

0. HOWARD IN THE AIR - Story Preface

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Howard Hughes was at the controls of a prototype "Hughes XF-11" (which his company made for the U.S. military) when it crashed during its first flight (on July 7, 1946). This image, online via the USAF Museum Photo Archives, is a screen shot from footage taken on that day. The crash happened when an oil leak—which developed during flight—caused one of the counter-rotating propellers to disastrously reverse direction. Hughes completed a second prototype which he flew (successfully) on the 5th of April, 1947. Although that plane was stable and controllable at high speeds, it did not have good stability flying at low speeds.

As the result of a childhood illness, Howard suffered from a bad case of tinnitus (ringing and noises in the ears). He found those noises stopped when he flew planes. His love of flying was thus enhanced by a physical reason to be in the air.

When Hughes was just a teenager, Lockheed - ultimately a powerhouse of aviation innovation - got a lowly start when Allan and Malcolm Loughead borrowed \$4,000 from a taxi company to create a flying boat, the Model G. Their plan, to charge \$10 per ride, was - at first - a failure.

Not enough people were willing to pay that much money to ride in the plane. By 1916, however, after finding plenty of passengers at the Panama-Pacific International Exposition, the brothers had enough money to start a new business.

In a different corporate form, with the spelling of the family name changed to match its pronunciation, Lockheed Air Corporation made innovative planes such as the Vega (favored by Amelia Earhart). The company also made the red-winged, twin-engine Electra 10E (which Earhart was flying when she and her navigator, Fred Noonan, disappeared on July 2, 1937).

Howard Hughes liked Lockheed planes, too. He liked them so much that in 1932, in a rented corner of a Lockheed hangar in Burbank, he created a new division of Hughes Tool: Hughes Aircraft Company.

Before long, Howard was converting a military plane into a racing aircraft and secretly collaborating with Lockheed officials to create the fastest commercial airplane in the world. How was it that Hughes - owner of Hughes Tool and producer of Hollywood movies - ended up in the airplane business? How did he expand his love of flying into another manufacturing concern?

One of the best hiring decisions Howard Hughes ever made was when he selected a 1927 engineering graduate from Oregon State University, Glenn Odekirk, to be his right-hand airplane mechanic. Howard loved to fly, and Odie had great ideas. The two argued endlessly about the best ways to make, and improve, airplanes.

In 1935, it was Odie who helped design the H-1 which Hughes flew at the incredible speed of 352.39 miles per hour. It, too, set a new record. The plane, revolutionary at the time, was one of the first to have retractable landing gear. It also had special screws and flat rivets which significantly reduced wind resistance, thereby increasing speed.

Flying an improved version of the H-1, Hughes set a new transcontinental record on January 19, 1937 when he flew from Los Angeles to Newark in 7 hours, 28 minutes and 25 seconds. His average speed: 332 miles per hour.

The event which catapulted Hughes into national fame, however, was his round-the-world flight from July 10-14, 1938. It was Odie who selected the plane Howard flew as he completed his record-setting pace of 3 days, 19 hours, and 17 minutes.

After Howard obtained government contracts to build military planes, Odie worked on the Hughes Flying Boat project which became known as the Spruce Goose (because it was mostly made of wood). Rewarding his close friend for the years of hard work, Hughes had Odie aboard when he finally flew the eight-engine plane - at Long Beach, California - on November 2, 1947.

Flying just a mile, at seventy feet above water, the huge aircraft has been grounded ever since.

Pushing his desire to keep increasing flight speed, Howard flew an experimental plane, the XF-11, on July 7, 1946. During flight, an oil leak caused one of the counter-rotating propellers to disastrously reverse direction. Hoping to save the plane by landing on the Los Angeles Country Club golf course, Hughes instead clipped three Beverly Hills homes, crashing into a fourth house.

When the fuel tanks exploded, [the house](#) (the link takes you to historical film footage) and its surroundings caught on fire. The plane [broke apart](#) and Hughes, [badly injured](#), was lying alongside his [burning plane](#). He was rescued by Marine Master Sergeant [Durkin](#) who happened to be in [the neighborhood](#).

His desire to fly faster and faster had thus caused a crushed collar bone, six broken ribs, a collapsed lung, a fractured skull and third-degree burns. Those injuries affected Hughes until his death.

After the crash, he [grew a moustache](#) to cover a minor facial scar. A more severe problem arose from significant amounts of morphine he received during his recovery. Experts, in fact, trace his dependence on opiates (his main drug of choice was codeine) to his 1946 brush with death.

Because of the "[achievements of Howard Hughes](#) in advancing the science of aviation and thus bringing great credit to his country throughout the world," [Hughes received](#) the Congressional Gold Medal on August 7, 1939.

If the rest of this [life of great promise](#) had not been damaged by [bizarre behavior](#) and narcotic addictions, what else might he have achieved?

See [Alignments to State and Common Core standards for this story online at:](#)

<http://www.awesomestories.com/asset/AcademicAlignment/HOWARD-IN-THE-AIR-Aviator>

See [Learning Tasks for this story online at:](#)

<http://www.awesomestories.com/asset/AcademicActivities/HOWARD-IN-THE-AIR-Aviator>

Media Stream



[Lockheed Vega - Innovative Plane](#)

Image online, courtesy U.S. National Archives.

PD

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[Amelia Earhart with her Lockheed Vega](#)

Image online, courtesy U.S. National Archives.

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<http://www.awesomestories.com/asset/view/Amelia-Earhart-with-her-Lockheed-Vega>



[Amelia Earhart - Pioneering Aviator](#)

Image online, courtesy [e-Archives at Purdue University's Libraries](#).

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[Howard Hughes - Racing Aircraft](#)

Image online, courtesy Century of Flight.

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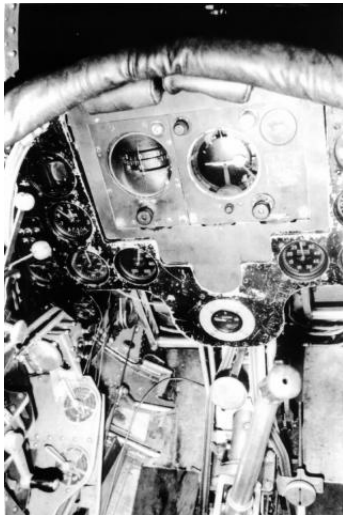
Howard Hughes and the H-1: Sets Speed Record

Image online, courtesy Historic Wings.

PD

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H-1: View Inside the Cockpit

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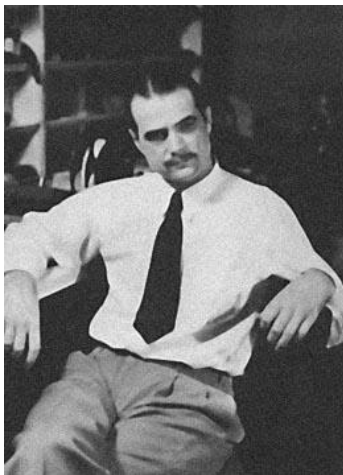
H-1: Howard Hughes Breaks Speed Records

Image online, courtesy Historic Wings.

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Howard Hughes - After the XF-11 Crash

Photo, courtesy University of Nevada at Las Vegas.

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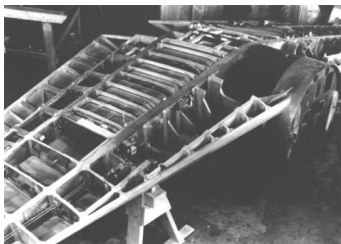


Glenn Odekirk - Premier Aeronautic Mechanic

Photo, online courtesy Oregon State University Alumni Association. PD
Information, quoted above, courtesy Oregon State University Alumni Association.

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H-1 and Its Flat Rivets and Screws

Image online, courtesy [Air Minded](#)

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Spruce Goose - Water as Runway for the Flying Boat

Image online, courtesy [456th Fighter Interceptor Squadron](#).

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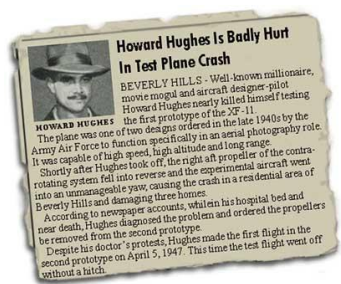


Hughes Flying Boat

Image online, courtesy U.S. National Archives.

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Crash of the XF-11 - Newspaper Account

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Howard Hughes - Rescued from XF-11 Crash

Image online, courtesy [Check-Six](#).

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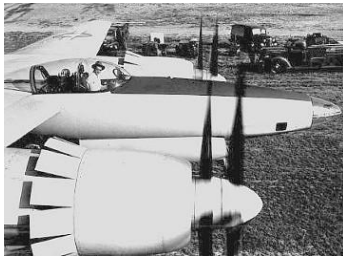


Hughes Flying Boat - In the Hangar

Image online, courtesy Wikimedia Commons.

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Hughes XF-11 - Howard in His Plane Before Crash

Photo, U.S. National Archives.

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Hughes and the Spruce Goose - Airborne!

Image is in the public domain.

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Viewing the Crash Site of XF-11

Image online, courtesy [Check-Six](#).

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Spruce Goose - Eight Powerful Propellers

Image online, courtesy U.S. National Archives.

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William Lloyd Durkin - Saved Howard Hughes

Image online, courtesy [Check-Six](#).

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XF-11 - Howard Hughes Crash Scene

Photo, U.S. National Archives.

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XF-11 Crash - Remnants of the Aircraft

Image online, courtesy [Check-Six](#).

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Hughes XF-11

Image online, courtesy U.S. Air Force.

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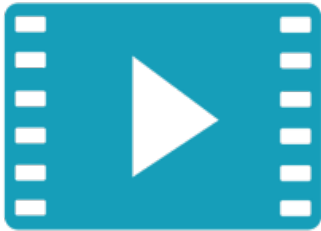
Howard Hughes - Comments on His Flights

Clip from a biography-channel documentary on Hughes.

Information on the Hughes Glomar Explorer from NOAA (National Oceanic and Atmospheric Administration).

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<http://www.awesomestories.com/asset/view/Howard-Hughes-Comments-on-His-Flights>

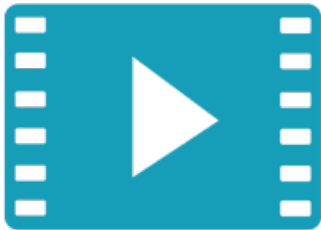


XF-11 - Howard Hughes Crash Scene, 1946

Universal Newsreel coverage for July 11, 1946. Online, courtesy U.S. National Archives.

View this asset at:

<http://www.awesomestories.com/asset/view/XF-11-Howard-Hughes-Crash-Scene-1946>



Spruce Goose - Hughes H-4 Hercules

Universal Newsreel clip, online courtesy U.S. National Archives.

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<http://www.awesomestories.com/asset/view/Spruce-Goose-Hughes-H-4-Hercules>



Howard Hughes - Aviation Pioneer, Part 1

Clip from 1974 documentary ("Hughes Aircraft Company - A History of Innovation"), by Hughes Productions. Part 1 of 2. Online, courtesy YouTube.

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<http://www.awesomestories.com/asset/view/Howard-Hughes-Aviation-Pioneer-Part-1>



Howard Hughes - Aviation Pioneer, Part 2

Clip from 1974 documentary ("Hughes Aircraft Company - A History of Innovation"), by Hughes Productions. Part 2 of 2. Online, courtesy YouTube.

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Amelia Earhart Last Footage - Leaving Lae, New Guinea

Clip from "Finding Amelia," produced for the Discovery Channel. Copyright, Discovery Communications, LLC., all rights reserved. Clip online, courtesy Discovery Channel via YouTube, and provided here as fair use for educational purposes.

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Aviator - Trailer

Trailer for the film, "Aviator," by Miramax and Warner Brothers. Copyright, Miramax/Warner Brothers, all rights reserved. Clip provided here as fair use for educational purposes.

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