

# aloft

Volume 38, Number 5

September | October 2016

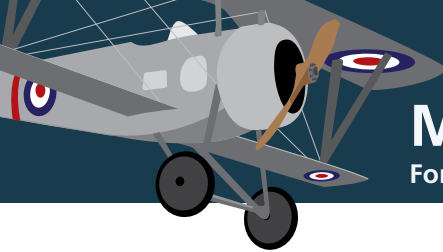
THE MUSEUM OF FLIGHT  
MAGAZINE

## 26 HOURS

Aboard America's Favorite Carrier

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# MEMBER EVENTS

For all events except those noted, please R.S.V.P. to [membership@museumofflight.org](mailto:membership@museumofflight.org).

## Member Movie Night: *Muppets from Space*

Friday, Oct. 7 | 6 p.m. (Doors open at 5:30 p.m.)

William M. Allen Theater

As Gonzo and his friend Rizzo hit the road in search of their roots, Gonzo makes a shocking discovery: his parents are actually space aliens from another galaxy. After announcing this startling news on Miss Piggy's talk show, Gonzo finds himself the subject of a dark and mysterious government conspiracy. In time, Gonzo is forced to choose: should he hop on board the UFO and sail off to live with his family, or stay on Earth with the friends he knows and loves? Rated G.

Member Movie Night is sponsored by:



# STEM starters

A monthly program series geared specifically for our youngest Members!

Children ages 3 to 5 and their co-pilots (adult helpers required) are invited to explore the wonders of aerospace during this fun, educational program. Space is limited to 12 families (one child/one adult per family) at each program.

**R.S.V.P. required due to limited space.**

To attend, R.S.V.P. to [membership@museumofflight.org](mailto:membership@museumofflight.org).

## Stories under the Stars!

Four Sessions Available

Explore the sun, the moon and the stars in our portable digital planetarium. This program will include a space-related story-time and an interactive viewing of the Sesame Street show, One World, One Sky.

**Monday, Sept. 12 | 10:30 to 11:30 a.m.**

Location: Skyline Room

**Monday, Oct. 10 | 10:30 to 11:30 a.m.**

Location: Side Gallery

**Monday, Sept. 26 | 3 to 4 p.m.**

Location: Side Gallery

**Monday, Oct. 24 | 3 to 4 p.m.**

Location: Side Gallery



## 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!

## Back to School!

Friday, Sept. 16 | Noon to 1 p.m.

Northwest Aeroclub Room, (Red Barn, 1st Floor)

It takes an amazing amount of training and schooling in aviation no matter the job - mechanic, pilot, flight attendant, or astronaut. School is never complete as regulations and tasks constantly change. Join us for a special lesson with Collections team members as they discuss and display some of the many training items from our collection. We promise there won't be a test at the end of class.

## Weird and Wonderful

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

Northwest Aeroclub Room, (Red Barn, 1st Floor)

What is that? Where could that have come from? This has something to do with flight? Ever wonder what weird and wacky items are in the Museum's Collection? The things that make even the Collections staff say, "huh?" Now's your chance to find out. Members of the Collections team will be showcasing their favorite quirky, spooky, funky, and downright odd items from the collection.

Weird and Wonderful is sponsored by:



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Questions or Comments?  
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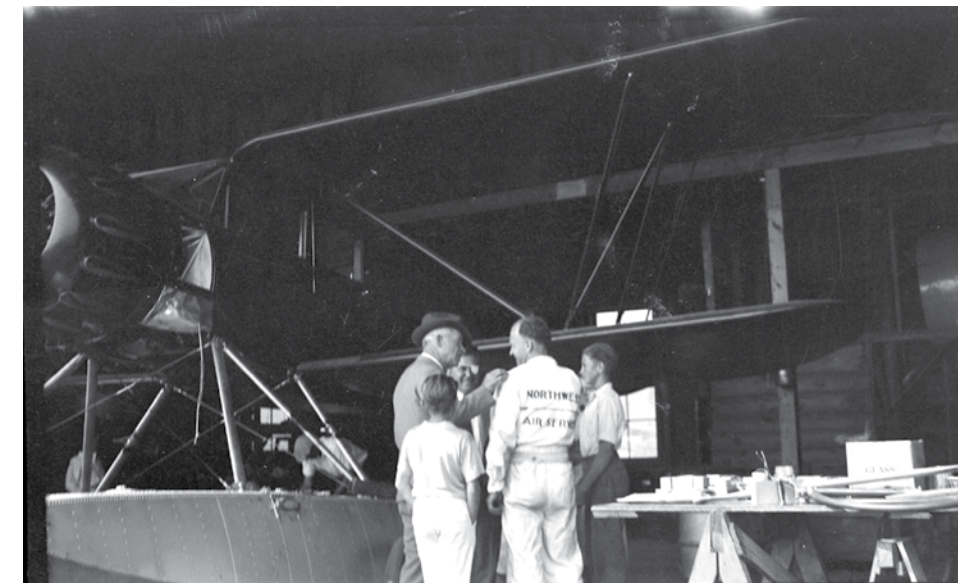
**On the cover:** An F/A-18 sits amongst the fog as it waits to be launched off the USS Carl Vinson aircraft carrier. (Seth Margolis)

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Will Rogers and Wiley Post at the Northern Air Service Hangar at Bryn Mawr on Lake Washington in August 1935. (The Gordon S. Williams Collection/The Museum of Flight)

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THE MUSEUM OF FLIGHT

# Restoration Center and Reserve Collection

Members-Only Open House!

**Saturday, September 17, 2016**  
11 a.m. to 2 p.m. | 2909 100th St. SW, Everett, WA

An in-depth look at the **Lockheed Jetstar!**

Come see what we've been up to! Get behind-the-scenes looks at our de Havilland D.H. 106 Comet Airliner, our Goodyear F2G-1 Super Corsair, and Piasecki H-21 "Flying Banana" just to name a few!



Smithsonian Institution  
Affiliations Program





To say that we have had a record-breaking summer is an understatement; it's been two months of full throttle excitement and celebration.

Most notably, the Museum doubled in size! Our Aviation Pavilion is now open thanks to the tremendous support of our *Inspiration Begins Here!* donors, Museum staff and volunteers. The June 25 opening of the Aviation Pavilion festivities were spectacular and generated excellent press and community enthusiasm! Museum visitors leisurely toured the new space, stopping to chat with living history characters and our famed and friendly team of retired flight attendants. Meanwhile Museum minis painted giant airplanes on the sidewalk lining the Pavilion and put the new Kidport to the test. Read all about the Grand Opening festivities on pg. 5!

The Museum's Boeing Founders Day centennial extravaganza—the single largest event in the Museum's history—took flight on July 15-17 with an estimated 93,000 visitors in attendance. It was a thrill to see the entire "700" series lined-up nose to tail on the tarmac in front of the Museum. If you missed this display, check out the centerfold of this issue on pg. 11 and 12. Equally thrilling was the spectacular light show; it's not every day that a 747 becomes a canvas for a colorful spectrum of aerospace history. It was an incredible honor to host Boeing's historic 100th birthday, and I was thoroughly impressed by the commitment and support demonstrated by our staff and volunteers, who made this a memorable success for the greater Boeing community.

What's on the horizon for fall? As children return to school and hit the books, the Museum prepares to launch its inaugural Exploration Expo, a highly interactive STEM (science, technology, engineering and mathematics) fair celebrating the Museum's education umbrella. From fantastic Flying Gizmos to radical robots to revolutionary rocketry and more, the Museum has a variety of innovative education programs for explorers of all ages. Whether you're an educator interested in an out-of-this-world field trip or a parent researching extracurricular activities for your child, you will enjoy getting a taste of the Museum's one-of-kind on-site and outreach education opportunities. This free event takes place on Sunday, Oct. 16 from 1 to 5 p.m.

Our calendar also fills up with a variety of exciting space programs in the months leading up to our 3rd annual SpaceFest. From a Telescope themed First Free Thursday to Spaceman: An Evening with Astronaut Mike Massimino to Astrobiology Mini Talks, the Museum has a huge array of events to satisfy your interstellar appetite. Please see the Museum's online calendar for more information.

Last but not least, on October 22nd, our 35th Annual Pathfinder Awards will once again honor Northwest visionaries who have made significant contributions to the development of the aerospace industry. This year's Pathfinder recipients are legendary innovator and business leader, Jeff Bezos and avid restorer of antique airplanes, Addison Pemberton. For ticket inquiries please email Andrea Arenas, Development Coordinator at [AArenas@museumofflight.org](mailto:AArenas@museumofflight.org).

Thank you for joining us in making this a truly memorable year; we look forward to seeing you again soon!

Sincerely,

Douglas R. King,  
President and CEO

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## Feelin' Fly at the Aviation Pavilion

After much anticipation, our new Aviation Pavilion opened to the public on June 25. A fantastic crew of flight attendants and a few dapper pilots (representing Pan American World Airways and United Airlines) greeted Museum guests as they arrived and distributed Feelin' Fly swag bags stuffed full of aviation inspired summer treats. Dressed to the nines in their vintage uniforms, the ladies caused quite the stir happily posing with Museum visitors and sharing stories about their time in the friendly skies.

At 11:30 a.m. a crowd of Museum visitors gathered in front of the DC-2 for the ribbon cutting ceremony. Museum President and CEO Doug King officially welcomed everyone to the space, and with the help of ACE campers Esta and Lane Margolis, Ground School students Javari Bogan and Issa Meboe and the Museum's infamous giant scissors, cut the ribbon to commemorate the new covered gallery.

Young kids explored the brand new Kidport checking bags, booking tickets, riding the fuel truck, and piloting the mini Alaska Airlines jet. Older children checked out the latest engineering themed education stations, building arches and towers while fine-tuning their problem solving skills.

Meanwhile outside on the sidewalk in the sunshine, "Paint the Ave to the Pav" was bustling with eager young 'Picassos.' By the end of the day the sidewalk was completely covered with neon renditions of our treasured pavilion aircraft.

Overall it was a wonderful opening weekend, a special thanks to Museum staff and volunteers for helping make the event a success.

**Clockwise from top:** United power couple. • Two scissors are better than one. • United and Pam Am ladies pose by their beloved "Queen of the Skies." • Fierce flyers check-in here! • Future artist in the making. (Photos by Ted Huetter)



# A Treasured Legacy

By: Louisa Gaylord, Campaign Communications Coordinator

"if a teacher is enthusiastic about a topic...the students follow right along"

Steve Kirkwood is a fourth grade teacher at Mt. View Elementary school in Shelton, Washington. For the past four years, he has brought more than 100 students to The Museum of Flight to experience the 'Flying Through Time' program. In the weeks leading up to the Museum visit, Kirkwood prepares his students by building lesson plans around what they will learn and see on their field trip.

"Every spring, the curriculum is a mix of science and aviation," he says. "We spend the better part of eight weeks incorporating flight into our history, reading and writing lessons. It's much better than the 'rock skip' approach that only covers a small part of a topic before moving on. It's very immersive."

At the Museum, Kirkwood's class tours the T.A. Wilson Great Gallery in small groups led by Docents, to see how the innovation of aerospace has evolved over the past century. The students learn how each aircraft's design reflects the best technologies that could be applied to the military and commercial needs of the times.

"The Boeing Above and Beyond exhibit was a big hit this year," says Kirkwood. The students also explored the Charles Simonyi Space Gallery with educators on the Museum's West campus, and learned about the future of flight and the technology that will propel us further into the galaxies.

Museum of Flight Trustee Michael Hallman and his wife Mary Kay have been advocates for The Museum of Flight for many years; when they first approached Mt. View Elementary about integrating aerospace into

the science curriculum, Kirkwood was thrilled. "It's just something we couldn't pass up," he says. The Hallmans, like Kirkwood, view education, particularly hands-on experiential learning, as imperative to developing a lifelong interest in science, technology, engineering and math (STEM). "Every effort is made to help the students succeed," Kirkwood explains, "Allowing them to explore what they're interested in is so important."

The Mt. View Elementary school program at the Museum is made possible by the generosity of the Hallmans. The town of Shelton, Wash. was built around the logging and farming industries, and many of the Mt. View students don't have as many up-to-date science resources and opportunities as schools in larger metropolitan cities. "If a teacher is enthusiastic about a topic, and can bring in outside resources, the students follow right along," explains Kirkwood. "Many times a school district's red tape prevents programs like this from being developed." Although Kirkwood retired from teaching this year, the other Mt. View Elementary fourth grade teachers will take on the annual field trip and tradition.

Engaging students at the Museum at a young age is an important part of building a lifetime love of curiosity and learning. The Museum's *Inspiration Begins Here!* Campaign provides countless opportunities for visitors of all ages through its ACE summer camps, the Boeing Academy for STEM Learning, Aviation Learning Center and the John Fluke, Jr. Challenger Learning Center, all which can increase youth academic and career potential and impact the future of aerospace!



Adding more exhibits, programs and events so your **IMAGINATION CAN REACH THE STARS**



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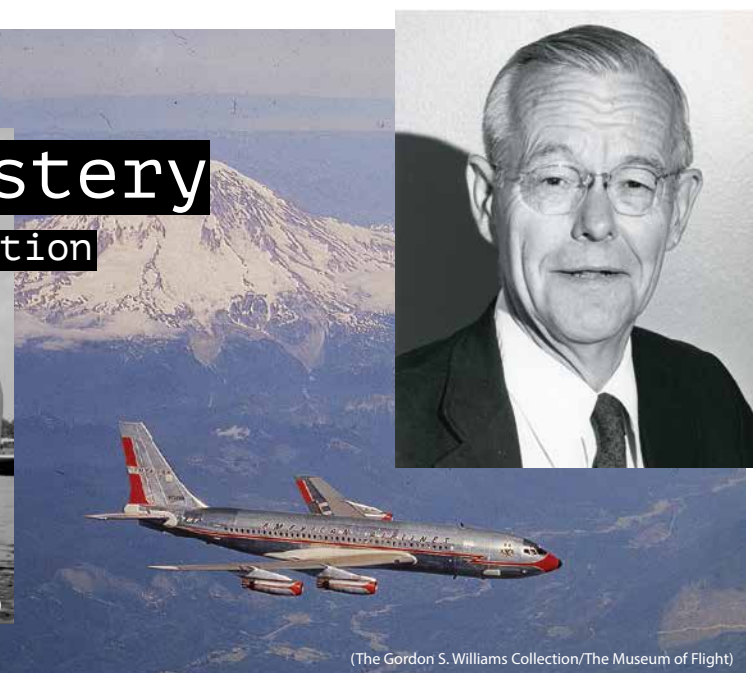
# Cataloging the Man of Mystery

the Gordon S. Williams Collection

By: Amy Heidrick, Supervisory Archivist



(The Gordon S. Williams Collection/The Museum of Flight)



(The Gordon S. Williams Collection/The Museum of Flight)

An avid supporter of preserving and documenting aviation history in the Northwest, Gordon "Gordy" Sear Williams was one of the first members of Pacific Northwest Aviation Historical Foundation—the Museum's founding body. It was only natural that (after his passing in 1985) that the Museum would acquire his extensive photographic collection. Comprised of approximately 30,000 negatives and prints, his collection documents everything from his early interests in aviation growing up in Seattle, his wartime experiences in the Coast Guard and the transition from the bombers of the 1940s through the age of passenger jets at Boeing. Alongside the collections of friends and fellow aviation photographers such as Peter M. Bowers and William T. Larkins, the Williams collection has been a key component of the Museum's archives since the 1980s and has been used to help countless patrons with their research on Boeing, Northwest aviation, and aircraft in general.

In 2014, Williams' widow, Marcella (Marcie) passed away and unexpectedly left the Museum a financial bequest in her will, with the expressed interest that the funds be used for the continued care of her husband's collection. When the collection was transferred to the Museum in the late 1980s, it was re-housed in acid-free sleeves and numbered sequentially and then cataloged in basic terms into the collections management database; though the project was never finished and only a portion of the negatives were cataloged. His photo prints were organized according to aircraft manufacturer and model. In the years following, archives staff and volunteers added photographs from other

sources into Williams' files, expanding it into general aircraft photo files. While this was undoubtedly well-intentioned – it provided a well-organized resource for locating images of certain aircraft - it did not preserve Williams' collection as a single collection that could be cataloged or represented together in its entirety. The current archives staff recognized that they needed to remedy this situation and properly catalog the collection. The photographic component was cataloged with the negatives according to archival standards. Marcie's generous gift allowed this large-scale project to come to fruition.

Late last fall, Marcie's bequest allowed us to hire temporary Project Archivist, Ashley Mead, to work on the collection. She reunited the photographic prints and cataloged the entire collection into a searchable finding aid we could make available to researchers. Beginning with the prints, Mead identified and removed Williams' photos from the aircraft files which fortunately he had stamped with his name or marked with his initials, making them easy to recognize amongst the other photos in the files. After the prints were reunited, she began work on the negatives and over the course of the next four months of the project term, Mead successfully catalogued nearly 15,000 negatives. While we estimate there are another 10,000 negatives to catalog, this was an excellent start to ensuring the future accessibility of this invaluable collection.

The final component of Mead's project was to create the initial finding aid for the collection that would list the materials she had thus far cataloged utilizing our archives database,

Archivists' Toolkit. Part of this process involved researching Gordon Williams' life and career to create a biographical note for the finding aid. Remarkably, Williams held a variety of esteemed positions throughout his career which included working as a Boeing official photographer, U.S. Coast Guard public relations officer and photojournalist during WWII, noted aviation historian, and founding member of The Museum of Flight. Yet, he also proved to be somewhat of a man of mystery. While the general dates of his life, his military career during WWII and his work at Boeing were fairly easy to find, finding any other information proved more difficult than we imagined. We have tens of thousands of his photos, photos he took, but no more than a couple of Williams himself. Keyword searches turned up only photo credit lines in numerous books and publications, and there were passing mentions of him in issues of Boeing News during his 40-year career at Boeing. Apart from that, we could find very little about a man whose photos were so well-known. We could only speculate that Williams was more comfortable behind the camera. As is perhaps fitting, we learned the most about him through Marcie's obituary, which was a lovely tribute to them both.

We will continue to catalog the remaining negatives in the collection through the use of archives volunteers and the initial finding aid for the collection will be available soon via the Museum's new website. If you have any questions about this project, the Gordon S. Williams Collection, or you have any stories to tell us about this man of mystery, please email us at [curator@museumofflight.org](mailto:curator@museumofflight.org).

# 100-0 mph and Back Again

## 26 Hours Aboard America's Favorite Carrier

By: Seth Margolis, Director of the William A. Hessel Education Department

From the moment I first saw *Top Gun*, I have been amazed by these "Cities of the Seas" and yearned to experience the thrill of being launched off the flight deck. I do not come from a military family, or even from a country that has aircraft carriers in her fleet (the HMCS Bonaventure was decommissioned before I was born). The chances of carrying out this dream seemed virtually impossible, therefore I buried all hope.

My fire was reignited when I started working at the Museum. I worked in the Museum's store in SeaTac Airport and one of the videotapes (...I worked there a long time ago!) in our display rotation was a documentary that profiled a six month deployment of the USS *Carl Vinson*. The movie was riveting. It literally stopped people in their tracks. I have vivid memories of airport personnel, airline crew and tourists jockeying for the best viewing spots. The film had the same effect on visitors to our main store. Shoppers would stand and watch the entire 90 minute video. It was just that good.

Fast forward 18 years and my dream of stepping aboard a carrier came true. I received the honor of participating in the Navy's

Distinguished Visitor Embark program and was invited to spend 26 hours aboard the Mighty USS *Carl Vinson*—America's Favorite Carrier. I was ecstatic; I knew that this would be the trip of a lifetime. I am happy to report, it was.

My adventure started at the Naval Air Station North Island visitor parking lot when I met the other members of my DV embark group. We were a diverse crew and only one of us had ever served on a

carrier before. The excitement was palpable as we loaded into the vans that would take us

**"I admit it, I am truly an Aircraft Carrier fanboy."**

to the Air Terminal for our safety briefing, embark overview and ultimately the boarding of the C2 Greyhound that would fly us to our ship. Now, I have had the chance to fly in some unique aircraft over the years, but I would say that this Grumman takes the cake. As we flew, we sat backwards in a "cabin" that only had two very small windows, which was fine because we were only flying over water and our five point harnesses did not really give us that much wiggle room anyway. Before I knew it, the crew were waving their arms and announcing "here we go." This was it, our trap landing. There is really no way to prepare yourself to go from 105 to 0 mph in 2 seconds. The combination of fear, excitement and adrenaline made me sweat profusely to the point of fogging my safety goggles. I do not recommend this method. The sound of metal on metal and a massive shudder indicated that we had landed, undoubtedly snagging the third wire. We were aboard CVN 70.

Our first stops were meetings with Commanding Officer Capt. Douglas C. Verissimo, Executive Officer Capt. Eric J. Anduze, and CSG1 Cmdr. Rear Admiral James T. Loebelin. All three welcomed us aboard, and shared facts about the ship and stories about their years of service in the USN. Then it was



**"Skittles a.k.a. Flight Deck Crew"**

back outside to watch air operations. There was activity everywhere I looked. Hornets were being tugged into place, Super Hornets were lining up for their launches, and Growlers were landing. The scene was astounding, an aviation fan's dream, a sensory overload; the sounds, sights and smells were loud, vivid and powerful. We watched in awe as members of the Flight Deck a.k.a. "Skittles" ran out and replaced an arresting wire. It was heavy metal poetry in motion; an industrial ballet. Everyone knew their roles, executed flawlessly and the wire was replaced in no time. The air operators didn't miss a beat.

Our tour continued with visits to the battery, the jet engine shop, the hangar deck, vultures row, the mess hall and more. The crew members we met were absolutely amazing; they were proud yet humble, mission driven, open, honest, candid and confident. The crew opened their ship and their lives to us, and it will not soon be forgotten. As 'carrier newbies' our cohort was often in the way—blocking doors and clogging up passageways—yet everyone was patient and gracious with us.

The next day, we were treated to even more unique experiences. We participated in a FOD (Foreign Object Damage) walk down of the carrier deck and watched air operations from the flag bridge. But the best was still yet to come—the unforgettable catapult launch. As we donned our safety gear and boarded our C-2 for our return flight; there was an overwhelming tension in the air. The giddiness of the group was soon replaced with anxiety and worry. Even though the plane's propellers were loud, you could almost hear a pin drop in the still cabin. We sat there. Waiting. Knowing that soon we would be shot off the deck of a moving boat, accelerate from 0 to 128 mph in 3 seconds, and hopefully keep on flying. Then it happened. The

**"It was heavy metal poetry in motion; an industrial ballet."**

crew waved their arms and time stood still. Imagine being in the worst car accident that you knew was going to happen. My body lurched in what felt like slow motion—like a scene from the *Matrix* or *Deadpool*—and then everything sped up and I was thrust in the opposite direction. Suffice to say, it was unbelievable, the best roller coaster ever....and it made my flight home from San Diego seem like a ride on a merry-go-round.

A very special thank you to the men and women of crew of the USS *Carl Vinson* for being my hosts, to Doug Asbjornsen of the Honorpoint Military and Aerospace Museum (Spokane), and Steve Fiebing at NAS North Island.



Photos by: Seth Margolis

# CURATOR'S corner

JOHN LITTLE,  
ASSISTANT  
CURATOR AND  
RESEARCH TEAM  
LEADER, ANSWERS  
YOUR QUESTIONS

**Q.** *What's been going on with the de Havilland D.H.106 Comet? Will it be on display at the Museum anytime soon?*

**A.** The de Havilland D.H. 106 Comet is still undergoing restoration at our Restoration Center at Paine Field, in Everett, Wash. The Museum's Restoration Volunteers are slowly returning the Comet to a like-new appearance. When the Comet's restoration is complete—and there is no definite date for that—it will be put on permanent display at the Museum. In the meantime, visitors are welcome to see the Comet being restored and talk to the Volunteers at the Restoration Center. *For hours of operation, please check the Museum's website: [museumofflight.org/Explore-the-Museum/Aircraft-Restoration](http://museumofflight.org/Explore-the-Museum/Aircraft-Restoration).*

**Q.** *I understand that the Museum's B-17 was actually built by Douglas Aircraft and appeared in the film, Memphis Belle. Is that true?*

**A.** Only partially. The Museum's B-17, did, indeed, appear in Michael Caton-Jones's 1990 remake of *Memphis Belle*, but it was built by Boeing, not Douglas. The Museum's B-17F carries the U.S. Army Air Forces serial number 42-29782, which makes the bomber's full designation "B-17F-70-BO." The "-BO" is the manufacturer's code, indicating that the airplane was built by "Boeing-Seattle," not "Douglas-Long Beach," which did build B-17s, under license, as part of the so-called "BVD pool," standing for "Boeing-Vega-Douglas." (Douglas's manufacturer's code was "DL"). The Museum's B-17 was delivered from Boeing's now-defunct Seattle Plant 2 to the U.S. Army Air Forces at Wright Field, Ohio, on February 13 1943. During World War II, the Museum's B-17 served exclusively as a crew trainer and

never saw combat—which helps to explain how it survived the war.

Following a long list of postwar owners, the late Seattle businessman and Museum of Flight Trustee, Robert "Swage" Richardson, purchased the B-17, which was registered N17W, in 1985. From June 28 to August 15, 1989, N17W was in England and participated in the filming of *Memphis Belle*. Primarily portraying the B-17 named *C-Cup*, N17W was one of five flyable B-17s that appear in the film. Prior to appearing in *Memphis Belle*, N17W had also appeared in two other films: *The 1000 Plane Raid* (1969) and *Tora! Tora! Tora!* (1970). This movie star can now be seen in the Museum's new Aviation Pavilion.

**Q.** *Why did Boeing design the Model 80 to be a biplane airliner more than two years after Fokker and Ford had introduced trimotored monoplane airliners?*

**A.** The Model 80's chief designer, Charles N. "Monty" Monteith, opted for a biplane design specifically to fly passengers and mail over Boeing Air Transport's Contract Air Mail Route 18 ("CAM 18"), which ran between Chicago and San Francisco—and required crossing several mountain ranges, including the Rockies and the Sierra Nevada. Because a biplane has two wings, it can take off and land at speeds lower than can a monoplane of comparable weight—which is a matter of life and death when flying from high-elevation airfields. For example, CAM 18 included Post Office-mandated stops at Cheyenne and Rock Springs, Wyoming. Cheyenne's elevation is 6,063 feet (1,848 m); Rock Springs' elevation is even higher: 6,388 feet (1,947 m). Moreover, both cities had dangerously short

runways, and the few emergency airfields in the Rockies were even shorter. In such conditions, a biplane can take off and land in a shorter distance than a monoplane. While a monoplane is faster than a biplane, speed was not a consideration when Boeing Air Transport introduced the Model 80, in 1928: Boeing's only competitors on CAM 18 were railroads, not other airlines.

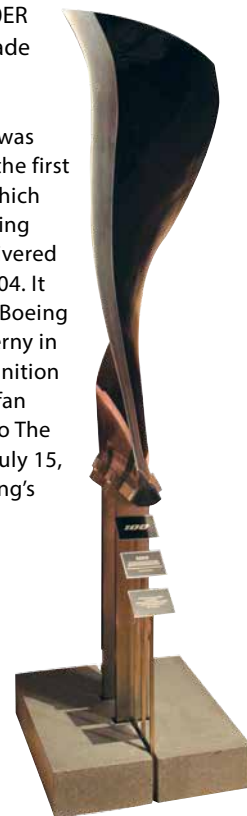
Ironically, cold-weather and high-altitude operations also ended the Model 80's career with Boeing Air Transport. In 1933, Boeing Air Transport introduced the revolutionary Model 247, an all-metal, monoplane airliner, whose thick, internally braced wings, tailplanes, and fin could be fitted with inflatable, rubber de-icer boots. This enabled the 247 to operate in icing conditions that would ground the Model 80 (or any other biplane). A biplane's wings could not accommodate de-icer boots, and its "forest" of struts and bracing wires provided a perfect place for ice to form, thus severely limiting the Model 80's use in icing conditions.

## WHAT'S NEW IN THE COLLECTION?

**Donor:** W. James McNerny, Jr.

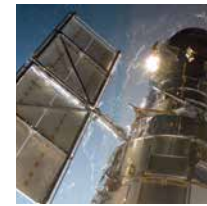
**Item:** Boeing 777-300ER GE90-115B Engine Blade Sculpture

This engine fan blade was removed from one of the first GE90-115B engines, which was installed on a Boeing 777-300ER jetliner delivered to Japan Airlines in 2004. It was presented by The Boeing Company to Jim McNerny in January 2016, in recognition of his retirement. The fan blade was presented to The Museum of Flight on July 15, 2016, in honor of Boeing's 100th anniversary.



[museumofflight.org](http://museumofflight.org)

# September FLIGHT PLANS



WELLS  
FARGO



**Thursday, Sept. 1 | 5 to 9 p.m.**

*T.A. Wilson Great Gallery*

**Wells Fargo Free First Thursday: Telescopes**

Have you ever wondered how a telescope works? Join us for family activities, exhibitors and a presentation on the history of the telescope during this month's Free First Thursday. The Museum store and Wings Café will also remain open for extended the hours.

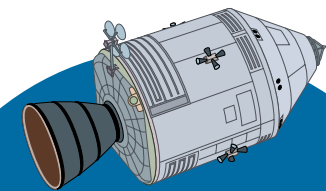
**Saturday, Sept. 24 | 10 a.m. to 4 p.m.**

*The Museum of Flight*

**Smithsonian Magazine Museum Day Live! - Free Museum Admission**

There's limited free Museum admission on Museum Day Live!, an annual event hosted by Smithsonian magazine, when participating museums across the country open their doors to anyone presenting a Museum Day Live! ticket (limit two). Please visit our calendar online for how to get tickets.

This year Museum Day Live! celebrates the opening of the newest Smithsonian museum—The National Museum of African American History and Culture (NMAAHC). Check out a historic poster exhibit entitled *A Place for All People* and a livestream of the NMAAHC opening day festivities in the Alaska Airlines Aerospace Education Center.



**Weekly Aerospace Update**

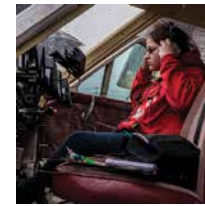
*Charles Simonyi Space Gallery | 1 p.m.*

**Every Saturday  
in September and October!**

Get the latest news in astronomy, aviation and spaceflight from our own experts. Every Saturday at 1 p.m., a Museum Docent or NASA Solar System Ambassador leads a 15-minute chat about the week's events and discoveries.

Q&A to follow.

[museumofflight.org](http://museumofflight.org)



Spots fill up  
FAST!

**Saturday, Sept. 24 and Sunday, Sept. 25**

**9 a.m. to 5 p.m.**

*East Parking Lot*

**Flying It Forward 2016**

The Museum is proud to again offer free first flights in small planes to girls and young women! The annual Flying it Forward program provides 15-minute rides in light planes for young women ages 8-17. This exciting opportunity helps encourage and promote interests in aviation, space and STEM professions. Rides are limited to those who have never flown, or who have only flown in airliners. Limited spots are available, and all flights are weather dependent. See the Museum's website for registration information.



THIRTY-FIFTH ANNUAL

**Pathfinder**  
*Awards Banquet*

**Saturday, October 22, 2016**

*honoring this year's recipients*

**Jeff Bezos  
Addison Pemberton**

For ticket information:

Andrea Arenas at [AArenas@museumofflight.org](mailto:AArenas@museumofflight.org)

Aloft September | October 2016 11

# THE MUSEUM OF FLIGHT

Boeing 100th Anniversary 7-Series Line-up

Photo by: Josh Kaiser



## FLIGHT PLANS



**Thursday, Oct. 6 | 5 to 9 p.m.**

T.A. Wilson Great Gallery and Charles Simonyi Space Gallery

### Wells Fargo Free First Thursday: Astronomy Night

Enjoy your own star trek with special programs and family activities that tour the galaxies. Local science and astronomy clubs will be on hand to share their knowledge of the heavens and views through their telescopes. Celestial wonders will shine in the Museum's portable planetarium, and NASA JPL Solar System Ambassador Tony Gondola gives a special presentation. Plus, learn about launching rockets with the National Association of Rocketry.

**WELLS FARGO**



**Monday, Oct. 17 | 5 to 8:30 p.m.**

Charles Simonyi Space Gallery

### The Road to SpaceShipOne Lecture, Book Signing and Reception with Julian Guthrie

National best-selling author Julian Guthrie talks about her new book, "How to Make a Spaceship: A Band of Renegades, an Epic Race, and the Birth of Private Spaceflight." The book tells the story of a cast of characters who dreamed of getting to space without the government's help. This cast includes aviators, test pilots, engineering school dropouts, NASA retirees, billionaires, and a particularly determined space geek who refused to give up on his outsized dream. The event is presented in conjunction with the University of Washington College of Engineering. For ticket information, please check our website.



**Saturday, Oct. 22 | 2 to 3:30 p.m.**

Charles Simonyi Space Gallery

### Astrobiology Mini Talks

Three special guest lecturers will give us the inside scoop on the latest in Astrobiology research, from polar analog studies to the next Mars and Europa missions. Ask questions and meet these awesome emerging scientists after the presentations.

Calendar subject to change. Visit [museumofflight.org](http://museumofflight.org) for updates.

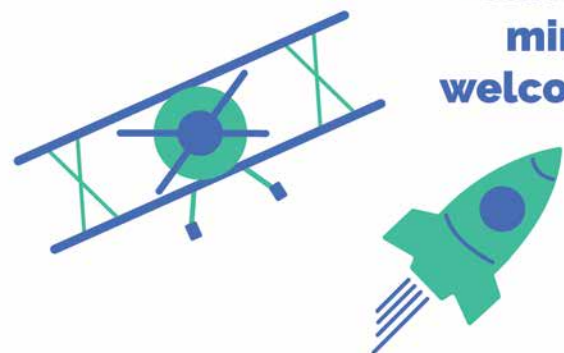
### Late Breaking Additions!

Please check our website for new Saturday programs, including a NW Friends of the American Fighter Aces Association-sponsored lecture and a new InFlight InSights program, Don't Be THAT Parent!, where United Airlines Flight attendants tell you how to prepare your kids for holiday travel.

## exploration expo



curious minds welcome.



Students, parents and educators, come explore the museum's one-of-a-kind educational opportunities!



**October 16**  
1-5 p.m. | all ages welcome | free!

## WEEKEND FAMILY WORKSHOPS

Explore the exciting world of flight in fun hands-on workshops offered every Saturday and Sunday!

Family workshops are free with Museum admission and open to all ages (kids six and younger should come with an adult helper). Contact our Interpretive Programs Coordinator at 206.768.7187 with any questions.

Every Saturday and Sunday from 11 to 11:45 a.m. and 1 to 1:45 p.m., unless otherwise posted.



### Spy in the Skies!

**Sept. 10-11, 17-18 and 24-25**  
11 a.m. and 1 p.m.

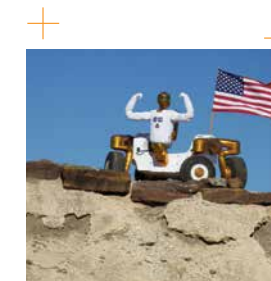
Can you keep a secret?... You don't need Top Secret Clearance to come to this program...but it would help! Learn about the SR-71 and M/D-21, a.k.a the Blackbird—the most amazing spy plane to ever take to the skies. Then make your own Blackbird model.



### 21st Century Airships

**Oct. 1-2 and 9**  
11 a.m. and 1 p.m.

Overshadowed by the airplane, the airship – a rigid or semi-rigid balloon, powered by engines– has a rich history. Learn about these fascinating machines and the new airship designs for the 21st century. Then design your own airship!



### Robot Revolution!

**Oct. 15-16, 22-23, and 29**  
11 a.m. and 1 p.m.

Learn how robots work and help prevent a robot revolution when creating your own robot.

## STAR WARS READS DAY

Empire Writes Back!  
Writing Contest  
Grades 2-8

Entries due  
Sept. 30!

**Saturday, October 8, 2016**  
10 a.m. to 2 p.m.

Wear your Jedi best as you enjoy arts and crafts, special programming and more!  
**FREE with Museum admission!**

For more information and details about the contest, visit: [museumofflight.org/star-wars-reads-day](http://museumofflight.org/star-wars-reads-day)



Join in on the *flightfully* spooky fun... that is if you're not too SCARED!

## The Museum of Fright

**Sunday, October 30**  
10am to 3pm

**FREE - 17 and under**  
(in costume with adult supervision)  
**\$5 - 17 and under**  
(without a costume)  
**\$10 - Adults**





(The Museum of Flight)

# VIRTUALLY THERE

BY: LAUREN MESSENGER,  
VISITOR SERVICES

One of the inescapable dilemmas faced by museums is how to balance the preservation of objects in their collection while making them accessible to the public. These objectives are often at odds with but obstacles can often spur innovation.

Faced with these challenges, the Exhibits department at The Museum of Flight resorted to unconventional ways to allow the public to explore these otherwise inaccessible spaces. The Space Shuttle Trainer in the Charles Simonyi Space Gallery is a prime example. Due to physical constraints and hazards of the space, a digital interactive kiosk was installed near the Shuttle trainer to let visitors explore the space virtually.

Similar challenges arose with the new Aviation Pavilion, the large, roofed outdoor gallery space featuring 15 of the Museum's most iconic commercial and military aircraft. This creates an exciting new experience, enabling visitors to connect and compare the different aircraft. However, as is true with all invaluable museum artifacts, viewing is limited to a safe distance. While it is possible to tour inside several of the Pavilion's planes, not all are open to walk through. Even the aircraft that can be toured use plexiglass inside around the artifacts, hindering observation. And some spaces are completely sealed and hidden from the tour, for example, the infamous Tiger Lounge in the "hump" of the Boeing 747.

Paolo Tosolini, of Tosolini Productions, LLC, worked with the Museum's Exhibits department to create an innovative solution. Thanks to an incredible partnership with Microsoft, the Museum is using technology to unlock unprecedented access to these aircraft. For the first time, visitors—both on site as well as remotely—can 'step inside' the cabins and interiors of these carefully preserved artifacts through high fidelity 360-degree virtual tours. Microsoft helped fund the project with a \$70,000 grant. Using a Matterport camera, Tosolini scanned the interior of the planes in the Aviation Pavilion. Matterport cameras collect visual and spatial data, a technique to create a map of an area, often used to map real estate. They hadn't been used to scan a tight space like a plane interior before, so Tosolini had to problem-solve and experiment with

new techniques to map out these spaces. Once the scans were complete, the data was stitched together with high fidelity photographs of the plane interiors.

"breaking down the barriers to access"

The result was a web-based application that could be accessed by docents and volunteers in the Aviation Pavilion to provide virtual tours that compliment their own storytelling and interpretation. The tour utilizes extremely high fidelity images that the docents can manipulate to enhance and illustrate their storytelling. They can maneuver through the virtual map of the inside of the plane in realtime as they explain what is being viewed. The tour is accessed on a Microsoft Surface tablet, which gives the docents mobility. A digital interactive kiosk is fixed in place, whereas a tablet can be carried from one end of a large plane to another, as

a docent reveals details of the interior of each section of the aircraft.

When I spoke to Microsoft's Ryan Gaspar, about the project, he pointed out that, "While the technology itself is exciting and novel, its true power is in breaking down the barriers to access. It creates possibilities for intergenerational connection and impactful storytelling." Part of that intergenerational connection is the way the virtual tours let visitors see the painstaking work of volunteers on aircraft such as the Museum's Boeing B-17. The virtual tour documents the restoration of the interior of the plane, and opens it up in a way that ensures it will be preserved for generations of future visitors to also explore it, and hear the stories of those who worked on the beloved plane.

Peder Nelson, the Museum's Exhibit Developer, expressed hope that the Museum may to continue to open up previously unseen plane interiors through virtual tours in the future, perhaps in the Personal Courage Wing, or the Great Gallery, increasing visitor access to the Museum's unique collection of historic aircraft even further.

Below: Museum Volunteer, Michael Garrett, demonstrates the new VR platform at the B-29. (Rachel Dreeben)



(The Museum of Flight)

# NewSpace and the HUMAN CONNECTION

By: Geoff Nunn, Adjunct Curator for Space History



(Blue Origin)

THIS PAST JUNE, SEATTLE PLAYED HOST TO THE CITY'S FIRST INTERNATIONAL SPACE CONFERENCE—NEWSPACE 2016.

The conference, which is hosted by the Frontier Foundation is now in its eleventh year. NewSpace 2016 relocated from its longtime home in Silicon Valley to check out Seattle's growing space hub. The result? NewSpace 2016 was by far the largest in the conference's history.

Nearly 700 attendees gathered at the Hotel Motif in downtown Seattle from June 21–23 to discuss the latest developments in space. The crowd included space industry professionals, civil servants, entrepreneurs, academics, and students. The Museum's own Raisbeck Aviation High School sent members of their satellite club, which presented on the morning of the first day. Conference-goers came from across the United States, and as far as Israel, Australia, Japan and Korea to join in the conversation. In addition to on-site attendance, the conference generated over 91 million media impressions through televised news reports, print articles and online pieces focused on the proceedings.

The conference panels and speakers covered a range of topics tied to NewSpace's tag line "the intersection of entrepreneurship, investment, and tech innovation." Each day was structured around a theme. The first day focused on the unique characteristics of Seattle as a hub for space industry. The second focused on entrepreneurship and the challenges of starting a career in the space sector. The last day examined the business of space. Throughout the course of the week, however, an additional theme kept bubbling to the top of the ongoing discussion: "How do we tell the space industry's story?"

The NewSpace presenters repeatedly acknowledged the importance of getting the public interested and helping them understand the work going on in space. Engaging the public helps to build the workforce pipeline necessary to grow the industry. Interested students are more likely to pursue courses of study that lead to jobs in space companies. An informed public also encourages lawmakers to make space a priority. Lastly, as long-time space correspondent Miles O'Brien implored during his closing keynote "We need your companies to make friends with the public, so when you have a success, they understand the context and know exactly what you've accomplished, and, God forbid, because it will happen one day, when you have a mishap, you will have friends." If and when things go wrong, an educated society is more likely to sympathize and understand the risks inherent to working in space.

The Museum was honored to sit on the host committee and sponsor NewSpace 2016 and continues to remain at the at the forefront of

the new space discussion. Through weekly aerospace updates, insightful programming and annual conferences such as SpaceFest (see ad on the back), the Museum is devoted to supporting post-shuttle era industry stories. The Charles Simonyi Space Gallery was founded with the intention of telling more than the traditional NASA story, rather it's designed to evolve with and reflect new space developments as they unfold.

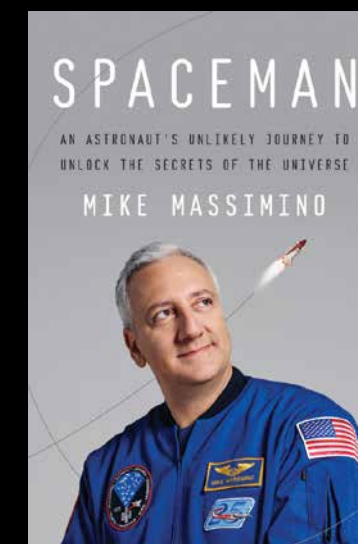
One of the greatest and our most frequent compliments we hear from visitors is that they like that we don't just stick up an artifact and a sign. They appreciate that we tell "people" stories. The importance of human stories was emphasized during NewSpace's discussions on how to effectively communicate space. In addressing the largely space-insider crowd, Mr. O'Brien used the example of the mission controllers during the Mars Curiosity landing to summarize this point. "You've gotta understand, you love your machines much more than most people do. I love the machines... but the average person is more into [mission controllers] Mohawk guy and Adam Steltzner... and so develop some people who are the face of your companies." In other words, find the human connection. Make the space story a human story.

So, why are these human stories so important? Why do we make them a focus here at the Museum and why should the space industry strive to make them a focus when telling their story? Quite simply, because that human connection is universal to everyone, whether they visit the Museum or watch a rocket launch on the news.

The story of space is inherently novel and spectacular, but without a human connection it can be impossible to grasp. I will make an assumption that if you are reading this magazine you have an interest in aviation, space, or at the very least, The Museum of Flight. If you think back to the moment when that interest first began... chances are you will find a human connection. Perhaps it was a loved one who worked for Boeing, or hearing Walter Cronkite announce Neil Armstrong's first steps on the Moon, or even a smile from a Museum employee that made you first think "this is interesting," "this is important," or simply "this makes me happy." The pairing of that familiar connection with the spectacular artifacts and stories we share every day is what makes this all possible.

Exclusive!  
Book signing  
and Reception  
with Mike!

## SPACEMAN: AN EVENING WITH ASTRONAUT MIKE MASSIMINO



From emergency hubble repairs to stellar spacewalks to playing himself on the TV hit "The Big Bang Theory," the engaging Mike Massimino has microgravity on lock! Join him at the Museum for a special evening reception, lecture and book signing.

**OCTOBER 14, 2016**

5:30 to 8 P.M.

Charles Simonyi Space Gallery

For ticket information, please visit our website.

## EDUCATION UPDATE



(The Museum of Flight)

While school may be out, our summer education programs are buzzing! ACE camp enrolled a record 1,831 campers thus far and for the first time debuted two art-focused camps “Color and Light” and “Shape Shifting: The Science of Shapes.”

You may have noticed some fun new weekend activities in the new Aviation Pavilion. Our amazing education team debuted a new repertoire of interactive engineering programs that encourage design, problem-solving, evaluation and teamwork skills. In addition, the Washington Aerospace Scholars students visited the Museum this month to complete Phase II of their residency experience which included working as a team to plan a human mission to Mars!

July 8 marked the graduation of 77 middle school and high school students in the Museum’s second annual Private Pilot Ground

School, an important component of the Bill Ayer Future Pilots Program. The graduation ceremony showcased entertaining skits that illustrated student experiences during the accelerated course. The three-week aeronautical science class was done in partnership with the Museum, Raisbeck Aviation High School, and Puget Sound Skills Center. Addressing airline industry concerns about future pilot shortages, the course was designed to explore the world of aviation and prepare students for the Federal Aviation Administration (FAA) private pilot written exam, which is one of the steps needed to become a licensed pilot.

For the past month, 18 students from The Museum of Flight’s Amelia’s Aero Club and Michael P. Anderson Memorial Aerospace Program have been participating in the MIT-developed Zero Robotics competition. Taking place at selected locations around the country, Zero Robotics is a free 5-week program where



(The Museum of Flight)

middle school students learn to program code for Synchronized Position Hold Engage and Reorient Experiment Satellites (SPHERES). Students write code to control satellite speed, rotation, direction of travel, and resource consumption in a digital environment. Teams that reach the finals will have their code tested during a live broadcast aboard the International Space Station!

## FLYING HIGH AT 100

An estimated 93,000 visitors came to the Museum on July 15-17 to take part in Boeing Founders Day festivities. Friday’s celebration showcased an unprecedented line-up of the Boeing “700 series” of aircraft on the taxiway in front of the Museum. Check out the impressive aerial image in this issue’s centerfold. The fabulous weekend also included Boeing heritage flyovers, live music, a parade of food trucks, children’s activities and static displays of Boeing aircraft and light shows celebrating Boeing’s history until midnight. The highlight of the weekend was by far the epic light shows, it was incredible to witness the making of a 747 from the inside out right before your eyes, and watch fantastic abstract light designs dance across the airplanes! A special thank you for all of the Museum staff and volunteers who helped support this once-in-a-lifetime event.

# Seattle Mini Maker Faire®

**SEPTEMBER 17-18, 2016**  
10 A.M. TO 5 P.M. | EMP MUSEUM

Come stop by The Museum of Flight’s booth for fun activities at the Seattle Mini Maker Faire hosted by the EMP! Hailed as the “Greatest Show (and Tell) on Earth,” this family friendly Maker Faire offers tech enthusiasts, crafters, homesteaders, scientists and garage tinkerers of all ages and backgrounds a platform to share their passion projects with the public. Try out hands-on demos for all ages, learn about innovative arts, see giant robots, experience new technology, and much more!

**Visit [empmuseum.org](http://empmuseum.org) for more information!**

**WE WILL BE THERE!**  
Stop by our booth and say “Hi!”

## VOLUNTEER PROFILE

# THE Guardian

By: Steve Dennis, Volunteer



(The Museum of Flight)

**B**arry Mendonca is a passionate perfectionist and those characteristics make him an ideal guardian of the Museum’s artifacts, whether he is working as a docent, volunteer or at a special event. His educational background in Computer Science and Electronic Engineering led Mendonca to positions with industry titans such as Apple, Microsoft, and Lockheed Martin. He is currently an engineer with Disney’s Seattle office.

According to Barry, when he hit his 40s he decided to shift his focus, give back to the community and pursue interests outside of work. A colleague first introduced Barry to the Museum in 2002 and for nearly a decade, he has served as a volunteer. Docent training in 2010 further cemented his relationship with the Museum and its extensive aircraft collection. Currently, he volunteers in a number of roles at the Museum and, to date, he has accumulated over 3,000 volunteer hours.

He works as a docent two Sundays and one Thursday night a month. Every Saturday, from opening to closing, he works the Air Park as a volunteer. He can also be found working special events, volunteering in the Museum store, and working security when the Blue Angels are in town. (He admits to sneaking

away from the Museum two Sundays each month to volunteer at LeMay-America’s Car Museum to pursue his other interest—cars!) His enthusiasm for cars and airplanes is immeasurable, in fact, he has created every model car and airplane sold in both of these Museum gift shops.

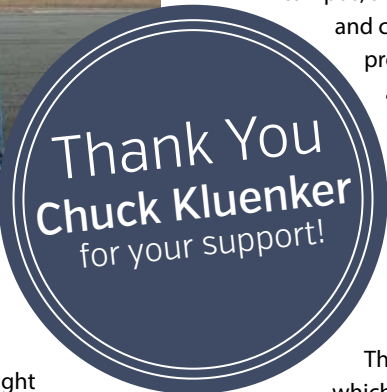
The Air Force One is easily Mendonca’s favorite aircraft at The Museum of Flight. It’s certainly more than your average plane. An iconic symbol of our nation and its leaders, Air Force One is a goldmine for treasured stories and unique facts. Mendonca enjoys sharing these bits of history with Museum visitors—particularly young ones. By showing enthusiasm for our artifacts, he hopes visitors leave the Museum with a better understanding of the importance of preservation.

Mendonca is also a huge fan of the Boeing 787 Dreamliner. He was honored to be selected as a part of the Museum team that welcomed the aircraft and participated in the arrival ceremony. Upon realizing that all the Boeing test pilots involved in flying the 787 were present for the event, Mendonca seized the moment and rushed to the gift shop to purchase a model of the plane (even though he already had one at home!). The test pilots signed the wings of Mendonca’s model, and the next thing he knew, he had a one-of-a-kind collectible on his hands.

Resourceful, virtuous and clever, Medonca is truly a special friend and volunteer to the Museum. As a beloved guardian of our collection, we look forward to having him on board for years to come.

# Passion, Potential and Possibility

By: Marc Manzo, Campaign Gifts Officer



Steve, Klueker learned about the Museum's partnership with the Highline Public School district through Raisbeck Aviation High School (RAHS). Klueker was especially impressed by RAHS' holistic approach toward STEM education. At RAHS, students' passions for aviation and aerospace act as the foundation for experiential learning. By cultivating a specialized, dynamic and applicable curriculum, students actively prepare for college and often pursue careers in the aerospace industry post-graduation.

Klueker recognized that the school, located on the Museum's west campus, shared his mission to inspire students with unique and challenging education experiences. The school's proximity to the Museum's collection of iconic aircraft and the stories of industry pioneers inspire students to pursue careers in STEM fields and aviation. Klueker built a relationship between UNDAF, RAHS and the Museum to help all three organizations further their shared mission of helping passionate and motivated students excel in the aerospace world.

The Museum's *Inspiration Begins Here!* Campaign, to which Klueker has generously contributed, is doing just that—creating more opportunities for young people to explore the infinite possibilities of a future in science, engineering and aerospace. From the Boeing Academy for STEM Learning, to the Aviation Pavilion, The Museum of Flight is perfectly poised to ensure that inspiration truly *does* begin here.

Growing up on a farm near Manitowoc, Wis., Chuck Klueker always stopped to watch planes fly over the barn. He remembers the sound of the Continental A65 engine and the glorious sight of low-flying DC-3s, and has been captivated by flight ever since. "I wanted to be a pilot but my dad felt I needed a more 'substantial' career," says Klueker, who graduated from University of Wisconsin with a degree in civil engineering. "But I never lost my passion for aviation."

Klueker applies the science, technology, engineering and math (STEM) that he learned at school to his construction management career, where he works on public school facilities. While getting to know the teachers and students of the schools, he's seen the impact education can have on young learners. "A good education will unlock a child's potential and ability to contribute to society and have a much better life."

It wasn't until Klueker became a parent that he recognized the sacrifices that his own parents made to provide their children with a college education.

Klueker instilled the importance of learning on his children, and his sons also inherited their father's love of aviation. Two of his sons earned Bachelor's degrees from the University of North Dakota's renowned Odegard School of Aerospace Sciences, and moved on to prestigious careers in the aviation industry. Klueker was so impressed with the program that he went on to serve as Chairman of the Board for the university's Aerospace Foundation (UNDAF).

While on the UNDAF Board, Klueker met Steve Taylor, who has served on The Museum of Flight's Board of Trustees since 2010. Through

**2016**  
**A.M. FLIGHT BREAKFAST**  
**ladies who launch**

**November 4, 2016**  
**Join us for The Museum of Flight's 4th annual A.M. Flight Breakfast: ladies who launch!**

Guest Speaker Nathalia Holt, PhD, author of *Rise of the Rocket Girls: The Women Who Propelled Us from Missiles to the Moon to Mars*

Bringing the community together to highlight the female experts who are exploring a world of possibilities.

For more information, contact Robin Webster at [rwebster@museumofflight.org](mailto:rwebster@museumofflight.org)

## IN MEMORIAM

The Museum of Flight offers its sincere condolences to the families and friends of departed Museum volunteers, members, and supporters.

Donald R. Beech	Cecil G. Foster	Gary B. Hills	Janet D. Osborn	Dale R. Schoenfield
Eugene L. Brady	Bruce E. Foster	Meech Houghton	David E. Owen	J. Nelson Seto
George C. Briggs	Ilene Gilmore	Wendell P. Hurlbut, III	Steve N. Pisanos	Donald R. Stark
Marie C. Brockway	Robert M. Glick	James H. Jackson	Romayne L. Potosky	Jack C. Taylor
Lee H. Brown	Marilyn B. Graham	Harriette P. Kollman	Robert H. Powell, Jr.	Philip C. Teachman
Dennis H. Dahline	Stanley D. Hall	Vernon O. Larson	Ronald W. Prokop	David J. Thatcher
Tracy Dart	David R. Hamro	Armand E. Longchamps	William H. Reese	Francis W. Tief
Robert G. DeWitt, Sr.	William E. Harlan	Donald P. Marinkovich	William G. Rhodes	Bobby G. Travelstead
Jean A. Donohue	Arthur L. Hedlund	Gale W. Mitchell	Roy L. Rich	Rodney A. Trueblood
Marshall L. Dorman, Jr.	Kenneth A. Helms	David E. Owen	Anne C. Rutledge	Donald L. Vogt
Rodney D. Farr	Carol J. Hess	James A. Nolan	William C. Sasse	David E. Wyman

## TRIBUTE GIFTS

### IN MEMORY

In memory of Karen C. Azure <i>Anthony E. and Shirley A. Azure</i>	In memory of Arthur E. Hitsman <i>Ellen Hitsman</i>	In memory of William J. Schwinck <i>Meredith Beck Albert and Eleanor Griffith Mr. Petras Eric and Kathleen Russell Arnold Stapnes and Family</i>	In memory of David J. Thatcher <i>Paula Clark</i>
In memory of Pat Barrett <i>Betty McBurney</i>	In memory of Russell D. Holly <i>Dean and Trudy Holly</i>	In memory of Ralph M. Shape <i>John and Donna Shape</i>	In memory of Herman R. Van Lier <i>Mrs. Karen L. Van Lier</i>
In memory of Donald V. Birdsall <i>Dave and Carla Birdsall</i>	In memory of James H. Jackson <i>Paul J. and Mary Jackson</i>	In memory of Yoshio J. Shiota <i>Bob and Nancy Forsyth</i>	In memory of John J. Wagner <i>Andover Terrace Garden Club Kay Hess</i>
In memory of Inga L. Bolang <i>Karin and Frederic Harder</i>	In memory of Howard W. Johnson <i>John Barker</i>	In memory of John Sinon <i>Connie Sinon</i>	In memory of George Walker <i>Jody Byrne</i>
In memory of Victor Caplan <i>Randy and Stacy Earlywine Michele Olson</i>	In memory of Harold D. Jolly <i>Catheren Jolly</i>	In memory of Paul A. Taipale <i>Daniel and Gretchen Dill</i>	In memory of Jesse A. Wallick <i>Don and Nancy Cumming Ruth Wallick</i>
In memory of Roy Chadwick <i>Delphine and Charles Stevens</i>	In memory of Max D. Lukenbach <i>Paul and Johanna Quam</i>	In memory of Richard W. Taylor <i>Anonymous David and Florence Kleine</i>	
In memory of Paul H. Crain <i>The Doennebrink Family</i>	In memory of Eugene J. Monahan <i>Virginia Monahan</i>		
In memory of Tracy Dart <i>Paula Clark</i>	In memory of Edward L. Nilson <i>Barbara Nilson</i>		
In memory of Tom Dawson <i>Ronald and Maralee Ellison</i>	In memory of James (Jim) A. Nolan <i>Stephen Moddle and Carmen Moddle Muriel Verschuuren</i>		
In memory of Richard L. Durham <i>Anonymous</i>	In memory of John Pinkerton <i>Guy and Nancy Pinkerton</i>		
In memory of Steve and Hazel Eastman <i>Harold and Jacque Eastman</i>	In memory of Steve N. Pisanos <i>Paula Clark</i>		
In memory of Ted E. Gary <i>Paula Clark Larry and Gayla Kanaster Kenneth and Sophie McNair</i>	In memory of James T. Pitts <i>Mark Pitts</i>		
In memory of Roy F. Gillespie <i>Anonymous (2)</i>	In memory of Dale R. Schoenfield <i>Community of Grace Presbyterian Church Bonnie Ford Elida Witthoeft</i>		
In memory of Donald D. Hall <i>Lilia Hall</i>			

### IN HONOR

In honor of Bill Ayer <i>Alaska Airlines</i>	In honor of John Lavillette <i>John and Sharen LaVillette</i>
In honor of June Boeing's birthday <i>Jill Heerensperger</i>	In honor of Don M. Ulmer <i>William and Miriam Matson</i>
In honor of Patrick DeRoberts <i>Susan Hettinger and John Brottem</i>	In honor of Vietnam POWs <i>Joseph and Joan Crecca</i>
In honor of Don J. Ferrel <i>Matthew and Bridget Ferrel</i>	In honor of Lindsay von Marbod <i>Dana Flanegin Stephen Mauser</i>
In honor of J. Arnold Gaillard <i>David F. Rensvold</i>	
In honor of Austin L. Hart <i>Robert and Sally Hart</i>	

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# SPACEFEST

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