



Aviation & Aerospace

From the Wright Brothers to the Moon

First Successful Helicopter

George de Bothezat, a Russian-born engineer who emigrated to the U.S., developed the first successful American experimental helicopter in Dayton in 1922. It was a four-rotor machine that was powered by a 180-horsepower rotary engine. The U.S. Army sponsored the project.



De Bothezat flew his helicopter for the first time at McCook Field near Dayton, Ohio, in October, 1922. While the flight lasted only about 90 seconds, it proved the principal of helicopter flight. During a series of more than 100 flights during the next two years, De Bothezat and his team fine-tuned controls and operating techniques. One of the flights had three "passengers" hanging onto the airframe. While the Army was encouraged by results, they ultimately abandoned the project which cost about \$200,000, reportedly due to the complexity of the machine and perhaps personal differences with de Bothezat, who some claimed was difficult to work with. The original contract with de Bothezat called for a 300 ft hover, but the highest the helicopter reached was about 15 feet. After the project was cancelled, de Bothezat launched a company that designed and manufactured industrial fans. In 1937, however, he returned to helicopter design and founded the Helicopter Corporation of America.



The helicopter launched a new era in civilian and military aviation. Today it is the mainstay of news stations, weather reporters, emergency rescue teams, and others. In the military, helicopters with their ability to both fly and hover became gunships, troop transports, and evacuation ambulances for the injured.

Find out more...

- U.S. Centennial of Flight's "Helicopter Development in the Early Twentieth Century"
(http://www.1903to2003.gov/essay/Rotary/early_20th_century/HE2.htm)
- A History of Helicopter Flight
(<http://www.enaе.umd.edu/AGRC/Aero/history.html>)
- Evolution of Helicopter Flight
(<http://www.flight100.org/history/helicopter.html>)
- Helicopter History
(<http://www.helis.com/pioneers/>)