

Hiller VZ-1 Pawnee

"Flying Platform"



Diameter	8 ft.
Height	7 ft.
Weight	180 lb. empty

The Flying Platform was almost literally a flying carpet, which the pilot controlled principally by shifting his weight instead of using manual or mechanical flight controls.

This small circular vehicle on which the pilot stood used the ducted fan for lift and propulsion. Two engines separately turned two counter-rotating propellers inside a common duct ring to counteract the tendency of the craft to turn. To change heading, the reduction in speed of one engine and propeller caused the craft to turn. Other controls and instruments were virtually unnecessary. To move forward, the standing pilot merely shifted his weight forward, which tilted the craft and propelled it in that direction.

This unorthodox craft was built as a test vehicle by Hiller Helicopters of Palo Alto, California, under the direction of the Office of Naval Research. It had the potential, however, for a number of military applications. Among these were artillery spotting, scout patrols over otherwise inaccessible terrain, and, if used in large numbers, greater freedom of movement for assault troops.

Designers of the craft hoped that volume production of advanced models would put the "air motorcycle in every family garage.

Control problems associated with this lift principle prevented prolonged travel in a constant direction, for the craft had an inherent tendency to right itself.

Consequently, when the Flying Platform had completed its Office of Naval Research and Army Air Mobility Division test program, it was transferred to the National Air Museum in 1960.

Further development of this propulsion method continued in other forms of aircraft, but the Hiller Flying Platform was the first ducted fan type of VTO (vertical takeoff) aircraft to fly, carrying a man in untethered free flight.

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