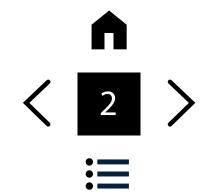
# AWARD WINNER DIRECTORY



Pathfinder Awards honors individuals with ties to the Pacific Northwest who have made significant contributions to the development of the aerospace industry. The Pathfinder Award honorees are selected by the Museum of Flight Board of Trustees from among nominees chosen by the Museum, the Pacific Northwest Section of the American Institute of Aeronautics and Astronautics, and representatives of other aviation and aerospace organizations and companies throughout the Northwest.





Pathfinder Awards can be given for achievement in any of six categories:

#### **FLYING**

Given to pilots, navigators, flight engineers, and all other aircrew members whose contribution was related directly to flying events.

#### **ENGINEERING**

Given to those involved in the design of aerospace vehicles, development of engineering technology, engineering testing, or investigations in a field of science related to flight.

#### **MANUFACTURING**

Given to persons involved in the manufacture or production of aerospace vehicles or components or the fulfillment of the entrepreneur's role in bringing together ideas and capital necessary to move from concept to fruition.

#### **OPERATIONS**

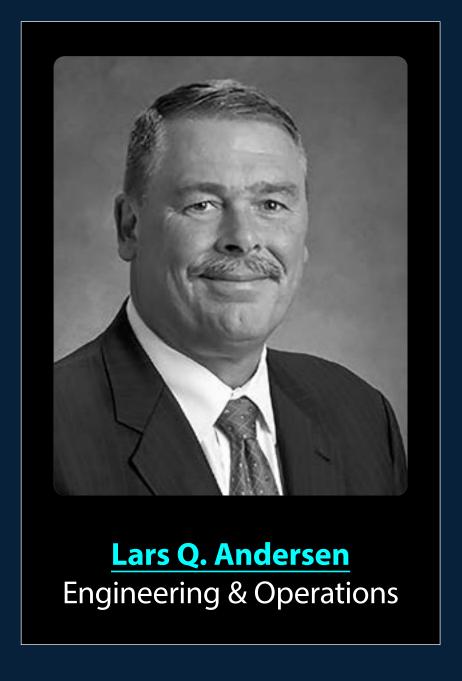
Given to operations managers of aerospace vehicle systems, such as airlines, charter services, or space vehicle launch and recovery organizations.

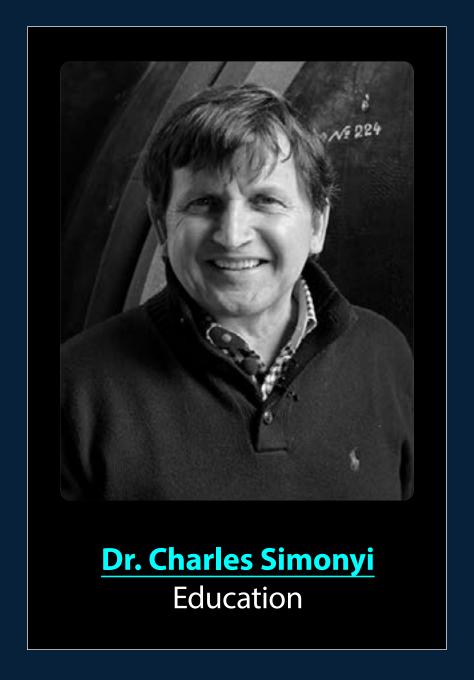
#### **EDUCATION**

Given to those involved in the advancement of education in the field of science or technology related to flight.

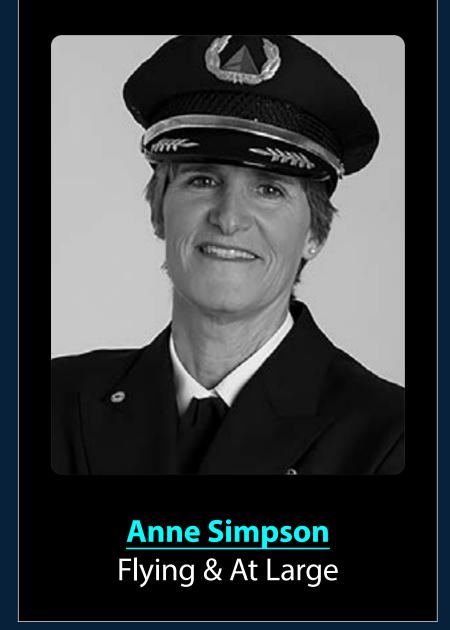
#### **AT LARGE**

Given to those whose contribution is related to aspects of aerospace development not specifically named in the other categories.









2024
PATHFINDER AWARD
WINNERS

Click a name to view their page



## Lars Q. Andersen





YEAR AWARDED
2024
CATEGORY
Engineering &
Operations

When Lars Andersen was a boy, his dad talked about living in rural Washington in the 1930s. There, after seeing a mail delivery seaplane, Lars' father decided to study aerodynamics, earning a degree in aeronautics in 1946 from the University of Washington. Lars decided to do the same, graduating from the University of Washington in 1968 with a degree in Aerodynamics Engineering.

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collaboration with engine manufacturers and regulatory agencies, securing ETOPS approval at entry into service, a milestone in aviation history.

Throughout his career, Lars displayed a knack for problemsolving and collaboration. Whether resolving engine testbed debates or addressing in-service issues like false fire warnings, his leadership proved invaluable. Promoted to Chief Project Engineer, Lars oversaw operational readiness, working with airlines to tackle challenges head-on.

Even in retirement, Lars remained committed to innovation, leading the development of the 777X series. His vision for enhanced fuel efficiency and passenger comfort shaped the future of long-range travel, earning acclaim from industry leaders.

With over 2,200 777 aircraft ordered cementing Lars' enduring legacy as a pioneer of aviation engineering, his induction as a Museum of Flight Pathfinder is a fitting tribute to his creativity, perseverance and lasting impact on the region's aerospace industry.



## Dr. Charles Simonyi





**YEAR AWARDED** 

Education

Born in Budapest, Charles Simonyi has contributed to a range of acclaimed scientific and technological advancements that have benefited the world. Pursuing his passion for space exploration, Simonyi participated in two missions to the International Space Station (ISS): the Soyuz TMA-10 mission in 2007 and the Soyuz TMA-14 mission in 2009, becoming the fifth space tourist and the first-ever tourist to fly twice. Prior to his flights, Dr. Simonyi underwent months of preparation, including gaining zerogravity experience aboard an airplane and survival training.

The Charles and Lisa Simonyi Fund for Arts and Sciences, established in 2003, has made a significant difference in the Seattle region and around the world by providing grants to

outstanding organizations in the arts, sciences and education, including the Institute for Advanced Study, University of Oxford for a Chair for the Public Understanding of Science, the Seattle Symphony, the Large Synoptic Survey Telescope, Raisbeck Aviation High School, and of course, The Museum of Flight.

At the Museum, his support was instrumental in creating the state-of-the-art Charles Simonyi Space Gallery, which bears his name in recognition of his commitment to aerospace education and enthusiasm for inspiring the next generation of space explorers. Fittingly, one of the artifacts displayed there is the Soyuz TMA-14 capsule that carried him from the ISS in 2009.

Dr. Simonyi's personal goals for his two missions were to advance civilian space flight and assist in research. But his most significant and long-lasting contribution was to educate all learners in the disciplines of science, art and space in the Pacific Northwest and throughout the world.

2024 **CATEGORY** 

### Einar Enevoldson





YEAR AWARDED
2024
CATEGORY
Flying

From the age of 15, when he set a world-record in his engineering of a glider model, to the end of his career at the National Aeronautics and Space Administration (NASA), Enevoldson constantly pushed the limits of possibility to make his own path. His career continued to soar, and after a short time learning about sailplanes in El Mirage, Enevoldson joined the United States Air Force.

Enevoldson's seven time to climb records in the Lockheed F-104 earned him a Distinguished Flying Cross, demonstrating the impact his passion could make. After his time in the military ended, he piloted an assortment of experimental aircraft for NASA, including the X-24B and Grumman F-11.

Proving his versatility to be limitless, Enevoldson broke the boundaries of aerospace technology with his memorable contributions, earning him two NASA Exceptional Service Medals. These awards celebrated his trailblazing role in the General Dynamics F-111 supercritical wing program and his work as a project pilot on the Grumman F-14 stall and spin resistance tests.

His pioneering spirit continued with Grob Aerospace in Germany, where he set numerous altitude records in high-altitude reconnaissance aircraft. Enevoldson explored the upper atmosphere with gliders in his leadership position for the Perlan Project, achieving a sailplane altitude record of 50,724 feet, which laid the groundwork for the stratospheric exploration in Perlan II. Enevoldson's

relentlessness and technical expertise epitomize the qualities celebrated by the Pathfinders Award, and his legacy of ambition is an inspiration for others pursuing their own unique vocations.



Back to 2024 Winners

## Anne Simpson





YEAR AWARDED 2024

**CATEGORY**Flying & At Large

Pathfinder Awardee Anne Simpson is an accomplished pilot and leader who advances opportunities for women in aviation. She achieved great success in her career, from her hiring as the third female pilot at Northwest Airlines at age 25 to her term as chairwoman of the Board of Trustees for The Museum of Flight.

Anne's mother earned her wings in 1943, but there were no opportunities for women to fly commercially at the time. Decades later, while attending University of California, Berkeley, following her mother's footsteps, Anne earned her own pilot's license in an astounding 30 days. By the time she graduated college, she held all ratings required as an airline pilot. After time as a pilot instructor in Seattle, a series of flying positions led her to Northwest Airlines in 1981. Anne flew several Boeing and Airbus

aircraft, and when she checked out as Captain on the 747-400 she was one of only four women in the position at the time.

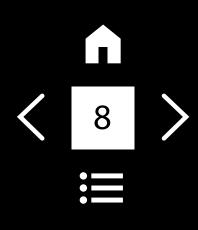
Anne rowed for UC Berkeley's crew team where she practiced dedication, perseverance and discipline that set the foundation for her leadership in the flight deck, at The Museum of Flight and as an advocate for women in aviation. She led the campaign to acquire the Lockheed Electra 10-E, one of two surviving examples of the type of aircraft famously flown by Amelia Earhart. The project became the foundation for the Museum's Amelia's Aero Club program for girls.

In every aspect of her life, Anne's dedication to excellence has been pioneering, leading to her induction as an aviation Pathfinder.



# AWARD WINNER DIRECTORY





#### Peter M. Bowers A D Edmund T. Allen Harl V. Brackin, Jr. Suzanna Darcy-Hennemann William M. Allen Dr. Walter Braithwaite Bonnie J. Dunbar Gladys Dawson Buroker William A. Anders Lars Q. Andersen E Michael P. Anderson C Fred S. Eastman Luella Mae Armstrong Michael Carriker Clarimont L. Egtvedt Ben Ellison Scott Carson Bill Ayer **Einar Enevoldson** John Cashman B Joe Clark C. Donald Bateman **Phil Condit** F Wellwood E. Beall **Steve Fulton** Ray Conner Jeff Bezos William A. Cook, Jr. William E Boeing Jr Carolyn Corvi G William E. Boeing, Sr. A. Scott Crossfield Jim Galvin **Bob Bogash** Joseph E. Crosson Ernest K. Gann

Reba Gilman

Louis B. Gratzer

Richard F. Gordon, Jr.

Н

Robert E. Hage

**Elling Halvorson** 

Elmer N. Hansen

David R. Hinson

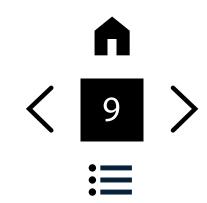
Thorp Hiscock

**Eddie Hubbard** 

Tom Imrich

J. Kenneth Higgins

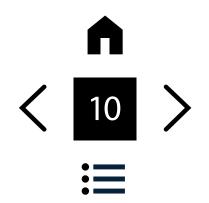
Thomas F. Hamilton



Click a name to view their page

Click a name to view their page	

J	L	Charles N. Monteith	P
Joe M. Jackson	Clay Lacy	Barbara Morgan	Clyde E. Pangborn
Jeff Jefford	Gary Lai	Peter Morton	Addison Pemberton
Elrey B. Jeppesen	Robert. T. Lamson	Dr. George E. Mueller	Maynard L. Pennell
Gene Nora Jessen	Wendy Lawrence	Robert S. Mucklestone	Raymond I. Peterson
Philip G. Johnson	Wesley G. Lematta	Alan Mulally	Don Pettit
Robert R. Johnson	Barbara Erickson London	Robert B. Munro	
A. M. "Tex" Johnston	Howard Lovering	Herbert A. Munter	R
Dr. James A. Joki	Charles A. "Chuck" Lyford		James D. Raisbeck
		N	Robert C. Reeve
K	M	Eric Nelson	John P. Roundhill
K Bruce R. Kennedy	M  Nicholas B. Mamer		
		Eric Nelson	John P. Roundhill
Bruce R. Kennedy	Nicholas B. Mamer	Eric Nelson	John P. Roundhill
Bruce R. Kennedy  Mark Kirchner	Nicholas B. Mamer  Louis S. Marsh	Eric Nelson  Dr. George D. (Pinky) Nelson	John P. Roundhill
Bruce R. Kennedy  Mark Kirchner  Fredrick K. Kirsten	Nicholas B. Mamer  Louis S. Marsh  George C. Martin	Eric Nelson  Dr. George D. (Pinky) Nelson  O	John P. Roundhill
Bruce R. Kennedy  Mark Kirchner  Fredrick K. Kirsten	Nicholas B. Mamer  Louis S. Marsh  George C. Martin  Bruce R. McCaw	Eric Nelson  Dr. George D. (Pinky) Nelson  O	John P. Roundhill



#### S

#### George S. Schairer

Arthur E. "Art" Walker

Clayton L. Scott

S. L. "Lew" Wallick, Jr.

Frank Shrontz

Edward C. Wells

Dr. Charles Simonyi

Sheila E. Widnall

Anne Simpson

**Noel Wien** 

W

Delford M. Smith

Frank W. Wiley

Joe I. Soloy

Dr. Sam B. Williams

John E. Steiner

Thornton Arnold "T. A." Wilson

**Dorothy Hester Stenzel** 

Jack K. Wimpress

George Stoner

Holden W. Withington

Joseph F. Sutter

Arthur G. Woodley

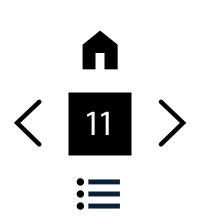
Brien S. Wygle

T

Richard W. Taylor

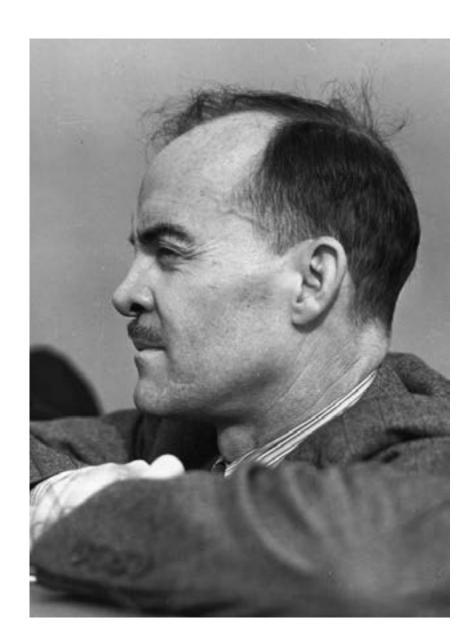
Leslie R. Tower

Guy M. Townsend



Click a name to view their page

## Edmund T. Allen





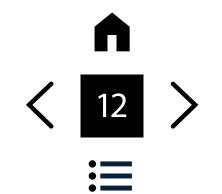
YEAR AWARDED 1983

**CATEGORY** Flying

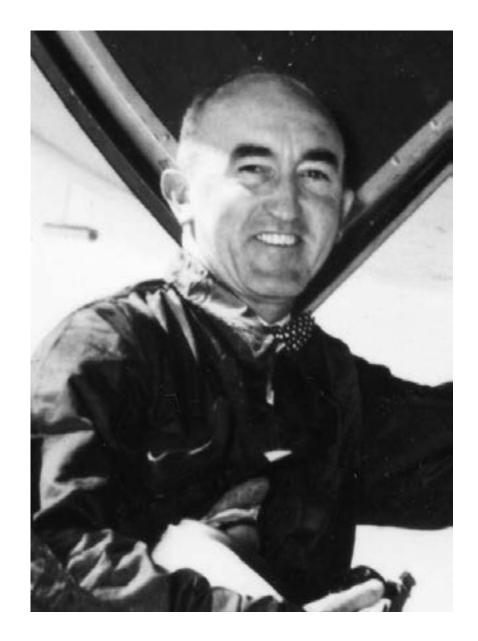
During the 1930s and early 1940s, Eddie Allen was recognized as the leading American test pilot. Throughout his career in a business famous for its daredevils, Allen was intent on World War I, he studied at the University of Illinois and the Massachusetts Institute of Technology, where he developed an early interest in the concept of wind tunnel testing. He sustained this interest during his freelance career in the 1930s, when he piloted the first flights of no fewer than 34 new aircraft, including the Northrop Alpha, Beta, and Gamma; the Douglas DC-2; the Boeing XB-15, 314, and 307; and the Lockheed Constellation.

In 1939, he joined the Boeing Aircraft Company as director of Flight and Aerodynamics. As director, he supervised all flight testing, aerodynamics, and wind tunnel research. He continued to pilot test flights. In 1943, he died in the crash of a prototype B-29 Superfortress when an electrical failure caused the engines to catch fire.

Allen received many honors during his lifetime, including the first IAS Octave Chanute Award in 1940 for outstanding contributions to the aeronautical sciences by a pilot. He was posthumously awarded the Daniel Guggenheim medal in recognition of his work in establishing systematic flighttesting methods for obtaining basic design and performance data and in 1944, Boeing honored Edmund Allen's achievements by dedicating its new aeronautics laboratory and wind tunnel in his name.



### William M. Allen





YEAR AWARDED
1984

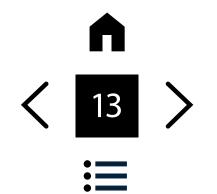
**CATEGORY**Manufacturing

Bill Allen's 50 years at Boeing really included two careers with the company. The first started in the mid-1920s, when Allen worked as outside legal counsel to help Boeing establish its new air-transport network and negotiate airport leases in states over which its mail and passenger routes were flown. Allen's business involvement with Boeing expanded during the next 20 years, both in a legal capacity and as a company director and valued advisor. In 1945, the "right time" came, and Allen's second Boeing career began, with his appointment to the company's presidency. It was a troubled time for Boeing because of the abrupt termination of wartime contracts and the layoff of thousands of production workers.

Allen's initial decisions were pivotal to Boeing's later successes. His first major act was to commit the 377 Stratocruiser program to immediate go-ahead, thus preserving an irreplaceable core of Boeing's highly skilled design and production teams. He also authorized advanced development that would later make Boeing a prime source of strategic aircraft, missiles, and space equipment for the U.S. government.

Allen believed strongly that jet propulsion would mark the way to Boeing's future. This conviction was borne out with Boeing's innovative combination of jet power and wing sweep in the revolutionary B-47 Stratojet and B-52 Stratofortress bomber designs. It was sustained and affirmed in 1952, when Allen

asked the Boeing board to take a calculated risk by funding development of America's first jet transport, the 367-80. Later, Allen led the expansion of the 707 program into a family of commercial jet transports, and led Boeing into the Space Age with Dyna-Soar, Saturn/Apollo, and the Lunar Orbiter.



### William A. Anders





YEAR AWARDED
2005
CATEGORY
At Large

Pilot, astronaut, nuclear engineer, diplomat and businessman, Major General William A. Anders has had a distinguished and varied career. Anders was selected by NASA as an astronaut in 1964. He was backup pilot for both Gemini XI and Apollo 11 and was the lunar module pilot for Apollo 8 in December 1968, the first Apollo mission to orbit the Moon. A year later, Anders left NASA and took up the first of a series of high-level government posts, beginning as executive secretary for the National Aeronautics and Space Council.

In 1973, Anders moved to the Atomic Energy Commission, where he was lead commissioner for all nuclear and non-nuclear power research and development. Following that, Anders was appointed by President Gerald

Ford to be the first chairman of the newly established Nuclear Regulatory Commission. Concluding his government service with a two-year assignment as ambassador to Norway, Anders joined General Electric in 1977 as vice president and general manager. In 1979, he returned to the classroom once more to attend Harvard Business School's Advanced Management Program. The following year he was appointed general manager of GE's Aircraft Equipment Division.

Anders held several important positions at large aerospace corporations, including Textron and General Dynamics. Today he is active in the USAF Heritage Flight program, demonstrating changes in aviation technology by flying vintage and modern fighters together at air shows around the country. He is the founder of the Heritage

Flight Museum in Burlington,
Washington, which is dedicated
to preserving historic military
aircraft in airworthy condition.
He serves on NASA's Space
Shuttle Return-to-Flight
Oversight Committee.

In his fifty-plus years in aviation, Anders has earned numerous awards and decorations, logged more than 6,000 hours in the air, retired as a major general from the Air Force Reserves, and recently been inducted into the National Aviation Hall of Fame. He is unquestionably a Pathfinder.



## Lars Q. Andersen





YEAR AWARDED
2024
CATEGORY
Engineering &
Operations

When Lars Andersen was a boy, his dad talked about living in rural Washington in the 1930s. There, after seeing a mail delivery seaplane, Lars' father decided to study aerodynamics, earning a degree in aeronautics in 1946 from the University of Washington. Lars decided to do the same, graduating from the University of Washington in 1968 with a degree in Aerodynamics Engineering.

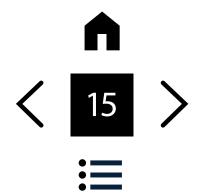
Joining The Boeing Company in 1973, Lars embarked on a 26-year term, marked by pioneering contributions to the 777 program. As leader of early ETOPS (Extended Twin Operations), he navigated uncharted territory, ensuring the 777's readiness for twin-engine operations worldwide. Lars' foresight led to groundbreaking

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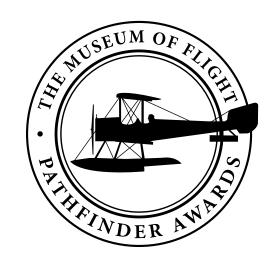
Even in retirement, Lars remained committed to innovation, leading the development of the 777X series. His vision for enhanced fuel efficiency and passenger comfort shaped the future of long-range travel, earning acclaim from industry leaders.

With over 2,200 777 aircraft ordered cementing Lars' enduring legacy as a pioneer of aviation engineering, his induction as a Museum of Flight Pathfinder is a fitting tribute to his creativity, perseverance and lasting impact on the region's aerospace industry.



### Michael P. Anderson





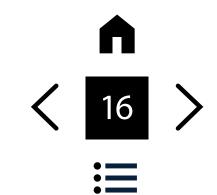
YEAR AWARDED
2015
CATEGORY
At Large

Astronaut Lt. Col. Michael Anderson set his eyes on aviation and aerospace at an early age. Inspired by the Apollo 11 Moon landing, "Star Trek" and "Lost in Space", Anderson dreamed of becoming an astronaut. He was also academically motivated and excelled in the sciences; a future career for NASA was the perfect combination of his interests and talents. In 1981, Anderson graduated with honors from the University of Washington with degrees in both physics and astronomy and was commissioned a Second Lieutenant in the U.S. Air Force. He logged over 3,000 flight hours for the U.S. Air Force. On top of his Air Force duties he found time to earn a masters in physics from Creighton University, making him a competitive candidate for an astronaut spot at NASA.

Selected by NASA in 1994, Anderson embarked on two missions in space, the STS-89 Endeavour (January 22-31, 1998) and the STS 107 Columbia (January 16-February 1, 2003). As mission specialist aboard Endeavour, Anderson conducted many experiments and assisted with the transfer of more than 9,000 pounds of equipment and hardware to the space station. He also became the first African-American astronaut to visit the Russian's Mir Space Station. In 2003, Anderson journeyed to space on the STS-107 Columbia. Appointed as a Payload Commander, Anderson was responsible for overseeing some 80 science experiments during the 16-day research mission. As Columbia started its re-entry into the atmosphere disaster struck, and the shuttle and its crew of seven were lost.

Anderson was presented many awards for his service in the Air Force, including the Defense Superior Service Medal, the U.S. Air Force Meritorious Service Medal, and the U.S. Air Force Achievement Medal with one Oak Leaf Cluster. Anderson was posthumously awarded the Defense Distinguished Service Medal and the Space Flight Medal.

Anderson enthusiastically spoke to countless youths emphasizing the importance of education and encouraging them to pursue their dreams. Anderson epitomizes the very essence of a Pathfinder, his dedication to science and space discovery coupled with his integrity and humility as a human being make him an ideal recipient for this award.



## Luella Mae Armstrong





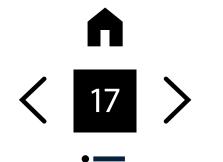
YEAR AWARDED 2019

**CATEGORY** Engineering

Luella Mae Armstrong was the only woman graduate in the 1951 University of Washington's Department of Engineering. She was the only woman in a class of 174 men. She has always strived to break stereotypes and continues to become an inspiring changemaker in the world of STEM. Armstrong never let social customs shape her goals and always reached far beyond the limit.

Engineers from The Boeing
Company were so impressed
by what Armstrong had
accomplished at UW
Aeronautical Laboratory, she
was guaranteed a career with
the company upon graduation.
Armstrong began her career
at Boeing with a position in
aircraft structural dynamics,

she continued to work there until she was dismissed due to a pregnancy, which was common practice at the time. After 22 years, she decided that it was time for her to return to work with Boeing. Twenty years later she retired, and received the Boeing Medal of Recognition for outstanding research and development on B-52 updates. She is honored by students at the National History Competition on Engineering and the University of Washington. Luella Armstrong has paved a pathway for future generations of women engineers.



## Bill Ayer





**YEAR AWARDED** 2012

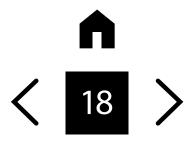
> **CATEGORY Operations**

As chairman of Alaska Air Group, the parent company of Alaska Airlines and Horizon Air, Bill Ayer guided the company through difficult industry times to emerge as one of the world's most respected carriers. Ayer began his career with Alaska Airlines in 1995 as vice president of marketing and planning, and later was elected president and chief operating officer. In 2002, he became Alaska's chief executive officer and, in May 2003, was named chairman, president and CEO of Alaska Air Group. Prior to his tenure with Alaska, Ayer spent 13 years at Horizon, where he held a variety of marketing and operations positions. Early in his career, Ayer founded Air Olympia, a commuter airline serving Washington state, and was a regional manager for Piper Aircraft Company.

Ayer led Alaska Airlines – the nation's seventh-largest airline, with 9,600 employees – through a business transformation, enabling it to overcome the extreme industry challenges that contributed to the bankruptcies of every other U.S. legacy airline. His achievements in aviation are rooted in the passion he brought to the areas of safety and compliance, employee involvement, technology, and environmental stewardship. Evidence of his success is reflected in Alaska Airlines ranking highest in airline customer satisfaction among traditional carriers for five consecutive years by J.D. Power and Associates.

Ayer is very involved in the community, serving on the University of Washington's Board of Regents and as chair of The Museum of Flight. He has a strong interest in education at all levels, supporting Aviation

High School and the University of Washington Foster School of Business, where he works parttime in the classroom. He also serves as chairman of Puget Energy and serves on the Angel Flight West Foundation Board. He is a graduate of Stanford University with a bachelor's degree in economics, and earned a master's degree in business administration from the University of Washington. Ayer holds commercial and flight instructor pilot certificates with instrument and multiengine ratings, and has over 4,500 hours of flight time. He owns a Piper Malibu, which he uses to fly Angel Flight West patients to their medical treatments.





#### C. Donald Bateman





YEAR AWARDED
2003
CATEGORY
Engineering

Few of the millions of airline passengers flying on any given day around the world know the name "C. Donald Bateman," and yet the work of this Pathfinder continues to play an inestimable role in making airline travel the safest form of transportation history has ever known. Bateman was born in Saskatchewan, Canada, in 1932. He received his bachelor's degree in electrical engineering from the University of Saskatchewan and, in 1958, moved to the Seattle area, where he has worked ever since.

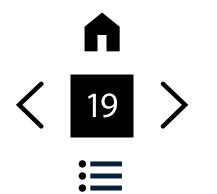
In 1968, while working at United Control Corp., Bateman began the development of what would become the Ground Proximity Warning System (GPWS). United Control went through several buyouts and is now part of Honeywell, but through all the corporate changes, Bateman continued his refinement of GPWS--a technology on which he holds more than thirty patents.

Prior to the widespread deployment of GPWS in the world's commercial and business aircraft, accidents involving controlled flight into terrain (CFIT) occurred on average once every twenty days, with an average of forty lives lost per accident. Since the adoption of GPWS, the aircraft fleet has grown more than threefold, but CFIT accidents have declined dramatically.

Employed by Honeywell as chief engineer for flight safety systems, Bateman has in recent years been instrumental in the development of enhanced GPWS (EGPWS). This great technological advance combines the radar altimetry

and other onboard sensors of traditional GPWS with a highly detailed virtual terrain database that allows the system to not just "look down" at terrain the aircraft might be converging with but to "see ahead" and project potential conflicts along the aircraft's path.

In the years to come, EGPWS will undoubtedly affect the same kind of quantum decrease in CFIT that GPWS produced in earlier decades, and Pathfinder Donald Bateman will be the reason why.



## Wellwood E. Beall





YEAR AWARDED 1989

**CATEGORY** Engineering

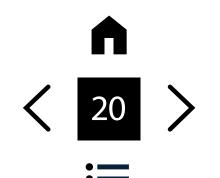
For Wellwood Beall the dream of flight began at age ten with the gift of a drawing board from his engineer father, and his fascination with the possibilities of flight never abated.

In the years to come, Beall would play a central role in the development of the Boeing Model 314 Clipper transoceanic seaplane and the B-52 Stratofortress, which has been the backbone of the Air Force bomber fleet.

Beall's aeronautical engineering background first brought him to the Boeing School of Aeronautics as a teacher. He moved to Seattle shortly thereafter and worked as a sales engineer; he then became the company's Far East manager. Frequent trips to China sparked

his enthusiasm for creating a commercial airplane to serve on long overwater routes. By 1936, he was engineer in charge of all commercial projects and had started working on the Boeing Clipper.

Beall also helped design the B-17 Flying Fortress and the 707 and 727 jetliners during his 30 years at Boeing. He died in 1978 and will long be remembered for his innovative contributions to the world of flight.



## Jeff Bezos





YEAR AWARDED
2016
CATEGORY
At Large

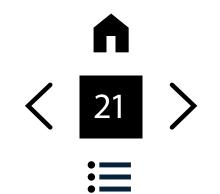
As the founder and CEO of Amazon. com, and also the founder of Blue Origin, and Bezos Expeditions, Jeff Bezos is revered as an entrepreneur and innovator. While he is best known for revolutionizing e-commerce, Bezos is committed to the development of low- cost, reusable private space flight technology.

Bezos' interest in outer space began at an early age, he recalls, "when I was five years old I watched Neil Armstrong step on to the moon and it imprinted me with a passion for science and exploration." While he didn't pursue commercial space as a direct career path, he always maintained long-term visions for the industry. After graduating summa cum laude from Princeton University with a Bachelor's degree in computer science, Bezos worked on Wall Street building network solutions for hedge funds. Despite carving a solid career in finance, Bezos had entrepreneurial leanings, and ventured west to start what has become America's largest online retailer, Amazon.com.

Bezos described his fortune and success with Amazon. com as his "lottery ticket" to quietly start Blue Origin, a space company founded on the principle of making human space flight more accessible. Since its launch in 2000, the Kent-based company has made a number of unprecedented accomplishments including successfully landing New Shepard, the first completely

reusable rocket. On July 20, 2021, he was part of the successful launch and return on the Blue Origin NS-16 spaceflight mission, along with his brother Mark Bezos, Wally Funk, and Oliver Daemen.

Bezos is both a pragmatic and visionary businessman, he is thus a perfect manifestation of a Pathfinder, implementing technology for the present and future benefit of humankind.



## William E. Boeing, Jr.





YEAR AWARDED 2010

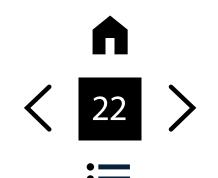
**CATEGORY** Education

Fueled by an unparalleled dedication to future generations, William E. Boeing, Jr. has spent a lifetime committed to furthering education and preserving aerospace history.

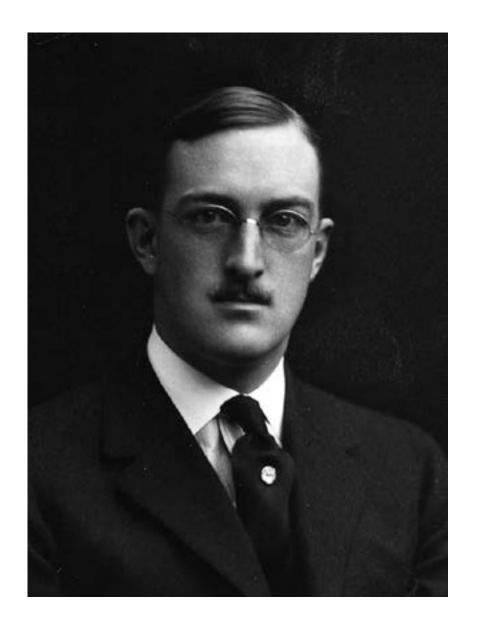
An insightful and driving force of The Museum of Flight from its earliest days, Boeing's wideranging career has put him in leadership positions from directorships at the Safeco Corporation, Pacific National Bank and Western Bancorp, to the chairman of Aldarra Management Company, to a trustee of Seattle University.

True to his family name, however, aviation has always held a special place in his life. He was instrumental in introducing the helicopter to Alaska and the Pacific Northwest, and as a trustee of The Museum of Flight, he has led the way in turning the Museum from a small, local attraction to one of international importance. His guidance and support has allowed the Museum to pursue its goal of becoming "the foremost educational air and space museum in the world."

His largely behind-the-scenes, with-little-fanfare influence helped bring about the capital campaign behind the T. A. Wilson Great Gallery, the Challenger Learning Center, the Tower exhibit, the J. Elroy McCaw Personal Courage Wing, the Washington Aerospace Scholars, and countless other contributions that helped to further the Museum's vision. Perhaps most important among his achievements, however, was his leadership in saving, moving, and restoring the historic Red Barn – without which the dream of The Museum of Flight may have never been realized.



## William E. Boeing, Sr.





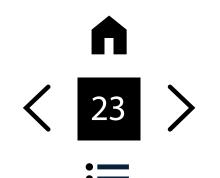
**YEAR AWARDED** 1982 **CATEGORY** Manufacturing William E. Boeing's interest in aviation began in 1914 during a flight from Lake Washington over Seattle. He learned to fly the following year, and soon he and Conrad Westervelt, a naval officer stationed in Seattle, were overseeing construction of two wood, fabric, and piano wire biplanes by a crew of 21 using a leased hangar as a factory. Boeing incorporated the enterprise as Pacific Aero Products in July 1916.

Soon thereafter, the fledgling company became The Boeing Airplane Company and started production of 50 training aircraft for the U.S. Navy. During the post-war decline in the aircraft market, Boeing kept his company alive by producing bedroom furniture and speedboats.

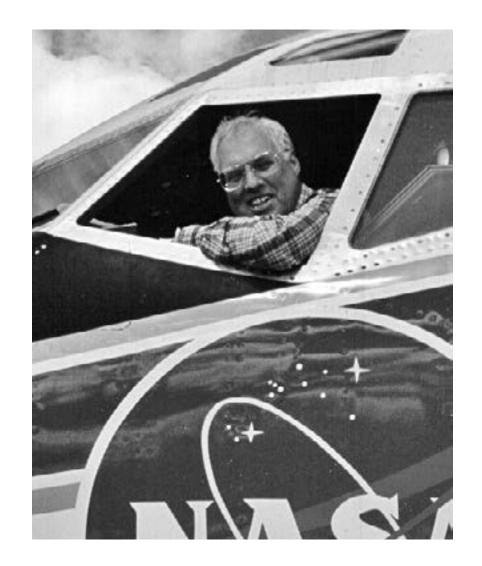
On March 3, 1919, Boeing and his pilot, Eddie Hubbard, carried the first sack of international airmail from Vancouver, B.C., to Seattle. This air-pioneering venture led to the company's entry into the domestic airmail business in 1927. In 1928, when the company had become one of the nation's largest aircraft plants with 800 employees, Bill Boeing offered company stock to the public.

Much of The Boeing Company's success can be attributed to Bill Boeing's philosophy and practice of surrounding himself with enterprising associates. He understood the importance of research and experimentation. In 1916, he said, "I've tried to make the men around me feel, as I do, that we are embarked as pioneers upon a new science and industry in which it behooves no one to

dismiss any novel idea with the statement that 'it can't be done." Bill Boeing was active in the aviation industry for just 18 years, but few men have had such great impact on the development of a single industry.



## Robert Bogash





YEAR AWARDED
2021
CATEGORY
At Large

Bob 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.

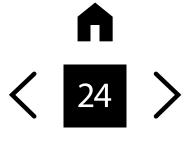
Bogash graduated from
Rensselaer Polytechnic Institute
with a Bachelor of Science in
Mechanical Engineering and is
also a licensed fixed wing pilot
and flight engineer. This led to
a distinguished 30-year career
at The Boeing Company. He
played a key role in supporting
legendary Boeing VP Richard W.
Taylor in developing two-pilot
flight decks and the use of twinengine jetliners for extended
twin operations known as

eTOPS. He also developed an all-new 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 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, managing numerous major projects for the institution. Important aircraft for which he was a leader in obtaining include the Boeing prototypes of the 727 and 747 airplanes, a de Havilland Comet 4C, a NASA Lockheed F-104, a Boeing B-52, the Lockheed Model 10 Electra, the Lockheed Super G Constellation, and a US Navy A-4 Skyhawk flown by the Blue Angels. A particular acquisition that Bogash is extremely proud of is the British Airways Concorde.

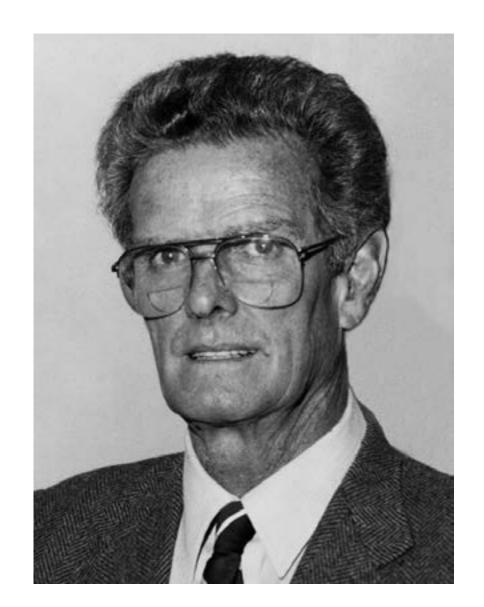
He has participated in the restoration of numerous historical aircraft. Of note, Bogash led the restoration of the prototype 727 to flying condition; the airplane was successfully flown to Boeing Field in 2016 after sitting dormant for 25 years. He also led the restoration of the prototype 737 airplane, maintaining it in airworthy condition for 6 years at Moses Lake, Washington, until it too was successfully flown to the Museum in 2003.

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.





#### Peter M. Bowers





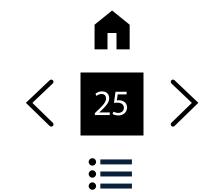
YEAR AWARDED 1992 CATEGORY

Education

Peter Bowers, a prolific author who submitted his first aviation article when he was a high school student in 1938, became one of the world's most widely respected aviation historians. Over the past five decades, he wrote dozens of books and hundreds of articles. He also amassed one of the largest private collections of aviation photographs in the United States. Bowers' holdings of more than 150,000 images are particularly strong in World War I aviation; they include 50,000 filed negatives, 100,000 filed photos, and several thousand unfiled photos.

During his remarkable 36-year Boeing career, Bowers served as a flight-test engineer and as editor of several company publications. Throughout his tenure, he maintained a prolific pace in article and book writing. One of his books, Boeing Aircraft Since 1916, first published in 1966 by Putnam and reissued in 1989 by Naval Institute Press, serves as a standard reference work.

While he is best known for his writing and photo collecting, Bowers also made significant contributions as a pilot and aircraft designer. An accomplished pilot who learned to fly in 1948, he flew more than 120 different aircraft types, ranging from conventional powered aircraft to homebuilts and experimental gliders. The recipient of numerous international awards, Bowers continued to help preserve the aviation history he witnessed and generously served as a resource for others in the aviation community until his death in April 2003.



## Harl V. Brackin, Jr.





YEAR AWARDED 1984

**CATEGORY** Education

Harl Brackin joined the expanding Boeing wind tunnel staff in 1942 as a lead model designer in several World War II military programs. After the war, he took on the task of compiling and maintaining historical records of the company's earlier preliminary designs and assigning model-number designations to new design concepts. Soon Brackin was the acknowledged authority on Boeing's product genealogy.

He was interested not only in Boeing's historical roots, but also in the product developments that would mark the company's future. It was Brackin who convinced the company of its need for a

history room and for service of ongoing company operations. In 1962, the significance of his effort was affirmed when Boeing elevated Brackin to corporate administrator of historical services.

Over the years, Brackin's work attracted a growing cadre of aviation enthusiasts both within Boeing and outside the company who shared his love of and respect for aviation history. He was a motivating force in the founding of the Pacific Northwest Aviation Historical Foundation in 1965. He sparked the concept of a regional air museum, and then worked tirelessly to gain public support for preserving the original "Red Barn" Boeing factory as its centerpiece. In addition, he spent countless hours as director of PNAHF's Museum of Flight at the Seattle Center.

All along, Brackin worked to ensure that his priceless records of creation and achievement in aviation should be preserved for the generations to come. By his own achievements, he has earned a very special place among the many Pathfinders that he himself was the first to honor.

**1** 26 >

#### Dr. Walt Braithwaite





YEAR AWARDED
2017
CATEGORY
Engineering

A visionary thinker and gifted leader, Dr. Walt Braithwaite revolutionized The Boeing Company's workflow and global reach while contributing to the evolution of computer technology as a whole.

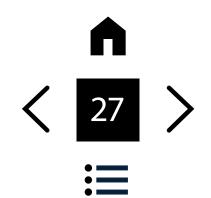
He was born in Kingston,
Jamaica with an intrinsic sense
of curiosity and tenacity.
An eager young inventor,
Braithwaite took apart his toys
at Christmas and transformed
them into circuits using
recycled household materials.
When he reached adolescence,
Braithwaite had already served
as an apprentice at a local
machine shop and embarked
on a correspondence course in
engineering.

Braithwaite graduated from the American Institute of Engineering and Technology in 1965 with a B.S. in engineering. He went on to receive a Master's degree in computer science from the University of Washington and a Master's of Science in Industry Management from MIT as a Boeing Sloan Fellow. Eventually he completed his PhD at Rushmore University.

Braithwaite joined Boeing in 1966 as a tool engineer and quickly proved himself, holding several prestigious positions throughout his 36year career. One of his most notable contributions was his bringing computer-aided design to Boeing. Known as the "Father of CIIN (CAD/ **CAM Integrated Information** Network)," Braithwaite introduced networked design/ manufacturing systems, changing the way airplanes are designed and produced. Braithwaite shifted into a corporate assignment, executing a number of initiatives including a plan for disaster preparedness.

Braithwaite then led the effort to bring the company's presence to Africa in his role of president of Boeing Africa. Through community and offset work, Boeing successfully expanded its business in Africa under his leadership.

Braithwaite's impact extends far beyond his technological and industry influence. He was a firm believer in "getting the job done quietly," and was regarded throughout Boeing for his integrity, wisdom and amiable, unassuming demeanor. Dr. Walt Braithwaite's proactive nature, astute foresight, and transformative role in the aviation industry truly qualifies him as a Pathfinder.



## Gladys Dawson Buroker





YEAR AWARDED 1989

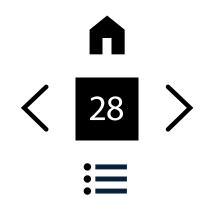
**CATEGORY** Education

Gladys Buroker began chasing airplanes when she was five, and at age 18 she soloed in an OX-5 Waco 10 biplane after only five hours of instruction--the shortest recorded pre-flight training period in the nation. She bought her first airplane at 21, and spent the next several years wing-walking, parachuting and barnstorming her way across Washington.

After earning both her flight instructor's and commercial pilot's licenses, Buroker became the first woman flight instructor at St. Martin's College in Lacey, Washington. She taught military pilots during the war in all phases of primary, secondary, and cross-country training, and later opened a flight school where she created her own curriculum. One craft

she flew during those training sessions was the Fairchild F-24W Fowarder--originally custom manufactured in 1941 for famed ventriloquist and actor Edgar Bergen--that now hangs in the Museum's Great Gallery.

In the post-war years, Buroker logged more than 18,000 hours on various powered aircraft, gliders and hot air balloons and earned her instrument and glider ratings. She was honored with the 1989 OX-5 Aviation Pioneers' Outstanding Woman's Award and the Elder Statesman of Aviation award in 2000, becoming the first female balloonist selected for this prestigious aviation award.



## Michael Carriker





YEAR AWARDED 2013

CATEGORY

Flying

Mike Carriker has been a test pilot and the pilots' voice behind Boeing innovation for more than two decades. He joined The Boeing Company in 1990 and served as the 737 senior project pilot and then chief project pilot for the 737 Next Generation series. In 2001, he became the Sonic Cruiser Chief Project Pilot and, in that role, transitioned to the 787 Dreamliner program in 2003.

Carriker guided the design team for the 787 Dreamliner. He leveraged new technologies while ensuring a smooth transition from the pilot interfaces of the 777 and minimizing training differences for Boeing's customers. He advocated for and introduced many improvements to the 787's instrumentation and control systems, which lead to numerous safety and operational benefits.

Finally, Carriker led the test team responsible for planning and executing the 787's flight test program, and on December 15, 2009, he captained the first flight of the Dreamliner. The program was awarded the Collier Trophy in 2011 – Boeing Commerical Airplane's first Collier win since the 777.

Carriker authored a chapter of the Society of Experimental Test Pilots' Experimental Flight Test manual. He is a Fellow in The Society of Experimental Test Pilots, and has received the Ray E. Tenhoff award, the AIAA Octave Chanute award, and the SETP Iven C. Kincheloe award for outstanding test pilot of the year.



### Scott Carson





**YEAR AWARDED** 2022

**CATEGORY** Manufacturing In a life of noteworthy accomplishments, perhaps Scott Carson's greatest achievement was his leadership at The Boeing Company during the Great Recession of 2008. Born into an aviation family with deep roots in the Pacific Northwest, Carson rose through both the defense and commercial sides of the company – climbing all the way to the head of Boeing Commercial Airplanes.

Carson joined the Air Force after high school, serving in Thailand as an armament crew chief. After returning home, he became a 2nd shift engineering aide at Boeing. He was laid off in 1970 during the Boeing Bust, the era of the infamous "will the last person leaving Seattle turn out the lights?" sign, which signaled just how grim the region's residents had become. He rejoined Boeing the following year with his business

degree from Washington State University, and as the company recovered, so did Carson's career.

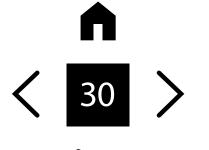
The recession was a difficult time for Boeing, and orders dropped 90%. Despite the turbulence, Carson charted a flight path that led to the longest steady production rate in the history of the company, breaking Boeing's historic boom and bust cycle. His cool, professional approach under pressure resulted in Boeing, and Seattle, making it through the recession in much better shape than would have happened otherwise.

After resolving the strike, Carson used scheduling strategy to keep production on track. As customers deferred deliveries, his division dynamically shuffled production priorities, focusing on finalizing orders for airlines who were ready to pick up their airplanes, even if they might normally be further back in

the queue. This kept Boeing Commercial, its employees, and the employees of the many businesses in the region that depend on Boeing's success, on target.

Beyond his accomplishments in the aerospace industry, Carson is most passionate about advancing educational opportunities in the Pacific Northwest. His philosophy has always been to leverage education to open doors. A strong supporter of WSU, he served on the Board of Regents and chaired the university's successful \$1 billion campaign. Scott Carson's love of flight came full circle when he became a trustee at The Museum of Flight, an institution his family helped found. He continues to advance the Museum's education programs, opening those doors to the next generation of pilots, engineers and business leaders.







## John Cashman





YEAR AWARDED 2014

**CATEGORY** Flying

One of the most respected test pilots in the industry, Capt. John Cashman's 40-year contribution to the advancement of commercial aviation has left an indelible impression that will be felt for generations to come.

Commanding the first flight

of the Boeing 777 and serving as the chief engineering test pilot for the aircraft's extensive fight-test program, Cashman guided the award-winning design of the flight deck and systems affecting flight operations of Boeing's first flyby-wire commercial airliner. Additionally, Cashman has piloted several maiden voyages, including the Rolls-Royce E4powered 757, 767-200ER, 767-400ER, Rolls-Royce-powered 767- 300ER, General Electricpowered 747-400, 777-200ER, 777-300, and the 777-300ER. He also participated in the development of the 787 and 747-8 airplanes.

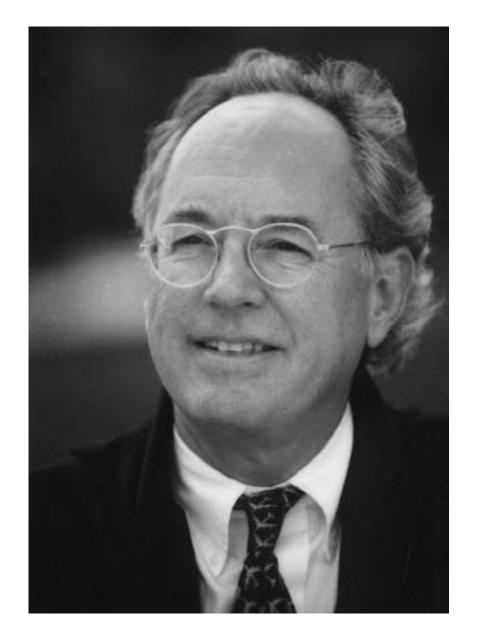
In April of 1997, Cashman helped set a national and international distance and speed around-the-world record in the 777, shattering a previous record in its weight class. In November of 2005, he again helped to set a new distance record in the 777, making the longest flight in history for a commercial jet aircraft, covering 11,664 nautical miles in 22 hours and 42 minutes.

Having accumulated more than 10,000 flight hours, Cashman is rated as captain on the 727, 737, 747, 747-400, 757, 767, 777, L1011 and – most recently – the 787 Dreamliner. Named director of Boeing Flight Crew Operations in October 1997, Cashman was responsible for the management and leadership of all Boeing Commercial flight test pilots, navigators, and flight engineers until his retirement from Boeing in 2007.

Among his many accolades, John has received the Iven C. Kinchelow Award from the Society of Experimental Test Pilots in 1995 and in 2007 the Society's Tony Levier Flight Test Safety Award. In 2006, he received the Brackley Memorial Trophy, a prestigious award from the British Guild of Air Pilots and Air Navigators. He also received the Aviation Week & Space Technology "Laurels Award" in 1995, and the Alumni Society Merit Award for Aerospace Engineering by the University of Michigan in 2000. In 2011, he was named an Elder Statesman of Aviation by the National Aeronautics Association.



## Joe Clark



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YEAR AWARDED
2008
CATEGORY
Manufacturing

Entrepreneur, aviation enthusiast, business leader, and pilot Joe Clark has changed the profile of jet transport airplanes with the sculpted shape of Blended Winglet technology on the wing tips of modern jets—winglets vastly reduce drag, and improve structural dynamics and airplane performance.

Joe's history as an innovator and entrepreneur started in the 1960s with his interest in the then-new Lear Jet airplane, for which he became a salesman and later a dealer. Progressing through a diverse career, Joe worked in sales for Raisbeck Engineering, became a founder of Horizon Air, distributed exmilitary jet aircraft for civilian use, and then created Aviation

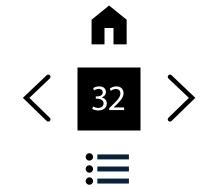
Partners, Inc.--the company that now produces Blended Winglets for several aircraft manufacturers.

Joe was a principal in organizing Friendship One, the round-the-world flight of a Boeing 747 SP. The flight raised \$530,000 for children's charities and broke the world speed record for circumnavigation of the globe on January 31, 1988. The record started from and finished at The Museum of Flight.

Joe was named the Michael A. Chowdry "Aviation Entrepreneur of the Year" in 2004 and was awarded the Living Legends in Aviation Award. In 2008, he was inducted into the prestigious Horatio Alger Association, which honors individuals who have overcome

adversity through hard work, perseverance, and integrity to achieve personal and professional success.

Joe Clark is a Pathfinder carrying forth the best legacy of great leaders in aviation history. His is the talent to take worthy ideas through challenging paths to closure, to transform worthy concepts into realized accomplishments, and to make the whole greater than the sum of its parts.



### Phil Condit





SON

YEAR AWARDED 2018

**CATEGORY** Operations

Phil Condit's infatuation with aviation matured from papering a PAN-AM route map on his bedroom wall, to flying lessons at age 15 and earning a private pilot certificate. He completed a degree in Mechanical Engineering at UC Berkeley and a Masters in Aeronautical **Engineering at Princeton where** he met Professor Cortland Perkins, a famous authority in aviation who told him "get out of here...you need to make things." Condit took the advice and joined Boeing in 1965 as an aerodynamicist on the SST.

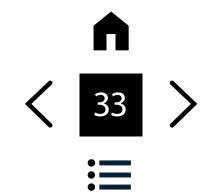
Phil then moved into his role as 747 High-Speed Aerodynamics Lead Engineer, where he led the solution to the wake vortex problem generated by the 747. The solution still prevails using the designation "Heavy" to describe aircraft with significant wake vortices.

Condit moved to Marketing Management supporting 727 product innovation and sales campaigns and then was selected for the prestigious Sloan Fellowship program at MIT. He returned to Boeing as manager of New Program Planning, and then Director of Program Management for the 707/727/737 Division. In 1978 he was appointed Chief Project Engineer of the new 757 program. He led the implementation of a common pilot type-rating for the 757 and 767 airplanes which was a breakthrough and stimulated sales of both models. On the 757, Phil implemented numerous 'people first' and team-based initiatives which revolutionized airplane development at Boeing and led directly to the Working Together Principles incorporated on the 777 Program.

Phil was then selected as Executive VP of BCA. His technical experience and conscious intention to instill a sense of community and transparency made the 777 program unique as a technological, cultural and business success.

In 1992, Condit was selected as Boeing President and then in 1996 as CEO, where he led the acquisitions of Rockwell Aerospace and Hughes Space and Communications, and the merger with McDonnell Douglas.

UAL executive Jim Guyette, who cosigned the 777-launch document said "Phil Condit is one of those very rare leaders who excels at each, dreaming and doing, and has the ability to join them together. A very special talent. A Pathfinder."



## Ray Conner





YEAR AWARDED 2023

CATEGORY
Manufacturing &
Operations

Ray Conner, former vice chairman of The Boeing Company and president and **CEO of Boeing Commercial** Airplanes (BCA), is described by his colleagues as a pioneering, humble leader who deeply appreciates the importance of meaningful, long-term relationships in the aerospace industry. His Boeing career began as a mechanic on the 727 and ultimately spanned 40 years. He led Boeing's propulsion division, served as the vice president and general manager of the 747 and 777 programs, held multiple positions in sales, and led BCA's supply chain and management operations. During his tenure, Conner solidified and expanded Boeing's prominence in aerospace, deepened its ties to the Pacific Northwest, and managed relationships with Boeing's employees, customers, regulators and others across the industry.

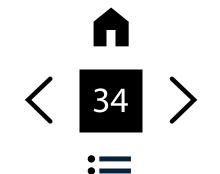
During the years Conner led BCA, the company increased in production rates across airplane models, breaking annual delivery records and out delivering its main competitor, Airbus, every year. He also ensured that the Northwest would remain the world's premier region for aviation innovation and manufacturing.

Conner managed a workforce numbering in the tens of thousands, many of whom called the Puget Sound region home. He represented his company's interests in negotiations between Boeing and its employees' unions, and ultimately secured Everett as the site of manufacture of Boeing's next generation 777X and its composite wing.

No description of Conner's tenure would be complete without comment on the greatest challenge he faced—the grounding of the 787 fleet due to battery issues, which occurred just six months after he moved into position. Many

have spoken at length about the leadership he provided during those critical months and senior aerospace leaders have praised his steadfast guidance as indispensable during the grounding, and indeed as the primary reason that Boeing emerged stronger—with its key customer, supplier and regulator relationships intact. Boeing did not lose a single 787 customer from the grounding.

Other corporate and government leaders describe Ray Conner as someone who deeply appreciates the importance of profound, longstanding relationships in the aerospace industry. As summarized by Brad Tilden, former chairman and chief executive officer of Alaska Air Group, "Over his long and successful career, he has earned a reputation for doing the right thing, both for customers and for employees. Many leaders aspire to this worthy goal, but Ray has actually done it."



## William H. Cook, Jr.





YEAR AWARDED
1993

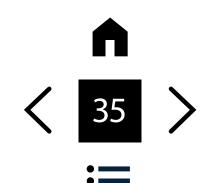
**CATEGORY** Engineering

William Cook's influence on the development of several successive Boeing aircraft distinguishes him as an engineer of extraordinary versatility and accomplishment. A Texas native, he earned a mechanical engineering degree in 1934 and a master's degree in science from the Massachusetts Institute of Technology in 1938. When he joined the Boeing Airplane Company in July 1938, he was one of just 235 engineers in the company.

Among Cook's contributions to Boeing were designing a revolutionary high-speed wind tunnel, serving as project engineer on the B-29 Superfortress, and acting as head of the development team for the world's first swept-wing jet bomber, the B-47 Stratojet. In the 1950s, Cook went on to lead the Boeing missile program and, later, the Transport

Division, where his research led to the 727 wing design. In 1959, Cook headed the Boeing Supersonic Transport feasibility study, which led the technical development of the Boeing SST through 1967.

Cook's professional distinctions include serving as a member of the NASA Subcommittee on Operating Problems and receiving the S.A. Reed Award from the American Institute of Aeronautics and Astronautics in 1968. He also wrote the well-regarded Road to the 707: The Inside Story of Designing the 707. Published in 1991, the book chronicles the evolution of jet transport technology.



## Carolyn Corvi





YEAR AWARDED
2011
CATEGORY
Manufacturing

Over her 34-year career with The Boeing Company, Carolyn Corvi worked to challenge the status quo and fundamentally redefine traditional commercial airplane production. Her vision had an indelible impact on the way commercial airplanes are designed and built. Simply put, she believed that airplanes could be— and should be—produced much more efficiently.

As a student of the Toyota Production System, Corvi began applying the principles of lean manufacturing, first in 1995 as Vice President of Boeing's Propulsion Systems Division, and then in 1998 as Vice President of Aircraft Systems and Interiors. From 2000-2005 she served as Vice President and General Manager of the 737/757 Programs, where she led the implementation of Boeing's Lean Production System in airplane assembly. Industry-leading "Lean"

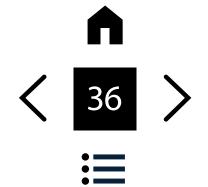
principles that reduce waste, foster employee engagement, focus on the customer, and create a culture of continuous improvement remain alive and well today.

Fundamental to this transformation was the implementation of a moving assembly line, enabling onepiece flow. Inventory turns improved by an unprecedented 357 percent, while days required for airplane assembly were reduced from 23 to 10. Elimination of excess inventory opened floor space. As a result, design engineers and all program administration were able to relocate to the factory, adjacent to the moving assembly line, speeding communication, and enabling improvement in both design and manufacturing processes.

Other Boeing commercial airplane programs have benefited from Corvi's Lean leadership. In 2003, the 777 program team began its

Lean journey. To date, they have realized a substantial improvement in assembly flow time and inventory turn rates. The 767 and 747 programs have also followed suit.

From 2005 until her retirement in December 2008, Corvi was Boeing Commercial Airplanes Vice President and General Manager of Airplane Programs. As Boeing's Lean leader, Corvi continued to spearhead Boeing's Lean cultural transformation while implementing industry-leading production practices inside of Boeing and in the supply chain. Underlying her success is the conviction that sustainable culture change in a complex process is dependent on principled leadership; leaders accomplish constructive change only through motivated and impassioned people whose minds, hands and hearts are close to the work.



#### A. Scott Crossfield





1998

Scott Crossfield's distinguished career in aviation began in 1942 when he was a U.S. Navy fighter pilot and fighter gunnery instructor. From 1946 to 1950, he was the chief operator of the University of Washington's F.K. Kirsten Wind Tunnel. From 1950 to 1955, he was an aeronautical research pilot for the National **Advisory Committee on** Aeronautics (NACA) at the High-Speed Flight Station at Edwards Air Force Base. Crossfield played a major role in the testing of many experimental aircraft and, in 1953, became the first pilot to fly at twice the speed of sound. He did so in the rocket-powered Douglas D-558 aircraft.

From 1955 to 1961, Crossfield was the design specialist and chief engineering test pilot for North American Aviation,

Inc., in its Los Angeles division. As project pilot, he flew the first 30 demonstration flights of the X-15. In 1967, he joined Eastern Airlines as a division vice president. After four years, he was promoted to staff vice president and worked transportation development issues for the airline. He left Eastern Airlines in 1974 to assume the position of senior vice president at Hawker Siddeley.

Crossfield also worked as an independent technical consultant for several corporations, House committees and subcommittees, NASA, and the FAA. He was awarded more than 40 prestigious honors, among them the Collier and Harmon Trophies and NASA's Distinguished Public Service Medal in 1993 for his

contributions to aeronautics and aviation over a period spanning half a century. He is also the only American to be honored in the White House for his contributions in advancing aeronautical science--or any other discipline--more than once. Posthumously, he has been awarded the Hoyt S. Vandenburg Award, the Paul Tissandier Diploma, the Victor A. Prather Award, and the Donald D. Engen Award.

**YEAR AWARDED** 

**CATEGORY** Flying



# Joseph E. Crosson





YEAR AWARDED
1984
CATEGORY
Operations

In 1926, Joe Crosson was invited to join the Fairbanks Airplane Company and he started a lifetime career of developing airways in Alaska. He became chief pilot for the company, and in the next years his logbook became studded with "firsts" in flights to new locations in Alaska: first over the Brooks Range, first flights to Point Barrow and Bethel, first winter flight to Nome, and first flight over Mt. McKinley. His leadership of search and rescue missions became legendary in Alaskan history.

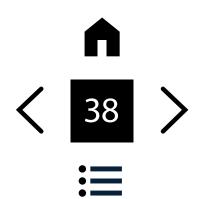
In 1928, Crosson joined the Wilkins-Eielson expedition to Antarctica. When he returned to Alaska in 1929, he joined Colonel Ben Eielson in forming Alaskan Airways. In 1935, when

he was with Pan American Airways (PAA), Crosson made world history with his flight to Nome and back to Seattle, when he brought out Wiley Post's and Will Rogers' remains.

Under Crosson's leadership, beginning in 1932, PAA pioneered the most advanced professional aviation concepts. He assembled a group of the finest pilots in Alaska, introduced instrument flying techniques, and extended air service from Fairbanks to Juneau and, in 1940, to Seattle, thereby establishing the first commercial air route between Alaska and the continental U.S.

Crosson grasped early Alaska's geographical significance in linking Europe and Asia by air. He was tireless in making the case for Alaska's importance

to the United States and to the future of world aviation. For his pioneering role in the development of air transportation in Alaska, and especially for his leadership in bringing Alaska into the mainstream of world aviation, Joe Crosson was a Pathfinder in the real sense of the word.



# Suzanna P. Darcy-Hennemann





39

**YEAR AWARDED** 2010 **CATEGORY** Flying Chief pilot, director of Boeing Flight Training, and responsible for the company's operation in 20 campuses globally, Suzanna Darcy-Hennemann is a pilot of "firsts." Boeing's first woman test pilot. The first to captain a 747-400. The first to captain a 777.

Joining Boeing in 1974 as a tech aide, Darcy-Hennemann learned to fly through the **Boeing Employees Flying** Association and graduated with a BS degree in Aeronautics and Astronautics Engineering from the University of Washington in 1981.

With a combination of aptitude and grace under pressure, she has achieved captain status on the Boeing 737, 747, 757, 767 and 777 jetliners. However, it is the Boeing 777 with which she is

most closely associated, having contributed to design, testing and certification of the initial airplane and later models. And perhaps most famously, Darcy-Hennemann commanded the 777-200LR on its 21,602km flight from Hong Kong to London in 2005, breaking the world distance record and two speed records.

Among her numerous honors, she has received the prestigious Laurels Award for Leadership from Aviation Week, was identified as one of the top 100 graduates of the University of Washington, and in 2010, was inducted into the Pioneer Hall of Fame for Women in Aviation International.

#### Bonnie J. Dunbar





YEAR AWARDED 1990

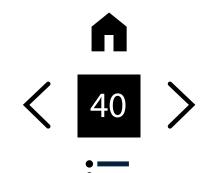
**CATEGORY** At Large

In less than two decades,
Bonnie J. Dunbar achieved a
lifetime of success. A gifted
scholar and educator, a
pioneering engineer, and a
skilled pilot and astronaut,
Bonnie Dunbar epitomizes the
new breed of Northwest flight
pioneers.

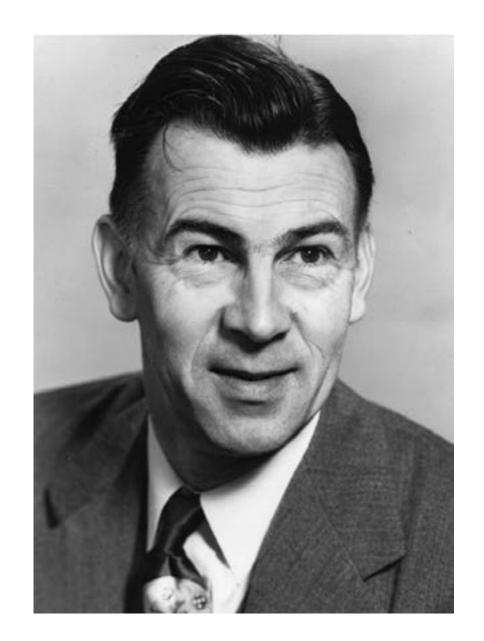
Dunbar first started thinking of space flight when she was a young girl in Outlook, Washington, as she looked into the night skies and dreamed of becoming an astronaut. In 1967, she started on that career path when she enrolled at the University of Washington, where she participated in early space shuttle research. Following attainment of a master's degree in ceramic engineering and several years of scientific study in the private sector, Dunbar joined NASA in 1978 as a MCC Flight Controller. In 1983, she obtained a Ph.D. in mechanical engineering.

In 1980, Dunbar's lifelong dream to fly in space was realized when she was named a NASA astronaut. Beginning with Spacelab in 1985, to date she has logged over 1,200 hours in space in five Space Shuttle Missions: STS-61-A, STS-32, STS-50, STS-71, and STS-89.

Dunbar has served as adjunct professor in mechanical engineering at the University of Houston and also held several upper management positions at NASA Johnson Space Center, including associate director. A member of the National Academy of Engineers, she has received dozens of professional awards, including the NASA Outstanding Leadership Medal and five NASA Space Flight medals. Dunbar is the past president and CEO of The Museum of Flight and currently serves as Professor of Aerospace Egineering at Texas A&M.



#### Fred S. Eastman





YEAR AWARDED
1986

**CATEGORY** Education

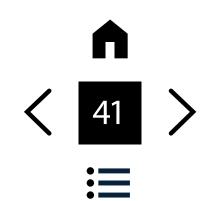
Fred Eastman graduated from MIT in 1929 with a master's degree in engineering. The Guggenheim Foundation had just donated funds to his alma mater, the University of Washington, to establish a course of study in aeronautics, and Eastman returned to Seattle to launch the new aeronautical engineering program.

During his 41 years at the University of Washington, Professor Eastman applied his exceptional skills to both teaching and engineering. When aeronautical engineering became an independent department in 1947, he served as its first chairman and expanded the program to offer a master's degree and

later a doctorate. Some of the Northwest's most prominent aeronautical engineers were among Fred Eastman's students. He was known by his students for his demanding expectations and great fairness.

In the early 1930s, while the University of Washington was developing its new wind tunnel, Eastman designed an ingenious electrical balance system. His innovations resulted in significantly more reliable wind tunnel data, but he refused to patent his device, believing that its use should be widely encouraged.

Eastman kept an active mind even after retirement. In later years, he researched moveable wings as a possible propulsion system for low-speed flight. His long career in forming the aeronautical engineers of today makes him a true Pathfinder.



## Clairmont L. Egtvedt



Clairmont "Claire" Egtvedt joined Boeing as a draftsman in 1917 after graduating from the University of Washington with an engineering degree. His leadership potential soon became apparent. At a time when William E. Boeing was advancing money from his personal account to meet the payroll and the company's future was in jeopardy, Egtvedt had ideas. With characteristic fearlessness, he met Bill Boeing head-on with his convictions. "We are building airplanes, not cement sidewalks," he said. "The airplane isn't half what it ought to be. Can't we hire a few engineers and try to build a future?"

"I think Claire is right," was Boeing's reply. Calculating speed, maneuverability, and loads, Egtvedt designed a pursuit plane, the best that could possibly be built. The 1923 PW-9 ("PW" stood for "pursuit water-cooled") was the start of long line of Army pursuit planes and Navy carrier fighters. By 1926, Egtvedt and his staff had developed a still more advanced fighter, powered by an air-cooled engine--the Pratt & Whitney Wasp.

In 1927, while Charles Lindbergh headed out over the Atlantic for Paris, Boeing was building Model 40 planes to carry mail over Chicago-to-San Francisco and other routes. By the end of June, 25 planes waited to begin the transfer of U.S. mail to the new airline--Boeing Air Transport System.

Under Egtvedt's guidance and leadership, the single-engine Model 40 and the bigger Model 80 gained acceptance and fame. Claire Egtvedt, now general manager of the plant, was just beginning to achieve his potential. He would later become operations vice president, then president, and in 1939, chairman of the board. His contributions to modern aviation still benefit us today.



YEAR AWARDED
1982
CATEGORY
At Large



#### Ben Ellison





YEAR AWARDED 2022

**CATEGORY** Education

Ben Ellison understands firsthand the power of mentorship. After spending his childhood watching B-17 and B-29 bombers taking off from Boeing Field, he earned his pilot's license by age 16 and then taught his brothers to fly.

Ellison has had a noteworthy career in aviation and engineering but is best known for creating an amphibious airplane known as the Gweduck. Ben Ellison had established a shop at Renton Municipal Airport supplying throttle body injectors for general aviation. Operating from the shop, Ellison set to work on his designs with Ross Mahon and other likeminded folks, including Ellison's brother Marty. They hoped to provide significant operational improvements over the Grumman G-44 Widgeon, especially during takeoff and landing. Ellison and team set out to design and build an

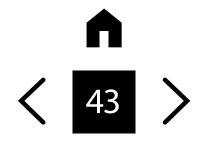
amphibious aircraft made with composite materials, using the principles his mentor (and Pathfinder) Bill Cook had passed on to him years earlier.

Together, they established a set of design requirements and specifications for their plane. They performed model testing to define the "boat hull" for the bottom of the fuselage, selected airfoil shapes, refined the configuration, completed the structural analysis, and eventually proceeded to manufacture the airplane, which first flew in 2009. Aviation magazines praise the Gweduck, describing its unique features and performance. Ellison is working with Composite Creations in Oregon to build kit versions for pilots who want their own Gweduck.

Ellison never stopped mentoring. He continues to engage young people, helping them uncover their life goals and guiding them

as they develop plans to pursue their dreams. Ellison sees youth mentorship as a life-long avocation, and he stays involved with Raisbeck Aviation High School. Ellison funded scholarships for students pursuing engineering at Washington State University and collaborated with The Museum of Flight to establish the Benjamin L. Ellison Future Pilot Scholarship, an annual award which provides two students up to \$12,000 each for flight instruction toward a Private Pilot Certificate. The Benjamin & Nancy Ellison **Education Endowment ensures** funding for this flight training program will continue into the far future.

Ben Ellison spent a lifetime in love with airplanes, designing, flying and most of all, with giving his time, energy and resources to encourage young people to take flight.





#### Einar Enevoldson





**YEAR AWARDED** 2024 **CATEGORY**  From the age of 15, when he set a world-record in his engineering of a glider model, to the end of his career at the National Aeronautics and Space Administration (NASA), Enevoldson constantly pushed the limits of possibility to make his own path. His career continued to soar, and after a short time learning about sailplanes in El Mirage, Enevoldson joined the United States Air Force.

Enevoldson's seven time to climb records in the Lockheed F-104 earned him a Distinguished Flying Cross, demonstrating the impact his passion could make. After his time in the military ended, he piloted an assortment of experimental aircraft for NASA, including the X-24B and Grumman F-11.

Proving his versatility to be limitless, Enevoldson broke the boundaries of aerospace technology with his memorable contributions, earning him two NASA Exceptional Service Medals. These awards celebrated his trailblazing role in the General Dynamics F-111 supercritical wing program and his work as a project pilot on the Grumman F-14 stall and spin resistance tests.

His pioneering spirit continued with Grob Aerospace in Germany, where he set numerous altitude records in high-altitude reconnaissance aircraft. Enevoldson explored the upper atmosphere with gliders in his leadership position for the Perlan Project, achieving a sailplane altitude record of 50,724 feet, which laid the groundwork for the stratospheric exploration in Perlan II. Enevoldson's

relentlessness and technical expertise epitomize the qualities celebrated by the Pathfinders Award, and his legacy of ambition is an inspiration for others pursuing their own unique vocations.





#### Steve Fulton





YEAR AWARDED
2011
CATEGORY

**Operations** 

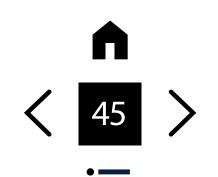
Steve Fulton is a pioneer in the design of modern Performance-**Based Navigation (PBN)** instrument flight procedures. As a Technical Pilot at Alaska Airlines beginning in 1992, he led the development of improved aircraft departure and arrival operations at Juneau, Alaska using a system called Required Navigation Performance (RNP), an advanced form of PBN. The RNP procedures ensure that the aircraft always flies inside a precisely defined "tunnel" in the sky and alerts the crew if there is any deviation. The RNP arrival and departure procedures certified for operations in the Juneau Gastineau Channel were the world's first RNP procedures, and are still flown by Alaska Airlines. The methods and standards developed in the original deployment of RNP at Juneau have been adopted into FAA and ICAO documents published in subsequent years that provide guidance for RNP procedure design and operations worldwide.

Juneau, the capitol of Alaska, is accessible only by air and sea. The prevailing weather in Juneau causes prolonged periods of low clouds that, previous to RNP, interrupted travel and government functions RNP arrivals and departures allow instrument operations under low weather conditions. RNP procedures in Juneau are an example of the profound effect this technology can have on airline operations, efficiency, and the served communities.

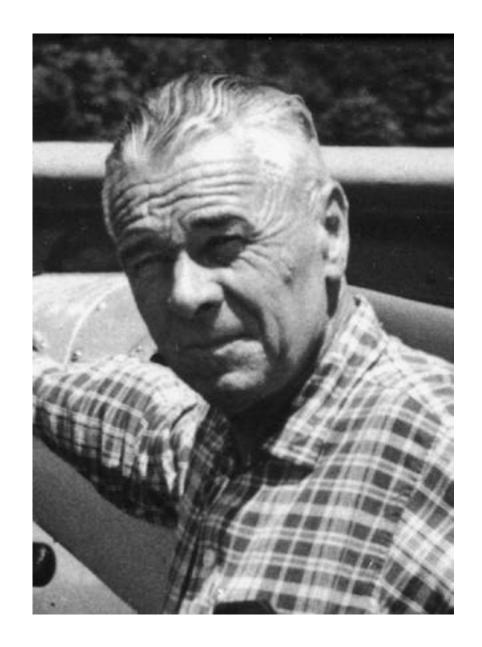
In February 2003, Fulton, along with Alaska Airlines
Capt. Hal Andersen and high-tech entrepreneur Dan Gerrity, founded Naverus, Inc. to provide RNP solutions for airlines and air navigation service providers around the world. In the first six years of operations, Naverus deployed more than 300 RNP flight procedures and established customer activities in a variety

of countries. Naverus was acquired by GE Aviation in late 2009 and Fulton is currently a Technical Fellow at GE Aviation.

Prior to his service with Alaska Airlines, Fulton was an avionics engineer and development pilot for Honeywell International. He co-authored three U.S. patents on air data formats for electronic primary flight displays and principles of RNP design. Fulton is an FAA Air Transport Pilot and Flight Test Pilot Designated **Engineering Representative** and earned a BS in Aerospace Engineering from the Georgia Institute of Technology. He gained widespread recognition for the development of the RNP procedures in Juneau, which led to receiving the American Institute of Aeronautics and **Astronautics Operations** Award in 1998 and numerous additional awards.



#### James B. Galvin





YEAR AWARDED 2000

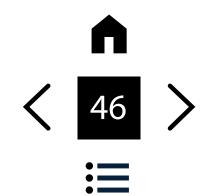
**CATEGORY** Operations

Before he made his mark in aviation, Jim Galvin was also a motorcycle pioneer. From all accounts, he was the first person to ride a motorcycle across the United States in the early 1920s. Galvin spent much of that decade in the U.S. Coast Guard, where he eventually became second in command at Sand Point Naval Air Station in Seattle. He began his aviation career in Los Angeles, where he learned to fly in 1928. Galvin soon returned to Seattle and opened an air taxi service and flight school at newly created Boeing Field.

During the 1930s, as his aviation business prospered, Galvin was involved in the first aerial mapping of the Northwest. As World War II approached, his school became a vital part of the Civilian Pilot Training Program, created to supply a reserve of pilots for the United States military. Galvin himself went off to war in the Pacific,

flying the famous "bent-wing"
Corsair as a naval aviator. Upon
completion of his naval service,
Galvin returned to Seattle and
his air taxi and flight-school
business. When returning pilots
created a surge in interest in
general aviation, Galvin became
a Piper dealer; soon he was
the largest supplier of civilian
aircraft in the Northwest.

Under Jim Galvin's active leadership, Galvin Flying Service continued to grow and evolve through the decades. He always maintained his commitment to flight training because he saw it as the root of aviation. At age 85, Galvin retired from active management of his flying service and died two years later, in 1991. His remarkable career spanned a period that took the industry from Curtiss Jennys to corporate Boeing 757s.



#### Ernest K. Gann



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YEAR AWARDED
1994
CATEGORY
At Large

Ernest K. Gann--pilot, novelist, screenwriter, and artist--showed an early interest in both flying and films. He was just nine years old when he took his first airplane ride and 14 when he established his Reel Film Company. Flying lessons began in 1935, and by 1939 he was a co-pilot for American Airlines, flying Douglas DC-2s and DC-3s. Gann made captain two years later.

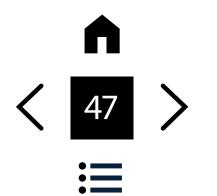
As his flying career developed, so did his writing. At first, he wrote short stories and children's books; then he began to write novels, many of which featured aviators and aviation. Many of his titles are well known: Islands in the Sky, Fiddler's Green, Soldier of

Fortune, In the Company of Eagles, Band of Brothers, The Black Watch, Blaze of Noon, The High and the Mighty, Fate Is the Hunter, Flying Circus, and A Hostage to Fortune. Several of the books were adapted as successful movies.

During World War II, Gann took a leave from American Airlines to fly with the Army Air Corps Air Transport Command, establishing North Atlantic and South American air routes. After the war, he flew commercially until 1952 and then turned to full-time writing. No longer a professional pilot, he remained a dedicated flyer.

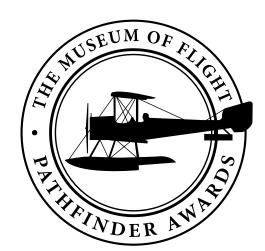
In his later years, Gann focused his creative energies on painting. Today his oils hang in collections around the world.

In July 2003, Washington
State Governor Gary Locke
awarded the Medal of Merit
posthumously to Gann. The
state's highest civilian honor,
Locke said, is awarded to "...
trailblazers in responsible
citizenship, practitioners of
progress and humanitarianism."



#### Reba Gilman





YEAR AWARDED
2008
CATEGORY

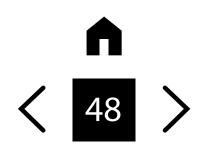
Education

Reba Gilman is the quintessential educator. With service as a teacher and principal, experience in youth and adult education, her career culminates as the creator and Principal for Aviation High School in Seattle. There, future engineers, pilots, and leaders in technology and aviation learn through hands-on experiences that emphasize science, technology, engineering, and math. Gilman's focus is now on the next stage--building a physical site associated with The Museum of Flight's expansion program.

Gilman's own education prepared her for a unique career path. She earned her BA in Business Education from Eastern Washington University and two Master's

degrees in Marketing and **Education Administration.** For ten years, she taught marketing in Richland, Washington, and served as advisor to DECA (Delta Epsilon Chi), an international association of high school and college students studying marketing, management and entrepreneurship in business, finance, hospitality, and marketing sales and service. She earned her Principal's credentials from Central Washington University and served as Assistant Principal and Vocational Director at Tahoma High School in Maple Valley. She then became Principal/Director of the SeaTac Occupational Skills Center in the Highline School District, receiving an award as Administrator of the Year for Career & Technical Education in 2003.

In 2003, Gilman started the process of developing a small, innovative high school to facilitate learning in the context of what interests and motivates students. She is the founder, creator, and leader of a learning community focused on developing the talents of young people to take leadership roles in a technologically based society. Her greatest accomplishments are in the future, multiplied many times as hundreds of students from Raisbeck Aviation High School benefit from her vision, tenacity, and dedication as a Pathfinder in Education.



### Richard F. Gordon, Jr.





YEAR AWARDED 2002

**CATEGORY** Flying

Richard "Dick" Gordon earned his wings in 1953 and went on to acquire extraordinary wide-ranging experience as a Navy test pilot. In 1963, he was among the third group of astronauts named by NASA and a backup pilot for Gemini 8. In 1966, he was pilot for Gemini 11, a three-day mission in which rendezvous with an Agena rocket upper stage occurred within one orbit. Gordon conducted docking maneuvers and extravehicular tasks and, with command pilot Charles Conrad, completed the first tethered station-keeping exercise, set an altitude record of 850 miles, and made the first fully automatic controlled reentry. The flight ended with an Atlantic splashdown two and a half miles from the recovery ship. In 1969, Gordon was backup command pilot for Apollo 9.

In November 1969, Gordon was command-module pilot for Apollo 12; during the 31-hour lunar-surface stay of fellow crewmen Charles Conrad, spacecraft commander, and Alan L. Bean, lunar module pilot, Gordon orbited in the Yankee Clipper to take photographs for future landing sites and perform re-docking maneuvers in the rendezvous with Intrepid during Conrad's and Bean's ascent from the Moon. All objectives of the 244-hour, 36-minute mission were met: first precision lunar landing, with the Intrepid splashdown on the Moon's Ocean of Storms; and first lunar traverse, as Conrad and Bean deployed the Apollo Lunar Surface Experiment Package, installed a power generator station to support longterm experiments, gathered lunar rock, and inspected the Surveyor III spacecraft.

Gordon retired in 1972 and now works in a great range of executive and advisory roles. In 1984, while consulting for a CBS mini-series based on James Michener's Space, he also played the part of "Captain."



#### Louis B. Gratzer





YEAR AWARDED
2003
CATEGORY
Engineering

Since the earliest days of aviation, the ability to go faster and farther on less fuel has been the Holy Grail. Louis "Bernie" Gratzer has delivered this grail over the course of an aerospace career spanning more than fifty years.

Born and raised in Tacoma, Washington, Gratzer graduated from the University of Washington with a bachelor's degree in 1944 and a master's degree in 1951, both in aeronautical engineering. He served briefly on the faculty of the university before joining the Boeing Airplane Company in 1953. There, he held a variety of engineering and technical management positions through his retirement in 1986, with a consistent focus on advanced

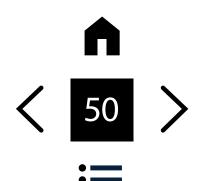
aerodynamic concepts. In 1968, while employed at Boeing, Gratzer earned his Ph.D. in aeronautics and astronautics from the University of Washington.

Following his retirement from Boeing, Gratzer returned to the University of Washington's Department of Aeronautics and Astronautics for a five-year stint as an affiliate associate professor. During this period, he consulted on projects with NASA's Langley Research Center and on the development of the 1987 America's Cup-winning yacht, Stars and Stripes.

Since 1990, Gratzer has been associated with Aviation Partners, Inc., a Seattle engineering firm formed to develop and market his patented Blended Winglet design. By reducing several sources of drag produced by

straight wingtips or typical angular winglets, Blended Winglets afford airliners and business jets greater fuel efficiency, which can be translated at the operator's discretion into higher speed or longer range.

Louis Gratzer's innovative aerodynamic concepts have made a significant mark on the aerospace industry, and they mark him in turn as a true Pathfinder.



### Robert E. Hage



YEAR AWARDED
2007
CATEGORY
Engineering

Bob Hage, a University of Washington Engineering alumni and former Boeing and McDonnell Douglas executive, made significant design, sales, and engineering contributions which lead to the development of the passenger jet airplane; contributions resulting in a transformation of the commercial aviation business from which the world benefits today.

Hage joined the Boeing Company in 1946, and along with Maynard Pennell and Richard FitzSimmons, conducted early studies that proved the feasibility of jet propulsion in civil aviation. In 1949, Mr. Hage co-authored Airplane Performance, Stability and Control, a classic text that is still in use today. Boeing provided Hage a leave of absence in 1950 to work in the Office of the Joint Chiefs of Staff in the Pentagon, returning to Boeing in 1954 as a project engineer on the new 707 program. He made significant contributions toward Boeing's success during his eight productive years at Boeing in design, sales, and engineering.

Hage moved to McDonnell Aircraft in 1958 as Vice President and General Manager, and subsequently carried out preliminary design of the DC-10, studies that led to the C-17, and marketing of all military and commercial programs at McDonnell Douglas. He retired as a Corporate Vice President in 1979.

In 2007, the University of Washington School of **Engineering Department of Aeronautics and Astronautics** honored him with their Diamond Award, Distinguished **Group Achievement-Pioneers** of the Passenger Jet. Mr. Hage received this award along with his friends and fellow distinguished aviation contributors: Maynard Pennell, John Steiner, Lynn Olason, Joseph Sutter, Robert Brown, Richard FitzSimmons, and John Roundhill.





# Elling Halvorson





**YEAR AWARDED** 2015

> **CATEGORY Operations**

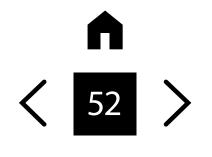
A legendary entrepreneur, Elling Halvorson has had a significant impact on vertical lift practices in industries including construction, engineering, travel and tourism. After completing his education at Willamette University, Halvorson coupled a degree in economics with "what you might call a minor in civil engineering" as he puts it. He immediately went to work for the family business in construction and was challenged by a variety of contracts— most notably, the Echo Summit Microwave Project. For this project he purchased his first helicopter, a Bell 47-G3B1 to carry workers and light construction materials through treacherous mountain terrain. Specializing in remote area projects with challenging logistics, Halvorson took pride in mitigating risks through creativity and innovation.

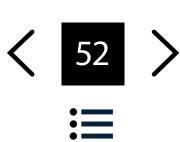
The job that truly changed the course of Halvorson's career involved constructing a 13.5-mile-long water pipeline from the North to the South Rim of the Grand Canyon. Halvorson used a fleet of helicopters including the Sikorsky S-61 and S-55, and the Bell Huey 204B for heavy lifting. Lighter loads were moved with Bell-47s and Hiller SL-4s. The project took three years and endured many challenges including a devastating "1,500year flood" that destroyed many miles of pipeline. It remains the largest helicopter-construction project completed in the United States.

As Halvorson and his team flew colleagues and clients to work sites within the canyon, the majestic scenery was so captivating that workers began requesting chartered helicopter flights during off hours. Halvorson recognized the golden opportunity

and created the world's first helicopter sightseeing company —Grand Canyon Helicopters. As the concern for noise over the Grand Canyon increased in the 1980s, Halvorson was instrumental in developing a quieter version of the S-55. In 1993, he formed Whisper Jet Inc. and partnered with Vertical Aviation Technology. They transformed a noisy 1950s design into a modern machine.

Halvorson has been honored with many awards over the years, notably the Lawrence D Bell Memorial Award, and the esteemed Vertical Flight Hall of Fame Award. He is a philanthropic leader of the community, including administering the Halvorson Charities Fund. Halvorson stands as a "Pathfinder," inspiring future generations with his entrepreneurial contributions to the helicopter industry.





#### Thomas F. Hamilton





YEAR AWARDED 1982

**CATEGORY** Engineering

"Hamilton Standard" on airplane propellers meant "the best." During the years between 1909, when Seattleborn Thomas F. Hamilton was 15, and 1949, when the Hamilton Standard Company diversified its products, a varied and fascinating evolution of the propeller took place. The man responsible for that was Thomas F. Hamilton.

Hamilton first began to manufacture wooden propellers in 1909. The next year, he established Hamilton Aero Manufacturing Company at 208 30th Avenue in Seattle. Though history reveals that his business was minimal, Hamilton survived, and in 1915 he took his company to Vancouver, British Columbia. In Canada, he continued to build propellers and a few airplanes, and soon began to teach Royal Canadian Flying Corps cadets to fly.

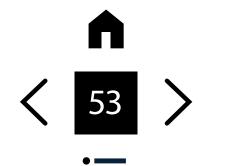
During World War I, Hamilton was responsible for making aircraft propellers at Matthew Bros. Co., a furniture manufacturer. Their propellers carried the name "Hamiltonian."

In 1920, Hamilton set up a propeller manufacturing business in Milwaukee under the name of Hamilton Aero Manufacturing Co.

In 1928, The Boeing Airplane and Transport Corporation (which became United Aircraft and Transport Corporation on February 1, 1929) acquired Hamilton's company. United Aircraft and Transport Corporation then acquired Standard Steel Propeller and combined it with Hamilton's company to form Hamilton

Standard Propeller in 1929.
Hamilton left this organization in 1930 and subsequently served in a variety of management posts with United Aircraft.

Thomas F. Hamilton's fearless entrepreneurship during an era of rapid progress and change in aircraft design emerges as a vital part of aviation history.



#### Elmer H. Hansen



NOER AWAR

YEAR AWARDED 2004

**CATEGORY** Education

Elmer H. Hansen's presence in Northwest aviation goes back virtually as far as Northwest aviation itself. Still an active flight instructor when he unexpectedly passed away in June 2004, Hansen's piloting career spanned an incredible seven decades. As Lindbergh flew the Atlantic, Hansen was a fourteen-year-old enthusiast who scratch-built model airplanes and had already taken his first flight in a barnstorming OX-5-powered biplane. A few years later, Hansen soloed an Aeronca C3 after three hours, fifteen minutes of instruction from fellow Pathfinder Elliott Merrill.

Beginning with a mechanic's rating in 1935, Hansen earned tickets through commercial pilot and instructor, and

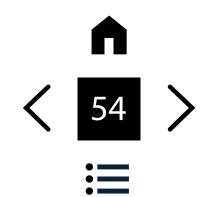
became chief pilot for Boeing Field's Washington Aircraft by 1939. With war looming, he joined the Civilian Pilot Training Program (CPTP). In 1940, he was designated one of the first CPTP flight examiners, helping to standardize instruction throughout the Northwest. Hansen trained nearly 1,000 pilots during the war as a Navy contract instructor.

After the war, Hansen remained with Washington Aircraft but also opened a seaplane base on Lake Washington. In 1960, he became a Boeing salesman, retiring nineteen years later as director of customer relations. While with Boeing, he continued flight instruction in his spare time.

After "retirement," Hansen continued instructing in his Cessna 172 with a zeal few bring to full-time employment. At the

time of his passing, he was still logging an average of 300 flight hours annually, amassing total flight experience in excess of 19,000 hours.

As an educator and mentor to generations of Northwest pilots, Elmer Hansen was truly a Pathfinder.



### J. Kenneth Higgins





YEAR AWARDED
2017
CATEGORY
Flying

Celebrated in the aviation community as a champion of flight test safety, J. Kenneth Higgins made a profound impact on aircraft design and the evolution of flight test safety practices during his 40-year career with The Boeing Company.

Known to all as "Kenny",
Higgins graduated from O'Dea
High School in 1960, majored
in engineering science at
the University of Portland,
and earned an executive
master's degree in business
administration from the
University of Washington.

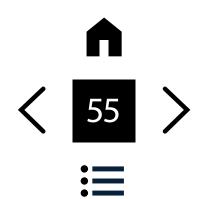
In 1966, Higgins joined the Boeing community as a flight test engineer and was one of the few Boeing test pilots who didn't come from the military. In 1979, Higgins became a Boeing production test pilot before serving as an experimental test pilot for models from the 737 to the 777.

After many years, Higgins became the Director of Flight Operations, where he was responsible for flight testing and certification of all Boeing commercial aircraft. Innovating new processes to assure safe flight-testing, Higgins rose to Vice President of Flight Operations, Test and Validation, Approaching the issue from an engineer's perspective, he implemented a formal safety management system which defined pilot qualifications for specific tests and formal documentation of anticipated safety hazards. His efforts were adopted by the industry, and later the FAA.

As both a test pilot and engineer, Higgins worked on many projects at Boeing including the 757/767 flight

deck and the 7J7 program.
He was a leader of the team that articulated the Boeing Principle that "the pilot shall be the final authority in the operation of the airplane," resulting in the distinctive 777 fly-by-wire implementation. In 1998, Higgins was awarded the J.H. Doolittle Award from the Society of Experimental Test Pilots, for his contributions to the 777 program.

Outside work, Higgins was devoted to his family and enjoyed projects such as restoring vintage cars. Higgins passed away in 2013 at the age of 71. His spirit lives on in his wife Sandy, three children, and friends. Currently, The Museum of Flight has developed the J. Kenneth Higgins Aviation Safety Exhibit, which honors his legacy and memory as a Pathfinder for all to come and witness.



#### David R. Hinson





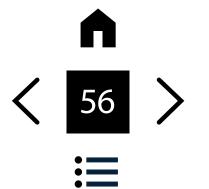
The bedrock of David Hinson's career in aviation is his extensive flying experience. He has been a pilot for more than fifty years, graduating from Navy pilot training in 1955 immediately following his graduation from the University of Washington. He soon moved to the airline industry as a pilot for Northwest Airlines, a flight instructor for United Airlines, a captain and director of flight training for West Coast Airlines, and a director of flight standards and engineering for Hughes AirWest.

Hinson returned to the classroom after his tour of duty at the airlines and graduated from the Stanford University Graduate School of Business Executive Program in 1972. He

founded Hinson-Mennella, an aviation-related corporation, in 1973, and then served as president of Flightcraft, Inc., the Northwest's Beech aircraft distributor, through 1984. In that year, he became one of the four founders of Midway Airlines, serving as chairman of the board and CEO for the Chicago-based airline. From 1991 to 1993, Hinson served as executive vice president of marketing and business development for McDonnell Douglas Aircraft.

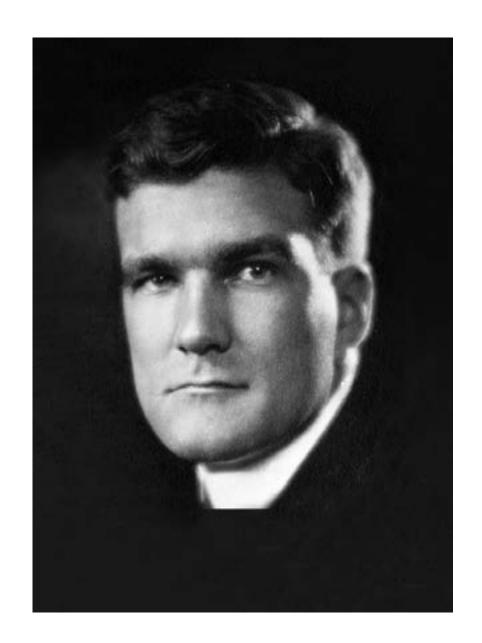
In 1993, Hinson moved from the private sector to the public when he was appointed by President Bill Clinton to be the FAA's thirteenth administrator. During his tenure at the FAA, Hinson is credited with driving the implementation of global positioning system technology for civil air navigation. Currently, Hinson is the chairman of International Aerospace Solutions, an aviation consulting firm, and serves on the Board of Directors of the Smithsonian National Air and Space Museum in Washington, D.C. He is Chairman of the Board of Visitors of the (AOPA) Air Safety Foundation.

Over this varied career, Hinson has logged more than 9,000 hours in more than seventy types of aircraft. David Hinson has blazed a wide path in the aviation industry, one the Museum is proud to honor with a Pathfinder Award.



YEAR AWARDED
2005
CATEGORY
At Large

# Thorpe Hiscock





5/

YEAR AWARDED 1998

**CATEGORY** Engineering

Thorpe Hiscock was born in Tacoma, Washington, in 1892. Best known for his contributions to radio communication, he was principally responsible for creating the first air-to-ground voice radio. During a get-together with his brother-in-law, William E. Boeing, he listened to Boeing's concerns for his pilots, who were being forced down in inclement weather.

Hiscock suggested that radioing updated weather information to pilots en route could eliminate some of the uncertainty, and then offered to solve the problem. With approval from Boeing, he began experimenting with low-frequency radio transmitters and receivers. He soon achieved what others before him had not: ground-to-air radio communication.

Hiscock's experiments began with a receiver mounted on a truck and progressed to one mounted on a Boeing Model 40-B plane. Engine noise and interference were the toughest problems he faced, but his perseverance paid off.

In 1931, when United Airlines was organized, Hiscock moved to Chicago and was placed in charge of the company's communications research and development activities. In July 1933, he was elected vice president in charge of technical development. At the time of his death, in 1934, Hiscock was working on 105 separate projects, most of them related to airline operational safety.

Some of Hiscock's other inventions include an automatic mixture control, the autopilot used by Wiley Post, a pneumatic wing deicing system, and the modern variable-pitch propeller.

#### Edward Hubbard





YEAR AWARDED 1988

**CATEGORY** Operations

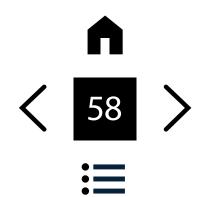
Eddie Hubbard, holder of flying license number 45 and the first flying license ever issued in Seattle, is regarded as the Northwest's foremost early aviator. Hubbard started his aviation career as a flight instructor during World War I. In 1917, he hired on as a pilot with the fledgling Pacific Aero Products Company, later renamed The Boeing Airplane Company.

On March 3, 1919, Hubbard piloted a Model C-700 seaplane while he and William E. Boeing carried mail between Vancouver, British Columbia, and Seattle in the first known international delivery of airmail. In 1920, he left Boeing to start operating the first regular airmail service--now considered

the first predecessor of United Airlines--between Seattle and Victoria, B.C., carrying up to 600 pounds of mail in all kinds of weather. Hubbard's plane, the B-1, now resides at Seattle's Museum of History and Industry.

encouraged Boeing to bid for a U.S. Post Office contract for airmail service between Chicago and San Francisco. The bid was successful, resulting in Boeing's design of a plane, the Model 40A, to fly over the Sierra Nevada and Rocky Mountains. Hubbard rejoined Boeing in 1927 as vice president in charge of operations.

Eddie Hubbard did not live to see the growth of United Airlines. He died on December 18, 1928, at the age of 39.



#### Tom Imrich





YEAR AWARDED 2022

**CATEGORY** Flying

Captain Tom Imrich passionately and tirelessly dedicated his 50-year career to developing safer and more efficient airline operations as a regulator, research engineer and test pilot. Imrich's fingerprints are on many of the critical elements of jet transport airplane systems that keep passengers safe every day, and equally on the navigation system infrastructure and procedures that enable worldwide, safe all-weather operations.

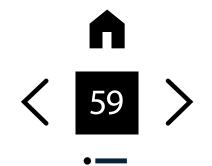
After graduating with a bachelor's and master's degree in Aeronautics and Astronautics from the Massachusetts Institute of Technology, he joined the United States Air Force. There, he carried out research projects at Wright-Patterson Air Force Base. He joined the Federal Aviation Administration in the late 1970s where he led FAA efforts to establish the framework and infrastructure for all-weather operations. His expertise

extended from authoring the regulatory guidance and system requirements to flying the certification test flights as project pilot.

Beyond all-weather ops, Imrich made important contributions to air travel through his leadership in developing, integrating and gaining adoption of operational concepts in the areas of advanced navigation for jet transports, safety in operations and pilot qualification. His work in such varied areas in aviation has made him one of the most knowledgeable people on many subjects in the air transport industry. Colleagues fondly recall going to Imrich, "the encyclopedia," for information.

Imrich retired from the FAA in 2001 and joined Boeing as Chief Research Pilot. At Boeing, he took a lead role working with engineers to develop a nextgeneration all-weather landing system called the Ground Based Augmentation System
Landing System. His capstone
assignment at Boeing was as an
engineering test pilot for the
new 747-8, including serving
as Co-Captain for its first flight.
Following certification of the
747-8, Imrich retired from
Boeing. He continues to consult
on various projects that will
shape our air transport systems
for decades to come.

As an airline industry change agent, Tom Imrich championed his vision of aircraft operations and the future of air traffic system for over 50 years. Though change never comes easily, Imrich persevered in leading difficult and significant steps forward for the entire air transport industry, typically far ahead of the industry's efforts. His work serves as the bedrock for aircraft and air traffic service operations across the globe, to the benefit and safety of all users of jet transportation.



#### Joe M. Jackson





YEAR AWARDED
2014
CATEGORY
Flying

On May 12, 1968, Lt. Col. Joe Jackson's C-123 Provider circled above a South Vietnam special forces camp near the Laotian border. The camp had fallen under enemy attack and ordered evacuated. As the last C-130 departed the airfield with what was believed to be the last remaining ground forces, a call came over the radio from a combat control team still on the ground.

With exploding ammunition dumps littering the runway with debris, Col. Jackson went into a steep dive from 9,000 feet. Breaking the 4,000-feet-perminute descent just above the tree tops, Jackson skidded to a stop, lowered the rear cargo door, and the three-man team scrambled aboard. With heavy fire coming from the hills on

both sides, Jackson escaped to the skies, having been on the ground for less than a minute.

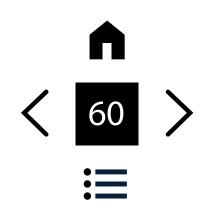
For this heroic rescue, Joe Jackson was awarded the Medal of Honor, but that's hardly the only line on his incredible resume, having served in three major wars – WWII, Korea, and Vietnam.

He flew gunnery instruction in the Curtiss P-40 and the Bell P-63, before transitioning to bombers. Returning to fighters, he flew the Republic P-47 Thunderbolt, North American P-51, and F-82 Twin Mustang. Deployed to Korea, he flew the Republic F-84 Thunderjet on 107 combat missions and later co-developed a bomb-tossing method to deliver nuclear weapons from fighter aircraft.

In 1956, Jackson became one of the first Air Force pilots to fly the top-secret Lockheed U-2 and commanded several

reconnaissance detachments around the world. Moving to SAC Headquarters in 1960, he engaged in what he considers his greatest accomplishment: planning and directing aerial reconnaissance over Cuba, playing a key role during the Cuban Missile Crisis.

After nearly 33 years in the Air Force, Jackson joined The Boeing Company and developed 707 training programs for the Imperial Iranian Air Force. The recipient of numerous military honors, he has been inducted into the Airlift-Tanker Hall of Fame, the Georgia Aviation Hall of Fame, the Retired Military Hall of Fame, and the American Combat Airman Hall of Fame.



### Jack Jefford





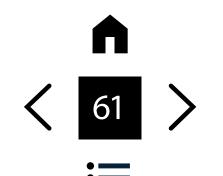
YEAR AWARDED
1984

**CATEGORY** Flying

Jack Jefford is one of the true giants of Alaskan aviation history. In scores of dramatic rescue flights, his supreme flying skills meant a life-ordeath difference to victims of accidents or illness in the Bush. Flying in all kinds of challenging weather, Jefford often risked his own life by daring zerozero conditions and landing at remote airstrips to help someone in dire need. A man of great character, he was very much aware of the contribution he could make as an aviator in the fast-developing Last Frontier.

For 32 years, beginning in 1940, Jefford served as chief pilot for the Civil Aeronautics Authority (CAA) and its successor agency, the Federal Aviation Administration (FAA). One of Alaska's first instrumentqualified pilots, Jefford worked tirelessly to provide air support for CAA's growing strategic communications and aircontrol network. He was a key figure in creating vital air routes throughout the territory, including routes used to supply military outposts in the Aleutians and the trans-Alaska routes used to ferry fighter planes to the Soviet front during World War II.

Jefford's autobiography,
Winging It, enthusiastically
recounts many of the
extraordinary adventures in
which his remarkable flying
skills and humanitarian spirit
triumphed over perilous
obstacles.



# Elrey B. Jeppesen





YEAR AWARDED 1998

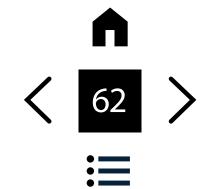
**CATEGORY** At Large

In 1930, Captain Elrey "Jepp" Jeppesen carried mail for the Boeing Air Transport Company in an open-cockpit 40-B biplane. "What great days," he remembered years later. "Boeing gave us a beautiful airplane, a sack of mail, no radio...the sky was ours." Without tools for navigation, however, piloting an airplane was a precarious operation. That winter, Boeing Air Transport lost four of its 20 pilots on the hazardous Cheyenne-to-Oakland route.

Jeppesen decided to do something about it. One afternoon, he bought a ten-cent notebook and began jotting down useful information: radio signals, field lengths, obstacles, descriptions of terrain, even farmers' telephone numbers, so he could call ahead and ask for weather reports. On his days off, he climbed hills and ridges with an altimeter and recorded safe minimum altitudes.

Armed with his "little black book," Jeppesen had an amazing record of flight completions, and fellow pilots began asking for copies. In 1934, he set up a publishing shop in his basement. The first edition sold out quickly, and soon the Army, Navy, and eventually commercial airlines were ordering subscriptions.

Today, pilots all over the world depend on Jeppesen Airway Manuals. In 1971, the FAA recognized Jeppesen's contribution to aviation safety with a Distinguished Service Award. But Jepp was proudest of his Meritorious Service Award from the National Business Aircraft Association--an honor he shared with the likes of Charles Lindbergh and Igor Sikorsky.



#### Gene Nora Jessen





Gene Nora Jessen is a pilot, flight instructor, columnist, airline owner, and aviation pioneer. Her aviation career began during high school working with the Civil Air Patrol in the 1950s. At the University of Oklahoma, she became a pilot as a member of its flight team and entered her first NIFA competition in 1957. That year, Jessen won the Ninety Nines achievement award and was the team's top female pilot.

After earning her degree in English, Jessen remained at the University of Oklahoma for the next six-and-a-half years as a flight instructor. Later, she spent a year at Oklahoma State University teaching aviation until she was tapped by Dr. W. Randolph Lovelace to participate in a secret program that would later become known as "The Mercury 13." Twentyfive female pilots, including Jessen, were contacted to participate in the same rigorous testing performed on the Mercury 7 astronauts. Thirteen of these women passed the physical exams and, despite outstanding test results, they never got their chance to go to space.

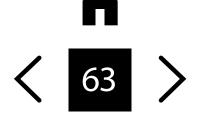
Jessen, who had resigned her position at OSU to participate in the testing, returned to flight as a demonstration pilot for Beech Aircraft in Wichita, Kansas. She was qualified to fly all Beech aircraft and she stayed with Beech as a demonstration pilot for the next few years.

From 1988-1990, Jessen served as International President of the Ninety-Nines where she also founded The Ninety-Nines Resource Center. In 2002, Sourcebooks published her book The Powder Puff Derby of 1929, the story of the first Women's Air Derby.

In 1996, Gene Nora Jessen was inducted into the International Women in Aviation Pioneers Hall of Fame and has received numerous awards attesting to her achievements and influence.



Flying





## Philip G. Johnson



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YEAR AWARDED 1983

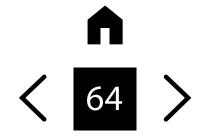
**CATEGORY** Manufacturing

Philip Johnson joined Boeing in 1917 with other engineering students recruited from the University of Washington.
World War I requisitions had swamped the small factory, and Johnson was often pulled from his drafting tasks to help bring order to the factory floor. His genius for meeting operational challenges resulted in his quick promotion to management, and in 1926 Johnson was named president of the company.

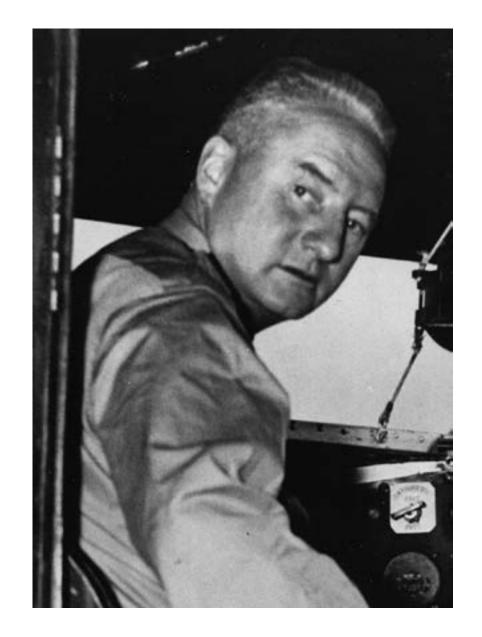
Johnson's conviction that Boeing's future was in civil transport soon led to mail and passenger operations under a separate firm, Boeing Air Transport Company. In 1929, Boeing and Pratt & Whitney, the nation's leading airplane manufacturer and transport firm, combined to form the nucleus of a new corporation, United Aircraft and Transport. Four separate airlines under the corporate umbrella were consolidated into United Airlines, and Johnson became its president. Under his guidance, United Airlines became the first radioequipped transport line. He also put stewardesses on passenger flights.

In 1934, when the government intervened to separate airplane and engine manufacturers from carrier lines, Johnson left the company to accept an offer from the Canadian government. In less than two years, he organized the airport and navigation support for launching TransCanada Airways (now Air Canada) as a successful coast-to-coast service.

On September 9, 1939, the day after the United States declared a state of national emergency in response to the war in Europe, Johnson returned to Seattle to accept the president's chair at Boeing for the second time. Johnson mobilized Boeing's huge war effort and, until his untimely death in 1944, set the pace for U.S. bomber production.



#### Robert R. Johnson





YEAR AWARDED 1986

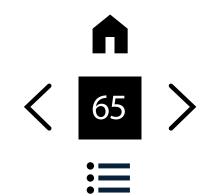
**CATEGORY** Operations

Unlike most of his fellow aviation pioneers, Bob Johnson was over 30 years old when he took his first airplane ride. Not long after, he left his job pumping gas at a Missoula, Montana, station and purchased his first airplane a Swallow OX-5. In 1927, he began offering flying lessons and scenic trips over Missoula. That was the start of Johnson Flying Service, an operation that would change the course of aviation in western Montana, northern Idaho, and Wyoming.

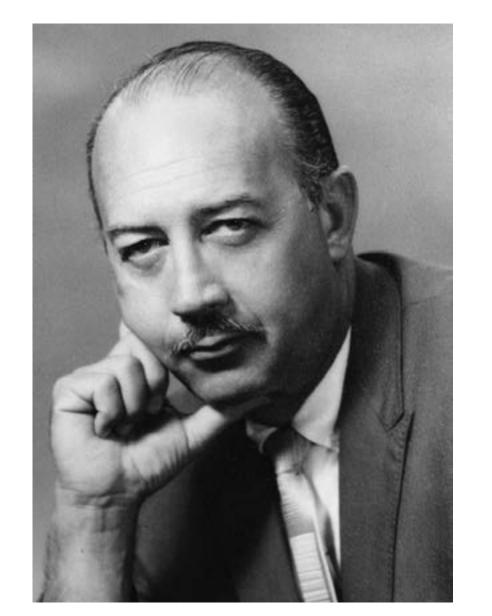
Braving the high altitudes and treacherous weather of the Rocky Mountains, Johnson pilots delivered mail, dropped supplies at remote ranches, surveyed terrain, conducted snow measurements and game counts, and performed emergency rescues. By 1940, residents of Montana were using the term "a Johnson pilot" to refer to the most skilled

and versatile mountain flyers.
Johnson himself logged more
than 17,000 hours in the air,
proving what a good pilot in a
good plane could accomplish in
rugged territory.

During its 50 years of operation, Johnson Flying Service grew to include 40 airplanes and six helicopters. The company was best known for its firefighting work with the U.S. Forest Service. On July 12, 1940, a Johnson airplane flew two firefighters directly to a fire. From that day forward, the practice of smoke jumping would save fire crews hours of grueling hikes into the backcountry. In 1954, the Forest Service commended Bob Johnson for pioneering aerial firefighting in the Rocky Mountains.



#### A.M. "Tex" Johnston



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YEAR AWARDED
1987
CATEGORY
Flying

Tex Johnston may be best known in the Northwest for performing an impromptu barrel roll in the Dash 80, the prototype for the Boeing 707, above a crowd of some 200,000 fans during Seattle's 1955 Gold Cup Hydroplane Races, but several of his other aviation accomplishments far surpass that famous stunt. Schooled in both aeronautics and astronautics, Johnston has spent a lifetime studying the science of flight.

Beginning his career as a barnstormer in the Midwest, Johnston took his first test-flying job in 1942 with Bell Aircraft, where he applied his technical and practical knowledge to developing,

testing, and evaluating a wide variety of aircraft. Early on, Johnston excelled at both professional and private piloting--in 1946, he won the National Air Races distinguished Thompson Trophy and set a new world record for closed-course racing in the process.

Johnston moved to the Boeing Airplane Company in 1949 to become test pilot on the XB-47 program, where he conducted all high-speed and stall tests on the revolutionary swept-wing jet bomber. He later piloted the first flight of the follow-up B-52 Stratofortress and was named chief of Boeing Flight Test in 1952. A proponent of "slide-rule" test flying, Johnston made significant contributions to the design and performance of the B-47 Stratojet, the YB-52, production B-52 bombers,

the Dash 80 (in which he broke the transcontinental speed record in 1955), and several later 707 models. His numerous professional honors include receiving awards from the Institute of Aeronautical Sciences and being presented the Flying Tiger Award by the late General Claire Chennault.



#### Dr. James A. Joki





YEAR AWARDED 2009

**CATEGORY** Engineering

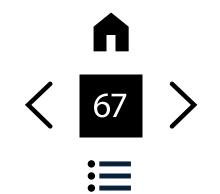
James Joki always anticipated a remarkable career in aviation and aerospace.
Little did he know that he would become one of NASA's outstanding engineers and contribute prominently to the development of the Apollo program Extravehicular Mobility Unit (EMU) as a designer and flight controller.

Eager to apply his knowledge after receiving a degree in aeronautical and astronautical engineering at the University of Washington, Joki applied to NASA for a flight control position in Houston, Texas. His enthusiasm and interest in space medicine directed him towards the EMU. He designed, developed, and tested the product with his colleagues. He spent countless hours assessing the EMU through experiments

simulating zero gravity and deep space conditions. Part of his work was to analyze the EMU and space suit performance flying parabolic trajectories in NASA's infamous "vomit comet."

The highlight of Joki's NASA career was on Apollo 11, ensuring the astronauts' EMUs (space suits and life support backpacks) were fully functioning for extravehicular activities (EVA) on the Moon.

Joki's work at NASA inspired a transition from engineering to medicine. First, he attained a master's degree in physiology, then eight years of medical school and residency to become an MD. He is now an OB-GYN doctor practicing at Northwest Hospital in Seattle. Today, he continues to be a community figure where he seeks to educate and inspire young minds about space within the Seattle area.



### Bruce R. Kennedy





YEAR AWARDED 2006

**CATEGORY** Operations

Bruce Kennedy was a major contributor to Aviation in the Northwest and elsewhere, and he his varied credentials included CEO of Alaska Airlines, Director of Mission Aviation Fellowship, and Director of Quest Aircraft Trust.

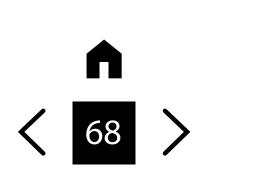
For 32 years, Kennedy served in a management capacity with Alaska Airlines and its predecessor company. He served as Chairman, Chief Executive Officer, and President for nearly 12 years. During Kennedy's period of stewardship Alaska Air Group, Inc. was formed as a holding company in which new acquisitions Horizon Air and Jet America joined Alaska Airlines.

In May 1991, Kennedy stepped down from the top posts at Alaska Air Group to pursue other interests, specifically humanitarian endeavors. Kennedy became Director of **Quest Aviation Trust. Quest** Aircraft, LLC is the manufacturer of the KODIAK, a 10-place single engine turboprop utility airplane, designed to be float capable. The underlying purpose at Quest is to design and manufacture an aircraft specifically suited to the needs of humanitarian organizations, which provide access to otherwise isolated peoples in the most geographically challenging regions of the world. These organizations are in dire need of a modern backcountry aircraft featuring the advantages of STOL performance, rugged construction, turbine power, and high useful loads. Kennedy was a guiding force in

developing this much-needed

aircraft.

Bruce Kennedy's remarkable career had a major impact on Northwest aviation. He passed away in 2007, but many of the projects that he championed are still ongoing.



### Mark Kirchner







**YEAR AWARDED** 2021

> **CATEGORY** Engineering

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.

Kirchner then headed to Massachusetts Institute of Technology where he received his BS and MS degrees in **Aeronautical Engineering** before joining Boeing. His managerial capability showed in every leadership assignment he had during his career. There were numerous times his knowledge and imagination stood out – and many of his innovations are still in use today.

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

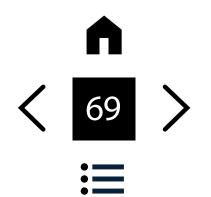
the atmospheric wind shear causes a sudden large tailwind component to the airplane's airspeed. To understand the problem of wind shear in more detail Kirchner built his own digital computer from a kit and used it to calculate the path of the airplane using different control techniques. He came to the conclusion that the current Boeing technique was the proper method. Kirchner was on a committee of the National Academy of Sciences formed to study wind shear, and he presented his results. 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 flyoff 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. Kirchner undoubtedly saved many lives through the years.

Before he retired, Kirchner created a nonprofit organization named the Flight Research Institute, and joined The Museum of Flight Board of Trustees where he rose to Chairman.

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.



#### Frederick K. Kirsten





YEAR AWARDED 1983

**CATEGORY** Engineering

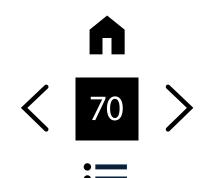
Frederick Kirsten left his native Germany aboard a sailing ship in 1902, when he was 17 years old. He landed in Tacoma, Washington, in 1903 and worked on a farm before entering the University of Washington in 1905. In 1909, he graduated with a magna cum laude bachelor's degree in electrical engineering and then went on to earn a doctorate in electrical engineering.

During the 1920s, Kirsten was instrumental in establishing classes in aeronautical engineering at the university and in obtaining a grant to build Guggenheim Hall, which became home for the new Department of Aeronautical Engineering in 1929. Kirsten

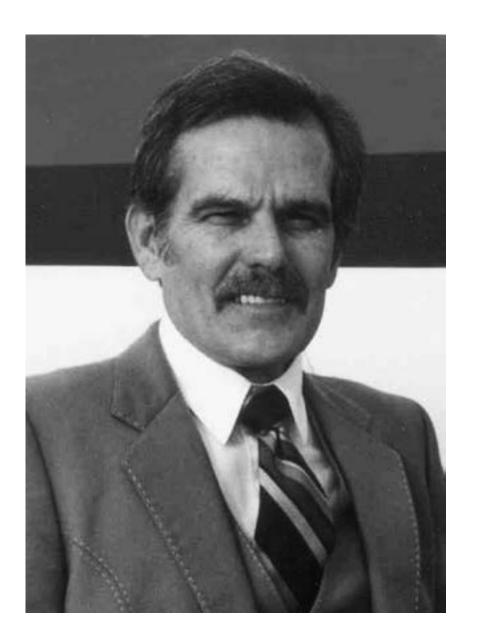
was named professor in the department and remained there until his death in 1953.

During construction of Guggenheim Hall, Kirsten and two senior students designed and built the Venturi wind tunnel. Venturi is still used by undergraduates, but as early as 1934 it was evident that a larger wind tunnel was needed. Kirsten designed a new one with an eight- by twelve-foot test section and a maximum speed of 250 mph. He also led the effort to fund it, and construction began in 1936.

Kirsten's tunnel was used in the development of U.S. flight technology during World War II, and since then has contributed significantly to the family of Boeing jetliners. In 1948, the University of Washington board of regents named the new wind tunnel the F. K. Kirsten Aeronautical Laboratory in Frederick Kirsten's honor.



### Milton E. Kuolt, II





YEAR AWARDED 2002

**CATEGORY** Operations

The son of missionaries, Milton Kuolt was born in a small village in India. His family returned to the U.S. in 1940, and Kuolt graduated from Central Washington University with an economics degree ten years later. He then worked for Boeing for 19 years, ultimately as business planning manager for the 737. Kuolt's pathfinding contributions to Northwest aviation, however, came later.

In 1981, having established himself as a successful entrepreneur with the Thousand Trails camping resort firm, Kuolt decided to start an airline. With deregulation in the late 1970s, many minor routes were abandoned by the major airlines, and poor service was the norm for many Northwest passengers. Kuolt, with no

previous airline experience, believed he could do better. With three dozen employees and two elderly Fairchild F-27 turboprops, Kuolt's Horizon Air began service in September 1981 with flights between Seattle and Yakima, Washington.

Soon Horizon was one of the nation's top six regional carriers. In 1984, Kuolt took Horizon public, and in 1986, the airline was acquired by Alaska Air Group. Kuolt's famous philosophy — "the customer is always right, even when he's wrong" —led to Horizon's consistently ranking among the country's most customerfriendly airlines. His leadership style was demonstrated by his willingness to roll up his sleeves and lead by example. It was not unusual in Horizon's early years to find the CEO loading bags, cleaning lavatories, or taking reservations. In the words

of biographer Bill Endicott,
"(Kuolt's) infectious enthusiasm
for the job at hand and his
fierce drive for excellence
inspired his people and left his
competitors on the tarmac."

Milt Kuolt passed away in 2008 at the age of 80. His service, which was attended by many aviation notables, was held at The Museum of Flight.



# Clay Lacy





YEAR AWARDED 2010

**CATEGORY** Flying

Since his first job painting planes in exchange for flight time, Clay Lacy's life has been shaped by aviation, even as he shaped aviation himself.

Receiving his student permit at age 14, Lacy logged over 1,500 hours by the time he turned 19 and was hired by United Airlines in January 1952. Forty years later, he would retire as number one in seniority. Between military duty, training pilots, helping to pioneer the business jet industry, test flights, and racing, there's scarcely a plane he hasn't flown or a corner of the aviation world that he hasn't influenced.

He pioneered aerial photography and contributed to more than 2,800 projects, including "The Right Stuff," "Armageddon," and "Top Gun," and landed a DC-3—gear-up—for the motion picture "The Island."

He's flown with the likes of Frank Sinatra, Neil Armstrong, and four U.S. presidents. He flew UNICEF flights with Danny Kaye and a special birthday flight with John Travolta. In all, Lacy has flown more than 300 different aircraft types, has 32 different type ratings and holds 29 current world speed records. Among them is the famous 36hr., 54-min., 15-sec. around-theworld Friendship One flight in 1988 with friends Bruce McCaw and Joe Clark that raised \$530,000 for charity. Today, Lacy continues flying, adding to the more than 50,000 hours he has spent in the air – more than anyone else, ever.



## Gary Lai



THE WOLL STATE OF THE PARTY OF

YEAR AWARDED
2023
CATEGORY
Engineering

The rocket roars off the launch pad, accelerating to over 2,200 mph in two minutes and climbing to 350,000 feet. Later, it restarts its engine and slows to a near hover before landing vertically back on Earth. Its crew capsule then emerges from the sky, deploying parachutes and landing softly. This is yet another demonstration of New Shepard, a fully reusable human spaceflight vehicle.

Gary Lai, Chief Architect, led New Shepard's design team for much of its history. Growing up, Lai developed a passion for space after watching Carl Sagan's Cosmos. He attended Cornell University to study astronomy but became disillusioned by the long path to academia. He ended up majoring in finance instead. In his senior year, Lai took the last course Carl Sagan ever taught. Meeting his childhood hero, Lai's passion for space was reinvigorated. He started over and enrolled in aerospace engineering at the University of Washington.

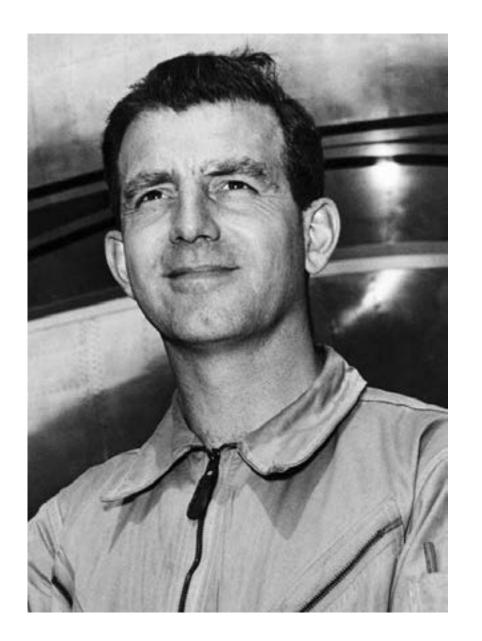
Kistler Aerospace hired Lai to help develop their business plan because of his dual background in engineering and finance. There, Lai met Rob Meyerson, who later went on to become President of Blue Origin. Meyerson recruited Lai to become Blue's 18th employee.

Lai would go on to fill many roles, helping Blue grow to over 10,000 employees. In 2008, Lai took over the New Shepard crew capsule, leading development of all its unique safety systems.

In 2015, New Shepard became the first rocket ever to fly to space and conduct a vertical, rocket-powered landing. In 2016, the same vehicle did it again, pioneering the path to today's reusable rockets and winning the Collier Trophy. Lai became overall technical lead of the project, at this critical point. To honor his contributions, Blue invited Lai to fly New Shepard himself in March 2022. Not only did he become the first Asian-American flyer on New Shepard, but he is the only person ever to lead the design of a rocket and then fly it to space himself.



### Robert T. Lamson





/4:

YEAR AWARDED
2001
CATEGORY
Flying

Robert Lamson began his decade-long stint as Boeing engineering test pilot in 1941; he worked on the Model 314, B-17C, B-17D, B-17E, B-17F, B-17G, XPBB-1, B-29, B-50, XF8B-1, Model 377 and YC-97 aircraft. Jet-rated in August 1947, Lamson was chief test pilot on the Model 377 Stratocruiser from 1949 to 1951. In all, he performed the first experimental test flights on nine different aircraft types, ranging from the four-engine B-50 bomber to the 3,000-hp XF8B-1 single-engine fighter.

Through the years, Lamson established himself as a technical consultant with a dizzying breadth of commercial aviation expertise. His projects and special reports have

covered such diverse disciplines as accident investigation, airport and airways facility planning, air carrier economics, aircraft certification standards, airspace utilization, and corporate flight operations planning. He was also involved in modifications to commercial and general aircraft that led to significant supplemental type certificates, was the principal designer of the Lamson L101 and L102 Air Tractor cropdusting aircraft, and was a member of the Federal Aviation Administration rulemaking committee that developed certification standards for turbine aircraft.

In 1965, Lamson started work on the all-composite L106 Alcor, the world's first pressurized sailplane. He then applied the expertise in composite materials and manufacturing techniques gained in 15 years' work on the Alcor to proofof-concept and prototypewinglet construction for Aviation Partners, Inc., a Seattle company that designs and builds innovative winglets to improve the efficiency of many commercial jets. More than 60 years on, Lamson continues to be a Northwest Pathfinder.

## Wendy Lawrence





YEAR AWARDED
2021
CATEGORY
Flying

Capt. Wendy Lawrence is a veteran of four Space Shuttle flights, logging a total of 1,225 hours in space. But her incredible career is marked by many other crowning achievements. Born in Florida, Lawrence was the daughter and granddaughter of Naval aviators. After high school, she 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. A member of only the second class in Naval Academy history to include women she was one of the first two female helicopter pilots to make a deployment to the Indian Ocean as part of a carrier battle group and accumulated more than 1,000 hours in the CH-46 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 her degree, she

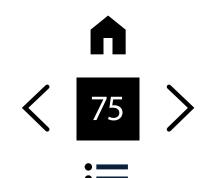
was assigned to Helicopter
Anti-Submarine Squadron
Light 30. She returned to the
Naval Academy in 1990 to serve
as a physics and leadership
instructor and women's crew
coach.

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. 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. Lawrence also served as NASA's Director of Operations at the Gagarin Cosmonaut Training Center in Star City, Russia.

Lawrence retired from NASA in 2006 and moved on to her "third" career as STEM educator. Her dedication to inspiring students, particularly young women, to pursue careers in STEM and aviation has been unmatched.

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.



## Wesley G. Lematta





YEAR AWARDED 1995

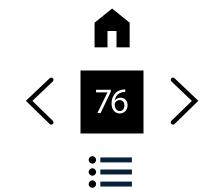
**CATEGORY** Operations

In 1957, in an adventurous endeavor, Wesley Lematta founded Columbia Helicopters, even though helicopters were still a novelty and work was often scarce. In September of that same year, Lematta displayed his adventuring spirit more dramatically when he rescued seventeen seamen by lifting them one at a time from a Corps of Engineers dredge sinking off the Oregon coast in high winds and rough seas. Lematta's courage and skill attracted national attention and stands as history's largest single-handed helicopter rescue.

For Lematta, this was just the beginning. In 1960, he pioneered the Direct Visual Operational Control (DVOC) technique for long-line precision placement of external loads, which improves safety by enabling pilots to see and control their loads. The DVOC procedure is recognized worldwide as the safest, most efficient technique for external load placement.

In 1971, Lematta founded a new industry--helicopter logging--and showed that logging is an ideal commercial application of the helicopter's unique capabilities. Columbia is now an industry leader, capable of harvesting two million pounds of logs per day with each Boeing Vertol 107-II and five million with each Boeing 234 Chinook.

Through the years, Lematta expanded Columbia's operations. His once-tiny, local operation is active around the world in passenger transport, firefighting, oilrig moves, and power line, ski lift, and general construction. Columbia's sixteen Boeing 107s have flown more than 350,000 hours, and the company's seven Boeing Chinooks nearly 25,000.



### Barbara Erickson London





**YEAR AWARDED** 1992

> **CATEGORY** Flying

In 1944, five years after she first soloed in a Taylorcraft seaplane, Barbara Erickson London became the only woman to be awarded the highly regarded Air Medal during World War II for her outstanding service with the Women's Airforce Service Pilots (WASPs) and for flying four 2,000-mile military trips across the United States in five days.

Only two years after London enrolled in the Civilian Pilot Training (CPT) program as a University of Washington junior, she had logged 1,000 flight hours and was serving as a CPT instructor. When the Air Transport Command issued a call for women aviators, London responded, and in September 1942 she became one of the 25 original members of the Women's Auxiliary Ferrying Squadron (WAFS). The following year, this group merged with Jacqueline Cochran's trainees to

form the WASPs. Working seven days a week, London and her fellow WASPs ferried B-17 Flying Fortresses, P-38 Lightnings, P-51 Mustangs, and other aircraft from factories to air bases and ports around the country. London quickly rose through the WASP ranks to become a squadron commander of the 6th Ferrying Group at Long Beach. She then went on to become one of only two women to qualify as captains of B-17s during the war.

London has received numerous awards during her long career. Today she remains active in aviation, operating Barney Frazier Aircraft, Inc., in Long Beach, California. Although more than 32 years would pass after the WASPs were disbanded before women could fly military aircraft again, Barbara London's early achievements paved the way for today's women military aviators.



### Howard Lovering







**YEAR AWARDED** 2021 **CATEGORY** At Large Growing up in the small, rugged town of Raymond, Washington, Howard Lovering never envisioned how his hardscrabble upbringing would provide him with the tools needed to transform a modest organization known as the Pacific Northwest Aviation Historical Foundation into what is now one of the largest nongovernmental air and space museum in the world. Few know of the Museum of Flight's rocky beginnings, and how, without the dogged persistence of Lovering, it may have never happened.

In 1975, Howard Lovering was assigned as a Boeing loaned executive to complete a study to assess the viability of a flight museum in the Pacific Northwest. His 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.

Lovering assisted the effort to save the old Boeing Red Barn, and relocate it to temporary storage at Boeing Field. Lovering then took leave of absence from the company to serve as the first executive director for The Museum of Flight. A few donors came forward during this critical time of "go-or-no-go," allowing the project to continue. As the Red Barn languished, and with the museum's presence at Seattle Center coming to a close, it was clear that the museum needed land, and the audacious ask was for seven prime acres on Boeing Field. The 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.

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. 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. Without his tenacity and steadfastness, the incredible story of The Museum of Flight would likely be much different.



# Charles A "Chuck" Lyford





YEAR AWARDED
2019
CATEGORY
Flying

Charles A. "Chuck" Lyford III closed each of his email messages with the tagline "Every Day Counts." Chuck Lyford personified this saying to the fullest. For nearly 70 years, he raced competitively on water, land, and in the air. Lyford is legendary in aviation for his flying skills and racing talent. His passion, enthusiasm, and leadership in flying and motor racing were infectious and inspirational.

Lyford began racing at age seven with his first outboard-powered racing boat. He was crowned the youngest national speedboat champion, and by his teens had secured five speedboat world records and many titles. Then came airplanes. At 19 he bought his

first P-51 Mustang and began to fly it back and forth to college. In the early 1960s, Lyford flew the Mustang in airshows and races. He naturally became an air race champion.

Lyford's passion for Learjets began with a demo flight with Clay Lacy and Joe Clark in 1964. Lyford and Clark later founded the first Learjet dealership in the Northwest, Jet Air. In 2017, Chuck Lyford died at the age of 75 doing one of the things he loved - racing cars. The legendary USAF fighter pilot and aerobatic flyer Bob Hoover remarked: "Chuck Lyford was the best natural pilot I ever knew."



### Nicholas B. Mamer

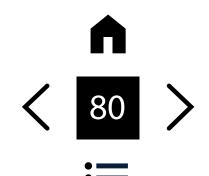




**YEAR AWARDED** 1983

**CATEGORY** Flying Nick Mamer enlisted in the U.S. Air Service in San Diego in 1916 and served as a pilot on patrol duty in the Panama Canal Zone during World War I. After the war, he settled in Spokane, and from 1920 to 1924 he barnstormed the entire Northwest. He secured the first contract for the Air Forest Fire Patrol in 1923; four years later, he organized Mamer Air Transport, which flew a route between Seattle and Spokane and eastward to Minneapolis and St. Paul. When Northwest Airlines was later awarded the U.S. Mail contract, Mamer piloted for them. In 1938, he was killed during what should have been a routine flight near Bozeman, Montana, when his airplane lost its tail assembly.

Most of his flying career was anything but routine. The highlight of his career came in 1929, when he and a young associate named Art Walker flew a single-engine Buhl airplane on the first transcontinental airborne refueling flight. The two men stayed aloft in the Spokane Sun God for more than 120 hours in a roundtrip 7,200-mile flight from Spokane to New York, setting a new world record for nonstop mileage. The flight included 49 mid-air exchanges of fuel, oil, and supplies, and was made without the help of radio communication or advance weather information. Air-to-ground communication consisted of notes attached to weights dropped over airfields. One of the last messages to reach the Spokane airfield was a request for clean clothes, soap, and hot water. "We're dirty as hell but happy," Mamer reported.



### Louis S. Marsh





YEAR AWARDED 1982

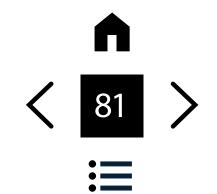
**CATEGORY** Engineering In the early 1920s, when Boeing engineers tried to join wood to metal, their efforts failed. Then Louis Marsh and his colleagues decided to try joining metal to metal. "We didn't know what a metallurgical problem was then," Marsh later recalled. "Metal was just metal in the early days, and there wasn't very much of it on those wooden planes."

Marsh and his supervisor, Claire Egtvedt, ran strength tests on various kinds of welds. Using a \$125 medical-turnedmetallurgical microscope to which he had attached a bellows camera, Marsh photographed and studied the structure and qualities of high-strength alloys. He then suggested that they use arc welding to keep production costs down and increase structural strength. Management, convinced, provided funds for designing and building arc-welding equipment suited to high

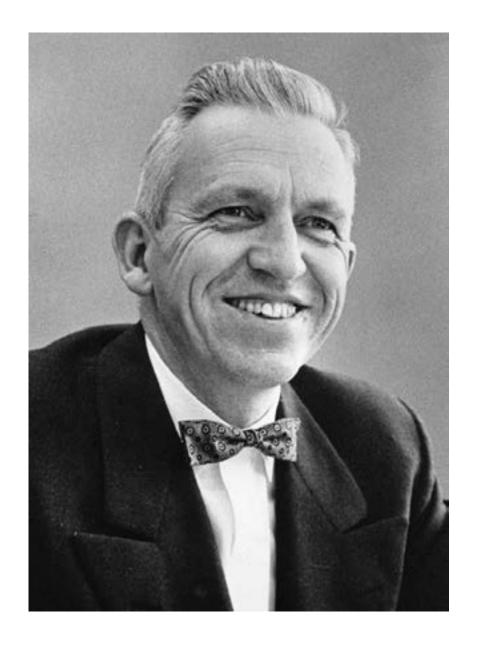
production. From this development stemmed one of the first significant advances of post-World War I aviation--a successful production process for arc-welding light steel tubing, which was used in 1923 for the frame of the Boeing PW-9 pursuit plane.

By establishing new standards for testing, manufacturing, buying, and using materials, Louis Marsh made a significant contribution to the revolutionary 1930 all-metal Boeing Monomail design.

Early in his career at Boeing, while working as one of William E. Boeing's first three engineers, Marsh had said, "Someday they're going to build these things entirely of metal." In addition to being a gifted mechanical engineer and metallurgist, Marsh was something of a prophet.



## George C. Martin





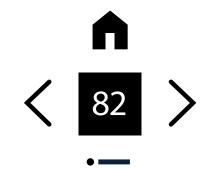
YEAR AWARDED 1987 CATEGORY

Engineering

George Martin joined the Boeing Airplane Company in 1931, shortly after his graduation from the University of Washington, and quickly made a name for himself in the company's burgeoning development division.

Early in his career with Boeing, Martin held responsible positions in both the B-17 Flying Fortress and B-29 Superfortress design efforts and played a pivotal role in the design development of the XB-47 Stratojet bomber as well. The XB-47 project represented the greatest single advancement in long-range high-speed aircraft in history and provided the basis for every Boeing jetliner and jet bomber design that followed.

Martin was named Boeing's chief engineer in 1953, where he directed the complex engineering programs for the B-52 Stratofortress, the Dash 80 (the prototype for the 707), and several classified aircraft projects. He went on to become vice president of engineering for the Boeing Seattle division and was later named a corporate vice president of engineering before retiring. A fellow of the American Institute of Aeronautics and Astronautics, Martin also served as a ranking member of several professional societies, including the Aerospace Industries Council and the Navy League.



### Bruce R. McCaw





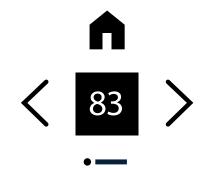
YEAR AWARDED
2013
CATEGORY
At Large

Airline founder, pilot, philanthropist, aviation historian, record-setter, leader, and visionary. Rare is the man who lives up to such adjectives. Rare is Bruce McCaw.

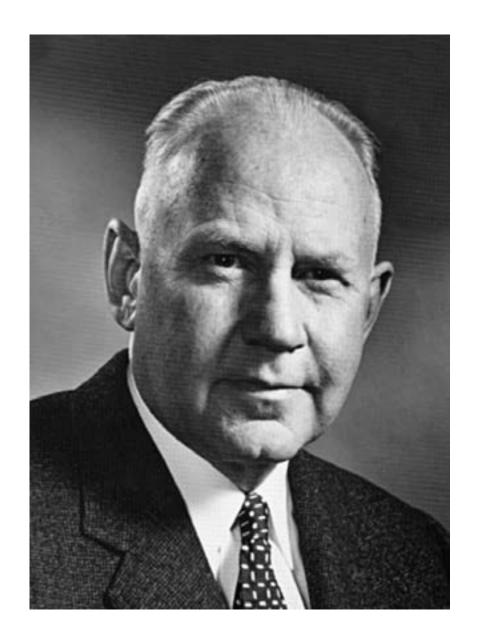
Though Bruce McCaw's business acumen and philanthropic influence has been felt throughout the Northwest and across the nation, perhaps it is his love and enthusiasm for aviation that will have the greatest impact on generations to come. Fascinated with aviation since childhood, McCaw has been the quiet and oftentimes anonymous force behind countless efforts that have shaped the Pacific Northwest aviation business culture since the 1960s.

His interest in the fledgling Museum of Flight began as a volunteer in 1979, four years before the Red Barn opened its doors to the public. He joined the Museum's Board of Trustees in 1985, and served two years as Chairman. Among the many accomplishments during his tenure were the arrival of the British Airways Concorde, the addition of the Personal Courage Wing, and the acquisition of the Champlin Collection.

McCaw's found tremendous success in the air as well. Along with longtime friends Joe Clark and Clay Lacy, he founded the Friendship Foundation in 1988. The Foundation chartered a 747SP dubbed "Friendship One" which set an around-the-world speed record while raising more than \$500,000 for childrens' charities. As co-founder, vice president, and director of Horizon Air, chairman and founder of Forbes Westar, Inc., and former director of Alaska Air Group, McCaw has been a vital voice in the growth and prosperity of the aerospace industry in Washington state and beyond.



### A. Elliott Merrill





YEAR AWARDED
1985

**CATEGORY** Flying

In 1945, the Institute of the Aeronautical Sciences awarded Elliott Merrill the Octave Chanute Award "for obtaining, at great personal hazard, data contributing to the design of high-altitude military aircraft." Back then, the institute recognized Merrill for sharing his talent and experience to further the war effort by flying B-29 Superfortresses in the Far East to help Air Force crews get the most from their bombers. His work was instrumental in testing the mettle of America's military might.

Merrill joined the Boeing Aircraft Company in 1941. As chief of Flight Testing, he pioneered true high-altitude flight testing, the kind that was vital to proving the XPBB-1 Sea Ranger, XC-97 (prototype of the

C-97 Stratofreighter), and B-50 Superfortress—all of whose first flights he piloted. During his testing days, Merrill also flew the 314 Clipper, DB-7B attack bomber, B-17 Flying Fortress, XB-29 Superfortress prototype, and B-47 Stratojet bomber. In 1945, Merrill set a new national transcontinental speed record while flying an XC-97 from Seattle to Washington, D.C. He retired from Boeing in 1964 as manager of military sales, and in the following year he was named the first board chairman of the Northwest Aviation Historical Foundation.

### Marvin Michael





YEAR AWARDED 1999

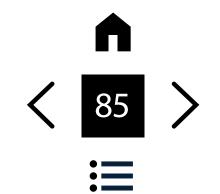
> CATEGORY At Large

Marvin Michael's interest in aviation began early when he performed chores at local airports in exchange for flight time. He flew gliders while he was a student at Kansas State and continued to do so at the University of Michigan, where he earned his bachelor and masters degrees in aeronautical engineering.

Following graduation, Michael joined the Stearman Aircraft Co., where he had worked as an office boy for Lloyd Stearman since right after high school. While working his way up to a flight-test engineer position at Stearman, Michael met Boeing pilot Eddie Allen. He was working at Lockheed when Allen offered him a position at Boeing as flight test engineer on the B-17 Flying Fortress. He took the Boeing offer and eventually moved into the test pilot slot during World War II.

Much of Michael's groundbreaking work at that time explored the aeronautical, physiological, and psychological effects of high-altitude flight in B-17s. Later, during the Cold War, Michael pioneered the development of air-to-air refueling technology on B-29 and B-50 Superfortresses. His flying career extended into the jet age with the B-47 Stratojet.

Upon his retirement from Boeing, Michael joined humanitarian relief flights—first for medical and dental care for native peoples in British Columbia, and then in faminestricken Ethiopia. Michael holds the Silver C Soaring Badge and is a Hall of Fame member of the OX5 Aviation Pioneers, the Caterpillar Club, and the United Flying Octogenarians.



### Harold "Mitch" Mitchell





YEAR AWARDED
2021

**CATEGORY** Education

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 Air Force two-star general and airline captain. 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'. He was also an instructor and a FAAdesignated Check Airman.

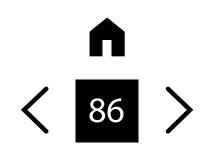
As impressive as Mitchell's accomplishments are, both military and civilian, it is his leadership and passion for youth education that will have the greatest impact and mark his legacy. In 2009, Mitchell

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 staff, hosted a few dozen youth for a day of fun and learning at the Museum. It was very clear that this was something special, and through the leadership of Mitch Mitchell it was only just beginning.

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." The target audience was disadvantaged children of color. From that day forward, the Michael P. Anderson Memorial Aerospace Program 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.

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.



### Charles N. Monteith





YEAR AWARDED 1984 CATEGORY

Engineering

engineering. During his time as chief engineer at Boeing, from 1927 to 1934, he directed the development that firmly established Boeing as an industry leader in both commercial and military aircraft design. Among these innovations were the electrical welding of steel structures, the first aircraft use of oleo shock absorbers, the first application of retractable landing gear, the first smooth-skin, all-metal airplane, the first application of controllable trim tabs, and the first twin-engined monoplane transport (the Model 247), which set a new standard in commercial aviation in 1933.

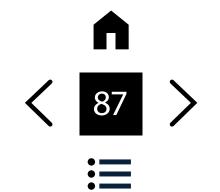
Charles Monteith was a

true pioneer in aeronautical

Monteith graduated from Washington University in St. Louis as a civil engineer in 1915 and learned to fly in the Army Air Service in 1917. He was a flight instructor at Kelly Field, Texas, and Taylor Field,

Alabama, and shortly before the end of World War I he was selected by the Army to study aeronautical engineering at MIT. After graduation, he was assigned to the Engineering Division of the Army Air Service at McCook Field in Dayton, Ohio. He later became section chief and also served for three years on the Aerodynamic Subcommittee of the National Advisory Committee for Aeronautics.

In 1925, Monteith resigned from the Army and joined Boeing as an engineer. After a period as chief engineer, Monteith went on to become vice president of engineering, and, in 1936, executive vice president. His 1932 book, Simple Aerodynamics, and the Airplane, went into three printings and was used as a standard text by a generation of engineers.



## Barbara Morgan





YEAR AWARDED
2012
CATEGORY
Education

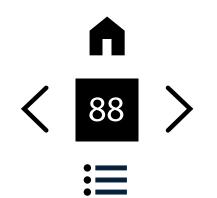
Over her extensive career,
Barbara Morgan has
contributed to education and
our nation's space program
as a teacher and astronaut.
Inspired by President Reagan's
1984 announcement of the
opportunity, she applied for the
Teacher in Space Program, was
selected as Christa McAuliffe's
backup in 1985, and trained
with the Challenger crew from
September 1985 to January
1986 at NASA's Johnson Space
Center.

Morgan took up the duties of Teacher in Space Designee after the Challenger accident. She worked with NASA and traveled around the country speaking to education organizations before returning to Idaho to resume her teaching career in late 1986. There, Morgan taught secondand third-graders while still working with NASA's Education Division and was active in the creation of the Challenger Learning Centers, one of which resides at The Museum of Flight.

In January 1998, Morgan was selected by NASA as a Mission Specialist and the first educator astronaut. Two years of training led her to a position in the **Astronaut Office Space Station** Operations Branch, and in 2007, she served as Mission Specialist Educator on STS-118. In addition to myriad other duties, Morgan participated in amateur radio question-and-answer sessions with young people. After 5.3 million miles in space spanning nearly 13 days, Morgan logged over 305 hours in space.

Morgan's passion for teaching continued after her 10 years with NASA, which culminated in retirement in August 2008.

She is the Distinguished Educator in Residence at Boise State University and founded and leads the Idaho Science and Aerospace Scholars, an inspirational program for high school juniors involving handson experiences in science, technology, engineering, and math (STEM) which includes a week-long academy at Boise State University and NASA Ames Research Center. Morgan remains an inspiration to many young minds today as she shows them that the sky is truly no limit.



#### Peter Morton





YEAR AWARDED
2019
CATEGORY
Education

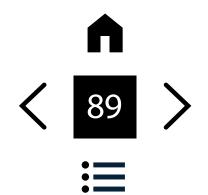
Peter Morton started at the Boeing Company as an educator for pilots in the "Boeing College of Jet Knowledge" in 1958. His assignments progressed to flight operations engineering, 737 and 747 marketing management, and as senior project engineer for the 757 flight deck. In that assignment, Boeing established industry standards for excellence in two-person crew flight design applying electronic displays to flight path management, airplane systems monitoring, and crew alerting. These concepts prevailed in subsequent Boeing models and influenced transport and general aviation flight decks around the world.

Leadership roles in airplane development included program management for the 707/727/737 division, sales operations for Boeing Commercial Airplanes, and director of Boeing customer training, in which he had started 25 years previous. Peter was director of program management for the 7J7 program during which Boeing developed and tested many process and airplane technologies that evolved into best practices in the 777, including design-build teams, design development without mockups, and advanced CAD/ CAM using CATIA systems.

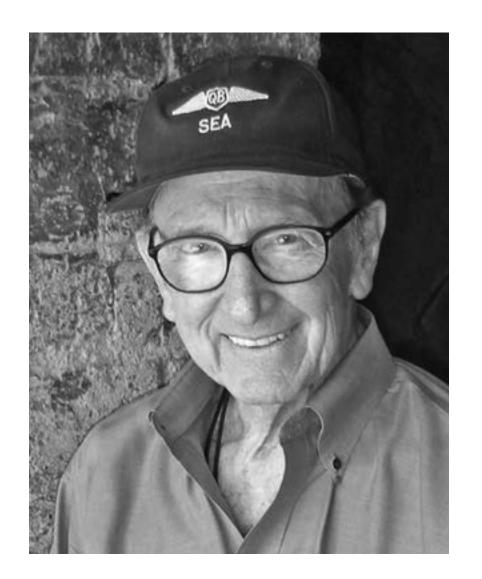
In 1995, Peter was assigned as corporate vice president of the Boeing Center for Leadership and Learning, responsible for company-wide education of first line, mid-level, and senior managers centered at the St. Louis Boeing Leadership Center. In 1997, he helped develop the

Seattle University Executive Leadership program where he still serves as a student coach. He retired in 2000 as vice president - human resources for Boeing Commercial. Since retirement, his interests focused on education using aviation as a prime motivator, providing advisory and governance roles at the Seattle Girls School, Raisbeck Aviation High School, South Whidbey High School, and the Museum of Flight Aeronautical Science Pathway program.

Peter's passion centers on teaching and coaching youth, and celebrating accomplishments of leaders through the Museum Pathfinder program. Now a Pathfinder, he proudly wears his EAA "300 Mission" jacket, having flown more than 350 Young Eagles missions.



### Robert S. Mucklestone





YEAR AWARDED
2022

**CATEGORY** Flying

From record-setting around-the-world flights to championing the Pacific Northwest Aviation Historical Foundation, Bob Mucklestone has advanced the legacy of aviation in our region for over half a century.

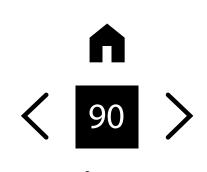
Mucklestone grew up in the Golden Age of Aviation, a time when daring, death-defying pilots competed to test the limits of flight with just a single engine and a set of metal wings. When he earned his own pilot's license, he set out to follow this tradition of pushing the envelope. His round-theworld flights in the 1970s clinched aviation records, and stand as a symbol of endurance, skill and determination.

In 1975, Mucklestone and his son Peter circumnavigated the globe in a non-pressurized, single propeller Cessna T-210, a flight widely covered by the national media. Landing back at Boeing Field after 12 days, 3 hours, and 29 minutes, the two earned a world record. When two other pilots bested that time, Mucklestone reconfigured the Cessna's interior and flew solo in 1978 to reclaim the record. His many flights, including four circumnavigations, earned him an FAA Distinguished Service Award and an induction into the Explorers Club.

Even before becoming a globetrotting pilot, Don Filer, a friend of Mucklestone, recruited him to join PNAHF, a fledgling organization that would evolve into The Museum of Flight. Mucklestone worked to relocate the group from the Renton Municipal Airport to an exhibit space at the Seattle Center. In its home next to the Space Needle, the Foundation's new gallery welcomed over 110,000 annual visitors and helped convince Boeing and area civic leaders that a Northwest

aviation museum could succeed and deserved exploration. Mucklestone was the Museum Chair and charted a course toward building the foremost educational air and space museum in the world.

Once the Museum was established, Mucklestone continued to serve for decades as a member of the Board of Trustees. He used his expertise as an estate planning attorney to guide the Museum's planned giving efforts. During this period, Mucklestone and Lew Wallick, head of Boeing flight testing, rescued a rare 1929 Boeing Model 100 from a scrap heap in Florida, restoring it and eventually gifting it to The Museum of Flight. The P-12 sits today in the Museum's T. A. Wilson Great Gallery, at home in the house that Mucklestone helped build.



## Dr. George E. Mueller





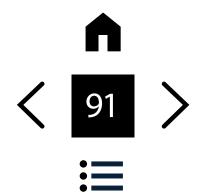


Dr. George E. Mueller led the Apollo lunar landing program that put Americans on the moon less than seven years after he was assigned to the program. In 1963, Dr. Mueller was asked by NASA administrator James Webb to join NASA as head of the manned space flight program, where he was responsible for the Gemini, Apollo, and Saturn programs. This role required Dr. Mueller to integrate the diverse engineering cultures of Kennedy Space Center, Marshall Space Flight Center and Johnson Space Center, all of which reported to him. From the beginning of Gemini flight operations in 1963 through the second Apollo moon landing in 1969, he directed the U.S. manned flight program as Associate Administrator for

Manned Space Flight. He was also the originator of Skylab, the world's first space station, and is credited as the "Father of the Space Shuttle," the first reusable space transportation system.

His leadership made possible the achievement of the national goal set by President Kennedy in 1961: the landing of men on the Moon and their safe return to Earth by the end of the decade. His practices from the Apollo program are now the standard program management practices of systems engineering, systems management, and "all-up testing," without which the president's goal would not have been achieved. After NASA, Dr. Mueller served as senior vice-president of the General Dynamics Corporation (1969 to 1971), chairman and president of System Development Corporation (1971 to 1983) and at Kistler Aerospace served as CEO from 1995 to 2003 and Chairman from 2003 to 2006.

Dr. Mueller earned his doctorate in physics at Ohio State University and has received honorary doctorates from six universities. His numerous awards include three NASA Distinguished Service Medals, the American Astronautical Society Space Flight Award, the Eugene Sanger Award, the Yuri Gagarin Space Award, and the Goddard Award from the American Institute of Aeronautics and Astronautics. He was awarded the National Medal of Science by President Nixon for his many individual contributions to the success of the Apollo system. In 2011, Dr. Mueller received the **Smithsonian Air and Space** Museum Lifetime Achievement Award.



### Alan Mulally





YEAR AWARDED
2015
CATEGORY
Engineering

Serving as President and CEO of the Ford Motor Company, **Boeing Commercial Airplanes** (BCA), and President of Boeing Defense and Space group, Alan Mulally has received worldwide recognition for his leadership and groundbreaking industry strategy. Fascinated with the art and science of flight, Mulally became a pilot in his teens and pursued studies in aeronautics and astronautics engineering, earning a Bachelors and Masters of Science from University of Kansas. In 1969, Mulally joined Boeing and advanced through a number of notable engineering and project leadership positions involving the 727, 737, 747, 757, 767, 777 and 787 airplanes. Mulally became known for his ability to tackle air safety challenges, earning the 1978 Boeing Employee of the Year award.

In 1982, Mulally became the BCA Renton Division Technical Staff Chief. In this position he was awarded in 1986 the AIAA

**Technical Management Award** and the Space Technology 'Laurels' recognition for his research on airframe contamination and wind shear at BCA. Mulally was later appointed to lead technical development of the Boeing 777. In addition to pioneering many design advancements, Mulally's insight and approach to this assignment revolutionized the organization and culture at Boeing. Employing "Working Together" principles encouraging the creation of cross-departmental design/ build teams—Mulally opened new lines of communication between the workforce and management; improving overall efficiency. The 777 earned his team the National Aeronautical **Associations Collier Trophy** in 1995, and he was awarded "Engineer of the Year" by Design News in 1996. In 1998, Mulally was named President of BCA, and became CEO in 2001.

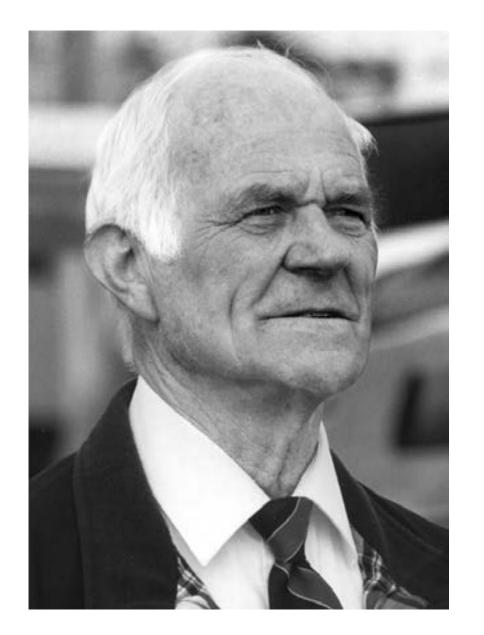
In 2006, Mulally joined Ford Motor Company as President and CEO, transforming Ford's culture and financial performance. He built a visionary platform known as "One Ford" which instituted a transparent team-focused work environment amongst workers and the development of new, profitable, fuel efficient, smart products. Unique among US auto companies, he saved Ford from bankruptcy, earning him Morningstar's CEO of the year in 2010, one of "The World's Most Influential People" by TIME magazine, and many other accolades.

Mulally is an inspiration and Pathfinder for generations to come and an example of what can be achieved through determination, diligence, vision and most importantly "working together."





### Robert B. Munro





YEAR AWARDED 1997

**CATEGORY** Operations

In his early careers as auto mechanic, cannery worker, and gold miner, Robert Munro demonstrated the drive that later enabled him to build Kenmore Air Harbor, the largest seaplane operation in the U.S. In 1945, when he and partner Reg Collins started a one-plane flying service at the north end of Lake Washington, Munro held an aviation mechanic's license from the Boeing School of Aeronautics and had found work on the Boeing B-17 Flying Fortress line and at the Pan American base at Boeing Field. Within a year, he learned to fly and became his new company's chief pilot, CEO, and sole owner.

Through the years, as Kenmore Air Harbor grew, Munro added aircraft and such services as hunting and fishing charters, regular flights between Seattle and British Columbia, flight instruction, aircraft storage, and the rebuilding of deHavilland Beavers. He also developed "ice flying" techniques for supplying northern outposts by landing floatplanes on and taking off from glaciers. Munro has saved lives in remote, dangerous air missions. He has also landed surveyors at 7,000 feet on the South Cascades Glacier of Mt. Olympus and ferried anglers to the best fishing spots in the Northwest.

Munro flew 50,000 passengers more than two million air miles each year. With as many as 130 employees, he operated four deHavilland turbine Otters, nine deHavilland Beavers, two turbine Beavers, and four Cessnas, all on floats. The man who called himself "just a mechanic who likes to tinker with airplanes" earned the

prestigious FAA Charles Taylor Master Mechanic Award in 1996, was recognized by the Seaplane Pilots Association as United Seaplane Pilot of the Year in 1995 and was inducted into the Washington State Aeronautics Hall of Fame in 1999.



### Herbert A. Munter





YEAR AWARDED 1991

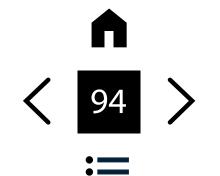
**CATEGORY** Flying

Herbert Munter's lifelong love of aviation was sparked in 1910, when he watched Charles Hamilton make Seattle's first aircraft flight at the Meadows Racetrack. Inspired, Munter began to build his own pusher biplane, equipping it with a 40-horsepower Hall-Scott engine and fabric stitched from bedsheets. He named the fragile plane The Munter. With no previous flying lessons, Munter made his first flight-the first successful flight of a Seattle-built airplane--in July 1912.

Munter went on to achieve several more firsts. In 1916, after barnstorming the West Coast, he became the first employee and test pilot of The Boeing Company, then known as Pacific Aero Products Company. In 1920, he started Seattle's first organized passenger-carrying service and made the first flight over Mt. Rainier, with two passengers, in a Boeing BB-L6 biplane.

After a hangar fire interrupted his charter flying, Munter entered the automobile business. He still took to the skies occasionally to fly the mail between Seattle and Victoria, B.C., for Eddie Hubbard. Then, in 1934, he returned to aviation full-time to open the Aircraft Charter Service in Ketchikan, Alaska. For the next seven years, his company operated without loss of equipment, personnel, or passengers. With this remarkable performance, Munter earned a reputation as an expert in sub-Arctic aviation.

Munter enlisted in the Navy in World War II and rose to the rank of commander. After the war, Munter, Nick Bez, and several others formed West Coast Airlines. Munter applied a lifetime of aviation experience to the successful operation of this airline and left an indelible mark on the development of aviation in the Northwest.



### Erik H. Nelson





YEAR AWARDED
2006

**CATEGORY** Engineering Erik Nelson was an early day Pathfinder it the true sense of the word. His amazing career began on sailing ships and continued through-out the early period of Military and Civil aviation.

Nelson enlisted in the "US Army Signal Corps" (later the U.S. Air Corps) at the beginning on World War I. His sailing and engine background served him well and he quickly passed through flight training and became a flight instructor at Love Field, Dallas, Texas.

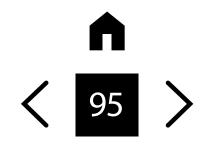
After the war, Nelson was selected as the engineering officer and pilot on a flight of four airplanes visiting 32 cities covering 7,000 miles. However, the highlight of Nelson's flying career was his selection in

1923 as Engineering Officer and Pilot for the Round the World Flight. This involved his liaison and supervisors in design and building of the Douglas World Cruisers in Santa Monica, California. A few days after returning to Seattle at the Sand Point Naval Air Station, he was approached by William E. Boeing, who was quite impressed by Nelson's contributions to the success of the first Around the World flight. Boeing offered Nelson a job as his personal advisor. Nelson accepted the offer and the relationship continued for the next fourteen years; first, as an assistant to Mr. Boeing and then under Phil Johnson as a Director of Sales for the Boeing Company.

Nelson returned to the military with the onset of World War II and served as General Arnold's technical advisor throughout the war. He became a Brigadier

General on October 25, 1945, and retired from the Air Corps on February 11, 1946. Later that year, he was named Technical Advisor to Swedish Intercontinental Airlines, now SAS.

Erik Nelson is nominated in the Engineer category for a body of work that contributed many significant achievements and breakthroughs in aviation, particularly for his involvement with the Douglas World Cruiser project and the safe navigation of the New Orleans around the world in 1924.



# Dr. George D. "Pinky" Nelson





**YEAR AWARDED** 2017 **CATEGORY** At Large A quietly accomplished astronaut, teacher and researcher, Dr. George D. "Pinky" Nelson has made a lasting impact in aerospace and STEM education. Nelson was particularly drawn to the sky from a young age; he was also a gifted math student, graduating from Harvey Mudd College in 1972 with a Bachelor's of Science degree in physics and a pilot's license.

Nelson then shifted his focus from aviation to astronomy. After years of solar physics and astronomical research he received his PhD from the University of Washington (UW). In January 1978, he was selected as an astronaut candidate by NASA, and he completed his first space mission aboard Challenger in April 1984. During the mission, Nelson became the first astronaut to repair a satellite in orbit, a challenging yet critical task which paved the way for

other astronauts to perform extra-vehicular activity. Two years later, he returned to space aboard Columbia where he conducted astrophysics experiments and deployed another satellite.

Ten days after returning in Columbia, the Challenger tragedy occurred and the space program entered a hiatus. Nelson returned to UW during the two-year investigation. However, he couldn't pass up the opportunity to fly as a mission specialist on Discovery, the first flight to follow the Challenger accident. By the time he left NASA in 1989, he had logged a total of 411 hours in space, including 10 hours of EVA.

Back on Earth as a university professor Nelson had another mission on his mind—science education reform. Growing concerned with the lack of science literacy amongst incoming freshman, he worked

with his science education seminar students to evaluate standards proposed by Project 2061, a long-term initiative committed to improving the nation's STEM fluency. From 1997 to 2011, Nelson served as Project 2061's Director, where he helped develop new science learning pillars and advocated for systemic change. Nelson went on to serve as the Director of the Science, Mathematics and Technology Education program at Western Washington University until 2012.

From performing notable astronomical research, to completing three successful space missions, to leading a nationwide science education initiative, Nelson embodies the true meaning of a Pathfinder. When his eyes aren't on the skies, he enjoys bicycling, playing guitar and spending time with his family.



### Dennis O'Donoghue





YEAR AWARDED
2018
CATEGORY
Flying

Dennis O'Donoghue embodies the definition of servant leadership as a pilot for the Marine Corps, NASA and Boeing, while his impact on flight test engineering and corporate leadership has redefined the aerospace industry.

O'Donoghue remembers his captivation with flying from an early age. He grew up with the excitement of the space race, and was 14 when his uncle took him on his first flight. With goals of earning a degree in engineering and becoming a test pilot, he was accepted to the United States Naval Academy

After graduating with a mechanical engineering degree, O'Donoghue flew in the Marine Corps serving as a fighter and instructor pilot. At the Navy Test Pilot School he

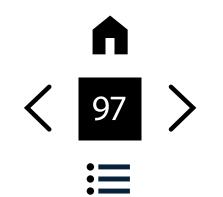
gained experience in vertical and short takeoff/landing aircraft as an AV-8B Harrier II test pilot. For his Master's thesis O'Donoghue created a voice-controlled avionics system for fighter aircraft; a similar system would end up in the Joint Strike Fighter program and the F-35 Lightning II.

After a career of experimental flight test and space support at NASA, he accepted a job from Boeing on the X-32B program. He then transitioned to a leadership role as the Deputy Project Pilot for the Sonic Cruiser and 787, and then as Chief Pilot of Production Flight Test. In 2005, he left Boeing for a year to be the Director and Chief Pilot for Eclipse Aviation. He returned to Boeing as VP of Flight Operations.

O'Donoghue was assigned the daunting task of integrating all laboratory and flight test activities in support of commercial airplanes, military

aircraft and space programs, into one company-wide organization which would become known as Boeing Test and Evaluation. It is now the largest and most diverse T & E organization in the industry. He retired in 2017 as Vice President and Chief Engineer for Boeing Defense, Space and Security.

O'Donoghue's success as a Boeing executive stems from a unique approach to leadership and desire to understand and leverage the purpose, principles and culture of the organization he leads. His credo: "Being present in the moment is a key trait and quality of a good and effective leader."



# Clyde E. Pangborn





YEAR AWARDED 1982

**CATEGORY** Flying

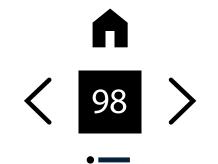
Clyde Pangborn's mother and father both came West in covered wagons, and Pangborn grew up in the brawling town of Orofino, in the Idaho Panhandle, in the early 1900s. "He was a pioneer throwing off the shackles of the ground," Lowell Thomas once said of Pangborn and his love of flying. And as Thomas woke America to travel, Pangborn drew the country's attention to aviation by carrying more than half a million passengers, dedicating some 300 airports, and cavorting in the air upsidedown and high above great congregations of spectators.

But those feats were not all that set Clyde Pangborn apart from the rest. On July 28, 1931 at six in the morning, Pangborn and his partner, Hugh Herndon, flew out of New York in what would become their famous attempt to break Wiley Post's record-setting circumnavigation of the globe. Flying in fog and clouds all the way, they piloted

their big red Bellanca aircraft across the Atlantic to their first landing in Moylegrove, Wales. They also made stops in Croydon, England, Berlin, and Moscow, Novosibirsk, Chita, and Khabarovsk in Russia. Then they flew on to Japan, where, abandoning their challenge to Post, they decided to complete the first nonstop crossing of the Pacific Ocean instead. They succeeded, landing in Wenatchee, Washington.

In 1934, Pangborn teamed with Roscoe Turner to win third place in an 11,325-mile event, the MacRobertson Race from England to Australia. They had leased a brand-new Boeing transport 247 that sported such luxuries as a retractable landing gear.

"Tramp? Philosopher? Pioneer?" Lowell Thomas asked. Now time has judged well the remarkable achievements of Clyde E. Pangborn.



### Addison Pemberton





YEAR AWARDED
2016

**CATEGORY** Engineering An avid restorer of antique airplanes and co-owner of Scanivalve Corporation, Addison Pemberton brings aviation's past into the present while helping engineers develop airplanes of the future.

Regarded as a 'godfather of biplanes,' Pemberton's passion for aviation is unparalleled. He found his love of antique aircraft working at Gillespie field near his San Diego home, and began formal flying lessons at age 15. For Pemberton, flying vintage aircraft wasn't about the destination, it was about experiencing the splendor of early aviation.

Pemberton's "day job" is running the Scanivalve Corporation (started by his father in 1955), a manufacturer of cutting-edge intelligent pressure and temperature instrumentation. The company now produces temperature and air pressure sensors for the wind tunnel/flight market, power plant devolvement, wind engineering, race car and turbomachinery industries.

When Pemberton isn't at the office, his eyes are on the skies. His hangar complex at Felts Field is celebrated in the vintage aircraft community as an airplane restoration sanctuary. His flyable fleet includes a Stearman Speedmail, 450 Stearman, Cabin Waco, Grumman Goose, Cessna 185, Super Cub and his most renowned project the 1928 Boeing 40C.

Pemberton's preservation of antique aircraft is a niche art form, a service capturing early aviation for the casual to the most zealous restoration

practitioner, education for the youngster to the seasoned senior; all the while conferring the inspiration of aviation and its impact on history. Pemberton's enthusiasm for his craft, strong leadership ability and charismatic personality make him an exemplary Pathfinder.



## Maynard L. Pennell





**YEAR AWARDED** 1986

> **CATEGORY** Engineering

Maynard Pennell's work as an aeronautical engineer spans the history of modern aviation--from fighter biplanes to supersonic jets. During his long career at Boeing, Pennell was a motivating force behind the development of the first commercial jets and he contributed to the engineering of nearly every Boeing aircraft that followed.

Pennell foresaw the tremendous possibilities for the Transport Division during the 1950s, when Boeing designed and built the 707 and 720 lines, the military KC-135, and the 727 trijet. The remarkable success of those programs can be credited largely to Pennell's unflagging confidence and enthusiasm.

Pennell went on to direct the Supersonic Transport program for the Commercial Airplane Division and, in 1970, moved to vice president of product development for the entire Boeing Company.

He received numerous awards for his accomplishments in aeronautical engineering. In 1965, Pennell was given a Sperry Award for "leading the study, design, and research team that engineered and produced America's first jet transport." He was also elected to the National Academy of Engineering--an honor reserved for individuals who have made a significant contribution to engineering theory and practice.

# Raymond I. Petersen





YEAR AWARDED 1985

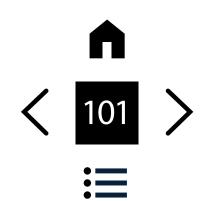
**CATEGORY** Operations

Raymond Petersen, "Dean of the Interior Pilots," first arrived in Anchorage, Alaska, on April 1, 1934. Within days, he joined Les Plumb in flying prospectors and trappers into and out of the Lake Chelatna area aboard a J-4 Travel Air biplane. Petersen then joined Bethel Airways and flew a Wasp Travelair and a Fairchild 71. Later, after he formed the Ray Petersen Flying Service, the CAB awarded Petersen the Bethel and Anchorage route in what could be called "the original sweetheart deal." Every Saturday, Petersen flew from Bethel to Anchorage to see Toni Schoddle, and when it came time to award the route, the CAB recognized Petersen's courtship flights as "grandfather rights."

In 1940, Petersen consolidated several bush airlines under the name of Northern Consolidated Airlines, which served more

than 3,000 miles of central Alaskan territory. Eventually, NCA merged with Wien Alaska Airlines, becoming Wien Air Alaska.

Petersen left Wien in 1978. His contributions to the field of aviation were recognized in 2001, when he was inducted to the Alaska Aviation Heritage Museum Hall of Fame. Today, his son owns and operates three fishing lodges near Bristol Bay, about 250 miles southwest of Anchorage. Guests from all over the world come to the lodges to fish and to hear stories about the early days of Alaska aviation.



#### Don Pettit





YEAR AWARDED 2019

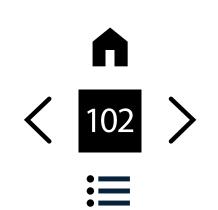
**CATEGORY** At Large

Don Pettit is a chemical engineer and an active NASA astronaut who has logged 370 days aboard the International Space Station, including 13 spacewalk hours. Within the astronaut corps, Pettit is one of the first persons called upon when something on the space station needs fixing. With his deep knowledge in material science, he has been known to design and invent tools to get the job done.

Born in Silverton, Oregon, Pettit became a NASA astronaut in 1996, and launched on his first mission in 2002, "Expedition Six" to the International Space Station. During his nearly sixmonth stay onboard the ISS, Pettit broadcast his Web series called "Saturday Morning Science," performing miniexperiments about the effects of microgravity and how science can help mitigate them.

The experiments led to two of his most renowned innovations: the zero gravity cup and an orbital optical tracker for photography on the ISS.

As a current astronaut, Pettit is working on special projects for NASA. He is lead support for Expedition 59 and is currently awaiting his next spaceflight assignment.



### James D. Raisbeck





YEAR AWARDED
2007
CATEGORY
Engineering

James Raisbeck is an aerodynamicist who possesses a comprehensive understanding of the interaction between technological and economic implications in airplane design.

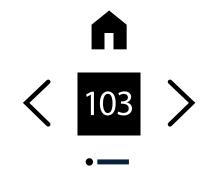
At Boeing, Raisbeck was part of a team that designed and tested an internally blown trailing edge flap system on the prototype 707 (Dash 80) to fly at speeds as slow as 60 knots. The inventions and aerodynamic insights from this program became the basis for low-speed configurations of subsequent Boeing airplanes.

In late 1969, Raisbeck left Boeing to become President and Chief Engineer of the Robertson Aircraft Corporation. There, he and a team of former Boeing Engineers completed the Robertson STOL design modifications for single and twin engine Cessnas and Pipers.

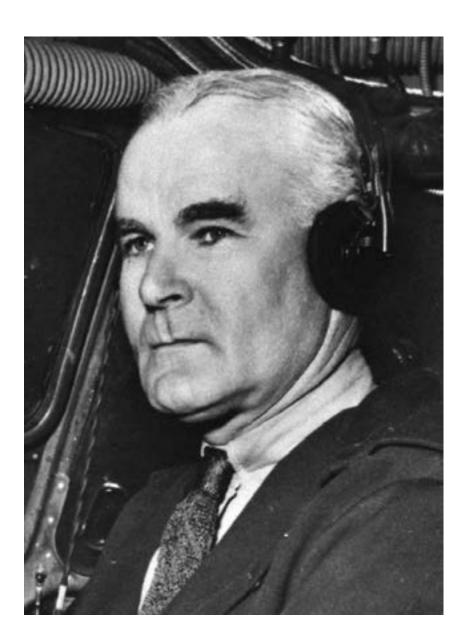
Raisbeck Engineering, Inc. was founded in 1973 and it continues to this day. Corporate, engineering, shipping, and receiving operations are near Boeing field where it conducts its experimental and certification testing.

In 1979, Raisbeck was honored by Purdue University, receiving their Distinguished Engineering Alumnus Award, and again in 1999 with Purdue's Outstanding Aerospace Engineer Award. In that same year, he was honored with the AIAA Commercial Aviation Technical Achievement Award. In 2000, he was awarded Professional Pilot Magazine's Aviation Entrepreneur of the Year. In 2002, The NBAA awarded Mr. Raisbeck its Lifetime Achievement Award.

Seattle's Hope Heart Institute honored the Raisbecks in 2003 with their "Wings of Hope" annual award for their leadership in philanthropy, and in May 2005, he received Purdue University's highest recognition to engineers, an Honorary Doctorate in Engineering.



### Robert C. Reeve





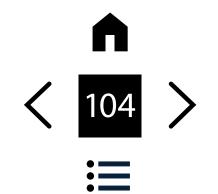
YEAR AWARDED
1983

**CATEGORY** Operations

Robert Reeve arrived in Valdez, Alaska, in 1932, after several years of flying in the South American Andes. His mountain-flying experience convinced him that he could land on the glaciers of the **Chugach and Wrangell** Mountains and provide easy access to gold mines that had been abandoned by miners because of the difficult overland trip. Reeve rebuilt a wrecked Eaglerock biplane himself, leased it from the owner, and launched Reeve Aleutian Airways. Soon, the mining business boomed, Reeve earned the title "Glacier Pilot," and his original singleairplane operation grew into a scheduled airline. The airline operated in an area that aviators everywhere say is one of the most forbidding and uncompromising in the world.

Reeve received many honors and awards, both during his lifetime and posthumously. Among them was inclusion in three aviation halls of fame. There are many stories about his mountain landings, but perhaps the most famous involves his response to a request from Brad Washington, director of the Boston Museum of Science and an expert on Mount McKinley. Washington wanted a pilot to land him and a full load of equipment at the 8,500-foot level of Welsh Glacier, which was 2,000 feet higher than what had been previously accomplished. "Anywhere you'll ride, I'll fly," Reeve responded. The mission was completed.

Despite his daring, Reeve was a thoroughly safety-conscious pilot. In 1952, after he forgot his flight preparation checklist and left one vital step out of his routine, he quit piloting.
"I figured I'd run out of all my
own luck, all my friends' luck,
and 10,000 other people's luck,"
Reeve explained. He continued
to run the family-owned
business until his death in 1980.



### John P. Roundhill





YEAR AWARDED 2009

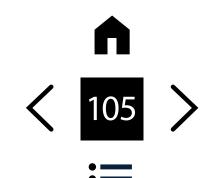
**CATEGORY** Engineering

Passionate, optimistic, and innovative are adjectives that can only begin to describe John Roundhill's compelling personality and dedicated nature. As an outstanding engineer and manager with a bachelor's and master's degree from the University of Washington, he has truly made his mark on Boeing commercial jet liners ranging from the 737 to the 787.

Beginning his 37-year career at Boeing in 1965 as a research specialist in acoustics and propulsion technology, Roundhill has succeeded in numerous technical and management positions including chief engineer of product development technology for the 737 and 757; development of a new 767 derivative; preliminary design, customer configuration, and marketing of the 777 program;

and creation of both 747-400 derivative, as well as new aircraft concepts, in the New Large Airplane Development project. During his last five years at Boeing, he served as vice president of Product Strategy and Development for the Commercial Airplane Group, where his team contributed to various new airplane programs such as the 747-8 and the 787.

Since his retirement in 2002, Roundhill remains an active participant in the 787 programs and product development. He flies to Seattle from his home in northwest Montana where he enjoys restoring antique cars as a hobby. Roundhill's innovations will influence future developments in aviation as his contributions inspire future generations of engineers.



### James S. Russell





YEAR AWARDED
1984

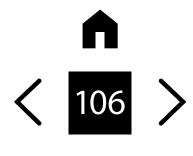
**CATEGORY**At Large

James Russell began his career in 1918, at the age of 15, with the U.S. merchant marine. He entered the Naval Academy in 1922 and became a naval aviator in 1929. Later, when World War II broke out, Russell was placed in command of Patrol Squadron 42, a squadron of six aircraft and the only line of U.S. aerial defense along the Pacific Coast.

Russell was awarded the Distinguished Flying Cross and the Air Medal for his heroism and leadership during the Aleutian campaign, and the Gold Star for his work as chief of staff to Commander Carrier Division Two. He commanded the attack carrier USS Coral Sea, a unit of the Sixth Fleet in the Mediterranean. In 1953, Russell was promoted to the rank of rear admiral, and in 1963 he became commander-in-chief of Allied forces in Southern Europe.

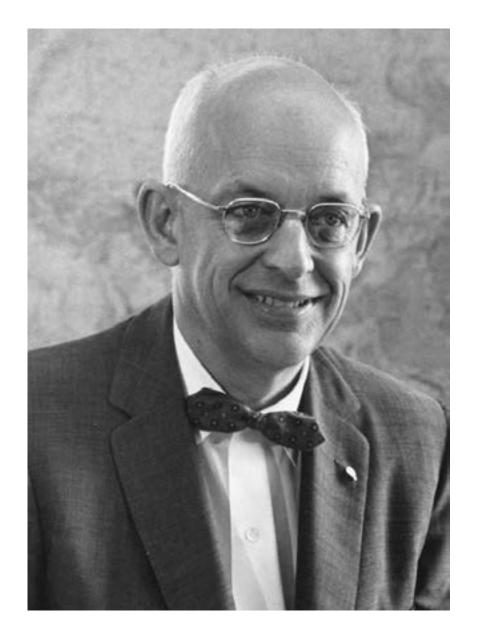
For many years, Russell acted as a consultant to The Boeing Company. He was also a member of the Advisory Council to the Washington Wing of the Civil Air Patrol, where he shared his wealth of experience, knowledge, and enthusiasm for aviation with young people.

Named after Russell in 1978, the Admiral James S. Russell Naval Aviation Flight Safety Award is a Daedalian trophy and award presented annually to the United States Navy Flying unit selected by the Chief of Naval Operations as having the most effective flight safety accident prevention program.





## George S. Schairer





**YEAR AWARDED**1985

**CATEGORY** Engineering

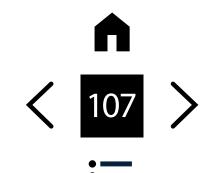
During his 40-year career with The Boeing Company, George Schairer either directly or indirectly influenced every Boeing product developed. A world-class technologist, he became Boeing's nurturer of the leading-edge advancements that put the company's aerospace products in the forefront.

As a young MIT-trained aerodynamicist, Schairer had an early influence on Boeing products. He set visionary goals for company research that probed the latest technology and extracted product integrity from it. His standards demanded the best from technology, talent, and research facilities. By 1941, he had fostered the acquisition of Boeing's first wind tunnel and recruited some of the nation's

most promising young talents. Subsequent years saw Boeing's research capabilities proliferate under Schairer's advocacy. Today, such facilities include transonic and supersonic wind tunnels.

In 1945, during his visit to Germany as part of a U.S. technical delegation, Schairer noted that the swept-wing technology advanced by the Germans confirmed his earlier discoveries. His on-the-spot assessment led Boeing into the jet era, during which swept-wing technology became the cornerstone of Boeing's development of the B-47 Stratojet and a vital bridge to the company's jet transport business.

After Schairer retired as Boeing's vice president for research in 1978, he continued his valuable contributions to Boeing, his profession, and his country.



## Clayton L. Scott





YEAR AWARDED
1985

**CATEGORY** Flying

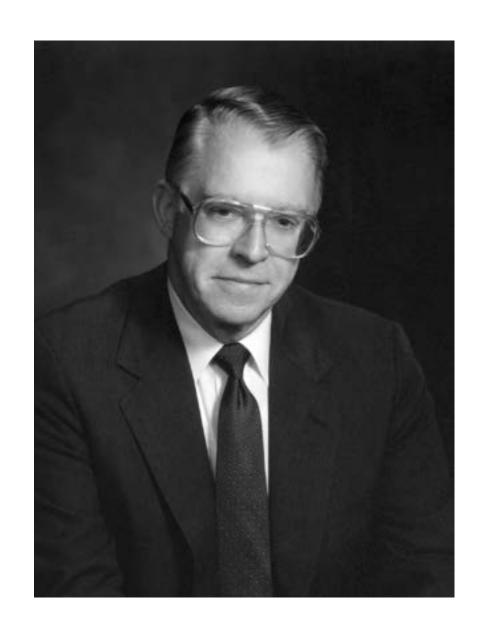
Over a career as a pilot that has spanned nearly three-fourths of his life, Clayton L. "Scotty" Scott has been personally connected with several notable firsts in Northwest aviation history.

Scott's long love affair with flight began in 1927 when he was 22 years old. He first soloed in an OX-5 powered WACO 9 open-cockpit biplane. The following year, he made one of the first landings on what is now Boeing Field. In 1929, Scotty piloted the first commercial flight across the Gulf of Alaska, from Juneau to Cordova, making the first airplane landing at Cordova. After he returned to Seattle, he began to shuttle passengers (eventually totaling some 10,000) between Seattle

and Bremerton for Gorst Air Transport, one of Seattle's first commuter airlines. In 1932, he signed on as a pilot with the then-fledgling United Air Lines and, within a year, was personal pilot to William E. Boeing. In 1941, he became a test pilot at Boeing, and during his 25-year stint he tested the A-20, DB-7B, B-47 Stratojet, B-50 Superfortress, C-97 Stratofreighter, Model 377 Stratocruiser, B-52 Stratofortress, KC-135, 707, and 727.

When he retired in 1966, Scotty turned his imagination to restoring and modifying planes. As part of Boeing's 50th anniversary celebrations, he built a replica of the famed "B&W Seaplane" and piloted it on demonstration flights, including one memorable pass under the Brooklyn Bridge. In 1984, at age 79, he certified a specially modified float system for a deHavilland Beaver. On his last birthday (July 15, 2006), he was forever immortalized with a life-sized bronze sculpture dedicated by friends and colleagues at the Renton, Washington, airport renamed Clayton L. Scott Field on his 100th birthday a year earlier.

### Frank Shrontz





**YEAR AWARDED** 2013

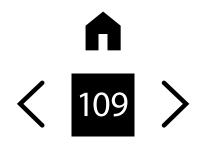
> **CATEGORY Operations**

The sixth leader in The Boeing Company's history, Frank Shrontz retired on January 31, 1997, after a career that spanned 38 years. The son of a sporting goods merchant, Shrontz graduated from Boise High School in 1949 and the University of Idaho in 1954 with a Bachelor of Laws degree. Following a commission and service in the U.S. Army from 1954 to 1956, he attended the Harvard Business School, where he received an MBA in 1958.

After serving our nation for four years as Assistant Secretary of the Air Force and Assistant Secretary of Defense, Shrontz assumed the duties of Chief Executive Officer of The Boeing Company in 1986. During Shrontz's tenure as Boeing CEO, the company launched development of the 777 jetliner and the Next Generation 737 series. It also won a share of important U.S. government

contracts, including the V-22 Osprey tilt-rotor, F-22 fighter, and RAH-66 Comanche helicopter, as well as the role of prime contractor on the International Space Station.

In addition to his vision and skill as a business leader, Frank Shrontz has demonstrated an extraordinary commitment to public service. He has been particularly active in the push for education reform. He has also been hailed for his efforts in support of a wide range of civic, cultural, and human service projects in all Boeing locations. Under his leadership, Boeing strengthened its programs of generous giving to the community and greatly expanded programs aimed at encouraging volunteerism by Boeing employees.





## Dr. Charles Simonyi





**YEAR AWARDED** 2024

> **CATEGORY** Education

Born in Budapest, Charles Simonyi has contributed to a range of acclaimed scientific and technological advancements that have benefited the world. Pursuing his passion for space exploration, Simonyi participated in two missions to the International Space Station (ISS): the Soyuz TMA-10 mission in 2007 and the Soyuz TMA-14 mission in 2009, becoming the fifth space tourist and the first-ever tourist to fly twice. Prior to his flights, Dr. Simonyi underwent months of preparation, including gaining zerogravity experience aboard an airplane and survival training.

The Charles and Lisa Simonyi Fund for Arts and Sciences, established in 2003, has made a significant difference in the Seattle region and around the world by providing grants to

outstanding organizations in the arts, sciences and education, including the Institute for Advanced Study, University of Oxford for a Chair for the Public Understanding of Science, the Seattle Symphony, the Large Synoptic Survey Telescope, Raisbeck Aviation High School, and of course, The Museum of Flight.

At the Museum, his support was instrumental in creating the state-of-the-art Charles Simonyi Space Gallery, which bears his name in recognition of his commitment to aerospace education and enthusiasm for inspiring the next generation of space explorers. Fittingly, one of the artifacts displayed there is the Soyuz TMA-14 capsule that carried him from the ISS in 2009.

Dr. Simonyi's personal goals for his two missions were to advance civilian space flight and assist in research. But his most significant and long-lasting contribution was to educate all learners in the disciplines of science, art and space in the Pacific Northwest and throughout the world.



## Anne Simpson



THE NOER AWARD

YEAR AWARDED
2024
CATEGORY
Flying & At Large

Pathfinder Awardee Anne Simpson is an accomplished pilot and leader who advances opportunities for women in aviation. She achieved great success in her career, from her hiring as the third female pilot at Northwest Airlines at age 25 to her term as chairwoman of the Board of Trustees for The Museum of Flight.

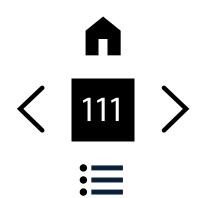
Anne's mother earned her wings in 1943, but there were no opportunities for women to fly commercially at the time. Decades later, while attending University of California, Berkeley, following her mother's footsteps, Anne earned her own pilot's license in an astounding 30 days. By the time she graduated college, she held all ratings

required as an airline pilot.

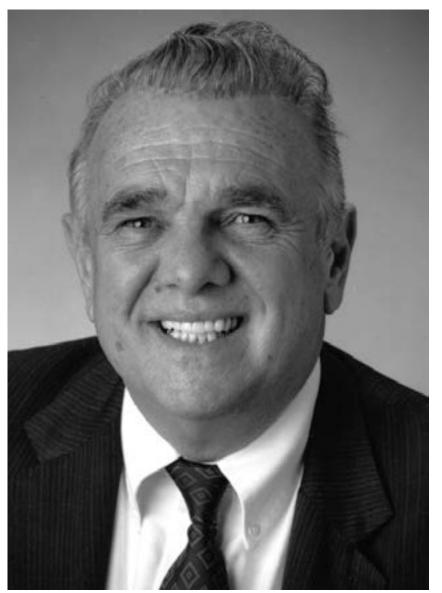
After time as a pilot instructor in Seattle, a series of flying positions led her to Northwest Airlines in 1981. Anne flew several Boeing and Airbus aircraft, and when she checked out as Captain on the 747-400 she was one of only four women in the position at the time.

Anne rowed for UC Berkeley's crew team where she practiced dedication, perseverance and discipline that set the foundation for her leadership in the flight deck, at The Museum of Flight and as an advocate for women in aviation. She led the campaign to acquire the Lockheed Electra 10-E, one of two surviving examples of the type of aircraft famously flown by Amelia Earhart. The project became the foundation for the Museum's Amelia's Aero Club program for girls.

In every aspect of her life, Anne's dedication to excellence has been pioneering, leading to her induction as an aviation Pathfinder.



### Delford M. Smith



Delford Smith, a graduate of the University of Washington and an Air Force veteran, was inspired by his vision of the helicopter as an "angel of mercy" and a "workhorse" to launch Evergreen Helicopters in 1960. Evergreen was the first company in what became a world-wide enterprise that today includes an international airline, commercial aircraft storage and maintenance facilities, sales and leasing operations, and aviation ground logistics support. A world leader in commercial and heavy transport, Evergreen International Aviation operates a \$1 billion fleet of more than 200 aircraft in more than 100 nations.

In addition to managing the largest and most diversified private aviation company in the world, Smith remains fiercely committed to educational and humanitarian efforts around the world. A firm believer that "aviation can provide substantial benefits for mankind," he established the nonprofit Evergreen Humanitarian & Relief agency to extend his ongoing efforts in international humanitarian projects, which include faminerelief efforts in Ethiopia, Pakistan, and other countries. His launch of the World Health Organization's 35-year campaign against black-fly river blindness in Africa resulted in the most successful venture yet undertaken by W.H.O. He has received numerous commendations throughout his career, including the 1988

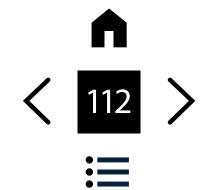
**Professional Pilot Honor Award** as Aviation Humanitarian of the Year and the Napoleon Hill Gold Medal for Entrepreneurial Achievement.

A native of Centralia, Washington, Smith manages his international network from Evergreen's corporate headquarters in McMinnville, the small Oregon community where it all started.

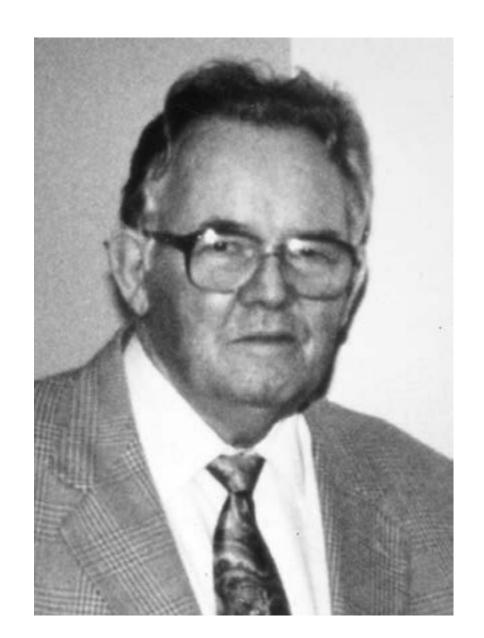


**YEAR AWARDED** 1990

> **CATEGORY Operations**



## Joe I. Soloy





YEAR AWARDED 1996

**CATEGORY** Engineering

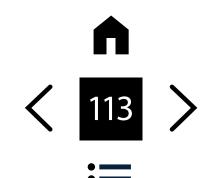
For decades, Joe Soloy flew helicopters in rugged terrain and demanding conditions. He developed such innovations as the first helicopter cargo hook and the external sling-load technique.

Convinced that the performance and reliability of helicopters could be substantially improved, Soloy formed his own company, Soloy Conversions, to convert helicopters to turbine power. Between 1975 and 1982, he successfully converted more than 300 Hiller and Bell 47 Series helicopters. Soloy also developed the Turbine Pac, an adaptation of turboshaft engines, for fixed-wing applications.

Soloy's crowning achievement is the Soloy Dual Pac for fixed-wing aircraft. This invention delivers the power output of two gas turbine engines

to a single propeller. Soloy's patented freewheeling clutch arrangement lets either of the engines power the propeller shaft while the other engine's drive train is unpowered, which gives substantial performance and safety advantages to 10- to 19-passenger aircraft.

Joe Soloy's ingenious innovations made helicopter flight safer and closer to realizing its full potential. Today, the Soloy Corporation, headquartered in Olympia, Washington, remains an industry leader in supporting helicopter safety and enhancements.



### John E. Steiner





YEAR AWARDED 1997

**CATEGORY** Engineering

As a teenager, John Steiner had a keen interest in naval architecture. Luckily for the aircraft industry, a naval architect persuaded him that making a living as a boat designer would be difficult. A series of flying lessons then attracted Steiner to the field of aerodynamics.

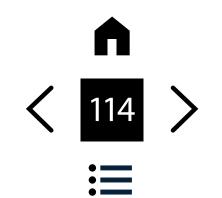
Interestingly, his first job was as a hydrodynamics engineer on Boeing's huge flying boat, the Model 314 Clipper. Later, during the development of the aerial refueling boom, Steiner worked out the aerodynamics of a 40-foot telescopic pipe whose nozzle could be guided into a receiver aircraft.

Steiner was one of four project engineers for the 707, and chief engineer and program manager for the 727. He headed the design team for the 737, now the world's most popular airliner, and was vice president assigned to lead development of Boeing's first jumbo jet, the 747. He also served as proposal

manager for the YC-14 and managed the introduction of computerized manufacturing in advance of the 757 and 767 programs.

In 1982, Steiner was the chairman and sole industry member of the White House Aeronautical Policy Committee, reporting to the White House. Twice, 1964 and in 1972, Aviation Week & Space Technology magazine named Steiner its Man of the Year.

Steiner was a fellow of the American Institute of Aeronautics and Astronautics, the National Academy of Engineering USA, and the Royal Aeronautical Society, England. He was also a member of the Royal Academy of Engineering in Great Britain. The University of Washington named a professorship in Advanced Technology for John Steiner in 1992.



## Dorothy Hester Stenzel





YEAR AWARDED 1988

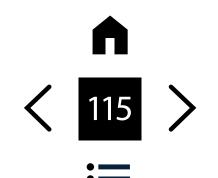
**CATEGORY** Flying

Dorothy Stenzel, "Queen of the Stunters," took her first flight on October 10, 1927, at Rankin Field in Portland, Oregon. She was the first woman in the Pacific Northwest to make a parachute jump and earned money for flying lessons by parachute jumping at air shows.

Stenzel came to the attention of Tex Rankin after soloing in 1928; she took lessons in basic aerobatics, and rapidly advanced to inverted flight. On June 30, 1930, at age 19, she became the first woman to execute the outside loop. Accompanied by Rankin, she embarked on a series of aerobatics exhibitions, appearing in 38 states in one three-month period in 1931.

In Omaha on May 15, 1931, Stenzel set a record for both men and women by doing 56 inverted snap rolls. On May 17, she accomplished 69 outside loops, of which 62 were certified as being perfect. Both of these records, which Stenzel established in a Great Lakes biplane, still stand today.

When she was 38 years old and the mother of two, Stenzel became the first woman to take the G-test. Honored by the Women's International Association of Aeronautics and OX5 Pioneers, Stenzel did much to promote public confidence in flying. Her records and expertise are a challenge to pilots worldwide.



## George Stoner





YEAR AWARDED 1988 CATEGORY

Engineering

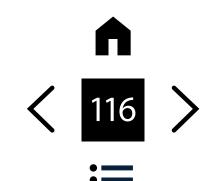
George Stoner's visionary efforts were a major part of The Boeing Company's post-World War II emergence to prominence in the aerospace industry.

Supported by Stoner's efforts, a Boeing team won contracts to develop the GAPA and Bomarc air defense missiles. This team of young, aggressive engineers would later bid on and win the contract for the Dyna-Soar program. Although the program was later canceled due to lack of funding, the research effort provided the basic technology the NASA space shuttle program would use 15 years later. This same team worked on the Minuteman ballistic missile assembly and test program, placing Boeing in a good position to participate in the NASA Apollo program.

George Stoner's leadership also helped Boeing capture the contracts for the Apollo S-1C booster design, development, assembly, and launch activities-he managed the successful execution of these contracts, which involved more than 10,000 personnel. A lasting achievement was the planning and supervision of construction of the Boeing Space Center in Kent.

In 1970, Stoner was named senior vice president and elected to serve on the Boeing board of directors.

George Stoner was posthumously awarded a NASA Distinguished Public Service Medal for his part in the development of the Saturn V.



# Joseph F. Sutter





YEAR AWARDED 1995

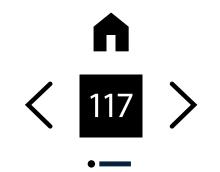
**CATEGORY** Engineering

A technical leader and visionary executive, Joseph Sutter is often called the "father of the 747." He made direct contributions to three generations of commercial transport in a long, distinguished career. He joined the Boeing Aircraft Company in 1945, following his tour of duty with the U.S. Navy; his first assignment was to help finalize the design of the Boeing 377 Stratocruiser. Starting in 1965, as chief engineer, Sutter guided the design of the 747, and he was appointed head of the 747 division in 1971. He also served in key leadership positions for other jetliners produced during his Boeing tenure: the 707, 727, 757, 767, and 737-300.

Sutter has received innumerable honors and awards, among them the Wright Brothers Trophy, the Daniel Guggenheim Medal, the Elmer Sperry Award, and the National Medal of Technology,

which was presented to him by President Reagan. The professional distinction that spoke loudest of Sutter's technical expertise and integrity was conferred after the loss of the space shuttle Challenger, when he was appointed to the President's Commission on the Challenger Disaster.

Sutter retired from Boeing as an executive vice president, but never really "retired" at all. He continued to serve as chair of the NASA Aerospace Safety Panel and today is among aviation's most tireless safety advocates. He also wrote his autobiography with Jay Spenser named 747: Creating the World's First Jumbo Jet and Other Adventures from a Life in Aviation, which was published in 2006.



## Richard W. Taylor





YEAR AWARDED 1993

**CATEGORY** Flying

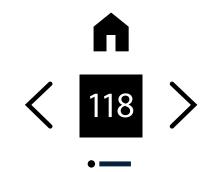
In his distinguished 45-year Boeing career, Richard Taylor was the force behind two of modern commercial flight's chief innovations: the twoperson crew and extendedrange twin-engine operations (ETOPS).

Taylor joined Boeing in 1946 after graduating from Purdue University and serving in World War II. He progressed through several flight-test positions, including project test pilot for the B-47 Stratojet. An avid and accomplished pilot, he has flown nearly every major postwar commercial and military aircraft built by Boeing, and he set nine speed records in his own Piper Cub and Christian Eagle aerobatic planes.

Some of Taylor's most significant professional achievements have come in his role as an aerospace executive and industry statesman.

His Boeing appointments have included executive management positions in the Military Airplanes Division, the 707/727/737 Division, and the Renton Division, most recently as vice president of Government Technical Liaison. He is credited with guiding Boeing to the goal of two-person crews on the Boeing 757, 767, and 747-400. In addition, he is recognized worldwide as the "father of ETOPS," and he continues to advise the company on issues of operations, certification, design, and safety.

Richard Taylor's honors include the Distinguished Service Award from the Federal Aviation Administration in 1967 and being named an Elder Statesman of Aviation by the National Aeronautics Association in 1992.



### Leslie R. Tower





**YEAR AWARDED** 1982

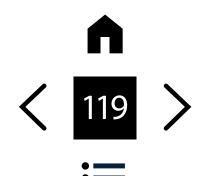
**CATEGORY** Flying

From 1926 until his death in 1935, Leslie Tower served as chief test pilot for the Boeing Airplane Company. His career spanned a period of transition when aircraft began to be designed with cantilevered wings and retractable landing gear. Tower flew all Boeing models, from pursuits to bombers to commercial transports. In that era of aviation history, test flying was neither carefully controlled nor highly instrumented. The only fail-safes were the pilot's judgment, engineering training, and personal knowledge of the designer's skills. That Tower was able to survive nine years of such dangerous and demanding flying is a tribute to his skill.

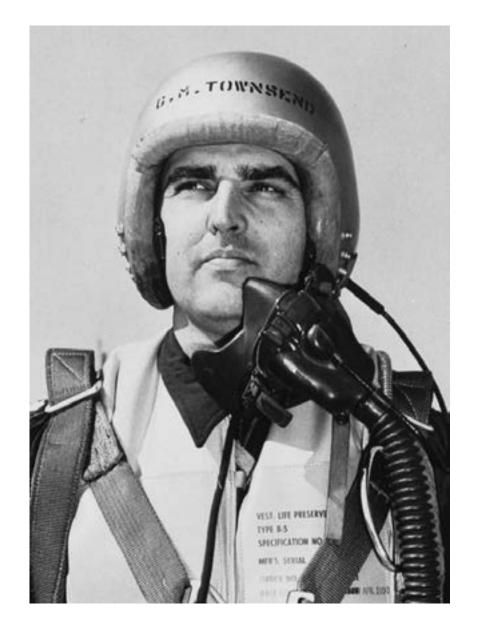
In 1934 and 1935, Boeing competed to build a new multiengine bomber for the Army, called the 299, that would eventually become the famed B-17 Flying Fortress.

It was an early test flight for the 299 that cost Les Tower his life. The first flight in July 1935 came and went successfully and uneventfully. Then, in October, after his co-pilot inadvertent locked the 299's controls, the plane crashed.

The loss disqualified the 299 from competition, but the demonstration up to that point had been so impressive that the Army placed a service test order for 13 flying aircraft and a static test model, to be called the B-17. For his fearless participation in the development of the Flying Fortress and other pre–World War II models, Leslie R. Tower is remembered as a true Pathfinder in the history of aviation.



# Guy M. Townsend



NOER AWARD

YEAR AWARDED 1994

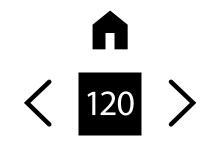
**CATEGORY** Flying

Working his way through college on scholarship, Guy M. Townsend studied aerospace engineering at Texas A & M. In 1941, he joined the Army Air Corps as an aviation cadet and he received his commission in 1942. He flew B-17 Flying Fortresses and B-29 Superfortresses in the Pacific theater and earned many decorations, including the Legion of Merit and the Distinguished Flying Cross.

After the war, Townsend became a pilot and test officer with Bomber Test at Wright-Patterson Air Force Base. Working extensively with the B-29, he was promoted to chief of Bomber Test within two months. In 1947, Townsend was assigned to the B-47 Stratojet test program. His flight demonstration for Major General K. B. Wolfe enhanced the credibility of the B-47 and resulted in the awarding of a production run that eventually totaled 2,382 airplanes and would pave the way for the B-52 Stratofortress, the KC-135 Stratotanker, and the entire Boeing family of commercial jetliners. Townsend also flew the inaugural flight of the B-52 with A. M. "Tex" Johnson in 1952. He conducted several phases of testing on that aircraft and was instrumental in flight-testing in other Air Force programs, such as the XB-70 Valkyrie, the C-5 Galaxy, and the B-1 Lancer.

After he retired from the Air Force as brigadier general, Townsend began a second career at The Boeing Company as head of Supersonic Transport operations. He lent his expertise to a number of Boeing commercial derivatives of military programs: the E-4/747 Advanced Airborne Command Post, the YC-14, the Microwave Instrument Landing System, and the B-2 Spirit stealth bomber.

Townsend retired from Boeing in 1986. This "pilot's pilot," Air Force general, and aerospace executive remains an active and highly respected figure in American aviation.



### Arthur E. "Art" Walker



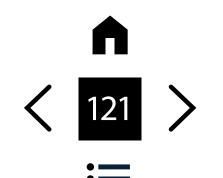


YEAR AWARDED
1989

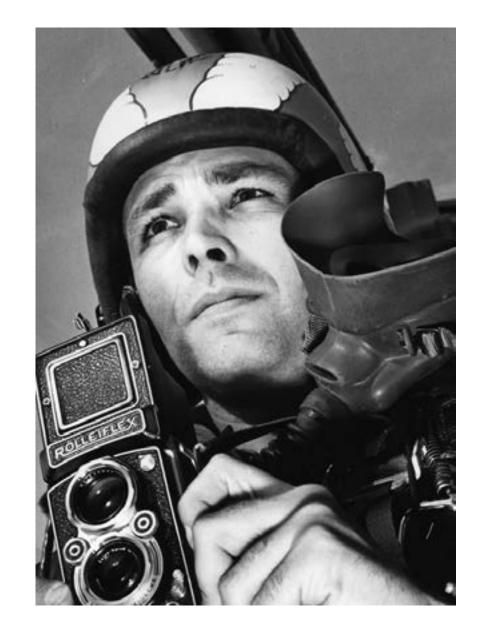
**CATEGORY** Flying

In August 1929, a young barnstormer names Arthur "Art" Walker and his associate, Nick Mamer, made history when they became the first aviators to use in-flight refueling during a round-trip, non-stop transcontinental flight. During their journey, Walker and Mamer were in the air for a sleepless five days as they traveled 7,200 statute miles across the U.S. in a specially modified Buhl CA-6 Air Sedan they called Spokane Sun God. The famous flight required 49 transfers of fuel, food and water in 11 in-flight refueling maneuvers. During the trip, Mamer, an acting correspondent for the Spokane Spokesman Review, filed his newspaper stories by dropping them over airports.

The flight of Spokane Sun God was just one highlight in Walker's distinguished aviation career. After a brief stint as a corporate pilot for Standard Oil of California, he worked as a captain for Northwest Airlines for 15 years, except for a two-year period during World War II which he was the Air Transport Command for the Ice Research Project and ferried cargo to the Northern Territory. Walker returned to Standard Oil of California as manager of aircraft operations and retired in 1971. He joined the distinguished OX-5 Aviation Pioneers Hall of Fame in 1985.



### S.L. "Lew" Wallick, Jr.





YEAR AWARDED
1999

**CATEGORY** Flying

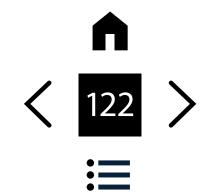
S.L. "Lew" Wallick, Jr., took his first open-cockpit biplane ride over the fields of Kansas at the age of 12, but he began his aviation career in earnest during World War II as a naval aviation cadet. He became a naval aviator and then qualified as a carrier pilot on F4U Corsairs.

After the war, Wallick earned a degree in mechanical engineering from Kansas State University and went to work as an engineer for Beech Aircraft. In 1951, he made the move to Boeing, in Wichita, as a junior engineer; within months he transferred to Flight Test and started flying in the B-47 Stratojet program. He joined Boeing's Seattle flight test organization in 1955, and worked on the B-52 Stratofortress, X-47 turboprop, 367-80 (prototype for the 707), and KC-135 Stratotanker programs. Wallick was later

involved in the certification of the 707-100, the first jet transport certified in the U.S., and he served as a project pilot for the 727-100 and -200 series as well.

Wallick also had the rare privilege of flying as copilot on the maiden flights of the first 707-300, 720, 737, 747SP, 757, and 767 aircraft. He participated as a test pilot in the development and certification of all models of the 707, 720, 727, 737, 747, 757, and 767.

Due to the breadth of his early multi-engine jet experience, Wallick frequently served as a Boeing pilot representative in CAA/FAA and industry meetings during the drafting of airworthiness requirements and standards for certification of turbine-engine-powered airplanes. After 35 years as a test pilot, Wallick retired from The Boeing Company in 1986 as Director of Flight Test.



### Edward C. Wells





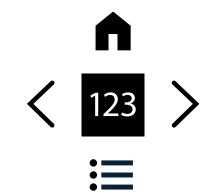
YEAR AWARDED 1983

**CATEGORY** Engineering

Throughout his long and distinguished career, which began at Boeing in 1931, Edward Wells was recognized for his significant accomplishments in the design and production of some of the world's most famous aircraft. In 1934, when he was 24, he had a major responsibility in designing the prototype B-17 Flying Fortress. By the time he was 33, he was directing an engineering force of more than 3,000 in the technical efforts that made the B-29 Superfortress the outstanding bomber of its day. Several years later, he was among the select group whose work on the B-47 Stratotanker and B-52 Stratofortress resulted in Boeing's development of swept wings and podded engines. These technologies launched Northwest aviation into the era of commercial jet transports, and Ed Wells had primary engineering responsibility for America's first jet transport--the 707 prototype, Dash 80.

Wells's career included many honors. In 1942, he received the Institute of Aeronautical Sciences (IAS) Lawrence Sperry Award, and in 1944, the Fawcett Aviation Award. He served as a consultant to the Secretary of War during World War II, as president of the IAS in 1958, and as a member of the Defense Science Board from 1969 until 1972. With a lifelong commitment to education, he served on advisory boards of several universities.

In 1972, Ed retired from Boeing as a senior vice president.
He died in 1986. He left behind more than 40 years of professional achievements that helped shape the aerospace industry in the Northwest, and a legacy of dedication and integrity that continues to inspire all who knew him.



### Sheila E. Widnall





YEAR AWARDED 1996

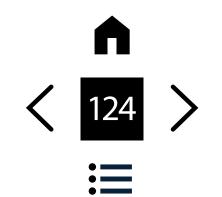
CATEGORY At Large Sheila Widnall was one of only 21 women in a 1960 MIT graduating class of 900 men. A brilliant, energetic student, she went on to earn a doctorate and become the first MIT alumna appointed to the MIT School of Engineering faculty.

Widnall is internationally known for her pioneering research in fluid dynamics. She designed MIT's advanced wind tunnel facility, taught at MIT for 30 years, and is the first woman to have served as chair of the entire MIT faculty, from 1979 to 1980.

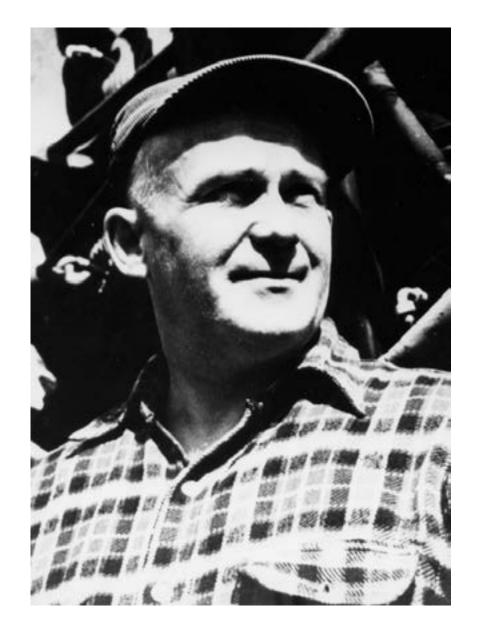
In 1993, when Widnall was named Secretary of the Air Force, she became the first woman to head a branch of the United States military service. For the next four years, she oversaw the personal and professional needs of 620,000 military and civilian personnel during a time of great change and restructuring in the country's military forces.

Widnall's awards include the Lawrence Sperry Award, the Outstanding Achievement Award of the Society of Women Engineers, and the Washburn Award of the Boston Museum of Science. She has held leadership posts in a great number of scientific and professional organizations. She currently works with the Lean Aerospace Initiative.

Sheila Widnall has overcome traditional obstacles with brilliance, compassion, and her charismatic intensity and unbounded energy. She is a true Pathfinder.



#### Noel Wien





YEAR AWARDED 1982

**CATEGORY**Operations

Just as leaders in flight operations do today, Noel Wien combined the best parts of caution and risk taking. For 53 years, he flew through raw, white Alaska winters and unpredictable summers, negotiating a delicate balance of climate, machine, and terrain.

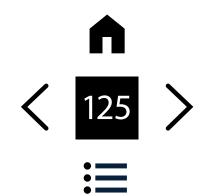
Wien's Alaska career is a story of miners, trappers, and fugitives for passengers; of landing on ice-age glaciers; and of gas-freezing, 70-below-zero weather. It's also a story of firsts. Because he was the first bush pilot, nearly every flight Wien made was an inaugural. A month after he arrived in Fairbanks, in 1924, he added a 30-gallon gas tank to his Hisso Standard J1 and flew to Anchorage in three hours,

45 minutes, in the first flight between the two cities. He was also first to fly over and land inside the Arctic Circle, and first to pilot a passenger flight from Seattle to Fairbanks.

In 1929, Wien gained fame by making the first-ever round-trip flight from North America to Asia when he flew across the Bering Strait and returned. Also, Wien Alaska Airways was awarded the first commercial mail contract issued to an Alaskan airline.

Wien's bravery let him attempt flights no other flyer had ever made, but it was his caution that kept him and his passengers alive. There were no weathermen in those days, so Wien had to reckon the weather himself. He never flew as the crow flew, opting instead for the route that would offer the best possible emergency landing--just in case. He changed the oil in his aircraft every five flying hours.

Only the stubborn and strong survived Alaska as Noel Wien did. For his pioneering role in developing commercial air transportation, modern aviation owes him a debt of gratitude.



## Frank W. Wiley





YEAR AWARDED 1984

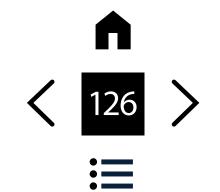
**CATEGORY** Education

Frank Wiley was a 19-year-old living in Miles City, Montana, when he was touched by flying fever. There was no formal flight training in those days, so Wiley picked up his flying knowhow from his curiosity and the encouragement and instruction of other flyers. By 1920, Wiley was flying professionally and working as a mechanic in Miles City for the Arrow Miles City Club, whose activities consisted of charter flights and barnstorming and exhibitionflying at fairs.

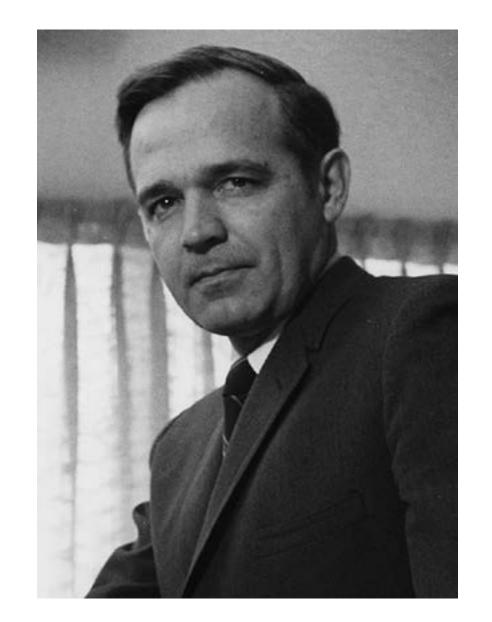
In 1924, Wiley worked for Ryan Aeronautical Corporation and flew on the first scheduled airline in the United States, operating between Los Angeles and San Diego. He returned to Miles City and established a flying school there in 1927. In 1930, he was in charge of flight operation for Mamer Airlines between Miles City and St. Paul.

Later, in addition to operating a flying service in Glasgow, Montana, Wiley performed aerial survey work in many parts of the United States and was in charge of the civilian pilot training program at Johnson Flying Service in Missoula. He served in the USAAF during World War II as a flight safety officer and chief of emergency rescue. After he was appointed to serve as the first director of the newly formed Montana Aeronautics Commission, he initiated the airport construction program, set up the state aircraft search-andrescue program, and served on numerous boards and committees.

Following his duties as director, Wiley researched and published Montana and the Sky, a well-regarded history of aviation in Montana. Wiley was a true pioneer who left his mark of accomplishments in aviation training and education throughout Montana.



#### Dr. Samuel B. Williams





**YEAR AWARDED** 2004 **CATEGORY** Engineering

Inventor, entrepreneur, and businessman Dr. Sam B. Williams is the unrivalled pioneer of small gas-turbine engines. His work has made both the modern cruise missile and the light business jet possible. And in an age when much aerospace innovation depends on governmental support, Williams has financed most of his projects as private ventures.

Born in Seattle in 1921, Williams worked briefly for Chrysler on a Navy turboprop engine. In 1954, he established his own company. Working out of a rented warehouse by day and studying business at night, Williams and his three employees developed, by the early 1960s, a successful miniature turbojet for use in military drones.

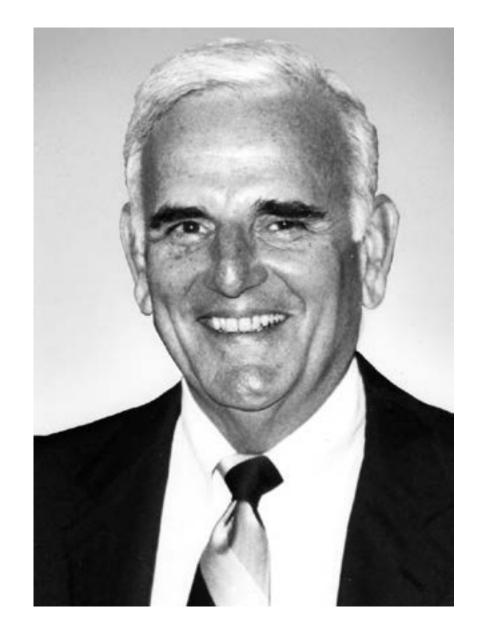
In 1968, Williams convinced the Air Force and Navy that his newly developed small turbofan had the reliability and efficiency to power cruise missiles over transcontinental distances. To date, more than 6,000 Williams-powered cruise missiles have been produced-weapons that continue to be a mainstay of America's nuclear and conventional arsenals.

In the 1980s, Williams applied cruise-missile lessons to the FJ44 turbofan for light business jets. So revolutionary was the FJ44 that a whole new class of aircraft--including the Cessna Citation Jet, Raytheon Premier I and Sino-Swearingen SJ-30--was designed around it. This class of business jets has become one of the best-selling categories in general aviation.

In 1996, Williams International partnered with NASA to develop an even lighter, more

efficient series of fanjets. Powering such cutting-edge designs as the six-seat Adam A700, the new Williams engines continue an unbroken record of innovation in both the military and civilian realms by Pathfinder Sam Williams.

### Thornton Arnold "T.A." Wilson





YEAR AWARDED 1991

**CATEGORY** Engineering

T.A. Wilson began his exceptionally distinguished aviation career with Boeing as a junior engineer in 1943. He played a formative role in the aerodynamic development of the B-47 Stratojet swept-wing bomber. In 1952, he honed his management skills as a Sloan Fellow at the Massachusetts Institute of Technology. Wilson's training and practical experience served him well--by 1958, he was senior project engineer for the B-52 Stratofortress and was selected to lead the proposal team for the Minuteman intercontinental ballistic missile system. Boeing won the contract, and Wilson's skill in managing the Minuteman program established the company as a leader in complex systems engineering projects.

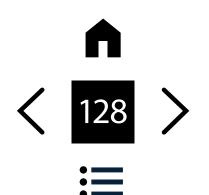
Wilson became Boeing's chief executive officer in 1969. Faced with mounting company debt, he made the difficult decision to streamline the workforce and reorganize management. His timely actions eventually propelled Boeing to the pinnacle of the aerospace industry.

Throughout his distinguished career, Wilson received numerous professional honors, including the National Academy of Science Award for Aeronautical Engineering, in 1985, and the Daniel Guggenheim Medal, in 1986.

Wilson played an active role in civic affairs. In 1983, under his leadership as chairman of the Museum of Flight capital campaign to raise funds for construction of the Great Gallery, the Museum exceeded

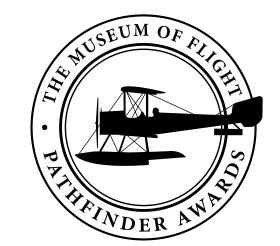
its \$26.4 million campaign goal, and the Great Gallery celebrated its grand opening in July 1987.

After retiring from his official duties January 1988, Wilson served as Boeing chairman emeritus. He died in April 1999.



# John K. Wimpress





YEAR AWARDED
2014

**CATEGORY** Engineering

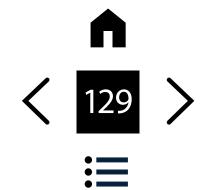
Following his graduation from Georgia Tech and Cal Tech, Jack Wimpress was immediately immersed in solving some of the most challenging aerodynamic problems facing The Boeing Company at the dawn of the jet age.

His initial assignments included design work on the B-47 and the "flying boom" for the KC-135 refueling tanker aircraft. In the B-47, he was responsible for analyzing the wind tunnel test date that resolved critical lateral control issues leading to the inclusion of spoilers on the B-52, 707, and all subsequent Boeing transports as well as those of other manufacturers. By the early 1960s, he was the head of the Commercial Airplanes Aerodynamics Research unit and then became the chief of all Boeing Aerodynamics. In these roles, he mentored many of those who were to become the future technical and managerial leaders of Boeing Commercial Airplanes.

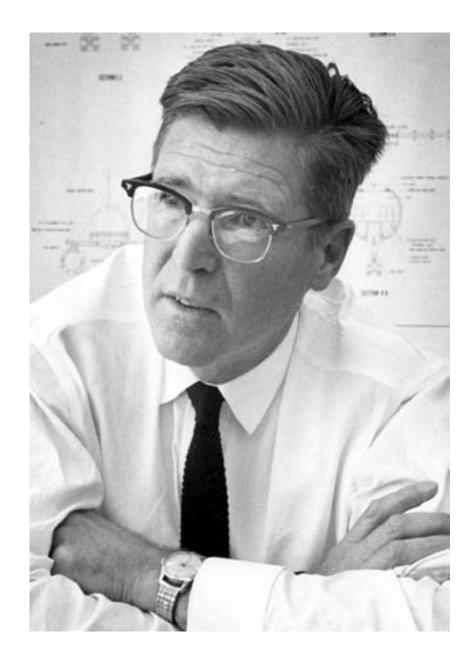
From 1971 to 1977, he was the Director of Engineering of the YC-14, an aircraft with the most efficient powered-lift system ever developed. Wimpress was instrumental in developing the innovative design, building the airplane, and proceeding through its flight test program. Wimpress was senior author of the the AIAA Case Study of the entire YC-14 program and presented many technical papers to the AIAA, SAE and other organizations. As a result, he was recognized in 1978 with the prestigious AIAA "Aircraft Design Award."

Wimpress served as the chief of the 757 Technical Staff from late 1978, when the program officially began, until after certification in 1983. As an example of his technical excellence and leadership in all areas of aircraft design, he managed the first successful design and certification of a fully electronic engine control (the PW2000) on the 757-200.

Following certification of the 757, Wimpress became the Director of Renton Division Product Development. In this assignment, from 1983 until he retired in 1986, he was responsible for developing potential design improvements and derivative models of the 757 and 737. During this period, he continued to mentor and develop those leaders who became pivotal in the development of the 777 aircraft.



## Holden W. Withington





**YEAR AWARDED** 2001

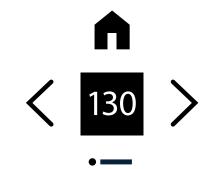
> **CATEGORY** Engineering

Holden "Bob" Withington's aviation career began in high school, when he worked as a mechanic's helper on the Sikorsky S-42 flying boat. Four years later, at the Massachusetts Institute of Technology, Withington worked as an assistant to his professor in the final design and initial operation of the new MIT wind tunnel.

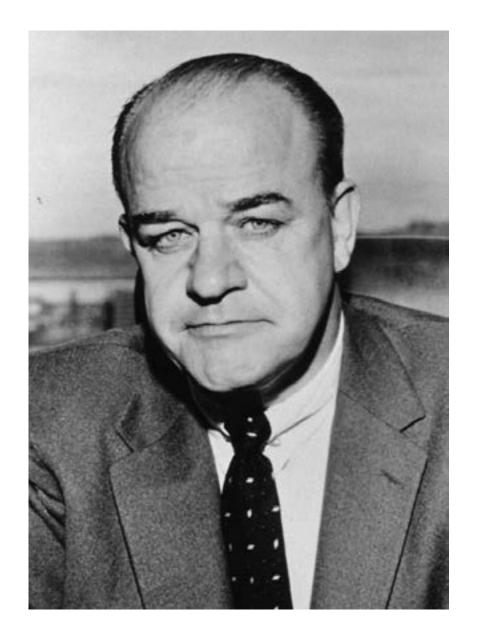
In 1941, Withington moved West to take a leading role in the design, construction, and operation of the Boeing Transonic Wind Tunnel. The research he conducted conclusively proved the benefits of swept-wing design that had been theoretically advanced by German scientists in World War II--from it emerged the swept-wing, podded-engine configuration that has characterized virtually every successful large subsonic military and commercial aircraft worldwide since the B-47 Stratojet.

Withington moved to a series of engineering roles and was part of the five-man team that met in a legendary weekend in a Dayton, Ohio, hotel room to retool Boeing's original proposal for the B-52 Stratofortress bomber. The now-venerable bomber entered service in 1954, and is projected to remain in the Air Force inventory until 2024.

Over the next thirty years, Withington's technical leadership aided a wide variety of Boeing's civilian and military advanced-development programs, including the SST, the TFX fighter-bomber project, the C5A, and the YC-14 STOL transport. Withington retired in 1983 as vice president of engineering for Boeing Commercial Airplanes, where he had led the engineering team for the 757 and 767.



## Arthur G. Woodley





**YEAR AWARDED**1987

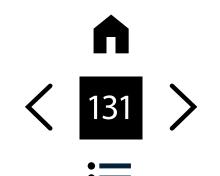
**CATEGORY** Operations

Arthur Woodley was once described as a "man of iron will, unimpeachable integrity and a streak of sentimentality the depth of Carlsbad Caverns." As the founder and president of Pacific Northern Airlines, Woodley single-handedly built a jet airline from a one-man bush operation.

Woodley arrived in Alaska in the late 1920s and soon became known as the "Bull of the Tundra." In 1932, when dogteam mushers were charging \$750 for the trip from Anchorage to Nome, pilot Woodley figured he could do it for \$150, and his one-man, one-plane airline was born.

As Alaska grew, so did Woodley Airways--by the end of World War II, the company was poised to become the air leader of the territory. In 1945, Woodley changed the company name to Pacific Northern Airlines. During Woodley's tenure,
PNA pioneered as the first
carrier in Alaska to develop
an air communications
system, operate multi-engine
aircraft, use instrument flight
procedures, and be certified
by the CAA. In 1950, Woodley
continued his domination of
Alaskan aviation by securing the
first direct passenger operation
between Anchorage and
the lower 48 states after the
Portland and Seattle airports
opened passenger terminals.

In 1960, the Seattle Chamber of Commerce honored Woodley as Aviation Man of the Year. In 1967, Woodley merged PNA with Western Airlines, and remained on the WAL board until his retirement in 1971. In 1978, the A.G. Woodley Aviation Center was dedicated in Anchorage.



## Brien S. Wygle





YEAR AWARDED 2000

**CATEGORY** Flying

Brien Wygle's flying career began in 1942 in the Royal Canadian Air Force--he saw combat in England, India, and Burma. After the war, he earned a degree in mechanical engineering from the University of British Columbia while flying as a captain for Queen Charlotte Airlines, and he later qualified as a jet pilot on deHavilland Vampire fighters in the RCAF Reserves.

Wygle joined Boeing in 1951, as a B-47 Stratojet test pilot. In 1953, he was the first Boeing test pilot to graduate from the Edwards AFB Test Pilot School. Through the years, he flew the B-52 Stratofortress and KC-135 Stratotanker, as well as 707, 720, 727, 737, 747, 757, and 767 aircraft. He was pilot on the first flights of the YDB-47E, 707-420, 707-120B, 707-320B, and 737, and he also served as co-pilot on the first 747 flight.

As project pilot on the 737, Wygle took the aircraft from design concept through certification of derivative models. He participated in the resurgence of the 737 market in the 1970s, taking the aircraft through a period of low production to its position as the world's best-selling jetliner. He also led development and certification of the 737 advanced-performance package and unimproved runway usage, and oversaw worldwide demonstrations of its capabilities.

Wygle was named director of Flight Test in 1970 and vice president of Customer Support in 1974. He later became vice president of Flight Operations, and retired from that position in 1990. Recipient of numerous awards and honors. Wygle has contributed greatly to aviation through a career rich in technological and management leadership.

