

## Hiller 1031 *Flying Platform* (Replica) | 1955

### Magic Carpet Ride

Ever since the days of One Thousand and One Arabian Nights, people have been intrigued by the concept of a flying carpet. While this has never become a reality, it did come close in the 1950s when Stanley Hiller built his "Flying Platform." The origin of the Platform began with engineer Charles Zimmerman, and his dream of low-cost flight to all humanity. He developed a vertical take-off rig that he called "Flying Shoes," consisting of a platform with two small engines powering a pair of upward facing propellers that the pilot would strap to his feet. Control was achieved through body movement. To move in one direction or another, the pilot merely shifted his weight in the direction he wanted to go. Zimmerman called this "kinesthetic control," and it was similar to riding a bike or surfing.

Zimmerman's design was acquired by helicopter pioneer Stanley Hiller and evaluated at his California factory. Although it proved to be a dead end, Hiller mated the control concept with the ducted fan concept of Alexander Sabin, to meet a design proposal for the Navy's Office of Naval Research (ONR). Starting in 1953, the Model 1031 "Flying Platform" was developed in secret, and featured a ring like structure that ducted the thrust from the propellers downward to create lift. The Model 1031 first flew in 1955, and proved to be a nimble, inherently stable craft that could move a man faster than one on the ground could run. Eventually the Army became interested in the craft as a way to move troops over mine fields or provide an elevated platform for sharpshooters, and took over the funding of the process. Attempts

to enlarge the craft for the Army's needs and the addition of more motors for safety only created a heavier vehicle and the performance suffered accordingly. While several versions of the "Flying Platform" were built and tested, the Army lost interest in the project and it was eventually abandoned.



### About this Aircraft

Of the six flying platforms built, three are known to still exist, including the original Model 1031 which is on display at the Hiller Aviation Museum. This replica of the Hiller 1031 "Flying Platform" was built by Ken Spence of Bend, Oregon for the Evergreen Aviation and Space Museum, and was delivered in 2006.

### Specifications:

Type:	Experimental
First Flight:	1955
Platform Diameter:	8 feet, 4 inches
Rotor Diameter:	7 feet
Height:	7 feet
Weight, Empty:	370 pounds
Weight, Loaded:	555 pounds
Power:	Nelson H-59, two cycle, 40 horsepower engine
Capacity:	One

### Performance:

Top Speed:	16 miles per hour
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