



GKN ADDITIVE
FORECAST 3D

Freedom Park at USS Midway Museum

Community Engagement



3D Printed Model Brings Park Project to Life

San Diego Museum Retains GKN Additive (Forecast 3D) to Print Parts for 3D Park Model

When the USS Midway and Port of San Diego broke ground for Freedom Park in April 2024, the event represented the culmination of a project that had been 20 years in the making. In the runup to the official groundbreaking, GKN Additive (Forecast 3D) printed 73 pieces for a detailed model of the park, helping to kick off a large fundraising campaign.

Freedom Park to Complement Legendary Museum

In 2022, the USS Midway Museum and the Port of San Diego agreed on a plan for Freedom Park; a nearly 10-acre public space that would reimagine Navy Pier while telling the story of our nation's heroes. The park, which will replace a parking lot on the 100-year-old pier, will cost a projected \$65 million.

The site for the park is adjacent to the USS Midway Museum. The museum opened in June 2004 and marks the final stop for the USS Midway — the longest-serving aircraft carrier in the 20th century. The California Coastal Commission agreed to allow the USS Midway to use Navy Pier, as long as a public park was built.

Laura White, president of the USS Midway Foundation, says the model plays a crucial role in the museum's fundraising efforts for Freedom Park.

"This is a huge capital campaign," White explains. "The demolition has already started, and we need roughly \$40 million to finish this. So the model of the park brings it to life visually. It's hard to imagine an old pier transformed into a park, so the model will be a big help for the general public, as well as for fundraising purposes."

Landscape Architect Connects With GKN AM F3D

White explains how Pat Caughey, the landscape architect who created the master plan for the park, helped identify a vendor for the model.

"We wanted a model of the park that we could have on the ship to visualize it," she says. "Pat helped us find companies that could provide sophisticated models. However, they were very expensive and would take months. We really wanted something by April 26 — the groundbreaking."

"Cost was one of the driving issues," White continues. "There were also a lot of different elements to the park that are small, tiny pieces of monuments and different areas of the park that slope."

Caughey got in touch with GKN AM F3D and arranged for a group from the museum to visit the GKN AM F3D facility.



GKN AM F3D printed the 73 12-by-12 parts that museum volunteers assembled to create the final model, which is approximately 4 feet wide by 14 feet long. All the gray parts — including the buildings — were printed using HP Multi Jet Fusion (MJF).

"Pat and I did a tour of GKN AM F3D in Carlsbad [California], and it was eye-opening," White recalls. "It was great to get to know the company and walk through the facilities — how large they are and the different projects they work on. It was pretty impressive, so we decided to move forward. From then on, it was a partnership."

Assembling the Model; a Team Effort

GKN AM F3D was able to print the parts in a matter of weeks. White and Caughey then relied on a cadre of volunteers who dedicated their time to assembling and completing the model.

The model follows an HO scale, or 1/87th of the actual size: the most popular scale used within the model-railroad community.

"The finished model is 4 feet wide and 14 feet long," Caughey explains. "There are 73 12-by-12 pieces. We built the model aboard the ship because it was going to be so big."

Volunteers painted every piece and added additional elements throughout. Completing the finishing touches meant a race against the clock. The model was ready for showtime on a Wednesday afternoon; the groundbreaking was Thursday morning.

Many of the museum's volunteers are veterans who served our country, including on the USS Midway.

White expresses her appreciation for the volunteers who finished the model.

"We have 700 to 800 volunteers who work on the ship every day, and they are the reason the project was so successful," White says. "Many participated in building the model, and many more watched it come to life because it was inspiring."

3D Model of Park Creates Buzz

Caughey says the model of Freedom Park intrigues visitors.

"It's become the talk of the town because it's on the harbor front," he says. "There's a lot of storytelling on this park."

White says the museum staff is pleased with the outcome.

"For those of us not familiar with 3D printing, we were hesitant along the way. We were concerned we were going the less expensive route and would have a less expensive look. We were pleasantly surprised."

She adds, "The groundbreaking was great; we had the mayor, congressman, and commissioner in attendance. Now it's an exhibit on the ship, so we can walk donors by it.

"It has created a lot of buzz and a lot more questions and interest. And it's just fun; it's a neat piece to have on the ship."



This portion of the model shows the American flag that will anchor the southern end of Freedom Park. The lights shown in the model are working lights.

Find out how GKN Additive (Forecast 3D) can take your product from prototype to production. Visit forecast3d.com today or contact us directly at (800) 549-5414 or hello@forecast3d.com to learn more.

Front Cover

GKN AM F3D printed 73 parts for a model of Freedom Park; a new public space outside the USS Midway Museum on San Diego's Navy Pier that is scheduled for completion by 2028.



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