**MEMBER EVENTS**

For all events, please RSVP to membership@museumofflight.org.

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**MEMBER MOVIE NIGHT**

**DUNKIRK**

In the early days of WWII, the German Army surrounded Allied soldiers from Belgium, the British Empire, and France in the French coastal town of Dunkirk. As 400,000 troops awaited their fate on the beaches, help will come from the air and sea in an operation that would defy all expectations. Rated PG-13 for intense depictions of war and strong language.

**WILLIAM M. ALLEN THEATER**

Friday, Oct. 5 | Movie starts at 6 p.m.
Doors open at 5:30 p.m.

Sponsored by:

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**EXCITING NEW BENEFITS ARE COMING TO MEMBERSHIP!**

Please see page 8 for details.

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**Want to see artifacts in the Museum collection not normally on view?**

Join us for Coffee with the Curator. You’re welcome to bring your lunch—coffee and dessert is on us! Featuring Red Barn blend coffee, available exclusively in our Museum Store. RSVP to membership@museumofflight.org to attend.

**B-52G RESTORATION & VIETNAM COLLECTIONS**

**NORTHWEST AEROCLUB ROOM (RED BAR, 1ST FLOOR)**

Friday, Sept. 21 | Noon to 1 p.m.

Please join us in September as our Director of Aircraft Collections and Restoration discusses the restoration of the Museum’s Boeing B-52G and what was required to disassemble and move the aircraft from Paine Field to the Seattle campus. Collections staff will share Vietnam-related objects, archival and library materials, and explain how they support the new Vietnam exhibit in the T.A. Wilson Great Gallery and are being made available to researchers.

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**WEIRD AND WONDERFUL**

**NORTHWEST AEROCLUB ROOM (RED BAR, 1ST FLOOR)**

Friday, Oct. 19 | Noon to 1 p.m.

Join us in October for our third annual edition of our “Weird and Wonderful” Coffee with the Curator! During this presentation, the collections staff will share odd, head-scratching, and strangely wonderful items from our Collection.

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CONTACT THE MUSEUM

www.museumofflight.org

24-Hour Info Line: 206.764.5720

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**ALEFT STAFF:**

Editor-in-Chief: Jerre Jayle

Contributing Editors: Erika Calahan, Louisa Goyphart, Amy Hendrick, Sid Raetter, Sara Stanney, Robin Webster

Art Direction & Design: Julie Wilbert

Columnists: Karen Bean, Steve Dennis, Allen Edwards, Dana Farrene, Amy Hendrick, John Little, Sean Mobley, Tim Nelson, Geoff Nunn, Christine Runte

Web Producer: Lynne Brenchley

On the cover: “Queen of the Golden Age of Flight,” by photographer Rick Gayheard. This image was the First Place Winner in the Spirit of Flight Photography Exhibition. Read about the other winners on page 16.

Questions or Comments?
Email us at aloff@museumofflight.org

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**NOTE:** In the July/August issue, on page 17, the date for the film Platoon in our Vietnam Film Series was listed incorrectly; the correct date was July 29, not July 18. On page 21, we missed the last three words—Geodesy and Heat Transport—that compose the acronym for the Mars InSight lander. The acronym stands for “Interior Exploration using Seismic Investigations, Geodesy, and Heat Transport.” On page 4, Stephen Erspig is a Trustee for the Museum and he was mistakenly omitted from the Trustee list. We apologize for these errors.
“AIRCRAFT HAVE SOULS, JUST LIKE PEOPLE...” I have heard some version of that statement time and again from aerospace lovers. I won’t begin to opine on the metaphysical state of a complex piece of metal, cloth, or composite. But I can assure you that like humans, aircraft and spacecraft can have rich, fascinating, and impactful histories. One can randomly pick an artifact and be assured its stories go far beyond a moment in time or a place in history. Take the Museum’s Spitfire, a plane that has a historic lineage as well as personal connections to me. MK923 was built in 1944 in England and one of its first combat flights was in support of the D-Day invasion. With a start like that, most people would ignore the next 74 years of its history.

But MK923 has lived 74 more years. It saw combat again in 1947 with the Royal Netherlands Air Force, when after being shipped to Java, it was involved in the unsuccessful Dutch attempt to reestablish the colonization of Indonesia. It joined the Belgian Air Force in 1952, and went into private Belgian hands in 1958 towing targets. Its extensive movie career began in 1961, flying over the beaches of Normandy in the Longest Day before being owned by Hollywood legend Cliff Robertson from 1963 well into the ‘90s. The stories that can be told throughout its 20th-century life are vast.

But there are also the personal connections. The strange picture of a boy “taking flight” is a young Matt when months later would go to an airplane in Hamilton, Ontario. Overcome with sunburn and tired feet, I saw some of the most incredible aircraft I had seen to date, including a Spitfire. That was gracefully twirling through the air. Flash forward 30 years to me at the Museum reading the placard for our Spitfire that mentions its past owner, Robertson. The memories the planes at Hamilton in the 80s not only flashed in my mind, but so did the words and the smile of my mother when she heard the radio announcer mention the Spitfire’s owner: a childhood heartthrob of Mom’s, Cliff Robertson. It was the same plane.

In typing this story, I find the aviation connections continue. Just yesterday I was up at the Boeing Academy for STEM Learning when, after being shipped to Java, it was involved in the unsuccessful Dutch attempt to reestablish the colonization of Indonesia. It joined the Belgian Air Force in 1952, and went into private Belgian hands in 1958 towing targets. Its extensive movie career began in 1961, flying over the beaches of Normandy in the Longest Day before being owned by Hollywood legend Cliff Robertson from 1963 well into the ‘90s. The stories that can be told throughout its 20th-century life are vast.

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So do planes have souls? I don’t know. But I do know that their stories can live and breathe and intertwine with our lives. That their histories can be as exciting as any novel or biography. And that like us, their lives are full of the impossible, the mundane, and the sublime. Come and find a soulmate, and maybe a long-lost friend, at The Museum of Flight.

Cheers,

Matt Hayes, President and CEO
FROM THE DAYS OF SAILING SHIPS

What’s new in the collection?

BY: CHRISTINE RUNTE, REGISTRAR

Aaron Caridi and his family are frequent visitors to the Museum, and after seeing some of our early aviation exhibits, he thought that we might be interested in his Hindenburg dishes. Mrs. Henneberg, father of Maxine Henneberg and grandfather of Aaron Caridi, began working as a Room Steward on the Hindenburg in 1935. He was on the Hindenburg at the time of its crash at Lakehurst, New Jersey, in 1937. He escaped through a window in the dining room, waiting until the zeppelin was close enough to the ground so he could jump. The dishes are some of the memorabilia he collected while affiliated with the Hindenburg. His collection was eventually left to his three daughters, including Maxine, and passed down through the family. Mrs. Henneberg is highlighted on the Faces of the Hindenburg website, facesofthehindenburg.blogspot.com.

Q: WERE THE DOUGLAS WORLD CRUISERS (DWCS) THE FIRST AMERICAN AIRCRAFT TO HAVE FACTORY-INSTALLATED NAVIGATION LIGHTS?

A: First, let’s define “navigation lights,” which actually date from the days of sailing ships. Navigation lights are small, colored lights that enable other air traffic to determine an aircraft’s orientation at night. The left wing tip carries a red light, the right wing tip carries a green light, and the rear of the aircraft carries a white light. So, for example, if a pilot is flying at night and sees three lights in a row, red-white-green, from left to right, that pilot knows that he or she is approaching another aircraft from dead astern. According to Curator Emeritus Dennis Parks, navigation lights were installed on American airships at least as early as 1917.

Q: WHAT’S THE MUSEUM’S REPUBLIC P-47 THUNDERBOLT BUILT IN FARMINGDALE, NEW YORK, OR IN EVANSVILLE, INDIANA?

A: The full designation for the Museum’s P-47 is “P-47D-2-RE,” which indicates that it was built at Republic’s plant in Farmingdale, Long Island, New York. The clue is the manufacturer’s code, “RE,” which indicates that the airplane was built by “Republic Aviation, Farmingdale, New York.” By contrast, all P-47s that were built at Republic’s Evansville, Indiana, plant carried the manufacturer’s code “RA,” for “Republic Aviation, Evansville, Indiana.”

Q: MY BROTHER FOUND A FUEL TANK THAT WAS MANUFACTURED BY THE BOEING AIRCRAFT COMPANY. FUEL CAPACITY: 212.5 GALLONS, U.S.; PART NUMBER 75-5017-1; SERIAL NUMBER 4286; DATE OF MANUFACTURE 9-20-40. CAN YOU TELL ME FROM WHAT BOEING AIRPLANE THE TANK COMES? (THE PRIOR OWNER WAS THINKING OF MOTORIZING IT AND TAKING IT TO BURNING MAN.)

A: Driving around in a motorized fuel tank at Burning Man! What could possibly go wrong there? Obviously, this was another case for our ace research volunteer, Bruce “Sherlock” Florsheim, who really outdid himself this time. Here is Bruce’s reply: “The size of the fuel tank, 212.5 gallons, says it is from a large airplane. The date of manufacture, 9-20-40, narrows it down to 4 Boeing airplane types, most likely a B-17. Checking the B-17 first, I found a match. The B-17’s inboard fuel tanks were of that size, but the outboard tanks were larger... The only B-17s that were being built when the fuel tank was manufactured were B-17C. Ergo, the tank was used on a B-17C bomber.” Hopefully, that makes the tank too valuable to be sacrificed at Burning Man!

HAVE A QUESTION?
Submit it to aloft@museumofflight.org and it could appear in the next issue of Aloft!

Supporting Future Pilots

THE MUSEUM’S PRIVATE PILOT GROUND SCHOOL (PPGS) has been one of our most popular programs since it launched in 2015 to meet the growing demand for aviation professionals. This 90-hour class offers high school students the opportunity to explore aviation and begin learning the technical knowledge to pass the Federal Aviation Administration private pilot written exam, as well as earn high school and college credits for free.

This summer, the Museum celebrated the achievements of the 96 students who completed the curriculum in 2018—our largest enrollment ever! Delta Air Lines Seattle Vice President Tony Gonchar addressed the students at their graduation in July: “Your being here is no small achievement,” he said. “It’s exciting to see so many young men and women tap into their interest in aviation, aerospace and aerodynamics. Continue to work hard and focus on your dreams.”

The PPGS program is in partnership with Raisbeck Aviation High School, Puget Sound Skills Center and Green River College. This year marks the beginning of a 3-year sponsorship from Delta to provide funds for student recruitment, program supplies and scholarships. Delta professionals also provided curriculum support for students. Thank you for encouraging the next generation of pilots to “Keep Climbing!”

Submit it to aloft@museumofflight.org and it could appear in the next issue of Aloft!

Funding a Future in Aviation

THIS YEAR, THE MUSEUM’S Boeing Academy for STEM Learning granted five new annual scholarships to pursue flight training and post-secondary aviation education to nine Seattle area high school students. Requirements included participating in one or more of the Museum’s Academy programs and demonstrating an intention to pursue aviation or aerospace. Thanks to the generous endowments established by Jim and Sue Johnson, Alaska Airlines, Pacific Northwest Business Aviation Association, and the Estate of Frank “Samm” and Betty Houston, these students received a total of $143,000. The scholarships were awarded in a reception at the Museum on June 11, where investors personally commended the recipients. Many of these talented Academy alumni have already earned licenses and college credits, and we can’t wait to see what they achieve in the future. Congratulations to Dane Anders, Gada Ahmed, Anthony Bui, Brooklyn Cross, Alexandra Reyes, Scarlett Stelzer, Hunter Whidlock, and Dane Andersen. CREDIT: THE MUSEUM OF FLIGHT

LEFT TO RIGHT: Anthony Bui, Sameer Romani, Gada Ahmed, Matthew Yamashita, Brooklyn Cross, Alexandra Reyes, Scarlett Stelzer, Hunter Whidlock, and Dane Andersen. CREDIT: THE MUSEUM OF FLIGHT

Montana Welcomes WAS!

THE WESTERN AEROSPACE SCHOLARS (WAS) annual Summer Residency touched down at the Montana Learning Center and opened their inaugural Montana Residency. In this 6-day program, already well-established at the Museum for Washington and Oregon residents, students plan a crewed trip to Mars covering all aspects of mission planning including getting there and back, living and working there, mission integration, public relations, and ethics. This program joined three Museum-hosted sessions of Junior WAS and eight sessions of Sophomore WAS across Washington, Oregon, and Montana, in which students plan a robotic mission to Mars in three days.
**NEW!** Member benefits & rates go into effect October 1, 2018!

We are enhancing and updating our membership program to welcome Destination Moon next spring. We invite you to renew today to lock in your current rate for 2019. Extend your membership for another year and take advantage of additional benefits!

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**NEW!** Senior Discount - 10% OFF Navigator and Aviator levels for ages 65+

Call our office at 206.764.5711 to receive this special offer! *Senior discount cannot be combined with other offers.*

For more information on Museum Memberships and a calendar of upcoming Members-only events, visit museumofflight.org/membership. To learn more about the ASTC Passport Program, visit www.astc.org/passport.
LISTEN INTENTLY TO THE CHATTER on the air traffic control channel as I watch the summer sun set over Mt. Hood from my vantage point in the plane.

“Horizon 1604 on departure flight heading 340,” comes the voice from the tower, giving my flight final instructions. “...28 left, clear for takeoff.”

“28 left, cleared for takeoff on departure flight heading 340. Horizon 1604, reply my pilot, Matt Woerly, with the cadence of a well-practiced professional. A truck trundles down the airport service road in front of us. The air from the cockpit vent cools our faces. Our Bombardier DHC-8-Q400 in full Alaska Airlines livery taxis to the 28 left runway at Portland International Airport, PDX in plane parlance. As the tower turns its attention to other aviators, Woerly deftly preps up the engines and a few minutes later Portland sits behind us. A slight haze stretches through the pink evening sky between the two mountains that dominate the bird’s-eye view out of Portland.

Except the view is virtual. The mountains, airplanes and trucks are pixels on Woerly’s computer screen in his apartment in South King County, where I sit in a spacious chair (with plenty of legroom) next to him. The cool air in the room comes not from a vent, but from the open window nearby. The voice of the PDX Tower, now wishing us a safe flight to Seattle, is a real person many miles away sitting at his own computer screen tracking Woerly’s virtual plane, along with other ‘planes’ in the PDX airspace, guiding the pilots to and from the airport as part of an extensive aviation simulation called VATSIM.

The Virtual Air Traffic Simulation Network (VATSIM) is a dream come true for anyone who has ever wanted to be a pilot or get a feel for life in an air traffic control tower. The free software plugs in to popular flight simulators like X-Plane or Microsoft Flight Simulator X and connects pilots to each other and VATSIM’s army of air traffic controllers.

“We have four radar centers for the ATC side,” explains Matt Bartels, who volunteers for the VATSIM Board of Governors. “That’s how the controllers can see the pilots. These are very close emulations of the real ATC scopes they are using at the approaches and the centers in the US.” Indeed, to the casual observer the software used by VATSIM’s controllers looks like it would be right at home at the Museum’s tower exhibit.

It may seem intimidating to the uninstructed, but the VATSIM community emphasizes the low barriers to entry. “[For pilots] there’s no training required, you can sign up and log on and do whatever you want,” says Woerly. Bartels agrees. “We try to cater to everybody. We want to be a network where people can come on and learn how to interact with air traffic control, learn how to fly an airplane, have fun doing it, and at the same time get a realistic simulation of the policies and procedures used by real world air traffic controllers and pilots.”

It’s also possible for gamers to get a more intensive experience. Virtual airlines have formed, mirroring their real-life counterparts, complete with chuck rides, scheduled routes, and real-life in-flight magazines. An add-on to VATSIM can put you into an elaborate economy. Woerly, is worth over $10,000,000 in the VATSIM world. There are no screen names; all participants in VATSIM must use their full real names to promote professional behavior.

Back on the flight deck of Horizon 1604, our flight passes in real time. We soar over the Kent Valley, the route based on FAA charts. Woerly has open on a second screen. He makes a northern approach so we can look down and wave at the virtual Museum of Flight and sets us down gently at SeaTac. A few surgical keystrokes later, he has shut down the flight simulator and opened up the ATC, direct, a tangle of multicolored lines against a black background that would be familiar to FAA staff sitting in the Seattle Air Route Traffic Control Center, and within seconds he is running SeaTac’s airspace. He initiates contact with a pilot logged in from Seoul, South Korea flying past Mount Rainier about to complete a 13-hour flight plan from Rio de Janeiro’s Galeão International Airport to Seattle. “This guy’s been online the whole time,” says Woerly, “you can be away for a short time but you’re not really supposed to leave the plane unattended.”

He toggles his microphone, “Asiana 2087 heavy Seattle approach, ident [identity].” His voice is heard in Seattle where the pilot flashes their aircraft’s transponder from their own keyboard (following FAA protocol) which makes the aircraft target on Woerly’s radar blip. Woerly begins managing Asiana’s display for the summer sun set over Mt. Hood from my vantage point in the plane.

Interested in scale modeling? The friendly modelers of NWSM meet each Friday from 7 p.m. in the Red Barn. Membership is informal and there are no dues—come join the fun!

ON SEPT 7, A NEW SCALE MODEL display will debut in the Museum lobby adjacent to the Wings Café. The members of NorthWest Scale Modelers (NWSM) are installing a collection of 30 highly detailed World War I aircraft models, one hundred years after the conflict ended. Eleven modelers have created these miniature replicas, representing more than 1,500 hours of skilled labor. The models will tell the story of the first air war and the pilots who experienced it.

The new display is the latest in a long line of collaborations between NWSM and The Museum of Flight—two organizations that have shared a symbiotic relationship since 1992. Although the Museum’s collection of aircraft and spacecraft is spectacular, it is not practical to acquire or display every significant artifact. Some of the important stories of flight can only be told in miniature. With this in mind, NWSM has partnered with the Museum to create exhibits, host spectacular shows, and stage retaking lobby displays.

Over the years, NWSM has created models in support of numerous major Museum exhibitions. These efforts included the Ely McIwray Personal Courage Wing subjects acquired from the Champlin Collections in 2002-2004, the U.S. Navy centennial in 2011, the Boeing centennial in 2016, and the new Vietnam Divided exhibit. NWSM also hosts one of the largest scale model exhibitions in North America over Presidents Day Weekend each February, featuring approximately two thousand models, seminars, working demonstrations, and a Make and Take program for kids.

Beginning in 2006, NWSM introduced a series of themed model displays in the Museum lobby. Permanent display cases were soon installed to showcase these miniature exhibits. In coordination with Museum exhibits and curatorial staff, the subject themes are selected far in advance to allow for building time—it can take many months of effort to craft a complete model. For each display model; NWSM collaborates with exhibits professionals to prepare placards and graphics.

In June 2018, NWSM unveiled its 50th lobby display, saluting Canadian Aviation. The new World War I display will remain on exhibit through the Armstrong centennial on Nov 11, yielding in December to a fun and light-hearted look at aircraft in film. NWSM and the Museum work together to finalize a display theme for 2021 and beyond.

Do you have a great idea for a model display? Any practical suggestion can be submitted to NWSM member and Museum volunteer Tim Nelson, twnelson@museumofflight.org for NWSM consideration. (Practicality is important—a display of Civil War observation balloon models would be fascinating, but just isn’t very feasible.)
THIS IS REAL,” promises LeVar Burton, narrator of In Saturn’s Rings, the new film shown several times each day at the Museum in the William M. Allen Theater. Burton invites viewers to explore the Solar System, adding commentary to the panoply of over 7.5 million photos captured by the Hubble Space Telescope, the Apollo missions, the Cassini-Huygens probe, and many more. The film promotes itself as ‘science meets art’ and filmmaker Stephen van Vuuren emphasizes the film’s realism.

As the title of the film suggests, the focus is on the Cassini-Huygens Mission to Saturn and the film dazzles with breathtaking photos of the planet and its orbital cousins. Some of the most evocative images in the film are not of Saturn, but of nebulae captured by the Hubble Space Telescope in the far reaches of our galaxy. Because images like the pillars of flaxen yellow thrusting dramatically across indigo seas, punctuated by the flares of distant stars in the Carina Nebula, or the famous dark outline of the Horsehead Nebula against rose-tinted clouds evoke such wonder, it is easy to see why the Hubble’s photos remain synonymous with space.

So ubiquitous are these photos that almost any space-based movie or video game will feature them at the forefront. Exploration games like EVE Online or Stellaris allow players to wander galaxies and use images based on Hubble’s photos as their background. In Saturn’s Rings uses nebula images to bring viewers into the stellar womb, illustrating how stars are created.

But are these images, as Burton says the film, “real”? The answer is complicated. The film prides itself, rightfully so, on its authenticity: none of the pictures used are doctored or computer created. Each of its 7.5 million photos is real and (for the most part) match exactly what you would see if you were to point a telescope into space. But nebulae are a bit more complex.

The first thing to remember about any picture the Hubble takes is that, however inspiring the photograph may be to the general public, it is first and foremost a scientific tool. Anyone in the world can request time to use the Hubble to capture an image, and those coveted few spots available go to those who meet scientific standards. The fact that we, the eager public, get to see what the Hubble sees is a happy byproduct of the program.

When a scientist captures an image with the Hubble, they are trying to answer a specific research question. Images of nebulae can be a great tool to learn about the formation of stars, as illustrated by In Saturn’s Rings; expanding swirls of gas can collapse into a new star, or extremely dense and cold nebulae can cause gaseous molecules to bind together to birth a new twinkle in the night sky. To get a better idea of what is happening in a nebula, scientists can use different filters on the raw image to highlight various phenomena. They might assign colors to different elements or types of radiation so they can more clearly discern between them to answer their research question. The result of these scientific efforts is the staggeringly beautiful images found in every space lover’s dream. This explains how even the most famous nebula might look completely different from one picture to another.

So are these images “real”? If you pointed your home telescope toward the Helix Nebula, you probably would not see the “Eye of God” staring back at you. But there is no doubt that the images the Hubble produces are indeed very real. The coloration may not be identical to what your own retina perceives, but the picture you snap with your phone’s camera sensors is also not identical to what your own retina perceives. The Hubble takes what we cannot see, or what we can barely see, and translates it into a language that our eyes understand. These images transcend the notion of ‘science meets art’ to the point that science and art become one.

In Saturn’s Rings plays daily. Tickets: $3; Members: $2.
The Hubble Space Telescope hovers at the boundary of Earth and space in this picture, taken after Hubble's second servicing mission in 1997.
September

SPECIAL EVENT

Fly Dog, Fly!
Seattle FlyDogs returns for three high flying performances! Dogs of all breeds catch air in these exciting displays of caped canine athletics. In between shows, enjoy a meet and greet with the furry athletes and their trainers. *Please note that Seattle FlyDogs are invited guests of the Museum. Only service animals are allowed in the Museum of Flight. Please do not bring animals to the program.

AVIATION PAVILION
Saturday, Sept. 29 | 2 to 4 p.m.

WILLIAM M. ALLEN THEATER
Saturday, Sept. 1 | 2 to 3:45 p.m.

Saturday, Sept. 8 | 2 to 3:30 p.m.

FAMILY EVENT

Wells Fargo
Free First Thursday
On the first Thursday of each month, the Museum stays open late—and admission is FREE. Enjoy the Museum’s T.A. Wilson Great Gallery, J. Eloy McCaw Personal Courage Wing, Charles Simonyi Simonyi Space Gallery, Aviation Pavilion and more from 5 to 9 p.m., courtesy of Wells Fargo. The Museum Store and Wings Café will also remain open for extended hours.

MUSEUM-WIDE

Thursdays, Sept. 6 | 5 to 9 p.m.

WEEKEND FAMILY WORKSHOPS

Spy in the Skies
Can you keep a secret? You don’t need Top Secret Clearance to come to this program... but it would help! Learn about the SR-71 and M/D-21, known as the Blackbird—the most amazing spy plane to ever take to the skies. Then make your own Blackbird model.
T.A. WILSON GREAT GALLERY
Saturday and Sunday, Sept. 1-2, 8-9, 15-16, 22-23, and 29-30 11 to 11:45 a.m. and 1 to 1:45 p.m.
Explore the exciting world of flight in fun hands-on workshops. Open to all ages and free with admission. Groups with 10 or more children, please call ahead to make sure we can accommodate your group. Contact: Interpretive Programs Coordinator at 206.768.7187.

Thank you to our community partners:

16    Aloft  |  museumofflight.org

THE SPIRIT OF FLIGHT 2018 JURIED PHOTO exhibition opened June 16th in the T.A. Wilson Great Gallery. Photographers spanning the globe captured images depicting diverse and personal interpretations of the “spirit of flight.” This year’s competition received over 150 submissions, with jurors rating 15 images for gallery display. Winning photographers are awarded Museum memberships, a custom trophy, and are recognized at the opening reception. Thank you to all participating photographers!

FIRST PLACE
DAWN OF THE GOLDEN AGE OF FLIGHT
BY: RICK GAUTHREAUX
Rick Gauthreaux’s photography intersects the iconic with the ephemeral. The California-based photographer’s attentiveness in rapidly changing light conditions paid off in “Dawn of the Golden Age of Flight.” Polished aluminum, design elegance, and illumination intermingle as a Douglas C-41 takes a bath in the first rays of sunshine to break through a dismal morning sky.

SECOND PLACE
LIGHTER THAN AIR
BY: NATALIE GILLIS
Inspired by a passion for exploration and nature’s stark beauty, Natalie Gillis turns her lens on disparate and remote regions of the far north. In “Lighter Than Air,” the Canadian photographer presents a unique perspective from her hot air balloon explorations above the Arctic environment.

THIRD PLACE
TRAFFIC IN THE PATTERN
BY: MARCIA M. MUELLER
A dramatic scene unfolds as a topography of snow geese take wing in Washington State’s Skagit Valley. Marcia M. Muller’s work captures rhythms in nature, while provoking the viewer to consider what external force (an off-camera bald eagle) spurred the flock from their roost.

The 2018 Spirit of Flight Photography Exhibition is on display now and runs through Sept. 16.

FIRST PLACE WINNER AND COVER PHOTO, “DAWN OF THE GOLDEN AGE OF FLIGHT.”/RICK GAUTHREAUX
SECOND PLACE WINNER, “LIGHTER THAN AIR.”/NATALIE GILLIS
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KIDS PAGE

Junior Aviators

Moon Jumble

Unscramble these five jumbles, one letter to a square to form five space words. Then arrange the seven circled letters to find the answer to the cartoon's riddle!

Answers on page 25.

BOOK RECOMMENDATION

You Choose: The Race to the Moon

BY: ALLISON LASSIEUR

ARE YOU READY TO CHOOSE your own Moon adventure? Imagine yourself in the 1950s and ’60s while the Soviet Union and the United States were racing to be the first to reach the Moon. You get to choose your role in the race: a young scientist working on early rocket technology; a reporter following space flights; or, a member of Mission Control during the Moon landing. Your adventure will change depending on what role you choose, but you can try them all as you re-read the book to learn more about what happened to real people during the race to the Moon. Available for purchase in the Museum Store.

A Race to Freedom: The Mira Slovak Story

BY: ALLISON LASSIEUR

AVAILABLE FOR PURCHASE IN THE MUSEUM STORE

If you’re interested in learning more about the real-life heroes behind the Race to the Moon, this fictional story will inspire your imagination. You Choose: The Race to the Moon is available for purchase in the Museum Store. The book is based on true stories of real people during the race to the Moon. Your adventure will change depending on what role you choose, but you can try them all as you re-read the book to learn more about what happened to real people during the race to the Moon. Available for purchase in the Museum Store.

DUE TO THE COVID-19 PANDEMIC...
Boeing, Bots, and the Future of Artificial Intelligence in Aviation

BY: IRENE JAGLA, CONTENT MARKETING MANAGER
Pilotless aircraft could eliminate all these inefficiencies, and Boeing is starting to explore how to make it possible."

"The last fighter pilot has already been born."
Spooktacular Fun
JOIN US AS THE MUSEUM OF FLIGHT TRANSFORMS into The Museum of Fright! Across all galleries, you’ll find Halloween carnival-style games and activities to spark imagination, innovation, and get in the Halloween spirit. Design and build soaring, swooping, and spooky fliers below a high-flying glider, visit Frankensteins Lab in our Aviation Learning Center, hop through an obstacle course under the Blackbird, and encounter other frightful surprises! Sponsored by the City of Tukwila.

Sunday, Oct. 28 | 10 a.m. to 3 p.m.
Kids 18 and under IN costume: FREE
Adult Chaperones: $10

To download your ticket, visit: smithsonianmag.com/MuseumDay
Smithsonian magazine museum day
September 22, 2018

SAVE THE DATE
MEET SPACE EXPERTS EXPERIENCE VIRTUAL REALITY MIX AND MINGLE AT EVENING RECEPTIONS
SATURDAY & SUNDAY NOVEMBER 2-3

MUSEUM NEWS
It’s in the Book
FOR FUTURE GENERATIONS, by former Executive Director Howard Lowering, is full of detailed stories about how the Museum came to be, including the one about our very own Red Barn. In 1970, when the Red Barn was slated to be destroyed, the Pacific Northwest Aviation Historical Foundation nominated it for the National Historical Register in order to honor it and buy time for its acquisition and relocation. Receiving national recognition, the Red Barn was transported by barge and truck to Boeing Field in 1975. Its relocation triggered state and federal calls for its registration, so Museum leadership appealed that the move was necessary to save the historic structure and place it on the site of the first flight in King County. The registration held, serving to clarify moving allowances in the regulations. The Red Barn, daily full of visitors who experience its aerospace story, continues to make history.

This piece of behind-the-scenes Museum history—and many more!—is available exclusively in For Future Generations, available now in our store and online at museumofflightstore.org.

MUSEUM NEWS
Calls for Space History
GET INTO THE BOOK!

Have you ever wondered what it was like to be a fighter pilot in WWII, WWII, the Korean War, or Vietnam? Now you can listen to personal stories from fighter pilots themselves when you access our Digital Collections. Over the past 18 months, the Museum has been engaged in an exciting project to digitize rare and unique oral interviews in the American Fighter Aces Association (AFAA) Collection. Generously funded by the Council of American Aviation, the AFAA Collection contains interviews with over 120 individual fighter aces from conflicts ranging from WWII through Vietnam and has over 120 hours of audio content. In the past few months, the project has focused on the time-consuming process of transcribing all of the digitized audio content and preparing the final transcripts to be made available with the audio content. On July 31, the first group of forty oral interviews was made available online through the Museum’s Digital Collections at mof.omeka.net. The digital content available includes biographical information and an image of each Ace featured in the interview, the full audio for each interview, the transcript in PDF format, and a detailed listing of the people, military units, geographical areas, aircraft, and other general subjects mentioned in the interview. The remaining oral interviews and transcripts will be added to the site and made available for all as each transcript is finalized over the coming months.

CALLING ALL PADAWANS! In honor of Star Wars Reads Day, the Museum will once again host the Empire Writes Back! writing contest. You tell us: In a galaxy far, far away did Darth Vader love chocolate chip cookies? Did Luke Skywalker not become a Jedi knight? Use your imagination and create your own fantasy. Stories must be the original work of the student. All students in grades 2-8 are invited to enter. Entries must be submitted by Oct. 1, 11:59 p.m. PST. For entry form and contest rules, please visit museumofflight.org/star-wars-reads-day.

Submit your story by:
Monday, Oct. 1, 11:59 p.m.
Open to students grades 2nd-8th.
*Entries must be present at the Museum during Star Wars Reads Day on Oct. 13 (page 18) to be eligible to win.

AFTER YEARS of communicating NewSpace to the public and ensuring that these stories are preserved for future generations, the Seattle-based Space Frontier Foundation, returned to the Seattle area on June 26. The three day event took place at the new Hyatt Regency Lake Washington in Renton and focused on the expanding commercial and entrepreneurial uses of space. Local space companies like Blue Origin, Planetary Resources, and RBCC Launchpad took the stage alongside industry representatives from across the country and around the world. The Museum of Flight was also present. I had the opportunity to lead a panel called Telling the NewSpace Story. Panelists Alan Boyle from GeekWire, Sarah Cudworth of the BBC, Boeing’s Historian Mike Lombardi, and Erik Rau, Director of the Hagley Library, discussed the challenges of communicating NewSpace to the public and ensuring that these stories are preserved for future generations. The conference culminated with a major announcement that the Seattle area will now be the permanent home for NewSpace. Instead of traveling back and forth between Silicon Valley and the Northwest, the conference will return to stay in 2019.
By Dana Flanagan, Donor Systems Coordinator

Last year, the Museum received several tribute gifts in memory of Steve Silva, designated for the restoration of our B-52, which will become the centerpiece of the Museum’s new Vietnam Veterans Memorial Park. The Silvas invited family and friends to make memorial gifts to the Museum’s B-52 restoration because Steve was a B-52 pilot during the Vietnam War and had wanted to participate in the plane’s restoration during his retirement. Unfortunately, due to health issues, Steve wasn’t able to become a restoration volunteer, but through his family’s decision, his memorial gifts have helped to preserve the plane to its former glory and provide a permanent tribute to his service.

In Memory of Steve Silva

Steve’s immediate family includes his wife Sheron, his daughter Kathy, his son-in-law Bill, and two of his grandchildren, his sister Kathy and a large, extended family. Steve immediately left for OTS and then Pilot Training at Webb Air Force Base, Texas. After initial B-52 training, he was assigned to the 474th Bomb Squadron at Beale Air Force Base, Calif. In 1972, Steve now an Aircraft Commander, and his crew were deployed to Andersen Air Force Base, Guam, to take part in Operation Bullet Shot (the codename for the buildup of B-52 bombers and support in Southeast Asia). In December of the same year, Steve and his crew also took part in Operation Linebacker II, an aerial bombing campaign that involved some of the heaviest strikes of the Vietnam War.

Knowing their correspondence was screened, the Silvas used the placement of the postage stamp on the envelope to convey secret messages to each other. In addition, the couple had a code word which Steve would use, if captured, to let Sheron know whether or not he was truly alright, despite what she might hear.

To this day, Sheron has never revealed that code to anyone.

When the United States’ military involvement in the Vietnam war ended, Steve helped ferry planes from Guam to the U.S. and later served as an Instructor Pilot at Beale and Castle Air Force Bases. After ten years of service, he was honorably discharged in 1977, having received a multitude of USAF honors. Steve later worked as an airline pilot for PSA and US Airways for 26 years, flying Boeing B-727s, 737, 757, 767, B-146s, MD-80s, and DC-9s. He retired from the airline in 2003 and worked as an Investigative Analyst for the FBI until he permanently retired in 2011.

Today, Steve’s family proudly remembers his military service and his love of family. In addition, his 12-year-old granddaughter told me she fondly remembers his help with her math assignments, which has inspired her to pursue a career as a pilot, astronaut, or an aerospace engineer. Steve is survived by daughters Lauren and Shannon, four grandchildren, his sister Kathy, and a large, extended family.

In Memory

In honor of 465th & 19th Bomb Wing OMS Rabon AB, GA
Robert McKennie
In honor of all those involved with the Wind Tunnel
Richard Warman
In honor of David C. Cable
Richard Hendriksen
In honor of Marilyn Chisholm
H. Eugene and Nikki McIver
In honor of Eugene J. Dauplet
Kathy Dauplet
In honor of Jim T. Farmer
Jeffrey Conner
In honor of Don J. Ferrel
Matthew and Bridget Ferrel
In honor of Robson Harrison
Barbara and Whay Featherstone
In honor of Cammira Harrison
Gary and Susan Harrison
In honor of Wesley Kennard
Sharon Kennard
In honor of Douglas R. King
Charles Claassen
In honor of The King Family
Peggy King
In honor of Barry C. Latter
Mr. Cather House Ravenna
In honor of Peter M. Morton
William and Karen Levis
In honor of Anne F. Simpson
All American Yacht Club
In honor of Carol Thomson
Dennis and Diane Hatfield
In honor of United States Air Force National Speakers Association
In honor of Vietnam POWs
Admiral Thomas B. Hayward USN (Ret)

In Memoriam

John H. Pruatt
Richard Paynton
Mark Pitts
Wendy Moomaw
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Brewster, MA
Dana Flanagan
Thomas Higgins
Howard and Janice Johnson
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Friday, October 19, 2018
7:30 to 9 A.M. | The Museum of Flight

Doors open at 7 A.M.

The Museum is committed to bringing diversity into the STEM field. You can be our partner in providing students opportunities to develop an interest in and understanding of STEM.

To RSVP & register, visit museumofflight.org/AMFlight

The breakfast is free to attend, $150 minimum contribution is encouraged. 100% of the proceeds supports education at The Museum of Flight.

KEYNOTE SPEAKER:

CINDY HEALY
STEM Advocate & Director of Worldwide Learning at Microsoft