



Montgomery Flight – 1904



Moffett Field – 1933



China Clipper – 1936



Hiller XH-44 – 1944



NASA Ames Research Center – 1981

Northern Wings

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Phil Boyer awarded Crystal Eagle



-- Northern Wings Photo

AOPA President Phil Boyer, left, receives Eagle from Carl Honaker

AOPA president 26th recipient of honor

Phil Boyer, the longtime president of the Aircraft Owners and Pilots Association, became the 2008 recipient of the Crystal Eagle, awarded annually by the Aero Club of Northern California to honor those whose achievements are the highest in aviation.

In a departure from the traditional Aero Club Crystal Eagle dinner, the award was presented Nov. 8 during the closing banquet of AOPA Expo 2008, which drew nearly 10,000 pilots to the San Jose McEnery Convention

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Huge airship may be in Hangar One's future

Another giant airship – possibly one now being constructed in Akron, Ohio -- may be in historic Hangar One's future at Moffett Field.

But it may depend on a combination of federal and private funding to restore the iconic structure to something usable.

The Navy, which operated Moffett until 1994, plans to tear off the skin of the hangar, leaving only the bare skeleton standing for NASA Ames Research Center, which now runs the airfield. The Navy is responsible for the cleanup of toxic substances leaching from the hangar's siding and for several years had been trying to demolish the building.

In January, Lew Braxton, deputy director of NASA Ames, told members of the Moffett Field Restoration Advisory Board that the space agency is devising a plan to



-- U.S Navy Photo

USS Macon inside Hangar One

restore Hangar One over the next year and a half to use it again "for its original purpose."

That likely means an airship, for Hangar One's original purpose in the 1930s was to house the giant dirigible, USS Macon. It also indicates NASA plans to re-skin the giant building after the Navy strips it bare beginning this fall.

So far, the only official announcement has been the Navy's decision to remove the hangar's siding.

Braxton said NASA Ames is working with two aerospace companies as potential tenants. The

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AOPA president Boyer awarded Crystal Eagle

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Center in downtown San Jose.

Boyer led the world's largest and one of the most influential civil aviation organizations since 1991. He retired at the end of 2008.

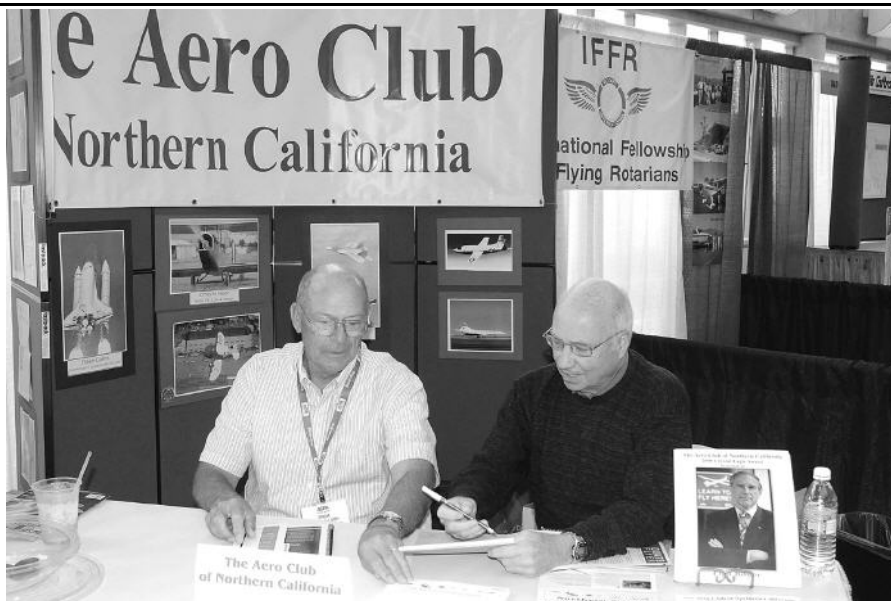
Aero Club President Carl Honaker presented the Crystal Eagle to Boyer during the event attended by hundreds of pilots and other aviation enthusiasts. As Honaker lifted the velvet cover from the Eagle, a noticeable "Oooooo" rippled through the audience.

After the presentation, a stage troupe performed a musical tribute to Boyer with Broadway songs especially reworded in his honor.

With the Crystal Eagle Award, Boyer joined a long list of aviation luminaries who have been so honored since legendary aviator Jimmy Doolittle received the first Crystal Eagle in 1983.

Boyer, a 7,000-hour-plus instrument- and multiengine-rated pilot, has been flying for more than 30 years, 15 as an aircraft owner. The former television news executive was instrumental in building AOPA's membership by more than 33 percent to 415,000 – two-thirds of all certificated pilots in the United States.

The organization has fought for general aviation issues in venues



-- Northern Wings Photo

Aero Club directors Rick Willson and Ray Hutchings staff information booth at AOPA Expo 2008 Nov. 6-8 to let the nearly 10,000 pilots attending the annual convention of the Aircraft Owners and Pilots Association know about the club organization and its activities.

ranging from local city councils and state legislatures to the U.S. Congress.

Most recently, AOPA led the successful opposition to the general aviation user fee plan that the Bush Administration and the airlines pushed to fund the Federal Aviation Administration.

Boyer and other AOPA officials argued in congressional testimony that the current system based on aviation fuel taxes has been highly successful in building the best aviation system in the world and can easily finance the new technology air traffic control systems of the future.

In the 1990s, AOPA played a major role in the fight to reform the tort law process that nearly killed the piston-engine aircraft industry in the 1980s. Liability suits targeted manufacturers on flimsy evidence, driving many out of business. AOPA's strong advocacy proved critical to congressional passage of the 1994 General Aviation Revitalization Act.

Boyer also led a successful campaign to persuade the FAA to certify satellite-based GPS for general aviation flight operations.

Crystal Eagle Recipients

1983 – James "Jimmy" Doolittle
1984 – Charles E. "Chuck" Yeager
1985 – Stanley Hiller Jr.
1986 – William "Bill" Lear
1987 – James M. "Jim" Nissen
1988 – Anthony W. "Tony" LeVier
1989 – Elbert "Burt" L. Rutan
1990 – George S. Cooper
1991 – Allen E. Paulson
1992 – Jeana Yeager
1993 – Robert T. Jones
1994 – Frank L. Christensen
1995 – James S. Ricklefs

1996 – Darryl G. Greenamyre
1997 – Robert L. "Hoot" Gibson
1998 – Donald D. Engen
1999 – Paul H. Poberezny
2000 – Wayne Handley
2001 – Igor I. Sikorsky
2002 – A. Scott Crossfield
2003 – Clay Lacy
2004 – Elgen Long
2005 – Eileen Collins
2006 – Sean D. Tucker
2007 – Steve Fossett
2008 – Phil Boyer

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Navy plans to strip skin off Hangar One

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agency wants to determine which one would share the estimated \$15 million cost to install new skin on Hangar One.

While NASA officials have not yet identified those companies, Lockheed Martin is currently building a 500-foot-long airship for the Army. The craft is being assembled in another big dirigible hangar – the Goodyear Airdock in Akron, Ohio.

Such an airship would be too large to get inside of Moffett's Hangar Two or Hangar Three. And constructing a new hangar to house such a huge airship could cost as much as \$90 million – far more than the cost of restoring Hangar One, RAB members have estimated.

The Navy now plans to begin removing the hangar's siding this fall. Braxton told the RAB that NASA wants to put up new siding while the removal scaffolding is still standing. NASA hopes to pay for its share of the project with additional funding from the Obama Administration.

The \$15 million pricetag is triple what the Navy spent to build the base and Hangar One in the early 1930s.

When the base opened in 1933, the 785-foot-long airship USS Macon, a dirigible with a rigid frame supporting the helium-filled cells that provided lift, was based in cavernous Hangar One.

But two years later, the Macon crashed in a storm off Big Sur, ending the era of giant airships. Moffett Field became a blimp base during World War II. It later was a fighter base, and then home for Navy submarine-hunting P-3 Orions.

Several years ago, the Navy planned to demolish Hangar One because of toxic contamination leaching from the metal skin into the groundwater. But it bowed to intense pressure from the community and elected officials and re-evaluated its plan.



--Air Ventures – Roger Cain Photo

246-foot dirigible "Eureka" cruises above San Francisco skyline.

Once again, a dirigible flies from historic Moffett Airfield

For the first time in 74 years, a dirigible is based at Moffett Field. And the public can take a flight.

While Moffett Field was home for countless blimps during World War II, there has not been a dirigible based at the former Navy airfield since the USS Macon crashed off Big Sur in 1935.

The new tenant – operated by Airship Ventures that has been based at Moffett's Hangar 2 since last year-- is an actual dirigible with a rigid frame covered by an outer skin of laminate material. The 246-foot airship is filled with non-flammable helium, which being lighter than air provides the lift to allow it to float through the sky. Blimps, on the other hand, are nothing more than giant, non-rigid gas bags, constructed in a series of cells to hold the lifting gas. Blimps have no internal framework.

Airship Venture flies the dirigible Eureka around the San Francisco Bay Area on daily flight-seeing trips, as well as contracting for advertising purposes, scientific missions and corporate events. The dirigible, a Zeppelin NT airship, also is flown on trips out of Oakland Airport's North Field and from Monterey. It carries 12 passengers.

The flights aren't bargains, however. A one-hour flight out of Moffett or Oakland will cost you \$495, with two-hour flights at \$950. Air Ventures also offers a number of special fares. For information, check the firm's website at <http://www.airshipventures.com/>.

Although the airship has a top speed of 78 mph, the scenic flights cruise about 35 to 40 mph at altitude 1,200 feet around the Bay Area. At those speeds, however, a one-hour flight from Moffett won't get you as far north as San Francisco.

The Eureka was built in Germany and shipped to Beaumont, Texas by container ship last October. It was then flown to California, arriving in the Bay Area Oct. 25.

The Eureka's rigid inner frame is made of carbon fiber and aluminum, with the cabin, engines, empennage and other main components mounted directly to the structure.

The airship has three 200-horsepower Continental engines, and vectored thrust propellers. One engine in the tail drives two propellers providing forward thrust. One of those propellers can rotate to provide sideways thrust. The two engines mounted on the sides can rotate 120 degrees to increase maneuverability.

History Corner: Pan American Clippers

Trans-Pacific airline flights began in S.F. Bay Area

It was Nov. 22, 1935 when Captain Edwin C. Musick and his flight crew fired up the four engines on the huge Martin M-130 flying boat and taxied away from the dock at the Alameda marina.

A short while later, the China Clipper lifted off from San Francisco Bay. Six days later, after stops in Hawaii, Midway, Wake Island and Guam, it landed 8,210 miles away in Manila Bay, the Philippines. Actual flying time was 59 hours 48 minutes.

The inaugural flight of trans-Pacific commercial air service carried no paying passengers, only 11,000 pieces of mail. The Hawaii Clipper made the first scheduled trans-Pacific passenger flight beginning Oct. 21, 1936.

This was the beginning of an exciting but short-lived era of air transportation when Pan American Airways' Clippers began to make the world smaller. No longer did it take three weeks to cross the Pacific. Trans-Atlantic service began in 1939.

The Clippers were named after the fast 19th century sailing ships.

From Alameda, and later Treasure Island, the well-heeled passengers traveled in luxury.



Boeing 314 Flying Boat – the Grandest Pan American Clipper of all.

Aboard the main deck of the grandest Clipper of all -- the behemoth Boeing 314 flying boat that went into service in 1939, were lounges that converted into curtained sleeping berths, luxurious lavatories and a dining room where hot meals were served by white-coated stewards on real china.

A circular staircase led to the large flight deck on the upper level where the pilots, navigators and other crew operated the flying boat.

Weighing 41 tons loaded, with a wingspan of 152 feet and four 1,600-

horsepower engines, the Boeing 314 cruised at 183 mph carrying as many as 74 passengers.

Aviation advances spurred by World War II gave land-based aircraft more power, speed and range, and the runways from which they could fly. By war's end, the flying boats were obsolete.

Sikorsky, Martin and Boeing had built 25 Clippers for Pan Am. By the early 1950s, the seven that had survived the war were scrapped.

Less than a decade later, the first commercial jet transports appeared on the scene.

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.