Imagining space with the Zeiss Model II star projector at the Buhl Planetarium, 1940.

For some Pittsburgh landmarks, a key detail—something seen or experienced by everyone who visited—becomes a touchstone of memory that lasts long after the landmark itself is gone. For generations of school children, this strange-looking machine was the highlight of a visit to Buhl Planetarium. Rising out of the floor like some giant insect or alien creature, the Zeiss Model II projected the stars of the cosmos onto the darkened ceiling of the planetarium, transporting audiences to the realms of outer space. The projector literally put the world at its operator’s fingertips, able to portray the night sky from any spot on the planet. It was dark, weird, slightly spooky, and magical. For many students, memories of the experience lasted a lifetime. At least two local astronauts who flew multiple space shuttle missions with NASA—Jerome “Jay” Apt, a graduate of Pittsburgh’s Shady Side Academy and Pine-Richland High School’s Stephen Frick—credited Buhl and the Zeiss II as inspirations for their careers. How many other students had similar dreams?

At the time it was installed, the Zeiss II symbolized global changes that would soon transform life in Pittsburgh. The planetarium that opened on the North Side in 1939 was just the fifth major institution of its kind in the nation, a statement about Pittsburgh’s scientific and technological aspirations. Its Model II projector, made at the Zeiss Optical Works in Germany in 1938, was the last of its kind. By the time the Buhl Planetarium was dedicated on October 24, 1939, Germany had been at war with the Allies in Europe for more than a month and Pittsburgh factories were already gearing up for the war effort. Ironically, the Zeiss projector was so accurate that it was eventually used to train pilots headed overseas to fight the Axis powers in Germany and Japan. This photograph was taken sometime around 1940, when the planetarium was still new and symbolic of Pittsburgh’s vision for the future; approximately 200,000 people visited that year.

After the war, Zeiss Optical shifted to new projectors and discontinued the Model II. Eventually, the Buhl’s staff had to fabricate their own parts to repair the machine. It continued to fascinate generations of students and other visitors through the 1980s, when Buhl began the process of transitioning to a new location along the Ohio River. By the time the Zeiss II ceased regular operations in 1991 (when the planetarium officially moved to its current home in the Carnegie Science Center) it was the oldest projector of its kind still in use in the world. Today, it can be viewed as an artifact at the Carnegie Science Center. Although it no longer rises from the floor to project star shows, it still serves as a reminder of the allure of space and the impact of Pittsburgh’s cultural institutions on the people who call this place home.