

HILLER AVIATION MUSEUM WHERE INSPIRATION TAKES FLIGHT

A CENTURY OF CIRCUMNAVIGATIONS FLYING AROUND THE WORLD SINCE 1924

Ithough it might have been news to some of Columbus' sailors in 1492, Earth's spherical nature was known in antiguity. Eratosthenes of Cyrene famously measured Earth's circumférence by careful measurement of shadows and distances some 2,200 years ago. His calculation was nearly identical to the actual value of just under 25,000 miles—a daunting distance in a world constrained to travel at the speed of a horse or a windpropelled ship. It would not be until some 1,700 years later that the survivors of Ferdinand Magellan's expedition became the first to circumnavigate the world by sea in 1522.

While traveling around the world gradually become more feasible and less fantastical as technology improved, it remained an arduous journey—Jules Verne's fictional characters struggled to complete the trip in 80 days in his 1872 novel. The advent of air travel at the beginning of the 20th century, however, offered the intriguing possibility of circling the world in far less than 80 days.

In 1923, the U.S. Army Air Service published a requirement for an airplane capable of completing an around-the-world flight. A 31-year-old Donald Douglas, at

by Jon Welte



the helm of his newly founded Douglas Aircraft Company, won a contract to modify one of his biplane torpedo bomber designs into a world-circling airplane. While the flights would feature many refueling stops, long range for flying extended legs over water and across inhospitable terrain was essential. With modifications designed by Douglas and Jack Northrop, the Douglas World Cruiser traded its forebear's armament for an extra 500 gallons of fuel. For added flexibility, the aircraft could be interchangeably equipped with either wheeled landing gear or pontoons for water landings. A total of five were built, along with an abundant supply of replacement parts. The four production aircraft, each named for an American city, departed the Douglas facility in Santa Monica, California, in March 1924, and launched the official attempt at an aroundthe-world flight headed westbound from Seattle the following month.

The U.S. expedition was well equipped and supported, yet nonetheless the trip was fraught with difficulties. One aircraft was lost in Alaska before the flight even left North America. Permission to fly in Soviet airspace was never officially granted, and the legs through Southeast Asia featured multiple stops at locations that had never before seen





Smithsonian Institution Affiliations Program an airplane. Breakdowns in remote areas were common, with one disabled aircraft towed for miles by paddle-powered boats after a forced water landing in French Indochina. Conditions improved as the surviving aircraft reached Europe, but a second aircraft became disabled and was lost under tow crossing the Atlantic. The original prototype was pressed into service as a replacement and the three surviving World Cruisers arrived triumphantly in Washington, D.C., in September 1924. Following a cross-country tour, the aircraft completed their mission by landing once more in Seattle on September 28, nearly six months after their departure.



While historic, the 1924 aerial circumnavigation was hardly a practical form of transportation. It did, however, mark the opening of all the world's skies to air travel. Only five years later, the German airship Graf Zeppelin completed an aroundthe-world flight in just three weeks. The first around-the-world journey by a Pan Am airliner took place by accident in 1941, when a Boeing 314 flying boat operated by Pan Am was forced to return home from New Zealand flying westbound after the Japanese attack on Pearl Harbor closed many trans-Pacific waypoints. Following the war, aerial refueling made nonstop flights around the world possible. The United States Air Force first achieved this feat with a propeller-driven Boeing B-50 in 1949, then repeated it with jet-powered B-52 aircraft in 1957. The latter mission required less than 48 hours to fly around the world—nearly a hundred times faster than the Douglas World Cruisers managed.

While the challenges faced by would-be aerial circumnavigators have lessened since 1924, the journey remains long, arduous, and seldom undertaken. Over a period of five months in 2021-2022, Belgian-British pilot Zara Rutherford made the first around-the-globe flight in an Aero Shark UL microlight aircraft—and in the process also became the youngest woman to fly solo around the world. Rutherford undertook her flight in part to boost female interest in, and engagement with, the science and engineering inherent in aviation and aerospace. Rutherford's westbound journey began and ended in Belgium and touched North and



South America, Asia, Africa, and Europe and included an unplanned stay in Alaska, waiting for weather and for permission to enter Russian airspace, very much like the Douglas World Cruiser expedition nearly a century earlier.

Globe-spanning flights continue to capture the world's imagination even in the 21st century. After the historic 1924 flight, the Douglas Aircraft Company's logo was altered to include a depiction of the world

with the path of the World Cruisers shown circling around it. The logo, later updated to reflect the advent of the space age, remained a part of Douglas' identity through a series



of mergers— including the 1997 merger with former archrival Boeing, which now includes the around-the-world "swoosh" of the Douglas World Cruisers in its own iconic logo.



On October 15 the Hiller Aviation Museum welcomes Zara Rutherford as the keynote speaker for its 18th annual Benefit Gala. Rutherford will share her experiences growing up in an aviating family, piloting a lightweight airplane around the world, and advocating for girls and women to look for their futures in the air.

Resources

https://airandspace.si.edu/collectionobjects/douglas-world-cruiser-chicago/ nasm_A19250008000 (downloaded 10 August 2022)

https://www.boeing.com/history/products/ douglas-world-cruiser.page (downloaded 10 August 2022)

https://flyzolo.com/ (downloaded 10 August 2022)

PRESIDENT'S PERSPECTIVE FALL 2022



t was an exciting summer at the museum. Aviation Camp soared with over 1,800 participants, our largest attendance ever,

with a heavy focus on aviation science that brought young people a bit closer to their dreams of flight with hands-on experiences that are unique in the Bay Area. This intense day camp is highly sought after and a family favorite thanks to the creativity and capable management of the museum's Education team led by Jon Welte and Linh Fanger.

This fall, our 18th annual Benefit Gala on October 15 promises to be a noteworthy event featuring Zara Rutherford, the new world-record holder for youngest woman to circumnavigate the globe by aircraft solo. If you join us (and tickets are available at www.hiller.org/gala), you'll have an opportunity to meet this young woman and hear about her extraordinary around-the-world journey that was completed just this past year. Well covered by international media, Zara's flight was an inspiration for the newest generation of aspiring young aviators. Her story will also soon be featured in our Women in Aviation exhibit, which chronicles the achievements of women pilots.

We are very grateful for the support we've received during the pandemic, and we greatly appreciate our family of museum visitors and Members for helping make the Hiller Aviation Museum a vibrant and exciting part of the community. We look forward to seeing you soon at the Museum!

> Jeffery Bass President & CEO, Hiller Aviation Museum

This event is expected to be conducted fully or partially outdoors!



ADVENTURE INSPIRES

18TH BENEFIT GALA

Saturday, October 15, 2022

5pm Cocktails 6:30pm Dinner & Auction



Keynote by Zara Rutherford The youngest woman to fly solo around the world

Benefiting the Museum's Aviation and STEM education programs



HILLER AVIATION MUSEUM Individual Ticket

Table of 10 Sponsorships\$15,000\$10,000\$5,000\$3,500

Questions? Contact Rebecca Duran, VP of Development 650-654-0200 x203 / duran@hiller.org



Tickets, Sponsorships, Donations · www.hiller.org/gala

EDUCATION PROGRAMS FALL/WINTER 2022

AVIATION CAMP FALL/WINTER AVIATION CAMP **HOLIDAY CAMP PROGRAMS** OCT 2022 - JAN 2023 • 9AM - 4 PM

Launch an adventure in aviation over the fall and winter holidays at Aviation Camp! Build and fly model aircraft, take on realistic flight simulations, explore museum aircraft and more, while exploring a unique subject in flight.







DRONE

(1-DAY).

NOV 25,

DEC 23,

JAN 9

RANGERS

RALLY

SEP 11.

OCT 9

NOV 13

11AM



FAMILY SUNDAY PROGRAMS

FALL 2022

Join the excitement this fall for a series of special outdoor family events! Held on select Sundays, each features hands-on activities just for kids ages 5+. Visit www. hiller.org for more information in each event.



HOLIDAY FUN WEEK

SPECIAL EVENTS • DEC 27-31

Celebrate the holidays with a special event in flight! Daily events December 27-31 provide special experiences in aviation for kids and adults alike! Each is included with museum admission.

HAPPY BIRDS



TUES, DEC 27, 11AM Take flight on the wild and feathered side with the Happy Birds! Back by popular demand,

this outrageous troupe of parrots, macaws, and cockatiels perform a remarkable routine of natural and trained behaviors.

OPEN COCKPIT

WED, DEC 28 10AM - 1PM

Explore the captain's seat in airliners, seaplanes, helicopters and more! The doors



of many of the Hiller Aviation Museum's unique and historic aircraft swing open for visitors of all ages on Open Cockpit Day.

PERFECT PAPER PLANES THURS, DEC 29, 11AM Join world

champion paper airplane designer John Collins for

an interactive, hands-on celebration of the art and science of paperlight flight! John shares his award-winning designs and leads everyone in the quest to build and fly the perfect paper plane.

SLED DRIVER – FLYING THE SR-71

FRI, DEC 30, 11AM

Celebrated **United States** Air Force pilot Major Brian



Shul returns to the Hiller Aviation Museum this December to share his experiences flying the world's fastest operational combat aircraft. Capable of exceeding three times the speed of sound, the SR-71 Blackbird was truly exceptional - as was the elite cadre of aviators who flew it.

NOON YEAR'S EVE PARTY



SAT, DEC 31, 10AM – 1PM

Join the countdown to 12 noon on the last day of the year in a kid-friendly New Year's Eve spectacular! Dance and music routines, hands-on activities, and special presentations prepare the way for the dramatic countdown and noontime balloon drop. Advance reservations are required! Tickets go on sale on Dec. 1st. This event will sell out.

HOLIDAYS BY HELICOPTER

HOLIDAY FUN BY HELICOPTER

Helicopter Operations Donated by Bay Area Helicoptours, www.bayhelicoptours.com



THANKSGIVING TURKEY TOSS FEATURING COMMEMORATIVE FOAM TURKEYS

WED, **NOV 23 11AM**



SANTA CLAUS ARRIVES **BY HELICOPTER**



All Helicopter Events are Weather Permitting

HALLOWEEN EVENTS



HALLOWEEN HAUNTED HANGAR OCT 22 - 31

ONLY) 10AM – 8PM Share a familyfriendly fright

10AM - 5PM

(OCT 28 - 30

as the Hiller Aviation Museum transforms into the Halloween Haunted Hangar in a special annual tradition! Enjoy creepy creations, dreadful decorations, and spirited Halloween fun.

HALLOWEEN KIDS' CARNIVAL

SAT/SUN, OCT 22/23 10AM - 12PM

Paint the museum's Cessna Cardinal in ghastly Halloween colors, launch a Ghosticopter in a wind tunnel, assemble a Halloween craft and more at the Haunted Hangar.



SAT/SUN, OCT

10AM - 12PM (PUMPKIN DROP

29/30

AT 12PM)

Join the fun

as our high-

flying witch

her doomed

for their final

prepares

pumpkins

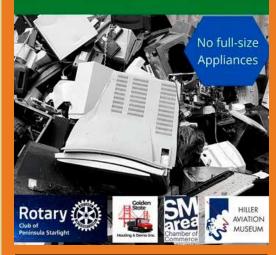
HALLOWEEN FESTIVAL AND PUMPKIN DROP

flights! With Halloween games, special prizes, and helicopter-borne pumpkin drops as the clock tolls 12 noon.



You can help inspiration take flight... by donating your vehicle!

Sunday, November 20, 10 am - 1 pm RECYCLE YOUR E-WASTE!



Hiller Aviation Museum is going green with digital eMembership cards.

Members, please visit www. hiller.org/digital-membership for details and download the eMembership App on your smartphone.

HILLER BUIGTION MUSEUM

HILLER MUSEUM

UNTEDHZ

saturday Oct 22 through Sunday Oct 30th, Daily 10am-Spm (open until 8PM 28-30th)

HIDS' CARNIVAL SAT-SUN OCT 22/23 10 AM-12 PM

- SPECIAL ACTIVITIES JUST FOR KIDS
- COCKPIT EXPLORATION
- GLIDER AND HELICOPTER
 CONSTRUCTION AND MORE
- PAINT THE MUSEUM'S PAINT-A-PLANE Orange and Black
- FUN FOR THE WHOLE FAMILY!

• PUMPKIN DROP

- · CREEPY GAMES AND PRIZES
- MEET THE WITCH AND SIGN HER Special Halloween Pumpkin

HELICOPTER

10 AM-12 PM (OROP AT 12 PM)

DROP

• GREAT PUMPKIN SAFARI HUNT

GET TICKETS AT WWW.HILLER.ORG

HILLER AVIATION MUSEUM 601 SKYWAY RD SAN CARLOS, CA 94070

CALENDAR

SEPTEMBER

SUN, SEPT 4 • 11AM Helicopter Adventure

SUN SEPT. 11 • 11AM Water Rocket Rally

SUN, SEPT 18 • 2:30PM-4:00PM Flight Sim Rally

SUN, SEPT 25 • 10AM - 12:00PM Kids' Carnival

OCTOBER

SUN, OCT 2 • 11AM Straw Rocket Workshop

SUN, OCT 9 • 11AM Water Rocket Rally

SAT, OCT 15 • 5PM-10PM Adventure Inspires, Museum Gala

SUN, OCT 16 • 2:30PM-4:00PM Flight Sim Rally

OCT 22 - OCT 31 • 10AM-5PM OCT 28-30 • 10AM-8PM Halloween Haunted Hangar

SAT/SUN, OCT 22/23 • 10AM - 12:00PM Kids' Halloween Carnival

SAT/SUN, OCT 29/30 • 10AM - 12:00PM Halloween Helicopter Pumpkin Drop

NOVEMBER

SUN, NOV 6 • 11AM Helicopter Adventure

SUN, NOV 13 • 11AM Water Rocket Rally

SUN, NOV 20 • 2:30PM-4:00PM Flight Sim Rally WED, NOV 23 • 11AM Turkey Toss

THURS, NOV 24 Closed for Thanksgiving

DECEMBER

SAT, DEC 3 • 9:30 AM - 12 PM Santa by Helicopter

SUN, DEC 4 • 11 AM Straw Rocket Workshop

SUN, DEC 11 • 11AM Glider Discovery

SUN, DEC 18 • 11AM Helicopter Adventure

WED, DEC 25 Closed for Christmas

TUESDAY, DEC 27 • 11AM Happy Birds

WED, DEC 28 • 10AM - 1PM Open Cockpits

THURS, DEC 29 • 11AM Paper Airplane Guy

FRI, DEC 30 • 11AM SR-71 Pilot Brian Shul

SAT, DEC 31 • 10AM - 1PM Noon Years Party

FLIGHT SIM ZONE AND FMX FLIGHT SIM WEEKENDS 11AM - 2PM INVENTION LAB

WEEKENDS 11AM - 3PM

DRONE PLEX

WEEKENDS 11AM - 3PM

HELICOPTER TURKEY TOSS

WED NOV. 23, 2022 11 AM



Celebrate the Thanksgiving holiday with a family-friendly re-enactment of a classic television event! In 1978, WKRP in Cincinnati first aired its timeless "Turkeys Away" episode. In 2022, the Hiller Aviation Museum commemorates this fictional holiday catastrophe with a "Turkey Toss" of its own.

The museum is known for many helicopter-borne events throughout the year. Now, for the first time, the museum will drop turkeys - not the actual birds, but soft foam turkey toys! Small, squeezable take-home turkeys will rain from the sky reminding all of the immortal words of WKRP General Manager Arthur Carlson, "As God is my witness, I thought turkeys could fly!"

SANTA CLAUS ARRIVES BY HELICOPTER

SATURDAY, DECEMBER 3, 10AM RAIN OR SHINE. DOORS OPEN AT 9:30.

Join the West Bay Community Band and sing Christmas carols while the kids line up to tell Santa their Christmas gift list. No Museum admission fee required for this event!





HILLER AVIATION MUSEUM

601 Skyway Road, San Carlos, California 94070 www.hiller.org

Non – Profit Organization US POSTAGE PAID San Carlos, CA PERMIT No. 96





IN THE GIFT SHOP

NOVEMBER 26 - DECEMBER 31

Become a Museum Member and take advantage of this great holiday offer!

Join Now!

Senior (age 65+) \$55 One adult plus 2 one-time use guest passes Individual \$70

One adult plus 2 one-time use guest passes **Family** \$105

2 adults and up to 4 children (17 & under) plus discounts on Aviation Camp

Pioneer \$140 Family Membership benefits plus one additional card for an adult, ideal for caregivers (up to 3 adults per visit), & 2 one-time use guest passes

Pilot \$275 Family Membership benefits with a total of 3 guest passes + 8 FMX Flight Simulator passes and 50% off additional FMX tickets.

Barnstormer \$550 Adventurer \$1,000 Pilot Membership benefits with a total of 4 guest passes + 10% off Museum Rental and Birthday Parties.

Explorer \$2,500 Navigator \$5,000 Pilot Membership benefits with a total of 8 guest passes + 15% off Museum Rental and Birthday Parties.

Aviator \$10.000 Pilot Membership benefits with a total of 12 guest passes + 25% off Museum Rental and Birthday Parties and a Hiller Aviation Museum jacket.

Thank you for your support.

Annual Membership Application Or join online at www.hiller.org/member

I want to be a member of Hiller Aviation Museum in the following category:

□ Senior (65+) \$55	□ Barnstormer \$550
□ Individual \$70	□ Adventurer \$1,000
□ Family \$105	□ Explorer \$2,500
□ Pioneer \$140	□ Navigator \$5,000
□ Pilot \$275	□ Aviator \$10,000
□ New Member □ Annual F	Renewal

Primary Adult Member:
Second Adult Member:
Third Adult Member:
Address:City:
State: Zip:Daytime Phone:
Email:
This is a gift membership from:
Payment Amount:
Card #:Exp. Date:
CSC: Print Name on Card:
Signature

Please make checks payable to Hiller Aviation Museum 601 Skyway Rd, San Carlos, CA 94070

