



Montgomery Flight – 1904



Moffett Field – 1933



China Clipper – 1936



Hiller XH-44 – 1944



NASA Ames Research Center -- 1981

# Northern Wings

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Operations mgr. Pete Sutherland

## WESTERN AEROSPACE MUSEUM

### Aero Club members take step into past at Oakland Airport

It's easy to find the Western Aerospace Museum at Oakland International Airport's historic North Field. Just look for the huge white

flying boat parked outside.

The old, four-engine Short Solent was a luxury passenger airliner in the 1940s, carrying well-to-do travelers to exotic ports. It was once owned by Howard Hughes and in the early 1980s appeared in a scene in the movie "Raiders of the Lost Ark."

The double-deck Solent is one of more than two dozen aircraft on display at the museum, which Aero Club members visited during the spring members' tour in March.

Housed in a historic hangar among the art deco buildings echoing the days of Charles Lindbergh and Amelia Earhart, the museum displays aircraft or replicas dating from the earliest days of aviation to military jets of the 1960s and 1970s.

Other displays include Early Pioneers in Aviation, Women in

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– Northern Wings photos

Wing of Short Solent C-35 seaplane frames Grumman KA6-D Intruder.

## SJC Director William Sherry briefs Aero Club Board

San Jose Mineta International Airport has scaled back its massive passenger terminal expansion over the next decade for cost reasons, Aviation Director William Sherry told the Aero Club Board of Directors recently.

Sherry, who was hired after the James M. Nissen terminal complex master plan was approved, said the original proposal was not

economically feasible, so the city has decided to build only what it – and the airlines and other airport tenants – can afford.

What had been a \$4.5 billion airport expansion plan has been downsized to a \$1.5 billion project that will handle 17.6 million passengers annually by 2017. The proposed Central Terminal has been eliminated, he said.



William Sherry meets club board.

## Aviation loses 2 Crystal Eagle honorees

### Helicopter pioneer Stanley Hiller Jr., 81

Stanley Hiller Jr., helicopter pioneer and innovator who was honored with the Aero Club's Crystal Eagle award in 1985, died April 20 from complications with Alzheimer's disease. He was 81.

Hiller, a brilliant engineer and businessman, became one of the world's principal developers of vertical flight while still in his late teens. He piloted the first helicopter in the west out of UC Berkeley's Memorial Stadium.

He developed the world's first successful co-axial helicopter, the XH-44, and built research helicopters for the military. One of his creations – the tiny Hiller Hornet – was powered by little jet engines mounted on the ends of the two rotor blades.

By age 17, he had founded Hiller Industries and was producing model race cars for a local department store at the rate of 350 a month. Although he entered UC Berkeley, he quit after a year to expand his business.

By 1949, Hiller Aircraft was a booming business in East Palo Alto. Military helicopters were the factory's main product during the Korean War, with one H-23 rolling off the assembly line every day.

But after losing a light observation helicopter contract during the Vietnam War to rival Hughes Aircraft, Hiller sold his company and became a venture capitalist.

In 1998, he opened the Hiller Aviation Museum adjacent to San Carlos Airport.



– Hiller Air Museum photo

Stan Hiller with XH-44 helicopter



### Legendary test pilot Scott Crossfield, 84,

Scott Crossfield, legendary research test pilot and 2002 recipient of the Aero Club's Crystal Eagle award, died April 19 when the light plane he was piloting apparently broke up in a severe thunderstorm over northeast Georgia. He was 84.

A preliminary report by the National Transportation Safety Board indicated in-flight breakup because parts of the wreckage of Crossfield's Cessna 210 were found a mile apart.

Crossfield was on an instrument flight plan, the NTSB said, when he inadvertently entered a Level 6 'thunderstorm – the worst kind. Radar contact was lost at 5,500 feet.

A World War II Navy pilot, Crossfield was the first to fly twice the speed of sound, in the Douglas D558 II Skyrocket on Nov. 20, 1953. In 1960, he flew early tests of the rocket-powered X-15 plane.

As one of the elite group of X-plane pilots in the 1950s and 1960s, Crossfield survived a crash-landing and two catastrophic engine explosions while testing the X-15.

Crossfield, who lived in Herndon, Va., in recent years, was an aerodynamicist, an aeronautical engineer and a designer. Friends said he was very professional and resented the reputation of test pilots as swaggering cockpit cowboys.

## *A brief tour into aviation's past*

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Aviation, World War I, World War II, Airlines, Engines, Simulators, Model Airplanes and Space.

Among the aircraft on display is a Lockheed Electra, the same type that Amelia Earhart flew out of Oakland in 1937 on her ill-fated attempt to fly around the world.

A Curtiss Robin is the same type of aircraft that Douglas "Wrong Way" Corrigan flew from Long Island to Ireland soon after Charles Lindbergh's pioneering solo flight. Corrigan earned his nickname when authorities said his plane was too flimsy to cross the Atlantic. So he took off heading west, then made a U-turn when out of sight to cross the ocean.

There is a full-size replica of the "Vin Fiz" – a Wright Brothers model EX airplane in which Calbraith Perry Rodgers made the first trans-continental flight. It took him 84 days and he crashed five times before landing in Long Beach.

Founded as a nonprofit organization by a group of aviation enthusiasts and historians in 1980, the Western Aerospace Museum finally opened its doors to the public in 1986 in a single room in 1929-vintage Hanger 5.

Finally, in November 1988, the museum moved to its current location.

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#### **Aero Club of Northern California 2006-2007 Board of Directors**

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# Aero Club members tour Western Aerospace Museum

*Ron Reuther's aviation career led to museum founding*

After decades as an Air Force, National Guard and commercial pilot, as manager, director or curator of five city zoos, and as a lecturer on aviation history, one might think Ronald T. Reuther would have settled into a comfortable retirement.

Not so. Reuther, who served on the Aero Club's board of directors from 2003 to 2005, in 1980 was one of the founders and later executive director of the Western Aerospace Museum at Oakland International Airport's North Field. He currently is president emeritus.

His more than 5,000 flight hours logged in military and civilian aircraft gave Reuther the experience to go with his sense of history that helped launch the museum.

Reuther's Air Force duty took him to Europe, Africa and the Middle East in the mid-1950s. He flew in the National Guard while pursuing a civilian career in zoo management in Lodi, Cleveland, Indianapolis, San Francisco and Philadelphia.



- Northern Wings photos

**Short Solent C-45 Seaplane transport is too big for museum hangar**

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in Building 62, a hangar built in 1940 by the Boeing School of Aeronautics to train aviation mechanics for the Army Air Corps and Navy.

The museum is at 8260 Boeing St., off Earhart Road from Doolittle Drive on North Field. It is open from 10 a.m. to 4 p.m. Wednesdays through Sundays. Call (510) 638-7100 for more information, or visit the museum's web site at

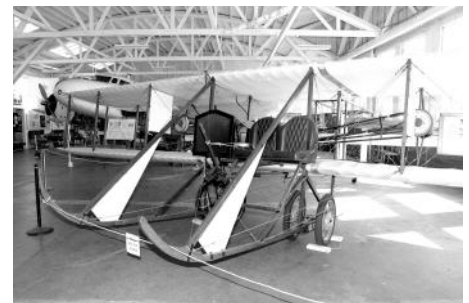
[www.westernaerospacemuseum.org](http://www.westernaerospacemuseum.org).



**Don Houseman, Tom Leonard inspect Solent passenger cabin**



**Curtiss Robin and cutaway Wright radial engine on display.**



**Wright "Vin Fiz" replica.**



**Rick Willson, Penny Blake listen to manager Pete Sutherland**

## History Corner: It all started with a motorized gas bag

The Bay Area's aviation history began in 1869 with a 45-foot-long, steam-driven airship that somewhat resembled a whale with wings. It actually flew, although it did not carry a human, and it inspired a young boy.

In fact, the July 2, 1869 test of the device laboriously built by San Francisco banker-newspaper editor Frederick Marriott is generally thought to be the first flight of a heavier-than-air machine to employ a three-axis control.

The flying Avitor was basically a hydrogen gas bag with rudimentary 18-foot wings generating the lift that got it off the ground. A 1-horsepower steam engine drove twin propellers to move the machine through the air –

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### SCHEDULE OF EVENTS

#### *Wings of History Tour*

June 10, Saturday. Aero Club members will tour the Wings of History air museum at South County Airport. For information, telephone Frank Sweeney at (408) 578-8566.

#### *Reid-Hillview Day*

Sept. 23, Saturday. Annual open house at Reid-Hillview Airport in San Jose, sponsored by the Reid-Hillview Association. Free admission.

#### *Crystal Eagle Award Banquet.*

Oct. 28, Saturday. Annual Crystal Eagle banquet of Aero Club of Northern California, Hiller Aviation Museum, 601 Skyway Road, at San Carlos Airport.



#### **Avitor replica at Hiller Museum**

into and with the wind – as an enthusiastic crowd watched. It flew a mile on its first attempt at a field near today's San Francisco International Airport.

Among the spectators was 13-year-old John J. Montgomery.

Montgomery was so impressed by the Avitor that he started to study how birds flew and became one of the authorities on lift and aerodynamics.

In 1883, Montgomery flew a glider he called the "Gull" off the bluffs near San Diego in what many consider the first controlled manned flight, and then wrote about it. It had parabolic wings and was controlled by warping or bending the wingtips to change lift and steer it.

At the same time the Wright Brothers were flying their earliest powered aircraft, Montgomery, by then a Santa Clara University physics

professor, was perfecting his gliders in Santa Clara County with full three-axis control and parabolic or curved wings.

Montgomery was a bit of a showman. By 1905, Montgomery had built the glider "Santa Clara." On April 29, thousands of people watched as the twin-winged craft was lifted to 4,000 feet by a hot-air balloon. Then pilot Daniel Maloney cast off and glided to earth. Unfortunately, on another attempt on July 18, one of the glider's struts was damaged by a balloon rope. Maloney fell to his death.

Montgomery flew his most sophisticated glider, the "Evergreen," more than 50 times off a hill in San Jose's Evergreen district. But in a relatively mild crash in 1911, a protruding bolt on the glider pierced his skull and he died within a couple of hours. The hill, next to Evergreen Valley College, is now known as Montgomery Hill



#### **Evergreen replica in museum**

## The Aero Club of Northern California

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Chartered in 1981 as a chapter of the National Aeronautic Association



-- To keep the public informed of the importance of aviation and space flight to the nation's economic progress, its security, and to international understanding.  
-- To support a vigorous aviation and space education program for students at all levels of learning.  
-- To recognize and honor those who make outstanding contributions to the advancement of aviation and space flight.