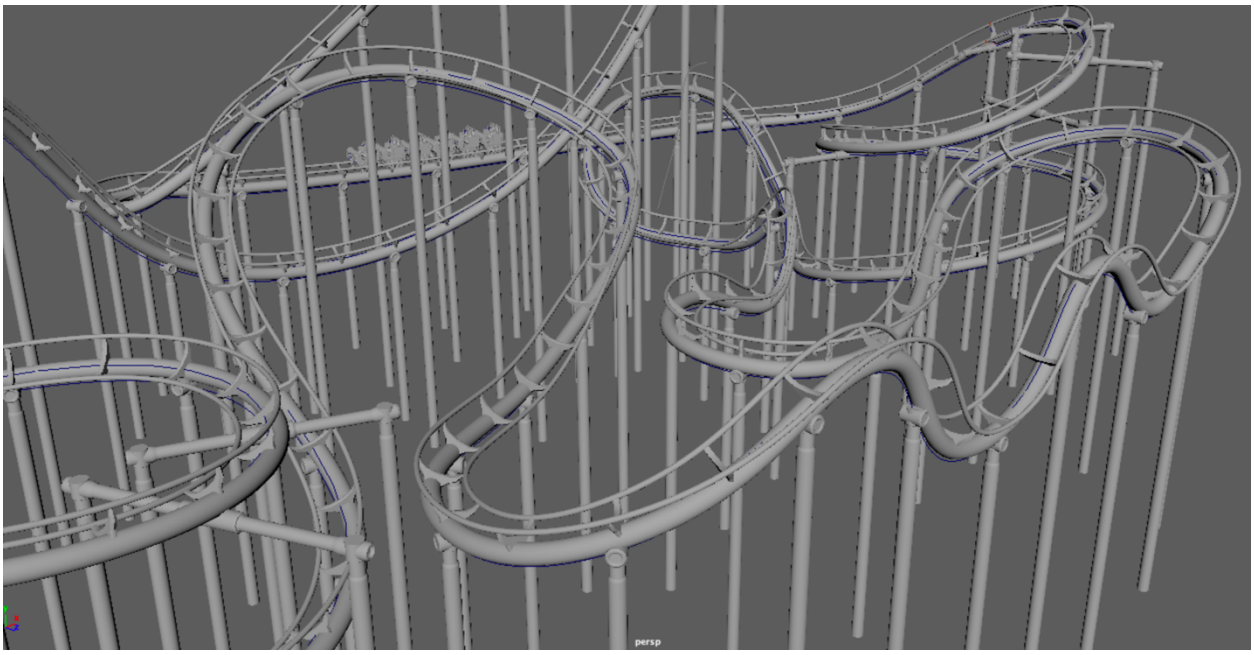
The attraction’s largest drop sequence comes right after the first lift hill in the track layout.



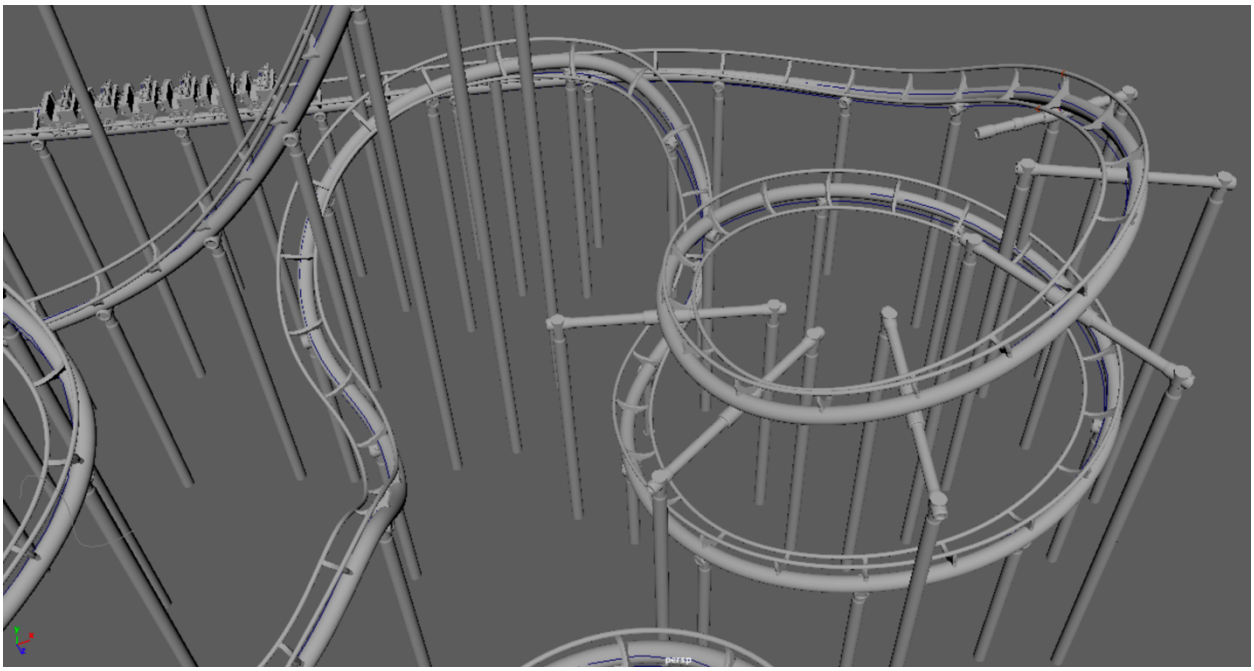
Below the downward-spiraling helix is featured with modified track support beams to ensure proper clearance levels of coaster trains during operation.



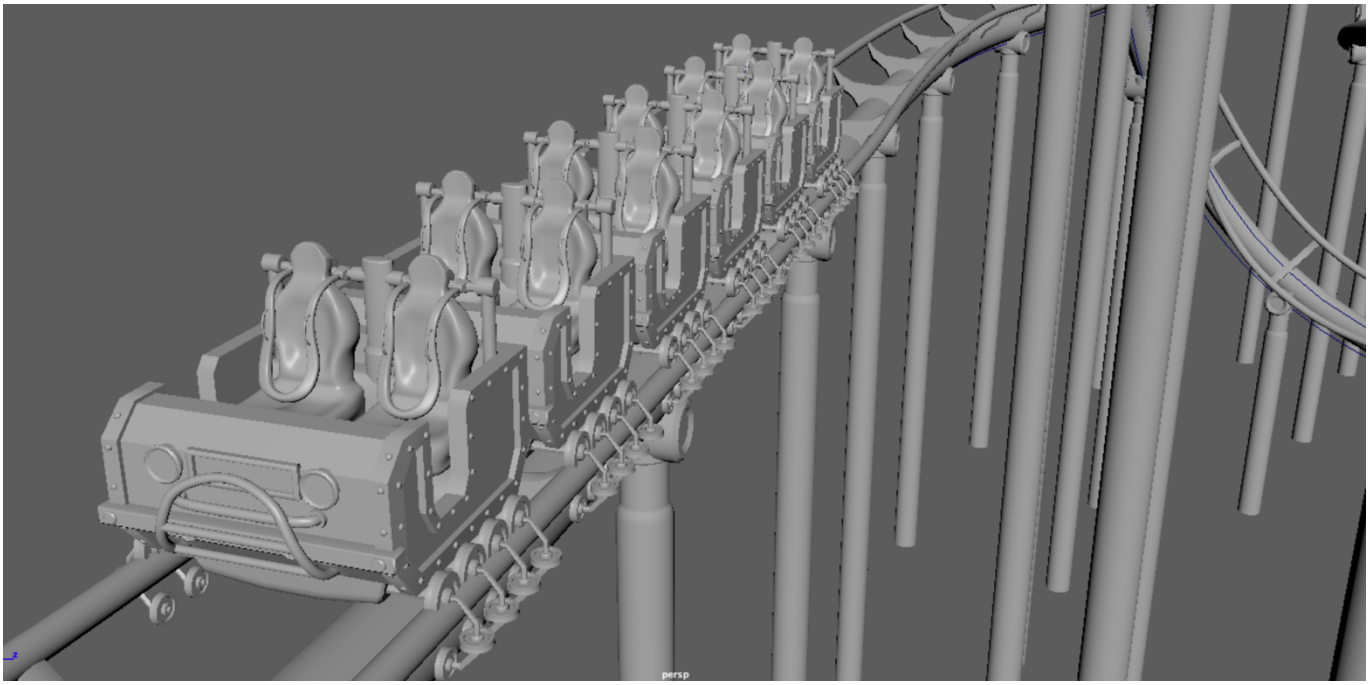
The bunny-hill section is featured around the halfway mark of the track layout.



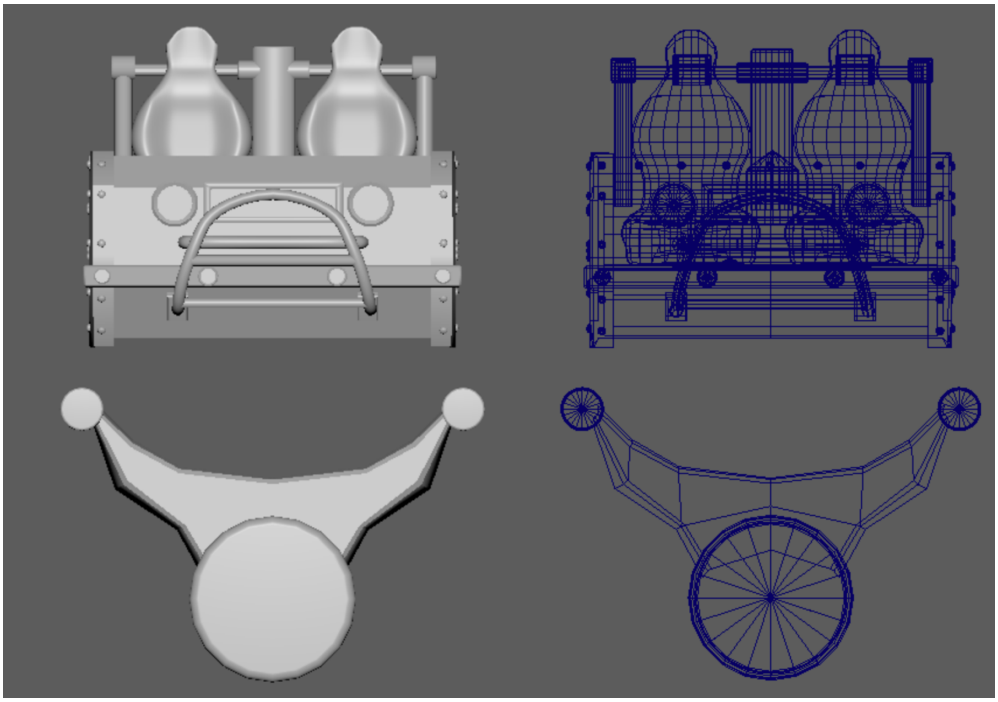
The upward-spiraling helix is the last feature of the track layout before the ride vehicle pulls into the unloading dock.

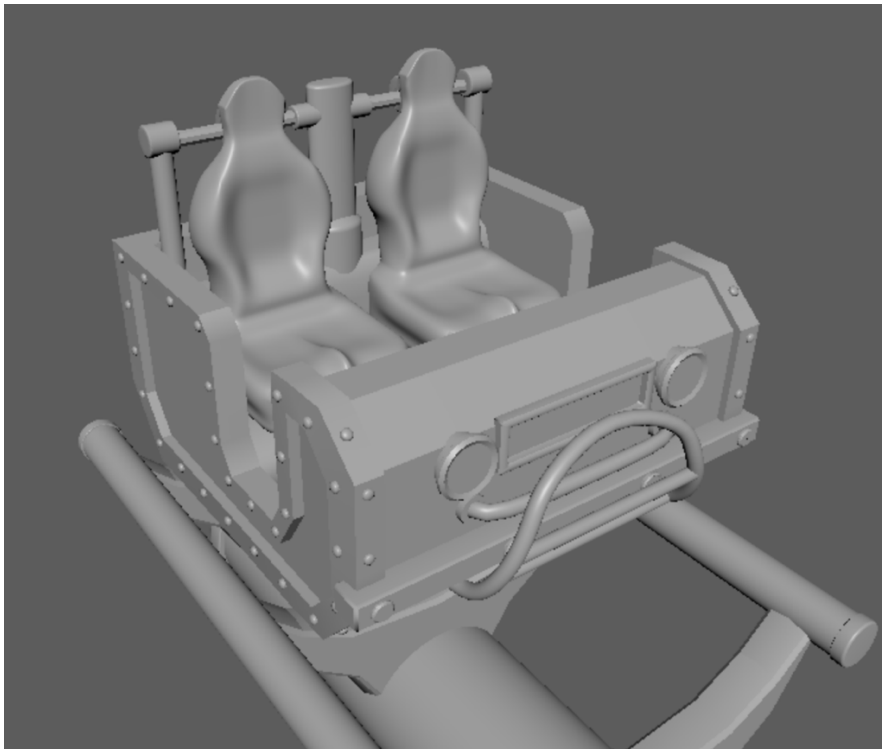


Roller coaster trains were built with six coaster cars each, each carrying two passengers for a total of 12 passengers per coaster train. Each seat is equipped with an over-the-shoulder seat restraint for safety.

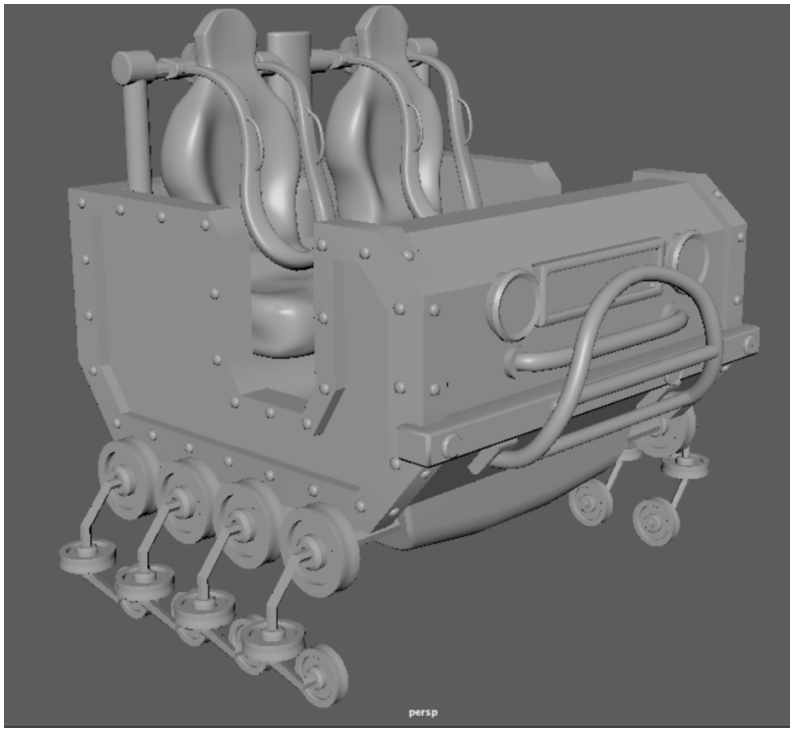


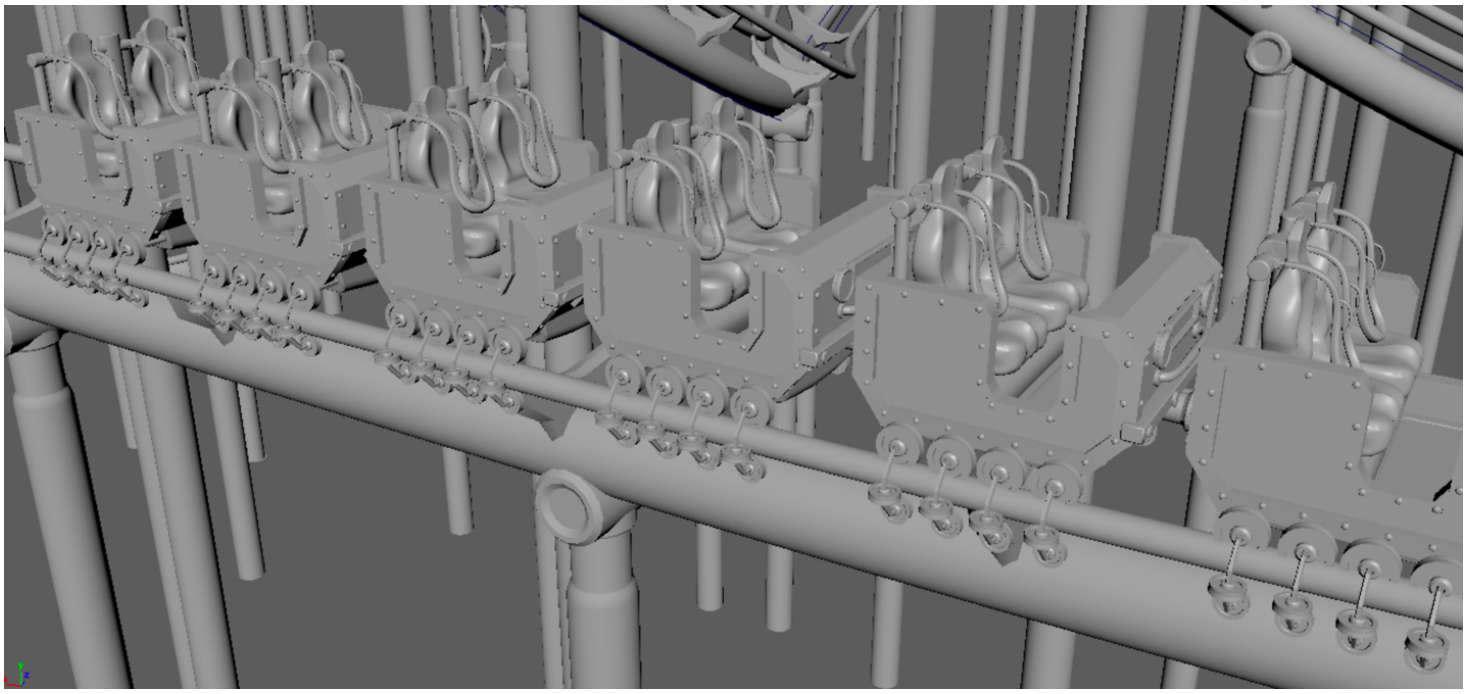
Each coaster seat was designed with both lower and back support arches for passengers, along with slotted/raised components for passenger leg placement while in the ride vehicle.





The cart wheel-assembly was created utilizing one large wheel fitted to the top of the track, with two smaller wheels assembled to fit on the side and bottom of the track tube, respectively.





Come Fly With Us Soon!