



Student Information Packet

39th Annual Pathfinder Awards Gala April 30, 2022 at the Museum of Flight 5:30 p.m. to approximately 10:00 p.m.*

(*Also, Raisbeck Aviation High School students will be expected to attend a “College Fair” presented by Embry-Riddle Aeronautical University, Purdue University, University of Washington and University of North Dakota on Friday, April 29, 2022 from 2:30 – 5:30 p.m. at RAHS, to which their parents/guardians are also invited)

*The Pathfinders Awards honor individuals or teams
from the Pacific Northwest
for significant contributions to aerospace development.*

This year’s recipients are:

*Robert A. Bogash, Mark Kirchner, Wendy Lawrence,
Howard Lovering & Mitch Mitchell*

“Aviation began as a dream, born of wonder and curiosity. The dream became a theory through imagination and intelligence. The theory became an experiment through courage and study. The experiment became a practice through vision and learning. This progression has been a profound adventure, an awakening of the human soul to the possibilities of dreams. Modern aviation has always depended on a few adventurous spirits who are the pathfinders for the rest of us — they are the brave few who survive on faith, skill, and the courage of their convictions. Pathfinders strive, dare, push the limits, and sacrifice so that the rest of us can enter the doors they open — the doors to the future, to human potential, to dreams.”

- Mike Wiegand

Students:

We are delighted you are interested in attending the 38th Annual Pathfinder Gala at the Museum of Flight. This packet of information will provide you with essential information related to this very prestigious event.

History of Raisbeck Aviation High School Attendance at Pathfinder:

Since opening our school in the fall of 2004, our students and staff have attended this annual fall gala as guests of Embry-Riddle Aeronautical University, Peter Anderson and Galvin Flying Service, and several other collegiate and private donors who believe in the mission and vision of our aviation-themed school. If you were purchasing a ticket to this event, it would cost \$200. Consider that about **67** students plus chaperones will be sponsored, and if you do the math, that's a collective gift from sponsors of \$13,400!

How will attending Pathfinder benefit you?

In today's world, **who** you know may be as important as **what** you know. This event provides an opportunity for you to meet successful leaders in aviation and aerospace who may someday offer you an internship or a job, serve as a mentor, or be someone you can call upon when conducting research for a class assignment or project. At this event, you will be expected to meet several people and interact with them. We call this "**networking**", and it is a skill that our graduates tell us that they learned well at RAHS; and most importantly, they count it as one of the most important skills in preparing them for life after high school. Most effective leaders are also highly effective networkers!

Pathfinder recipients are people who have aspired to do good in the world. They are people who dreamed big and set goals for their life's work. They are individuals who will inspire you to stick to your own goals and dreams and realize that you, too, can be a Pathfinder!

Student Selection Process:

1. Read this packet, paying particular attention to the biographies of the five Pathfinder recipients!
2. Write a five paragraph essay that addresses the following: (1) why you want to attend this year's Pathfinder Gala; (2) What are your career goals; (3) What colleges are you considering; (4) what inspires you about at least one of this year's pathfinder recipient's contribution to the aerospace industry; (5) Write a personal bio. (See attached)
3. **Your essay is due to Mrs. Olsen by no later than Friday, March 25, 2022 at 4:00 p.m.** Please email it to her at renee.olsen@highlineschools.org or deliver a hard copy to her office in the College & Career Center (room 2510).
4. Essays will be reviewed by a committee. **We will announce the students who have been selected on March 31, 2022.** Selection will consider students who have not attended previously. Freshmen...we encourage you to apply!

If you are selected, you will be agreeing to the following:

- Attend a required **Etiquette/Networking Training session on Tuesday, April 26, 2022 from 3:45-5:30 p.m. in the RAHS Boeing Presentation Center (BPC)** (If you cannot attend, you must be excused by either Renee Olsen in the Career Center.)
- Wear appropriate formal or semi-formal attire to the event. If you want to attend and don't feel you have the right clothing, don't let that stand in your way of applying. We'll help you get what you need!
- You'll be required to write a thank-you card to your sponsor the weekend following the event. This needs to be turned in Monday to Renee Olsen in the RAHS Career Center.

- Share your experience with others—family members, students in your Advisory class, and perhaps with staff from The Museum of Flight, if asked to do so.

We look forward to reading your essays and hopefully, chaperoning you at the 2022 Pathfinder Gala!

In the last 100 years, our dreams of flight have taken us beyond the horizon and into space. And the dreams for tomorrow continue. The Museum of Flight Pathfinder Awards honor pioneering achievements in flying, engineering, education, operations, manufacturing, and an at-large category.

Five individuals have been selected for recognition in 2022:

Robert A. Bogash

2020 Pathfinder Award Recipient in the At-Large Category



ROBERT A. BOGASH had an eclectic career at The Boeing Company before retiring in 1995. Since then, he has spent his time being active with The Museum of Flight and supporting exhibit acquisitions at other prominent museums and institutions around the world. An avid pilot, he built his own RV-12 two seat airplane which he has flown all over the western United States. Bogash is especially known as a collector and restorer of large aircraft for The Museum of Flight Collection. His reputation as the go-to guy for getting almost anything accomplished on behalf of the Museum was established many years ago and continues today. Most of the activities and

events in his career have been driven by his love of airplanes and his dedication to the people who love airplanes.

He graduated from Rensselaer Polytechnic Institute with a Bachelor of Science in Mechanical Engineering and is also a licensed fixed wing pilot and flight engineer. This led to a distinguished 30- year career at The Boeing Company, where he worked during his initial 13 years as an engineer in Customer Support. Next, he moved to the 737/757 Division in Renton, where some of his assignments included 737 Factory Liaison Engineering, Flight Test Engineering, Engineering Configuration Manager for the 757 airplane, Renton Division Special Projects Manager, and Marketing Manager for Used Airplane Sales. He also played a key role in supporting legendary Boeing VP Richard W. Taylor in developing two-pilot flight decks and the use of twin-engine jetliners for extended twin operations known as ETOPS.

Bob spent the last nine years of his Boeing career as the Director of Quality Assurance for the Materiel Division. While he was Director of Technical Quality Assurance for all of Boeing Commercial Airplanes, he helped to begin Boeing's transition into a continually improving Total Quality system. He also developed an all new quality system, known as the Advanced Quality System, that resulted in reducing defective parts by more than 50% over a four-year period. This system was so successful, it was adopted by more than 20,000 companies, many outside the aerospace industry, and was taught in more than 24 colleges and universities in four countries.

Bogash has been an active volunteer at The Museum of Flight in Seattle since its beginnings in 1965. He has been both Chairman and Member of the Museum’s Aircraft Acquisition Committee for many years; and he managed numerous major projects for the institution. Important aircraft for which he was a leader in obtaining for the Museum include the Boeing prototypes of the 727 and 747 airplanes, a de Havilland Comet 4C, a NASA Lockheed F-104, a USAF Boeing B-52 bomber and a US Navy Douglas A-4 Skyhawk flown by the Blue Angels. A particular acquisition that Bogash is extremely proud of is the British Airways Concorde G-BOAG, which was acquired in November 2003 after a 19-year effort.

He has participated in the restoration of numerous historical aircraft including the Museum’s B-17F, and the Confederate Air Force’s B-29. Since Bob’s retirement, he has become even more active in the restoration and maintenance of many of the Museum’s airplanes. Of note, Bogash led the restoration of the Number One 727 from sitting on the Paine Field airport to flying condition; the airplane was successfully flown to Boeing Field in 2016 after sitting dormant for 25 years. He also led the restoration of the prototype 737 airplane, maintaining it in airworthy condition for 6 years at Moses Lake, Washington, until it too was successfully flown to the Museum in 2003.

From 2005 to 2010, Bogash guided the acquisition of a Lockheed Super G Constellation, first in Toronto, later during its restoration at Rome, New York, and currently on display at the Museum.

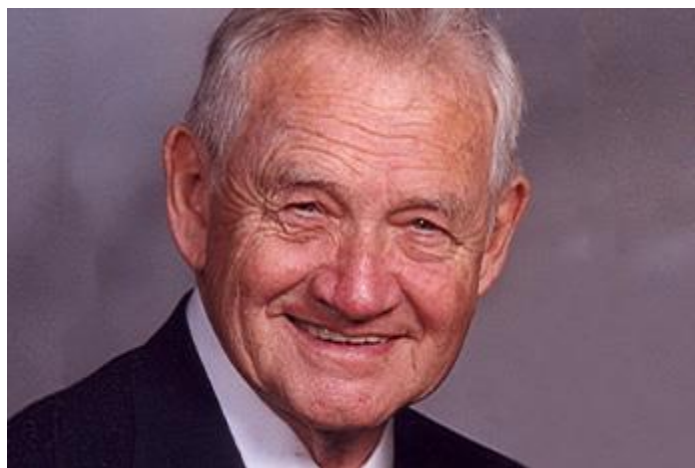
Beginning in 2006, Bogash started hunting for a 1934 Lockheed Model 10 Electra—Kelly Johnson’s first airplane design—to bookend with his last, the SR-71 Blackbird. Bogash, as a big Kelly Johnson fan, has been instrumental in bringing eight of Kelly’s best designs to the Museum. The airplane he found was a Model 10E, identical to the airplane in which Amelia Earhart disappeared in 1937—right down to having flown around the world replicating her famous flight. This airplane arrived at the Museum in September 2013.

A born storyteller, Bob has a talent for archiving, illustrating and presenting vivid shows of adventures of both his and the airplanes he loves, as well as stories of his aeronautical heroes like Kelly Johnson. If you attend a Bob Bogash presentation, be prepared for an in-depth coverage of the subject matter, humorous exposure of irony and thoroughly researched facts and data.

Bob Bogash is an ultimate example of the engineer and leader admired for his enthusiastic energy, and for the people-centered person who can rally and lead a team to get the difficult things done. He is the very definition of what the Pathfinder Award was designed to represent.

Mark Kirchner

2020 Pathfinder Award Recipient in the Engineering Category



FROM BIRTH, MARK KIRCHNER was destined to be an outstanding aeronautical engineer and a major contributor to the aviation industry. He came of age during WWII, and volunteered for US Naval flight training, but the war ended before he earned his wings. Rather than pursuing a career as a Navy pilot, he mustered out and applied to MIT, where he received his BS and MS degrees in Aeronautical Engineering. After graduation from MIT and a previous summer job with The Boeing Company during his junior year, Kirchner permanently joined Boeing in 1949.

Mark Kirchner’s managerial capability showed in every leadership assignment he had during his Boeing career including Chief Engineer for Aerodynamics, Director

of the Commercial Airplane Technical Staff and Director of Technology at Vertol. His decisions were fair, decisive and technically powerful. There were also numerous times when his technical knowledge and imagination stood out and made an unusual contribution.

When Mark was just beginning his Boeing career and working on the B-47, he pointed out that the US Air Force's plan to use gasoline as fuel rather than kerosene would result in a 20-30% loss in range because of fuel boil-off at high altitude, an issue that both the Air Force and Boeing had failed to appreciate.

When preparing the pilot's performance handbook for the B-47, he arranged for the calculations to be done on the company's punch card computers used to calculate paychecks, which enabled the handbook to be completed in only 6 months, much shorter than could have been done with manual computation. In addition, the handbook consisted of "chase-around" charts for determining such things as takeoff and landing distances. This type of chart still is used today in pilot handbooks.

Kirchner was sent to Vertol with the goal of improving the technical level of Vertol helicopters. To test new ideas he needed a wind tunnel configured to handle the large down-wash created by the helicopter rotors. He led the design and construction of this wind tunnel, working hard to get the approval of George Schairer. The tunnel was very successful and led to improvements in both the Chinook and Navy Sea Knight helicopters.

Kirchner's greatest technical contribution having worldwide significance was his analysis of the wind shear problem during the landing of large aircraft. The problem occurs when the atmospheric wind shear causes a sudden large tailwind component to the airplane's airspeed. To understand the problem of wind shear in more detail Kirchner built his own digital computer from a kit and used it to calculate the path of the airplane using different control techniques to avoid hitting the ground. He came to the conclusion that the current Boeing technique was the proper method.

Kirchner was a member of a committee of the National Academy of Sciences (NAS) that had been formed to study the wind shear problem, and he presented his results as they prepared their report. He couldn't get agreement from another member of the committee, an ALPA pilot, and it appeared the committee's report would not endorse Boeing's methodology. Kirchner then proposed a simulator fly-off to settle the issue. He let this ALPA pilot choose the type of wind shear that he wanted to fly through in the simulation, and Kirchner would tell him exactly how to fly through it. The pilot picked 10 different examples, and Kirchner's technique proved to be the most favorable in every case. This result changed the thinking of the entire committee, who then endorsed the procedure in their report, and it became the standard for the world. The seriousness of this problem was represented by the fact that the world commercial fleet was losing an airplane a year from this phenomenon. Kirchner undoubtedly saved many lives through the years, a true Pathfinder's accomplishment.

Kirchner also put his considerable aerodynamic skills to work as an outstanding pilot. He held an instrument-rated commercial pilot license for fixed wing, helicopters and gliders. Soon after joining Boeing in 1949, he started the Seattle Glider Council. In the 1950's, he purchased and flew a surplus Fairchild PT-19, a Navy open cockpit trainer called the Timm. This airplane played a major role in convincing his wonderful wife, Mary Lu, to marry him. They became a great flying team, and she also became a licensed pilot. Kirchner, Dick Taylor and 8 other Boeing friends, built an experimental aerobatic biplane, the Christen Eagle, which they built in Kirchner's basement and Taylor's garage. After Kirchner made all his friends airsick from rides doing aerobatic stunts, he sold his share and decided to build a new high-performance kit plane, the Lancair IV-P. This was a four-place, turbo-charged, pressurized piston airplane, capable of speeds over 300 mph at 25,000 feet, with a range of 1,000 miles. It was constructed of carbon fiber composite, so it was light and stiff, but complex to build. He built this in his basement in about five years.

Before he retired from Boeing, Kirchner created a nonprofit organization named the Flight Research Institute to provide a way for Boeing Company engineers to use Boeing computers during offhours to pursue personal research interests, like man-powered flight. Kirchner also joined The Museum of Flight Board of Trustees, and rose to the Chairmanship. Mark Kirchner was a modest person, with exceptional intelligence and

analytical ability, who was able to make most everything he touched better. The one word that describes him best is integrity. He was indeed a Pathfinder during his lifetime.

Wendy Lawrence

2020 Pathfinder Award Recipient in the Education and Flying Categories



CAPT. WENDY LAWRENCE is a veteran of four Space Shuttle flights, logging a total of 1,225 hours in space. But her incredible career, which continues today, is marked by many other crowning achievements.

Born in Jacksonville, Florida, Lawrence was the daughter and granddaughter of UW Naval aviators. She graduated from Fort Hunt High School in Alexandria, Virginia in 1977, and received a BS degree in ocean engineering from U.S. Naval Academy in 1981. With a Navy career in her blood, Lawrence was designated as a naval aviator in July 1982. She served as special weapons training officer, detachment

maintenance officer and squadron Naval Air Training and Procedures Standardization officer at Helicopter Support Squadron Six (HC-6) in Norfolk, Virginia. A member of only the second class in Naval Academy history to include women, she went on to rank 12th in her graduating class, becoming instrumental in forming the women's crew team. She also served as Deputy Brigade Commander and earned one of just five naval aviator billets available to women in her class. She was one of the first two female helicopter pilots to make an extended deployment to the Indian Ocean as part of a carrier battle group and accumulated more than 1,000 hours in the Boeing Vertol CH-46 "Sea Knight" helicopter.

Capt. Lawrence was selected for the Secretary of the Navy master's degree program in ocean sciences at MIT and Woods Hole Oceanographic Institution. After completion of her degree, she was assigned to Helicopter Anti-Submarine Squadron Light 30 as officer-in-charge of Detachment ALFA. Her detachment deployed on Chauvenet and provided support to Oceanographic Unit 5 for coastal surveying operations off of Kenya and Vieques Island, Puerto Rico.

She returned to the Naval Academy in 1990 to serve as a physics and leadership instructor and novice women's crew coach.

Achieving her childhood dream of flying in space, Lawrence was selected by NASA in 1992. She began training for her first flight onboard Space Shuttle Endeavour as the first female graduate of the U.S. Naval Academy to fly in space. Aboard Endeavour in 1995, the STS-67 mission was to study ultraviolet light radiating from distant objects and galaxies. Lawrence went on to serve on three more Shuttle crews over the next 10 years, including missions to Russian space station Mir and the International Space Station. Her final flight in 2005, STS-114 "Return to Flight," was the first shuttle flight after the loss of the Columbia. Here she and evaluated new procedures for the inspection and repair of Shuttle's thermal protection system and delivered much need supplies to the International Space Station.

Lawrence also served as NASA's Director of Operations at the Gagarin Cosmonaut Training Center in Star City, Russia. Astronaut Barbara Morgan worked with Lawrence at NASA and said that her reputation was that of both an "outstanding leader and team member, which is critical to NASA mission success" and sought her out as a mentor when she was designated loadmaster for STS-118.

After 11 years, four Shuttle flights and 50 days in space, Lawrence retired from NASA in 2006 and moved on to her "third" career as STEM educator. In 2008, she became the first female Astronaut Encounter presenter

at the Kennedy Space Center Visitor Complex. Her dedication to inspiring students, particularly young women, to pursue careers in STEM and aviation has been unmatched. When it comes to supporting educational programming in the Pacific Northwest, distance is no barrier. She has traveled across Washington state, from Bellingham to Moses Lake and Seattle, to support multiple Museum of Flight educational programs over the past 10 years. Lawrence has also been the “astronaut of choice,” participating in all but two of the 20 Idaho Science and Aerospace Scholar programs in Boise.

Lawrence also helped bring the Zero Robotics program to Washington state. She has worked with the Girl Scouts of America and the Sally Ride Family Foundation, and is one of the founders of AstraFemina, a brand new nonprofit organization whose mission is to inspire young women to be tomorrow’s STEM stars and a goal to partner with other STEM organizations to reach 10,000 girls over the next year.

Capt. Wendy Lawrence has mastered the art of being engaging and inspiring, and yet humble and practical, and understands the important responsibility in serving as a role model to countless young women, motivating them follow her incredible path and soar to new heights.

Howard Lovering

2020 Pathfinder Award Recipient in the At-Large Category



THE MUSEUM OF FLIGHT is the largest non-governmental air and space museum in the world and is recognized as the foremost aerospace education center in the world. Our collections, programs, trained staff and volunteers have served and inspired millions of students and visitors for more than 50 years. Few know of the Museum’s rocky beginnings, and how, without the dogged persistence of one man, it may have never happened.

In the late 1960s, Boeing Chairman William M. Allen was pitched the idea of a flight museum by Boeing historian Harl Brackin and others in a small organization known as the Pacific Northwest Aviation

Historical Foundation (PNAHF). Allen was interested but was unsure of the project’s viability. After his retirement, Allen used his influence to explore the museum’s potential. In 1975, Howard Lovering was assigned as a Boeing loaned executive to complete a study of the project. Completed on a tight schedule, the assessment found that a museum was feasible and of consequence as an educational center, only if located at Boeing Field. This early work committed what was to become the mission for the institution.

Continuing to serve on the Museum’s Board of Trustees and as a volunteer, Lovering assisted the effort to save the original manufacturing building, the Boeing Red Barn, and relocate it to temporary storage at Boeing Field. Recruited by Bill Allen, Lovering then took leave of absence from the company to serve as the first executive director and staff of one for The Museum of Flight. Lovering was eager to seize this opportunity to build an enduring institution from scratch. In its infancy, it was clear the community would not buy the case alone, nor would or could The Boeing Company. Necessary was joint support, a prime property, and a lot of money—an overwhelming exercise for a small organization with no funds.

Lovering found funds to pay his salary and carved out a small budget for planning and operations. A few donors came forward during this critical time of “go-or-no-go,” allowing the project to continue. With Lovering in place and a modest amount of money in hand, it was time to reorganize for the next series of

battles. The Red Barn was deteriorating on its temporary property at Boeing Field, and it was entirely possible at this point that the project would fail.

A donor provided office space in downtown Seattle, and Lovering hired two part-time assistants. The small but determined staff made progress, upgraded PNAHF's small initial aviation museum at the Seattle Center, organized outreach programs, and persevered in the mission for a flight museum. Each accomplished step of the journey created momentum for the next, and it was a long climb.

A pivotal moment in the development of the new museum happened in 1978. As the Boeing Red Barn languished, and with the museum's presence at Seattle Center coming to a close, it was clear that the museum required land, and the audacious ask was for seven prime acres on Boeing Field.

The expected response was push-back from airfield management, in addition to legal woes as eminent domain action was required to acquire the necessary private parcels. Lovering answered the subpoena to represent the museum in court, sans attorney. It was a surprise that the judge ruled in favor of the land for public use, with the museum included as an airport-related activity.

This was not the end of the struggle, but it was a turning point. With the prime property, the Red Barn was restored with growing corporate and community support, allowing the first-phase opening in 1983. This successful early opening leveraged the continuing capital campaign to build out the full property to include the iconic T.A. Wilson Great Gallery. Community support included corporate donors from bottom to top, private philanthropy, and considerable national investment. The momentum now was of a large and dedicated force with strong leadership. With the Great Gallery opening in 1987, replete with Vice President Bush and Apollo astronauts, the brand of quality and service was established. The exceptional public popularity ensued and has continued over decades of expansion.

The Museum of Flight exists today because of many influential people and their crucial contributions. Yet, Lovering's ongoing conviction that an aerospace museum should educate and his determination and utter refusal to let the project fail in the face of numerous obstacles was the essential reason it succeeded.

Leaving the Museum in 1992, Lovering and his wife established LOGIC, a museum consulting company, with their first assignment to manage the acquisition and move of the Spruce Goose from California to Oregon. For three decades, LOGIC has assisted cultural, historical and transportation projects around the country in realizing their missions. Lovering recently authored *For Future Generations/A History of The Museum of Flight* that was awarded an International Silver Medal (IPPY) from the Independent Publishers association.

Howard Lovering is a true Pathfinder. Without his tenacity and steadfastness, the incredible story of The Museum of Flight would likely be much different.

Mitch Mitchell

2020 Pathfinder Award Recipient in the At-Large Category



MAJ. GEN. HAROLD "MITCH" Mitchell's list of careers is long and his accomplishments are many. Among them: he has a decorated military career (US Marine and US Air Force) spanning 39 years, retiring at the rank of two-star general. Some of the positions Mitchell held during his distinguished career are Commander, 728th Airlift Squadron, McChord AFB, Washington; Vice Commander, 4th Air Force, March Air Reserve Base, California; and Deputy Inspector General of the Air Force, Office of the Secretary of the Air Force, the Pentagon, Washington, D.C. Along

the way he has earned the Distinguished Service Medal, Legion of Merit with Oak Leaf Cluster, the Air Force Outstanding Unit Award with three Oak Leaf Clusters, and many other military awards. Mitchell is also a Command Pilot, amassing more than 3,500 military flight hours.

Concurrently with Mitchell's military career, he also enjoyed a very successful career as a commercial airline pilot. He began his airline career in 1981 with Continental Airlines. In 1983, he joined Alaska Airlines and spent the next 31 years flying for 'The Eskimo'. Mitchell was a Captain in both the McDonnell Douglas MD-80 and the Boeing 737. He was also an instructor and a FAA-designated Check Airman.

As impressive as Mitchell's accomplishments are, both military and civilian, it is his leadership and passion for youth education that will have the greatest impact and mark his legacy. In 2009, Mitchell led an effort to erect a statue of fallen astronaut Michael P. Anderson on the grounds of The Museum of Flight. The effort paid off and the statue was dedicated in June 2009. Sensing an opportunity to do more with the name and story of Michael P. Anderson, Mitchell, with the help of volunteers and Museum staff, hosted a few dozen youth for a day of fun and learning at the Museum. The event also included interacting with the inspiring special guest astronaut Dr. Bonnie Dunbar. This program in February 2010 marked the inaugural Michael P. Anderson Day. It was very clear that this was something special, and through the leadership of Mitch Mitchell it was only just beginning.

A natural leader, Mitchell knew that for the fledgling program to be successful a mission statement would have to be established to guide future actions, and the following was formed: "To leverage Astronaut Lt. Col. Michael P. Anderson's legacy to inspire underserved children of Washington State, grades 6-8, to pursue and to realize their dreams through the pursuit of studies in Science, Technology, Engineering and Math (STEM)." The target audience was disadvantaged children of color. From that day forward, the Michael P. Anderson Memorial Aerospace Program (MPA) at the Museum has grown from a single activity to a multi-event program over several days that has been fully integrated into the Museum's own educational offerings.

Over the past 11 years, MPA has served 778 students (37% female), known as the Michael P. Anderson Scholars. These scholars come from 212 schools in 61 school districts across Washington state representing 69 cities. In 2020 alone, MPA Scholars participated in six STEM-focused events and received up to 25 hours of educational programming. Many of the MPA Scholars have gone on to pursue careers in STEM fields.

In addition to these significant contributions, Mitchell has served as a member of The Museum of Flight's Board of Trustees, and has been a tireless advocate and supporter of the development of the Boeing Academy for STEM Learning, expanding opportunities for underserved youth in every educational program that the Museum offers.

Mitchell, a Marine and retired two-star general and airline captain, builds a genuine, heartfelt connection with students. Mitchell has a natural way with young people, always willing to give a special word or lend an ear. Over the years, hundreds of young people have looked up to Mitch Mitchell with admiration, respect and affection.

What Mitchell has done, after two careers of amazing accomplishments, is to find a way to positively impact the youth of Washington State: to challenge them, inspire them and provide opportunities where there previously were none. The beautiful thing about his work is that his impact will be felt for years to come. In the finest Pathfinder tradition, Mitch Mitchell has indeed made a significant contribution to the development of the aerospace industry.

The Pathfinder awardees are selected by representatives of the Aircraft Owners and Pilots Association, American Institute of Aeronautics and Astronautics PNW Section, The Boeing Company, Civil Air Patrol, Federal Aviation Administration, The Museum of Flight, Ninety-Nines, Pratt & Whitney, Seattle Soaring Club, Sterling Aviation Technologies, Society of Experimental Test Pilots, Society of Experimental Test Engineers, University of Washington, Washington State Department of Transportation and Women in Aviation.